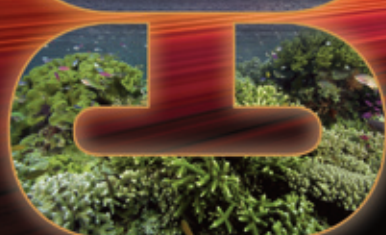
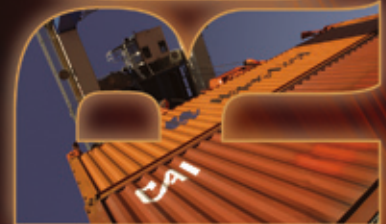




U.S. DEPARTMENT OF COMMERCE

Strategic Plan FY 2011 - 2016



WHO WE ARE

History and Enabling Legislation

The Department of Commerce was originally established by Congressional Act on February 14, 1903 as the Department of Commerce and Labor (32 Stat. 826; 5 U.S.C. 591) and was subsequently renamed the U.S. Department of Commerce by President William H. Taft on March 4, 1913 (15 U.S.C. 1512). The defined role of the new Department was "to foster, promote, and develop the foreign and domestic commerce, the mining, manufacturing, and fishery industries of the United States."

Bureaus

- Economic Development Administration
- Economics and Statistics Administration
 - Bureau of Economic Analysis
 - Census Bureau
- International Trade Administration
- Bureau of Industry and Security
- Minority Business Development Agency
- U.S. Patent and Trademark Office
- National Institute of Standards and Technology
 - National Technical Information Service
- National Telecommunications and Information Administration
- National Oceanic and Atmospheric Administration
- Office of Inspector General

In addition to these bureaus, Departmental Management (DM) encompasses the responsibilities of the Secretary, Deputy Secretary, Chief Financial Officer and Assistant Secretary for Administration, Chief Information Officer, and the Office of General Counsel. DM provides the policies, planning, and administrative guidance that ensure bureau operations are consistent with Secretarial priorities and with the Department's mission.

Location

The Department is headquartered in Washington, D.C., at the Herbert Clark Hoover Building. The Department's Internet address is <http://www.commerce.gov>.

Employees

The Department had approximately 43,000 employees at the start of FY 2011. The size of the Department will fluctuate, particularly as the remaining activities related to the 2010 Decennial Census are completed.



U.S. DEPARTMENT OF COMMERCE

Strategic Plan FY 2011 - 2016

MISSION

THE DEPARTMENT OF COMMERCE CREATES
THE CONDITIONS FOR ECONOMIC GROWTH AND
OPPORTUNITY BY PROMOTING INNOVATION,
ENTREPRENEURSHIP, COMPETITIVENESS, AND
STEWARDSHIP INFORMED BY WORLD-CLASS
SCIENTIFIC RESEARCH AND INFORMATION

VISION

UNITED STATES REMAINS A LEADER IN
THE WORLD ECONOMY





As our Nation emerges from the deepest and most tenacious recession in recent decades, the Department of Commerce's mission is more critical than ever to support renewed economic growth and job creation. The economic challenges facing our fellow citizens—and the fiscal challenges facing our federal, state, and local governments—make our effective and efficient implementation of this mission particularly crucial.

I instituted a balanced scorecard approach to strategic planning and management in order to identify the Department's critical goals and objectives, and to facilitate my management team's sustainable long-term focus on their attainment. Through this approach, we have identified the Department's top priorities, performed data-driven reviews to achieve them, and emphasized that Customer Service, Organizational Excellence, and Workforce Excellence are prerequisites to our programmatic goals.

The Department's balanced scorecard, reflected in this Strategic Plan, is structured around our three programmatic themes (Economic Growth, Science and Information, and Environmental Stewardship) and our three management themes (Customer Service, Organizational Excellence, and Workforce Excellence).

Our Economic Growth theme is organized into three strategic goals:

Innovation and Entrepreneurship

The U.S. Patent and Trademark Office (USPTO) facilitates development of innovative and commercially viable processes and products by protecting the intellectual property rights of inventors. The National Institute of Standards and Technology (NIST) provides support for cutting-edge research and technology in materials science, nanotechnology, and other innovative areas. Economic Development Administration (EDA) grants encourage innovation and foster commercialization. The National Telecommunications and Information Administration (NTIA) furthers communications for businesses and consumers by improving telecommunication performance, optimizing use of the federal spectrum, and increasing broadband access.

Market Development and Commercialization

NIST, EDA, and the International Trade Administration (ITA) support small and medium-sized enterprises (SME) to encourage job growth and innovation, with a focus on environmentally and economically sustainable technologies. EDA and the Minority Business Development Agency (MBDA) assist in developing markets in disadvantaged or distressed communities through private enterprise job creation.

Trade Promotion and Compliance

ITA is focused on increasing exports, supporting the President's National Export Initiative (NEI) by assisting U.S. businesses to be globally competitive. Export control reform is a key effort for the Bureau of Industry and Security (BIS) as it works with counterpart agencies to update intergovernmental systems and processes. The Census Bureau supports NEI and the Export Control Reform Initiative by providing critical export data.

The Department's two other programmatic strategic themes—Science and Information and Environmental Stewardship—each contain a single strategic goal:

Science and Information

The Department generates and provides a wide range of essential technical, economic, social, and environmental information to the public and other agencies. NIST provides the backbone of measurement science to the Nation and its industries through state-of-the-art research. NTIA expands information access through enabling technologies—for businesses, the public, and for public safety agencies. The National Technical Information Service (NTIS) provides a clearinghouse for the public, private, and academic sectors to efficiently access scientific, technical, and engineering information. The National Oceanic and Atmospheric Administration (NOAA) monitors and models the environment to forecast daily weather; warns the Nation of hurricanes, tornadoes, and tsunamis; and supports private enterprise with information necessary to mitigate the impact of weather events on economic growth. The Census Bureau and the Bureau of Economic Analysis (BEA) provide statistics critical to business decisions, the planning and delivery of public and private sector services, and the determination of political boundaries.

Environmental Stewardship

NOAA is directly responsible for managing the Nation's fisheries and for supporting the responsible management of coastal habitats and species. 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.

The Department has established three management themes and goals. These focus on optimizing the internal resources and processes that enable our programmatic goals.

Customer Service

The Commerce Department will maintain a culture of outstanding communication and services to our internal and external customers. Similarly, we will afford information access and transparency through technology. Finally, we will empower our employees to best meet the needs of internal and external customers.

Organizational Excellence

Commerce will be a high performing organization with integrated, efficient, and effective service delivery. The Department will implement its programs through strong internal controls, effective risk management, and well-engineered business processes.

Workforce Excellence

We will develop and support a diverse, highly qualified workforce with the right skills in the right jobs to carry out our mission. The Department is implementing the President's Hiring Reform Initiative to streamline applications, attracting more applicants for mission-critical occupations—especially veterans and persons with disabilities.

I am honored to have guided the Commerce Department toward meeting these critical strategic goals over the last two years, and am pleased to present this Strategic Plan for the Department's success in meeting the Nation's critical commerce needs in the future.



Gary Locke
Secretary of Commerce
June 6, 2011

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INTRODUCTION

The structure of the Department of Commerce's FY 2011 – 2016 Strategic Plan has markedly changed from that of the previous plan, and incorporates the structure of the Department's new balanced scorecard.

During the spring of 2010, Secretary Locke and Deputy Secretary Hightower engaged with a broad cross-section of the Department's senior leadership to develop a balanced scorecard to deploy and execute this Strategic Plan. The Secretary directed a balanced scorecard approach to establish and maintain focus on the Department's top priorities, to support related data-driven reviews to achieve them, and to emphasize that Customer Service, Organizational Excellence, and Workforce Excellence are prerequisites to the achievement of the Department's programmatic goals.

The balanced scorecard approach monitors the Department's internal management processes and focuses operating programs on priorities. This approach recognizes that follow-up and follow-through are critical to both the short and long-term success and sustainability of high-performing programs.

The Department's balanced scorecard and Strategic Plan are structured around three programmatic themes (Economic Growth, Science and Information, and Environmental Stewardship) and three management themes (Customer Service, Organizational Excellence, and Workforce Excellence). The Economic Growth theme is further subdivided into three goals (Innovation and Entrepreneurship, Market Development and Commercialization, and Trade Promotion and Compliance). These themes and goals are further subdivided into 27 strategic objectives, which frame all of the Department's programs and supporting activities.

The Department's Performance Budget aligns its bureaus' funding to the programmatic objectives they most directly support. Significant other activities are also noted in the narratives of relevant objectives, with cites to the aligned objectives. Performance measures for Department bureaus are shown at the end of each programmatic objective narrative (1-18), consistent with this alignment. Performance measures for Departmental Management (Office of the Secretary) and the Office of Inspector General are shown at the end of selected management objectives, including each management objective to which funding is aligned in the Department's Performance Budget.

THEME

ECONOMIC GROWTH

ECONOMIC
GROWTH

THEME – ECONOMIC GROWTH

The impact of the recent recession has made economic growth a critical function of the Department as Americans search to replace lost jobs. The Department is dedicated to improving the state of the U.S. economy and assuaging the difficulty of economic recovery experienced by Americans.

The Department's efforts contributing to economic growth are organized into three goals.

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. The goal to provide efficient and thorough review of patents and trademarks optimizes the economic value to investors and improves U.S. competitiveness. Furthering innovation, the National Institute of Standards and Technology (NIST) provides support for cutting-edge research and technology in materials science, nanotechnology, and other innovative areas. Grants administered by the Economic Development Administration (EDA) play a large role in encouraging innovation, and the forums that the Agency establishes create research-based communities of practice that foster commercialization. Expedient communication is key to business growth and the National Telecommunications and Information Administration (NTIA) assists by improving telecommunication performance, optimizing use of the federal spectrum, and increasing broadband access. Sustainable, nano and bio-manufacturing are also significant areas of innovation to which NIST provides research on scientific standards.

MARKET DEVELOPMENT AND COMMERCIALIZATION

NIST and 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. To reduce economic duress, MBDA and EDA assist in developing markets in disadvantaged or distressed communities through private enterprise job creation. The CommerceConnect initiative unifies Department resources for customized person-to-person support in generating economic growth.

TRADE PROMOTION AND COMPLIANCE

The Department generates economic growth and jobs through extensive assistance to firms engaging in international trade. The International Trade Administration (ITA) is focused on increasing exports, as outlined by the National Export Initiative (NEI), by assisting U.S. exporters in expanding to foreign markets. ITA achieves this goal, in part, by confronting unfair trade practices at home and abroad in order to give workers and firms the opportunity 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. The Census Bureau supports the President's NEI and the Export Control Reform Initiative by providing critical measures of exports. These measures help ensure that interagency automated systems that collect data needed for export control are kept up to date.

INNOVATION AND ENTREPRENEURSHIP GOAL:

DEVELOP THE TOOLS, SYSTEMS, POLICIES, AND TECHNOLOGIES CRITICAL TO TRANSFORMING OUR ECONOMY, FOSTERING U.S. COMPETITIVENESS, AND DRIVING THE DEVELOPMENT OF NEW BUSINESSES

The Department's first strategic goal focuses on providing the tools, systems, policies, and technologies that will enable U.S. businesses to maintain their technological advantage in world markets.

MAJOR ELEMENTS OF THE GOAL

Protecting Intellectual Property

Given the demonstrated importance of high-quality intellectual property (IP) to innovation and competitiveness, USPTO is a key component of the Administration's strategy to encourage U.S. innovation and global competitiveness.

USPTO will work to raise awareness, both domestically and internationally, of the value of IP and the positive economic, social, and cultural impact it has. USPTO promotes policies that improve the protection of IP rights (IPR) afforded by both domestic and international laws and agreements, and develops U.S. policies that reflect the vital importance of IPR in ensuring the continued competitiveness of U.S. industry.

Processing of Patent and Trademark Applications

U.S. innovators and businesses rely on the legal rights associated with patents in order to reap the benefits of their innovations. This means that the longer it takes for USPTO to review a patent application, the longer it will take for the benefit of patent protection to accrue. Congress and the public have recognized that patent pendency has a direct impact on U.S. competitiveness.

USPTO is streamlining the review and appeals process for patents by increasing the number of patent examiners, working closely with foreign IP offices, and implementing a state-of-the-art IT system for patent and trademark examination, with the goal of achieving an average first action patent pendency of 10 months, and an average overall patent pendency of 20 months. USPTO has aggressively been improving and providing effective training, revamping performance appraisal plans to include leadership skills development, and developing an effective Human Capital Succession Plan in an effort to improve quality and train the next generation of patent and trademark examiners.

Stimulate High-growth Business Formation and Entrepreneurship through Investing in High-risk, High-reward Technologies and by Removing Impediments to Accelerate Technology Commercialization

NIST is expanding efforts to increase access to, and improve the utility of, two major user facilities that support national innovation efforts in materials science, nanotechnology, and other emerging technology areas. The NIST Center for Neutron Research provides neutron measurement capabilities to the U.S. research community, and NIST NanoFab houses advanced tools for making and measuring materials and devices with nanometer-scale structures.

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.

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.

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 supports telecommunications and information technologies (IT) through research focused on improving both the performance of telecommunications networks and the availability of digital content on the Internet. NTIA's Institute for Telecommunication Sciences (ITS) research also supports U.S. positions in international standards-setting bodies.

NTIA maintains information that describes federal spectrum use to determine spectrum/geographic areas that are underused or vacant. In June 2010, the President signed a memorandum calling for NTIA, in collaboration with the Federal Communications Commission (FCC), to make 500 MHz of spectrum available for fixed and mobile wireless broadband in the next 10 years.

The Broadband Technology Opportunities Program (BTOP) is helping to improve broadband services in unserved and underserved areas of the United States, enhancing U.S. competitiveness through advances in broadband speeds, deployment, and adoption.

Provide Measurement Tools and Standards to Strengthen Manufacturing, Enable Innovation, and Increase Efficiency

NIST laboratories focus on developing the measurement tools standards and services in order to support a robust, sustainable high-technology manufacturing sector. Efforts include:

- ***Sustainable Manufacturing.*** NIST is developing standards to measure sustainability along several dimensions—such as environmental conditions, management, and operating performance—across the entire product life cycle.
- ***Nanomanufacturing.*** NIST builds the supporting technical capabilities that U.S. industry needs to understand and control matter at ever finer scales—all the way down to assemblies of a few atoms.
- ***Bio manufacturing.*** NIST capabilities in measurement science improves manufacturing processes involved in the production of protein-based drugs and enables the U.S. Food and Drug Administration (FDA) to measure the "sameness" of drugs made by different manufacturers.
- ***Interoperability Standards.*** Creating interoperability standards gives industry the confidence to invest in new technologies such as Smart Grid and health IT by broadening the market and decreasing the limitations inherent in legacy systems.

BUREAUS CONTRIBUTING TO THIS GOAL

Promoting innovation and creativity, stimulating economic growth, and creating high-paying jobs are key Administration priorities. By providing IP protection in the form of patents and trademarks, USPTO plays a key role in fostering the innovation that drives job creation, investment in new technology and economic recovery, and in promoting and supporting these priorities.

NIST laboratories conduct research that advances the Nation's technology infrastructure and is needed by U.S. industry to continually improve products and services.

EDA's investments in communities focus on setting the stage for sustainable job growth and the building of durable regional economies throughout the United States. This foundation builds upon two key economic drivers—innovation and regional collaboration. Innovation is the

key to global competitiveness, new and better jobs, and a resilient economy. Regional collaboration allows communities to work together to develop initiatives that advance new ideas and creative approaches to address rapidly evolving economic conditions.

NTIA promotes the development of Administration policies to increase availability of advanced telecommunications such as wireless services, broadband, and Internet-related technologies in support of e-commerce; manages the effective and efficient use of federal spectrum; and provides timely, effective application of NTIA's research and engineering to U.S. industry through technology transfer and commercialization activities.

OBJECTIVE 1

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

It has become increasingly clear that innovation is the key driver of long-term economic growth and a sustainable source of competitive advantage for U.S. businesses. By providing IP protection in the form of patents and trademarks, USPTO plays a key role in fostering the innovation that drives job creation, investment in new technology and economic recovery, and in promoting and supporting the Administration's priorities.

Optimize Patent Quality and Timeliness

U.S. innovators and businesses rely on the legal rights associated with patents in order to reap the benefits of their innovations. This means that the longer it takes for USPTO to review a patent application, the longer it will take for the benefit of patent protection to accrue. Congress and the public have recognized that patent pendency has a direct impact on U.S. competitiveness. The following steps will be taken:

- Re-engineer patent process to increase efficiencies and strengthen effectiveness;
- Increase patent application examination capacity by hiring more patent examiners;
- Improve patent pendency and quality by increasing international cooperation;
- Measure and improve patent quality by providing more effective training;
- Improve appeal and post-grant processes by streamlining the appeal process; and
- Develop and implement the patent end-to-end processing system.

Optimize Trademark Quality and Timeliness

Trademarks perform a valuable function by identifying the source of products and services and being an indicator of safety and quality to the consumer. In the 21st century, trademarks represent highly valuable business assets, serving as symbols of a company's good will and helping to cement customer loyalty. By registering trademarks, USPTO plays a significant role in protecting consumers from confusion as well as providing important benefits to U.S. businesses. The following steps will be taken:

- Maintain trademark first action pendency on average between 2.5 – 3.5 months with 13 months final pendency;

- Continuously monitor and improve trademark quality;
- Ensure accuracy of identifications of goods and services in trademark applications and registrations;
- Enhance operations of Trademark Trial and Appeal Board;
- Modernize IT system by developing and implementing the trademark next generation IT system; and
- Develop a new generation of Trademark organization leaders.

KEY CHALLENGES

IP is a necessary instrument for innovators and businesses to capture value as ideas move to the marketplace. In performing its mission USPTO faces significant challenges:

- The volume of applications;
- Rapid advances in technologies;
- Necessity for global cooperation and protection;
- Antiquated and decaying IT infrastructure;
- Hiring, retaining, and training examiners;
- Balancing competing objectives;
- The need for greater transparency in defining accountability metrics for agency objectives and performance; and
- Creating a stable, long-term fee structure that supports agency performance objectives.

EXTERNAL FACTORS

The following are key external factors that may significantly affect achievement of this objective:

- Economic volatility that affects quantities of filings, fee collections, and the ability to hire and retain high quality staff;
- Court decisions that affect USPTO practices and procedures;
- Outcomes of international discussions on topics that may determine the extent to which USPTO is able to realize operational efficiencies through work sharing and harmonization.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

USPTO is partnering with ITA to develop country-specific toolkits, which provide a wealth of detailed information on how to protect and enforce intellectual property rights (IPR) in certain specific markets. The toolkits contain materials describing the scope of the IPR problem in a specific country, domestic legislation, suggestions on what can be done to protect an IPR, and steps that should be considered after an infringement is discovered. See www.stopfakes.gov.

PROGRAM EVALUATIONS

USPTO is committed to subjecting new initiatives to thorough evaluations and pilot projects. Evaluation plans will incorporate measurable objectives, critical measures of success, baseline data, and conditions for full implementation. This will ensure that USPTO proposes appropriate changes to patent and trademark laws, makes changes to internal processes that provide benefits and increased efficiency, and makes sound investment decisions.

Quality Assurances – USPTO also is committed to enhancing the quality of the patent and trademark examination processes to provide more consistent results and certainty for applicants, registrants, and patent owners. USPTO will demonstrate, through statistically valid metrics, that the quality of its work is the highest possible.

Accountability – Responsibility for providing performance data lies in the Patent, Trademark, and External Affairs organizations. USPTO holds program managers accountable for ensuring procedures are in place regarding the accuracy of their data and that the performance measurement source is complete and reliable.

