



PERFORMANCE SECTION



THEME 1

ECONOMIC GROWTH



**ECONOMIC
GROWTH**

THEME, STRATEGIC GOALS, AND OBJECTIVES

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	Improve intellectual property protection by reducing patent pendency, maintaining trademark pendency, and increasing the quality of issued patents and trademarks (USPTO)
Objective 2	Expand international markets for U.S. firms and inventors by improving the protection and enforcement of intellectual property rights (USPTO)
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)
Objective 4	Drive innovation by supporting an open global Internet and through communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce (NTIA)
Objective 5	Provide measurement tools and standards to strengthen manufacturing, enable innovation, and increase efficiency (NIST)

Strategic Goal – Market Development and Commercialization: *Foster market opportunities that equip businesses and communities with the tools they need to expand, creating quality jobs with special emphasis on unserved and underserved groups*

Objective 6 ¹	Promote the advancement of sustainable technologies, industries, and infrastructure (EDA)
Objective 7	Promote the vitality and competitiveness of our communities and businesses, particularly those that are disadvantaged or in distressed areas (EDA, MBDA)
Objective 8	Improve the competitiveness of small and medium-sized firms in manufacturing and service industries (ITA, NIST)

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

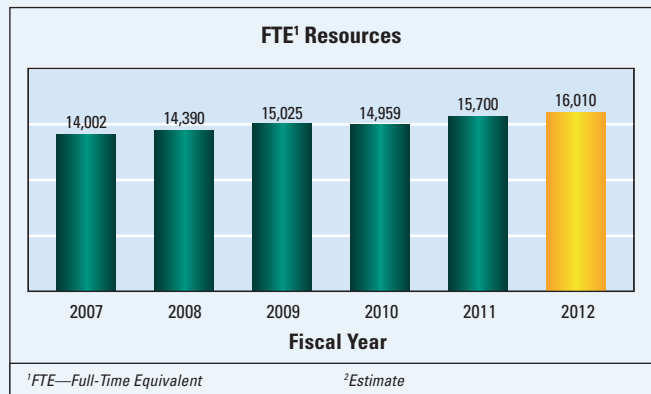
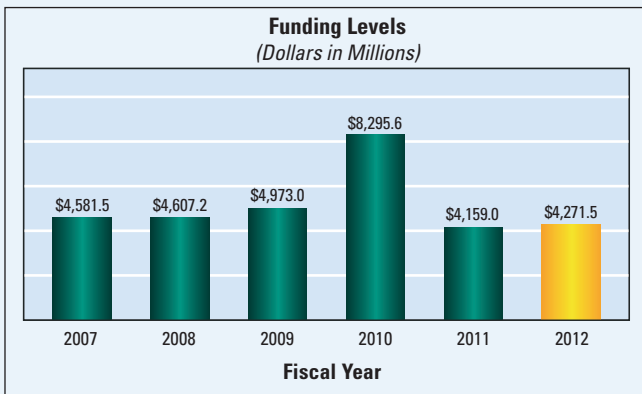
Objective 9	Increase U.S. export value through trade promotion, market access, compliance, and interagency collaboration (including support for small and medium enterprises) (ITA)
Objective 10	Implement an effective export control reform program to advance national security and overall economic competitiveness (BIS)
Objective 11	Develop and influence international standards and policies to support the full and fair competitiveness of the U.S. information and communications technology sector (NTIA)
Objective 12	Vigorously enforce U.S. fair trade laws through impartial investigation of complaints, improved access for U.S. firms and workers, and fuller compliance with antidumping/countervailing duty remedies (ITA)

¹ The measures for this objective are shown in Objective 3.



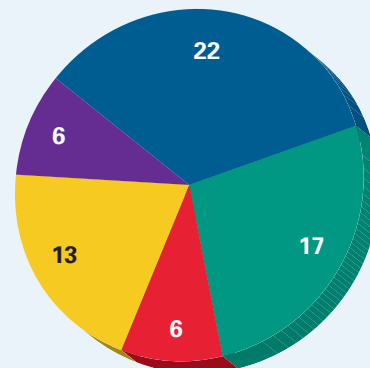
THEME 1: ECONOMIC GROWTH

ECONOMIC GROWTH TOTAL RESOURCES



The Economic Growth theme consists of three strategic goals related to Innovation and Entrepreneurship, Market Development and Commercialization, and Trade Promotion and Compliance. Within those three goals are 12 corresponding objectives: five associated with Innovation and Entrepreneurship, three with Market Development and Commercialization, and four with Trade Promotion and Compliance.

ECONOMIC GROWTH STATUS OF CURRENT MEASURES



- Improving
- Stable
- Declining
- New Measure
- No Trend Due to Volatility of Funding

Improving, stable, or declining measures have at least three years of data.

PUBLIC BENEFITS

Innovation and Entrepreneurship

The U.S. Patent and Trademark Office (USPTO) facilitates the generation of innovative and commercially viable processes and products, while protecting the intellectual property rights (IPR) of the inventor. USPTO's goal to provide efficient and thorough review of patents and trademarks optimizes the economic value to investors and improves U.S. competitiveness. The Economic Development Administration (EDA) grants play a large role in encouraging innovation, and the forums that the Agency establishes create research-based communities of practice that foster commercialization. The National Telecommunications and Information Administration (NTIA) assists communication, key to business growth, by improving telecommunication performance, optimizing use of the federal spectrum, and increasing broadband access. As the federal government's National Laboratory focuses on innovation and industrial competitiveness, the National Institute of Standards and Technology (NIST) works to promote and accelerate technological innovation and to provide the measurement infrastructure necessary for a robust manufacturing sector which are essential to the health of the Nation's economy both as a source of high-paying, high-skilled jobs, and as a driver for future technological advancement.

Market Development and Commercialization

NIST's Hollings Manufacturing Extension Partnership (MEP) and the International Trade Administration (ITA) support small and medium-sized enterprises (SME) to encourage job growth, job creation, and innovation, with a focus on environmentally and economically sustainable technologies. Through private enterprise job creation, EDA and the Minority Business Development Agency (MBDA) assist in developing markets in disadvantaged or distressed communities so as to reduce economic duress.

Trade Promotion and Compliance

The Department generates economic growth and jobs through extensive assistance to firms engaging in international trade. ITA focuses on increasing exports by assisting U.S. exporters in expanding to foreign markets as outlined by the National Export Initiative (NEI). ITA works to achieve this goal by addressing the following priorities:

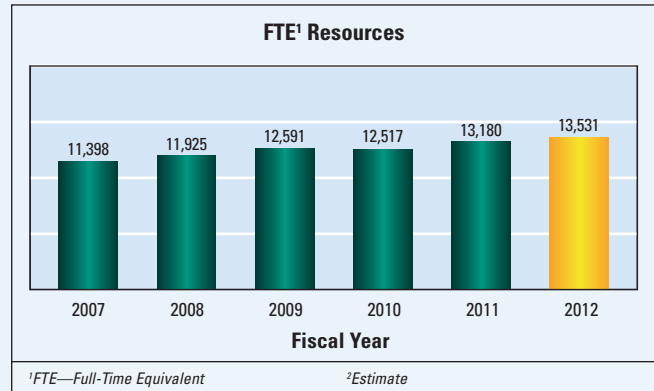
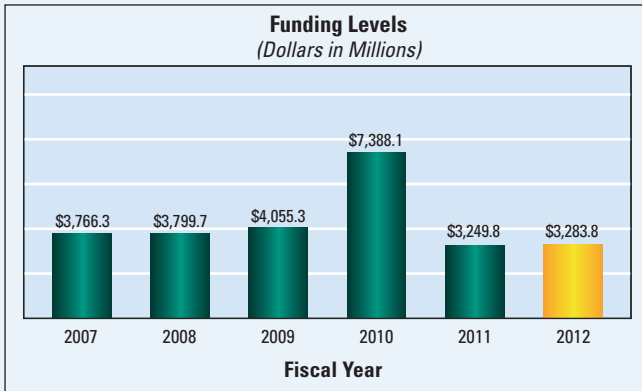
- Expanding programs designed to enhance exports by small and medium-sized enterprises;
- Promoting federal resources currently available to assist exports by U.S. companies;
- Ensuring that U.S. government-led trade missions effectively promote exports by U.S. companies;
- Ensuring that Commercial Advocacy effectively promotes exports by U.S. companies;
- Improving market access overseas for U.S. manufacturers, farmers, and service providers by actively opening new markets, reducing significant trade barriers, and robustly enforcing U.S. trade agreements;
- Developing a framework, including policy and export promotion tools, for exports of services.

Furthermore, ITA vigorously enforces the U.S. fair trade laws to provide an opportunity for U.S. businesses and workers to compete on a level playing field. Export control reform has become a central concern to the Bureau of Industry and Security (BIS) as it updates the intergovernmental processes that are in place. NTIA promotes the use of telecommunication devices, speeding the pace of business.

STRATEGIC GOAL – INNOVATION AND ENTREPRENEURSHIP

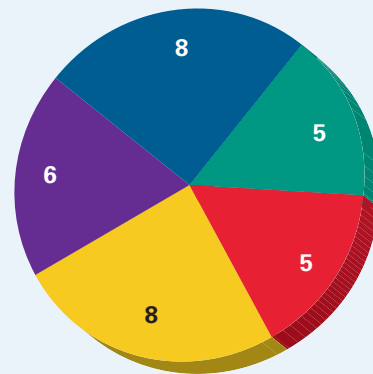
Develop the tools, systems, policies, and technologies critical to transforming our economy, fostering U.S. competitiveness, and driving the development of new businesses

INNOVATION AND ENTREPRENEURSHIP TOTAL RESOURCES



This strategic goal is comprised of five objectives which contribute to the Secretary’s theme of Economic Growth. The following public benefits, achievements, and performance results are associated with each objective.

INNOVATION AND ENTREPRENEURSHIP STATUS OF CURRENT MEASURES



■ Improving ■ Stable ■ Declining ■ New Measure
■ No Trend Due to Volatility of Funding

Improving, stable, or declining measures have at least three years of data.

OBJECTIVE 1

Improve intellectual property protection by reducing patent pendency, maintaining trademark pendency, and increasing the quality of issued patents and trademarks (USPTO)

PUBLIC BENEFITS

Intellectual property (IP) contributes to a strong global economy by encouraging investment in innovation and fostering entrepreneurial spirit. People worldwide benefit from innovations, both directly on a personal level, and indirectly through economic growth fueled by innovation. Continual development of a vigorous, flexible, and efficient IP system thereby achieving this objective protects individual rights, encourages investment in innovation, and fosters entrepreneurial spirit.

The Department promotes the IP system through the protection of inventions or creations via patent, trademark, trade secret, and copyright laws. Under this system of protection, industry in the United States has flourished, creating employment opportunities for millions of Americans.

Patents provide incentives to invent and invest in new technology by allowing innovators the opportunity to benefit from their discoveries. Registration of trademarks assists businesses in protecting their investments and safeguards consumers against confusion and deception in the marketplace by providing notice of marks in use. Through dissemination of patent and trademark information, the Department promotes a global understanding of IP protection and facilitates the development and sharing of new technologies worldwide.

It is a legal requirement for patentability to determine whether an invention is new, useful, and non-obvious to someone knowledgeable in that subject matter. To that end, not only is it important that a patent or trademark be issued in a timely manner, but that it is of high quality. Patent examinations are subjected to both end-product allowance and in-process reviews that evaluate the quality of the substantive basis for examiner decisions, applicability of publications found by the examiner, or the quality reviewer; evidence; and clarity of communications with applicants. Findings produced by these reviews are shared individually with examiners, are collected in a database for ongoing analysis, serve as the basis for the development of training programs, and are used to strengthen the review process.

ACHIEVEMENTS

An important tool needed in improving patent pendency and increasing the quality of issued patents is the Leahy-Smith America Invents Act (AIA), (PL 112-29), signed into law by President Obama on September 16, 2011. USPTO is pleased to report that its AIA implementation efforts are proceeding on a timely basis. U.S. innovators are already seeing the benefits of this legislation. USPTO has implemented several provisions of the AIA, all within the time frames prescribed by the act.

USPTO launched a major program called Clearing Our Oldest Patent Applications 2.0 (COPA 2.0). COPA 2.0 is a continuation of the original COPA effort to eliminate the “tail” of backlog applications. For COPA 2.0, the “tail” is applications that were 13 months and older as of October 1, 2011 that had not received a first office action.

The Agency is moving from a one-track patent examination process to a multi-track process by adopting procedures and initiatives that incentivize abandoning applications that are not important to applicants, accelerating critical technologies, permitting an applicant to accelerate important applications, and exploring other incentive and accelerated examination options.

USPTO continues to increase its examination capacity by employing new recruitment and development models to hire, train, and retain a highly skilled and diverse workforce.

For the first time ever, USPTO has expanded its operations outside of the Washington, DC metropolitan area as part of its ongoing effort to recruit and retain the Nation's top professionals. The first USPTO satellite office, the Elijah J. McCoy Satellite Office, opened in Detroit, MI on July 13, 2012. This location will function as a hub of innovation and creativity, helping protect and foster U.S. innovation in the global marketplace, assisting businesses to cut through red tape, and creating hundreds of highly skilled jobs in each of the local communities.

Patent processing times are primarily gauged by two measures: Average First Action Pendency and Average Total Pendency. Average First Action Pendency is the average length of time it takes from filing until an examiner's initial determination of the patentability of an invention. Average Total Pendency is the average length of time it takes from filing until the application is issued as a patent or abandoned by the applicant. Average First Action Pendency (21.9 months) improved significantly from FY 2011 (28.0 months).

In recent years, the Patent Prosecution Highway has proven to be a significant work sharing initiative for USPTO, and a successful vehicle enabling faster and less expensive multi-country patent prosecution for the IP community.

New performance standards were implemented that place a greater emphasis on examiners interacting with patent applicants earlier in the process to clarify claims and enhance the quality of patent reviews.

In enhancing its effective training regimes, USPTO implemented the Patent Examiner Technical Training Program which provides patent examiners with direct access to experts who are able to share their technical knowledge on prior art and industry standards in areas of emerging technologies and established technologies. This enhanced communication contributes to improving overall patent quality and decreasing patent pendency.

USPTO is implementing a variety of information technology (IT) initiatives to improve its patent operations. Some of these measures include, but are not limited to: converting imaged-based documents to XML text versions of key documents for the entire active patent backfile; deployed Universal Laptops to all patent examiners, on time and on budget, enabling applicants to obtain real-time decisions on their petitions by automating the handling of common electronically-filed petitions; upgraded network infrastructure, providing ISP-grade network bandwidth to USPTO examiners; and continuing to provide and enhance tools for applicants' use for patent application filing.

The Trademark organization consistently met and exceeded its pendency targets for first action and final disposition. With final pendency less than 11 months—a sustained record low for the office—a new application is registered or issued a notice of allowance on average in less than a year.

Pendency has improved as electronic filing and processing have become the primary means of conducting business. Increased use of electronic forms, particularly Trademark Electronic Application System (TEAS) Plus, has improved the efficiency and timeliness of examination.

Trademark first action pendency measures the average number of months from the date of application filing to the first office action. Trademark final pendency measures the average number of days from date of filing to notice of allowance, notice of abandonment, or registration for applications based on use in that month. First action pendency has been maintained within its optimized range of 2.5 to 3.5 months every month for the past six years. Average final pendency, including suspended and *inter partes* cases, was 12.0 months. Excluding applications that were suspended or delayed for *inter partes* proceedings, average total pendency was 10.2 months.

The Trademark organization continues to meet and exceed standards for high quality examination; 96.2 percent of all first actions and 97.1 percent of all final decisions (approvals and rejections) were compliant with the registrability standards set by statute, and also met or exceeded Agency standards for writing quality. Results for both the first and final compliance action measures are at or above their targets and indicate high accuracy in decision-making and writing.

The Trademark organization strives to enhance the quality of examination by adopting more rigorous customer-centric measures. The new “exceptional” quality measure exceeded its target. This measure reflects comprehensive excellence of the search, evidence, writing, and decision-making of the initial office action. It also emphasizes the appropriate use of telephone and e-mail communications to settle or clarify issues with the applicant or its attorney. The target is an indication of the high standard that has been set in defining excellence.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (USPTO)	TARGET	ACTUAL	STATUS
Patent quality composite rate	48-56	72.4	Exceeded
Patent first action pendency (months)	22.6	21.9	Met
Patent total pendency (months)	34.7	32.4	Met
Patent applications filed electronically	96.0%	97.1%	Met
Trademark first action compliance rate	95.5%	96.2%	Met
Trademark final compliance rate	97.0%	97.1%	Met
Trademark first action pendency (months)	2.5-3.5	3.2	Met
Trademark average total pendency (months), excluding suspended and <i>inter partes</i> proceedings	12.0	10.2	Met
Trademark applications processed electronically	74.0%	77.0%	Met

OBJECTIVE 2

Expand international markets for U.S. firms and inventors by improving the protection and enforcement of intellectual property rights (USPTO)

PUBLIC BENEFITS

In an era of a global economy it is also important that the property rights of inventors be protected not only in the United States, but internationally as well. USPTO plays a leadership role in promoting effective domestic and international protection and enforcement of IPR by advocating U.S. government IPR policy, working to develop unified standards for international IPR, providing policy guidance on domestic IPR issues, and fostering innovation. USPTO advises the President and federal agencies on national and international IPR policy matters and trade-related aspects of IPR, and conducts technical assistance and capacity-building programs for foreign governments seeking to develop or improve their IPR regulatory and enforcement mechanisms.

ACHIEVEMENTS

USPTO develops and advances domestic and international U.S. IP policy objectives that include the establishment of strong and balanced IP systems to serve the needs of all stakeholders. USPTO develops IP policy through information gathering and analysis and stakeholder consultations. Stakeholders include domestic and foreign IP rights holders and users, consumers, U.S. government agencies, foreign governments, and the public at large. USPTO furthers IP policy goals through training foreign officials, providing domestic and international educational outreach, launching strategic cooperation projects between national IP offices, deploying IP Attachés to critical regions of the world, and advising on the IP aspects of U.S. trade efforts.

USPTO, through the Global IP Academy (GIPA) in the Office of Policy and External Affairs, provides IP educational opportunities to U.S. and foreign government officials, domestic small and medium-sized enterprises, universities, foreign officials, and the public. GIPA provides expertise on administration, protection, and enforcement in all areas of domestic and international IP. In FY 2012, GIPA conducted training programs for foreign government officials, reaching an audience of foreign government officials from 78 countries.

Throughout FY 2012, USPTO continued to seek improved protection for IP multilaterally in several fora including the World Intellectual Property Organization (WIPO), the World Trade Organization (WTO), and other intergovernmental organizations.

- In June 2012 in Beijing, China, a delegation from USPTO joined U.S. Department of State and U.S. Copyright Office officials, and negotiated and signed a landmark multilateral treaty that advances global IPR for the creative content of audiovisual performers.
- USPTO also advanced work with WIPO on issues relating to the protection of broadcasting and the access to copyrighted works by persons with print disabilities.
- The TM5, consisting of the United States, Japan, Europe, Korea, and China trademark entities, brings together the largest trademark offices in the world to share information and collaborate on projects that increase efficiencies in filing for and maintaining international trademark portfolios. USPTO, Japan Patent Office, and the European Community's Office of Harmonization for the Internal Market invited the Korean Intellectual Property Office and the Chinese State Administration for Industry and Commerce to the TM5 discussions to share information regarding the development of practice and procedure in these offices for the benefit of all trademark owners.

- To improve enforcement in high-priority countries and regions, USPTO has developed rigorous capacity-building programs for foreign enforcement officials, including police and investigators, prosecutors, border enforcement officials, as well as the judiciary. USPTO has taken an active role in working with foreign judiciaries and prosecutors to increase their understanding of IP issues through direct training and exchanges with U.S. officials, including U.S. judges and prosecutors who are experts in handling IP cases.
- Combating the proliferation of counterfeit medicines is a training priority. USPTO organized a series of workshops in Indonesia and Jordan. The U.S. Food and Drug Administration, U.S. Department of Justice, and the U.S. Immigration and Customs Enforcement, Homeland Security Investigations participated in the workshops.
- USPTO worked with Korea, Colombia, and Panama to guide implementation of the IP provisions of their free trade agreements (FTA) with the United States.
- Two new Attaché Post locations were established in Mexico City, Mexico and Shanghai, China, respectively. The addition of the Shanghai position will increase USPTO's presence in China from two cities to three, and the addition of the Mexico City position will expand USPTO's overseas presence from seven countries to eight.

For more detailed information about USPTO achievements this fiscal year, please see its FY 2012 PAR at: <http://www.uspto.gov/about/stratplan/>.

SUMMARY OF PERFORMANCE

The Department uses the following measure to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (USPTO)	TARGET	ACTUAL	STATUS
Percentage of prioritized countries that have implemented at least 75% of action steps in the country-specific action plans toward progress along following dimensions: <ol style="list-style-type: none"> 1. Institutional improvements of IP office administration for advancing IPR 2. Institutional improvements of IP enforcement entities 3. Improvements in IP laws and regulations 4. Establishment of government-to-government cooperative mechanisms 	75%	75%	Met

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)

PUBLIC BENEFITS

EDA encourages entrepreneurship and commercialization through its i6 Challenge Grants designed to encourage and reward innovative, groundbreaking ideas that will accelerate technology commercialization and new venture formation across the United States. Continuing the i6 concept developed in previous years, EDA conducted an i6 Challenge in 2012 to issue up to 12 competitive awards to support proof-of-concept centers. Along with several other federal agencies, EDA also provided funding for the 2012 Advanced Manufacturing Jobs Accelerator; up to 12 awards are expected to be made that will support various projects that foster advanced manufacturing, sponsor entrepreneurship, and utilize commercialized technology. EDA also uses its Office of Innovation and Entrepreneurship to conduct forums, collaborate on cutting-edge research, and analyze policy with the intent of identifying opportunities for enhancing federal efforts to encourage commercialization and entrepreneurship.

ACHIEVEMENTS

Using its broad portfolio of economic development programs, EDA took significant steps to stimulate high growth, business formation, entrepreneurship, and technology commercialization through strategic investments in FY 2012. EDA's investments in University Centers helped to identify opportunities for technology commercialization, and facilitated implementation and dissemination of programs to cultivate innovation and entrepreneurship. EDA's Office of Innovation and Entrepreneurship worked with key stakeholders throughout the country to identify and disseminate strategies to promote technology transfer and commercialization, especially through the Nation's federal laboratories. Vital to this effort was EDA-funded research completed in FY 2012 that identified factors affecting technology transfer and commercialization and provided key innovative strategies that can be employed as they are pursued.

In FY 2012, EDA continued to develop, implement, and lead successful efforts to coordinate federal resources and streamline processes and procedures for both grant application requirements and post-award grant administration. EDA championed several of these interagency funding competitions in FY 2012, including: the Rural Jobs and Innovation Accelerator and the Advanced Manufacturing Jobs and Innovation Accelerator. The Rural Jobs and Innovation Accelerator Challenge leveraged the resources of both EDA and the U.S. Department of Agriculture to support the development and implementation of locally-driven economic development strategies that foster the development of high-growth clusters and accelerate the benefits of regional innovation cluster-based economic development, with a targeted focus on economically-distressed rural communities. Following a similar structure, EDA spearheaded the Advanced Manufacturing Jobs and Innovation Accelerator, which strategically combined federal resources from EDA, NIST, U.S. Department of Energy, U.S. Department of Labor's Employment and Training Administration, U.S. Small Business Administration, and the National Science Foundation. The collaboration between these agencies provided funding for public-private partnerships between small and large businesses, colleges and universities, nonprofits, and other local stakeholders to support and strengthen advanced manufacturing at the local level. In addition to these new regional innovation strategies, EDA conducted a second i6 Challenge in FY 2012, in which recipients will develop and enhance technology commercialization activities.

SUMMARY OF PERFORMANCE

The following 10 measures associated with EDA overlap among Objectives 3, 6, and 7 and are reflected in the crosswalk below. Objective 6 has no other measures other than the ones noted in this list while Objectives 3 and 7 have separate measures that don't overlap with each other.

PERFORMANCE MEASURE (EDA)	OBJECTIVE 3	OBJECTIVE 6	OBJECTIVE 7
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 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 program	✓		✓
Percentage of University Center clients taking action as a result of University Center assistance	✓		✓
Percentage of those actions taken by University Center clients that achieve the expected results	✓		✓

The table that appears below reflects performance for those measures that apply to either all three, or to Objectives 3 and 7, and to those measures that apply to only Objective 3. Measures that apply to only Objective 7 appear under the text for that objective.

PERFORMANCE MEASURE (EDA)	TARGET	ACTUAL	STATUS
Private investment leveraged – 9 year totals (in millions)	\$1,810	\$1,620 ¹	Not Met
Private investment leveraged – 6 year totals (in millions)	\$662	\$662	Met
Private investment leveraged – 3 year totals (in millions)	\$490	\$437 ¹	Not Met
Jobs created/retained – 9 year totals	52,700	45,800 ¹	Not Met
Jobs created/retained – 6 year totals	17,548	17,458 ¹	Slightly Below
Jobs created/retained – 3 year totals	11,269	11,183 ¹	Slightly Below
Percentage of Economic Development Districts (EDD) and Indian tribes implementing projects from the Comprehensive Economic Development Strategy (CEDs) that lead to private investment and jobs	95%	90%	Not Met
Percentage of sub-state jurisdiction members actively participating in the Economic Development District program	89%	87%	Slightly Below
Percentage of University Center clients taking action as a result of the University Center assistance	75%	70%	Not Met
Percentage of those actions taken by University Center clients that achieve the expected results	80%	82%	Met

¹ Estimates as of November 15. EDA expects to meet or be slightly below the targets with the release of final performance data.

NIST’s final FY 2012 enacted appropriations did not provide funding for the Technology Innovation Program (TIP) and the program is currently implementing a closeout, expected to be completed by the end of FY 2014. Therefore, TIP’s performance measures have been discontinued. TIP’s performance measures and targets for previous years appear in the FY 2011 PAR.

Prior to its closeout, TIP awarded 38 projects advancing research in the areas of civil infrastructure (17 projects) and advanced manufacturing (21 projects). These awards leverage \$136 million in TIP funding with an additional \$144 million in industry cost-share. Two projects have successfully completed research and development (R&D) and the remaining projects will continue the research using previously obligated funds. NIST technical experts will continue to monitor the technical progress and ensure the fidelity of the research during this time.

FY 2012 MISSED TARGETS

MEASURE	PRIVATE INVESTMENT LEVERAGED – 9 YEAR TOTALS (IN MILLIONS) (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.
Action	No actions to be taken.
MEASURE	PRIVATE INVESTMENT LEVERAGED – 3 YEAR TOTALS (IN MILLIONS) (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.
Action	No actions to be taken.
MEASURE	JOBS CREATED/RETAINED – 9 YEAR TOTALS (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. The deviation can largely be explained by targets not accounting for the economic downturn that began in 2008.
Action	No actions to be taken.
MEASURE	JOBS CREATED/RETAINED – 6 YEAR TOTALS (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. The deviation can largely be explained by targets not accounting for the economic downturn that began in 2008.
Action	No actions to be taken.
MEASURE	JOBS CREATED/RETAINED – 3 YEAR TOTALS (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. The deviation can largely be explained by targets not accounting for the economic downturn that began in 2008.
Action	No actions to be taken.
MEASURE	PERCENTAGE OF ECONOMIC DEVELOPMENT DISTRICTS (EDD) AND INDIAN TRIBES IMPLEMENTING PROJECTS FROM THE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDs) THAT LEAD TO PRIVATE INVESTMENT AND JOBS (EDA)
Explanation	For this measure, EDA uses a strict definition that requires EDDs to report both jobs and private investment as a result of their economic development projects. This year, a significant number of EDDs reported either jobs or private investment, but not both. If these were to be counted, the percentage would be greater.
Action	No actions to be taken.

(continued)

MEASURE	PERCENTAGE OF SUB-STATE JURISDICTION MEMBERS ACTIVELY PARTICIPATING IN THE ECONOMIC DEVELOPMENT DISTRICT PROGRAM (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. This measure represents an improvement over the previous year.
Action	There was no effect on overall program or activity performance.
MEASURE	PERCENTAGE OF UNIVERSITY CENTER CLIENTS TAKING ACTION AS A RESULT OF THE UNIVERSITY CENTER ASSISTANCE (EDA)
Explanation	The performance goal was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.
Action	No actions to be taken.

HISTORICAL TRENDS

Except for FY 2012, EDA has consistently met or exceeded its targets for private investment leveraged and jobs created, as well as its EDD and University Center targets.

OBJECTIVE 4

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

PUBLIC BENEFITS

In this era of technological expansion two areas where the Department provides significant benefits to the U.S. public involve the radio frequency spectrum and broadband technology. NTIA acts as an advisor to the President on communications policy matters; Internet domain names, wireless telecommunications standards, and technology; and high-speed Internet services. NTIA continues to further the technological advances for wireless communication, Internet services, domain name management issues, and other advances in technology. NTIA's responsibilities have increased considerably in this expansion of technology with the enactment of the American Recovery and Reinvestment Act (ARRA) of 2009. NTIA and the U.S. Department of Agriculture's Rural Utilities Service are administering a \$7 billion initiative to expand broadband access and adoption. Specifically, NTIA is utilizing approximately \$4 billion of that funding for grants through the Broadband Technology Opportunities Program (BTOP). BTOP projects extend broadband access to unserved and underserved areas of the country and to vulnerable populations, including minorities, low income residents, the aged, the unemployed, and people with disabilities. These projects are deploying broadband infrastructure, enhancing capacity at public computing centers, and supporting projects to encourage non-users to subscribe to broadband services. BTOP objectives include:

- Extend broadband access to unserved and underserved areas;
- Increase broadband education, awareness, training, access, equipment, and support;

- Expand broadband access and use by public safety agencies; and
- Stimulate broadband demand, economic growth, and job creation.