OBJECTIVE 1: IMPROVE INTELLECTUAL PROPERTY PROTECTION BY REDUCING PATENT PENDENCY, MAINTAINING TRADEMARK PENDENCY, AND INCREASING THE QUALITY OF ISSUED PATENTS AND TRADEMARKS

BUREAU	PERFORMANCE MEASURE
USPTO	<ul style="list-style-type: none"> ● Patent quality composite <ul style="list-style-type: none"> ● In-process compliance rate ● Final disposition compliance rate ● Patent average first action pendency (months)¹ ● Patent average total pendency (months)¹ ● Patent backlog¹ ● Patent applications filed electronically ● Trademark first action compliance rate ● Trademark final compliance rate ● Trademark first action pendency (months) ● Trademark average total pendency (months) ● Trademark applications processed electronically

¹ This is a Department priority goal.

OBJECTIVE 2

Expand international markets for U.S. firms and inventors by improving the protection and enforcement of intellectual property rights**STRATEGIES TO ACHIEVE THIS OBJECTIVE**

Given the importance of high-quality IP to innovation and competitiveness, USPTO is a key component of the Administration's strategy to encourage U.S. innovation and global competitiveness.

USPTO must promote, both domestically and internationally, the value of IP and the positive economic, social, and cultural impact it has. USPTO must work to ensure that IP laws in the United States and foreign IP offices continually adapt to new technological advances, that efforts to adapt and improve IP systems are based on the best available data, and that the IPR of U.S. businesses are protected at home and abroad.

Provide Domestic Leadership on IP Policy Issues and Development of a National IP Policy

The Administration's *Strategy for American Innovation* whitepaper demonstrated a commitment to retaining U.S. innovation leadership. USPTO must develop a national IP strategy will ensure that policy developments and implementation takes place within a national framework that allows stakeholders to create, own, and exploit research results, innovations, new technologies, and works of creativity.

Provide Leadership on International Policies for Improving the Protection and Enforcement of IPR

USPTO will:

- Lead efforts at World Intellectual Property Organization (WIPO) and other international forums to improve IP protection and enforcement;
- Prioritize countries of interest to improve IP protection and enforcement, capacity building, and legislative reform, including creation of country/region specific action plans;
- Improve efficiency and cooperation in global IP system;
- Provide international IP policy advice and expertise to other U.S. government agencies;
- Provide technical expertise in the negotiation and implementation of bilateral and multilateral agreements that improve IPR protection and enforcement; and
- Create USPTO and attaché-integrated action plans that focus on country-specific needs and interagency cooperation.

KEY CHALLENGES

To improve the protection and enforcement of IPR, USPTO faces significant challenges:

- Necessity for global cooperation and protection;
- The volume of patent and trademark infringement claims; and
- Negotiating the differences in domestic and foreign attitudes regarding the value of protecting IP.

EXTERNAL FACTORS

The ability of U.S. negotiators to successfully promote the acceptance of U.S. positions on IP protection in international forums and at multilateral IP conferences is the most important external factor that may affect achievement of this objective.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

USPTO is partnering with ITA to develop country-specific toolkits (<http://www.stopfakes.gov/>).

ITA's Office of Intellectual Property Rights provides small and medium-sized enterprises assistance on reporting IPR violations, participates internationally in the IPR working group to strengthen global IPR protections, and contributes to the joint development of the intellectual property enforcement strategic plan. Please refer to Objective 12 for further information related to ITA activities.

PROGRAM EVALUATIONS

USPTO is committed to subjecting new initiatives to thorough evaluations and pilot projects. Evaluation plans will incorporate measurable objectives, critical measures of success, baseline data, and conditions for full implementation.

OBJECTIVE 2: EXPAND INTERNATIONAL MARKETS FOR U.S. FIRMS AND INVENTORS BY IMPROVING THE PROTECTION AND ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS	
BUREAU	PERFORMANCE MEASURE
USPTO	<ul style="list-style-type: none"> Percentage of prioritized countries that have implemented at least 75% of action steps in the country-specific action plans toward progress in institutional improvements of IP enforcement entities, IP office administration, and the establishment of government-to-government cooperative mechanisms to improve IP laws and regulations

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Technological innovation drives economic growth, sustains U.S. competitiveness in the global economy, and supplies solutions to critical national needs and global challenges. Economic studies conducted even before the IT revolution have shown that as much as 85 percent of measured growth in U.S. income per capita was due to technological change.¹

Fund High-risk, High-reward Research in Areas of Critical National Need

NIST's Technology Innovation Program (TIP) was established to assist U.S. small and medium-sized businesses, institutes of higher education, national laboratories, and non-profit research organizations to conduct research that has the potential for yielding transformational results with wide-reaching implications in areas of critical national need.

¹ *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Future*, Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, The National Academies, p. 1 (2007).

TIP addresses the Nation's most critical needs by offering competitive, cost-shared funding opportunities for high-risk, high-reward research. Critical national need areas are identified to respond to societal challenges that are national in scope and of sufficient magnitude to justify government attention. Advanced manufacturing technology is one such focus area. TIP only funds projects that have a promising technological solution for problems that are not being addressed, for which funding is not reasonably available through other public or private sources, and that are within NIST's areas of technical competence.

Accelerate Technological Innovation through Expanded Partnerships and Collaborations with Industry and Academia

NIST works closely with other federal agencies to develop strategies to address national priorities where NIST can have a major impact, including expanding partnerships with industry, academia, and government (federal, state, and local), and developing new partnerships that address the critical national priorities singled out in the NIST investment priority areas.

The NIST partnership with Nanoelectronics Research Initiative of the Semiconductor Research Corporation is a key example of this type of partnership. In this program, NIST works with industry to fund research at universities based on four regional clusters in New York, Indiana, Texas, and California that support research at 35 universities in 20 states.

NIST is also expanding efforts to increase access to and improve the utility of two major user facilities that support national innovation efforts in materials science, nanotechnology, and other emerging technology areas: the NIST Center for Neutron Research, which provides neutron measurement capabilities to the U.S. research community; and the NIST NanoFab, which houses advanced tools for making and measuring materials and devices with nanometer-scale structures.

Provide Targeted Assistance to Help Foster Commercialization and Encourage High-growth and Innovation-based Entrepreneurship

In the increasingly interconnected global economy, creating programs that unleash the innovation and commercialization potential of communities across the Nation is critical. As global competition erodes the return to traditional practices, the key to job creation and shared prosperity is the creation and deployment of new products and services.

EDA recognizes the importance of encouraging programs that spur high-growth and innovation-based entrepreneurship and foster commercialization. EDA encourages entrepreneurship and commercialization through multi-agency innovation competitions (such as the i6 Challenge Grant that was designed to encourage and reward innovative, ground-breaking ideas that will accelerate technology commercialization and new venture formation across the United States, for the ultimate purpose of helping to drive economic growth and job creation), technical assistance, and greater priority in the Agency's programs. 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.

Invest in Cutting-edge Research that can Help Inform and Enhance Policy Efforts to Stimulate High-growth Business Formation

EDA has an important role in conducting and disseminating cutting-edge research that helps inform local, regional, and national efforts to encourage entrepreneurship and commercialization. For example, EDA has utilized its National Technical Assistance Program to disseminate its *Know Your Region* curriculum. The curriculum helps communities leverage regional assets to more effectively encourage business formation and expansion. EDA's *Know Your Region* curriculum has been adopted by USDA to help provide training to rural extension practitioners. Additionally, EDA is using its Research and Evaluation program to produce a National Regional Innovation Cluster map and tools that will help inform policy, shape decision-making, and assist communities and businesses become more competitive.

KEY CHALLENGES

Globalization and changes in domestic policy have brought about a number of challenges to innovation in the United States.

To maintain U.S. international innovation leadership, NIST must adapt its mechanisms and policies for investing in science and technology to increase U.S. capability for innovation.² By leveraging the resources of the NIST laboratories with a coordinated extramural research program built on partnerships between the federal government, the private sector, academia, and regional governments, NIST is able to provide the solutions needed to maintain U.S. competitiveness and promote innovation across the entire research and development (R&D) enterprise.

EXTERNAL FACTORS

EDA programs are not intended to work alone, but to increase the availability of outside capital (both public and private) for economic development efforts to result in firm creation, job creation, and the commercialization of products and ideas. EDA recognizes that encouraging entrepreneurship and commercialization is difficult because of the wide range of externalities that affect whether firms and individuals take necessary risks, including national or regional economic trends, changes in business climate, and access to capital.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NIST programs decrease the costs of research, market adoption, and penetration, and reduce the time it takes for this innovation process to unfold. Working in strategic partnership with industry and academia to address critical national needs, NIST programs address the following needs:

- Ensure that government, industry, and academic research are aligned to meet the Nation's long-term needs;
- Encourage more resources to be directed at the needs of the future as compared to incremental developments based on today's technology;
- Create human capital and scientific talent in critical areas; and
- Facilitate the transfer of knowledge and capabilities between academia and industry.

EDA assists economically distressed communities by providing strategic investments that encourage business creation and expansion, foster entrepreneurship, provide 21st century innovation infrastructure, and encourage research and technical assistance into cutting-edge economic development topics. EDA's investments help attract private capital investment and jobs that address problems of high unemployment, low per capita income, and sudden and severe economic challenges. EDA's technical assistance and research and evaluation investments provide effective resources to help enhance decision-making at the local, regional, and national level.

EDA's programs are further discussed under Objectives 6 and 7.

2 This draws heavily upon Anderson, Gary, Jason Boehm, Eric Steel, and Gregory Tasse, 2008, "Enhancing Competitiveness and Speeding Innovation: Design and initial results of the NIST Rapid Innovation and Competitiveness Initiative," which was presented at the annual meeting of The Technology Transfer Society.

PROGRAM EVALUATIONS

NIST uses the Government Performance and Results Act (GPRA) performance measures, balanced scorecard measures, dashboards, and program-specific metrics to measure the effectiveness of its programs.

NIST designed its performance evaluation system to accommodate its unique mission and to respond to the difficulty of measuring the results of investments in science and technology. The primary output of NIST is scientific and technical knowledge, which is inherently difficult to measure directly and comprehensively. Also, the benefits of research often do not accrue until several years after the research has been completed, and the diffusion of benefits often affects broad segments of industry and society over long time periods.

Given these challenges, NIST evaluates its performance using an appropriate mix of specific output tracking, peer review, and economic impact analyses. Together, these evaluation tools, combined with continual feedback from customers, provide NIST management and external stakeholders with a comprehensive picture of performance toward its long-term outcomes.

All agencies within the Department conduct program evaluations and track progress of their programs. EDA reviews performance on its programs through annual self-evaluations, GPRA performance measurement reporting, program base reviews, and quarterly balanced scorecard performance measure evaluations

Additionally, EDA utilizes critical performance measures to determine the overall effectiveness, usefulness, and success of its programs in meeting the needs of the Nation; including GPRA performance measures, balanced scorecard objectives and performance measures, dashboards, annual performance plans, strategic plans, customer satisfaction surveys, organizational assessment surveys, and other program-specific measures.

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

BUREAU	PERFORMANCE MEASURE
NIST	<ul style="list-style-type: none"> ● Cumulative number of TIP projects funded ● Cumulative number of publications ● Cumulative number of patent applications ● Cumulative number of projects generating continued R&D ● Cumulative number of projects with technologies under adoption
EDA	<ul style="list-style-type: none"> ● Private sector dollars invested in distressed communities as a result of EDA investments ● Jobs created or retained in distressed communities as a result of EDA investments ● 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 ● Percent of substate jurisdiction members actively participating in the Economic Development District program ● Percent of University Center (UC) clients taking action as a result of UC assistance ● Percent of those actions taken by UC clients that achieve the expected results

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 serves as the President's primary policy advisor on domestic and international telecommunications and information issues and acts as the Administration's primary voice on them. NTIA fulfills this role in a number of ways:

- Issuing special reports on topics of broad interest;
- Providing the Administration's views on actions proposed by the FCC;
- Issuing requests for public input on specific issues; and
- Encouraging dialogue with the private sector by participating in conferences, workshops, and other forums.

NTIA represents the Administration in other proceedings related to telecommunications and information policy, including Internet governance; domain name management; and the core issues of privacy policy, child protection and freedom of expression, and cyber security.

NTIA provides direct benefits to the U.S. public through promotion of universal, affordable advanced telecommunications such as broadband and wireless services and Internet-related technologies, and by facilitating national and homeland security, public safety, and scientific research.

STRATEGIES TO ACHIEVE THIS OBJECTIVE

NTIA supports innovative telecommunications and IT through basic research performed at its laboratory, the Institute for Telecommunication Sciences (ITS). This research has the potential to improve both the performance of telecommunications networks and the availability of digital content on the Internet. ITS research also supports U.S. positions in international standards-setting bodies.

NTIA will develop and maintain information that describes federal spectrum use. An inventory of spectrum use is needed to help spectrum management policy decisionmakers and technology innovators to determine spectrum/geographic areas that are underused or vacant.

In June 2010, the President released an executive memorandum directing NTIA and other federal agencies to make spectrum available for fixed and mobile wireless broadband. In response to the memorandum, NTIA is undertaking tasks in collaboration with FCC to make available a total of 500 MHz of spectrum to support wireless broadband services or products over the next 10 years. This work will also include regular progress reports.

The Broadband Technology Opportunities Program (BTOP) is helping to improve broadband services in unserved and underserved areas of the United States, ensure that every American may benefit from broadband technologies, and enhance America's competitiveness through advances in broadband speeds, deployment and adoption. NTIA will ensure that projects supported by BTOP funds are fully completed within three years, and that funds are used by recipients in an effective and competent manner.

KEY CHALLENGES

The President directed the Secretary of Commerce, working through NTIA and in consultation with NIST, the National Science Foundation, and other agencies, to create and implement a plan to explore innovative spectrum-sharing technologies.

EXTERNAL FACTORS

Key external drivers include the White House, Congress, telecommunications industry, and consumers, which support spectrum management reforms via flexible use of spectrum and who benefit from NTIA actions on domestic and international telecommunications and information issues.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NTIA, in its role as the President's primary policy advisor on domestic and international telecommunications and information issues, engages other government agencies, both in the Department and throughout the federal government, as well as Internet constituencies in the commercial world, civil society, and academia.

NTIA, USPTO, NIST, and ITA, have created an Internet Policy Task Force to identify public policy and operational challenges such as domestic and international information and communications technology policy, international trade, cyber security standards and best practices, IP, business advocacy, and export control.

In June 2010, the President signed a Memorandum calling for NTIA, in collaboration with the Federal Communications Commission (FCC), to make 500 megahertz of spectrum available for fixed and mobile wireless broadband in the next ten years.

PROGRAM EVALUATIONS

In addition to tools such as GPRA performance measures and the balanced scorecard measures, NTIA conducts periodic assessments by senior management executives to evaluate progress, and to develop and refine new program goals.

These program goals are coordinated with the Secretary of Commerce and the White House to ensure that policy priorities are met. Program evaluations determine whether existing resources are being assigned appropriately to the highest priority issues.

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

BUREAU	PERFORMANCE MEASURE
NTIA	<ul style="list-style-type: none"> ● Update the spectrum inventory first established in FY 2011 ● Identify up to 500 MHz of spectrum to support commercial broadband services or products ● Miles of broadband networks deployed (infrastructure projects)¹ ● Community anchor institutions connected (infrastructure projects)¹ ● New and upgraded public computer workstations (public computer centers projects)¹ ● New household and business subscribers to broadband (sustainable broadband adoption projects)¹

¹ This tracks a Department priority goal.

OBJECTIVE 5

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Cutting-edge measurement capabilities, technical standards, and facilities are critical to strengthen manufacturing, enable innovation, and enhance efficiency of U.S. enterprises. NIST laboratories work at the frontiers of measurement science to develop and deliver these enabling technical products. These efforts will be strengthened through the America COMPETES Reauthorization Act, and will provide critical support to implement the President's Plan for Science and Innovation.

Advance the State of the Art in Measurement Science

NIST leadership in measurement science research helps ensure that U.S. industry and universities will have the tools needed to remain at the leading edge of innovation and to secure advantages in bringing new technology to market. NIST will invest in high-risk, high-payoff projects that advance the state of the art in measurement science and focus on critical measurement barriers to industry.

NIST's Innovations in Measurement Science (IMS) program funds highly innovative measurement science ideas by NIST scientists and engineers that have the potential to significantly advance NIST's measurement science capabilities.

One project funded through this program focuses on addressing the fundamental link between the electrical and mechanical units of the international system of units. This problem will be addressed by the use of cutting-edge technology (the femtosecond laser frequency comb) to create an electrical measurement unit based directly on an atomic clock. This effort will result in measurement devices twice as accurate as others being deployed around the world, and would impact all facets of electrical measurements.

Other NIST programs focus on developing measurement tools and standards. Progress in building smaller, more efficient, and more powerful devices has been accompanied by improvements in the precision of NIST measurement systems—systems crucial for quality control, reproducibility, and product innovation—all of which are essential for advanced manufacturing. This progress has also enabled opening new frontiers in the quantum world—the world at the atomic scale.

As an example, NIST research on precision manipulation of the quantum mechanics of ions to make better atomic clocks led directly to research on the use of those ions for quantum computing, initiating NIST's world-class program on quantum information processing. In the future, these quantum computers will achieve performance beyond the physical limitations of today's silicon-based computers.

More recently, NIST applied techniques of quantum computing to research on developing a new type of atomic clock with the potential to be 100 times more accurate than today's atomic clocks. Such accuracy and sensitivity are needed to meet demands in navigation, telecommunication, and gravity and magnetic measurements.

Focus New NIST Laboratory Activities to Provide the Measurement Tools and Services to Strengthen Manufacturing

NIST serves customers that include companies representing all major manufacturing sectors and many service sectors, state and local governments, over one hundred different federal agencies, standards organizations, the academic community, the general public, and friendly foreign governments. NIST meets the needs of its customers through a broad range of products, services, measurement capabilities, laboratories, testbeds, and user facilities.

NIST laboratories focus on developing the measurement tools standards and services in order to support a robust, sustainable, high-technology manufacturing sector. Efforts include:

- ***Sustainable Manufacturing.*** NIST is developing a system of sustainable manufacturing measures and standards to enable U.S. manufacturers to verifiably produce and recycle innovative products that result in zero environmental impact manufacturing. These tools will enable U.S. industry to measure and verify sustainability along several dimensions—environmental condition, management performance, and operating performance—across the entire product life cycle. U.S. manufacturers' leadership in the development of innovative products that compete effectively in global markets will result in sustainable job creation while ensuring adequate resources and a better quality of life for current and future generations.
- ***Nanomanufacturing.*** NIST builds the supporting technical capabilities that U.S. industry needs to understand and control matter at ever finer scales—all the way down to assemblies of a few atoms. NIST is helping to clear technical obstacles, including uncertainties about potential environmental, health, and safety risks with the aim of creating a competitive advantage in the growing international market for nanotechnology products.
- ***Biomanufacturing.*** NIST has identified critical areas where NIST capabilities in measurement science can most effectively impact the biopharmaceutical manufacturing industry to (1) improve efficiency and reliability of the manufacturing processes involved in the production of biologics (protein-based drugs), and (2) facilitate the approval of such drugs through measurement methods or reference materials that enable the FDA to accurately measure the "sameness" of a biologic made by different manufacturers.
- ***Interoperability Standards.*** Lack of standards that allow interoperability within and among crosscutting technologies such as Smart Grid and health IT can reduce the benefits gained from these emerging technologies. Creating these standards gives industry the confidence to invest in these new technologies by broadening the market and decreasing the limitations inherent in legacy systems.

For example, NIST is working to accelerate the development of Smart Grid standards, interfaces, and protocols within a common interoperability and cyber security framework. The availability of standards developed from this effort will enable manufacturers to introduce new ranges of products that can take advantage of the technological advances provided by a Smart Grid.

- ***Rapid and Cost-Effective Manufacturing Capabilities.*** The ability to rapidly introduce product innovations is needed to fully capitalize on the unprecedented long-term manufacturing opportunities being created by new approaches to health care, energy, the environment, and transportation. NIST will conduct and sponsor R&D in technology areas central to a transformational future of U.S. manufacturers, including additive manufacturing and advanced robotics. New measurements and performance-based standards for additive manufacturing, the ability to create complex three-dimensional objects by building up layers with material composition and structure that vary like-colored ink on printed pages, will give U.S. manufacturers new capabilities to rapidly produce highly-customized and complex products with increased functionality and performance, decreased time-to-market, and reduced waste.

KEY CHALLENGES

A key challenge in meeting this objective will be playing a targeted but significant role in coordinating the responses required to meet the national and global needs in areas of buildings and physical infrastructure, energy, environment, healthcare, IT, and manufacturing.

NIST will have to continue to initiate and sustain effective collaboration among external partners. To maximize its impact in these areas of national interest, NIST will leverage its reputation for impartiality and technical expertise, its international standing, and its decades of experience as an effective partner to build on its cooperative relationships with other national laboratories and federal agencies, industry, academia, state and local governments, and international organizations.

EXTERNAL FACTORS

Revitalizing the Nation's manufacturing industries and helping to ensure that they will continue to be engines of innovation and job creation in the future is essential to building a vibrant economy that can help raise the standard of living for all Americans. Continued emphasis must be applied to:

- Provide workers with the opportunity to obtain the skills necessary to be highly productive;
- Invest in the creation of new technologies and business practices;
- Develop stable and efficient capital markets for business investment;
- Help communities and workers transition to a better future;
- Invest in transportation infrastructure;
- Ensure market access and a level playing field; and
- Improve the general business climate, especially for manufacturing.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NIST works with the private sector, other government agencies, and universities to develop and apply the technology, measurements, and standards needed to strengthen its infrastructure for innovation to advance manufacturing and science; promote trade; and improve public safety and security. This contributes to improved quality of life and better and more jobs.

PROGRAM EVALUATIONS

In addition to tools such as GPRA performance measures and the balanced scorecard measures, NIST undertakes select economic impact analyses to determine the economic impact of its programs.³

Since 1959, the National Research Council (NRC) has assessed the technical merit, relevance, and quality of NIST laboratory programs in the context of NIST's mission. The NRC review is independent, technically sophisticated, and extensive. Information about its reviews and the assessments is publicly available,⁴ and has helped NIST refine its programs.

NIST also uses the extensive expertise available in the private sector, through reviews undertaken by the NIST Visiting Committee on Advanced Technology (VCAT), which provides recommendations regarding the general policy for NIST, its organization, budget, and programs within the framework of applicable national policies as set forth by the President and the Congress. Based on its review, VCAT submits an annual report to the Secretary of Commerce for submission to Congress.⁵

3 http://www.nist.gov/director/planning/impact_assessment.cfm

4 <http://www.nist.gov/director/nrc/index.cfm>

5 <http://www.nist.gov/director/vcat/index.cfm>

OBJECTIVE 5: PROVIDE MEASUREMENT TOOLS AND STANDARDS TO STRENGTHEN MANUFACTURING, ENABLE INNOVATION, AND INCREASE EFFICIENCY

BUREAU	PERFORMANCE MEASURE
NIST	<ul style="list-style-type: none"> ● Qualitative assessment and review of technical quality and merit using peer review ● Citation impact of NIST-authored publications ● Peer-reviewed technical publications produced ● Standard Reference Materials (SRM) sold ● NIST-maintained datasets downloaded ● Number of calibration tests performed

MARKET DEVELOPMENT AND COMMERCIALIZATION GOAL:

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

The Department believes that the best way to encourage and support economic expansion and to increase the prosperity of all Americans is to create market opportunities.

MAJOR ELEMENTS OF THE GOAL

Promote the Advancement of Sustainable Technologies, Industries, and Infrastructure

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.

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, advance in green industries and technologies, have for transforming regional economies and spurring innovation.

Through its grants, EDA assists communities in using regional assets to promote economic development in a sustainable manner. For example, EDA may 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.

Promote the Vitality and Competitiveness of Our Communities and Businesses, Particularly those that are Disadvantaged or in Distressed Areas

The Minority Business Development Agency (MBDA) provides minority business development services to minority business enterprises (MBE) through a network that includes MBDA staff and its funded centers (grantees). This network provides management and technical assistance and offers businesses services to grow and expand minority firms throughout the Nation. Recent growth rates in the total number of firms, employment, and gross receipts of minority-owned firms outpace non-minority owned firms. However, the average gross receipts of minority-owned firms, significantly lags behind the level of non-minority firms.

The current financial crisis is disproportionately affecting MBEs as they face significant challenges dealing with credit restrictions and contract bundling. Access to capital is still one of the most important factors limiting the establishment, growth, and expansion of minority-owned

firms. As such, MBDA works to remove these barriers to entry and to open doors to economic opportunity for MBEs. MBDA's staff and network of funded centers are on the ground in distressed communities throughout the Nation including the Gulf Coast region.

EDA regional innovation clusters—geographic concentrations of firms and industries that do business with each other and have common needs for talent, technology, and infrastructure—are a proven way to create jobs and grow the economy.

Collaborative regional innovation strategies work because they identify and leverage a region's unique competitive strengths. They involve universities and other R&D centers as catalysts of innovation. They nurture networks for business financing, business-to-business sales, education, workforce development, and in particular, high-growth industry sectors.

This approach applies to rural and urban areas because economies function as interconnected systems supporting each other and innovation increases efficiencies resulting in increased competitiveness. This strategy represents an important tool for helping historically disadvantaged and distressed communities and businesses become more competitive.

Resiliency—the ability to prepare and respond to various events—is critical to ensuring sustainable economic prosperity and growth. EDA recognizes that all communities are susceptible to natural and man-made disasters and has focused its programs to provide a robust array of resources to help communities plan and respond to such events. In many cases, when a community faces a disaster, businesses and citizens leave, the tax base shrivels, and the community faces enormous obstacles on the path to recovery. These obstacles necessitate a comprehensive approach to responding to the crisis.

EDA's ability to fund planning, capital, infrastructure, and technical assistance uniquely positions it to help communities revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business creation and expansion, foster sustainable manufacturing, diversify regional economies, and generate or retain long-term, private-sector jobs and private investment.

The Census Bureau's Local Employment Dynamics (LED) program creates new labor market information with industry and geographic flexibility and details that can help to identify regional innovation cluster centers.

Improve the Competitiveness of Small and Medium-sized Firms in Manufacturing and Service Industries

Through its CommerceConnect initiative, the Department provides a one-stop approach to expose businesses to the array of programs, services, and data available from the federal government. Teaming up with its partner bureaus, other federal and local agencies, CommerceConnect hopes to develop and enhance programs that meet business needs, and to identify existing programs to better target areas of business need.

NIST's Hollings Manufacturing Extension Partnership (MEP) provides manufacturers with access to manufacturing experts available to assist in adopting new technologies, developing innovative products, and implementing process innovations to improve their productivity, profitability, and competitiveness.

MEP concentrates on five critical areas: technology acceleration, supplier development, sustainability, workforce, and continuous improvement. With a focus on increasing the competitiveness of the industry and its firms, MEP works at a deep, strategic level with firms placing emphasis on cutting costs by 20 percent and increasing revenue by 20 percent.

The U.S. Commercial Service helps U.S. companies find new international business partners in worldwide markets, offering four ways to grow international sales:

- International market research;
- Trade events that promote U.S. products or services to qualified buyers;

- Introductions to qualified buyers and distributors; and
- Counseling through every step of the export process.

For companies looking for U.S. suppliers, U.S. Commercial Service can help find U.S. suppliers of products and services.

ITA combines its analytical capabilities with its international and industry knowledge to provide recommendations to advance the competitiveness of U.S. manufacturing and service industries. For example, ITA uses its industry expertise and contacts to help other federal agencies design rules and regulations that achieve public goals in a more efficient manner. ITA is working with industry, the Department of Transportation, and other agencies to highlight the importance of improving the U.S. supply chain and transportation infrastructure.

BUREAUS CONTRIBUTING TO THIS GOAL

In the Office of the Secretary, CommerceConnect plays a key role in delivering programs and services to enable small and medium-sized businesses to commercialize technologies, grow their businesses, and create jobs. CommerceConnect provides easy, one-stop access to federal programs that provide technical data and research, export counseling, cost reduction programs, grants, as well as many local economic development programs.

EDA assists economically distressed communities by promoting a favorable business environment through its strategic investments in public infrastructure. These investments help attract private capital investment and jobs that address problems of high unemployment, low per capita income, and sudden, severe economic challenges. EDA supports effective decision-making by local officials through its capacity-building programs.

MBDA helps minority-owned businesses obtain access to public and private debt and equity financing, market opportunities, and management and business information to increase business growth in the minority business community. MBDA also plays an integral role in the CommerceConnect program.

Through MEP, NIST helps smaller firms adopt advanced manufacturing and management technologies as well as innovative business practices to position them to compete in the global economy. MEP helps companies transform themselves into high performance enterprises—productive, innovative, customer-driven, and competitive—by efficiently providing high value technical and advisory services, including access to industry best practices.

ITA assists in the development of U.S. trade policy in the global economy, creates jobs and economic growth by promoting U.S. companies, strengthens U.S. competitiveness across all industries, addresses market access and compliance issues, administers U.S. trade laws, and undertakes a range of trade promotion and trade advocacy efforts.

OBJECTIVE 6

Promote the advancement of sustainable technologies, industries, and infrastructure

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Encourage Innovations in the Green Economy

EDA supports the Department's goal of fostering economic growth by stimulating the advancement of green and blue technologies and industries.

EDA provides strategic investments in projects that encourage growth of the “green economy” (i.e., the development and use of products and services that contribute to economic growth by respecting and revitalizing the environment). Recent EDA-funded research reveals that businesses in renewable energy and alternative fuels, green building and energy efficiency technology, energy-efficient infrastructure and transportation, and recycling are growing faster than the rest of the economy. A Pew Charitable Trusts report also found that clean energy segments have resulted in far-reaching national economic benefits. Between FY 1998 and FY 2007, clean energy jobs grew by 9.1 percent, while total jobs grew by only 3.7 percent according to data collected by Pew. While the industry is still in its infancy, its growth rate over the past decade has outpaced other emerging technology sectors. These findings illustrate the promise that environmentally-sustainable development, and, more specifically, advances in green industries and technologies, can have for transforming regional economies and spurring innovation.

EDA promotes environmentally-sustainable development through a two-pronged approach. First, EDA's Sustainable Economic Development program (formerly known as the Global Climate Change Mitigation Incentive Fund) helps to cultivate innovations that can power the green economy through investments in emerging industrial clusters related to energy, cutting-edge environmental technologies, sustainable manufacturing processes, and green building practices. Specifically, the program invests in efforts to develop and implement green products, processes, and buildings that create jobs through, and increase private capital investment in, efforts to limit the Nation's dependence on fossil fuels, enhance energy efficiency, curb greenhouse gas emissions and protect natural systems. Second, EDA has implemented a funding priority that encourages investments capable of cultivating innovations in the green economy in all of its other grant programs. This investment priority enables EDA to leverage its wide array of programs and resources to support this important national priority and Departmental objective.

Support Sustainable Economic Development

Recent years have witnessed growing recognition that economic growth can—and must—go hand in hand with environmental stewardship. EDA has taken important steps to link its investments with broad policy that understands the link between environmental quality and economic development.

EDA provides investments that assist communities in utilizing regional assets to promote economic development in a sustainable manner. In some communities these investments come as technical assistance to plan or test the feasibility of transitioning to green practices, in others EDA provides resources to help construct U.S. Green Building Council's LEED certified (or equivalent) buildings, while in others EDA provides strategic resources to help make a business or manufacturing process more environmentally friendly and more competitive.

One of the Department's priority goals is to support the support sustainable manufacturing practices. Specifically, this goal is measured by the percent of EDA's total infrastructure construction projects that are certified by the U.S. Green Building Council's LEED, or an equivalent.

KEY CHALLENGES

EDA recognizes that efforts to promote sustainable economic development are intrinsically linked to broader federal efforts to support the green economy and associated markets. Firms who might consider leveraging their work to support the green economy are hesitant because regulations that could have a significant impact on their business have yet to be determined. Additionally, firms that could support the green economy and help promote sustainable economic development have to navigate a convoluted network of state policies. These state policies often compete against each other, and offer few incentives to manufacture the products and services associated with green technologies and innovations. In spite of these challenges, the green economy continues to be one of the fastest-growing aspects of the economy, and has become a critical component of job creation, business formation, and long-term regional prosperity.

EXTERNAL FACTORS

EDA programs are not intended to work alone, but to increase the availability of outside capital (both public and private) for economic development efforts to result in firm creation/expansion, job creation, and long-term prosperity of regions across the country. EDA recognizes that encouraging innovations in the green economy and promoting sustainable economic development is difficult because of a wide range of externalities, including access to capital to help seed fledgling companies in the green economy and variations in federal and state policies which cause uncertainties in the market. Because EDA's programs leverage other federal, state, local, and private efforts, they provide catalytic investments that help firms in the green economy start and expand.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

EDA promotes environmentally-sustainable development through a two-pronged approach. First, EDA's Sustainable Economic Development Program helps to cultivate innovations that can power the green economy through investments in emerging industrial clusters related to energy, cutting-edge environmental technologies, sustainable manufacturing processes, and green building practices. Specifically, the program invests in efforts to develop and implement green products, processes, and buildings that create jobs through, and increase private capital investment in, efforts to limit the Nation's dependence on fossil fuels, enhance energy efficiency, curb greenhouse gas emissions, and protect natural systems. Second, EDA has implemented a funding priority that encourages investments capable of cultivating innovations in the green economy in its other key grant programs. This investment priority enables EDA to leverage its wide array of programs and resources to support this important national priority and Departmental objective. EDA's programs are further discussed under Objective 7.

Promoting innovative energy technologies to reduce dependence on oil and mitigate the impact of climate change is a priority of the Administration. To address this issue, NIST is focusing on programs that will develop the measurements, standards, and common framework that are required to promote sustainable operations and improve energy efficiency in both the construction and manufacturing sectors. NIST initiatives will provide for the development of data, models, and support tools to improve energy efficiency in manufacturing and construction processes and to benchmark and stimulate the utilization of sustainable materials. NIST's laboratory programs are further discussed in Objective 5. NIST MEP, which assists businesses in adopting sustainable practices, is discussed in Objective 8.

NIST will focus on developing new measurement instrumentation and methods for Advanced Solar Technologies, which will help bridge the current gap in measurement technology needed to enable third-generation photovoltaic (3rd-Gen PV) development. NIST is also expediting development of standards critical to achieving a reliable Smart Grid, as well as developing the measurements, standards, and a common framework that are required to promote sustainable and energy-efficient manufacturing and construction. The Smart Grid, along with work in Advanced Solar Technologies and sustainable manufacturing and construction, will be key to national efforts to further energy independence and curb greenhouse gas emissions. With industry, government, and consumer stakeholders, NIST is carrying out these responsibilities with a sense of urgency.

PROGRAM EVALUATIONS

All agencies within the Department conduct program evaluations and track progress of their programs. EDA reviews performance on its programs through annual self-evaluations, GPRA performance measurement reporting, program base reviews, and quarterly balanced scorecard performance measure evaluations.

Additionally, EDA utilizes critical performance measures to determine the overall effectiveness, usefulness, and success of its programs in meeting the needs of the Nation; including GPRA performance measures, balanced scorecard objectives and performance measures, dashboards, annual performance plans, strategic plans, customer satisfaction surveys, organizational assessment surveys, and other program-specific measures.

In FY 2010, EDA completed an evaluation of the Green Economy in collaboration with the University of California, Berkeley, which informed the development of new programmatic guidance for the Agency's Sustainable Economic Development Program.

OBJECTIVE 6: PROMOTE THE ADVANCEMENT OF SUSTAINABLE TECHNOLOGIES, INDUSTRIES, AND INFRASTRUCTURE

BUREAU	PERFORMANCE MEASURE
EDA	<ul style="list-style-type: none"> ● Raise 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 Leadership in Energy and Environmental Design (LEED) or a comparable third-party certification program to 12 percent¹ ● Private sector dollars invested in distressed communities as a result of EDA investments ● Jobs created or retained in distressed communities as a result of EDA investments
<p>¹ This is a Department priority goal to be completed by the end of FY 2011.</p>	

OBJECTIVE 7

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Encourage Collaborative Regional Innovation

EDA's framework for economic development builds upon the Administration's strategy for promoting sustainable economic growth by fostering regional innovation clusters. Regional innovation clusters—geographic concentrations of firms and industries that do business with each other and have common needs for talent, technology, and infrastructure—are a proven way to create jobs and grow the economy.

Research shows that collaborative regional innovation strategies work because they actively identify and leverage a region's unique competitive strengths. They involve universities and other R&D centers as catalysts of innovation. They nurture networks for business financing, business-to-business sales, education, workforce development, and high-growth industry formation. These innovation clusters are particularly effective vehicles for sustainable economic growth in a global knowledge-driven economy. Regional innovation clusters reach every region and benefit every segment of the population, from people with general equivalency diplomas to those with PhDs. This approach is applicable to both rural and urban areas because economies function as interconnected systems supporting each other and innovation increases efficiencies resulting in increased competitiveness. Ultimately, clusters provide a means to identify and leverage a region's competitive advantages, overcome its weaknesses, and mitigate any long-term economic threats. This strategy represents an important tool for helping historically disadvantaged and distressed communities and businesses become more competitive.

A key vehicle for implementation will be through the Regional Innovation Program authorized by the America COMPETES Reauthorization Act.

Similarly, EDA envisions a regional approach to support the President's Wireless Innovation and Infrastructure Initiative by leveraging public and private community investments.

Foster Economic Resiliency

Resiliency—the ability to plan, prepare, and respond to various events—is critical to ensuring sustainable economic prosperity and growth. EDA recognizes that all communities are susceptible to natural and man-made disasters and has focused its programs to provide a robust array of resources to help communities plan, prepare, and respond to such events.

EDA's diverse programs provide critical resources capable of helping communities impacted by man-made and natural disasters. Such disasters can dramatically shape a community. In many cases, when a community faces a significant disaster businesses and citizens leave, the tax base shrivels, and the community faces enormous obstacles on the path to recovery. These obstacles necessitate a comprehensive approach to assessing and responding to the crisis. EDA's ability to fund planning, capital, infrastructure, and technical assistance uniquely positions it to help communities revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business creation and expansion, foster sustainable manufacturing, diversify regional economies, and generate or retain long-term, private-sector jobs and private investment.

Promote Minority Business Development

MBDA fully supports Department efforts to ensure the full participation of businesses that are minority-owned competing in the United States and the global market. MBDA works to remove barriers to entry and open doors to economic opportunity. MBDA successfully provides minority business development services to minority business enterprises (MBE) through a network that includes MBDA staff and its funded centers (grantees). MBDA's staff and network of funded centers provide management and technical assistance and offer business services to grow and expand local minority firms. MBDA has initiated a series of business-to-business forums to encourage MBEs to partner with other firms, form joint ventures, and sign mentor-protégé agreements. This will encourage enterprises with increased capacity and competitiveness to sustain development within the minority community. MBDA will continue efforts to maximize job creation and to assist MBEs in obtaining financial and contract awards.

Maintain Strategic Growth Initiative

The long-term goal of achieving entrepreneurial parity for MBEs remains a benchmark by which MBDA's critical federal government role should be measured. The Strategic Growth Initiative (firms with \$500,000 or more in annual sales or with rapid growth potential) introduced by MBDA in FY 2004 was designed to address the issue of sustainable business growth and development for MBEs beyond the micro-enterprise stage, as too many minority businesses were small and start-up firms. The MBDA Strategic Growth Initiative has made progress providing performance dividends for minority businesses. Many high-growth minority firms have successfully competed for larger prime contracts and financial awards, and have had a significant economic impact within the minority community and overall economy. MBDA will continue to focus on services for Strategic Growth Initiative that have a capability to expand, make an economic impact in their communities, and create new jobs. It is expected that overall annual receipts for client firms assisted will grow by \$50,000 each year. Larger firms will increase capacity by obtaining new contracting opportunities and financial awards with a continued growth in sales.