NTIA also leads Department activities in the areas of next-generation Internet Protocols, ultrawideband technology, wireless broadband applications, wireless sensor technologies, and Internet technical functions. Congress directed NTIA to use ARRA funding to develop a national broadband map which would educate the Nation about broadband availability and assist the public and private sectors in making decisions affecting their businesses and constituents.

ACHIEVEMENTS

NTIA and the Economics and Statistics Administration (ESA) released a report, "Exploring the Digital Nation," that analyzes broadband Internet adoption in the United States. The report analyzes data collected through an Internet Use supplement to the Current Population Survey of about 54,300 households conducted by the U.S. Census Bureau in October 2010. Overall, approximately seven out of 10 households in the United States subscribe to broadband service. The report finds a strong correlation between broadband adoption and socio-economic factors, such as income and education, but says these differences do not explain the entire broadband adoption gap that exists along racial, ethnic, and geographic lines. Even after accounting for socio-economic differences, certain minority and rural households still lag in broadband adoption.

NTIA and the Federal Communications Commission (FCC) together will identify 500 megahertz (MHz) of spectrum to reallocate for commercial wireless broadband. In January 2011, NTIA selected the 1755-1850 MHz band as a priority for analysis based on a variety of factors, including industry interest and its potential for commercial use within 10 years. In March, NTIA released a report finding that 95 MHz of prime spectrum could be repurposed for wireless broadband use. NTIA, working with federal agencies, evaluated the potential of the 1755-1850 MHz band to accommodate commercial wireless broadband service. This spectrum band is of great interest to the wireless industry. However, over 20 federal agencies currently hold more than 3,100 individual frequency assignments in this band to perform a host of mission-critical functions, including law enforcement surveillance, military tactical communications, air combat training, and precision-guided munitions.

In the report, NTIA proposes a new path forward for spectrum repurposing that relies on a combination of relocating federal users and sharing spectrum between federal agencies and commercial users. Spectrum sharing will be a vital component to satisfying the growing demand for spectrum, and federal and non-federal users will need to adopt innovative spectrum-sharing techniques to accommodate this demand. NTIA proposes convening discussions between industry and the relevant federal agencies under the auspices of the Commerce Spectrum Management Advisory Committee, with the goal of finding ways to work together through sharing or other means to reduce the time and expense of repurposing the 1755-1850 MHz band, while maintaining essential federal capabilities and maximizing commercial utilization.

In February, the Administration released its Privacy Blueprint for consumer data privacy policy in the 21st century. The Privacy Blueprint is the result of more than two years of work by the Department Internet Policy Task Force, as well as extensive discussions with stakeholders in the private sector and the government. NTIA played a key role in developing this policy, and is leading the Administration's work to put it into practice. The Privacy Blueprint directs NTIA to convene multistakeholder processes to develop legally enforceable codes of conduct that specify how the Consumer Privacy Bill of Rights applies in specific business contexts. NTIA announced that the goal of the first multistakeholder process is to develop a code of conduct to provide transparency in how companies providing applications and interactive services for mobile devices handle personal data. NTIA convened four multistakeholder process meetings in July, August, and September. Approximately 300 people took part in the first meeting: 200 in person in Washington and 100 online or by telephone.

BTOP recipients are exceeding their performance goals in deploying new fiber-optic infrastructure, constructing new public computer centers, and encouraging greater Internet adoption. As of June 30, 2012, BTOP recipients reported that they had:

- exceeded NTIA's FY 2012 goal to deploy 50,000 new or upgraded network miles across the country, bringing the total number of miles to more than 72,000, deploying facilities in 47 states and territories; reached its FY 2012 goal to connect 10,000 community anchor institutions to high-speed broadband Internet service;
- entered into nearly 400 interconnection agreements with third-party providers to leverage or interconnect with their networks;
- recipients installed more than 36,000 workstations in public computer centers in 40 states, exceeding the FY 2012 goal;
- provided more than 8 million hours of technology training to approximately 2 million users;
- exceeded NTIA's FY 2012 goal of 350,000 planned new broadband subscribers with more than 380,000 households and 8,000 businesses subscribed to broadband services after receiving digital literacy or job training; and
- funded more than 4,000 jobs in the second quarter of FY 2012.

In all, NTIA broadband grant recipients have spent approximately \$2.1 billion in federal funds and, as of June 30, 2012, more than \$820 million in non-federal matching funds, towards building the Nation's 21st century infrastructure. NTIA expects the pace of construction to remain strong over the next several quarters and expects communities to begin to fully realize the impact of these investments.

In February 2011, NTIA released the National Broadband Map (www.broadbandmap.gov), the first U.S. public, searchable nationwide dataset of broadband availability, and updated it twice in FY 2012. Each update is powered by an extensive, publicly available dataset—more than 20 million records representing 1,865 U.S. broadband providers—that shows where broadband is available, the technology used to provide the service, the maximum advertised speeds, and the names of the service providers. It is the most extensive dataset of its kind, created in partnership with every state. The interactive Web site is a powerful tool for researchers, economic developers, state government leaders, and business owners seeking to better harness the power of broadband to improve their communities.

NTIA awarded a new Internet Assigned Numbers Authority (IANA) functions contract to the Internet Corporation for Assigned Names and Numbers (ICANN). The IANA functions are key technical services critical to the continued operations of the Internet's underlying address book, the Domain Name System (DNS). The IANA functions include: (1) the coordination of the assignment of technical Internet protocol parameters, (2) the administration of certain responsibilities associated with the Internet DNS root zone management, (3) the allocation of Internet numbering resources, and (4) other services related to the management of the .ARPA and .INT top-level domains. (The .INT domain is operated by IANA, and available for registration exclusively by intergovernmental organizations established by international treaties between or among national governments. The .ARPA domain is the "Address and Routing Parameter Area" domain and is designated to be used exclusively for Internet-infrastructure purposes. It is administered by the IANA in cooperation with the Internet technical community.) The period of performance for the contract is October 1, 2012 – September 30, 2015, with two separate two-year option periods for a total contract period of seven years.

NTIA hosted four meetings of the Commerce Spectrum Management Advisory Committee in FY 2012. The committee provides advice on needed reforms to domestic spectrum policies and management in order to: license radio frequencies in a way that maximizes their public benefits; keep wireless networks as open to innovation as possible; and make wireless services available to all Americans.

NTIA issued a Request for Information (RFI) seeking public comment on various issues relating to the development of the State and Local Implementation grant program, which NTIA must establish pursuant to the Middle Class Tax Relief and Job Creation Act of 2012 to assist state and local governments in planning for a single, nationwide interoperable public safety broadband network. NTIA intends to use the input from this process to inform the development of programmatic requirements to govern the state and local planning grants program.

The act also created the First Responder Network Authority (FirstNet) as an independent authority within NTIA. FirstNet is Congressionally mandated to establish a nationwide wireless broadband network that enables police, firefighters, emergency services personnel, and others in public safety to better communicate with one another during emergencies and use new technology to improve response time, keep communities safe, and save lives. The FirstNet Board is responsible for making strategic decisions regarding FirstNet’s operations. The FirstNet Board held its first public meeting on September 25, 2012, adopting bylaws and making initial organizational decisions.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NTIA)	TARGET	ACTUAL ¹	STATUS
Update the spectrum inventory first established in FY 2010	spectrum inventory update	Inventory updated and made available to federal agencies	Met
Identify up to 500 MHz of spectrum to support commercial broadband services or products	Meet 66% of milestones regarding the identification of 500 MHz for wireless broadband	85%	Exceeded
Miles of broadband networks deployed (infrastructure projects)	50,000	72,152	Exceeded
Community anchor institutions connected (infrastructure projects)	10,000	10,045	Exceeded
New and upgraded computer workstations (public computer centers projects)	35,000	36,347	Exceeded
New household and business subscribers to broadband (sustainable broadband adoption projects)	350,000	388,679	Exceeded

¹ Actuals as of June 30, 2012. NTIA anticipates exceeding all its targets with fourth quarter data.

OBJECTIVE 5

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

PUBLIC BENEFITS

NIST works with U.S. industry and other stakeholders to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology that drive technological change. The NIST laboratories play a unique role in the Nation's scientific, industrial, and business communities and anchor the national measurement and standards system that is the language of research and commerce. NIST's presence and leadership in the Nation's measurement and standards system enables companies, government agencies, and universities to work with each other more easily, improving the Nation's economic security and quality of life. NIST's activities also help address a broad range of critical challenges for the Nation to lay the foundation for future success in priority areas such as advanced manufacturing, cybersecurity, Smart Grid, healthcare IT, alternative energies, and improved sustainability.

The NIST Laboratory Programs work at the frontiers of measurement science to ensure that the U.S. system of measurements is firmly grounded on sound scientific and technical principles. Today, the NIST laboratories address increasingly complex measurement challenges, ranging from the very small (e.g., nanoscale devices) to the very large (e.g., vehicles and buildings), and from the physical (e.g., renewable energy sources) to the virtual (e.g., cybersecurity and cloud computing). As new technologies develop and evolve, NIST's measurement research and services remain central to innovation, productivity, trade, and public safety.

The NIST Laboratory Programs provide industry, academia, and other federal agencies with:

- Scientific underpinnings for basic and derived measurement units in the international standards community, measurement and calibration services, and certified reference materials;
- Impartial expertise and leadership in basic and applied research to enable development of test methods and verified data to support the efficient commercialization and exchange of goods and services in industry and commerce;
- Support for the development of open, consensus-based standards and specifications that define technical and performance requirements for goods and services, with associated measurements and test methods for conformity; and
- Unique cutting edge user facilities that support innovation in materials science, nanotechnology discovery and fabrication, and other emerging technology areas through the NIST Center for Neutron Research, which provides world class neutron measurement capabilities to the U.S. research community, and the NIST Center for Nanoscale Science and Technology, which supports nanotechnology development from discovery to production.

In addition, NIST is designated under the National Technology Transfer Advancement Act as the coordinator for all federal agencies using documentary standards that are developed by private-sector consensus bodies to carry out their policy objectives.

ACHIEVEMENTS

Two New Advanced Laboratories Open at NIST Boulder and JILA

New buildings for high-precision science and measurements have opened in Boulder, CO, providing upgraded facilities to support technology innovation, economic growth, and the training of future scientists. The Precision Measurement Lab at NIST and the X-Wing at JILA—a joint venture of NIST and University of Colorado at Boulder—tightly control environmental conditions such as vibration and temperature, as is required for cutting-edge research with lasers, atomic clocks, nanotechnology, and other areas of study. Both buildings also have capabilities for micro and nanofabrication of custom research devices. The original labs were built in the 1950s and 1960s. (http://www.nist.gov/public_affairs/tech-beat/tb20120417.cfm#labs)

Advanced Manufacturing National Program Office Established at NIST

NIST has established the Advanced Manufacturing National Program Office to enable more effective collaboration in identifying and addressing challenges and opportunities that span technology areas and cut across Agency missions. Hosted by NIST, the office will be staffed by representatives from federal agencies with manufacturing-related missions as well as fellows from manufacturing companies and universities. It will link federal efforts to the growing number of private-sector partnerships between manufacturers, universities, state and local governments, and other organizations. (http://www.nist.gov/public_affairs/releases/npo-121911.cfm)

NIST Establishes National Cybersecurity Center of Excellence

NIST established the National Cybersecurity Center of Excellence, a public-private collaboration for accelerating the widespread adoption of integrated cybersecurity tools and technologies. The center will work to strengthen U.S. economic growth by addressing the cybersecurity challenges of real-world complex IT systems. Potential use case examples would be interoperable cybersecurity templates to address challenges in health IT, cloud and mobile computing, cryptography, or continuous monitoring of IT systems. (http://www.nist.gov/public_affairs/tech-beat/tb20120221.cfm#nccoe)

NIST Opens the Net-Zero Energy Residential Test Facility

NIST unveiled a new laboratory designed to demonstrate that a typical-looking suburban home for a family of four can generate as much energy as it uses in a year. The two-story, four-bedroom, three-bath facility incorporates energy-efficient construction and appliances, as well as energy-generating technologies such as solar water heating and solar photovoltaic systems. Following an initial year-long experiment to prove net-zero energy usage, the facility will be used to improve test methods for energy-efficient technologies and develop cost-effective design standards for energy-efficient homes that could reduce overall energy consumption and harmful pollution, and save families money on their monthly utility bills. (http://www.nist.gov/el/nzertf/net_zero_91212.cfm)

NIST Physicists Benchmark Quantum Simulator with Hundreds of Qubits

Physicists at NIST have built a quantum simulator that can engineer interactions among hundreds of quantum bits (qubits)—10 times more than previous devices. The simulator has passed a series of benchmarking tests and scientists are poised to study problems in material science that are impossible to model on conventional computers. Other experiments have yet to fully involve more than 30 qubits, the threshold at which calculations become impossible on conventional computers, but the NIST simulator has extensive control over hundreds of qubits. (http://www.nist.gov/public_affairs/tech-beat/tb20120502.cfm#qubits)

Study Finds Failure Points in Firefighter Protective Equipment

NIST researchers uncovered temperature and heat-flow conditions that can seriously damage facepiece lenses on standard firefighter breathing equipment, a potential contributing factor for first-responder fatalities and injuries. The experiments will inform efforts to improve the match between standard requirements and real-life conditions. Until now, these efforts have been hampered by lack of information regarding the high-temperature and high-heat-flow performance of facepiece lenses and the actual fire-scene conditions that have resulted in lens failures. (http://www.nist.gov/el/fire_research/scba-120611.cfm)

New NIST Biometric Data Standard Adds DNA, Footmarks, and Enhanced Fingerprint Descriptions

NIST published a revised biometric standard that vastly expands the type and amount of information that forensic scientists can share across their international networks to identify victims or solve crimes. New types of biometric data—DNA and footprints—were added as well as updates to existing record types such as fingerprints, facial images, or iris samples. The revision includes the first international standard for the exchange of DNA data. (http://www.nist.gov/public_affairs/tech-beat/tb20111206.cfm#biometric)

Publications Provide Cloud Computing Standards Roadmap and Reference Architecture

NIST has published two new documents on cloud computing that provide guidance for understanding the cloud computing standards and categories of cloud services that industry and government can use. Cloud computing is a model for enabling ubiquitous, on-demand network access to a shared pool of computing resources, including servers, data storage, and applications and services. These documents are incorporated into the *NIST U.S. Government Cloud Computing Technology Roadmap*, which describes what needs to be done to establish cloud computing across government agencies. (http://www.nist.gov/public_affairs/tech-beat/tb20110913.cfm#cloud)

New Tool Helps Organizations Meet Health Care Security Requirements

A new free toolkit developed by NIST can help public and private organizations to understand and implement the requirements of the Health Insurance Portability and Accountability Act Security Rule. The act was enacted by Congress in part to promote efficiency in the health care industry through the use of standardized electronic transactions, while protecting the privacy and security of health information. Organizations can use the toolkit to identify areas where security safeguards may be needed to protect electronic health information, or where their existing safeguards may need to be improved. (http://www.nist.gov/public_affairs/tech-beat/tb20111122.cfm#hipaa)

NIST Releases Final Smart Grid 'Framework 2.0' Document

NIST has updated its *Framework and Roadmap for Smart Grid Interoperability Standards*. The new version adds 22 standards, specifications and guidelines to the 75 NIST recommended in the 1.0 version of January 2010 as relevant to the Smart Grid. Further additions include an expanded view of Smart Grid architecture, developments to ensure grid cybersecurity, a new framework for testing the conformity of devices and systems to be connected to the Smart Grid, and information on coordinating Smart Grid standards development in the United States with similar efforts elsewhere in the world. (<http://www.nist.gov/smartgrid/framework-022812.cfm>)

Novel Filter Material Could Cut Natural Gas Refining Costs

Measurements taken by a team including NIST scientists show that a new material has the ability to separate components of natural gas from one another, a task that currently demands a good deal of energy to accomplish. The results, published in the journal *Science*, might improve the efficiency of the distillation process, which currently involves chilling gas down to the point where its components liquefy. The “metal-organic framework” material the team examined can selectively absorb light hydrocarbons at much higher temperatures, potentially making separation more economical. (<http://www.nist.gov/ncnr/filter-032812.cfm>)

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NIST)	TARGET	ACTUAL	STATUS
Qualitative assessment and review of technical quality and merit using peer review	Complete annual peer review	Completed	Met
Citation impact of NIST-authored publications	> 1.1	> 1.1 ¹	Met
Peer-reviewed technical publications produced	1,210	1,335	Met
Standard Reference Materials (SRM) sold	31,000	33,441	Met
NIST-maintained datasets downloaded	18,000,000	22,567,416	Exceeded
Number of calibration tests performed	14,000	17,206	Met

¹ Actual for this measure lags nine months. The actual shown here is based on FY 2011 data.

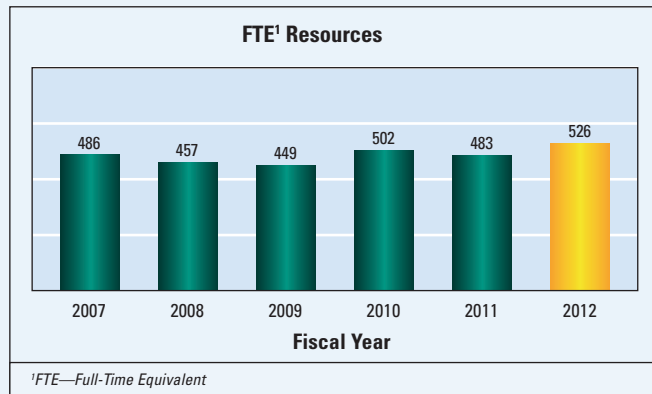
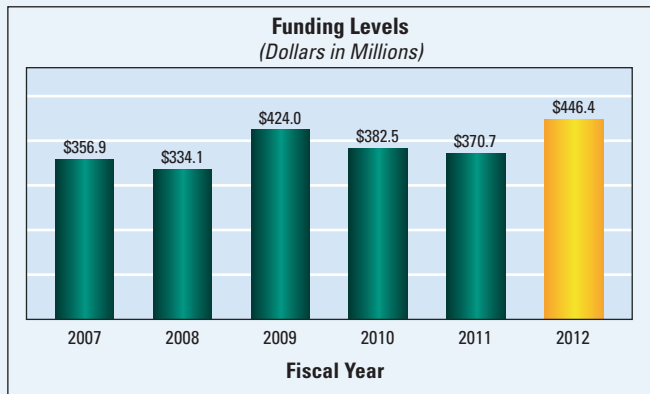
HISTORICAL TRENDS

The National Research Council (NRC), in cooperation with NIST, has completed its peer assessments every year with typically high praise for NIST programs. NIST typically meets all its targets each year.

STRATEGIC GOAL – MARKET DEVELOPMENT AND COMMERCIALIZATION

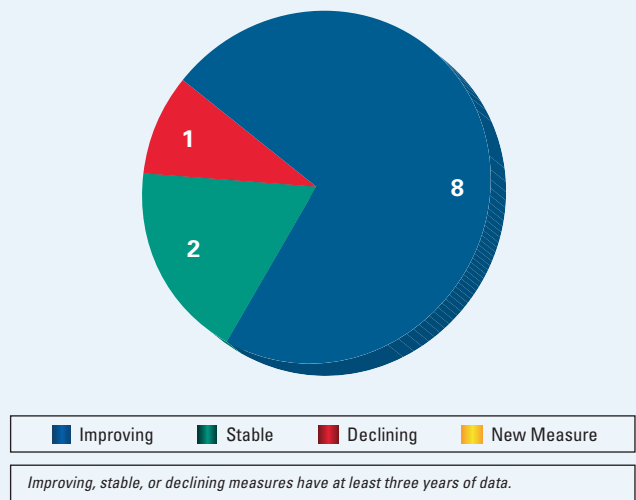
Foster market opportunities that equip businesses and communities with the tools they need to expand, creating quality jobs with special emphasis on unserved and underserved groups

MARKET DEVELOPMENT AND COMMERCIALIZATION TOTAL RESOURCES



This strategic goal is comprised of three objectives which contribute to the Secretary’s theme of Economic Growth. The following public benefits, achievements, and performance results are associated with each objective.

MARKET DEVELOPMENT AND COMMERCIALIZATION STATUS OF CURRENT MEASURES



OBJECTIVE 6

Promote the advancement of sustainable technologies, industries, and infrastructure (EDA)

PUBLIC BENEFITS

Green technologies and industries refer to efforts and activities that preserve or enhance environmental quality by limiting the Nation's dependence on fossil fuels, enhancing energy efficiency, curbing greenhouse-gas emissions, and protecting natural systems. As a subset of green, blue technologies refer to environmentally-sustainable efforts and activities related to oceans and waterways, aquaculture, renewable energy (hydropower, ocean thermal energy, wave power, etc.), and water science management.

Facing the challenges presented by global warming and climate change also offers opportunities to U.S. businesses. It is a Departmental priority to gather data about the environment, promote energy efficient and environmentally sustainable technologies, and use this information to grow jobs in the blue and green economies.

The Economic Development Administration (EDA) provides strategic investments in projects that encourage growth of the green economy. Recent EDA-funded research reveals that businesses in renewable energy and alternative fuels, green building and energy efficiency technology, energy-efficient infrastructure, transportation, and recycling are growing faster than the rest of the economy. These findings illustrate the promise environmentally sustainable development, and more specifically, advances in green industries and technologies, have for transforming regional economies and spurring innovation and fostering job growth.

Through its strategic investments, EDA helps communities leverage their regional assets to promote economic development in a sustainable manner. For example, EDA can provide technical assistance to plan or test the feasibility of transitioning to green practices, resources to help construct U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certified (or equivalent) buildings, or support to make a business or manufacturing process more environmentally-friendly and more competitive. Since FY 2010, EDA has measured its success in promoting environmentally-sustainable economic development through a Priority Goal by raising to 12 percent the percentage of construction projects involving buildings or structures funded by Economic Development Assistance Programs that are certified by the U.S. Green Building Council's LEED or a comparable third-party certification program.

ACHIEVEMENTS

In FY 2012, EDA updated its Environmental Sustainable Development investment priority, which encourages the use of its programs to support environmentally-sustainable economic development. There are several conditions which must be met for an EDA project to advance this investment priority, such as a project's proximity to quality transit and its reuse of existing developed land. EDA streamlined an applicant's ability to achieve this investment priority by enabling projects sited within the boundaries of an area that has received the U.S. Department of Housing and Urban Development's (HUD) Preferred Sustainability Status designation and can demonstrate how the project is consistent with the Partnership for Sustainable Communities Livability Principles to do so.

SUMMARY OF PERFORMANCE

The measures for this objective overlap with those of Objectives 3 and 7. The targets and actual performance of those measures appear on page 56.

OBJECTIVE 7

Promote the vitality and competitiveness of our communities and businesses, particularly those that are disadvantaged or in distressed areas (EDA, MBDA)

PUBLIC BENEFITS

In support of disadvantaged individuals and communities, EDA promotes private enterprise and job creation in economically distressed communities and regions by investing in projects that produce jobs and generate private capital investment. Through partnerships with local development officials: Economic Development Districts (EDD); University Centers; faith-based and community-based organizations; and local, state, and federal agencies, EDA can assist distressed communities with strategic planning and investment activities. This process helps communities set priorities, determine the viability of projects, and leverage outside resources to improve the local economy to sustain long-term economic growth.

For communities that are particularly distressed through natural disasters, EDA has a long history of providing concerted economic assistance designed to assist these communities with their long-term economic recovery. In partnership with the Federal Emergency Management Agency (FEMA), EDA will often provide the initial economic impact assessment of affected areas. EDA then works with the community to provide tailored assistance, whether by supporting a disaster coordinator to help guide the community in its recovery efforts, or by providing funds for targeted infrastructure designed to help catalyze the regional economy to overcome the effects of the disaster.

The Minority Business Development Agency (MBDA) promotes the ability of minority business enterprises (MBE) to grow and to participate in the global economy through a range of activities that include funding a network of centers that provide MBEs a variety of business assistance services. MBDA, through its direct federal client services and its network of funded centers (1) fosters the expansion of opportunities for minority-owned business in the global marketplace, (2) identifies sources of financial capital for minority-owned firms, (3) develops and upgrades electronic tools to provide access to growth markets through automated matching of MBEs to public and private sector opportunities, (4) provides management and technical assistance to minority-owned businesses, and (5) advocates for the increased use of e-commerce and new technologies by MBEs.

ACHIEVEMENTS

In FY 2012, EDA continued to develop, implement, and lead successful efforts to coordinate federal resources and streamline processes and procedures for both grant application requirements and post-award grant administration. The Strong Cities, Strong Communities Visioning Challenge, in the same vein of interagency collaboration, leveraged HUD's resources and philanthropic networks to provide funding for cities to conduct economic planning competitions, in which financial prizes are used to incentivize the submission of community-led, bottom-up economic development plans. Lastly, EDA received a supplemental appropriation of \$200 million to support long-term economic recovery and infrastructure support in communities receiving a major disaster designation in FY 2011. To ensure that these resources began to be disbursed as rapidly and effectively as possible, EDA developed a streamlined application process that allows for an expeditious review and evaluation.

In FY 2012, MBDA experienced a very productive year. MBDA created 5,331 new jobs across the Nation and saved tens of thousands of existing jobs by helping minority-owned and operated businesses obtain contracts, totaling \$1.16 billion, and financial awards, totaling \$1.56 billion.

MBDA continued to operate a nationwide network of 39 MBDA Business Centers, including centers focused on American Indians and Alaska Natives. MBDA also continued to operate a center for government contracting to provide direct support to minority-owned companies across the Nation that desire to compete for government contracts. This center provides a central location for minority-owned businesses to obtain the information, skills, and relationships they need to achieve favorable contract acquisition.

In FY 2012, MBDA engaged in an ambitious reorganization effort to focus its critical resources on supporting the Nation's MBEs through its network of Business Centers. MBDA's regional administrative offices were closed and staff were integrated into MBDA headquarters. The network of funded centers now have a central point of contact with MBDA headquarters to support their local and national efforts to help MBEs succeed in the global marketplace.

The National Advisory Council on Minority Business Enterprises continued to be a critical source of policy recommendations on how to expand the economic capability of MBEs. MBDA worked closely with advisory board members to promote policies that create a level playing field for MBEs across the Nation.

Under the auspices of President Obama's National Export Initiative (NEI), export promotion and the globalization of the minority business community continued to be a substantial focus of Agency activities in FY 2012. MBDA's target clients have unique competitive advantages in the global markets, including language skills, cultural knowledge, knowledge of local business practices, and familial and other relationships. These competitive advantages have resulted in minority-owned firms being twice as likely to export as non-minority-owned firms. To leverage these competitive advantages on behalf of the U.S. economy, MBDA engaged in an effort to identify those companies that have export potential and support them as they globalize their business models.

SUMMARY OF PERFORMANCE

Several of the measures for this objective overlap with those of Objectives 3 and 6. The targets and actual performance of those measures appear on page 56. In addition, the following measures apply only to this objective.

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
Percentage of Trade Adjustment Assistance Center (TAAC) clients taking action as a result of the assistance facilitated by the TAACs (EDA)	90%	85%	Not Met
Percentage of those actions taken by Trade Adjustment Assistance Center clients that achieved the expected results (EDA)	95%	100%	Met
Dollar value of contract awards obtained (billions) (MBDA)	\$1.10	\$1.16	Met
Dollar value of financial awards obtained (billions) (MBDA)	\$0.90	\$1.56	Exceeded
Number of new job opportunities created (MBDA)	5,000	5,331	Met

FY 2012 MISSED TARGETS

MEASURE	PERCENTAGE OF TRADE ADJUSTMENT ASSISTANCE CENTER (TAAC) CLIENTS TAKING ACTION AS A RESULT OF THE ASSISTANCE FACILITATED BY THE TAACS (EDA)
Explanation	The decrease in the percentage of TAAC clients taking action as a result of the assistance facilitated by the TAACS may be due to firms having to allocate resources that would have gone towards implementing projects to operating costs as a result of the recession-driven economic downturn.
Action	No actions to be taken.

HISTORICAL TRENDS

In the past, EDA and MBDA have consistently met their targets.

OBJECTIVE 8

Improve the competitiveness of small and medium-sized firms in manufacturing and service industries (ITA, NIST)

PUBLIC BENEFITS

ITA

The International Trade Administration’s (ITA) Manufacturing and Services (MAS) program provides the Administration, Congress, and U.S. businesses the data and analysis needed to make informed decisions on issues impinging on U.S. competitiveness and employment. The data program is especially valuable to policymakers who require trade information at sub-national (state and metropolitan) and small and medium exporter levels. MAS has also created an online database of U.S. free trade agreement (FTA) tariff rates to better enable small and medium-sized firms to take advantage of these agreements. In addition, to be competitive in today’s global economy, U.S. companies need to be able to move products and services securely, quickly, and efficiently within U.S. borders and beyond. MAS launched a national dialogue to explore supply chain infrastructure issues that cut across the broad range of national priorities. MAS is framing the issues and prioritizing what needs to be done to improve U.S. competitiveness, especially through coordinating with other ITA units to develop in-depth and data-driven strategies that can be the basis for Administration policies and coordinated activities to expand U.S. exports that support U.S. jobs.

The Nation’s approximately 300,000 manufacturers employed more than 11.5 million people in high-paying jobs in 2010. U.S. manufacturers represent roughly two-thirds of total U.S. research and development (R&D) expenditures and account for 60 percent of all U.S. goods and exports. A strong manufacturing base is critical to the economic strength and stability of the United States. Increased manufacturing productivity and competitiveness are essential for the survival of this crucial industrial base.

MAS administers the Market Development Cooperator Program (MDCP). An MDCP award establishes a public-private partnership whereby ITA provides a trade association or other non-profit industry organization with technical and financial assistance. MDCP awards enhance the competitiveness of U.S. industries by reducing the startup costs of new projects designed to help U.S. firms to

export. Projects vary based on industry focus and target market. Project elements vary as well, ranging from organizing U.S. industry participation in foreign trade shows to removal of market access barriers that limit exports. Performance is measured by the value of exports generated annually from public-private MDCP partnerships

NIST

A strong domestic manufacturing base is vital to the U.S. economy, national security, and fostering U.S. technology and innovation. The National Institute of Standards and Technology's (NIST) Hollings Manufacturing Extension Partnership (MEP) connects manufacturers with the tools, information, and opportunities available to develop innovative products, diversify into new markets, and increase options for growth and profitability. In doing so, MEP supports the mission of NIST of promoting U.S. innovation and industrial competitiveness, while also advancing the Department's Market Development and Commercialization goal.

MEP is a federal-state-industry partnership that provides U.S. manufacturers with access to technologies, resources, and industry experts. The MEP program consists of centers in every state and Puerto Rico that work directly with their local manufacturing communities to strengthen the competitiveness of the Nation's domestic manufacturing base. Funding for the MEP centers is a cost-sharing arrangement consisting of support from the federal government, state and local government/entities, and fees charged to the manufacturing clients for services provided by the MEP centers.

Through the MEP program, manufacturers have access to a network of manufacturing experts available to assist in the adoption of new technologies, developing innovative products, and implementing process innovations to improve their productivity, profitability, and competitiveness. MEP, in collaboration with partners in all levels of the government, universities, community colleges, and the private sector, is working to accelerate manufacturing's ongoing transformation into a more efficient and powerful engine of innovation that drives economic growth and job creation.

Each year MEP works with thousands of U.S. manufacturers to implement the best combination of process improvements and growth services for each individual company. MEP is focused on providing the services that reduce manufacturer's bottom-line expenses, increase efficiencies, and build capacity to foster the development of new products, expand into new markets, and the adoption of new technologies that improve the overall competitiveness of each manufacturer.

Through an annual client survey, the program obtains quantifiable impacts of MEP services on its clients' bottom line. MEP demonstrates the impact of its services on increased sales, increased capital investment, and cost savings attributed to MEP assistance.

ACHIEVEMENTS

ITA

As part of the Office of Management and Budget (OMB) led interagency rulemaking process, the MAS Regulatory Affairs team provided comments on the Environmental Protection Agency's (EPA) Treatment of Confidential Business Information for the Chemicals Industry rule. Although EPA had not calculated compliance costs for the rule; the Regulatory Affairs team estimates the annual costs to be approximately \$800 million. The Regulatory Affairs team also contributed to EPA's greenhouse gas and Corporate Average Fuel Economy (CAFE) regulations. The Regulatory Affairs team suggested changes to the text of the proposed 2017-2025 greenhouse gas and CAFE standards for light duty vehicles to highlight the benefits to U.S. automobile competitiveness of moving efficiency standards closer to those of other major markets, and EPA agreed to the suggested changes.

ITA continues to make progress toward achievement of NEI goals by leveraging public-private partnerships through the MAS-administered MDCP. Led by tourism and building material exports to China, MDCP partners have helped U.S. companies export \$1.7 billion to various foreign markets during the first nine months of FY 2012. This is the second highest three-quarter export result since MDCP export result tracking began in 1997. MDCP awards help trade associations and other non-profit industry groups help small and medium-sized enterprises to increase revenue and create jobs. On average, for every MDCP award dollar, \$219 is generated in exports. Additionally, MAS has 24 active MDCP cooperative agreements, including nine 2012 awards for \$2.4 million in financial assistance.

NIST

Manufacturing Extension Partnership Helps Manufacturers Increase Sales and Retain Jobs

MEP’s nationwide network of centers with nearly 1,300 technical experts helped small and mid-sized manufacturers receiving services in FY 2011 increase their sales by an estimated \$2.7 billion (MEP results have a one-year time lag). MEP provided its clients with a range of tools and services focused on the adoptions of new technologies, exporting strategies, and workforce retention. These activities will generate an estimated \$2.6 billion in capital investments, \$966 million in cost savings, and 65,077 jobs created or retained.

For example, with help from the MEP system and partners, Idaho-based Rekluse Motor Sports developed a strategic export action plan that increased sales to the European Union, created 31 new jobs, and expanded revenues to over \$3 million. Unarco, an Oklahoma-based manufacturer of shopping carts, was looking to drive out waste in their manufacturing process and reduce their impact on the environment. By working with MEP, the company revamped their manufacturing processes and incorporated powder coating technologies resulting in near elimination of hazardous materials, \$15,000 in utility savings, and the creation of three new jobs. Additional MEP client success stories are available on MEP’s Web site at: <http://ws680.nist.gov/mepmeis/SearchSS.aspx>.

Energy and Commerce Departments Announce New Centers for Building Operations Excellence

Through MEP, the Department and the U.S. Department of Energy selected three Centers for Building Operations Excellence to receive a total of \$1.3 million to create and deploy programs aimed at training and expanding current and incoming building operators. The centers will work with universities, local community and technical colleges, trade associations, and the Energy Department’s national laboratories to build training programs that provide commercial building professionals with the critical skills they need to optimize building efficiency while reducing energy waste and saving money.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
Exports generated annually from public/private partnerships (ITA)	\$1.9B	\$1.7B ¹	Met
Annual cost savings resulting from the adoption of MAS recommendations contained in MAS studies and analysis (ITA)	\$250M	\$0M	Not Met
Number of clients served by Hollings MEP centers receiving federal funding (NIST)	32,500	32,123	Slightly Below

(continued)

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
Increased sales attributed to Hollings MEP centers receiving federal funding (NIST)	\$2,000M from FY 2011 funding	\$2,700M from FY 2011 funding ²	Met
Capital investment attributed to Hollings MEP centers receiving federal funding (NIST)	\$1,100M from FY 2011 funding	\$2,600M from FY 2011 funding ²	Exceeded
Cost savings attributed to Hollings MEP centers receiving federal funding (NIST)	\$1,100M from FY 2011 funding	\$966M from FY 2011 funding ²	Not Met

¹ Results as of June 30, 2012. Once final numbers are in, ITA expects to meet or exceed the target.

² NIST performance actuals for this objective lagged at least six months. Therefore, beginning with the FY 2005 PAR, NIST shifted to a format in which NIST reports actuals one year later. This data lag, coupled with the time line for producing the PAR, precludes the reporting of actual FY 2012 data. With the exception of the number of clients, the NIST data reported in the current year PAR are an estimate based on three quarters of actual client reported impacts and one quarter estimated client impacts.

FY 2012 MISSED TARGETS

MEASURE	ANNUAL COST SAVINGS RESULTING FROM THE ADOPTION OF MAS RECOMMENDATIONS CONTAINED IN MAS STUDIES AND ANALYSIS (ITA)
Explanation	MAS did not meet the target for annual cost savings resulting from the adoption of MAS recommendations contained in MAS studies and analysis because none of the rules MAS commented on in FY 2012, which would have resulted in cost savings, have been issued as final rules. MAS, however, contributed industry and analytical expertise on several rules, the most important of which was the Department of Energy 810 rule regulating the export of unclassified nuclear technology. MAS analysis indicating that the value of nuclear civil exports could cross the \$100 million threshold by 2015 has caused OMB to reconsider whether the rule might be deemed economically significant.
Action	MAS actively follows the rule-making process and focuses especially on economically significant rules, i.e., those that have an impact of over \$100 million that have the potential to impact the global competitiveness of U.S. industry. In FY 2012, there have been significantly fewer rules to consider than in past years. The number of rules to consider in any year is beyond the control of MAS.
MEASURE	NUMBER OF CLIENTS SERVED BY HOLLINGS MEP CENTERS RECEIVING FEDERAL FUNDING (NIST)
Explanation	The performance target was set at an approximate target level, and the deviation from that level is slight. There was no effect on the overall program or activity performance.
Action	No actions to be taken.
MEASURE	COST SAVINGS ATTRIBUTED TO HOLLINGS MEP CENTERS RECEIVING FEDERAL FUNDING (NIST)
Explanation	In FY 2012, MEP continued the transition of the MEP system from a focus on continuous improvement and primarily cost savings to a broader focus on innovation-driven business growth for U.S. manufacturing firms. This transition involves the MEP centers working with companies on longer-term projects with expected economic impacts in the area of new product development, expanded markets, and increased sales. These innovation-focused projects realize lower economic impact with respect to the cost savings measure. In addition, business innovation service offerings require a renewed skill set for the MEP center staff and a considerable effort was made in FY 2012 to build the capacity and skills of center staff to effectively deliver innovation services to manufacturers.
Action	As the program continues this transition, MEP will monitor all impact measures and specific measures and targets may need to be adjusted to reflect the program's shifting focus to longer-term, innovation projects.

HISTORICAL TRENDS

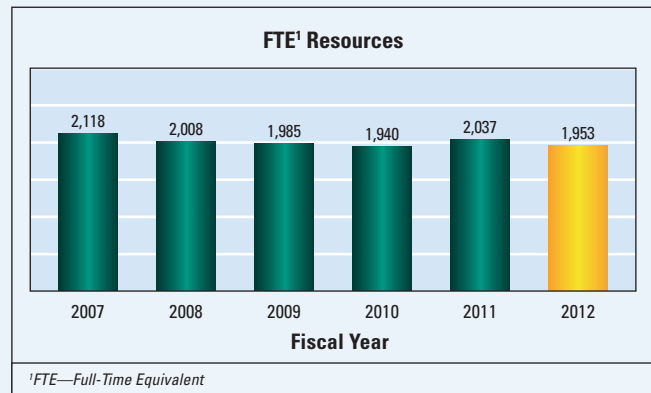
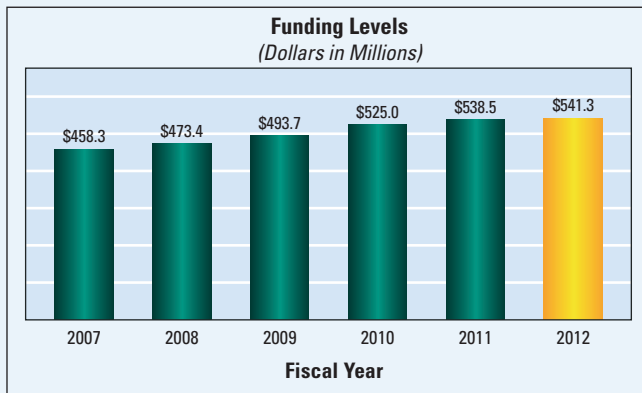
MAS has consistently met its targets for annual cost savings resulting from the adoption of MAS recommendations contained in MAS studies and analysis when the rule-making process has been more active, a characteristic beyond the the control of MAS.

MEP has consistently exceeded its targets. Performance projections are based in part on past programmatic results but also on the current operating realities of the MEP centers and their manufacturing clients. The projections reflect a realization that any sort of forecast must be based on current economic and market conditions and also other contributing factors such as state funding uncertainties. Simply projecting past results into the future in a linear fashion does not take into account these other considerations. Data from the Federal Reserve Board, the Institute for Supply Management, Bureau of Labor Statistics, and Bureau of Economic Analysis are monitored and assessed on a regular basis to inform MEP's performance targets.

STRATEGIC GOAL – TRADE PROMOTION AND COMPLIANCE

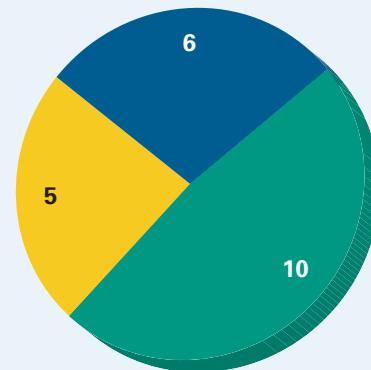
Improve our global competitiveness and foster domestic job growth while protecting American security

TRADE PROMOTION AND COMPLIANCE TOTAL RESOURCES



This strategic goal is comprised of four objectives which contribute to the Secretary’s theme of Economic Growth. The following public benefits, achievements and performance results are associated with each objective.

TRADE PROMOTION AND COMPLIANCE STATUS OF CURRENT MEASURES



Improving, stable, or declining measures have at least three years of data.

OBJECTIVE 9

Increase U.S. export value through trade promotion, market access, compliance, and interagency collaboration (including support for small and medium enterprises) (ITA)

PUBLIC BENEFITS

The health of the U.S. economy depends on small and medium-sized enterprises (SME) since they account for 98 percent of all U.S. exporters. Many of these firms have been successful in doing business in countries that have recently negotiated free trade agreements (FTA) with the United States. The U.S. and Foreign Commercial Service (US&FCS) program provides front-line diplomatic support to U.S. companies for commercial issues overseas, advocates for U.S. companies bidding on foreign government procurements, and creates a supporting environment at home in which all U.S. firms, including SMEs, can flourish by increasing export opportunity awareness among U.S. companies. This is accomplished by advocating on behalf of the U.S. companies in foreign markets; identifying potential exporters who need assistance; leveraging electronic and traditional media; enhancing relationships with customers; and developing alliances and partnerships with state, local, and private partners to deliver export assistance. US&FCS helps U.S. companies take advantage of world market conditions to find new buyers.

ACHIEVEMENTS

Amidst the pressures of a troubled global economy, US&FCS continued to help U.S. businesses maximize their export potential, enabling them to diversify their customer base, remain globally competitive, and maintain jobs for Americans through global trade. In 2012, US&FCS assisted nearly 19,000 U.S. companies by providing in-depth export counseling, market entry plans, business-to-business matchmaking services, market research and due diligence reports, and other customized export development and market entry services. US&FCS also led trade missions around the globe, brought foreign buyer delegations to U.S. trade shows, promoted U.S. companies at international trade events, and organized product launches and technical seminars overseas. In addition, US&FCS continued to provide front-line diplomatic support to U.S. companies overseas and advocated for U.S. companies bidding on foreign government procurements. As a result of these efforts, US&FCS facilitated more than \$100 billion in exports for nearly 5,600 U.S. companies in 2012. Over 80 percent of these companies were SMEs that exported for the first time, entered a new market, or increased their market share in an existing market.

US&FCS continues to support the National Export Initiative (NEI). Launched in February 2010, President Obama's NEI is designed to reach the goal of doubling exports by 2014 to support two million jobs in the United States. The NEI is focused on three key areas: (1) a more robust effort by this administration to expand its trade advocacy in all its forms, especially for SMEs, (2) improving access to credit with a focus on SMEs that want to export, and (3) continuing the rigorous enforcement of international trade laws to help remove barriers that prevent U.S. companies from getting free and fair access to foreign markets. Since the President announced the NEI, the Department's Advocacy Center has assisted U.S. companies competing for export opportunities, supporting \$111 billion in exports. With offices and staff around the globe and throughout the United States, the Department's Commercial Service has helped more than 15,000 companies generate \$162 billion worth of exports. To date, the Department has coordinated 103 trade missions with over 1,000 companies to 82 countries.

The International Trade Administration's (ITA) Export.gov is currently the federal government's most comprehensive Web site on exporting. Since its launch in 2001, ITA has made incremental improvements to Export.gov over the years, and in 2012 ITA began

the effort to transition the Export.gov Web site to a new platform that will improve clients' online experience and deliver personalized content to SMEs through a "MyExport.gov" like experience. Based on a company's profile (including industry, exporting maturity, size of company, etc.), information on events, market research, and trade leads will be pushed to clients. This will save SMEs time and effort so that they can focus on building the best product, expanding international sales, and providing world class service. This new tool is being designed to consolidate feeds from the Trade Promotion Coordinating Committee agencies and integrate them into Export.gov and into BusinessUSA, delivering an enhanced client experience.

The Strategic Partnership Program has grown exponentially in 2012, from 18 public-private partnership agreements to 96 agreements with companies and associations, and continued to promote successful public-private partnerships through the growth of the New Market Exporter Initiative (NMEI) and the introduction of the Global Buyers Initiative (GBI). In 2012 alone, partners cooperated on more than 260 activities reaching more than 13,500 clients and committed more than \$120,000 in resources including paying for their customers to receive services and supporting educational outreach. The NMEI is a program of the President's NEI, recommended in the September 16, 2010 "Report to the President on the National Export Initiative: The Export Promotion Cabinet's Plan for Doubling U.S. Exports in Five Years." The NMEI leverages strategic partners to expand U.S. exports by identifying their customers and members who sell to at least one international market and providing them with assistance selling to additional markets. The GBI was developed as a foreign buyer recruitment program to better identify and align foreign importers with U.S. exporters. To date, the NMEI has 23 active partners and has generated more than 2,000 company registrations, while the GBI has developed initial partnerships with 16 organizations.

SelectUSA was created last year by Executive Order of the President to promote and facilitate business investment in the United States. In addition to developing and formalizing its advocacy, ombudsman, and investor inquiry services, SelectUSA has used its 2012 pilot year to develop a robust outreach strategy focused on leveraging the Department's foreign and domestic fields. Internationally, SelectUSA identified 25 target markets for focused outreach and engagement. Those markets—which include Belgium, Brazil, Canada, China & Hong Kong, Finland, France, Germany, India, Ireland, Israel, Italy, Japan, Mexico, Netherlands, Russia, Saudi Arabia, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, United Arab Emirates, and United Kingdom—comprise 90 percent of current foreign direct investment in the United States. SelectUSA provided training to commercial officers in 23 of these 25 target markets. Domestically, SelectUSA increases awareness of its services among U.S. economic development organizations and other key stakeholders by leveraging intra-agency partners, including the National Institute of Science and Technology's (NIST) Hollings Manufacturing Extension Partnership (MEP), the Economic Development Administration (EDA), the Minority Business Development Agency (MBDA), and the U.S. Patent and Trademark Office (USPTO).

In March 2012, then Secretary Bryson led an Infrastructure Business Development Trade Mission to India. Over the course of five days, the 16 companies and 27 executives represented on the missions participated in over 200 individual and group meetings with Indian companies and government officials, as well as attended several large events where additional introductions were made, including breakfasts/luncheons hosted by the local American Chamber of Commerce, Indian Business Organizations (CII and FICCI), and the Ambassador and Consul General. These activities generated multiple leads, potential agreements, and potential future sales. During the wrap-up discussions, the participating companies indicated that there were significant opportunities in the Indian market and most expected commercial success to come from their participation in the mission in the next 18-24 months.

The International Buyer Program (IBP) is one of the most successful US&FCS trade promotion programs. The IBP offers business-to-business matchmaking service offerings enabling U.S. companies to meet a breadth of prospective buyers from around the world all in one domestic venue. In FY 2012, the IBP recruited 10,880 prospective buyers from international markets to come and meet U.S. exporters at 33 participating U.S. industry trade events. During these trade shows, US&FCS personnel facilitated 3,860 trade counseling sessions with U.S. and international companies. As a result, the IBP generated nearly \$614 million in exports in FY 2012.

An excellent example of the IBP value proposition is the Consumer Electronics Show (CES)—the world’s largest annual trade show for the broad-based consumer electronics technology market, held in January 2012 in Las Vegas, NV. Through the IBP, the US&FCS recruited 39 international buyer delegations consisting of 1,126 delegates, and conducted 320 trade counseling sessions with U.S. companies. The then Department Deputy Secretary Blank participated in this IBP trade show, providing welcome remarks at the session “Getting Us Back on Track: How Technology and Innovation Can Save America,” and presenting an Export Achievement Certificate to a U.S. company, Meridrew Enterprises.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (ITA)	TARGET	ACTUAL	STATUS
Commercial diplomacy success (cases) (annual)	152	215	Exceeded
Ratio of US&FCS export value to US&FCS costs	\$140	\$387	Exceeded
Number of clients assisted by US&FCS	20,709	18,945	Not Met
Dollar value of U.S. export content in advocacy cases won	\$19B	\$74B	Exceeded
Annual number of SMEs US&FCS assists exporting to a second or additional country	3,307	3,444	Met

FY 2012 MISSED TARGETS

MEASURE	NUMBER OF CLIENTS ASSISTED BY US&FCS
Explanation	US&FCS missed the annual target for this goal due to the technology challenges associated with US&FCS’s current Customer Relationship Management (CRM) system, which hinders timely and accurate reporting of trade promotion activities.
Action	In FY 2013, US&FCS will remedy technology challenges by procuring a new CRM system.

OBJECTIVE 10
Implement an effective export control reform program to advance national security and economic competitiveness (BIS)

PUBLIC BENEFITS

It is essential to security of the United States that it prevent the export of sensitive goods. To prevent illegal exports, the Department administers and enforces controls on exports of dual-use goods and technologies to counter proliferation of weapons of mass destruction, combat terrorism, and pursue other national security policy goals. The Department processes export license applications for controlled commodities of U.S. companies engaged in international trade in accordance with Export Administration

Regulations (EAR). The Department engages in activities to prevent violations before they occur and to investigate and prosecute violators to dismantle illicit proliferation networks. Preventive activities include the following:

- screening license applications for enforcement concerns;
- conducting end-use checks abroad to confirm the *bona fides* of parties to export transactions;
- confirming compliance with license conditions;
- uncovering diversions to unauthorized end-users/uses; and
- reviewing Shippers Export Declarations and foreign visitors' visa applications to identify potential export control issues.

Outreach activities include educating U.S. businesses on export control requirements and identifying suspicious transactions leading to successful preventative and investigative actions. Investigation and prosecution activities involve Department Special Agents conducting cases focused on significant proliferation, terrorism, and military end-use export violations, and the vigorous pursuit of criminal and administrative sanctions. Finally, an integral part of the Bureau of Industry and Security's (BIS) mission is to facilitate compliance with U.S. export controls by keeping U.S. firms informed of export control regulations through an extensive domestic and foreign outreach program.

The Department also works to strengthen the export control systems of other countries, assess the viability of key sectors of the defense industrial base, and assure the timely availability of industrial resources to meet national defense and emergency preparedness requirements. Further information on these tasks is available on www.bis.doc.gov/news/index.htm#annual. Finally, the Department also serves as the lead agency for ensuring U.S. industry compliance with Chemical Weapons Convention (CWC).

Driven by the President's call for an Export Control Reform Initiative, BIS is contributing to accomplishing the initiative's key recommendations of establishing a single control list, a single primary enforcement coordination agency, a single information technology (IT) system, and a single licensing agency. The initiative is split into three phases: make immediate improvements on the current system while creating a framework for the new system, complete deployment of reforms, and complete the transition to the new U.S. export control system with legislative assistance.

ACHIEVEMENTS

In FY 2012, BIS published 12 proposed rules to implement the President's Export Control Reform Initiative. These rules, and the counterpart proposals published by the U.S. Department of State, seek public comment on the revision of State Department's U.S. Munitions List (USML) into a positive, objective list and propose to transfer tens of thousands of low level military items, primarily parts and components, from the USML to the more flexible export control system administered by BIS. Revising these controls will achieve the objectives of the President's Export Control Reform Initiative: focusing limited resources on the threats that matter most, facilitating military interoperability with close U.S. friends and allies, and strengthening the U.S. defense industrial base by reducing the current incentives for foreign manufacturers to "design out" U.S.-origin parts and components because foreign-made end products into which USML-listed items are incorporated will be controlled under the International Traffic in Arms Regulations (ITAR).

In FY 2012, the Bureau played a leading role in mapping the intricate industrial supply chains for such key defense sectors as Space and Naval Underwater Acoustics; assessing the overall health of companies that support human space flight activities; and identifying sectoral equipment, labor, and technology shortfalls that could jeopardize the ability of the warfighter to successfully accomplish missions. The space industry defense industrial base assessment is a good example of how BIS worked closely with defense and

civilian agencies, such as the U.S. Air Force, National Aeronautics and Space Administration, and National Reconnaissance Office, and leveraged unique authorities and analytical capabilities to support the U.S. defense industrial base. BIS, in conjunction with these agencies, surveyed more than 9,000 companies that supply products or services to the U.S. government for space-related purposes. The survey results give the U.S. government unprecedented visibility into the intricate supply chain network supporting the provision of products and services across the defense, intelligence, and commercial space sectors.

The Bureau plays a critical compliance role within the U.S. government. BIS implemented and monitored compliance with License Exception Strategic Trade Authorization (STA), which allows for the export, reexport, or transfer in-country, without a license, to a group of approximately 36 partner and allied countries. The compliance requirements are significant because they ensure that controlled items eligible for STA will not be reexported outside the group of 36 countries without the appropriate export authorization. The compliance activities require analysts to evaluate exporters' adherence to the conditions, including their internal control programs. Since its inception through June 2012 (most current data), 69 U.S. companies have made 543 shipments worth over \$29 million under STA.

On March 7, 2012, the Administration officially opened two new national, multi-agency centers to improve how the U.S. government administers its export control system: the Export Enforcement Coordination Center (E2C2) and the Information Triage Unit.

- The E2C2 is responsible for enhanced information sharing and coordination between law enforcement and intelligence officials regarding possible violations of U.S. export controls laws. The E2C2 is administered by the U.S. Department of Homeland Security (DHS) with a leadership team comprising officials from DHS, the Federal Bureau of Investigation, and the Department. The opening of the E2C2 builds on the increased criminal penalties for export control violations and the provision of the Department's permanent law enforcement authorities, further strengthening the enforcement of U.S. export controls.
- The Information Triage Unit, housed at the Department, is responsible for assembling and disseminating relevant information, including intelligence, upon which to base informed decisions on proposed export licenses. This multi-agency screening will coordinate the reviews of separate stove-piped processes across the government to ensure that all departments and agencies have a full dataset, consistent with national security, from which to make decisions on license applications. Such screening contributes to more timely, predictable, and consistent processes that U.S. exporters engaged in global trade have confirmed are critical to their competitiveness.

In FY 2012, BIS, working with the Department's Office of the Chief Information Officer, successfully deployed the Secret Internet Protocol Router Network (SIPRNet) through most of BIS's headquarters and field office operations. Full deployment should be completed in FY 2013. SIPRNet is a system of interconnected computer networks used by the U.S. Department of Defense (DOD) to transmit classified information (up to and including information classified SECRET). This is an important element of BIS's efforts to migrate to DOD's USXPORTS System, one of the key components of the Administration's Export Control Reform.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (BIS)	TARGET	ACTUAL	STATUS
Percent of licenses requiring interagency referral referred within 9 days	98%	97%	Slightly Below
Median processing time for new regime regulations (months)	2.0	2.0	Met
Percent of attendees rating seminars highly	93%	93%	Met
Percent of declarations received from U.S. industry in accordance with CWC regulations (time lines) that are processed, certified, and submitted to the State Department in time so the United States can meet its treaty obligations	100%	100%	Met
Number of actions that result in a deterrence or prevention of a violation and cases which result in a criminal and/or administrative charge	850	1,162	Exceeded
Percent of shipped transactions in compliance with the licensing requirements of the Export Administration Regulations (EAR)	99%	99%	Met
Percentage of post-shipment verifications completed and categorized above the "unfavorable" classification	315 PSVs/90%	343 PSVs/87%	Slightly Below
Number of end-use checks completed	850	983	Met
Percent of industry assessments resulting in BIS determination, within three months of completion, on whether to revise export controls	100%	100%	Met

FY 2012 MISSED TARGETS

MEASURE	PERCENT OF LICENSES REQUIRING INTERAGENCY REFERRAL REFERRED WITHIN 9 DAYS (BIS)
Explanation	The performance target was set at an approximate target level, and the deviation from that level is slight.
Action	None.
MEASURE	PERCENTAGE OF POST-SHIPMENT VERIFICATIONS COMPLETED AND CATEGORIZED ABOVE THE "UNFAVORABLE" CLASSIFICATION (BIS)
Explanation	The performance target was set at an approximate target level, and the deviation from that level is slight.
Action	None.

HISTORICAL TRENDS

BIS has consistently met or exceeded the targets for this outcome.

OBJECTIVE 11

Develop and influence international standards and policies to support the full and fair competitiveness of the U.S. information and communications technology sector (NTIA)

PUBLIC BENEFITS

The National Telecommunications and Information Administration (NTIA) serves as the President's primary policy advisor on domestic and international telecommunications and information issues. NTIA fulfills this role in part by advocating globally for foreign regulatory and policy regimes that encourage competition and innovation, and by encouraging dialogue with the private sector through sponsorship and participation in conferences, workshops, and other forums. NTIA will pursue policies promoting international trade in telecommunications products and services, promoting consistent international approaches to telecommunications policies, and improving relations with countries with rapidly expanding markets.

NTIA is also responsible for coordinating the federal government's participation in the International Telecommunication Union's (ITU) World Radiocommunication Conferences (WRC) and related national and international meetings. NTIA works with the Federal Communications Commission (FCC), which represents the civil spectrum community, and the State Department, to create U.S. Preliminary Views and Proposals for the WRCs.