Expand Global Competitiveness for MBEs

To increase the size, scale, and capacity of MBEs, MBDA will work to foster global competitiveness through a Global Export Initiative and a newly created Global Construction program. As minority-owned firms are twice as likely to export compared to non-minority-owned firms, MBDA brings a unique perspective, leadership, energy, and service to the Administration's National Export Initiative (NEI). MBDA's Global Construction program includes a training program for 150 minority-owned construction firms, developing global contracting skills, and allowing them to compete in a program for over \$1 billion in private-sector contracting opportunities. MBDA is also offering MBEs the opportunity to participate in an overseas private investment corporation enterprise development network.

KEY CHALLENGES

Regions are the economic driver of national prosperity, and as such, they serve as the organizing framework upon which economic development efforts should be directed for maximum benefit. And yet, too often economic development efforts are developed and implemented in parochial, siloed ways. Regional assets that could be leveraged to mitigate challenges of a community are not leveraged, solutions are not considered in broad terms, and thus do not afford the broadest impact, especially for distressed and disadvantaged communities and businesses. EDA aims to provide resources to help local and regional decisionmakers understand the importance of implementing collaborative regional innovation strategies that build upon the unique assets of the region to mitigate challenges and increase competitiveness. EDA has had an important role in supporting the emerging federal strategies for place-based development efforts.

MBDA faces internal challenges as it addresses numerous environmental factors. Agency management will need to make critical program decisions that ensure optimal service delivery and administrative efficiencies. A significant focus will be on grants management, monitoring of funded centers, and operation of the Regional Enterprise Centers. Related to this effort will also be the need to maintain accountability for the accomplishment of overall performance, efficiency, and productivity metrics by MBDA-funded centers. Another critical factor will be the timely verification and validation for performance outcomes by MBDA staff.

MBDA will also need to examine capital access for MBEs since it has increasingly become more difficult for them to obtain capital due to stress on the capital markets. Key to many of MBDA's efforts will be its success in advocating and promoting program services and marketing MBEs nationwide. MBDA will strive to improve its Web-based tools and information technology to better service its clients.

Additional efforts to serve more clients include the establishment of public-private partnerships to better service funded centers and constituents and to offer additional business-to-business forums to encourage joint venture opportunities. MBDA will also seek to work with minority financial institutions to further support the efforts of its network of funded centers.

EXTERNAL FACTORS

EDA programs are not intended to work alone, but to increase the availability of outside capital (both public and private) for economic development efforts to result in firm creation/expansion, job creation, and long-term prosperity of regions across the country. Fostering collaborative regional innovation and economic resiliency is difficult because of a wide range of externalities, including issues related to the composition and education of the workforce and obstacles related to the geography, climate, and/or natural resources of particular regions.

MBDA recognizes environmental factors that will impact operations during the balance of the decade. An objective of MBDA is to achieve entrepreneurial parity for minority business enterprises. Entrepreneurial parity is achieved when the level of business activity of a business group is proportional to that group's representation in the U.S. adult population. The 2007 Survey of Business Owners data show a rapidly growing minority business population, however the share of minority businesses continued to lag behind the representation of minorities age 18 and above in the U.S. population. The minority population in the United States represents 35 percent of total population, while minorities own 22 percent of classifiable firms and generate just 9 percent of the total gross receipts.

While MBEs made a substantial contribution to the U.S. economy, they are now facing significant and disproportionate challenges in the current environment as they rely heavily on lines of credit and are often denied opportunities due to contract bundling. These factors, along with the restructuring of the corporate supply chain will make it more difficult for MBEs to compete.

Another external factor is the continued increase in immigration that will add potential new minority clients seeking business services. New job creation will be required to support this increase. The globalization of the competitive marketplace will continue to move toward outsourcing and foreign competition. These existing obstacles challenge minority-owned firms, however, business free trade agreements (FTA) and the President's NEI can certainly provide opportunities for MBE participation.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

EDA assists economically distressed and historically disadvantaged communities and businesses by providing strategic investments that can help communities become more competitive, including:

- **Strategic Economic Development Planning.** EDA, through its Partnership Planning investments, provides strategic economic development planning to help communities understand how they can leverage their regional assets to make their community more competitive. These types of investments can be critical when, for example, plant closures lead to a significant deterioration in the region's economic prospects. Communities may use strategic planning investments to create an action plan to stabilize their local economy and then develop a regional strategy that re-thinks their economic future and enables the region to grow in new and sustainable directions. For example, EDA provided a strategic planning grant to the Economic Council of St. Louis County, the State of Missouri Department of Economic Development, and the City of Fenton, MO, to fund a strategic plan to address the closure of the Chrysler auto manufacturing plants in the City of Fenton, near St. Louis, and a plan for eventual re-use of the sites. This public-private partnership is working to identify opportunities to replace the jobs lost and expand employment by creating a stronger and more diversified regional economy, able to compete in the global marketplace.
- **Technical Assistance.** EDA provides technical assistance in several forms, including feasibility studies, impact analyses, or initiatives to promote entrepreneurship. For example, EDA recently provided a strategic investment to JumpStart, a non-profit whose programs focus on preparing the northeast Ohio region to transition from old-line, manufacturing industries to a high-tech, entrepreneurial-based economy. EDA supports JumpStart's outreach to, and development of, entrepreneurs in the region's 21 counties, an area that is among the hardest hit by the recent economic decline and the foreclosure crises.
- **Infrastructure Construction.** EDA, through its 21st Century Innovation Infrastructure (formerly Public Works) and Economic Adjustment Assistance programs, provides investments to help distressed communities revitalize, expand, and upgrade their physical infrastructure. EDA provides investments to help facilitate the transition of communities from being distressed to becoming competitive in the worldwide economy by the development of key public infrastructure such as technology-based facilities; R&D commercialization centers; facilities for workforce development; wet labs; multi-tenant manufacturing facilities; research, business, and science parks with fiber optic cable; and telecommunications infrastructure and development facilities. In addition, EDA continues to invest in traditional infrastructure, including water and sewer system improvements, industrial parks, business incubator facilities, expansion of port and harbor facilities, skill-training facilities, and the redevelopment of brownfields.
- **Capitalization of Revolving Loan Funds (RLF).** EDA provides resources to support the capitalization or re-capitalization of RLFs, which enable the recipient to make loans at interest rates that are at or below market rate to small businesses or to businesses that cannot otherwise borrow capital. As the loans are repaid, the grantee uses a portion of interest earned to pay administrative expenses and adds remaining principal and interest repayments to the RLF's capital base to make new loans. A well-managed RLF award actively makes loans to eligible businesses and entities, continues to revolve funds, and does not have a termination date.
- **Regional Innovation.** EDA will use this program, authorized by the America COMPETES Reauthorization Act, to support regional economic competitiveness through planning, capacity building, and capital projects.

The mission of MBDA is to foster the growth and global competitiveness of U.S. businesses that are minority-owned. MBDA works to remove barriers to entry and open doors to economic opportunity, through five base programs, including:

- **Minority Business Public-Private Partnerships.** The network of MBDA Business Centers and Native American Business Enterprise Centers are comprised of for-profit entities, non-profit entities, state and local governments, tribal entities, and institutes of higher learning. MBDA's network of funded centers (grantees) operates under cooperative agreements. The centers provide an array of business counseling and development services to the minority business community and work in full collaboration with MBDA field staff.

- **Minority Business Direct Federal Client Services.** MBDA staff and resources provide direct collaboration with MBDA-funded centers, one-on-one client service delivery, referrals, resource matchmaking, business-to-business teaming facilitation, as well as indirect service delivery through electronic means. The MBDA units responsible for this program are the Office of Business Development and MBDA's field offices.
- **Minority Business Advocacy and Outreach.** This program is responsible for establishing and maintaining positive relations between the Agency, members of Congress, the White House, and other government entities; and coordinating the Agency's Congressional and intergovernmental activity with the Department's Office of Legislative and Intergovernmental Affairs. The program is also responsible for the development and implementation of strategic alliances with public and private sector organizations, trade associations, education institutions, and business advocacy groups.
- **Minority Business Policy and Oversight.** The National Director leads the Agency in promoting the growth and competitiveness of MBEs nationwide. This program coordinates the plans, programs, and operations of the Agency to strengthen MBEs. The program also oversees and produces research studies, reports, and fact sheets to increase the body of knowledge on minority-owned businesses.
- **Office of Native American Business Development.** This office is engaged in identifying opportunities in the areas of federal procurement, energy, manufacturing, international trade, and financial services for Native American constituencies. This office collaborates with other federal agencies, Indian Nations, and industry to provide leadership in Indian economic development. Other activities include conducting outreach to private sector companies and other minority businesses to collaborate in building private and public partnerships for developing sustainable economies in Indian country.

The Census Bureau's Local Employment Dynamics (LED) program creates new labor market information with unprecedented industry and geographic flexibility and details that can help to define or identify regional innovation cluster centers. Several academic and research institutions already recognize this potential. The LED program provided technical assistance in response to questions and interest about the recent EDA solicitation for mapping regional innovation cluster centers.

The LED program also has been providing labor market information to communities affected by disasters for a number of years. Recently these disasters have included hurricanes in the Gulf, wild fires in California, floods in Iowa, tornados in Illinois, and even the bridge collapse in Minnesota. LED program information has provided a detailed breakdown of the characteristics of the workforce such as age, gender, earnings, and industry broken down by geography. The LED program application known as OnTheMap provides a unique picture by showing, visually on a map, the relationship of where people work and live.

In July 2010, the LED program, in cooperation with National Oceanic and Atmospheric Administration's (NOAA) National Hurricane Center, developed a sophisticated version of OnTheMap called OnTheMap for Emergency Management: Hurricanes. This application provides real-time tracking of a hurricane with a direct feed from the National Hurricane Center. As the hurricane makes landfall, the LED program begins to generate information on the jobs and characteristics of workers that might be affected by the hurricane.

Census Bureau programs are more fully addressed under Objective 14.

PROGRAM EVALUATIONS

All agencies within the Department conduct program evaluations and track progress of their programs. EDA reviews performance on its programs through annual self-evaluations, GPRA performance measurement reporting, program base reviews, and quarterly balanced scorecard performance measure evaluations.

Additionally, EDA utilizes critical performance measures to determine the overall effectiveness, usefulness, and success of its programs in meeting the needs of the Nation; including GPRA performance measures, balanced scorecard objectives and performance measures,

dashboards, annual performance plans, strategic plans, customer satisfaction surveys, organizational assessment surveys, and other program-specific measures.

In FY 2010, EDA promoted a comprehensive innovation index (developed in collaboration with the Indiana Business Research Center) that would allow economic development practitioners to identify user-defined geographies and evaluate the innovation potential of their region. It also provided an overall innovation performance score for a particular region and allows users to determine how they compare to other regions across the Nation.

MBDA will continue to engage in performance evaluations to develop appropriate performance measures. These efforts will ensure that overall Agency performance is accurately related to stakeholders and the U.S. taxpayer. MBDA contracts with the Federal Consulting Group at the Department of the Treasury to measure customer satisfaction and to establish an American Customer Satisfaction Index (ACSI). The ACSI survey is conducted every other year and provides valuable feedback on performance related activities and measures. MBDA continuously makes process improvements based upon the ACSI findings and recommendations.

OBJECTIVE 7: PROMOTE THE VITALITY AND COMPETITIVENESS OF OUR COMMUNITIES AND BUSINESSES, PARTICULARLY THOSE THAT ARE DISADVANTAGED OR IN DISTRESSED AREAS

BUREAU	PERFORMANCE MEASURE
EDA	<ul style="list-style-type: none"> ● Private sector dollars invested in distressed communities as a result of EDA investments ● Jobs created or retained in distressed communities as a result of EDA investments ● 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 (EDD) program ● Percentage of University Center (UC) clients taking action as a result of the UC assistance ● Percentage of those actions taken by University Center clients that achieve the expected results
MBDA	<ul style="list-style-type: none"> ● Dollar value of contract awards to minority business enterprises ● Dollar value of financial awards obtained ● Number of new job opportunities created ● Satisfaction rating for the American Customer Satisfaction Index (ACSI) ● Cumulative economic impact

OBJECTIVE 8

Improve the competitiveness of small and medium-sized firms in manufacturing and service industries

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Increase the Productivity, Efficiency, Profitability, and Competitiveness of Manufacturers

NIST's Manufacturing Extension Partnership (MEP) provides manufacturers with access to manufacturing experts available to assist in identifying growth strategies, adopting new technologies; developing innovative products; and implementing process innovations to improve their productivity, efficiency, profitability, and competitiveness.

MEP collaborates with governments, universities, community colleges, and the private sector, to transform U.S. manufacturers into a more efficient and powerful engine of innovation that drives economic growth and job creation.

MEP's network of field staff provides the services that reduce manufacturers' bottom-line expenses and increase efficiency while offering tools to improve manufacturers' top-line growth with the development of new sales, new markets, and new products.

MEP concentrates on five critical areas: technology acceleration, supplier development, sustainability, workforce, and continuous improvement. With a focus on increasing the competitiveness of the industry and its firms, MEP works at a deep, strategic level with firms placing emphasis on cutting costs by 20 percent and increasing revenue by 20 percent.

The wealth of unique tools, services, and resources offered by MEP positions MEP clients to achieve higher profits, save time and money, invest in physical and human capital, and create and retain thousands of jobs.

Strengthen the Competitiveness of U.S. Firms in Manufacturing and Service Industries to Increase Trade

ITA combines its analytical capabilities with its international and industry knowledge to provide recommendations, which advance the competitiveness of U.S. manufacturing and service industries. ITA administers programs to research and analyze U.S. industries to identify opportunities and challenges. For example, ITA uses its industry expertise and contacts to help other federal agencies design rules and regulations that achieve public goals in a more efficient manner. ITA is working with industry, the Department of Transportation, and other agencies to highlight the importance of improving U.S. supply chain and transportation infrastructure.

ITA supports the interests of U.S. companies and industries in the Federal Regulatory Review process by evaluating the effects of domestic regulatory policies on the ability of U.S. manufacturing and service industries to compete successfully.

ITA has an economic analysis program that provides analysis of policies that impact U.S. manufacturing and services industries. For example, the program is evaluating the economic effects of climate change policies.

The Market Development Cooperator Program (MDCP) provides federal assistance to trade associations, chambers of commerce, and other industry groups that assist SMEs. Such groups compete for MDCP partnerships that help to underwrite the costs of competitiveness enhancement projects that these groups are often reluctant to undertake without federal government support.

ITA also administers the Export Trading Company Act to help primarily small and medium-sized firms improve their competitiveness in international markets. The *Export Trade Certificate of Review* provides limited antitrust immunity to U.S. exporters, enabling them to form export joint ventures that allow for lower costs and long-term presence in foreign markets.

Increase Exports and to Maximize U.S. Business Competitiveness through Work on International Standards and Policies to Support the National Export Initiative

Differences in standards-related trade measures can impede U.S. exporters' access to foreign markets, and particularly affect small and medium-sized exporters if the differences between a standard for a foreign market differs significantly from the United States and the cost to comply is relatively high. Since the U.S. standards system is market-driven, ITA works in cooperation with the private sector on standardization issues and works to identify areas where U.S. industry should engage in standardization activities.

ITA's network of trade specialists shares information on standards-related trade issues, domestically and internationally. ITA staff engage in international standardization work where there are public policy implications, and engage in standardization activities in treaty organizations. ITA uses bilateral meetings and multilateral/World Trade Organization (WTO) forums to resolve standards-related obstacles to trade through the Department's Trade Agreements Compliance Program.

KEY CHALLENGES

To maximize its effectiveness, MEP must not only respond rapidly to its clients' changing needs, but also must anticipate changes in the business environment facing smaller manufacturers, and devise new products and services to address their needs.

Access to capital has also been a challenge. MEP is working to help companies more effectively access available programs at all levels of government as well as helping companies understand how to present their business so that it is understood and valued properly by the financial community.

The global economy presents intense competition from foreign suppliers in the export market. Accordingly, U.S. companies need to explore new products, markets, processes, and sources of finance. By considering new markets and emerging industries, and by improving processes to be more productive, companies can find new ideas to become more competitive.

Other countries' standardization policies sometimes differ from that of the United States, which can make it more difficult for foreign officials to understand the benefits of the U.S. market-led system, and sometimes present market access barriers. With governments in other countries playing a more directive role in standards policies, the United States has limited leverage to effect change in other countries' standards-related measures.

EXTERNAL FACTORS

Technology and globalization have fundamentally changed many manufacturing companies and products. The changes have resulted in an era of increased cost pressures, shortened product life cycles, rapidly diffusing technology, and production chains that involve a network of suppliers.

Success in today's manufacturing environment requires not only an efficient production system but also developing business strategies that highlight the unique capabilities of a firm. Manufacturers must master innovative product design, understand the benefits of adopting environmentally sustainable processes, invest in human and physical capital, leverage a range of financing options, realize international trade opportunities, and forecast future customer demands.

As discussed above, many lenders have become risk averse in the current economic climate, due to a combination of increased reserve requirements from bank regulators, and the general downturn in manufacturing and consumer demand.

Nowhere is risk aversion so prevalent—because it is so difficult to assess both risks and opportunities without experience—than breaking into export markets. However, export markets present some of the strongest growth opportunities in today's economy for the following reasons:

- Economies such as China, India, and Brazil have rapidly expanding middle classes;
- The world economy is recovering more quickly from the current recession relative to the U.S. recovery; and
- Recovery in the consumer and housing markets are softer than they were in the recoveries from recent past recessions.

These factors suggest that although there is risk in developing ability and experience in exporting there is also likely great reward.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

Developed by MEP and the U.S. Commercial Service, ExporTech is the how-to program that enables companies to enter or expand into global markets quickly and efficiently by connecting them with an array of expert resources and helping them develop a customized, international growth plan. For the past four years, MEP, along with the U.S. Commercial Service and local MEP and business assistance centers, has been working with manufacturers to increase their exports. So far, MEP has completed 28 ExporTech projects in 18 states with a total of 230 companies participating.

ITA leverages its industry and economic expertise to strengthen the competitiveness of U.S. industry through a variety of programs and policies. ITA supports this objective by combining its analytical capabilities with its in-depth international and industry knowledge to implement its programs and to provide recommendations to improve U.S. business competitiveness.

The Department will also increase outreach to small business manufacturers to increase their participation in the Department's acquisitions.

PROGRAM EVALUATIONS

MEP's internal performance management system provides five avenues through which the program collects and evaluates performance data and provides managerial review and oversight of the centers:

Operating Plan. Each center prepares an operating plan annually (linked to its strategic plan) that outlines the proposed nature and level of activities and results for the coming year. The operating plan, reviewed and approved by MEP, forms the basis for monitoring progress throughout the year.

Quarterly Data Reporting. Each center reports data on a variety of activities each quarter. Major elements of quarterly reporting include progress data, progress narrative, activity data log (which forms the basis for the client impact survey), partner and affiliate information, and client success stories.

Annual Review. Each year, prior to renewal of federal funding, each center is reviewed by MEP. The reviews are strategy oriented, focusing on linked strategic-operational plans and performance-based results. The review is conducted by the MEP program officer assigned to monitor that center. Each review is documented in the form of a written report, provided to the center for implementation of recommendations, and is part of the center renewal package.

External Panel Review. The MEP statute requires each center be reviewed by an external panel during years three and six, and every two years thereafter. The panel reviews are managed and chaired by MEP using the Center Progress Report. The center prepares the Center

Progress Report, which includes the center profile, strategic and operational plans, and quantitative performance-based results. The center and panel meet to discuss and clarify the written report and suggested recommendations, and develop a written report that documents results of the process. These are delivered to the center for implementation.

Third Party Client Survey. Since 1996, MEP has sponsored a national survey of center clients by an independent third party. The survey asks clients to comment on the business impact of the services provided by their local center. These surveys are done for two primary purposes:

- Collect aggregate information on program performance as indicators of performance. The survey provides information about the quantifiable impact on client firms of the services provided by MEP centers.
- Provide center-specific program performance and impact information for center use. Centers use the information to communicate results to their own stakeholders at the state and federal level. Center management and MEP use it to evaluate center performance and effectiveness.

The MEP Center Review Criteria and review process places strong emphasis on a center’s ability to demonstrate impacts and uses the survey results in its program reviews. The results also provide MEP centers with a tool to measure their individual performance against other centers and performance standards. The data also allow MEP to gauge the impact of the national MEP network on small manufacturers and on the national and regional economies.

ITA’s MDCP partners, or “cooperators,” are required to report quarterly on their project success. All cooperators report the value of export sales, the export destination market, and the identity of each U.S. exporter reporting sales. In addition, each cooperator reports its progress on measures unique to its project.

ITA also requires that small and medium-sized firms that are certificate holders of the Export Trading Company Act program to submit annual reports to ITA regarding their performance under the certificate. This information becomes part of the record for each certificate and provides a basis for evaluating the program. ITA uses the annual reports to ascertain the performance of the program as a whole.

OBJECTIVE 8: IMPROVE THE COMPETITIVENESS OF SMALL AND MEDIUM-SIZED FIRMS IN MANUFACTURING AND SERVICE INDUSTRIES	
BUREAU	PERFORMANCE MEASURE
ITA	<ul style="list-style-type: none"> ● Exports generated annually from public-private partnerships ● Annual cost savings resulting from the adoption of MAS recommendations contained in MAS studies and analysis
NIST	<ul style="list-style-type: none"> ● Number of clients served by MEP centers receiving federal funding ● Increased sales attributed to MEP centers receiving federal funding ● Capital investment attributed to MEP centers receiving federal funding ● Cost savings attributed to MEP centers receiving federal funding ● Number of firms adopting sustainable practices through MEP¹

¹ This is a Department priority goal to be completed by the end of FY 2011.

TRADE PROMOTION AND COMPLIANCE GOAL:

IMPROVE OUR GLOBAL COMPETITIVENESS AND FOSTER DOMESTIC JOB GROWTH WHILE PROTECTING AMERICAN SECURITY

The Department's third strategic goal under the economic growth theme, Trade Promotion and Compliance, strives to increase U.S. export value through the National Export Initiative (NEI), to ensure effective export control and trade compliance, to maximize U.S. competitiveness through the use of influential U.S. standards and policies, and to ensure that the trade remedy laws are enforced. The effective performance toward this goal contributes to improving the Nation's economy.

MAJOR ELEMENTS OF THE GOAL

Increase U.S. Export Value

Through ITA, the Department contributes to the NEI which aims to double U.S. exports by improving advocacy of U.S. exporters, enforcing trade rules, and promoting policies resulting in sustained economic growth. These activities are expected to result in increased U.S. export value. ITA's U.S. and Foreign Commercial Service plans to support exports by providing targeted market research, counseling, and services to U.S. exporters. ITA will further this support by increasing the number of foreign buyers that attend U.S. trade shows, working with public and private-sector partners to both expand outreach to U.S. small and medium-sized enterprises (SME) and to encourage U.S. export to foreign countries, and introducing additional companies in high-growth sectors, including renewable energy and energy efficiency, to promising international markets. As a component of the national initiative, ITA is focused on increasing the number SMEs assisted in exporting to a second or additional country.

Implement Effective Export Control Reform

Driven by the President's call for an Export Control Reform Initiative, the Bureau of Industry and Security (BIS) is contributing to accomplishing the initiative's key recommendations of establishing a single control list, a single primary enforcement coordination agency, a single 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.

Develop and Influence International Standards and Policies

NIST contributes to this goal by working closely with U.S. industry, standards developers, and other government leaders in the global standards community to build a standards infrastructure that supports innovation and creates opportunities for business to thrive. The institute develops measurement tools to support the manufacturing industry, standards organizations, and friendly foreign governments, among many other beneficiaries. These tools assist manufacturers by providing precision for advanced manufacturing, including quality control and reproducibility. Interoperable standards, used in Smart Grid and health IT, is another critical area where NIST provides confidence in industry standards.

ITA's trade specialists share information on international and standards-related trade issues and engage with treaty organizations in standardization activities. ITA works to resolve standards-related obstacles to trade in multilateral World Trade Organization (WTO) forums

and through ITA's Trade Agreements Compliance Program. ITA works with the private sector on standardization issues and on identifying areas where U.S. industry should engage in standardization activities.

NTIA contributes by promoting international trade for telecommunications devices, increasing the pace of business. The Agency influences policy development in international forums for the benefit of the United States, and contributes to the development of Internet policies and innovations that foster economic growth.

Enforce U.S. Fair Trade Laws

ITA's Import Administration (IA) ensures fair trade compliance to mitigate the impact of unfair trade practices on U.S. exporters. IA also identifies instances of unfair dumping, subsidization and government support, thereby helping to ensure that U.S. firms and workers compete on a level playing field. IA also works to minimize the impact of improper trade remedy actions taken by other countries that impair the ability of U.S. companies to sell their products overseas. The Agency works with U.S. Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), Department of Justice (DOJ), and U.S. Trade Representative (USTR) to resolve antidumping and countervailing duty (AD/CVD) issues.

BUREAUS CONTRIBUTING TO THIS GOAL

ITA's Import Administration (IA) program works to minimize unfair trading practices and provide relief where fair trade laws are violated. IA works to educate U.S. firms about fair trade laws, including AD/CVD, and provide government assistance where exporters are negatively affected by unfair trade practices. ITA's Market Access and Compliance (MAC) program works with other trade-related U.S. agencies to mitigate the effects of trade barriers. The program benefits exporters by providing information on which foreign markets are traditionally compliant and by aiding in the development of market access strategies.

BIS improves the effectiveness of national security by controlling exports of dual-use goods to reduce the threat and likelihood of terrorism, by participating with other nations to control export of sensitive materials, and by providing analysis on the impact of export control on important U.S. industries.

OBJECTIVE 9

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Expand Export Promotion of U.S. Goods and Services to Spur Economic Growth and Job Creation

Ninety-five percent of the world's customers and fastest growing markets are beyond our borders. So if we want to find new growth streams, if we want to find new markets and new opportunity, we've got to compete for those new customers—because other nations are competing for those new customers."

President Barack Obama, July 7, 2010

At a time when such traditional drivers of U.S. economic growth as consumer and business spending are strained, exports are vital to U.S. economic recovery and job creation in the near-term and the foundation of a sustainable growth model in the long term. With four-fifths of the international economy and 87 percent of world economic growth in the next five years forecasted to be outside of the United States, exports are the fuel needed to power the U.S. economy. Exports are also critical to supporting a healthy and vibrant U.S. manufacturing sector. In 2008, U.S. exports accounted for nearly one in three manufacturing jobs as well as 10.3 million jobs economy-wide. Despite sluggish job growth elsewhere in the economy between 2003 and 2008, export-related jobs in the United States actually increased by nearly three million during this period and also paid higher wages on average. After dropping off in the first half of 2009 due to the global financial crisis, exports and export-supported jobs started to rebound in the second half of the year and have been a key source of growth in 2010.

Although U.S. exports as a percentage of GDP in 2008 reached the highest level in almost a century, the United States (13 percent) still lags well behind most of its competitor nations, such as Germany (47 percent), China (37 percent), and the United Kingdom (29 percent). Many U.S. companies do not export, or export less than they could, because they don't have the resources or internal capabilities to identify promising new business opportunities in foreign countries or overcome the obstacles to enter these markets. To help U.S. companies boost their exports and create and sustain jobs, President Obama announced the NEI in January 2010 with the goal of doubling U.S. exports in five years and supporting two million U.S. jobs. Since the NEI was announced, the President has signed an executive order and formed an Export Promotion Cabinet of top Administration leaders to coordinate a government-wide export promotion strategy. The Department and ITA play an instrumental role in implementing this initiative and will take the necessary steps to organize the entire 20-agency federal effort, under the Trade Promotion Coordinating Committee (TPCC), to provide on-the-ground services worldwide to link U.S. companies to export opportunities, and open markets and ensure a level playing field overseas. As part of the NEI, ITA will expand the promotion of U.S. exports by increasing the number of trade specialists in its offices around the world to enhance its support for U.S. businesses.

While continuing to help U.S. companies through all phases of the export process— from export-readiness training to post-sales support—ITA's export promotion expansion will focus initially to help current exporters expand to more markets. To do so, ITA will find the best markets for their goods and services and increase the number of opportunities for them to meet foreign buyers and complete sales transactions. This includes leading more trade missions; bringing more foreign buyers, distributors, and partners to U.S. trade shows; and providing more business-to-business matchmaking services to U.S. companies. To "grow the pie" and turn more of today's businesses into tomorrow's exporters, ITA will then focus in the mid-term on developing more U.S. exporters by educating, training, and connecting potential exporters to global markets.

ITA will focus on increasing U.S. exports to major emerging markets—Brazil, India, and China—where there is rapid growth and more new customers. ITA will also focus on engaging high-potential, population-intensive, public-procurement driven markets—Vietnam, Saudi Arabia, Turkey, Colombia, South Africa, and Indonesia—to reserve a place for U.S. exporters in markets of the future. These markets may not be the right markets for every company and sector so ITA will avoid a one-size-fits-all approach and continue to link U.S. companies to markets where their prospects for success are most promising. In addition, ITA will employ a regional strategy to help companies fully benefit from their initial foray into a region. This will be especially true in the Association of Southeast Asian Nations (ASEAN), Central America Free Trade Agreement (CAFTA), Gulf states, European Union, and North American Free Trade Agreement (NAFTA) regions where there is a commercial dynamic highly conducive to U.S. exports, such as where there are existing FTAs, transparent rules of law, or a high concentration of emerging markets. ITA will also focus on industry sectors where there is a high-growth potential and U.S. competitive advantage—such as services, renewable energy, and environmental and other advanced technologies—while continuing to help U.S. companies across the industry spectrum achieve their export objectives.

The Census Bureau compiles critical measures on U.S. exports and profiles the U.S. exporting companies. These measures include export information by company type, employment size, market share, world market, number of exporting companies, and dollar value. This information is essential for ITA to develop their outreach strategy and will be provided to ITA bi-annually to ensure the success of this objective and under the President's NEI. In addition, the Census Bureau has begun tracking the number and value of exporting companies and the number and value of new exporting companies on a quarterly basis as a measure of the success of ITA's outreach activities.

Help More U.S. Small and Medium-sized Enterprises Become Successful Exporters

Business innovation and job creation in the U.S. economy is often driven by SMEs, so they are essential to the Nation's economic recovery. In fact, SMEs accounted for nearly two-thirds of the jobs created in the United States between 1992 and 2009. In the coming years, this force of SME business innovation and job creation will need to continue to drive U.S. export competitiveness. ITA's enhanced export promotion efforts will be primarily targeted toward bringing the global marketplace within reach of SMEs, which account for almost 97 percent of U.S. exporters, but less than one-third of the total U.S. export value. SMEs tend to face more impediments than large companies in expanding their exports because of their relatively limited resources. SMEs often face a steep learning curve and major information gaps when it comes to exporting due to imperfect access to information on overseas market opportunities and reliable partners in foreign countries. This is reflected in the fact that nearly two-thirds of SME exporters only export to one foreign country. To help SMEs overcome the hurdles to entering new markets, ITA has adopted a priority goal of increasing the number of SMEs that enter a second or additional market with ITA's assistance.

To achieve this goal, ITA will increase outreach to SME exporters and fully leverage its global network to help these companies develop and implement market entry and expansion plans. This includes providing ITA's know-how in the adaptation of product design, pricing, and other elements of the marketing mix to the local market. Since insufficient marketing is another critical barrier to success for SMEs overseas, ITA will upgrade promotional support and representation at international trade shows and fairs as well as assistance with new product launches and technical seminars. It is often difficult for SMEs to find the right buyers, distributors, and other strategic partners in foreign markets. Hence, ITA will ramp up its business-to-business matchmaking services for SMEs. ITA will bring the global marketplace to them by leading more foreign buyer delegations to the United States and increasing the use of technology to offer virtual matchmaking services. ITA will also continue to provide SMEs with due diligence reports to enable them to make informed business decisions when evaluating potential international business partners.

Enhance Public-Private Partnerships and Government-wide Coordination of Export Promotion Programs

ITA recently developed an innovative public-private partnership with U.S. global shipping companies—FedEx, UPS, and the U.S. Postal Service—to increase outreach to SME exporters. This effort builds on the knowledge and market reach of these partners to target U.S. businesses that only export to one or two countries in order to help these businesses expand to additional markets. ITA began establishing strategic partnerships with the private sector in FY 2003. To date, ITA has strategic partnerships with AON Corporation, Baker & McKenzie, City National Bank, Comerica Inc., FedEx, FITA online, Lufthansa, Manufacturers and Traders Trust Company, National Association of Manufacturers, PNC Bank, Reed Exhibitions, TD Bank, ThinkGlobal Inc., Trade Center Management Associates, TÜVRheinland, UPS, U.S. Postal Service, U.S. Council for International Business, and Zions Bank. These partnerships allow ITA to leverage the resources and expertise of its partners and increase access to ITA's programs and services. ITA will add new partners and increase its collaboration with the private sector, including businesses, trade associations, lenders, District Export Councils, and chambers of commerce to enhance its ability to assist SMEs to grow internationally.

In addition, ITA will improve coordination of its export promotion efforts with state, local, and other federal agencies to multiply its impact and avoid any overlap in services. Through the TPCC, which is chaired by the Secretary of Commerce and the Export Promotion Cabinet, ITA will work with other federal agencies to execute a government-wide strategic plan for implementing the NEI, early September 2010. This plan, along with the annual National Export Strategy, will focus on agency coordination, the government's core export promotion services, and outreach to current and potential exporters. The Secretary of Commerce, on behalf of the President, has already directed senior officials throughout the government to include commercial issues as part of their agenda in communications with their counterparts overseas.

Identify and Resolve Unfair Trade Practices, Monitor and Ensure Compliance with Trade Agreements, Reduce Barriers for U.S. Companies to Sell Abroad, and Develop a Global Economic Environment that Fosters Fair Trade

Although ITA's export promotion programs can be extremely helpful in assisting U.S. firms to become more active and effective players overseas, there are a variety of barriers to market access imposed by foreign government that can impede even the best prepared U.S. company from entering or expanding into a foreign country. Many U.S. companies, particularly SMEs, do not have the resources, knowledge, or leverage to impact trade barriers. To make trade agreements work for U.S. firms and workers, and as a key part of the NEI, ITA will actively monitor them and work to ensure foreign government compliance with over 270 international trade agreements countries have entered into with the United States. To do so, ITA will continue to provide U.S. companies with a one-stop "trade complaint center" that makes it easy for them to obtain U.S. government assistance in reducing or eliminating foreign trade barriers, including the protection and enforcement of intellectual property rights (IPR). Trade barriers can be identified by ITA, other government agencies, or private businesses. Once a barrier is identified, a case team of ITA specialists will investigate the problem and develop a strategy to address it, working with the affected companies or industries to establish objectives and to implement plans to achieve market access and enhanced IPR protection. Non-successful cases may, if warranted, be referred to USTR for consideration for formal dispute settlement. ITA will also conduct an active outreach initiative to raise U.S. business awareness of their rights under trade agreements and of U.S. government assistance offered to overcome trade barriers.

In addition, ITA will further reduce trade barriers and work to develop a global economic environment that fosters fair trade by working with USTR on both a multilateral and bilateral/regional basis to negotiate trade agreements and policies that promote rule of law, administrative due process, regulatory transparency, and IPR enforcement abroad. ITA's independent analyses and assistance in supporting negotiations will be crucial to providing U.S. firms with new and increased opportunities to export their goods and services and protect their IPR overseas. This means ensuring the perspective of the U.S. business community is included in proposed trade policies and agreements in areas such as agriculture, climate change, standards, environment, biodiversity, food safety, competition, communications and the Internet, innovation, and worker rights. ITA will also promote the development of "soft law" approaches through policy dialogues by leading or supporting U.S. delegations to the Organization for Economic Cooperation and Development, CODEX Alimentarius, Asia Pacific Economic Cooperation, U.S.-China Joint Commission on Commerce and Trade, U.S.-ASEAN Enhanced Partnership, the CEO Forum with Brazil, and the U.S.-EU Transatlantic Economic Cooperation forum. In doing so, ITA will promote the adoption of best practices that reflect the types of transparency and due process requirements at the core of the U.S. administrative governance system, thus enabling the global competitiveness of U.S. firms.

Ensure U.S. Companies can Compete on a Level Playing Field when Bidding for Foreign Government Procurements and Advance and Protect U.S. Commercial Interests Abroad

In a given foreign country, purchases by the government can represent up to 15 percent of the country's total gross national product. This number equates to hundreds of billions of dollars per year in potential opportunities for U.S. exporters. However, intense domestic pressure on foreign governments to reserve procurements for their own suppliers combined with unfair trade practices by foreign competitors often tilt the playing field against U.S. companies. ITA will continue to work proactively to improve the system of international rules covering government procurements and increase the number of foreign governments bound by them so that U.S. firms can compete on a more level playing field. This includes supporting multilateral U.S. government efforts to bring the renegotiation of the WTO Agreement on Government Procurement to a successful conclusion and to spur important trading partners, including China, Jordan, and Saudi Arabia, to complete their accession to this agreement as well as assisting with the bilateral negotiation of a robust government procurement chapter in the Trans-Pacific Partnership FTA. At the same time, ITA will also enhance its advocacy assistance on a day-to-day basis to help U.S. companies bidding for foreign tenders to overcome practices that give foreign companies unfair competitive advantages, such as bribery, political influence on bid and tender processes, corruption, and institutional favoritism. As the lead agency for the U.S. government's advocacy efforts, ITA will coordinate the resources of the U.S. government to promote fairness and transparency and use U.S. political leadership to highlight the unique advantages of a U.S. company's bid. Some foreign tenders, due to their magnitude or strategic importance, will be highlighted to the National Security Council to ensure they receive the full attention of the U.S. government. ITA will also focus on creating more awareness among SMEs of the benefits of U.S. government advocacy assistance by increasing outreach to SMEs, especially in sectors that have significant export potential but have not historically sought advocacy assistance, such as renewable energy, infrastructure, medical, and other services.

ITA's commercial diplomatic efforts encompass a broad range of initiatives undertaken by commercial officers and locally-engaged staff at overseas posts. This includes developing relationships with host country government officials and business and civic leaders that enable ITA to respond quickly and effectively to requests for assistance from U.S. companies facing unfair trade practices. These discriminatory practices do not rise to the level of non-compliance with treaty obligations by foreign governments, but do nonetheless threaten the ability of U.S. firms to maintain and expand their exports. ITA will increase its commercial diplomatic presence overseas to help U.S. exporters overcome market access barriers and hidden risks in doing business internationally, especially in emerging markets where foreign governments discriminatorily change laws, contracts, and regulations more frequently. ITA will also increase its collaboration with other federal agencies to promote the adoption of U.S. standards around the world thereby strengthening the competitiveness of U.S. exports, solidify respect for IPR to protect U.S. innovations, identify export transactions that require financial assistance to succeed, provide USTR with accurate and timely information and assistance for new trade agreements, and shore up the United States's image abroad in order to enhance the appeal of U.S. goods and services.

KEY CHALLENGES

Availability of Export Financing for U.S. Companies, Particularly SMEs

While the credit freeze from the global financial crisis continues to thaw, export financing remains a significant challenge for many U.S. companies, particularly SMEs. Tight lending standards and reluctance to extend loans to SME exporters persist among many banks that perceive these loans as too risky, time consuming, or administratively costly. The U.S. government does fill gaps in export financing, especially for SMEs, in order to supplement private sector lending by providing working capital guarantees (pre-export financing), export credit insurance, and loan guarantees and direct loans (buyer financing). In addition to increased SME awareness of U.S. government export financing options, there is also a need to have more lenders participate in these programs since the majority of U.S. government assistance is in the form of guarantees that enable U.S. exporters to obtain loans from commercial lenders.