ACHIEVEMENTS

NTIA

NTIA participated in the 2012 WRC (WRC-12), where policymakers negotiated changes to the international treaty that governs the use of radiofrequency spectrum. This conference is convened every three to four years to ensure the treaty, called the Radio Regulations, keeps up with the rapid pace of technological development in radio communications. WRC-12, held in Geneva, Switzerland, brought together more than 3,000 people from most of the ITU's 193 member countries. There were 33 items on the WRC-12 agenda, and the United States was highly successful in achieving its objectives and satisfying critical federal agency and industry radio spectrum needs.

For example, the conference allocated new spectrum to support radars the Department uses to monitor the ocean's surface and to collect airborne imagery that enhances U.S. national security. The conference also allocated spectrum that enables unmanned aircraft to be commanded and controlled safely from the ground. In addition, the next WRC will examine allocating spectrum for the command and control of unmanned aircraft from space. The conference also allocated spectrum that supports lunar missions, earth observation and climate monitoring, and digital maritime communications for ship and port safety and security. In addition, participants improved the procedures for registering satellite networks with the ITU.

Most importantly, however, the United States secured a broadband agenda item at the next conference. This agenda item will support NTIA's effort to nearly double the amount of spectrum available for U.S. commercial wireless broadband service this decade, a goal set by President Obama. To maximize the economic value of the spectrum NTIA is identifying for wireless broadband, it should be harmonized globally. That is one of the objectives for WRC-15 and NTIA is now planning the technical studies needed to support solid decision-making at this conference. These accomplishments will support the expanding wireless communications needs of U.S. consumers, businesses, and government while removing international barriers to the introduction of new U.S. technologies.

NIST-led Development of Principles for Effective Federal Agency Engagement in Standardization Activities

NIST leadership of the National Science and Technology Council’s Subcommittee on Standards has led to the development of principles for effective federal agency engagement in standardization activities to address national priorities (http://standards.gov/upload/Federal_Engagement_in_Standards_Activities_October12_final.pdf). These principles reflect the consensus of federal agencies with varied interests (technology, innovation, trade, competition, etc.) in standards and have helped guide coordination of agency positions on important international standardization activities in the information and communications technology sectors. These principles also will help guide U.S. positions on standards-related proposals related to the International Telecommunication Regulations that will be renegotiated at the 2012 World Conference on Information Technology to be held in December. In addition, broad U.S. public and private sector stakeholder buy-in of these principles is helping ensure that U.S. government positions reflect approaches that promote technological innovation and competitiveness. NIST efforts to raise awareness among U.S. industry and standards setting organizations of information and communication technology related standardization activities in the ITU has led to greater engagement in the current U.S. government-led processes for input into these activities. This enhanced engagement will reduce the likelihood of duplicative standards and increase the likelihood that standards are developed by organizations with relevant expertise. NIST also leads activities in standardization committees within the Joint Technical Committee 1 of the International Organization for Standardization and International Electrotechnical Commission, and the ITU in the areas of cloud computing, Smart Grid, and cyber security.

SUMMARY OF PERFORMANCE

The Department uses the following measure to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NTIA)	TARGET	ACTUAL	STATUS
Percent of NTIA positions substantially adopted or successful at international meetings	75% adoption or success	>80%	Met

OBJECTIVE 12

Vigorously enforce U.S. fair trade laws through impartial investigation of complaints, improved access for U.S. firms and workers, and fuller compliance with antidumping/countervailing duty remedies (ITA)

PUBLIC BENEFITS

U.S. industries are entitled to the benefits of trade agreements negotiated by the United States. They are also entitled to the aggressive investigation of unfair trade practices that undercut those agreements. Three program units in ITA, Market Access and Compliance (MAC), Manufacturing and Services (MAS), and Import Administration (IA), work to ensure that U.S. firms receive those benefits and obtain prompt relief from unfair trade practices. Trade compliance with negotiated trade agreements and access to foreign markets are existing problems faced by U.S. businesses that choose to sell their products overseas.

Ensuring that U.S. industries and workers have the opportunity to compete on a level playing field is critical to advancing business competitiveness in the United States and abroad, and is a key component of the NEI. Accordingly, IA is committed to the vigorous enforcement of U.S. trade laws. IA promotes free and fair trade by administering the U.S. antidumping (AD) and countervailing duty

(CVD) laws thereby providing U.S. industries and workers with a reliable and transparent mechanism to seek critical relief from unfair trade practices, including injurious dumping and foreign government subsidies.

IA has a team of experts available to assist any U.S. business with questions on remedies available under the trade laws, or that wishes to develop and file an AD and/or CVD petition. Particular attention is paid to small businesses that may find the petition process unwieldy, or may be unable to afford the assistance of outside trade counsel to develop and file a successful petition. Extensive outreach and work with industry was instrumental in helping IA successfully initiate more than 20 new AD/CVD investigations in 2012. IA also has a team of experts dedicated to monitoring U.S. trade partners' use of trade remedies and that works closely with U.S. businesses whose access to export markets may be harmed by the misuse of these instruments. IA works with U.S. Customs and Border Protection (CBP), Immigration and Customs Enforcement, Department of Justice, and Office of the U.S. Trade Representative (USTR) to resolve AD/CVD issues. IA works closely with CBP to ensure that the trade remedy laws are enforced vigorously and that efforts to evade the payment of AD/CVD duties are identified and thwarted.

MAC also strongly supports the NEI by creating, expanding, and defending market access for U.S. exports of goods, services, and investment overseas. MAC executes this mission by developing specific and tailored country engagement strategies to develop a business climate abroad that promotes trade and investment, pursuing crosscutting policy initiatives to address transnational market access challenges (such as anticorruption, intellectual property enforcement, and standards/regulatory cooperation), and proactively working to identify and break down foreign government-imposed trade barriers through the MAC-led ITA Trade Agreements Compliance Program.

A key tool in the NEI's trade enforcement efforts, the program provides the framework for proactive monitoring of trade agreements; the process for identification, investigation, and resolution of trade barriers for companies; and the strategy for conducting outreach to inform stakeholders of efforts and services in this area. There is no cost for the program's services.

Once a barrier is identified, MAC assembles a case team of ITA specialists to investigate and address the problem. The team works with affected companies or industries to establish objectives and to implement agreed action plans to achieve market access and ensure that U.S. trade agreement rights are safeguarded. In taking action, ITA teams can gradually escalate trade issues, and as appropriate, bring the full weight of the U.S. government to bear in an effort to resolve the issues, leveraging relevant trade agreements, multilateral/World Trade Organization (WTO) fora, FTA negotiations and other diplomatic means. If warranted, cases may be referred to USTR, the Interagency Trade Enforcement Center, and the interagency for formal dispute settlement action consideration.

The program benefits from the active involvement of ITA trade officials stationed around the world as well as designated compliance officers in Beijing, Brussels, San Salvador, and New Delhi. To assist in outreach to companies, ITA also maintains contact with the office of each member of Congress, some 60 District Export Councils, more than 100 trade associations, and state agencies.

MAC and MAS seek to obtain market access for U.S. industries and workers and to achieve full compliance by foreign nations with trade agreements they sign with the United States. MAC and MAS ensure market access for U.S. businesses; advance the rule of law internationally; and create a fair, open, and predictable trading environment. Based on customer needs, MAC has a sizable caseload from U.S. firms that have encountered a trade barrier. Beyond casework, MAC and MAS work to develop a pro-growth business climate in other markets that encourages U.S. exports and transparent policies. MAC and MAS also conduct critical trade policy analysis and negotiation support for USTR and represent the Department in trade-related dealings with other U.S. government agencies.

ACHIEVEMENTS

In FY 2012, IA conducted 39 investigations covering products as diverse as high pressure steel cylinders from China, large residential washers from South Korea and Mexico, and steel nails from the United Arab Emirates.

In December 2011, the Court of Appeals for the Federal Circuit found, in *GPX v. United States*, that U.S. law prohibits the Department from applying CVD duties to imports from countries that the Department has determined to be non-market economies, including China and Vietnam. Had it taken effect, the court's decision could have resulted in the termination of more than two dozen existing CVD orders as well as numerous ongoing and potential future CVD investigations, impacting billions of dollars of imports into the United States and affecting manufacturing operations in the majority of U.S. states. With the strong support of the Department and the Administration, in a few short months and with overwhelming bipartisan support, the U.S. Congress, before the court's mandate became final, passed legislation in March 2012 that reaffirmed the Department's ability to apply the CVD law to imports from market and nonmarket economies alike. With the passage into law of H.R. 4105, Congress and the President have confirmed that U.S. trade remedies will remain a strong and effective tool in combating unfair trading practices and in ensuring a level playing field for U.S. manufacturers, exporters, and workers.

Capping months of close collaboration between IA and USTR, in June 2012, a WTO dispute settlement panel upheld the key U.S. complaints in a WTO case against China's AD/CVDs imposed on U.S. exports of grain-oriented electrical steel, a market worth over \$271 million prior to China's AD measure.

While the number of new U.S. investigations of injuriously dumped and subsidized imports has fluctuated over the past several years, the average number of AD/CVD determinations issued during the three-year period was approximately 275 per fiscal year. In FY 2012, as of June 4, 2012, 23 new AD/CVD investigations have been initiated.

Approximately one-third of the AD/CVD orders administered by IA are handled by the China/non-market economy unit, a unit dedicated to the enforcement of the AD law with respect to China and other non-market economy countries, e.g., Vietnam. This unit enables IA to consolidate and cultivate the expertise necessary to address the unique trade problems associated with conducting AD proceedings involving non-market economy countries, such as irregular financial reporting, fraudulent filings, opaque company relations, and close ties to local and provincial governments.

Led by MAC, ITA was able to exceed targets for casework under the Trade Agreements Compliance (TAC) Program, identifying and working to remove foreign trade barriers on behalf of U.S. firms. Two hundred twenty seven new cases were initiated in FY 2012, 44 percent on behalf of SMEs. Of the 168 cases closed in FY 2012, ITA teams were able to successfully remove the barriers identified in 89 of the cases, ensuring that American workers and firms could benefit from the trade agreements negotiated on their behalf.

A recent example demonstrates the benefits of the TAC Program for U.S. Industry. In February 2011, a U.S. engineering company reported that Chile's Ministry of Health excluded it from bidding on a government tender to build a hospital because it did not have prior experience in Chile designing seismic shock resilient structures. This exclusion, which shut the company out of an opportunity worth several hundred thousand dollars, was clearly inconsistent with Chile's FTA obligations, which ensures that U.S. companies are treated the same as Chilean companies when competing for covered government procurement contracts. A MAC-led ITA team engaged the Chilean government on this issue, and in May 2012, the Chilean government concurred that U.S. company's global experience should have been considered when assessing its eligibility to participate in the procurement. The company was happy with this outcome, and most importantly, by enforcing our rights under the U.S.-Chile FTA, we set a positive precedent for all U.S. companies seeking to do future business in Chile.

Beyond these performance metrics, MAC works to increase U.S. access to foreign markets through bilateral engagement, multilateral negotiations, and direct interaction with the exporting community. Some representative accomplishments for MAC in FY 2012 include bilateral engagement with priority export markets for the United States. For example, Brazil is an NEI priority market with a large and diversified economy offering U.S. companies many opportunities to export their goods and services. MAC helped implement several key initiatives, including an education services trade mission to Brazil. Additionally, MAC organizes and manages two high-profile mechanisms for improving and expanding the U.S.-Brazil commercial relationship: the U.S.-Brazil CEO Forum, co-chaired by the Secretary of Commerce, which brings together business leaders from both countries to provide joint recommendations to our two governments on ways to strengthen the bilateral relationship; and the U.S.-Brazil Commercial Dialogue, a forum for our trade ministries to collaborate to increase bilateral trade and investment through better mutual understanding. Activities include best practice exchanges on a wide variety of issues ranging from customs and express delivery, services, and intellectual property and standards, with the goal of improving the flow of trade between our two countries.

MAC's global trade agenda included a number of other significant accomplishments. For example, MAC played a key role in implementing the successful outcomes from the November 2011 bilateral U.S.-China Joint Commission on Commerce and Trade (JCCT). MAC established a U.S.-Indonesia Commercial Dialogue to enhance U.S. exports to the largest country in Southeast Asia by working with Indonesia to identify concrete reforms the Indonesian government should implement to improve its standing in the World Bank's *Ease of Doing Business* report. MAC staff supported President Obama's commitment to the Turkish President to expand the U.S.-Turkish economic and commercial relationship through the U.S.-Turkey Framework for Strategic Economic and Commercial Cooperation (FSECC). MAC worked with the U.S. private sector to ensure that companies were aware of the opportunities afforded to them as a result of recently implemented FTAs with the Republic of Korea and Colombia, as well as to update industry on the probable impacts of Russia's August 2012 accession to the WTO and the implications of the success or failure in our efforts to establish Permanent Normal Trade Relations with Russia. MAC staff also support the coordination of the Secretary's leadership of the Business Development and Economic Relations Working Group, one of the key bilateral initiatives under the U.S.-Russia Bilateral Presidential Commission.

MAC also works to create market access through negotiations and multilateral organizations. In FY 2012, the 14th round of Trans Pacific Partnership (TPP) negotiations in Leesburg, VA successfully concluded with MAC staff providing on-site advice in the technical barriers to trade, sanitary and phytosanitary (SPS) standards, customs, rules of origin, anti-corruption, government procurement, investment, labor, and environment sections. MAC staff worked with their interagency counterparts to remove as many brackets as possible in preparation for Canada and Mexico's participation in the December negotiations. MAC staff were instrumental in drafting negotiating language in several areas, including anti-corruption, customs, and SPS. For example, MAC recommended substantially expanding anti-corruption obligations in the TPP. MAC was largely responsible for developing the robust text and working with the interagency to secure support. In the end, a joint Departments of Commerce and State proposal to USTR was made and accepted.

MAS worked to create new market access for U.S. industry through the Asia-Pacific Economic Cooperation (APEC) Environmental Goods and Services negotiations. APEC members agreed to a list of 54 environmental goods for tariff reduction during the September 2012 APEC Leaders meeting in Vladivostok, Russia. APEC leaders have agreed to reduce applied tariffs on these 54 products to five percent or less by 2015. This list encompasses a wide range of environmental technologies, from renewable energy to wastewater management, and will impact an estimated \$1.2 billion worth of U.S. exports to the region.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (ITA)	TARGET	ACTUAL	STATUS
Percent of identified unfair trade practices affecting U.S. parties addressed through informal/formal intervention of dispute settlement	20%	27%	Met
Number of new antidumping/countervailing duty petitioners counseled	50	77	Exceeded
Percent of industry-specific trade barriers addressed that were removed or prevented	20%	37%	Exceeded
Percent of industry-specific trade barrier milestones completed	55%	72%	Exceeded
Number of compliance and market cases initiated	210	227	Met
Number of compliance and market access resolved successfully	80	89	Met

THEME 1 PROGRAM EVALUATIONS

The following program evaluations were conducted on programs related to this theme in FY 2012.

BUREAU	REVIEWER	NAME OF EVALUATION	DATE	WEB SITE
NIST	Panel on Review of the Manufacturing-Related Programs at NIST, National Research Council	<i>A Review of the Manufacturing-related Programs at NIST</i>	9/2012	http://www.nist.gov/director/nrc/upload/final-manufacturing-report2012.pdf
NIST	GAO	<i>Cybersecurity: Challenges in Securing the Electricity Grid</i>	7/17/2012	http://gao.gov/products/GAO-12-926T
NIST	GAO	<i>Information Security: Additional Guidance Needed to Address Cloud Computing Concerns</i>	10/6/2011	http://gao.gov/products/GAO-12-130T
NIST	GAO	<i>Information Security: Weaknesses Continue Amid New Federal Efforts to Implement Requirements</i>	10/3/2011	http://gao.gov/products/GAO-12-137

(continued)

BUREAU	REVIEWER	NAME OF EVALUATION	DATE	WEB SITE
NIST	OIG	<i>Oversight Activities of NIST's Recovery Act Construction Contracts Need Improvements</i>	6/1/2012	http://www.oig.doc.gov/Pages/Oversight-Activities-of-NIST-Recovery-Act-Construction-Contracts-Need-Improvement.aspx
NIST	OIG	<i>Oversight Activities of NIST's Recovery Act Construction Grant Awards are Generally Effective but Need Improvements</i>	2/14/2012	http://www.oig.doc.gov/Pages/Oversight-Activities-of-NIST-Recovery-Act-Construction-Grant-Awards-Are-Generally-Effective-but-Need-Improvements.aspx

THEME 2

SCIENCE AND INFORMATION

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SCIENCE AND INFORMATION

THEME, STRATEGIC GOAL, AND OBJECTIVES

THEME 2: SCIENCE AND INFORMATION

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

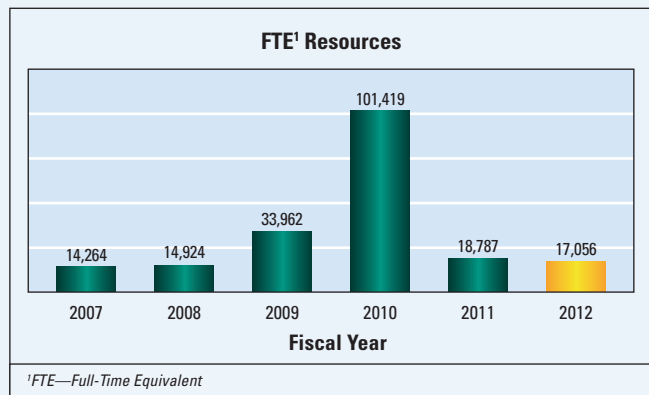
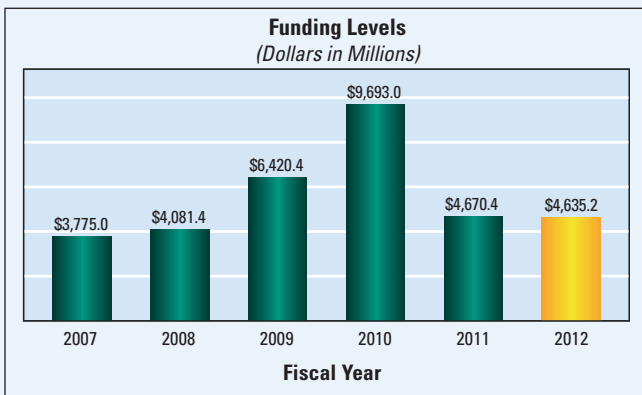
Objective 13	Increase scientific knowledge and provide information to stakeholders to support economic growth and to improve innovation, technology, and public safety (NTIS, NTIA)
Objective 14	Enable informed decision-making through an expanded understanding of the U.S. economy, society, and environment by providing timely, relevant, trusted, and accurate data, standards, and services (ESA/CENSUS, ESA/BEA, NOAA)
Objective 15	Improve weather, water, and climate reporting and forecasting (NOAA)



THEME 2: SCIENCE AND INFORMATION

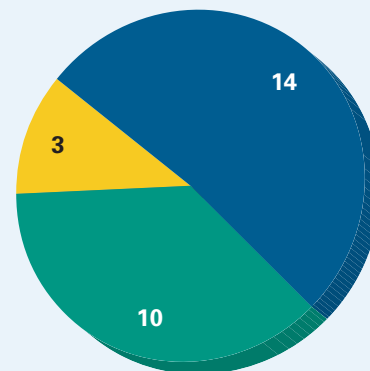
STRATEGIC GOAL: *Generate and communicate new, cutting-edge scientific understanding of technical, economic, social, and environmental systems*

SCIENCE AND INFORMATION TOTAL RESOURCES



This theme contains one strategic goal and within that strategic goal, three objectives which contribute to the Secretary’s theme of Science and Information. The following public benefits, achievements, and performance results are associated with each objective.

SCIENCE AND INFORMATION STATUS OF CURRENT MEASURES



■ Improving ■ Stable ■ Declining ■ New Measure

Improving, stable, or declining measures have at least three years of data.

OBJECTIVE 13

Increase scientific knowledge and provide information to stakeholders to support economic growth and to improve innovation, technology, and public safety (NTIS, NTIA)

PUBLIC BENEFITS

The National Technical Information Service (NTIS) seeks to advance measurement science by bringing scientific and technical information to U.S. business and industry. NTIS promotes innovation and economic growth for U.S. business by (1) collecting, classifying, coordinating, integrating, recording, and cataloging scientific and technical information from a variety of sources, foreign and domestic; (2) disseminating this information to the public; and (3) providing information management services to other federal agencies that help them interact with and better serve the information needs of their own constituents, and to accomplish this without appropriated funds.

Through its laboratory at the Institute for Telecommunication Sciences (ITS), the National Telecommunications and Information Administration (NTIA) supports basic research in innovative telecommunications and information technologies. This research has the potential to improve both the performance of telecommunications networks and the availability of digital content on the Internet.

Currently, ITS and NTIA's Office of Spectrum Management are conducting a pilot test-bed program to evaluate approaches and techniques to increase spectrum sharing between federal and non-federal spectrum users. NTIA will publish an annual report evaluating private sector-supplied devices in the areas of emission characterization, sensor characterization, geo-location characterization, spectrum access behavior, and land mobile radio (LMR) emission characterization.

ACHIEVEMENTS**NTIA**

NTIA, in coordination with the Federal Communication Commission (FCC) and the federal agencies, established a Spectrum Sharing Innovation Test-Bed (Test-Bed) pilot program to examine the feasibility of increased sharing between federal and non-federal users. This pilot program is an opportunity for the federal agencies to work cooperatively with industry, researchers, and academia to examine objectively new technologies that can improve management of the Nation's airwaves. The Test-Bed pilot program evaluates the ability of dynamic spectrum access devices employing spectrum sensing and/or geo-location techniques to share spectrum with LMR systems operating in the 410-420 megahertz (MHz) federal band and in the 470-512 MHz non-federal band. In FY 2012, NTIA reported on the progress to date and sought comments on the types and depth of testing that NTIA intends to conduct in Phase II/III of the pilot program.

In July, NTIA's ITS hosted the International Symposium on Advanced Radio Technologies (ISART), which brings together government, academia, and industry leaders for the purpose of forecasting the development and application of advanced radio technologies.

NTIS

NTIS released a new version of the National Technical Reports Library and instituted the Federal Science Repository Program to assist other federal agencies in establishing information repositories to support the dissemination of their science and technology information products to their constituents.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
Number of updated items available (annual) (NTIS)	875,000	978,871	Met
Number of information products disseminated (annual) (NTIS)	49,878,000	54,592,481	Met
Customer satisfaction (NTIS)	95-98%	98.4%	Met
Annual progress report on the Test-Bed program (NTIA)	Publish annual report	Published report	Met

HISTORICAL TRENDS

NTIS has consistently met its targets for the past 10 years.

OBJECTIVE 14

Enable informed decision-making through an expanded understanding of the U.S. economy, society, and environment by providing timely, relevant, trusted, and accurate data, standards, and services (ESA/CENSUS, ESA/BEA, NOAA)

PUBLIC BENEFITS

In many ways the United States is a statistics driven society. The Nation depends on statistics provided by the Census Bureau and the Bureau of Economic Analysis (BEA) to determine business decisions, plan for geographic and economic (both national and international) expansion, provide funds to needy organizations, and determine political expansion and contraction. Accurate business information regarding the demographics of the Nation, including measures of the population, economy, and governments assists entrepreneurs in identifying market opportunities that can generate jobs. Population estimates serve as a starting point for allocating federal, state, and local funds to various groups within society.

The Economics and Statistics Administration (ESA), comprised of the Census Bureau and BEA, provides decisionmakers with timely, relevant, and accurate economic and statistical information related to the U.S. economy and population.

Current and benchmark measures of the U.S. population, economy, and governments play a vital role in the Nation's economic well being. The Census Bureau uses the decennial census to provide the official population counts for determining the allocation to states of seats in the U.S. House of Representatives and for determining how the districts are defined for those seats. The Census Bureau provides to each state the data necessary to determine Congressional, state, and local legislative boundaries. The decennial census provides comprehensive and useful demographic information about all people living in the United States, Puerto Rico, and the associated Island Areas. The program also provides data for small geographic areas and population groups that federal agencies need to implement legally mandated programs. Approximately \$400 billion a year is distributed to state and local governments using formulas that are based on data such as state population and personal income.

The Economic Census provides comprehensive, detailed, and authoritative facts about the structure of the U.S. economy ranging from the national to the local level. The Economic Census covers nearly 29 million business locations and 84 percent of the Nation's economic activity. The Census of Governments is the only source of comprehensive and uniformly classified data on the economic activities of state and local governments. The Census of Governments covers about 90,000 local governments, 12 percent of the gross domestic product (GDP) and nearly 14 percent of the U.S. workforce. The Demographic Surveys Sample Redesign (DSSR) program designs and selects samples for the major national household surveys. The Intercensal Demographic Estimates program provides updated estimates of the U.S. population for the country, states, counties, cities, and townships.

BEA invests in the improvement of the accuracy and relevance of GDP, international trade in goods and services, industry economic measures, and regional and metropolitan statistics, thereby supplying the economic statistics essential to sound business forecasting and monetary policy. In these ways, the Department seeks to understand the strength and direction of the economy as well as the determinants of growth as the Nation shifts to more knowledge-based and skill-based industries.

One of the primary methods for improving the understanding of the environment is through the examination of oceanic and atmospheric conditions patterns worldwide. To this end, the National Oceanic and Atmospheric Administration (NOAA) develops and procures satellite systems, aircraft, and ships with the purpose of providing information to determine weather patterns and predict weather forecasts. This information affects all facets of society from agricultural planning to electric power usage to disaster planning. It plays a major role in the accuracy of national, regional, and local forecasting as well as impacting short and long-term climate modeling.

ACHIEVEMENTS

Census Bureau

The Census Bureau released all 2010 Decennial Census data products scheduled for FY 2012. These products provided the most detailed information available so far from the 2010 Census about every community's entire population, including cross-tabulations of age, sex, households, families, relationship to householder, housing units, detailed race and Hispanic or Latino origin groups, and group quarters.

The Census Bureau released results of Coverage Measurement Program ahead of schedule. The results showed that the 2010 Decennial Census had a net overcount of 0.01 percent, meaning about 36,000 people were overcounted in the census. This sample-based result, however, was not statistically different from zero. By way of comparison, the 2000 Census had an estimated net overcount of 0.49 percent and the 1990 Census had a net undercount of 1.61 percent. The 2010 Decennial Census Program for Evaluations and Experiments (CPEX) is progressing on schedule for completion in 2013. The Census Bureau released all 2010 Census evaluation, assessment, and experiment reports scheduled for FY 2012. Its results will influence how the 2020 Census is designed, tested, and implemented.

The Census Bureau's Count Question Resolution (CQR) Program continues to research and respond to state, local and tribal area elected officials who have challenged their jurisdiction's 2010 Decennial Census counts. As of September 21, the Census Bureau has received 174 CQR challenges, of which they have completed the CQR review and responded with findings to 122 of the challenging jurisdictions.

All the three and five-year 2010 American Community Survey (ACS) data and the one-year 2011 ACS data products were released by the Census Bureau on schedule. For the first time they also released Selected Population Tables and American Indian and Alaska Native Tables to fulfill one aspect of the promise that was made to the public that the ACS would replace the decennial census long form and provide similar information. These two ACS products provide comprehensive social, economic, housing, and demographic data for hundreds of race, ethnic, tribal, and ancestry population groups that is of a level similar to the 2000 long form data. The Census Bureau also redesigned the ACS Web site to provide more information about the program and its purpose to the public and stakeholders.

During its first year of funding, the 2020 Decennial Census program identified candidate approaches for measuring and improving Master Address File quality for the 2020 Census; identified candidate approaches for automating, tailoring, and increasing the efficiencies of response for the 2020 Census; and identified infrastructure approaches for integrating, expanding, and optimizing field and information technology (IT) infrastructure for the 2020 Census. The program also updated a business plan, developed research and testing plans, and completed documentation of key program management and system engineering plans to support the first phase of research and testing (FY 2012-FY 2014).

In FY 2012, the Census Bureau released nearly 400 economic reports, including 120 principal economic indicators. Responses to censuses and surveys provide information on manufacturing, retail, and wholesale trade; selected service industries; construction activity; quantity and value of industrial output; inventories; new orders; capital expenditures; e-commerce sales; foreign trade; and state and local government activities.

In FY 2012, the 2012 Economic Census forms were finalized, and all the printing contracts were awarded for the program's core content report forms. Data collection began for the Census of Governments.

In an effort to make economic statistics more usable through census.gov, an economic indicator dashboard was created highlighting key indicators produced by the Census Bureau. The dashboard provides a quick glance of the most recent data releases, highlighting the major findings, and links to the Economic Indicator Briefing Room for more detailed information, and access to the full press releases. It is also embeddable so it can be easily shared on other Web sites as well.

The Census Bureau released its first-ever mobile application, "America's Economy," which provides constantly updated statistics on the U.S. economy, including monthly and quarterly economic indicators and trends, along with a schedule of upcoming releases. The application, which is available for Android and Apple users, combines statistics from the Department's Census Bureau and BEA, and the U.S. Department of Labor's Bureau of Labor Statistics (BLS). "America's Economy" provides smartphone and tablet users with the real-time government statistics that drive business hiring, sales, and production decisions; and assist economists, researchers, planners, and policymakers. The economic indicators track monthly and quarterly trends in industries, such as employment, housing construction, international trade, personal income, retail sales, and manufacturing.