Competitiveness of U.S. Goods and Services in the Global Marketplace

To compete and thrive in the rapidly changing and increasingly interconnected global economy, U.S. businesses need to be innovative and adaptable to continuously improve their productivity and capitalize on evolving global market opportunities. This means being in the front of the pack when it comes to technological advancements, especially in renewable energy, energy efficiency, and other green technologies. With billions of workers competing for the world's jobs, it also means that U.S. workers need to maintain and develop their skills to ensure U.S. companies can produce their products domestically without risk of losing business to foreign competitors. The value of the U.S. dollar against other currencies is another potential obstacle to the price competitiveness of U.S. companies. As a result, the U.S. government is actively working to strengthen U.S. competitiveness in these areas while monitoring foreign currencies to ensure they are not manipulated by their central banks in order to gain an unfair advantage.

Commitment of U.S. Companies to Take the Necessary Steps to Increase Their Exports

Fundamentally, exports will provide Americans with good, high-paying jobs only if U.S. businesses choose to compete on the world stage. Federal, state, and local government agencies, including the Department and ITA, must encourage, facilitate, and support U.S. firms competing globally. ITA helps steer a U.S. company on the path to becoming a proactive and strategic exporter to multiple markets; however, success is contingent upon the company's commitment to do so. Even with a competitive and marketable product or service, there must be a conscious and concerted effort by the company to focus time and effort to exporting. Then, and only then, can ITA be truly effective as their global business partner.

EXTERNAL FACTORS

Strength of the Global Recovery and Extent of Realignment in World Economic Imbalances

Growth in U.S. export value will depend on the strength of the global economic recovery. As long as demand around the world continues to rise, U.S. exporters will have the opportunity to increasingly supply their goods and services to new and existing customers overseas. Although the world economy is showing signs of a sustained rebound, there is “unusual uncertainty” regarding the shifting global landscape and future tailwinds for growth. Will U.S. consumption continue to stagnate and have a ripple effect around the world? Will the European sovereign debt crisis fade into distant memory or remain a drag on its and the world's economy? Will China and other emerging markets be able to maintain accelerated growth? The answers to these questions are not yet known and will likely depend on the ongoing efforts of world leaders to support growth while rebalancing global demand in order to correct excessive external surpluses in certain markets and address large external deficits through fiscal adjustments in other markets.

Competitor Nations’ Intent on Increasing Their Export Value and Protecting Economic Growth

Many U.S. companies directly compete with foreign enterprises that have greater access to financing, subsidies, and other support from their home governments, including export promotion programs similar to ITA's. China continues to prop up its exporters through policies that make Chinese exports artificially cheap and abundant, such as export credit policies that do not adhere to the rules followed by the U.S. government as established within the Organization for Economic Cooperation and Development. Many U.S. competitors are also actively negotiating new trade and investment agreements that put U.S. exporters at competitive disadvantages in key markets. As foreign governments increasingly seek to support their economic growth, the threat of rising protectionism also looms on the horizon and poses a challenge to U.S. exporters should it intensify.

Intellectual Property Laws and Enforcement Overseas, Especially in Emerging Markets

Piracy, counterfeiting, and the theft of intellectual property (IP) assets pose a serious threat to U.S. exporters. U.S. SMEs are at a particular disadvantage, because they may lack the knowledge, expertise, or capital necessary to prevent the theft of their ideas and products. In fact, research recently conducted by USPTO found that only 15 percent of small businesses that conduct business overseas know that they need to file for IP protection abroad. Many SMEs also may not have personnel and operations overseas, so they lack the “eyes and ears” needed to be vigilant globally and the theft of their IP can often go undetected. In addition, SMEs generally cannot afford the necessary tools to counteract IP violations, such as specialized legal counsel, that may be available to larger companies. While the U.S. government has a number of resources available to help U.S. companies, particularly SMEs, protect their IP overseas, the extent of this assistance is dependent on the willingness of foreign governments to enact and enforce IP laws, especially in emerging markets where infringement is more common.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

ITA is the primary contributor to this objective. Through efforts in promoting trade, improving market access, enforcing compliance to trade laws, and through interagency collaboration, ITA has a significant impact on increasing U.S. export value. To achieve this important goal, ITA provides focused support to SMEs. Progress toward this goal is tracked by ITA's priority goal to increase the annual number of SMEs ITA successfully assists in exporting to a second or additional country.

The Census Bureau supports this objective and ITA's goals by producing the U.S. international trade statistics and information on exporters and by helping exporters understand export regulation to properly report their shipments. More information on the Census Bureau can be found in Objective 14.

PROGRAM EVALUATIONS

ITA is committed to improving the effectiveness and efficiency of its programs and operations. ITA conducted a program evaluation in FY 2008 as part of the Office of Management and Budget’s (OMB) Program Assessment Rating Tool and as a result adopted new performance measures in accordance with the Government Performance and Results Act (GPRA) to focus its export promotion unit on the core elements of its Congressional mandate. ITA also conducted a program evaluation in mid-FY 2010 and adopted a 12-month plan to immediately ramp up its efforts to achieve the NEI by focusing on ITA programs with the highest return on investment in terms of export value. In 2010, ITA conducted a thorough program assessment as part of the Department’s roll-out of a balanced scorecard initiative in order to set a baseline for moving forward with this strategic management system. ITA’s balanced scorecard contains the five strategies outlined above along with corresponding performance measures that will hold the organization accountable through performance-driven management, effective resource allocation, and improved customer satisfaction. In regards to the latter, ITA routinely collects customer satisfaction data from its clients and analyzes this information to improve ITA assistance.

In addition to these internal evaluations, ITA has fulfilled the recommendations made by the Government Accountability Office (GAO) in the 2005 GAO report, “Further Improvements Needed to Handle Growing Workload for Monitoring and Enforcing Trade Agreements.” This includes increasing officer access to cables (both classified and unclassified) via technological solutions to improve communications, augmenting active participation in and provision of information to intra and interagency efforts to monitor and coordinate on trade barrier reduction activities, and expanding officer training and knowledge management on trade agreements compliance activities. ITA also continues its collaboration with GAO on a comprehensive and independent evaluation of the export promotion function. In March 2009, GAO reported on ITA’s fee-based programs and the relationship between ITA and state trade offices. In 2010, GAO reported on how well ITA managed export promotion resources from FY 2004 through FY 2009, and the completeness of ITA’s workforce plans and FY 2011 budget request. ITA will address these workforce and resource management issues going forward.

OBJECTIVE 9: INCREASE U.S. EXPORT VALUE THROUGH TRADE PROMOTION, MARKET ACCESS, COMPLIANCE, AND INTERAGENCY COLLABORATION (INCLUDING SUPPORT FOR SMALL AND MEDIUM ENTERPRISES)

BUREAU	PERFORMANCE MEASURE
ITA	<ul style="list-style-type: none"> ● Number of commercial diplomacy successes ● Ratio of U.S. and Foreign Commercial Service export value to costs ● Number of clients assisted by the U.S. and Foreign Commercial Service ● Dollar value of U.S. export content in advocacy cases won ● Annual number of small and medium-sized enterprises (SME) the Commercial Service assists in exporting to a second or additional country¹

¹ This is a Department priority goal.

OBJECTIVE 10

Implement an effective export control reform program to advance national security and economic competitiveness**STRATEGIES TO ACHIEVE THIS OBJECTIVE**

The Bureau of Industry and Security (BIS) will continue to advance U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system and promoting continued U.S. strategic technology leadership. This is accomplished by three primary activities:

Maintaining and Strengthening an Adaptable and Effective U.S. Export Control and Treaty Compliance System

Reform of the dual-use export control system will strengthen BIS's ability to focus controls on the most sensitive items in order to address current and emerging threats, and facilitate exports of less sensitive items to destinations and end-users that do not pose a national security or foreign policy concern. This reformed system will enhance BIS's administration and enforcement controls on exports of dual-use items to counter proliferation of weapons of mass destruction (WMD), and combat terrorism and military diversion. BIS will continue its efforts to detect, prevent, and prosecute illicit dual-use export activity. BIS will continue to pursue other national security and foreign policy goals by serving as the lead agency for ensuring U.S. industry compliance with the Chemical Weapons Convention (CWC) and the International Atomic Energy Agency (IAEA) Additional Protocol.

Integrating Non-U.S. Actors to Create a More Effective Global Export Control and Treaty Compliance System

The effectiveness of U.S. export controls is enhanced by strong controls in other nations that export or transship sensitive goods and technologies. BIS will continue to work to improve the participation and compliance of existing members of multilateral export control regimes and cooperate with other countries to help them establish effective export control programs. As part of policy formulation and implementation toward key trading partners and transshipment countries, BIS will continue to engage in a robust end-use visit program.

Ensuring Continued U.S. Technology Leadership in Industries that are Essential to National Security

By analyzing the impact of export controls and trade policies on strategic U.S. industries, administering the federal government's Defense Priorities and Allocations System (DPAS), reporting on the impact of defense trade offsets, and evaluating the security impact of certain proposed foreign investments in U.S. companies, BIS will continue to work to ensure that the United States remains competitive in industry sectors and sub-sectors critical to national security.

KEY CHALLENGES

Export Control Reform

On August 31, 2010, the White House announced a series of fundamental reforms to the U.S. export control system to enhance U.S. national security. The key challenges for BIS will be to achieve consensus among national security agencies to:

- Revise the Department Control List into a three-tiered structure and implement associated licensing policies;
- Assist the Departments of State and Defense in identifying items on the U.S. Munitions List that do not warrant control as defense articles and revise the Export Administration Regulations (EAR) to control such items effectively;
- Create an expeditious process to control emerging technologies;
- Coordinate and deconflict enforcement activities with Immigrations and Customs Enforcement and the Federal Bureau of Investigation under an Export Enforcement Coordination Center;
- Transition the dual-use licensing infrastructure to the Department of Defense's USXPORTS information technology (IT) platform; and
- Implement a new single licensing form and related industry portal.

EXTERNAL FACTORS

The following are key external factors that may significantly affect achievement of the export control reform objective:

- Agencies' willingness to implement agreed policies through clearance on BIS regulations;
- International export control regimes' willingness to conduct comprehensive list reviews consistent with U.S. policies on control list criteria;
- Stakeholder support for the transfer of articles to the Department Control List; and
- Adequate resources to fund the IT integration process.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

Nonproliferation and Treaty Compliance (NPTC) fulfills treaty compliance obligations for the U.S. government under the CWC, the Additional Protocol, and the Biological Weapons Convention (BWC). As the designated lead agency for private industry implementation of the CWC and Additional Protocol, NPTC mandates and collects declarations to the responsible international organizations, and manages international inspections of U.S. industry. For the BWC, NPTC coordinates economic security aspects of compliance, including confidence building measures.

National Security and Technology Transfer Controls (NSTTC) is responsible for developing and administering the Department's dual-use multilateral export control under the Wassenaar Arrangement (conventional arms and sensitive dual-use items). Licensing officers in NSTTC are responsible for decisions on individual export license applications, based on their technical and/or foreign policy analysis of the specific transactions, and are active in the interagency dispute resolution process when consensus is not reached among the reviewing agencies. NSTTC provides commodity jurisdictions, commodity classifications, and advisory opinions to help exporters determine the licensing requirements for their export transactions. NSTTC also supports the Bureau's export seminar outreach and international export control

cooperation programs and provides license determinations in support of enforcement actions. Finally, NSTTC participates in interagency and international deliberations to determine the list of items that the United States will control.

The primary objectives of the Export Enforcement programs are to detect and prevent the illegal export of controlled goods and technology; investigate and help sanction violators of U.S. export control, anti-terrorist, and public safety laws and regulations; educate the business community to help prevent violations; and administer U.S. law and regulations restricting participation in foreign boycotts. Export enforcement includes investigating criminal and administrative violations and imposing civil sanctions for violations of the EAR, International Emergency Economic Powers Act, the Chemical Weapons Convention Implementation Act, the Fastener Quality Act, and related statutes and regulations. Consistent with the President's national security priorities, Export Enforcement prioritizes its enforcement activities on cases relating to the proliferation of WMD, terrorism, and military diversion.

Exporter Services regulates policy administration of the dual-use export control system through developing, negotiating, writing, and publishing new export control regulations, revising the current EAR, and coordinating the clearance of all regulatory changes within the Bureau, Department, and other export control government agencies.

Outreach and Educational Services include promotion of knowledgeable voluntary compliance with dual-use export controls by educating the business community about its obligations under the EAR through one-on-one regulatory counseling and the development and implementation of online training programs, Webinar programs, annual export control conferences, licensing officer training, and U.S. government export control training. Also, additional compliance oversight and support is provided by reviewing company compliance manuals, providing compliance support for specific export programs that include a compliance program requirement for participation, conducting compliance seminars, and facilitating the Bureau's quality assurance license review program.

The Office of Technology Evaluation (OTE) analyzes export and related economic data obtained from the Export Control Automated Support System (ECASS), the Automated Export System (AES), and other available sources. OTE leads the assessment of dual-use export control systems. OTE's metrics include determining the percentage of licenses that are not shipped against and why, identifying noncompliance with reporting requirements in the EAR, identifying trends related to EAR-controlled items to countries and end-users, and measuring the impact that controls have on emerging technologies. OTE also assists BIS's intelligence liaison and Office of Enforcement Analysis in assessing effectiveness from national security and compliance perspectives.

OTE conducts primary research and analysis of critical technologies and industrial capabilities of key defense-related sectors. Working with industry organizations and universities, OTE publishes reports and assessments of findings and recommendations for government policymakers and industry leaders, enabling the private sector and government agencies to monitor trends, benchmark industry performance, and raise awareness of diminishing manufacturing capabilities.

The Office of Antiboycott Compliance (OAC) administers the antiboycott provisions of the EAR (15 C.F.R. Part 760). The impetus of these laws was to discourage, and in some circumstances, prohibit U.S. companies from furthering or supporting the boycott of Israel sponsored by the Arab League and certain Muslim countries. This includes compliance by U.S. entities with certain requests for information designed to verify compliance with the boycott. Compliance with such requests may be prohibited by the regulations and reportable to OAC.

OAC accomplishes its mission by assisting the regulated public in complying with the antiboycott regulations, monitoring requests to comply with unsanctioned foreign boycotts received by U.S. businesses, and investigating and sanctioning violators of the antiboycott provisions of the EAR. OAC assists the regulated public in complying with the antiboycott regulations through its outreach efforts. These include participation in export control seminars and conferences through which exporters, freight forwarders, bankers, lawyers, and others are trained on the application of the antiboycott portions of the EAR to export transactions. Additionally, OAC operates a telephone and e-mail advice line that provides answers to the exporting community's specific antiboycott questions.

Strategic Industries and Economic Security (SIES) is responsible for implementing programs that help to ensure that strategic U.S. industries can meet current and future national security requirements. SIES accomplishes this, in part, by analyzing the impact on strategic U.S. industries of cooperative international defense agreements, by participating in the review of foreign investment in the United States by the Committee on Foreign Investment in the United States (CFIUS), and through analysis of the transfer of excess defense articles and stockpile material disposal plans. In addition, SIES analyzes the impact of "offsets" in defense trade on the U.S. defense industrial base and participates in interagency initiatives seeking to reduce economic inefficiencies. SIES is also responsible for administering the DPAS, which assures the timely availability of industrial resources to meet national defense and emergency preparedness program requirements; coordinating the Bureau's continuity programs; and representing the United States within the North Atlantic Treaty Organization's (NATO) Industrial Planning Committee.

PROGRAM EVALUATIONS

The foundation for export control reform was a cabinet-level decision that the system was ineffective in meeting current and emerging threats and opportunities. The National Academies' 2009 *Beyond 'Fortress America: National Security Control on Science and Technology in a Globalized World* report identified many of the vulnerabilities of the current system that underpinned the decision by the Obama Administration to call for a fundamental review. In January 2010, a National Security Council/National Economic Council Task Force authored a report outlining the principles for a new export control system based on a three-phased implementation approach.

BIS is committed to subjecting these new initiatives to thorough evaluation.

OBJECTIVE 10: IMPLEMENT AN EFFECTIVE EXPORT CONTROL REFORM PROGRAM TO ADVANCE NATIONAL SECURITY AND ECONOMIC COMPETITIVENESS	
BUREAU	PERFORMANCE MEASURE
BIS	<ul style="list-style-type: none"> ● Percent of licenses requiring interagency referral referred within 9 days ● Median processing time for new regime regulations (months) ● Percent of attendees rating seminars highly ● 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 ● Number of actions that result in a deterrence or prevention of a violation and cases which result in a criminal and/or administrative charge ● Percent of shipped transactions in compliance with the licensing requirements of the Export Administration Regulations (EAR) ● Percentage of post-shipment verifications completed and categorized above the "unfavorable" classification ● Percentage of leads that result in a prevention of a violation and cases which result in a criminal and/or administrative action ● Number of end-use checks completed ● Percent of industry assessments resulting in BIS determination, within three months of completion, on whether to revise export controls

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 advocates globally for foreign regulatory and policy regimes that encourage competition and innovation in the information and communications technology (ICT) sector. NTIA promotes dialogue with private industry and nongovernmental organizations through sponsorship and participation in conferences, workshops, and other forums. On behalf of the federal government, NTIA coordinates usage of federal spectrum allocations, and it issues specific assignments for discrete uses by individual agencies. Through its laboratory at the Institute for Telecommunication Sciences (ITS), NTIA also supports basic research in innovative telecommunications and information technologies (IT). This research has the potential to improve both the performance of telecommunications networks and the availability of digital content on the Internet.

In addition, ITS organizes and coordinates preparations for U.S. participation in international telecommunications conferences and standards development organizations, and negotiations in cooperation with other interested U.S. government agencies and industry groups. It develops and presents user-oriented technical contributions to national and international standards organizations addressing quality of service, communication network resource management, and other topics critical to the development and implementation of advanced IP-based networks, optical transport networks, next generation networks, and supporting broadband infrastructures.

STRATEGIES TO ACHIEVE THIS OBJECTIVE

NTIA will pursue policies that promote U.S. exports in ICT products and services, promote consistent international approaches to telecommunications and Internet issues, harmonize key international standards while safeguarding competition, and improve relations with countries with rapidly expanding markets. All of these activities will require substantial coordination among NTIA's program offices, across the Department, as well as via interagency coordination to develop the Administration's positions.

The U.S. government participates in many different international forums in which global telecommunications and information policy is debated and developed. NTIA leads many U.S. delegations to these meetings and participates in others, and it provides the negotiators and full delegation with critical policy and technical expertise.

ITA's work in increasing collaboration with other federal agencies to promote the adoption of U.S. standards around the world is discussed in Objective 9. Objective 2 describes the steps that USPTO is taking to provide leadership on international policies for improving the protection and enforcement of IPR worldwide.

KEY CHALLENGES

Achieving acceptance of U.S. positions and proposals at international and regional ICT meetings, bilateral meetings, and conferences remains a challenge for NTIA, as well as for the federal government as a whole. U.S. industry is seen, rightfully, as a world leader in the ICT sector. At times, this leadership in the marketplace translates into thought-leading influence in international policy-making forums. At other times, it translates into resistance.

EXTERNAL FACTORS

Key external drivers include the White House, Congress, the telecommunications and Internet industries, and consumers. These domestic stakeholders, not surprisingly, frequently have different views on complicated issues (like spectrum management reform) requiring NTIA to carefully assess how to maximize the benefits of NTIA actions on domestic and international ICT issues.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

By partnering with other Department bureaus, and by leveraging the expertise of its Office of Spectrum Management, Office of International Affairs, Office of Policy Analysis and Development, and ITS, NTIA is able to provide critical policy and technical analysis to U.S. negotiators and interagency delegations. NTIA also advises the executive branch on economic, policy, and technology developments important to the global ICT market environment. NTIA is the lead agency in the executive branch regarding management of the Internet’s domain names (DNS), a critical aspect of the Internet infrastructure.

Objective 4 describes efforts by the Department Office of the Secretary, using the expertise of NTIA, USPTO, NIST, and ITA, to create the Internet Policy Task Force. This task force will conduct a comprehensive view of the nexus between privacy policy, copyright, global free flow of information, cyber security, and innovation in the Internet economy.

NIST laboratories support development of a wide range of international standards that are essential to industries domestically and worldwide. NIST laboratory programs are discussed in Objective 5.