The Census Bureau released prototype tables for an Enterprise Statistics Program in June 2012. The new tables are based on 2007 Economic Census data, and a newly developed enterprise classification system. The tables show the industrial specialization and diversification of U.S. businesses, and provide a valuable new tool for the analysis of enterprises.

In August 2012, the Census Bureau released the first ever Public Use Microdata Sample (PUMS) from the 2007 Survey of Business Owners. The PUMS will allow researchers to create customized tables and models and to study entrepreneurial activity and the relationships between business characteristics such as access to capital, firm size, employer-paid benefits, minority and women-ownership, and firm age.

In FY 2012, the Census Bureau completed several major milestones toward redesigning major demographic surveys. The first stage selection of primary sampling units (PSU) is on track for timely completion as all U.S. counties were combined into PSUs, and sampling methods were researched and programmed for implementation in early FY 2013. Also, the Census Bureau completed research on different modeling approaches to identify blocks that do not meet housing unit frame coverage requirements for reimbursable surveys using the Master Address File. This will help to optimize cost and efficiency for our sponsors starting in FY 2013.

BEA

In FY 2012, BEA continued to maintain and improve the relevance and usefulness of its economic accounts. BEA successfully advanced several collaborative projects with other agencies that resulted in new or improved statistics, including:

- linkage of BEA and BLS data to provide new data on the impact of foreign direct investment on employment and wages;
- work with the Federal Reserve Bank to provide quarterly detail in the joint BEA-Federal Reserve Bank Integrated Macroeconomic Accounts; and
- work with the Census Bureau to improve source data and seasonal adjustment methods to address statistical issues revealed by the recession.

In addition, as the recession underscored the need for better information on the distribution of income, BEA used existing economic accounts to better capture the differential impacts of the recession across households, industries, and regions.

BEA also achieved a major milestone in support of the President's export initiative by creating a new linked dataset that combines data on cross-border trade in services with data on the operations of multinational companies to provide services information with increased detail on industry classification and firm size with no additional respondent burden. BEA reached another important milestone in expanding its accounts to better measure health care, innovation, and intangibles with the development of a prototype health care spending account that illustrates how health care expenditures can be presented by type of illness and by type of commodity (e.g., inpatient care, prescription drugs, etc.). BEA explored the best methods and data sources for estimating such detail.

BEA also provided customers with major enhancements to its Web site in FY 2012. In keeping with the goal to make the statistics more widely available and the Web site easier to use, BEA made significant improvements to the content of regional economic statistics and the range of information on the operations of U.S. affiliates of foreign multinational companies that are available through the new interactive tables on BEA.gov (which were introduced in FY 2011). Furthermore, BEA launched the new "BEABlog" to augment communication with customers.

ESA provides timely and accurate economic insight to the Secretary and his policy advisors through regular economic briefings. These briefings help to inform the Department's long-term policy goals and senior staff enjoys the opportunity to hear a clear, concise summation of economic events.

NOAA

Successful Launch and Commissioning of the Suomi National Polar-orbiting Partnership (SNPP) Environmental Satellite

The SNPP spacecraft was launched on October 28, 2011, from Vandenberg Air Force Base, to begin its Earth observation mission. The initial checkout and commissioning was completed March 6, 2012. SNPP data are already used in the operational long-range weather forecast. The launch of SNPP and the successful data collection from weather and climate monitoring sensors represents many years of exceptional effort by NOAA, the National Aeronautics and Space Administration and contractor teams to create the gateway to the U.S. climate monitoring system, collecting both climate and operational weather data and continuing key data records that are critical for global change science. SNPP represents a critical first step in building this next-generation satellite system. SNPP will carry five science instruments and test key technologies for the Joint Polar Satellite System mission. SNPP is the first satellite mission to address the challenge of acquiring a wide range of land, ocean, and atmospheric measurements for earth system science while simultaneously preparing to address operational requirements for long-range weather forecasting. Understanding, monitoring, and predicting the course of long-term climate change and short-term weather conditions remain tasks of profound importance. Economic competitiveness, human health and welfare, and global security all depend in part on the ability to understand and adapt to global environmental changes.

National Polar-orbiting Partnership (NPP) Data Exploitation (NDE) Project delivers NPP products to National Weather Service and EUMETSAT

NDE began delivering atmospheric products from Suomi NPP infrared and microwave sounders to the National Weather Service's (NWS) National Centers for Environmental Prediction (NCEP) within a few weeks after the instruments were activated in orbit. As a result, the NCEP has declared the microwave data operational in the Numerical Weather Prediction Models only five months after NDE started to receive the data. NDE has also delivered these products to EUMETSAT (Europe's Meteorological Satellite Organization), NOAA's long-term international partner, for evaluation by the European Weather Modeling Centers. NDE is a development project that generates NOAA-unique products from NPP for NWS and other operational user communities. NDE devoted additional resources to provide the necessary monitoring of NDE production to ensure the users continued to receive the products they expect from the National Environmental Satellite, Data, and Information Service (NESDIS). By delivering the products to NWS as early as two months after launch, NDE has made it possible for NWS to evaluate the microwave data and declare these data operational in the Weather Models in May 2012. This is a significant improvement over the 11 months it took for similar microwave sounding data from the last Polar-orbiting Environmental Satellite (POES) mission, NOAA 19, to be declared operational by NWS. These data enable NWS to generate improved 3-7 day weather forecasts, which in turn mitigate the loss of life and property.

NGDC Implements Satellite Anomaly Assessment Tool

The National Geophysical Data Center (NGDC) has implemented a computer-based tool to assess environmental risk factors for satellites in geostationary orbit. In 2010, NGDC determined that a debilitating anomaly experienced by the Galaxy-15 geostationary communications satellite was the likely result of heightened space weather conditions. In support of NOAA's goal for providing relevant weather and water information, NGDC has now implemented the Space Environmental Anomalies Expert System Real Time (SEAESRT) as a tool and graphical product to monitor those aspects of the space environment known to affect satellites in geostationary orbit. Using space weather data from the NOAA Geostationary Operational Environmental Satellites (GOES), the SEAESRT tool calculates hazard quotients for satellite surface charging, internal charging, single event effects, and total dose. SEAESRT was recently used to assess the likely environmental factors contributing to the SkyTerra-1 satellite anomaly that occurred on March 7, 2012. SEAESRT provides real-time assessments of space environmental vulnerabilities likely to be experienced by satellites in geostationary orbit. Knowing the root cause for a spacecraft anomaly is critical to restoring, if possible, full operational capabilities. SEAESRT can also be used to determine extreme environmental risk factors, which are used by satellite manufacturers for worst-case assessments.

Monitoring Gas Flaring with VIIRS

NGDC developed a technique for identifying and estimating the light signatures of gas flares worldwide using data collected by the Visible Infrared Imaging Radiometer Suite (VIIRS) instrument. Gas flares are identified by their intense and persistent light emission, which can be easily detected at night. Since 2005, NGDC has been using Defense Meteorological Satellite Program data to estimate national and global gas flaring volumes. Natural gas, mostly in the form of the greenhouse gas methane, is commonly released in oil production and processing. In locations where there is limited infrastructure to capture this gas for energy utilization, the industry standard is to flare (burn) it off rather than release the gas uncombusted into the atmosphere. NGDC estimate for global flaring in 2011 was 140 billion cubic meters, which is equivalent to 20 percent of U.S. natural gas consumption. In 2012, NGDC began collaborating with the California Air Resources Board to rate the carbon intensity of crude oil from oil fields around the world in support of the California Low Carbon Fuel Standard. NGDC’s new technique for monitoring gas flaring with VIIRS data will play a key role in documenting reductions or changes in gas flaring activity worldwide. This activity is key to reducing the carbon intensity of crude oils produced in many parts of the world. This activity supports the World Bank’s Global Gas Flaring Reduction Partnership as a part of the World Summit on Sustainable Development.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
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 (ESA/CENSUS)	For states that provide wage records on schedule, Census Bureau will produce Quarterly Workforce Indicators for at least 90% of those states on time every quarter	For states that provide wage records on schedule, Census Bureau produced Quarterly Workforce Indicators for at least 90% of those states on time every quarter	Met
Release monthly export statistics on schedule (ESA/CENSUS)	100%	100%	Met
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 (ESA/CENSUS)	At least 90% of key censuses and surveys meet/exceed collection rates/levels of reliability	At least 80% of key censuses and surveys meet/exceed collection rates/levels of reliability	Not Met

(continued)

PERFORMANCE MEASURE <i>(continued)</i>	TARGET	ACTUAL	STATUS
Release data products for key Census Bureau programs on time to support effective decision-making of policymakers, businesses, and the public (ESA/CENSUS)	<ul style="list-style-type: none"> • 100% of Economic Indicators released on time • At least 90% of key prep activities completed on time 	<ul style="list-style-type: none"> • 100% of Economic Indicators released on time • At least 90% of key prep activities completed on time 	Met
Complete key activities for cyclical census programs on time to more effectively support effective decision-making by policymakers, businesses, and the public and meet constitutional and legislative mandates (ESA/CENSUS)	At least 90% of key prep activities completed on time	At least 90% of key prep activities completed on time	Met
Timeliness: Reliability of delivery of economic data (number of scheduled releases issued on time) (ESA/BEA)	62	62	Met
Relevance: Customer satisfaction (mean rating on a 5-point scale) (ESA/BEA)	>4.0	4.3	Met
Accuracy: Percent of GDP estimates correct (ESA/BEA)	>85%	87%	Met
Complete all major strategic plan milestones related to improving the economic accounts (ESA/BEA)	Completion of strategic plan milestones	Completed strategic plan milestones	Met

FY 2012 MISSED TARGETS

MEASURE	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 (ESA/CENSUS)
Explanation	<p>The Survey of Income Program and Participation (SIPP) is a longitudinal (cannot add to sample) survey that realizes a decrease in response rates as the survey progresses and respondents decline participation.</p> <p>The Annual Capital Expenditures Survey (ACES) consists of businesses (sample) without employees. Their unwillingness to participate in the survey had a negative impact on the response rate that resulted in missing the targets through the third quarter of FY 2012.</p>
Action	<p>The remedy for ACES is to change the methodology to better capture and measure responses starting in FY 2013. The new methodology will specifically focus on factors more pertinent to the study and survey.</p> <p>The response rate for SIPP will be adjusted to be in line with the trend of the respondents' participation in the survey.</p>

HISTORICAL TRENDS

Census and BEA has consistently met or achieved its targets for its four performance measures over the past several years, as shown in Appendix A.

OBJECTIVE 15

Improve weather, water, and climate reporting and forecasting (NOAA)

PUBLIC BENEFITS

Weather affects all facets of society, impacting the economy in ways ranging from agricultural preparation to transportation planning to disaster response. Accurate weather forecasting can affect the number of lives saved or lost as well as mitigate the extent of property damage as a result of weather events. Weather forecast guidance and decision support also affects how power companies plan for daily, weekly, and seasonal variances. Because of this, Americans benefit from sound weather forecasting both in their daily lives and planning, and in preparation for major storm events.

A weather-ready nation will be able to prepare for and respond to environmental events that affect safety, health, the environment, economy, and homeland security. NOAA's capacity to provide accurate and relevant information can help create a society that is more adaptive to its environment; that experiences fewer disruptions, dislocation, and injuries, and that operates a more efficient economy. Over the long term, climate change may increase the intensity and even the frequency of adverse weather events, ranging from drought and flooding to wildfires, heat waves, storms, and hurricanes. Changing weather, water, and climate conditions affect the economic vitality of communities and commercial industries, such as the energy, transportation, and agriculture sectors. Environmental information aligned with user needs will become ever more critical to the safety and well being of those exposed to sudden or prolonged hazards and will enable U.S. businesses and policymakers to make informed decisions.

NOAA conducts sound, scientific research and provides warnings, forecast, and decision support for managers of environmental resources, ranging from fresh water supplies to coastal ecosystems to air quality. Realizing that NOAA's information and services bridge weather to climate timescales, NOAA will continue to collect and analyze environmental data and issue forecasts and warnings that help protect life and property and enhance the U.S. economy. The Department is committed to excellent customer service and depends on its partners in the private sector, academia, and government to add value and help disseminate critical weather and climate information.

One of the growing challenges in the 21st century is the escalation of the demand for water and improved water and air quality. Changing water temperatures and poor air quality impact the Nation's population and its fish and shellfish populations. To this end, NOAA can combine predictive weather information with an understanding of weather, water, and climate to develop integrated predictions that can improve the health of ecosystems and communities.

ACHIEVEMENTS

First Operational Tornado Warning Issued Using AWIPS II

The first tornado warning issued using Advanced Weather Interactive Processing System (AWIPS) II was issued to Foard County, TX on March 18, 2012. Operational since 1999, AWIPS is NWS's primary system to clearly communicate hazardous weather information to decisionmakers responsible for implementing life-saving measures when catastrophic weather hits, such as the Joplin, MO and Tuscaloosa, AL tornado outbreaks. In 2011, NOAA began deployment of the software upgrade known as AWIPS II. This upgrade transforms existing AWIPS capabilities into a modern, robust software architecture. This modern software architecture lays the foundation to transform its service delivery to better align itself with the emerging needs of the U.S. Department of Homeland Security, Federal Aviation Administration, emergency managers, decisionmakers, the U.S. public and industry.

Collaboration with FEMA on Wireless Emergency Alerts

On June 28, 2012, the Federal Emergency Management Agency (FEMA) began to disseminating critical NWS warnings via Wireless Emergency Alerts (WEA) to wireless mobile devices. The WEA program, a partnership between FEMA, FCC, and commercial wireless carriers, enhances public safety by relaying presidential, AMBER alerts, and Imminent Threat alerts to millions of mobile phones. All major wireless carriers and hundreds of smaller carriers voluntarily participate in WEA. Numerous cell phones are already capable of receiving WEAs; by 2014 most commercially available phones are expected to be WEA capable. WEA messages are not subject to delay or non-delivery when cellular networks become congested as with traditional text messaging. NWS messages which trigger WEA broadcast includes tornado warnings, flash flood warnings, hurricane and typhoon warnings, extreme wind warnings, blizzard and ice storm warnings, and dust storm warnings. By the end of 2012, WEA for tsunami warnings will also be disseminated.

Lifesaving Support in Advance of and During 2012 Heat Wave

NOAA provided lifesaving advisories and warnings across the United States before and during the 2012 heat wave. Weather Forecast Offices issued 140 Excessive Heat Warnings and 521 Heat Advisories during the 2012 heat season. NOAA maintained daily contact with media and emergency managers providing up-to-date information and forecasts to ensure advanced preparation and appropriate actions were undertaken. NOAA partnered with multiple federal and private partners to provide guidance on preventive measures for avoidance of harmful exposure to excessive heat and ultra violet (UV) radiation to the Nation. Beginning in May 2012, much of the continental United States sweltered under an extreme heat wave; according to NOAA's National Climatic Data Center Extremes Archive, a total of 645 records were set for the all-time hottest June temperatures. Kansas, Illinois, Indiana, Missouri, Nebraska, New Jersey, Ohio, Oklahoma and Tennessee saw multiple days of extremes prompting emergency management officials to issue warnings for excessive heat. An all-time record was set at the Nation's capital with a daily maximum temperature reaching 104°F on June 29 making for the area's hottest June day in 142 years. NOAA began alerting the public on extreme heat danger on May 22 with the release of its annual Heat and Sun Safety Guidance Public Information Statement. During a similar heat wave in Chicago in 1995, nearly 700 people died of heat related causes. In the summer of 2012, Chicago reported a few dozen deaths, with potential fatalities averted due to advanced warning and preemptive actions such as opening cooling shelters and increased attention paid to seniors and other vulnerable populations. These efforts proved especially critical during widespread power outages that accompanied the extreme heat.

NOAA Completes Deployment of New River Forecasting System

NOAA completed deployment of its Community Hydrologic Prediction System (CHPS) to all 13 River Forecast Centers (RFC) leading to improved river forecasting. CHPS replaces the previous river forecast modeling system that was developed in the 1970s. CHPS, which is built upon modern software architecture, provides expanded and enhanced tools for water forecasting services. CHPS enables the larger hydrologic community access to NOAA's hydrologic modeling. NOAA is now able to access and leverage a wide variety of external hydrologic tools. These improvements significantly expand tools and capabilities to the RFCs and have led to improved products and services, including decision support services. CHPS enabled the Northeast RFC (NERFC) to provide critical decision support information to the New York City Department of Environmental Protection (NYCDEP), supporting construction at the Gilboa Dam. In advance of widespread heavy rain, CHPS enabled the NERFC to provide "what-if" river stage scenarios which allowed NYCDEP to make informed decisions regarding the safe removal of construction equipment and personnel prior to the heavy rains.

NOAA Upgrades Global Forecast System and Data Assimilation

In March 2012, NOAA implemented major improvements to its Global Forecast System (GFS) including a new method of data assimilation which more effectively uses the information content in observations to correct errors in forecast models. This new data assimilation system which represents one of the biggest improvements in U.S. weather and climate forecasting in a decade was developed in collaboration with the Office of Oceanic and Atmospheric Research and facilitated by the Hurricane Forecast Improvement Project

team. The GFS is the foundational computer model used in the development of guidance for more than 1.5 million weather forecasts annually. Decisionmakers across the country depend on these weather forecasts to improve their planning and hazard preparedness. Advancements over the previous GFS version were also made in the model physics, post-processing, and improved quality control. Additional data from GOES East and West (GOES-13 and 15), changes in the use of global positioning system (GPS) Radio Occultation data, and use of new observations including the operational transition of the Advanced Technology Microwave Sounder data from the new Suomi NPP satellite were also incorporated. The new forecast system is anticipated to produce more accurate forecasts out to 16 days. This includes improved hurricane track forecast accuracy, general global weather predictions, and forecasts of stratospheric ozone, which affects the amount of skin damaging radiation that hits Earth's surface and also affects climate.

Sea Ice Support for Emergency Nome, Alaska Fuel Resupply

During January 2012, the U.S. Coast Guard ice-breaker HEALY successfully escorted a Russian fuel tanker delivering an emergency supply of 1.3 million gallons of winter fuel to Nome, AK. The normal winter fuel supply had been blocked by a major November winter storm then subsequently by heavy sea ice, placing Nome in danger of running out of fuel mid-winter. The earliest the next seasonal fuel supply barge would arrive would have been June 2012. NWS provided continuous decision support to U.S. Coast Guard operations beginning with daily briefing beginning in early December 2011 continuing throughout the operation until the end of January 2012. The NWS Sea Ice Forecaster worked 46 straight days and was in direct contact with the HEALY supplying special routing forecasts and satellite images daily which were critical to the mission's success. The NWS Sea Ice Forecaster collaborated with the Interagency National Ice Center, the U.S. Navy, the University of Alaska, and the U.S. Coast Guard on this effort.

NOAA Provides Decision Support for 2012 Fire Season

NOAA provided extensive decision support services enabling the Western United States to effectively manage the FY 2012 active fire season starting in late April. Because of a drier than average winter across much of the West, the 2012 fire season was the most active since 2008. The 2012 fire season was characterized by severe drought conditions and record temperature extremes from central Wyoming, southward through Arizona, Colorado and New Mexico. As early as January, NOAA began providing a seasonal outlook, focusing on the potential for significant wildfires to stakeholders and began coordinating with partners including federal, tribal, state, and local fire service providers. NOAA continued to provide daily-to-weekly updates to their partners, including the impacts of the current weather forecasts on potential wildfire conditions. NOAA has provided over 18,000 spot forecasts for wildfire management year to date, including 11,000 for prescribed burns. NOAA deployed Incident Meteorologists (IMET) as front-line support, with 167 on-site dispatches through September providing approximately 21,000 hours of direct support for these devastating fire outbreaks. On average, IMET were on site within 14 hours of request to NWS, enabling them to participate from the first stages overall Incident Management Team response to closeout. During the morning of June 12, 2012, at the Cow Camp Fire in Wyoming, a high-confidence IMET forecast of light winds resulted in implementing an aggressive tactical strategy to drop 160,000 gallons of water resulting in the protection of the towns of Hartville and Guernsey, WY. At the incident closeout, the Incident Commander commented that this action shortened the fire duration by two days. IMETs continue to serve on fires at this time, with a projected total number of deployments this year totaling 175; 35 deployments above an average year.

Weather-Ready Nation Community Pilot Projects Launched

As part of the Weather-Ready Nation (WRN) initiative, NOAA began piloting concepts for improved coordination for the emergency management community and effective response by the public and business community. These pilot projects will help set the direction for NOAA services of the future to better meet its mission to protect life and property mission. The community pilot projects launched in strategic locations in the Gulf Coast, South and mid-Atlantic were designed to improve warning and forecast services. These six community pilot projects are now operational in Silver Spring, MD; Fort Worth, TX; Sterling, VA; Slidell, LA; Tampa Bay, FL; and Charleston, WV. The pilot projects are helping these communities reach the highest level of preparedness and resilience to high-impact weather

while sharing best practices and lessons learned with other NOAA offices. Each of the pilots are designed to test new service concepts laid out in the WRN Roadmap and range in focus from emergency response to integrated environmental support services. Early accomplishments of the pilot projects include a public-private partnership in Slidell where a Significant Weather Emergency Response Vehicle was acquired and equipped at no cost to taxpayers. The vehicle will be deployed at weather-dependent emergencies and incidents to better support NOAA Core Partners on location. Also, working with social scientists, in collaboration with the National Hurricane Center, the pilot projects in Slidell and Tampa Bay tested a prototype Storm Surge Warning product during Tropical Storm Debby.

NWS Prepares Workforce to Integrate Dual-Pol Radar into Nation’s Warning Services

In 2012, NWS accelerated forecast staff expertise on Dual-Polarization (Dual-Pol) radar data which is critical for improved warnings and forecasts used by the public and key decisionmakers. Preliminary assessment by a team of expert forecasters indicated that a well-trained forecaster staff using Dual-Pol data is better able to identify areas of heavy precipitation over the standard radar leading to improved flash flood warnings, winter weather warnings, and warning of severe convective weather. This training success has received attention around the world with 10 other nations’ meteorological agencies requesting access to this operations training for their workforce. The operational integration of Dual-Pol technology, being currently deployed to the Nation’s fleet of weather radars, requires synchronization of all the interrelated components of NWS, including current operations, technology improvements, training, and service delivery by forecasters. To address the complex Dual-Pol training needs, NWS designed a comprehensive training course targeted to 1,800 Meteorologists-in-Charge, Hydrologists-in-Charge, Science and Operations Officers, Warning Coordination Meteorologists, forecasters, and hydrologists with warning responsibilities at NWS to effectively use Dual-Pol data in the development of warnings. This training program is the most comprehensive and challenging since NWS trained its workforce to effectively use the Doppler weather radar in the 1990s.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NOAA)	TARGET	ACTUAL	STATUS
Severe weather warnings for tornadoes (storm-based) – Lead time (minutes) ¹	13	12 ¹	Slightly Below
Severe weather warnings for tornadoes (storm-based) – Accuracy (%) ¹	72%	71 ¹	Slightly Below
Severe weather warnings for tornadoes (storm-based) – False alarm rate (%) ¹	72%	70% ¹	Met
Severe weather warnings for flash floods (storm-based) – Lead time (minutes)	42	57 ¹	Exceeded
Severe weather warnings for flash floods (storm-based) – Accuracy (%)	74%	74% ¹	Met
Hurricane forecast track error (48 hours) (nautical miles) ¹	84	70 ³	Exceeded
Hurricane forecast intensity error (48 hours)(difference in knots)	13	14.4 ³	Not Met
Accuracy (%) (threat score) of day 1 precipitation forecasts	31%	32 ¹	Met
Winter storm warnings – Lead time (hours)	19	18	Slightly Below
Winter storm warnings – Accuracy (%)	90%	83%	Not Met
Marine wind speed accuracy (%)	71%	76% ¹	Met
Marine wave height accuracy (%)	75%	77% ¹	Met
Aviation forecast accuracy for ceiling/visibility (3 mile/1,000 feet or less)(%) ³	65%	61% ²	Not Met
Aviation forecast FAR for ceiling/visibility (3 mile/1,000 feet or less)(%)	40%	39% ²	Met

¹ Pending collection of final data and verification and validation.

² Pending verification and validation.

³ Beginning in FY 2007, NOAA reported the previous year’s results because data is not available until February.

FY 2012 MISSED TARGETS

MEASURE	SEVERE WEATHER WARNINGS FOR TORNADOES (STORM-BASED) – LEAD TIME (MINUTES) AND ACCURACY (NOAA)
Explanation	The performance targets for tornado lead time and accuracy were set at an appropriate level, and the deviation from that level is slight. There was no effect on the overall program or activity performance.
Action	A full field deployment of the dual-polarization upgrade to the Next-Generation Radar and associated training from FY 2011-FY 2013 will aid forecasters in better diagnosing severe thunderstorm structure and will lead to better detection of airborne tornado debris in radar data in FY 2014 and beyond. Integrated Hazard Information Services software is being developed, which will allow forecasters to better manage hazardous weather warning services as well as their situation awareness. Rapid prototyping is ongoing with field deployment scheduled to begin in FY 2013.
MEASURE	HURRICANE FORECAST INTENSITY ERROR (48 HOURS)(DIFFERENCE IN KNOTS) (NOAA)
Explanation	NOAA set aggressive targets for hurricane intensity forecasting in FY 2011 which were not fully realized. This was based on anticipated performance improvements from the physics upgrades to the operational Hurricane Weather Research and Forecasting (H-WRF) model. FY 2011 48 hour intensity error value exceeded the 5-year average, although it fell below the target.
Action	NOAA continues to address issues contained with the H-WRF software including refining model physics. In FY 2010, NOAA's initiated its Hurricane Forecast Improvement Project (HFIP) which focuses on improving the accuracy and reliability of hurricane forecasts. The specific goals of the HFIP are to reduce the average errors of hurricane track and intensity forecasts by 20 percent. These efforts include enhanced observational strategies, improved data assimilation, numerical model systems, and expanded forecast applications. HFIP has developed a prototype hurricane forecast system which will be transitioned to operations contingent up availability of high performance computing.
MEASURE	WINTER STORM WARNINGS - LEAD TIME AND ACCURACY (NOAA)
Explanation	In a typical fiscal year, the number of winter weather events varies from 4,500 to 7,800. In FY 2012 the Nation experienced 3,207 winter storms. The lack of storms and near record warmth throughout the FY 2012 winter made it difficult for NOAA's forecasters to distinguish between snow versus rain or mixed events. This resulted in reduced winter storm warning accuracy. The lack of large winter storm systems also made it difficult to warn across multiple counties, which contributed to longer lead times than during a typical winter. Despite these difficulties, the winter storm warnings lead time was missed by less than an hour; from a service perspective, the lead time still gave NOAA's users, particularly emergency managers, adequate time to prepare and to mitigate impacts—which is critical to decision support services.
Action	In FY 2013 and beyond, NWS forecasters will benefit from advanced numerical weather prediction model forecast of winter storms.
MEASURE	AVIATION FORECAST ACCURACY FOR CEILING/VISIBILITY (3 MILE/1,000 FEET OR LESS)(%) (NOAA)
Explanation	Instrument Flight Rules (IFR) are defined as ceiling <1,000 feet and/or visibility <3 miles. Typically, NWS forecasts IFR events more accurately during years with higher occurrences of low clouds and fog. FY 2012 was a milder than normal winter, when most events occur, and a significant drought over much of the United States during the summer resulted in fewer low cloud and fog events to forecast. Fewer events to forecast result in lower performance.
Action	NWS continues to focus on detecting IFR conditions and making accurate and precise forecasts. NWS is focusing on improving Terminal Aerodrome Forecast (TAF) products at 30 busiest airports.

HISTORICAL TRENDS

Each year, NOAA's NWS typically meets or exceeds 12 of 14 Government Performance and Results Act (GPRA) measures. In FY 2012, the Nation witnessed an exceptionally dry year with over 80 percent of the Nation being impacted. FY 2012 was characterized by a low frequency of weather events, unusually high temperatures, and drought. The reduced weather event frequency led to less representative performance results. During a typical year, a larger number of weather events allow NWS forecasters to have greater situational awareness, leading to improved average weather forecasts and warnings.

Since 2010, NWS has exceeded flash flood lead time targets. NWS effected a transition from a county-based warning service to a storm-based warning service for flash floods in FY 2010 to provide more geographically-specific and accurate warning information to the public. During 2010 and 2011, the Nation had extremely wet years dominated by periods of highly predictable storm activity which was a factor in improved accuracy. As noted, FY 2012 was characterized by fewer storms and drought. At the end of FY 2012, NWS conducted a review of its past performance of flash flood lead time. Based upon this analysis, NWS has increased its targets beginning in FY 2013. NOAA's hurricane forecast track error performance has steadily improved by one to three percent since 2003; targets are routinely reassessed and adjusted to reflect these performance trends.

THEME 2 PROGRAM EVALUATIONS

The following program evaluations were conducted on programs related to this theme in FY 2012.