ITA supports the competitiveness of U.S. industry by using its network of trade specialists to share information on standards-related trade issues, engaging in international standardization work where there are public policy implications, and engaging in standardization activities in treaty organizations, as described in Objective 8.

PROGRAM EVALUATIONS

NTIA conducts periodic assessments by senior management executives to evaluate progress, and to develop and refine new program goals. These program goals are coordinated with the Secretary of Commerce and the White House to ensure that policy priorities are met within existing resources. Program evaluations determine whether existing resources are being assigned appropriately to the highest priority issues.

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

BUREAU	PERFORMANCE MEASURE
NTIA	<ul style="list-style-type: none"> ● Percent of NTIA positions substantially adopted or successful at international meetings

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Improve Global Competitiveness and Foster Domestic Job Growth While Protecting American Security

IA administers the U.S. trade remedy laws that are designed to remedy the injurious effect of unfair dumping and subsidization, thereby helping to promote a level playing field on which U.S. firms and workers can compete against foreign producers. IA is committed to the strong enforcement of these laws and ensuring that U.S. industry and workers can obtain effective relief from unfair trade practices which would otherwise undermine their national and global competitiveness, and hamper job growth. The vigorous enforcement of the trade laws also plays an important role in building support for the Nation's bilateral and multilateral trade agenda.

IA resources are targeted at the administration of the unfair trade laws. These resources presently provide relief to a variety of U.S. industries, including those related to steel, chemicals, agricultural/aquaculture products (e.g., shrimp and catfish) and various consumer goods. IA currently administers over 300 AD/CVD orders, covering more than 120 products from over 40 countries. AD/CVD duties collected under these orders help to ensure that U.S. industry, particularly SMEs, have a level playing field on which to compete against foreign imports, and help promote the commercial conditions that allow businesses to export, which in turn helps to maintain a strong U.S. manufacturing sector and U.S. jobs and exports.

IA conducts outreach to U.S. small and medium-sized industries that may have been injured by unfairly dumped or subsidized imports. IA's AD/CVD Petition Counseling and Analysis Unit provides to these firms detailed information regarding the legal requirements for seeking relief under U.S. trade law. Numerous counseling sessions have led to the initiation of investigations and the imposition of AD/CVD border measures. Further, IA works proactively to ensure that all U.S. companies and workers know about and can take advantage of the benefits of this program by maintaining a publicly accessible Web site, publishing determinations in the Federal Register, releasing policy bulletins, and hosting trade seminars. In FY 2010, IA's Petition Counseling Unit counseled 44 companies, 26 of which were small and medium-sized businesses. Over the next few years, IA plans to intensify its outreach and petition counseling service offerings in an effort to ensure that U.S. firms and workers have every opportunity to avail themselves of the U.S. trade remedy laws.

IA conducts statutorily mandated investigations and subsequent administrative reviews. After a petition requesting an investigation is filed, IA determines whether the legal requirements to initiate the investigation have been met. Once an investigation is initiated, IA conducts an in-depth analysis of information provided by foreign governments and/or exporters in response to numerous questionnaires, in order to determine if the alleged unfair trade practice is occurring. The process includes conducting in-country verifications of the information provided. IA's conclusions for all investigations and reviews are detailed in comprehensive Federal Register notices and publicly available memoranda. All proceedings are conducted within strict statutory and/or regulatory deadlines, and are subject to judicial review and dispute settlement proceedings established under the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO). IA works with the Department's Office of the General Counsel and DOJ to defend IA's AD/CVD determinations when they are challenged in the U.S. Courts, NAFTA panels, and in the WTO.

IA conducts all unfair trade investigations and reviews in an open and transparent manner, allowing all interested parties an opportunity to present information and participate in the process. In addition, IA educates the public regarding its decisions whether products are being unfairly dumped or subsidized by posting all regulations and decisions on its Web site, and engages in technical exchanges with key trading partners.

IA leads the U.S. government's work on dumping issues in the ongoing WTO rules negotiations and in bilateral negotiations with the Nation's trading partners, and works in partnership with USTR on subsidy issues. IA works proactively to advance U.S. interests in these negotiations by supporting strong, effective, and transparent trade remedy disciplines to address injurious dumping and unfair subsidization that harms the competitiveness of U.S. industry and workers competing in the global marketplace. In addition, IA assists U.S. exporters that are subject to a growing number of foreign AD/CVD proceedings lodged against them. In doing so, IA promotes continued access to foreign markets by helping to ensure that these companies receive fair treatment consistent with that country's obligations under the WTO. This is an area where IA anticipates a significant workload increase in the coming years as U.S. trading partners become more sophisticated in the greater use of trade remedies against U.S. exports. Accordingly, IA will continue to develop expertise in foreign trade remedy actions and will ensure that potentially affected firms are educated to access IA's services when confronted with these types of foreign actions. IA also plans to continue to work closely with its trading partners in this area to gain a better understanding of foreign trade remedy proceedings and to promote the importance of transparency and due process in such proceedings.

Another key function of IA involves identifying ongoing and emerging trade threats from unfair subsidization and government support by providing analysis, research, and advocacy services to U.S. businesses. IA works closely with a number of critical U.S. industries (including steel, textiles, aerospace manufacturing, agriculture, and paper) to confront foreign government support practices and coordinates U.S. multilateral subsidies enforcement efforts. This assistance helps provide more open and equal global market access for U.S. enterprises, supporting U.S. job growth. As such, this service represents another area where IA will increase its outreach in the coming years in order to educate U.S. industry and other stakeholders about the services IA can provide and the mechanisms available to obtain relief from trade-distorting practices.

IA's long-range planning specifically calls for the organization to demonstrate greater flexibility in terms of managing its workload so as to more efficiently address the increasing volume, complexity, and unpredictability of trade remedy cases. To that end, IA will evaluate its organizational structure and lines of authority in order to become more responsive to fluctuating and somewhat unpredictable workload patterns. Also, IA will implement technological improvements to create efficiencies in both the processing and costs associated with filing and maintaining documents related to AD/CVD proceedings, as well as improving accessibility to the Department by interested parties and the public. IA is also undertaking a new training initiative, designed from within to target specific and unique qualifications needed to conduct AD/CVD analyses. Further, the deployment of Web-based technologies across ITA challenges IA to efficiently master the use of these tools in a manner that will vastly improve communications within, across, and outside of the organization.

IA also administers the Steel Import Monitoring and Analysis (SIMA) system. This system provides U.S. steel producers and users with real-time steel import information that has facilitated the smooth operation of the U.S. steel market and better informed decision-making by both steel producers and buyers. The SIMA Web site is one of the most heavily trafficked Web sites within ITA, receiving, on average, roughly 100,000 hits per week. IA is active in a number of forums with industry and trading partners regarding steel market issues, including the Organisation for Economic Co-Operational Development steel committee, North American Steel Trade Committee, and U.S.-China Steel Dialogue, where IA promotes market-driven mechanisms and international trade in steel without government subsidies.

ITA's Manufacturing and Services (MAS) unit has the Departmental lead on the implementation of safeguard actions that are designed to provide a remedy for imports that have caused market disruption to the domestic industry. MAS analyzes the economic and competitive effects of remedy measures, and coordinates the overall Departmental recommendation on remedy to USTR.

Fraud and evasion of AD/CVD orders are key concerns and need to be addressed promptly and forcefully. To this end, IA works in concert with partner agencies, including the Department of Homeland Security (specifically U.S. Customs and Border Protection (CBP) and Immigration and Customs Enforcement (ICE)), DOJ, and USTR to identify and take action to stop these practices. Specifically, when IA has evidence of fraudulent activity or efforts to evade or minimize AD/CVD duties to be paid, it will provide that information to CBP so that CBP can either pursue it as a civil action or refer it to ICE and/or the U.S. Attorney's Office at DOJ for possible criminal investigation. Such cases may also involve collaboration with other agencies within the Department, e.g., NOAA. These cases have resulted in the collection of significant fines and criminal penalties against importers who defraud the U.S. government of tariff revenue. In the coming years, IA plans to continue to work strategically with its partner agencies in an effort to devise solutions to this issue and will also work with its trading partners to increase awareness of the systemic issues involved in fraud and evasion of AD/CVD duties.

IA's other key partner, CBP, supports the strategic goal to "identify and resolve unfair trade practices" and its objective to "enforce U.S. trade laws" through statutory and regulatory requirements and various coordinated efforts. When dumping and/or subsidization is found, IA instructs CBP to collect AD/CVD duties and deposits using the Automated Commercial Environment system (a commercial trade processing system being developed by CBP to facilitate trade while strengthening border security). To enhance effective coordination between IA and CBP, IA established the Customs Liaison Unit, which works with CBP to enforce AD/CVD laws and related duty collection, in addition to closely liaising with CBP on possible fraud and related issues. IA's Customs Liaison Unit and CBP meet monthly to exchange updates on the status of ongoing AD/CVD cases. IA plans to identify additional opportunities to coordinate enforcement activities with CBP in the coming years in order to confront practices that seek to evade AD/CVD duties or that otherwise constitute fraud.

KEY CHALLENGES

- Effective border enforcement to identify and prohibit efforts to circumvent measures imposed to offset unfair trade practices;
- Strategic utilization of resources to enable the Agency to deal with unanticipated shifts in workload with respect to enforcement efforts both domestically and abroad in light of future economic conditions affecting U.S. industries and workers;
- Effective messaging and counsel to help ensure that U.S. economic policy goals are consistent with U.S. international obligations; and
- Evolution of U.S. manufacturing base and outward investment into foreign locations of key parts of the supply/production chain.

EXTERNAL FACTORS

The volume and complexity of international commerce, including a marked growth in the number of foreign exporters entering the U.S. market, the escalation of global integration of supply chains, and the rise in the number of novel issues associated with applying trade remedies to non-market economies, directly correlate to the difficulty of applying and enforcing trade remedy laws. Such issues have an enormous impact on the capacity of the Department to ensure a level playing field for trade. Another critical external factor surrounds the ultimate conclusion of the ongoing international trade negotiations in the WTO. Any resulting agreement from these negotiations will necessarily require an update to the U.S. trade remedy laws and impact the Department's practices and procedures for conducting AD/CVD investigations and reviews. Finally, this program will continue to confront, and implement measures to halt, the increasingly sophisticated methods and schemes designed to evade the duties resulting from U.S. trade remedy proceedings. Specifically, compliance with these laws is and will continue to be dependent upon effective border measures and coordination with other U.S. government agencies.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

IA contributes to this objective by administering unbiased investigations on complaints of unfair trade. To ensure U.S. businesses have fair competition in their markets, IA conducts reviews involving AD/CVD, which often result in remedies to injured parties. The efforts of the Bureau maintain fair competition by enforcing U.S. trade law.

PROGRAM EVALUATIONS

Trade Law Administration. ITA is committed to improving the performance of the Trade Law Administration program. The Trade Law Administration uses systematic, objective, and quantitative performance data to evaluate its progress in achieving fair and transparent administration of the AD/CVD laws. IA's internal performance management system provides for several avenues through which the program collects data, evaluates performance, and provides managerial review and oversight.

Quarterly Data Reporting. IA collects data and reports on a variety of performance measures each quarter. Major elements include quarterly results as measured against previously established targets, commentary on performance with explanations of quarterly performance data, and plans for meeting missed targets.

Management Review. Quarterly data is submitted to IA senior management for review. The review is strategy and resources-oriented, focusing on identification of performance deficiencies and targeting resources to achieve performance-based results. IA senior management, in internal meetings with IA administrators of AD/CVD and other trade law programs, implements any recommendations for improvement of performance and/or reallocation of resources to drive improved performance.

Congressional Review. IA prepares reports to House and Senate Appropriations Committees on AD/CVD related activities and WTO negotiations. For example, IA prepared a report on the relative advantages and disadvantages of retrospective and prospective AD/CVD collection systems. IA also provides regular briefings to members of Congress on issues of interest to members.

Court Review. AD/CVD determinations can be challenged in the U.S. Court of International Trade, the U.S. Court of Appeals for the Federal Circuit, and dispute settlement proceedings established under NAFTA and/or the WTO. Court findings provide IA with judicial insight into the application of the AD/CVD trade law.

External Program Evaluation. IA contracted with The Wexford Group International to conduct a program review to evaluate IA functions, structure, and organization and provide recommendations for more effective and efficient program administration. Specific areas of interest included:

- Planning and evaluation tools emphasizing strategic planning and performance;
- Suitability of the current organization structure and available resources to address current and future fluctuations in workload;
- Effectiveness of existing management practices, tools, and metrics; and
- Identification and feasibility of opportunities to measurably enhance or improve IA program functions and activities through the use of supplemental external contract support. This and future program reviews provide useful data and information to aid management in improving businesses processes, structure, and resource allocation.

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

BUREAU	PERFORMANCE MEASURE
ITA	<ul style="list-style-type: none"> ● Percent of identified unfair trade practices affecting U.S. parties addressed through informal/formal intervention of dispute settlement ● Number of new antidumping/countervailing duty petitioners counseled ● Percent of industry-specific trade barriers addressed that are removed or prevented ● Percent of industry-specific trade barrier milestones completed ● Number of compliance and market access cases initiated ● Number of compliance and market access cases resolved successfully

THEME

SCIENCE AND
INFORMATION

SCIENCE AND
INFORMATION

THEME – SCIENCE AND INFORMATION

GOAL: GENERATE AND COMMUNICATE NEW, CUTTING-EDGE SCIENTIFIC UNDERSTANDING OF TECHNICAL, ECONOMIC, SOCIAL, AND ENVIRONMENTAL SYSTEMS

The Department's fourth strategic goal focuses on generating and providing the means by which the public and other federal agencies can acquire essential technical, economic, social, and environmental information.

MAJOR ELEMENTS OF THE GOAL

Increase Scientific Knowledge and Provide Information to Stakeholders to Support Economic Growth and to Improve Innovation, Technology, and Public Safety

The National Institute of Standards and Technology (NIST) provides the backbone of measurement science to the Nation and its industries, from telecommunications and information networks to electric power distribution to positioning and navigation systems. A key component of the President's Plan for Science and Innovation, NIST's cutting-edge tools, instruments, and laboratories support innovation in biotechnology, nanomanufacturing, advanced electronics, and alternative energies technologies. Developing key measurement standards depends on having safe and current facilities in which to conduct experiments. The capabilities of these facilities must be maintained at the highest levels of precision and accuracy.

Often current events demand quick action in terms of researching and developing tools to respond to situations. For example, following the events of 9/11, NIST was able to quickly develop new innovations in the area of fire research. NIST must have the capability to quickly respond to the immediate needs of the Nation.

With the explosion of data in the information age, the National Technical Information Service (NTIS) provides the public, private, and academic sectors with a permanent clearinghouse by which they can access scientific, technical, and engineering information. To better respond to its customers needs, NTIS continues to explore improved access to its collection of federally funded technical reports.

As society begins to mature within the digital age, it needs to be able to develop and expand its usage of new technological developments in telecommunications. Advanced telecommunications allows all sectors of society to more efficiently provide information and products to their customers.

The understanding of climate interactions depends on the knowledge of a wide variety of ecosystem processes and weather patterns. The long-term effects of climate change play a major role in determining what strategies to pursue in terms of energy conservation, development, and deployment. Accurate climate research and information will determine the extent to which the Nation pursues research in areas such as alternative fuels. The expansion of the U.S. population to coastal areas reinforces the need to better understand coastal climates as well as protect coastal and marine resources. This knowledge of climate interactions is enhanced through partnerships in climate research within an extended community of the National Oceanic and Atmospheric Administration (NOAA), public, private, and academic researchers.

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

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.

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, 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.

Improve Weather, Water, and Climate Reporting and Forecasting

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.

Finally 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.

BUREAUS CONTRIBUTING TO THIS GOAL

NIST's Safety, Capacity, Maintenance, and Major Repairs program assures that all NIST facilities are in sufficient condition to provide high-level information to industry. Thus, NIST can meet the growing demands of researchers and corporations including those using the NIST Center for Neutron Research (NCNR), a one-of-a-kind user facility. In addition, the Strategic and Emerging Research Initiative program provides a means to address high-priority research programs that need immediate attention by quickly developing interdisciplinary research teams to respond to the needs of the Nation.

As a means to provide technical information to the public, the National Technical Information Service (NTIS) provides a clearinghouse for an extensive set of technical reports and documents for both the public and the federal community. NTIS annually disseminates more than 30 million products and offers approximately 800,000 updated items.

The National Telecommunications and Information Administration (NTIA) provides basic research on quality of digital speech, audio and video compression, and transmission characteristics which it subsequently distributes to the public. This research can improve the performance of telecommunications networks and the availability of digital content on the Internet.

The Economic and Statistics Administration (ESA) and its two statistical agencies, the Census Bureau and BEA, provide vital data and analysis covering key dimensions of the Nation's population, economy, and governments. This data is critical to decision-making processes for both the public and private sectors. For example, this information assists entrepreneurs in identifying market opportunities that can generate jobs. Every 10 years, the Census Bureau conducts the decennial census which benchmarks information concerning the Nation's population. The decennial census affects the Congressional makeup of the Nation as well as providing population estimates that serve as a starting point for allocating over \$400 billion in federal funding to states and localities. The American Community Survey provides information on an annual basis to local governments, businesses, and non-profit organizations to use for effective decision-making. BEA provides some of the most important statistical measures in the Nation, including the gross domestic product (GDP). BEA economic statistics play a vital role in business decisions throughout the economy.

Through the Office of Atmospheric Research, NOAA seeks to expand its short and long-term knowledge of climate interactions and their effects on society through enhanced climate services to inform mitigation and adaptation strategies and decisions, improved assessments of climate impacts, and increased climate literacy in the public. NOAA seeks to advance innovative research thereby pushing the boundaries of scientific understanding and integrating information across scientific boundaries.

NOAA also seeks to enhance national readiness for weather-related events through decision support services and improved weather forecasts. Improved weather forecasts, particularly in the area of severe weather events, allow state and local decisionmakers to better plan for the consequences of severe weather events thereby minimizing the loss of lives and property. More accurate daily forecasts allow various sectors that are dependent on weather to better plan for the extent of societal consumption of their products (e.g., power companies, water management). Finally, NOAA provides water resources observations and forecasts to water managers so that they can better manage limited water supplies in a changing and uncertain environment.

NTIS seeks to improve dissemination of new cutting-edge scientific, technical, economic, social, and environmental information through increased access to federally funded scientific and technical information. NTIS continues to meet the challenge of permanent preservation of and ready access to taxpayers' investment in science and information through the acquisition, organization, and preservation of the titles annually added to its permanent collection.

OBJECTIVE 13

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Develop a Holistic Understanding of the Earth System through Research

NOAA's strategic progress and future operational capacity will depend on a strong and vibrant scientific enterprise that draws from NOAA research capabilities and the extended community of public, private, and academic researchers with whom NOAA collaborates routinely. NOAA's long-term goals hinge on an enhanced understanding of the complex interrelationships that exist across NOAA's climate, weather, ocean, and coastal domains. NOAA needs to advance innovative research that pushes the boundaries of scientific understanding and integrates information across scientific disciplines.

To achieve this objective, NOAA supports a reliable, accessible suite of climate, weather, marine ecosystem, living marine resource, and geospatial information. NOAA will improve the understanding of key environmental processes and build capacity in the social, behavioral,

and economic sciences to support the valuation of ecosystem services, risk and vulnerability assessments, and decision support services. This will require NOAA to continue the development of advanced technologies in sensors, computing and networking, and user interfaces to better observe, understand, model, and communicate knowledge of complex systems. NOAA will balance technology development, deployment, and relatively low-risk applied research with an appropriate level of high-risk research to foster unpredictable, radical innovation that can transform its science and mission functions.

Promote an Engaged and Educated Public with an Improved Capacity to Make Scientifically Informed Environmental Decisions

Among the many environmental challenges facing the Nation, responding to climate change and balanced use of coastal and marine resources are paramount. Many stakeholders and the public face a considerable challenge of understanding climate and ecosystem dynamics, parsing estimates of potential impacts, and integrating environmental information and uncertainties into routine decision-making. There is a widening gap between the science most U.S. students learn in school and the knowledge they will need in the 21st century to foster the Nation's innovation and competitiveness. To support climate, weather, ocean, and coastal science and management needs of the next generation, NOAA must foster an environmentally literate society and the future environmental workforce.