BUREAU	REVIEWER	NAME OF EVALUATION	DATE	WEB SITE
NOAA	GAO	<i>Information Technology Cost Estimation: Agencies Need to Address Significant Weaknesses in Policies and Practices</i>	7/2012	www.gao.gov
NOAA	GAO	<i>Polar-orbiting Environmental Satellites: Changing Requirements, Technical Issues, and Looming Data Gaps Require Focused Attention</i>	7/2012	www.gao.gov
NOAA	GAO	<i>Geostationary Weather Satellites: Design Progress Made, but Schedule Uncertainty Needs to be Addressed</i>	6/2012	www.gao.gov
NOAA	GAO	<i>GAO Annual Report: Opportunities to Reduce Duplication, Overlap and Fragmentation, Achieve Savings, and Enhance Revenue (GAO-12-342SP)</i>	2/2012	www.gao.gov
NOAA	GAO	<i>Change Adaptation: Federal Efforts to Provide Information Could Help Government Decision Making (GAO-12-238T)</i>	11/2011	www.gao.gov

THEME 3
ENVIRONMENTAL STEWARDSHIP



ENVIRONMENTAL
STEWARDSHIP

THEME, STRATEGIC GOAL, AND OBJECTIVES

THEME 3: ENVIRONMENTAL STEWARDSHIP

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

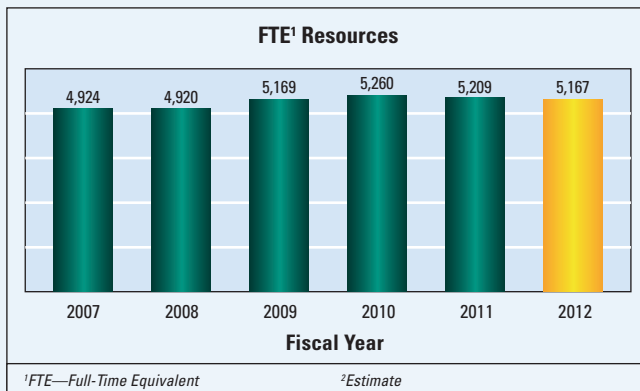
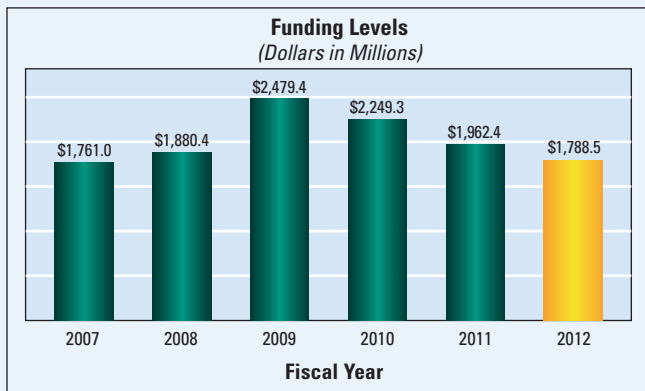
Objective 16	Support climate adaption and mitigation (NOAA)
Objective 17	Develop sustainable and resilient fisheries, habitats, and species (NOAA)
Objective 18	Support coastal communities that are environmentally and economically sustainable (NOAA)



THEME 3: ENVIRONMENTAL STEWARDSHIP

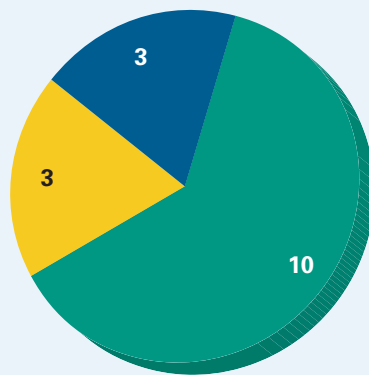
STRATEGIC GOAL: *Promote economically-sound environmental stewardship and science*

ENVIRONMENTAL STEWARDSHIP TOTAL RESOURCES



This theme contains one strategic goal and within that strategic goal, three objectives which contribute to the Secretary’s theme of Environmental Stewardship, all of which are associated with the National Oceanic and Atmospheric Administration (NOAA). The following public benefits, achievements, and performance results are associated with each objective.

ENVIRONMENTAL STEWARDSHIP STATUS OF CURRENT MEASURES



Improving Stable Declining New Measure

Improving, stable, or declining measures have at least three years of data.

OBJECTIVE 16

Support climate adaption and mitigation (NOAA)

PUBLIC BENEFITS

The Nation has an urgent need to advance U.S. understanding of the climate system and climate impacts so as to improve climate predictions and projections and to better inform adaptation and mitigation strategies. Key scientific uncertainties limit scientists' ability to understand and predict changes in the climate system. International, national, state, and local efforts to limit greenhouse gases require reliable information to support emissions verification, as do efforts to track climate changes and mitigate impacts. Adaptation and mitigation strategies must be informed by a solid scientific understanding of the climate system.

Society exists in a highly variable climate system, with conditions changing over the span of seasons, years, decades, and centuries. Given such stresses as population growth, drought, and increasing demand for fresh water, it is essential for NOAA to provide reliable observations, forecasts, and assessments of climate, water, and ecosystems to enhance decisionmakers' ability to minimize climate risks. This information supports decisions regarding community planning, business management, and natural resource and water planning.

Climate-related changes projected for the future include the following:

- increased global temperatures;
- melting sea ice and glaciers;
- rising sea levels;
- increased frequency of extreme precipitation events;
- acidification of the oceans;
- modifications of growing seasons;
- changes in storm frequency and intensity;
- alterations in species' ranges and migration patterns;
- earlier snowmelt;
- increased drought; and
- altered river flow volumes.

The impacts of these changes are regionally diverse and affect numerous sectors, including water, energy, transportation, forestry, tourism, fisheries, agriculture, and human health. A changing climate is projected to increase demand for water resources and exacerbate other human impacts on fisheries and marine ecosystems, such as over-fishing, habitat destruction, pollution, and excess nutrients in coastal waters. Sea level rise is expected to amplify the effects of other coastal hazards, and rising temperatures are expected to increase invasions of non-native species. Climate change can also have a direct impact on commerce, transportation and the economy. In the Arctic, retreating sea ice is providing access for regional oil and gas development, expanding commercial fisheries northward, and opening sea routes for commerce and tourism.

These changes have profound implications for society, underscoring the need for scientific information to aid decisionmakers in developing and evaluating options for mitigating the human causes of climate change and adapting to foreseeable climate impacts. While the Nation has made significant progress in its understanding of climate, more work is needed to improve scientific understanding, produce accurate predictions, identify risks and vulnerabilities, and inform decision-making. No single agency can do this alone; climate science, assessment, service, engagement, and education efforts require and benefit from interagency, academic, and private sector partnerships. Building on decades of strong scientific research and information and engagement with stakeholders, NOAA will advance this long-term goal by deepening its scientific understanding of climate, developing authoritative climate assessments, developing and delivering climate services at global, regional, and local scales, and improving public knowledge of a changing climate and its impacts. Given its stewardship responsibilities and expertise, NOAA will focus particularly closely on the impacts of a changing climate on weather patterns, ocean and coastal ecosystems, living marine resources, and salt and freshwater resources.

In FY 2012, NOAA continued to play a lead role in the U.S. Global Change Research Program (USGCRP) which coordinates and synergizes climate research and activities across numerous member agencies, gaining efficiencies in the process. NOAA leads the USGCRP effort to produce the National Climate Assessment which is a quadrennial compilation of the state of the climate, climate research, and assessments pertaining to the impacts of climate variability and change.

ACHIEVEMENTS

Carbon Dioxide Levels Reach Milestone at Arctic Sites

In April 2012, NOAA measured the highest concentration of carbon dioxide (CO₂) ever recorded in the atmosphere of Barrow, AK, 400 parts per million (ppm). Carbon dioxide at six other remote northern sites in NOAA's international cooperative air sampling network also reached 400 parts per million at least once this spring: at a second site in Alaska and others in Canada, Iceland, Finland, Norway, and an island in the North Pacific. Measurements at all those remote sites reflect background levels of CO₂, influenced by long-term human emissions around the world, but not directly by emissions from a nearby population center. Carbon dioxide, emitted by fossil fuel combustion and other human activities, is the most significant greenhouse gas contributing to climate change. By comparing these values to historical CO₂ amounts, NOAA can predict future levels of CO₂.

NOAA Scientists Point to Climate-protecting Potential of Montreal Protocol

NOAA Research scientists and international colleagues authored a Policy Forum on "Preserving Montreal Protocol Climate Benefits by Limiting HFCs" published in *Science* (February 24, 2012: 922-923). The Montreal Protocol's protection of the stratospheric ozone layer could have unintended impacts on climate because it has encouraged the use of chemicals called HFCs (hydrofluorocarbons) as substitutes for ozone-depleting substances such as CFCs (chlorofluorocarbons). HFCs do not deplete ozone, but they are potent climate-warming greenhouse gases, and their use is rising. The Montreal Protocol has provided some global climate protection. Many ozone-depleting substances, now phased out of production, are also greenhouse gases. The authors note the Montreal Protocol's climate benefits could be preserved if HFCs were also addressed under the protocol.

NOAA Expanded the Climate Stewards Education Project

The NOAA Climate Stewards Education Project (CSEP) expanded to include 140 educators in 40 states and the District of Columbia providing professional development and collaborative online learning to increase climate science knowledge and engage kindergarten to college and informal learners in local stewardship projects. NOAA CSEP educators completed over 1,300 contact hours of

professional development in climate change science and pedagogy via Webinar and online tutorials, as well as face to face workshops hosted by the National Ocean Service and partners like the U.S. Forest Service, National Science Teachers Association, and American Meteorological Society in states and localities including Georgia, Wisconsin, Louisiana, New York, Maryland, and Washington, D.C.

“Seeing” Sea Level Rise and Improving Local Sea Level Change Scenarios

Datasets, models, visualizations, and many other resources must come into play when coastal professionals talk with communities about flood-related changes such as sea level rise. Some audiences begin to understand coastal changes only when they can visualize the impacts. For this reason the NOAA Coastal Services Center developed the Sea Level Rise and Coastal Flooding Impacts Viewer. This viewer uses local elevation data and visualization software that enables users to see, in maps and pictures, how one to six feet of sea level rise is likely to impact their coastal communities. Featured on the Digital Coast Web site, this tool has been very popular, garnering 9,760 direct Web hits between October 1, 2011, and July 20, 2012. The viewer is in year three of a four-year effort, covering a total of 98 counties or parishes in six states. The release of the viewer by region will include Webinars and meetings to ensure its application by coastal managers.

NOAA Completes Move into the Center for Weather and Climate Prediction

NOAA successfully moved into the NOAA Center for Weather and Climate Prediction (NCWCP). NCWCP is a newly-constructed, leased facility located in College Park, MD with 268,762 square feet of available space. NCWCP was a joint NOAA and General Services Administration project. This effort consolidates three current locations into one. Five of NOAA's National Centers for Environmental Prediction; two elements of NOAA's National Environmental Satellite, Data, and Information Service; and NOAA's Air Resources Laboratory will operate out of the NCWCP. The co-location of these organizations will improve programmatic integration in national weather and climate modeling and prediction product development. The NCWCP facility is currently a candidate for silver certification in the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. LEED sets standards for green buildings, verifying that the building is environmentally responsible, profitable and healthy for occupants. NCWCP has environmentally-friendly features such as planted “green roofs,” bio-retention areas, and a storm water cistern to collect water for irrigation.

Examining the State of the Climate in 2011

NOAA released the 2011 State of the Climate Report, which is a peer-reviewed report compiled by scientists from countries around the world. It provides a detailed update on global climate indicators, notable weather events, and other data collected by environmental monitoring stations and instruments on land, sea, ice, and in the sky. According to the report, 2011 was the coolest year on record since 2008 even though temperatures remained above the 1981–2010 average. The State of the Climate Report is peer-reviewed and published annually as a special supplement to the *Bulletin of the American Meteorological Society*. The report is part of a suite of climate services NOAA provides to government, business, and community leaders so they can make informed decisions. The National Climatic Data Center has led the annual effort to assemble the State of the Climate Report for the last 12 years. In that time, the number of contributing authors has grown from 13 in 2001 to 378 authors from every continent in 2012. Each year the report reaches a broader audience as an increasing number of businesses, groups, and individuals gather ever-growing interest and concern in the climate. Educators also use this report as a tool to teach students about various aspects of climate and climate change.

Explaining Extreme Events of 2011 from a Climate Perspective

A National Climatic Data Center scientist along with colleagues from the UK Met Office Hadley Centre and the NOAA Office of Program Planning and Integration authored a paper entitled “Explaining Extreme Events of 2011 from a Climate Perspective.” The paper was published in the *Bulletin of the American Meteorological Society* and explains how the odds of extreme events have changed in response

to global warming. Currently, scientists find attributing single extreme events to human-induced climate change very challenging. In the past, scientists often stated that it simply was not possible to say whether an individual weather or climate event could be attributed to climate change. However, scientists now widely accept that attributing individual weather or climate events to climate change is possible, if the probabilistic nature of doing so is properly taken into account. This paper explains which of several specific extreme events of 2011 can be attributed to human-induced climate change. By developing the ability to put recent extreme weather or climate events into the longer-term context of climate change, scientists can provide the public with the information needed to make decisions to effectively minimize and prepare for the impacts of these variations and changes in the climate system.

New Regional Climate Science Collaborations in Alaska, California-Nevada, and the Carolinas

NOAA established three new Regional Integrated Sciences and Assessments (RISA) collaborations in Alaska, California-Nevada, and the Carolinas. The three new awards include the Alaska Center for Climate Assessments and Policy (ACCAP – University of Alaska-Fairbanks), the California-Nevada Applications Program (CNAP – Scripps Institution of Oceanography), and the Carolinas Integrated Science and Assessments program (CISA – University of South Carolina). All three institutions will address issues expressed by regional decisionmakers and will conduct research efforts collaboratively with other universities and research organizations. The ACCAP center will focus on coastal and living marine resources with potential topics including sea ice extent and the vulnerability of coastal infrastructure to storms. CNAP will address water supply, planning and preparedness for wildfires, and coastal management. The CISA project addresses early warning and preparedness for drought, groundwater vulnerability to saltwater intrusion, and shellfish pathogens. The teams will support dialogue between scientists and decisionmakers through which social scientists and outreach experts can evaluate the use of climate information.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NOAA)	TARGET	ACTUAL	STATUS
U.S. temperature forecasts (cumulative skill score computed over the regions where predictions are made)	21	28	Exceeded
Uncertainty in the magnitude of the North American (NA) carbon uptake	0.40 GtC/year	0.40 GtC/year	Met
Error in global measurement of sea surface temperature	0.50°C	0.56°C	Not Met
Annual percentage of U.S. states and territories that use NOAA climate information and services to improve decision-making in the face of a changing climate	22%	22%	Met

¹ Pending final data and verification and validation

FY 2012 MISSED TARGETS

MEASURE	ERROR IN GLOBAL MEASUREMENT OF SEA SURFACE TEMPERATURE (NOAA)
Explanation	The primary reason for the increase is the residual effect of the unexpected short life spans for some batches of drifters. While correction procedures have been in place and more drifters have been deployed since April 2012 by the Global Drifter Program, deployments are lacking in the Southern Ocean during the Southern Hemisphere winter season. Combined with the times required for the deployed drifters to disperse to other areas from the deployment points, this resulted in more data gaps particularly in the Southern Ocean regions.
Action	With the planned enhanced deployment for the Southern Ocean region as the warmer Southern Hemisphere seasons come, combined with the farther spread of last season's deployed drifters, NOAA anticipates that the sea surface temperature GPRA results will improve.

OBJECTIVE 17

Develop sustainable and resilient fisheries, habitats, and species (NOAA)

PUBLIC BENEFITS

Ocean and coastal ecosystems provide many important human benefits, including nourishment, recreational opportunities, and support for U.S. economies. Yet ocean and coastal resources, stressed by human uses and habitat changes, are experiencing depleted fish and shellfish stocks, increased numbers of species at-risk and declining marine, coastal, and Great Lakes biodiversity. Since humans are an integral part of the ecosystem, these declines in ocean and coastal ecosystem functions and quality directly impact human health and well being. Global demands for seafood, recreational use of the marine environment, and other pressures on habitats and over-exploited species are expected to increase as a result of long-term environmental, climate, and population trends. Depleted fish stocks and declines in iconic species such as killer whales, salmon, and sea turtles result in lost opportunities for employment, economic growth, and recreation along the coasts. In addition, climate change impacts to the ocean such as sea level rise, acidification, and warming will alter habitats and the relative abundance and distribution of species as well as the productivity of coastal and marine ecosystems. This will affect recreational, economic, and conservation activities, as concerns about the sustainability of ecosystems and safety of seafood rise commensurately.

By working toward the long-term sustainability of all species, NOAA will also ensure that seafood is a safe, reliable, and affordable food source for present and future generations; that both consumptive and non-consumptive uses of living marine resources, including seafood production and recreational fishing opportunities, continue to support vibrant coastal communities and economies; and that species of cultural and economic value can flourish. Restoration of species that have declined to the point where, without intervention, they would simply die out does not occur overnight; it often requires a substantial amount of time to restore their natural habitat and their depleted levels. Native species also can be affected by the inadvertent introduction of invasive species, often through the shipping industry or through direct human release of such species. NOAA defines them as "aquatic and terrestrial organisms and plants that have been introduced into new ecosystems (i.e., Great Lakes, San Francisco Bay, Florida, Hawaii) throughout the United States and the world and are both harming the natural resources in these ecosystems and threatening the human use of these resources." Examples of recent invasive species include zebra mussels and snakeheads. NOAA will ensure that the ocean, estuarine, and related ecosystems and the species that inhabit these ecosystems are vibrant and sustainable in the face of these challenges. An ecosystem-

based approach to management that accounts for the complex connections between organisms (including humans); their physical, biotic, cultural, and economic environments; and the wide range of processes that control their dynamics will assist policymakers by giving them a stronger understanding of these systems and allowing them to weigh trade-offs between alternative courses of action.

ACHIEVEMENTS

Major Management Milestone Reached for U.S. Fisheries

On June 29, 2012, NOAA achieved a significant milestone by approving the final Fishery Management Plan amendment to put annual catch limits and accountability measures into place. To prevent and end overfishing in the United States, the Magnuson-Stevens Reauthorization Act requires that all federal fisheries be harvested under annual catch limits with accompanying accountability measures. During the next few years, as NOAA continues to manage fisheries under annual catch limits and completes new scientific stock assessments, it expects to confirm that overfishing has ended and depleted stocks are rebuilding to higher levels of abundance. Ending overfishing and rebuilding stocks are an investment in the long-term viability of the Nation's fisheries and fishing communities. NOAA commends the fishermen and communities impacted by these management changes for their commitment and participation in making U.S. fisheries among the most responsibly managed in the world.

Record Number of Stocks Rebuilt, Improving the Nation's Fisheries

By the close of 2011, NOAA had declared six fish stocks rebuilt—the most in a single year—and overall results showed a decrease in the number of both overfished stocks and stocks experiencing overfishing. Between December 31, 2010, and December 31, 2011, the number of overfished stocks dropped from 48 to 45, and the number of stocks experiencing overfishing dropped from 40 to 36. These results underscore the strength of NOAA's science-based management process and clearly demonstrate that the Agency is actively turning the corner on ending overfishing and rebuilding the Nation's fisheries.

Positive Results from First Year of Innovative Catch Shares Program for West Coast Groundfish

Final figures for the 2011 fishing year for the West Coast Groundfish Fishery showed successful fishing under the catch share system as reflected in a year-round fishery based on the business decisions of fishermen. In 2011, annual revenues were up by 14 percent in the non-whiting portion of the shoreside fishery compared to the historical average. Shoreside whiting landings and revenue both increased dramatically, with landings up by 40 percent and revenues up by 121 percent compared to the historical average. Buttressed by high sablefish prices and a large whiting quota, revenues in the combined fishery reached higher than average levels. These sectors combined reached a total of \$54 million in 2011 compared to the 2006-2010 average of \$38 million. NOAA scientists also support the fishery with timely information on fish stocks and retention. These results are promising for the groundfish resource, the fishermen, and their communities.

NOAA's Transformed Law Enforcement Provides Benefits for Protected Species, Marine Resources, and Constituents

The transition of NOAA's Office of Law Enforcement toward a more holistic approach that combines focused and effective criminal enforcement with more extensive compliance assistance, monitoring, patrols, and inspections has yielded benefits for protected species, marine resources, and constituents. For the first time, NOAA took a collaborative approach to creating its enforcement priorities, reaching out to commercial and recreational fishermen, fishery management councils and interstate commissions, federal and state enforcement partners, nongovernmental organizations, and others. As a result, NOAA adjusted the composition of its workforce such that a better balance exists between special agents and enforcement officers.

As an example of this successful approach, NOAA has made significant progress protecting endangered sea turtles. In the wake of high levels of sea turtle strandings in the Gulf of Mexico (525 documented in 2011 and 350 documented through July 15, 2012), NOAA inspected 240 shrimp trawl vessels for Turtle Excluder Device (TED) compliance from October 2011 through May 2012 and discovered 79 vessels with noncompliant TEDs. While this effort resulted in multiple warnings and violations as well as one civil penalty, NOAA personnel also helped many shrimpers comply with the TED requirements, correcting improperly installed TEDs, investigating reports of incorrect TED construction, and educating the industry on TED requirements.

NOAA Restores Access to Valuable Fish Habitat

NOAA worked with state and federal agencies and nongovernmental partners to open rivers and streams for fish and other species by removing barriers to fish passage while supporting national infrastructure and energy projects that promote economic growth. Mitigating the negative impacts of dams and other obstacles, such as water supply and diversion structures, is an important strategy for allowing migratory fish populations to return to their spawning grounds. NOAA contributions to partner programs will open more than 1,000 river miles with benefits for fish and entire riverine, coastal, and marine ecosystems. Important examples include:

- The removal of the Great Works dam on the Penobscot River in Maine;
- A new fish passage facility at the Savannah River's New Savannah Bluff Lock and Dam in South Carolina;
- Mitigation for the relicensing of the Toledo Bend Hydro Project on the Sabine River in the Gulf of Mexico river basin;
- Fish passage facilities negotiated by NOAA and partners at the Goose Creek Dam above Charleston, SC; and
- Large-scale dam removal projects on the Elwha and White Salmon rivers in Washington State.

Historic Sockeye Returns in Columbia River Basin

In 2012, the number of sockeye salmon passing Bonneville Dam was the highest in more than seven decades. Over 514,000 sockeye passed the dam in 2012, up from 386,000 in 2010. The average count for 2008 to 2012 was 295,000 fish. This increased abundance is even more impressive since the majority of these fish are wild fish from the Okanogan River, which pass nine mainstem dams, and Lake Wenatchee, which pass seven mainstem dams. High survival rates of in-river migrating smolts in recent years demonstrate positive impacts from recent improvement to fish passage and hydrosystem operations. For example, survival rates in 2010 and 2011 between Rock Island and Bonneville dams—a six-dam reach—were estimated at about 49 percent and 51 percent, respectively. Survival estimates in earlier low flow years (similar to 2010) were much lower: 15 percent in 2002 and 16 percent in 2005.

NOAA Protects Atlantic Sturgeon

On February 6, 2012, NOAA announced its decision to list five populations of Atlantic sturgeon along the U.S. East Coast under the Endangered Species Act (ESA): four as endangered and one as threatened. This listing follows a formal status review of Atlantic sturgeon in 2007 conducted by biologists from NOAA, the U.S. Geological Survey, and the U.S. Fish and Wildlife Service. Because the ESA requires consultation on actions that might affect listed species, and several Northeast fisheries are either known, or have the potential, to interact with Atlantic sturgeon, the listing triggered the need to analyze the effects on those fisheries. NOAA is working closely with partner agencies to gather the information necessary to fully assess the impacts of these fisheries on Atlantic sturgeon. Working with the New England and Mid-Atlantic Fishery Management Councils, NOAA is also identifying measures to minimize the

impacts of these fisheries on Atlantic sturgeon as necessary. All nine planned fishery consultations should be finished by the end of 2012. The National Resources Defense Council petitioned NOAA to list Atlantic sturgeon and designate critical habitat under the ESA on October 6, 2009.

NOAA Achieves Key U.S. Goals in International Fora

NOAA made key contributions toward improving international management of marine resources. NOAA led the U.S. delegation to the 2012 Annual Meeting of the Inter-American Tropical Tuna Commission (IATTC) and was key to achieving a landmark international agreement that, for the first time ever, establishes catch limits for bluefin tuna in the Eastern Pacific. The IATTC adopted a catch limit of 10,000 metric tons and agreed to request that the Western and Central Pacific Fisheries Commission adopt similar measures. These catch limits are an essential step toward the sustainable management of this highly prized fish in the Pacific Ocean.

Improving Coastal Resiliency and Creating Jobs

The National Marine Fisheries Service awarded a \$45 million construction contract funded by the Coastal Wetlands Planning, Protection and Restoration Act Program to restore two miles of Gulf of Mexico shoreline and 500 acres of coastal habitats on Louisiana’s Pelican Island. The project largely completes a 15-year effort led by NOAA in partnership with Louisiana to restore over 12 miles of critically eroding barrier shoreline in the Barataria Basin, one of the Nation’s most productive estuaries. That effort has created and protected 2,200 acres of coastal habitats while improving protection for significant energy supply infrastructure and maintaining the “first line of defense” against storm surge. The Pelican Island project uses over four million cubic yards of sediments (equivalent to filling 80 percent of the Louisiana Superdome) to re-create dune, salt marsh and other habitats important to Gulf of Mexico marine resources. Project construction is about 50 percent complete, with over 70 private sector employees providing a wide variety of marine construction, skilled labor, and supporting services. This project is part of NOAA’s nationwide effort to ensure healthy habitats that sustain resilient and thriving marine resources and communities.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NOAA)	TARGET	ACTUAL	STATUS
Fish stock sustainability index (FSSI)	603.5	606	Met
Percentage of fish stocks with adequate population assessments and forecasts	57.4.% (132/230)	56.1% (129/230)	Slightly Below
Number of protected species with adequate population assessments and forecasts	20.6% (78/378)	20.9% (79/378)	Met
Number of protected species designated as threatened, endangered, or depleted with stable or increasing population levels	28	29	Met
Number of habitat acres restored (annual)	80,007	8,242 ¹	Exceeded

¹ Acres restored with funding from the Pacific Coastal Salmon Recovery Fund were not available at the time of publication. The acres shown were restored with Habitat Program funding, which exceeded the target of 6,007.

FY 2012 MISSED TARGETS

MEASURE	PERCENTAGE OF FISH STOCKS WITH ADEQUATE POPULATION ASSESSMENTS AND FORECASTS (NOAA)
Explanation	<p>The target of 57.4% or 132 stocks with adequate population assessments was missed by three stocks as a result of the following:</p> <ul style="list-style-type: none"> ● Two new assessments (cobia and Spanish mackerel) have been completed but not yet fully reviewed and approved. They were delayed by the decision to include 2011 data and the need to revise the model, and the process was slowed by the workload of the scientific staff. ● One new assessment did not meet the adequacy requirements due to data limitations. The stock in question (skipjack tuna) is an international stock, and the survey was conducted by the Inter-American Tropical Tuna Commission, so data from multiple nations were required, and NOAA was not in charge of the assessment process. ● One existing assessment (blue king crab) was determined to be invalid due to problems with the assessment model. This effort was led by the Alaska Department of Fish and Game so NOAA was not in charge of the schedule for revision of the model.
Action	<p>The delayed assessments for cobia and Spanish mackerel are expected to be completed in second quarter FY 2013. The revised model for blue king crab was accepted in September 2012 and will be fully implemented and the assessment finalized during FY first quarter FY 2013.</p>

HISTORICAL TRENDS

Although the shortfalls in both FY 2011 and FY 2012 were largely related to individual assessment events, steps are being taken to address larger issues to ensure that this pattern does not turn into an ongoing negative trend. These issues include the loss of days at sea and the demand for increased frequency of assessments that are already adequate, especially in the Northeast. Individual Science Centers are working with their respective Regional Fishery Management Councils to revise assessment processes and get more stock assessments onto an expedited update schedule and streamlined review in lieu of full benchmark assessments.

OBJECTIVE 18

Support coastal communities that are environmentally and economically sustainable (NOAA)

PUBLIC BENEFITS

Coastal areas are among the most developed in the Nation, with over half the population living on less than one-fifth of the land in the contiguous United States. At over 230 persons per square mile, the population density of the near shore is three times that of the Nation as a whole. The portion of the U.S. economy that depends directly on the ocean is also large, with 13 million U.S. jobs provided by the water and transportation industry and over \$800 billion in domestic trade added to the national economy in 2010. Approximately 90 million people support the travel and tourism industry along U.S. coasts every year. With its Exclusive Economic Zone of 3.4 million square miles, the United States manages one of the largest marine areas of any nation in the world. While an increasing range of uses will allow coastal communities to create diverse ocean-based economies, care must be taken to ensure continued access to coastal areas and sustained ecosystems services

The complex interdependence of ecosystems and economies will grow with increasing uses of land, marine, and coastal resources, generating economic and environmental pressures that bear particularly heavily on the Nation's coastal communities. Maritime-dependent economies will expand in all Exclusive Economic Zone areas and coastal economies will be highly dependent on safe and efficient transportation of people and goods.

At the same time, these ecosystems will be increasingly vulnerable to environmental disruptions, such as harmful algal blooms, that can weaken coastal economies and communities by killing fish and closing beaches. Shifting patterns in weather and climate will result in coastal communities, urban centers, and economic sectors relying more heavily upon geospatial and other environmental information. The Nation's profound need for alternative energy solutions will result in more competition for land and ocean resources, adding additional challenges to sustaining environmentally and economically sustainable coastal and Great Lakes communities.

No single region better exemplifies the complex interdependence of communities and changing climate and ecosystem conditions than the Arctic. There is evidence of widespread, dramatic change in the Arctic region, with local to global implications. National security concerns are increasing as reductions in sea-ice bring opportunities for economic development and increased access to Arctic resources. The breadth and complexity of the cultural, societal, economic, and environmental impacts within this region requires a concerted, systematic, and rapid effort with partners from local to international levels.

NOAA works with its partners to achieve a balance between the use and protection of these resources to ensure their sustainability, health, and vitality for the benefit of this and future generations and their optimal contribution to the Nation's economy and society. Marine planning is a comprehensive management approach that is designed to support sustainable uses and ensure healthy and resilient ocean and coastal ecosystems. In some areas, NOAA and its partners collaboratively protect and manage critical coastal and ocean ecosystems. The National Ocean Service worked with states and localities to ensure accurate shoreline data for efficient debris cleanup.

NOAA will invigorate coastal communities and economies and lead to increased resiliency and productivity. Comprehensive planning will address competing uses to protect coastal communities and resources from the impacts of hazards and land-based pollution on vulnerable ecosystems, as well as to improve water quality and foster integrated management for sustainable uses. Geospatial services will support communities, navigation, and economic efficiency with accurate, useful characterizations, charts and maps, assessments, tools, and methods. Coastal decisionmakers will have the capacity to adaptively manage coastal communities and ecosystems with best available natural and social science. Enabling this goal are strong collaborative partnerships with regional, state, and local private and public entities that have responsibilities and interests in managing coastal communities and ecosystems. Close collaboration across goals will ensure success in meeting NOAA's strategic priorities.

NOAA's Marine Transportation System (MTS) spans ports and inland waterways across U.S. coastal waters and oceans to support commerce, recreation, and national security. MTS supports the Nation's economy, with more than 78 percent by weight and 95 percent by volume of U.S. overseas trade carried by ship. By 2020, the value of domestic maritime freight is forecasted to nearly double. MTS is increasingly vulnerable to natural and human-caused disruptions, potentially impacting the viability of the economy. Increased maritime activity can stress sensitive marine and freshwater environments and increase the risk of maritime accidents. Improving the reliability and resilience of MTS will decrease risks to the economy and the environment.

ACHIEVEMENTS

NOAA Responds to Changing Conditions in Alaska and the Arctic

As sea ice continues to disappear at a rapid rate, vessel traffic in the Arctic has begun to rise. This is leading to new maritime concerns, especially in areas increasingly transited by the offshore oil and gas industry, cruise liners, military craft, tugs and barges, and fishing vessels. Keeping all of this new ocean traffic moving smoothly is important to the U.S. economy, environment, and national security. In 2012, NOAA released a new nautical chart for Kotzebue Harbor and Approaches, addressing a pressing need for the Arctic regional transportation hub in Northwest Alaska. The new chart's accurate and precise depth measurements (previously charted in the 1800s) will make ocean-going vessel traffic more efficient through Northwest Alaska.

NOAA's Mapping and Charting Data, Products, and Services—Foundation for Applications in United States and Abroad (e.g., United Kingdom)

NOAA produces, updates, and maintains the Nation's suite of nautical charts, other public and private groups access and repackage the charts for sale. This year NOAA and the United Kingdom Hydrographic Office signed an agreement to repackage the NOAA charts and improve the distribution of these charts, especially those vessels that use UK Admiralty series. NOAA's electronic navigational charts (NOAA ENC®) that cover the approaches to the East Coast now alert mariners when they are approaching Right Whale seasonal management areas, giving them better information to plan to reduce their speeds or avoid the areas altogether. The ENCs also provide for an alarm on the ship's electronic chart display and information system as vessels enter the speed zone, further alerting the bridge watchstander of speed restrictions. NOAA's nautical charts are the backbone of today's modern computer navigation systems, both on the bridges of the largest commercial vessels and in the wheelhouses of countless boats that line local marinas from coast to coast. To continue to provide accurate nautical charting information, the FERDINAND R. HASSLER, a state-of-the-art coastal mapping vessel was recently commissioned. Ocean transportation contributes more than \$742 billion to the national economy, and NOAA's effort to improve efficiencies benefits communities and industries that rely on maritime trade.

Record-Breaking Harmful Algal Bloom Forecasts in Texas and Lake Erie Algae Helps Businesses Prepare and Mitigate Impacts

Harmful algal bloom (HAB) forecasters at the Center for Operational Oceanographic Products and Services (CO-OPS) issued a final forecast in mid-February for a HAB that severely impacted the Texas coast and coastal bays over the past five months. *Karenia brevis* bloom or "red tide" may have been the longest lasting and one of the largest, extending from the southern tip of Texas to Galveston Bay. The *Houston Chronicle* reported preliminary costs to the Texas shellfish industry alone at \$7 million due to this past season's HAB-related closures. Fortunately, HAB forecasts for Texas were transitioned from a research application, developed by the National Centers for Coastal Ocean Science, to routine and reliable operations at NOAA's CO-OPS just one year prior to the onset of this devastating bloom. NOAA and partners announced a new seasonal HAB forecast for Lake Erie during an event hosted by Ohio State University Sea Grant's Stone Laboratory. The seasonal forecast supplements a weekly, near-real-time forecast that helps water treatment plant operators know when to use extra carbon filtration to preserve the quality of lakeside communities' drinking water.

New Sanctuary Exploration Center in Santa Cruz Expected to Serve 150,000 Visitors a Year

NOAA's Monterey Bay National Marine Sanctuary, the City of Santa Cruz, and the National Marine Sanctuary Foundation opened the Sanctuary Exploration Center, a state-of-the-art facility full of interpretive and hands-on exhibits highlighting the sanctuary's extraordinary natural and cultural resources. More than 150,000 visitors a year are expected. The National Marine Sanctuary Foundation

brought in over \$3 million in private and public monies to fund the exhibits, which include the Exploration Theater, a walk through a kelp forest, an intertidal interactive display, an open-ocean mini-theater, and a replica deep-sea canyon with a remotely operated vehicle. Just steps from the ocean, the two-story, 12,387-square foot center located in Santa Cruz's famed beach area, educates visitors as they learn about NOAA's National Marine Sanctuary system, ocean conservation partners, and the vital role citizens play as ocean stewards. The Sanctuary Exploration Center also serves as a starting point for visitors to experience other facilities and on-the-water activities. NOAA and the City of Santa Cruz specified the project to be a model for sustainable, environmentally sensitive design, construction, and operation. The Sanctuary Exploration Center implemented multiple strategies during the construction process using U.S. Green Building Council's LEED criteria. The Sanctuary Exploration Center was built with the highest of green standards and is currently pursuing certification for a Gold rating.

Regional Operational Forecast System Available for the Northern Gulf of Mexico

NOAA's Office of Coast Survey and CO-OPS expanded the suite of operational Nowcast and forecast hydrodynamic models by unveiling the new Northern Gulf of Mexico Operational Forecast System developed with the NWS's National Centers for Environmental Prediction and the University of Massachusetts-Dartmouth. The system is NOAA's first regional ocean model, encompassing the shelf and coastal areas from Pensacola, FL to Corpus Christi, TX. These forecasts support mariners, port managers, and emergency response teams with present and future conditions of water levels, currents, wind, temperature, and salinity. The model includes spatial animations and time series for each parameter at nearly 100 stations across the entire Northern Gulf of Mexico region. NOAA's new Gulf of Mexico Disaster Response Center creates an unprecedented regional presence and expands federal capacity to plan for and respond to hazards in the Gulf of Mexico. In addition to the Office of Response and Restoration, the Disaster Response Center will house staff from the Office of Coast Survey, National Marine Fisheries Service, and NWS. The Disaster Response Center not only includes offices, a training room, and conference rooms, but also a large multifunction space which can be used for large trainings, meetings, emergency response operations, and drills. Training curriculum is being designed to expand the cadre of NOAA responders in the region and build a broader trained and educated response partnership across NOAA.

Coral Reef Program Collaborates on Monitoring, Mapping, and Education Efforts

In 2012, NOAA's Coral Program addressed climate-related risks to coral reefs by establishing ocean acidification monitoring equipment in one-third of the six Coral Triangle countries to support the U.S. Agency for International Development's U.S. Coral Triangle Initiative. In addition, the program advanced near-real-time satellite monitoring of ocean temperatures to provide higher spatial resolution products to more accurately predict mass coral bleaching events and monitor thermal stress at scales specific to coral reefs. To further support marine protected area management capacity and address/reduce impacts of land based sources of pollution, NOAA's Coral Program responded to a request from Puerto Rico's Coastal Zone Management Program and partnered with the Caribbean Fisheries Management Council, the U.S. Coast Guard, and academia to map Puerto Rico's Northeast Great Reserve, a recently established marine protected area. The program also launched NOAA Reef Smart in Puerto Rico, an education initiative designed to engage students, stakeholders, and policymakers and increase their awareness of NOAA's coral reef ecosystem research. The Reef Smart initiative also helped foster discussions about ways NOAA's existing technology, data, and expertise can be leveraged to support the needs of local managers in coral reef priority areas.

Historic 19th Century Shipwreck Discovered in Northern Gulf of Mexico

During a 2012 expedition in the Gulf of Mexico, NOAA Research, Department of Interior's Bureau of Ocean Energy Management, and partners discovered a historic wooden-hulled vessel which likely sank at least 200 years ago. Scientists on NOAA's OKEANOS EXPLORER ship used underwater robots with lights and high definition cameras to view remnants of the wreck: anchors, navigational

instruments, glass bottles, ceramic plates, cannons, and boxes of muskets. Equipped with telepresence technology, OKEANOS EXPLORER reached audiences around the world who participated in the expedition through live streaming Internet video.

High Frequency Radar Efforts Advance Globally and Technically

The Group on Earth Observations recently launched an effort to develop a global High Frequency Radar (HFR) network, with short and long-term deliverables. HFR systems measure surface current speed and direction in near real time to benefit search and rescue, oil spill response, harmful algal bloom monitoring, water quality assessments, ecosystem assessments, and fisheries management. Long-term goals of the global effort include: make HFR data available in a single, standardized format in near real time; develop a worldwide quality assurance and control standard; develop easy-to-use standard products; assure HFR data assimilation in ocean and ecosystem modeling; and develop emerging uses of HFR in the areas of ecosystem, tsunami, and climate.

NOAA-Funded Researchers Find Caffeine in Pacific Northwest Coastal Waters

A July 2012 NOAA-funded study reveals that traces of caffeine in Pacific Northwest waters point to septic tanks and sewer overflows as likely source. Results of the study, funded in part by Oregon Sea Grant and NOAA, were published in the Marine Pollution Bulletin. This research, the first to look at caffeine contamination off the Oregon coast, found elevated levels of caffeine at several sites in Pacific Ocean waters off the coast of Oregon—though not necessarily where researchers expected. The study found high caffeine levels near Carl Washburne State Park in Florence, and at Cape Lookout—two areas not near the potential pollution sources. Meanwhile, the researchers also measured low levels of caffeine near large population centers like Astoria/Warrenton and Coos Bay. They also found that caffeine levels spiked following a late-season storm of wind and rain that triggered sewer overflows. The results suggest that wastewater treatment plants are effective at removing caffeine, but that high rainfall and combined sewer overflows flush the contaminants out to sea. The results also suggest that septic tanks, such as those used at the state parks, may be less effective at containing pollution.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (NOAA)	TARGET	ACTUAL	STATUS
Annual number of coastal, marine, and Great Lakes ecological characterizations that meet management needs	51	51	Met
Cumulative number of coastal, marine, and Great Lakes issue-based forecasting capabilities developed and used for management	55	58	Met
Percentage of tools, technologies, and information services that are used by NOAA partners/customers to improve ecosystem-based management	88%	88%	Met
Annual number of coastal, marine, and Great Lakes habitat acres acquired or designated for long-term protection	69,550	8,694,070 ¹	Exceeded
Percentage of U.S. coastal states and territories demonstrating 20% or more annual improvement in resilience capacity to weather and climate hazards (%/year)	34%	46%	Exceeded
Hydrographic survey backlog within navigationally significant areas (square nautical miles surveyed per year)	2,200	2,947	Met
Percent of U.S. and territories enabled to benefit from a new national vertical reference system for improved inundation management	20.0%	23.9%	Met

¹ Acres acquired or designated was exceeded due to the expansion of the Fagatele Bay National Marine Sanctuary in American Samoa to include five additional discrete sites. A total of 8,691,840 acres make up the sanctuary expansion.

THEME 3 PROGRAM EVALUATIONS

The following program evaluations were conducted on programs related to this theme in FY 2012.

BUREAU	REVIEWER	NAME OF EVALUATION	DATE	WEB SITE
NOAA	GAO	<i>Endangered Sea Turtles: Better Coordination, Data Collection, and Planning Could Improve Federal Protection and Recovery Efforts</i>	1/2012	www.gao.gov

THEMES 4, 5, AND 6 MANAGEMENT THEMES

.....



MANAGEMENT
THEMES

THEMES, STRATEGIC GOALS, AND OBJECTIVES

THEME 4: CUSTOMER SERVICE

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

Objective 19	Provide streamlined services and a single point of contact assistance to customers, improving interaction and communication through CommerceConnect, partnerships, and other means of stakeholder involvement (DM)
Objective 20	Promote information access and transparency through the use of technology, fuller understanding of customer requirements, and new data products and services that add value for customers (DM)
Objective 21	Provide a high level of customer service to our internal and external customers through effective and efficient functions implemented by empowered employees (DM)

THEME 5: 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 statutes and regulations, and prevent waste, fraud, and abuse of government resources (DM, OIG)
Objective 23	Re-engineer key business processes to increase efficiencies, manage risk, and strengthen effectiveness (DM)
Objective 24	Create an IT enterprise architecture that supports mission-critical business and programmatic requirements, including effective management of cyber security threats (DM)

THEME 6: WORKFORCE EXCELLENCE

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

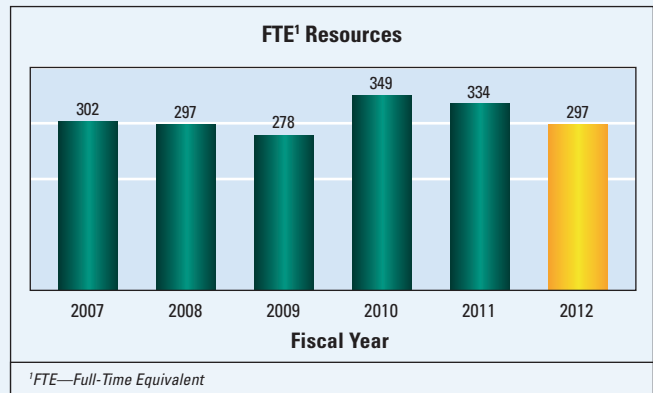
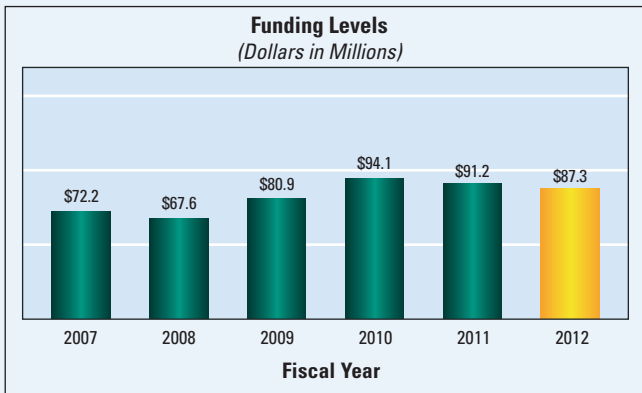
Objective 25	Recruit, grow, develop, and retain a high-performing, diverse workforce with the critical skills necessary for mission success, including the next generation of scientists and engineers (DM)
Objective 26	Create an optimally-led Department by focusing on leadership development, accountability, and succession planning (DM)
Objective 27	Provide an environment that empowers employees and creates a productive and safe workforce (DM)



MANAGEMENT THEMES (THEMES 4, 5, AND 6)

Below is a summary of the following three management themes: Customer Service, Organizational Excellence, and Workforce Excellence. After this summary are individual sections for each of the themes.

MANAGEMENT THEMES TOTAL RESOURCES

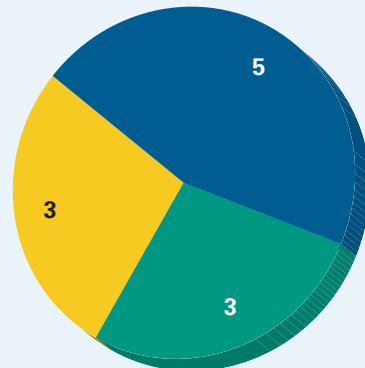


As U.S. society becomes increasingly oriented toward using electronic means of communication and information dissemination, federal agencies must ensure that they continue to be as responsive as possible to the needs of the public, the private sector, other levels of government, and other federal agencies.

Departmental Management (DM) must promote leading-edge technologies, collaboration, and technology transformation across the Department, ensuring alignment with mission requirements, goals, and objectives in order to deploy and maintain systems able to perform at the highest levels.

Achieving organizational and management excellence is a goal that requires extensive interaction and coordination among entities throughout the Department. DM—consisting of the Offices of the Secretary, Deputy Secretary, Chief Financial

MANAGEMENT THEMES STATUS OF CURRENT MEASURES



Improving, stable, or declining measures have at least three years of data.

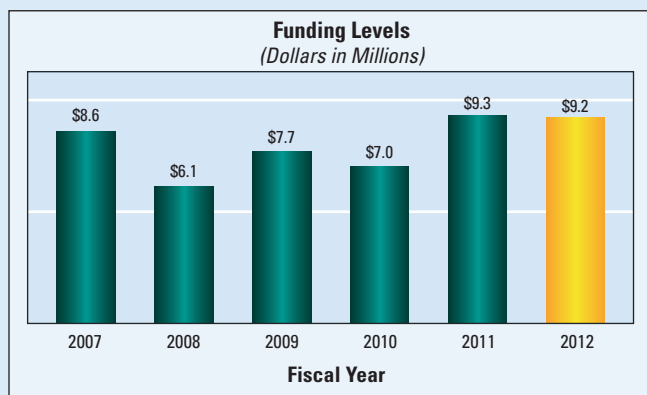
Officer (CFO) and Assistant Secretary for Administration (ASA), Chief Information Officer (CIO), and General Counsel—provides the policies and guidelines that support the management infrastructure the Department needs to carry out its mission.

The Department must have the capacity to do business with the public and its partner agencies, as both a more than \$8 billion worldwide enterprise, and an integrated set of individual programs. This requires that it identify, adopt, and maintain business practices essential to successful operations; use its resources wisely; and effectively implement the laws that affect it. In order to ensure the accomplishment of its mission, the Department has developed and put into place policies and programs designed to enable the successful operation of its units, the effective and efficient use of both material and human resources, and the implementation of laws and regulations that govern the use of those resources.

THEME 4: CUSTOMER SERVICE

STRATEGIC GOAL: *Create a culture of outstanding communication and services to our internal and external customers*

CUSTOMER SERVICE TOTAL RESOURCES



Fiscal Year	2007	2008	2009	2010	2011	2012
	N/A	N/A	N/A	N/A	N/A	N/A

¹FTE—Full-Time Equivalent
²DM and OIG FTEs are shown in Theme 5, Organizational Excellence.

This strategic goal is comprised of the following three objectives which contribute to the Secretary’s theme of Customer Service and all of which are associated with DM.

OBJECTIVE 19

Provide streamlined services and a single point of contact assistance to customers, improving interaction and communication through CommerceConnect, partnerships, and other means of stakeholder involvement (DM)

OBJECTIVE 20

Promote information access and transparency through the use of technology, fuller understanding of customer requirements, and new data products and services that add value for customers (DM)

OBJECTIVE 21

Provide a high level of customer service to our internal and external customers through effective and efficient functions implemented by empowered employees (DM)

The following public benefits, achievements, and performance results are associated with each objective.

PUBLIC BENEFITS

Through its CommerceConnect initiative, the Department provided a one-stop approach to expose businesses to the array of programs, services, and data available from the federal government. CommerceConnect teamed up with partner bureaus, and other federal and local agencies to develop and improve the delivery of programs that met business needs, and identified existing programs to better target areas of business needs.

CommerceConnect acted as a one-stop touch point for the entire Department by matching businesses and referring them to the Department's more than 70 programs, services, and resources. The goal was simple: help emerging entrepreneurs and established companies around the country overcome challenges, exploit opportunities, and connect to the right resources to advance their objectives.

The Department initiated CommerceConnect to transform government and breakdown bureaucratic silos. The initiative fostered customer service to U.S. business enterprises and interagency collaboration. CommerceConnect provided assistance to U.S. businesses through a Web-based portal, call center, stand alone field office, and bureau field offices. The assistance portals were fully integrated with a customer relationship management system to track customer service and performance metrics, respecting business privacy.

ACHIEVEMENTS

On October 28, 2011, the President issued a memorandum entitled, "Making it Easier for America's Small Businesses and America's Exporters to Access Government Services to Help Them Grow and Hire" and directed the adoption of a "No Wrong Door" policy that uses technology to quickly connect businesses to the services and information relevant to them, regardless of which agency's Web site, call center, or office they go to for help. The President directed the U.S. Department of Commerce and the U.S. Small Business Administration to lead this federal-wide initiative. CommerceConnect was selected as the Department's lead unit to oversee the implementation, development, and operations of BusinessUSA. CommerceConnect maintained limited operations through FY 2012 and transitioned to become BusinessUSA and oversaw the Program Management Office. The transition began in December 2011 and was completed by the end of the fiscal year.

BusinessUSA expanded the Department's customer service initiative. BusinessUSA streamlined access to enterprise assistance resources across the entire federal government by launching a new online platform, BusinessUSA.gov, to help small businesses and exporters of all sizes find information about available federal programs without having to waste time and resources navigating the federal bureaucracy.

The BusinessUSA.gov Web site was created with the customer in mind. BusinessUSA reached out to businesses and sought input as to what they would like to see from a Web site when it comes to finding federal government resources. Their feedback led to the creation of dynamic functionality in the BusinessUSA.gov Web site including: robust search engines, five content category "swim" lanes, dynamic content sorting and filtering, direct contact information for program resources, related resources, discoverable events, state and local resources, and more.

BusinessUSA combined information and services from 10 different government agencies through one consolidated Web site. It greatly enhanced the Department's capability to promote more resources to customers. It also multiplied the number of business-related resources to nearly 1,000 federal-wide, state and local resources by the end of FY 2012. In addition, over 100 success stories

were captured online and nearly 4,000 local business events were captured and promoted via BusinessUSA.gov. Although the BusinessUSA Web site was officially launched on February 17, 2012, it had over 1.5 million pages viewed, with nearly 560 thousand unique visitors, and recorded an average use time of nearly 6.5 minutes on the site.

CommerceConnect also transitioned its former call center operations to a new BusinessUSA Contact Center at 1-800-FED-INFO. The new contact center is designed to compliment BusinessUSA and support caller questions and emails received. The new contact center will also implement a phased approach to conducting “warm hand-offs” between the contact center and partner agencies beginning in FY 2013.

The Department’s participation in BusinessUSA helped improve information sharing to promote open and transparent access to information generated by the Department and bureaus. The Department fostered a culture of information sharing to promote outstanding customer service by using new tools, such as social media to provide timely information sharing; providing single point of contact assistance to customers; and promoting access to information that meets Department customers’ needs.

- Develop the use of new tools, such as social media, to provide timely information sharing both inside and outside of the Department and bureaus. This may be achieved through integration of these tools into existing information dissemination processes.
- Provide single point of contact assistance to customers. This is achieved by understanding customer requirements, communicating clearly with Department customers, and following up with partners and customers to ensure that customers get the level of service they expect.
- Promote information access. This is achieved by understanding customer requirements, and then applying existing technology as well as creating new data products and services to meet customer requirements.

In addition to developing a culture of information sharing and a single point of access for customers, the Department used its open government initiative to improve transparency, collaboration, and cooperation with the public and across all levels of government.

In seeking to develop a culture which emphasizes outstanding customer service, a variety of strategies were developed and measured using a strategic planning and management system known as the Balanced Scorecard. The Department-wide strategies included the following:

- Provide integrated services and single point of contact assistance to customers. This may be achieved through enhanced stakeholder involvement, by means of improved interaction and communication using techniques such as partnerships and branding (see Objective 19).
- Promote information access. This may be achieved by establishing an understanding of customer requirements, and then applying existing technology as well as creating new data products and services to deliver added value to customers (see Objective 20).
- Establish the Department’s open government initiative to improve transparency, collaboration, and cooperation with the public and across all levels of government (see Objective 20).
- Implement BusinessUSA (formerly CommerceConnect) to provide businesses and entrepreneurs with a single source for economic, technology, trade, and statistical information (see Objective 19).
- Re-engineer key business processes in accordance with the President’s Government-wide Hiring Reform Initiative to increase efficiencies and strengthen effectiveness (see Objective 25).
- Improve risk management and reduce Department exposure to high-risk contracts (see Objective 23).

SUMMARY OF PERFORMANCE

The following three measures apply to Objectives 19, 20, and 21.

PERFORMANCE MEASURE (DM)	TARGET	ACTUAL	STATUS
Number of referrals made	1,100	703	Not Met
Number of companies engaged – field operations	400	401	Met
Number of existing Commerce field locations	30	19	Not Met

CommerceConnect reports partial accomplishment of its annual performance goals due to a strategic shift in priorities and objectives that occurred during FY 2012. CommerceConnect was identified as the Department’s lead unit to oversee the implementation, development, and operations of BusinessUSA, a new federal-wide initiative.

CommerceConnect began BusinessUSA work assignments on October 28, 2011. It supported itself and BusinessUSA throughout FY 2012 while executing a progressive shift in work priorities, resulting in a full transition by end of FY 2012. During the transition, staff continued to serve customers through a new virtual platform at business.usa.gov.

The original performance measures were determined to be insufficient and were no longer tracked prior to mid-year. Subsequently, the development of new performance measures were initiated and completed by the end of FY 2012.

The table above represents substantive, yet partial year performance achievements for CommerceConnect including:

- 63 percent of goal accomplished for Number of Referrals Made;
- 100 percent of goal accomplished for Number of Companies Engaged – Field Operations; and,
- 63 percent of goal accomplished for Number of Existing Commerce Field Locations.

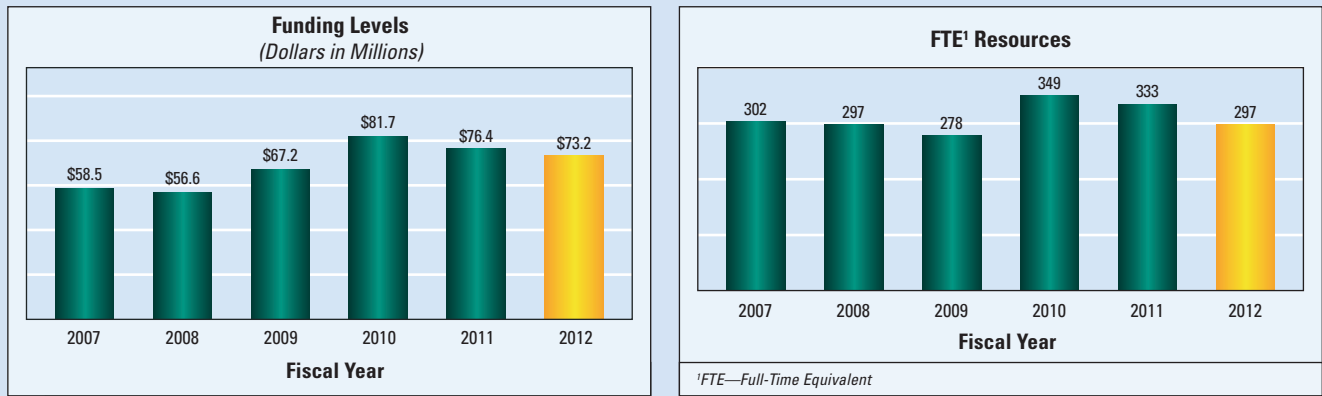
FY 2012 MISSED TARGETS

MEASURE	NUMBER OF REFERRALS MADE (DM)
Explanation	Strategic transition from CommerceConnect to BusinessUSA occurred during FY 2012. New BusinessUSA performance measures were developed and identified for release in FY 2013.
Action	New performance measures and targets established for BusinessUSA and will be reported for FY 2013 and beyond.
MEASURE	NUMBER OF COMPANIES ENGAGED – FIELD OPERATIONS (DM)
Explanation	Strategic transition from CommerceConnect to BusinessUSA occurred during FY 2012. New BusinessUSA performance measures were developed and identified for release in FY 2013.
Action	New performance measures and targets established for BusinessUSA and will be reported for FY 2013 and beyond.
MEASURE	NUMBER OF EXISTING COMMERCE FIELD LOCATIONS (DM)
Explanation	Strategic transition from CommerceConnect to BusinessUSA occurred during FY 2012. New BusinessUSA performance measures were developed and identified for release in FY 2013.
Action	New performance measures and targets established for BusinessUSA and will be reported for FY 2013 and beyond.

THEME 5: ORGANIZATIONAL EXCELLENCE

STRATEGIC GOAL: *Create a high-performing organization with integrated, efficient, and effective service delivery*

ORGANIZATIONAL EXCELLENCE TOTAL RESOURCES



This theme is comprised of three objectives which contribute to the Secretary’s theme of Organizational Excellence. The following public benefits, achievements, and performance results are associated with each objective.

OBJECTIVE 22

Strengthen financial and non-financial internal controls to maximize program efficiency, ensure compliance with statutes and regulations, and prevent waste, fraud, and abuse of government resources (DM, OIG)

PUBLIC BENEFITS

DM strengthens financial and non-financial internal controls within the Department by conducting the Office of Management and Budget (OMB) Circular A-123 financial internal controls assessments annually, performing non-financial management internal controls reviews on selected sensitive programs, overseeing the development of corrective action plans to address any identified weakness, and continuously monitoring the progress made on corrective actions.

The Office of Inspector General (OIG) improves Departmental programs and operations through independent and objective oversight and detects and deters fraud, waste, and mismanagement. As required by statute, the OIG’s annual *Top Management Challenges* report presents the Secretary with an objective analysis of the major issues and areas of greatest program risk facing the Department.

As part of its mission, the OIG keeps Departmental decisionmakers and Congressional stakeholders informed of longstanding as well as emerging problems identified through its audits and investigations so that timely corrective action can be taken. In addition to areas identified in its *Top Management Challenges* report, the OIG performs audits required by law (such as the Federal Information Security Management Act of 2002 (FISMA)); of interest to Congress, the Secretary, or the current Administration; and/or based on significant issues uncovered during a previous review or when a program or office is determined to be higher risk. OIG criminal, civil, and administrative investigations continue to disclose instances of misconduct by employees, contractors, and grantees that threaten the integrity of the Department's programs and operations.

ACHIEVEMENTS

In FY 2012, OIG issued 30 audit and evaluation reports addressing programs overseen by the Economics and Statistics Administration (ESA), International Trade Administration (ITA), National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), National Telecommunications and Information Administration (NTIA), U.S. Patent and Trademark Office (USPTO), and the Department itself. Many of its products addressed issues identified in the *Top Management Challenges* report: cost reductions and operations improvements, oversight of resources for long-term benefits, Department-wide information security, and acquisitions and contracting. Among the areas that underwent OIG scrutiny were USPTO's backlog of *ex parte* appeals, NTIA's American Recovery and Reinvestment Act-funded Broadband Technology Opportunities Program, compliance with improper payment requirements, FISMA and Web security management audits, managing risks in the acquisition and development of the next generation of environmental satellites, and the Department's Acquisition Human Capital Plan and its Office of Acquisition Management.

During FY 2012, the OIG examined 374 audit reports prepared by independent public accountants and local, state, and other federal auditors for recipients of grants from multiple bureaus. The OIG identified \$2.9 million in the federal share of questioned costs and \$229,000 in funds to be put to better use from these audit reports.

Most significant was the \$112.6 million in financial benefits identified by OIG audit and evaluation recommendations, which far surpassed this year's target of \$30 million. The OIG's review of NOAA's cost-plus-award-fee and award-term processes accounted for \$104.7 million of this amount. Going forward, Department bureaus will be able to increase efficiency and effectiveness by implementing action plans that respond to OIG's findings and recommendations.

On the investigative front, the OIG participated in criminal and civil cases that resulted in financial recoveries to the government totaling more than \$63.2 million. Additionally, the OIG conducted investigations that resulted in numerous judicial and administrative actions. Among these successes were the guilty pleas from two NOAA grant recipients for theft, the indictment of an NTIA grant recipient for fraud and theft, a guilty plea from a Georgia resident who assaulted a Census enumerator, and a 23-year prison sentence given to a former Census Bureau employee for attempted murder. The OIG also issued multiple investigative reports with findings and recommendations resulting in programmatic and policy changes at NOAA, NIST, and Department management. Also, the Inspector General issued a letter, co-signed by the Census Bureau Director, to all law enforcement agencies nationwide noting the risk of physical harm faced by Census workers and encouraging investigation and prosecution of reported assaults on Census employees.

Department-related hotline complaints increased significantly in FY 2012, and the OIG developed several initiatives to improve complaint handling and to provide guidance and assistance to bureaus conducting fact-finding inquiries in response to OIG complaint referrals. These efforts have helped to increase awareness in the Department regarding the role of the OIG, and its commitment to whistleblower protection.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE	TARGET	ACTUAL	STATUS
Provide accurate and timely financial information and conform to federal standards, laws, and regulations governing accounting and financial management (DM)	<ul style="list-style-type: none"> ● Eliminate any significant deficiency within 1 year of determination that there is a significant deficiency ● Complete FY 2012 A-123 assessment of internal controls 	<ul style="list-style-type: none"> ● Did not eliminate significant deficiency ● Completed 	Not Met
Effectively use commercial services management (DM)	<ul style="list-style-type: none"> ● Increase use of competition by 2% measured by procurement dollars awarded ● Decrease procurement dollars awarded on cost-reimbursement, time and materials, and labor hour contracts by 10% 	<ul style="list-style-type: none"> ● 1% increase ● 16% decrease 	Slightly Below
Percent of OIG recommendations accepted by Departmental and bureau management (OIG)	95%	90% ¹	Slightly Below
Dollar value of financial benefits identified by the OIG (OIG)	\$39.0M	\$175.8M	Exceeded
Percent of criminal and civil matters that are accepted for prosecution (OIG)	75%	40%	Not Met

¹ Estimate.

FY 2012 MISSED TARGETS

MEASURE	PROVIDE ACCURATE AND TIMELY FINANCIAL INFORMATION AND CONFORM TO FEDERAL STANDARDS, LAWS, AND REGULATIONS GOVERNING ACCOUNTING AND FINANCIAL MANAGEMENT (DM)
Explanation	This measure was partially met since the Department had completed FY 2012 A-123 Assessment of Internal Controls, but did not eliminate the significant deficiency finding related to NOAA Satellite Programs. As a result of delays encountered by NOAA for the corrective actions as planned and identification of new findings related to the satellite programs, this significant deficiency has been elevated to a material weakness in the FY 2012 Financial Statements Audit.
Action	Discussions are in progress both at the Departmental and bureau level to ensure additional corrective actions and monitoring needed to properly address the areas of findings. The Department will continue its effort to eliminate repeat findings in FY 2013.
MEASURE	EFFECTIVELY USE COMMERCIAL SERVICES MANAGEMENT (DM)
Explanation	Actual increase of one percent. Reason target was missed: there were some large dollar procurements that did not lend themselves to competitive procedures..
Action	None.
MEASURE	PERCENT OF OIG RECOMMENDATIONS ACCEPTED BY DEPARTMENTAL AND BUREAU MANAGEMENT (OIG)
Explanation	The performance target was set at an approximate target level, and the deviation from that level is slight.
Action	None.
MEASURE	PERCENT OF CRIMINAL AND CIVIL MATTERS THAT ARE ACCEPTED FOR PROSECUTION (OIG)
Explanation	The Inspector General Act of 1978 states, "each Inspector General <i>shall</i> report expeditiously to the Attorney General whenever the Inspector General has reasonable grounds to believe there has been a violation of Federal criminal law." This means the OIG is required to refer matters even when our experience leads us to believe the matter will not be accepted for prosecution. Department of Justice (DOJ) acceptance depends on considerations, including individual U.S. Attorney's Office prosecutive priorities, monetary thresholds, and workload, in addition to other factors such as availability and appropriateness of administrative remedies.
Action	Notwithstanding DOJ acceptance considerations, improvement in case selection and management—with emphasis on developing grant and contract cases viable for criminal and civil prosecution—should enable future target attainment.

HISTORICAL TRENDS

The OIG will continue to work to meet targets and address shortfalls identified in FY 2012.

OBJECTIVE 23

Re-engineer key business processes to increase efficiencies, manage risk, and strengthen effectiveness (DM)

PUBLIC BENEFITS

As U.S. society becomes increasingly oriented toward using electronic means of communication and information dissemination, federal agencies must ensure that they continue to be as responsive as possible to the needs of the public, the private sector, other levels of government, and other federal agencies. DM must promote leading-edge technologies, collaboration, and technology transformation across the Department, ensuring alignment with mission requirements, goals, and objectives in order to deploy and maintain systems able to perform at the highest levels.

ACHIEVEMENTS

As U.S. society becomes increasingly oriented toward using electronic means of communication and information dissemination, federal agencies must ensure that they continue to be as responsive as possible to the needs of the public, the private sector, other levels of government, and other federal agencies. DM must promote leading-edge technologies, collaboration, and technology transformation across the Department, ensuring alignment with mission requirements, goals, and objectives in order to deploy and maintain systems able to perform at the highest levels.

Acquisition is one of the key areas in terms of re-engineering key business processes. The Office of Acquisition Management achieved the following results in FY 2012:

- Established a Procurement Performance Excellence Office to sustain existing strategic sourcing cost reduction savings and implement new initiatives to drive additional efficiencies;
- Developed a Scalable Acquisition Project Management Framework to serve as the infrastructure to an integrated acquisition project management system to institute a systematic approach to overseeing and managing acquisitions; and
- Increased the focus on acquisition planning in order to maximize competition and create more effective acquisition strategies.

SUMMARY OF PERFORMANCE

The Department uses the following measure to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (DM)	TARGET	ACTUAL	STATUS
Obligate funds through performance-based contracting (% of eligible service contracting \$)	50%	45%	Not Met

FY 2012 MISSED TARGETS

MEASURE	OBLIGATE FUNDS THROUGH PERFORMANCE-BASED CONTRACTING (% OF ELIGIBLE SERVICE CONTRACTING \$) (DM)
Explanation	Not all requirements lend themselves to performance-based contracting. Successful implementation of performance-based contracting requires a behavioral management approach. Due to staffing shortages, resources have not been available to assist bureaus and program offices with a better understanding and implementation of performance-based contracting.
Action	Implementation of the Acquisition Project Management Framework will be used to help identify requirements suitable for performance-based contracting.

HISTORICAL TRENDS

DM has consistently missed this target due to the reasons noted in the explanation above.

OBJECTIVE 24

Create an IT enterprise architecture that supports mission-critical business and programmatic requirements, including effective management of cyber security threats (DM)

PUBLIC BENEFITS

The benefits of this objective are both internal and external. By having a strong information technology (IT) enterprise architecture, the Department ensures the security of information both within its own structure and with outside stakeholders. The priorities driving the achievement of this objective are to (1) improve the effectiveness of IT investments and resources across the Department, (2) strengthen cyber security through an increased use of security technologies, and (3) increase collaboration across bureaus using the Department CIO community.

The Department IT Enterprise Architecture has a federated structure. This allows the various bureaus the flexibility they need to meet their mission-specific goals while at the same time providing an overarching structure to meet Department-wide program needs, and to encourage deploying and using IT resources more effectively wherever possible.

The goals of the Enterprise Architecture are to:

- Foster the development and use of IT architectural standards based on established best practices;
- Assist in identifying applications and systems that can be deployed with new technology solutions;
- Identify technologies and services that can be purchased and/or deployed Department-wide to reduce costs;
- Increase the use of automated continuous monitoring tools; and
- Provide tools and analysis to capital planners and acquisitions staff to channel purchases in the direction established by the CIO Council.

Taking a phased approach, initially the larger bureaus are looking at optimization and consolidation across geographically distributed organizations, while smaller co-located bureaus are prompted to work collaboratively. Subsequently, such efforts can be expanded to optimize more broadly the activities, operations, and investments of the Department as a whole.

ACHIEVEMENTS

Significant IT Security accomplishments in FY 2012 include:

● OCIO Balanced Scorecard and IT Security Performance Measures

- Developed and measured metrics quarterly in the Office of the CIO (OCIO) Balanced Scorecard, including plan of action and milestones (POA&M) management, Internal Control Reviews, IT Security Workforce, Cyberscope and general vulnerability scans, Continuous Monitoring, and Enterprise Initiatives. Implemented and tracked progress on “Top 3” security controls; configuration, vulnerability, and patch management; and monitored progress on additional controls selected by operating units.

● Enterprise Initiatives

- Implemented Managed Trusted Internet Protocol Service (MTIPS) to support the operating units within the Herbert C. Hoover Building (HCHB) in accordance with OMB’s Trusted Internet Connection (TIC) initiative. Twelve of the 14 Department operating units will be in compliance with OMB’s TIC initiative by the end of the 2012 calendar year.
- Issued request for proposals and set milestones for Enterprise Cybersecurity Monitoring and Operations (ECMO) for continuous monitoring of security-related information across the Department. At least half of the operating units should complete installation by the end of 2012.
- Commenced the Department of Homeland Security (DHS) Cyber Hygiene initiative to assess the “health” of Department unclassified systems reachable via the Internet on a recurring basis. Cyber Hygiene activities consist of network mapping, vulnerability scanning, and configuration review of common services (e.g., Domain Name System (DNS)) for errors or deviations from accepted best practice.
- Continued implementation of the Personal Identity Verification (PIV) pilot program to deliver PIV multifactor logical access authentication to all Office of Secretary users.

● IT Security Policy

- Issued Department policies for Vulnerability Scanning and Patch Management, Security Configuration Checklist Program, POA&M Management, Risk Management Framework, and Safeguarding Information while on Foreign Travel. Also issued FAQ guidance on Commerce Interim Technical Requirements (CITR) implementation.
- Issued Department-wide guidance for the secure implementation, use, and management of mobile technology.

● Compliance

- Remediated a significant deficiency in the FY 2011 Federal Financial Management Improvement Act (FFMIA) IT Audit.
- Focused efforts on Economic Development Administration (EDA) compliance and configuration management assessments to assist in recovery and reconstitution of EDA IT security infrastructure.

- Completed 29 IT security assessments, exceeding FY 2012 target of 24 assessments.
- Conducted IT security compliance checks of all Department operating units and in-depth Internal Control Review meetings with five selected operating units as part of the Department's IT internal control review program.
- Engaged two independent assessments of the Office of the Secretary including one performed by the National Security Administration and another provided by DHS.
- Continued to hold monthly IT Audit Working Group meetings to address remediation of FY 2011 FFIA IT findings in a timely manner.
- Migrated the Cyber Security Assessment and Management (CSAM) application from Department environment to DOJ Cloud environment.
- Performed monthly reviews of selected Department IT investments and provided IT security program compliance ratings.
- Launched monthly DHS Cyberscope data feeds in October 2011. Developed Department dashboards for tracking and monitoring of vulnerability data.

● Shared Services

- As an effort to increase efficiency and improve cyber security posture, the OCIO launched the HCHB Security Shared Services initiative, including formation of working group that meets weekly. Created charter and developed action plans to implement shared services by first quarter FY 2013. The focus areas include common controls, IT security training, IT security assessments, and configuration management.

● IT Security Training

- Trained Authorizing Officials and System Owners throughout the Department with quarterly workshops.
- Launched tracking of Department's compliance with role-based training policy for employees with significant IT security roles and responsibilities.
- Developed training and Webinars to assist in training employees for implementation of revised Department FISMA reporting tool.

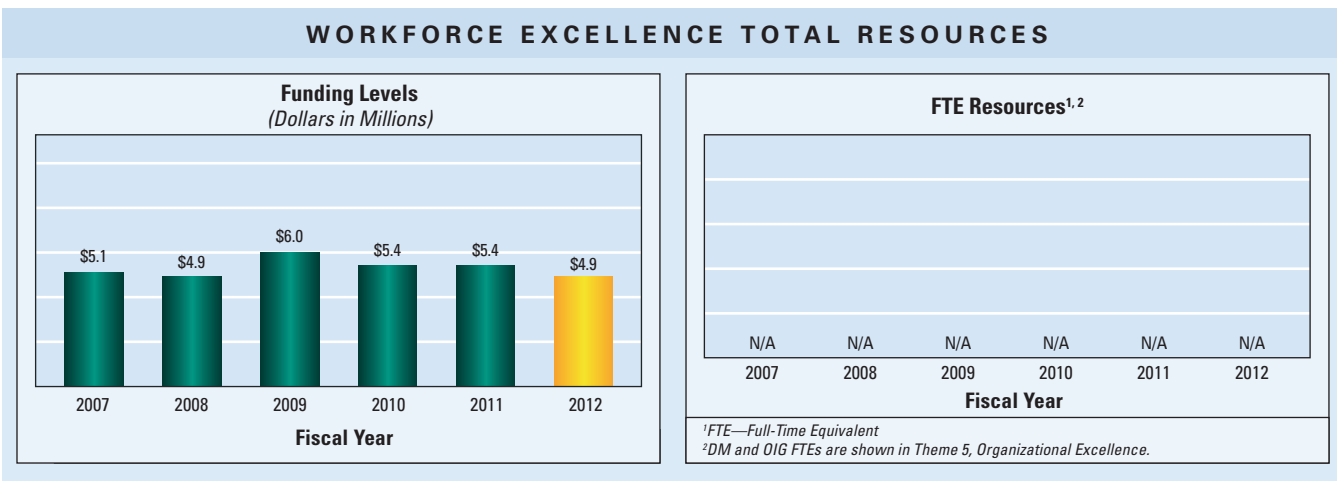
SUMMARY OF PERFORMANCE

The Department uses the following measure to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (DM)	TARGET	ACTUAL	STATUS
Improve the management of information technology	<ul style="list-style-type: none"> ● IT investments have cost/schedule overruns and performance shortfalls averaging less than 10% ● Perform IT security compliance review of all operating units, and 10 FISMA systems in CSAM ● Increase security training completion rate to 80% for privileged users (role-based) ● Deploy 80% of the required NCSD 3-10 communications capabilities. Expand cyber intelligence communications channel to all operating unit Computer Incident Response Teams. 	<ul style="list-style-type: none"> ● 75% of major investments have cost/schedule overruns and performance shortfalls averaging less than 10% ● Completed 29 IT security assessments. Conducted IT security compliance checks of all Department operating units and in-depth internal control review meetings with five selected operating units as part of the Department’s IT internal control review program. ● Trained Authorizing Officials and System Owners throughout the Department with quarterly workshops. Achieved greater than 85% of required security training for privileged users (role-based). ● The Department is currently at 50%. Required equipment and systems are installed at the Herbert C. Hoover Building. Deploying classified connectivity to all outside bureau components. 	Met

THEME 6: WORKFORCE EXCELLENCE

STRATEGIC GOAL: *Develop and support a diverse, highly qualified workforce with the right skills in the right jobs to carry out the Department’s mission*



This theme is comprised of three objectives which contribute to the Secretary’s theme of Workforce Excellence. The following public benefits, achievements, and performance results are associated with each objective.

The Department continues to refine and develop programs to help train and retain a highly qualified workforce and avoid disruption in the services it provides. Leadership priorities for improvement are based on employee feedback to surveys, various skills assessments, and comprehensive workforce analyses. While performance management systems are effective in rewarding high performers, more targeted approaches are necessary to close skill gaps in the entire workforce. Learning and development programs are based on training needs assessments for mission-critical occupations such as meteorologist, statistician, acquisition, engineer, and chemist.

OBJECTIVE 25

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

PUBLIC BENEFITS

The Department implemented the President’s Government-wide Hiring Reform Initiative that became effective November 1, 2010. This initiative streamlined the process and increased the number of applicants who apply for positions thus attracting applicants in mission-critical occupations. The Department’s front-end automated hiring system allows applicants to electronically submit their resumes (in any format), and cover letters as mandated by the President’s initiative, enabling hiring managers and

human resources practitioners to reduce the processing time. In addition, the front-end system allows applicants to receive status notifications electronically. The Department updated the Veterans Recruitment and Employment Operational Plan for FY 2011–2012; maintained the Recruiting, Hiring and Retaining People with Disabilities Operational Plan for FY 2011–2015; and developed the Diversity and Inclusion Strategic Plan for FY 2012–2016 as models to recruit, develop, and retain veterans, people with disabilities, and other special emphasis groups. The Department will continue to provide retention incentives to retain skilled employees at all levels of the organization and to implement its pay for performance systems that have proven to be positive factors in the scientific and engineering fields, where private sector pay scales for these difficult-to-fill positions are historically much higher than in the federal sector.

ACHIEVEMENTS

- Increased disabled veteran new hires from 2.5 percent in FY 2011 to 2.9 percent in FY 2012, in support of Executive Order 13518, “Employment of Veterans in the Federal Government.” Enhanced employment opportunities for veterans were cultivated through the creation of a Veterans/Schedule A Non-Competitive Appointment Resume Database, the incorporation of a Veterans Preference e-learning module into the Commerce Learning Center for hiring managers and HR practitioners, participation in the 2012 VA for VETS Career Fair at the Washington DC Convention Center, and direct delivery of qualified disabled veteran resumes to hiring managers. The Department also served on the Office of Personnel Management (OPM) working group on federal best practices to create an FY 2013–2015 Veterans Employment and Recruitment Operational Plan that will highlight strategies for continued progress.
- Implemented Executive Order 13583, “Establishing a Coordinated Government-wide Initiative to Promote Diversity and Inclusion in the Workforce,” by developing and submitting the FY 2012–2016 Commerce Diversity and Inclusion Strategic Plan. Additionally, the formation of a formal Departmental Diversity and Inclusion Program and Diversity and Inclusion Council was approved by the Deputy Secretary. A Chief Diversity Officer and Deputy Chief Diversity Officer will be appointed to manage the program and oversee the council by the end of FY 2012. The council will consist of both bureau and functional representatives participating in three working groups—Recruitment; Development and Retention; and Education, Awareness, and Innovation. The program kicked off with the attendance of least 109 local Senior Executive Service (SES) members at a Diversity and Inclusion Workshop co-sponsored by OPM during June and July 2012, which received very positive feedback.
- Developed and launched a high school intern program for students with disabilities through Project Search in September 2012. This initiative is a collaborative effort with the Department, Department of Interior, General Services Administration, and OPM. Project Search integrates education and work experience in an academic year program for students with disabilities who are in their last year of high school or who recently graduated, to prepare the students for competitive employment in the community. The federal and local government partners work collaboratively to create school to career transition experiences and employment opportunities for the participants, with each student participating in a variety of classroom and work place experiences to acquire skills leading to employment in the community and/or within the federal government.

SUMMARY OF PERFORMANCE

The Department uses the following measures to gauge the performance of the activities associated with this objective.

PERFORMANCE MEASURE (DM)	TARGET	ACTUAL	STATUS
Acquire and maintain diverse and highly qualified staff in mission-critical occupations	<ul style="list-style-type: none"> ● Meet or exceed the 80-day hiring goals mandated by OPM ● Train 100-200 Department participants on leadership development programs via ALDP, ELDP, APCP, and SES CDP ● Train 180-200 participants via Careers in Motion. 	<ul style="list-style-type: none"> ● 84 calendar days ● 122 Department participants in leadership development programs ● 711 participants in Careers in Motion 	Met

FY 2012 MISSED TARGETS

MEASURE	ACQUIRE AND MAINTAIN DIVERSE AND HIGHLY QUALIFIED STAFF IN MISSION-CRITICAL OCCUPATIONS
Subpart	Meet or exceed the 80 day hiring goals mandated by OPM
Explanation	The deviation from the target was slight. In fact, the target was met in the first and second quarters. There was no effect on overall program or activity performance.
Action	The Department's Principle Human Resources Managers Council will quarterly review and discuss status and progress made towards reaching the 80-day hiring goals and establish action plans for improvement in areas that are not meeting the goals, as part of the HRstat program pilot.

HISTORICAL TRENDS

Over its three years as a measure, the actuals for the 80-day hiring goals exhibited a positive trend from the 2009 baseline to the FY 2011 results but remained slightly below the target in FY 2012, with the target itself remaining the same. Over its four years as a measure, the actuals for the leadership development program training met the target during the past two years and exceeded it during the two years prior, with the target being increased over time to about three times the original goal. Over its three years as a measure, the actual for Careers in Motion training have consistently met or exceeded the target, with the target itself remaining the same.

OBJECTIVE 26

Create an optimally-led Department by focusing on leadership development, accountability, and succession planning (DM)

PUBLIC BENEFITS

By creating, sustaining, and strengthening its development of emerging leaders to assume leadership positions within all levels, the Department will ensure effective leadership during the Departmental changes that are sure to come within future decades. Additionally, by ensuring that the workforce's composition remains aligned with Departmental strategic and budgetary priorities, the Department can continue to provide its many services to the public in the most efficient and effective manner. A continuous cycle of improved performance will become the culture of the Department by putting systems for accountability in place that will drive individual and Agency performance and excellence.

ACHIEVEMENTS

- Developed an automated tool to offer management teams a highly practical approach to succession planning. The tool incorporates a set of pre-formatted templates, workforce reports, and user-friendly instructions to guide users through a process designed to identify high impact positions, assess attrition risk in those positions, and document a specific set of actions that the unit's management team can implement to help plan for and mitigate the impact of attrition in those positions. The tool is currently being piloted in select CFO/ASA directorates and is expected to be marketed Department-wide in FY 2013. With over 35 percent of the Department's general workforce and 55 percent of its SES currently eligible for retirement, effective succession planning, including data and tools to support actionable workforce planning efforts, will become increasingly vital to the Department's ability to execute its mission.
- Implemented the Department's skills management strategy by administering leadership development and other training programs and analyzing mission-critical occupations for appropriate action planning. In FY 2012, 22 employees were trained under the Aspiring Leaders Development Program for GS-7-12 or equivalent; 27 were trained under the Executive Leadership Development Program for GS-13-14 or equivalent; 19 were trained under the SES Candidate Development Program for GS-14-15 or equivalent; 114 Executives were trained under the Leading EDGE Program; 219 were trained in the Project Management discipline; over 220 mentors and nearly 250 mentees were supported under the Mentoring Program; and all employees had access to the Commerce Learning Center's over 2,000 online courses. Additionally, the Department participated in the interagency effort to identify federal and agency mission-critical occupations and high-risk mission-critical occupations, led by OPM and the Chief Human Capital Officers Council. Various data were analyzed on the Department's 23 mission-critical occupations; appropriate actions plans for the federal mission-critical occupations and any high-risk agency mission-critical occupations are expected to be completed by the end of FY 2012; and federal competency assessments will be administered during FY 2013.
- Continued to successfully implement workforce reshaping efforts through the use of Voluntary Early Retirement Authority (VERA) and Voluntary Separation Incentive Payment (VSIP) and establishment of a Department Voluntary Resume Bank Program to assist in restructuring and streamlining the Department workforce while continuing to meet mission goals. Currently the VERA/VSIP authority covers designated positions within certain units of the Bureau of Economic Analysis (BEA), Census Bureau, ITA, Minority Business Development Agency (MBDA), NIST, NOAA, NTIA, and Office of the Secretary. The Department received approval for a total of 1,796 VSIPs and offered approximately 1,389, of which 582 employees have accepted, for a 41 percent acceptance rate,

which greatly exceeds the 14.2 percent government-wide rate. Additionally, the Department Voluntary Resume Bank Program provided special consideration to employees who occupied competitive service positions that had been identified for potential elimination due to proposed budget reductions, lack of work, or reprogramming. All eligible participants were able to submit their resume, and vacancies matching the occupational series and grade of Resume Bank participants were not advertised on USAJOBS until after well-qualified resume bank participants were interviewed and a selection decision effected. Five Department employees were selected for positions through this process and three employees accepted job offers.

SUMMARY OF PERFORMANCE

The Department is in the process of developing measures to evaluate progress toward achieving this objective. Measures will appear in the FY 2013 PAR.

OBJECTIVE 27

Provide an environment that empowers employees and creates a productive and safe workforce (DM)

PUBLIC BENEFITS

In the current economic climate, an effective and efficient workforce will be more critical than ever to the continued success of the Department in achieving its diverse missions. This will require work environments that monitor and implement activities to encourage high levels of employee satisfaction, engagement and productivity, and workplaces free of recognized hazards so personnel can conduct their work safely in a variety of environments, and the Department can provide its visitors and partners a safe experience.

The Department focuses on having its executives and managers responsible for safety programs in their bureaus actively participate in safety activities, such as the Department's Safety and Health Council meetings and awareness training opportunities. The Department enhances the role of leadership by making certain that the executives, managers, supervisors, and employees have the knowledge, skills, resources, and commitment in order to control hazards in the workplace and to strengthen efforts to protect employees, contractors, visitors, and others who enter Department workplaces. One method of doing this is conducting a gap analysis and preparing a written strategy to update and continuously improve the Department's Safety and Health Program Manual so that it is a comprehensive policy document to guide the bureaus' occupational safety and health programs to ensure a culture of safety.

ACHIEVEMENTS

- Exceeded the government-wide average for positive responses on 70 out of 78 eligible items on the 2011 Federal Employee Viewpoint Survey (FEVS), which was administered by OPM to gauge employee perceptions on critical work life areas which drive employee satisfaction, commitment, and retention. The Department was ranked 5th out of 37 agencies on the Results-Oriented Performance Culture Index and exhibited major strengths in work experiences, supervisors/team leaders, the use of alternative

work schedules, and telework implementation. No Department averages for positive responses were “notably” (i.e., 5 percentage points or more) below the government-wide averages for any items. The release of OPM’s 2012 FEVS results reports is scheduled to be completed by November 30, 2012.

- Launched a Safety Risk Assessment Program for the smaller bureaus to assist them in identifying risks to employee safety and health. This program also provides guidance to the bureaus as they develop their safety program to control the identified risks and provide a safe work environment for employees. Currently four bureaus have started the assessment process that looks at their safety and health risks based on mission and operational needs.

SUMMARY OF PERFORMANCE

The Department is in the process of developing measures to evaluate progress toward achieving these objectives. Measures will appear in the FY 2013 PAR.