To achieve this objective, NOAA will engage stakeholders and the public at multiple levels to build awareness of environmental science, services, and stewardship responsibilities; foster community dialog; and educate citizens and students. To this end, NOAA will work with partners to increase climate, weather, and ocean literacy through investments in extension, training, education, outreach, and communications. NOAA will use innovative technologies to engage stakeholders, including community leaders and decisionmakers, and the general public; and develop strategic connections with science education communities to advance scientific and technical education opportunities and attract populations who are currently underrepresented in the science workforce. NOAA will coordinate with other agencies' education and outreach initiatives, including those of other federal scientific and environmental agencies.

Promote Increased Access to Federal Scientific and Technical Information (STEI)

NTIS deployed the National Technical Reports Library (NTRL) in April 2009, a subscription product with direct access to full metadata and full text documents that are viewable, printable, and downloadable by the user. NTRL has substantially increased perpetual access to federally funded STEI. Support of archival practices for NTRL is being improved with new National Archives and Records Administration/NTIS initiatives. NTIS plans to implement user-driven customer improvements in NTRL release 2.0 in 2011. NTIS recently deployed its next generation 2.0 Web site and is experimenting with the use of social media technology as part of its outreach and education activities to further the dissemination of STEI. In collaboration with NIST and the Federal Laboratory Consortium for Technology Transfer, NTIS is seeking an enhanced collaborative model to increase the dissemination and exchange of federally-funded science and technology research information within scientific communities of practice. Collaboration on federally funded science and technology information exchanges strategically positions NTIS to add value to content and foster innovation and entrepreneurship. NTIS programs will increase worldwide access to STEI through continuing efforts to acquire and capture scientific content. NTIS will continue its program to increase public access to worldwide STEI through improved acquisition and dissemination activities and maintaining high customer satisfaction goals. NTIS recently initiated new private-public partnerships in order to explore innovative STEI products and services that will enhance new media offerings. New public-private partnerships will position NTIS as a significant participant in federal e-science development.

Facilitate the Dissemination of Federal Science and Information

NTIS will facilitate the dissemination of federal science and information by providing information management services to other federal agencies to help them disseminate federal information to their constituents. In 2010, NTIS continued to provide product information dissemination services for the U.S. Department of Agriculture in addition to initiating new programs with the Department of Education and the Social Security Administration. NTIS plans to expand its science and information dissemination services through outreach and education

discussions with other federal agencies. NTIS will also continue to seek process improvements in its dissemination programs through its Business Systems Modernization program that is scheduled to commence in 2011. NTIS will also investigate new private-public partnerships for new products and services that will assist other agencies in accomplishing their information dissemination programs and improve and increase public access to federal science and information.

Advance the State of the Art in Measurement Science

Providing the measurement support that underpins a substantial part of the national and global technology infrastructure that drives the U.S. economy, from telecommunications and information networks to electric power distribution, to positioning and navigation systems such as global positioning system (GPS) to many crucial applications in national defense, intelligence, and homeland security, demands that NIST maintain the capability to address increasingly complex measurement challenges. These can range from measuring the nanoscale interaction of materials to better understanding the performance characteristics of new photovoltaic technologies to developing the tools to measure the performance of building systems in order to decrease overall energy consumption. Investment in fundamental measurement science is key to overcoming these challenges. For example, NIST investment in research on precision manipulation of the quantum mechanics of ions to make better atomic clocks led directly to research on the use of those ions for quantum computing, initiating NIST's world-class program on quantum information. More recently, NIST has turned the tools and techniques of quantum computing back to research on developing a new type of atomic clock with the potential to be 100 times more accurate than today's atomic clocks. Achieving these advances in accuracy and sensitivity will ensure that NIST is able to meet increasing demands in navigation and telecommunication, and continuing to advance scientific progress.

NIST continues investment in high-risk, high-reward research at the frontiers of measurement science and effective dissemination of those results to its stakeholders in industry through the development of new reference data, reference materials, calibration services, testing protocols, and supporting laboratory accreditation programs. These will ensure that the United States continues to have necessary measurement capability required to support technological innovation and increase economic growth and competitiveness.

Enhance the Facilities and Equipment that Enable Technological Leadership

The one-of-a-kind user facilities at NIST—the NIST Center for Neutron Research (NCNR), and the Center for Nanoscale Science and Technology (CNST)—provide access to cutting-edge tools and instruments for thousands of researchers each year from industry and universities. These researchers support innovation in nanomanufacturing, advanced electronics, alternative energies technologies, and biotechnology. The capabilities of these facilities must be maintained at the highest levels of precision and accuracy to meet the increasingly stringent needs of their users. CNST must be able to continually provide access to cutting-edge industry-relevant measurement tools and fabrication processes in order to support the needs of the user community. Research at NCNR accounts for over two-thirds of all neutron research done in the United States and the facility is currently oversubscribed by a factor of two. By expanding and upgrading NCNR, NIST will be able to meet the growing demands of the researchers and corporations seeking the use of this one-of-a-kind facility. NIST will prioritize efforts to improve and upgrade facilities and equipment to promote the capabilities, productivity, and safety of these facilities.

Increase Spectrum Sharing between Federal and Non-federal Spectrum Users

In addition to its policy-related activities, NTIA supports innovative telecommunications and information technologies (IT) through basic research performed at its laboratory, the Institute for Telecommunication Sciences (ITS). ITS performs extensive basic research on quality of digital speech, audio and video compression, and transmission characteristics. This research has the potential to improve both the performance of telecommunications networks and the availability of digital content on the Internet. ITS research also supports U.S. positions in international standards-setting bodies and NTIA's development of Administration policies related to the introduction of new technologies.

NTIA, in coordination with the Federal Communications Commission (FCC) and other federal agencies, established a Spectrum Sharing Innovation Test-Bed pilot program to examine the feasibility of increased spectrum sharing between federal and non-federal users. The program is an opportunity for federal agencies to work cooperatively with industry, researchers, and academia to objectively examine new technologies that can improve management of the Nation's airwaves. ITS, on behalf of NTIA, performs laboratory measurements to characterize spectrum sharing devices provided by participants in the program.

Improve Public Safety Communications

In support of the President's Wireless Innovation and Infrastructure Initiative, NTIA will help build an interoperable public safety broadband network. Building upon the recommendations of the National Commission on Terrorist Attacks Upon the United States, this effort will improve public safety by providing the Nation's first responders with modern and efficient communications capabilities. It will also make additional spectrum in the 700 MHz band available for public safety use.

NIST will also support this initiative by working with industry and public safety organizations to conduct research and develop standards, technologies, and applications to advance public safety communications.

KEY CHALLENGES

Investment in science and technology is critical for economic competitiveness and security. U.S. competitors have learned from U.S. success and have adopted and adapted U.S. approaches to science and technology and technological innovation to advance their competitive position. Other countries have invested heavily to develop their innovation infrastructure through:

- Improving the education of their work forces;
- Increasing national investment in research and development;
- Interdisciplinary characterization of the physical, chemical, geological, biological, and social components of the earth system; and
- Balancing technology development, deployment, and relatively low-risk applied research with an appropriate level of high-risk research to foster innovation.

In June 2010, the President released an executive memorandum directing NTIA and other federal agencies to make spectrum available for fixed and mobile wireless broadband. The President directed that adequate funding and incentives be provided to accomplish these actions. The President also directed the Secretary of Commerce, working through NTIA and in consultation with NIST, the National Science Foundation and other agencies, to create and implement a plan to explore innovative spectrum-sharing technologies.

EXTERNAL FACTORS

- NOAA's scientific challenges are global in nature. Information sharing between national and international partners is affected by intellectual property, homeland security, and related policies that influence international exchange of data, information, and scientific services.
- Industry-specific business conditions and technological developments affect the level and range of demand for NIST products and services over time. For instance, annual demand for calibrations of numerous outputs of the NIST laboratories can fluctuate due to several factors outside NIST's control.
- The telecommunications industry and consumers support spectrum management reforms via flexible use of spectrum.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NOAA

NOAA conducts research in federal laboratories and through partnerships with universities and science institutes. NOAA's research provides solid science and policy-relevant findings to leaders in government and industry worldwide on topics such as climate, ozone-depleting gases, air quality, and ecosystem protection. Through various partnership mechanisms, NOAA works with academia via cooperative institutes and partnership programs such as the National Sea Grant College Program to advance the Department's scientific mission. Researchers of many disciplines—from oceanography, chemistry, biology, meteorology, and mathematics, to physics, computer sciences, and engineering—collaborate to conduct research at remote outposts in the Arctic and Antarctica, aboard research and fishing vessels and in-flight on airplanes, at the depths of the oceans, inside state-of-the-art laboratories, and at computers in office settings.

NIST

NIST provides the United States with unmatched measurement capabilities, tools, and facilities. NIST laboratories work at the frontiers of measurement science to ensure that the U.S. system of measurements is firmly grounded on a sound scientific and technical foundation. NIST promotes the use of measurements based on the international system of units. The measurement science research at NIST is useful to all science and engineering disciplines. NIST laboratories directly support U.S. innovation and industrial competitiveness by developing new measurement instruments and facilities to address critical barriers to innovation; disseminating validated measurement methods and protocols; providing reference data, reference materials, and calibration services to ensure that industry-performed measurements are traceable to NIST standards; and developing testing protocols and supporting laboratory accreditation programs. NIST works actively with other metrology institutes from around the world to ensure that the global marketplace is supported with sound measurements and standards.

NIST laboratories are further discussed under Objective 5.

NTIS

NTIS seeks to improve dissemination of new cutting-edge scientific, technical, economic, social, and environmental information through increased access to federal STEI. NTIS continues to meet the challenge of permanent preservation of and ready access to taxpayers' investment in science and information through the acquisition, organization, and preservation of the titles annually added to the permanent collection. NTIS promotes the development and application of science and information by providing technologically advanced global e-commerce channels for dissemination of specialized information to business, industry, government, and the public. In addition, NTIS facilitates the dissemination of federal science and information by supporting other federal agencies in the distribution of their science and information products to the public.

NTIA

NTIA's Office of Spectrum Management contracts with ITS to operate the test-bed program to evaluate approaches and techniques to increase spectrum sharing between federal and non-federal spectrum users. The devices that are provided by the participants have different approaches which exercise various ideas for spectrum sharing. Several different types of radio technologies are implemented in the devices resulting in each device offering different advantages. The test-bed program measurements will quantify some of the radio technologies and provide a comparative view of the performance of spectrum sharing technologies.

NTIA will also work to help build an interoperable public safety broadband network and provide additional spectrum for public safety use.

PROGRAM EVALUATIONS

Each of NOAA's programs will be reviewed in-depth every three years, with annual self-evaluations, Government Performance and Results Act (GPRA) performance measurement reporting, program base reviews, and quarterly balanced scorecard performance measure evaluation.

ITS established a test-bed pilot to evaluate dynamic spectrum access devices. The six devices being evaluated in the pilot program are limited to sharing with land mobile radio systems. ITS developed the test plan and completed the measurements of device emissions, sensor performance, and spectrum access behavior. Results of tests and measurements are subjected to crosscutting peer reviews.

Program evaluation for NIST laboratories involves a combination of specific output tracking, crosscutting peer review, and economic impact analyses. NIST laboratories are reviewed by the National Research Council (NRC) Board on Assessment. NRC provides an independent, technically sophisticated, and extensive review of:

- The technical merit of the laboratory programs relative to the current state of the art worldwide;
- The adequacy of the laboratories' budgets, facilities, equipment, and human resources, as they affect the quality of laboratory technical programs; and
- The degree to which laboratory programs in measurement science, standards, and services achieve their stated objectives and desired impact as identified by NIST.

The most recent NRC Assessment Reports are available online at <http://www.nist.gov/director/nrc/index.cfm>.

OBJECTIVE 13: INCREASE SCIENTIFIC KNOWLEDGE AND PROVIDE INFORMATION TO STAKEHOLDERS TO SUPPORT ECONOMIC GROWTH AND TO IMPROVE INNOVATION, TECHNOLOGY, AND PUBLIC SAFETY

BUREAU	PERFORMANCE MEASURE
NTIA	<ul style="list-style-type: none"> ● Annual progress report on the test-bed program
NOAA	<ul style="list-style-type: none"> ● Percentage of weather-related research projects transitioned to NWS operations during each two-year period (i.e., for each year and the immediately prior year)
NTIS	<ul style="list-style-type: none"> ● Number of updated items available (annual) ● Number of information products disseminated (annual) ● Customer satisfaction

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

The Department aims to foster economic growth by providing up-to-date relevant information and measures on the changing structure of the U.S. economy, society, and environment through the production and timely release of useful information products. These measures are critical

for decisionmakers and policymakers at the local, state, and national levels to track the health of the U.S. economy, including dimensions of the economic recovery, the landscape of U.S. society, and the environment.

Openness to user and respondent concerns, independence and neutrality, strong statistical standards, and protection of confidentiality form the foundation for the overarching strategies the Economic and Statistics Administration (ESA), the Census Bureau, and the Bureau of Economic Analysis (BEA) use to achieve outcomes necessary to meet the Nation's need for relevant and timely information.

Provide Accurate, Timely, and Reliable Economic and Societal Measures

The Department works diligently in generating and communicating new, cutting-edge scientific understanding of economic and social systems. ESA serves as a central source of information on economic analysis and research for the Department. It produces a series of economic reports and policy analyses on topical issues; coordinates the release of many vital economic statistics relating to the manufacturing, services, and international trade sectors for the Nation; and is working to improve dissemination of Census Bureau and BEA information products on their Web sites.

The Census Bureau assists in fostering economic growth by providing timely, accurate, accessible, and current measures of the population, economy, and governments, which help entrepreneurs and businesses to identify and exploit market opportunities that generate jobs. This information also helps to provide early signals of impending problems in key sectors throughout the economy and effective information to enable communities to build their capacity to attract businesses and sustain economic growth. Data collected from many monthly, quarterly, and annual surveys support effective decision-making, in both the public and private sectors, with the information assets needed to understand social, economic, and demographic trends.

A significant new source of information about the dynamics of local labor markets—the Local Employment Dynamics program—is the result of the Census Bureau's broader focus on integrating data from existing sources, including administrative records, to produce unprecedented information or to create existing products more efficiently. This strategy supports the need to produce more valuable and timely data using fewer resources and limiting respondent burden.

The Census Bureau also provides timely, relevant, accurate, and accessible benchmark measures of the U.S. population, economy, and governments to leverage U.S. competitiveness, identify new business opportunities, and foster domestic job growth. Vital data products from the 2010 Census will meet constitutional and legislative mandates for apportionment and provide the starting point for the annual population estimates that are used in allocating over \$400 billion of federal funding annually to states and localities. As the 2010 Census concludes with the completion of extensive quality control and coverage measurement operations, the Census Bureau continues to develop and implement a plan to improve the 2020 Census with a sustained emphasis on identifying innovative and cost-effective ways to collect, process, and disseminate information.

The American Community Survey, as the replacement for the decennial census long form, provides valuable and effective decision-making information every year to states, local governments, businesses, and non-profit organizations. Other products provide information that positions minority business enterprises, including small manufacturers, to compete in a global economy and provide information on the characteristics of businesses that facilitates the growth and creation of domestic jobs.

BEA stimulates the advancement of science and information by producing some of the most closely watched economic statistics that influence the decisions made by Congress and the federal government, state and local governments, businesses, and U.S. households. BEA's economic statistics provide a comprehensive, up-to-date picture of the U.S. economy, including how much the U.S. household spends on goods and services, the personal savings rate, corporate profits, U.S. trade in services with other countries, and GDP at the national, state, and metropolitan level. BEA's measures of the economy inform key aspects of business and financial investment, U.S. trade policy, Federal Reserve monetary policy, federal and state government budget and tax projections, and the allocation of more than \$300 billion in federal funds each year.

The cornerstone of BEA's statistics is the National Income and Product Accounts (NIPA), which feature the U.S. GDP. GDP was recognized by the Department as its greatest achievement of the 20th century and has been ranked as one of the three most influential measures that affect U.S. financial markets. Since the NIPAs were first instituted in the aftermath of the Great Depression, BEA has developed and extended its statistics to cover a wide range of economic activities. In addition, BEA prepares national, regional, industry, and international accounts that present essential information on such key issues as economic growth, regional economic development, inter-industry relationships, and the Nation's position in the world economy. The Census Bureau's 2012 Economic Census will provide key inputs for the NIPA, as well as profiling the economy at the national, state, and local levels.

Gather Accurate and Reliable Data from Sustained and Integrated Earth Observing Systems

NOAA's science, service, and stewardship capabilities draw upon the diverse observing system assets, including satellites, radar, manned and unmanned aircraft, ground stations, sea-going vessels, buoys, and submersibles. Fundamental to ensuring that the wealth of environmental information generated by NOAA is effectively utilized now and for the long term is an increased focus on information management standards and strategies to improve access, interoperability, and usability. The varied and growing requirements levied upon these systems greatly exceed the current capacity. NOAA's observing system portfolio needs to balance growing demands with continuity concerns and implementation of emerging technologies.

To achieve this objective, NOAA will continue to gather environmental data by developing, deploying, and operating systems to collect remote and in-situ observations, and manage and share data through partnerships and standards. NOAA will continue the planned development of the next generation of satellites to serve future space-based observations and provide data continuity; maintain and develop the next generation of research vessels and aircraft to serve multiple observation requirements; calibrate climate sensors to maintain the integrity of NOAA's climate data records over time; and assimilate and fully exploit the data from the varied observing systems. Throughout this effort, NOAA will pre-plan the transition of research observing platforms to operations, and maintain strong partnerships with domestic and foreign partners through agreements to share expertise, instrumentation, data, data processing, and related costs.

NOAA's weather, water, and climate activities that are supported by these observing systems are discussed in Objective 15.

Create an Integrated Environmental Modeling System

To fulfill current and emerging science and service requirements toward all of NOAA's strategic goals over the long term, the Agency must evolve toward a comprehensive earth-system modeling enterprise that links atmospheric and oceanic models, incorporating an integrated modeling backbone that connects environmental models across time, space, and phenomena.

To achieve this objective, NOAA will continue to develop such a comprehensive modeling backbone; integrate models, products, and services; and foster a culture of collaboration within NOAA and external to NOAA. NOAA will develop collaborative strategies involving internal and external partnerships and community-wide standards to ensure interoperability; and integrate research monitoring and prediction plans for NOAA's strategic goals, including regional-scale climate models and integrated ecosystem modeling.

KEY CHALLENGES

The Department plays an integral role in the challenging process of developing the tools, systems, policies, and technologies critical to transforming the economy, fostering U.S. competitiveness, and driving the development of new businesses and domestic job creation. These challenges are reflected in growing expectations of, and demands on, ESA, the Census Bureau, and BEA in the following areas:

- ***Maintain a High Level of Cooperation in Censuses and Surveys While Measuring a Constantly Changing Economy.*** As concerns grow about threats to privacy in the Internet age, about confidentiality of information provided to the government, and about intrusiveness of government programs, the Census Bureau faces challenges in collecting information from a growing portion of the public. The Census Bureau and BEA must address the unprecedented and rapid changes in the economy associated with the recent housing and financial crises. The associated recession and government interventions have made comprehensive measures of the economy difficult to achieve.
- ***Recruit and Retain a Highly Skilled and Motivated Workforce and Maintain its Expertise Over Time.*** The Census Bureau's and BEA's status as the leading sources of quality data is inextricably linked to its workforce. With historically high numbers of retirements possible, the Census Bureau and BEA must continuously look for ways to improve recruitment, hiring, and retention, as well as expand training programs.
- ***Use New Technologies Efficiently.*** As technological capabilities increase, customers expect easier access, quicker turnaround, accessible interface mechanisms, and greater comparability among different sources of data. The challenge will be to maintain the confidence of businesses, individuals, and customers in the reliability, security, and integrity of e-business and other electronic collection modes.
- ***Make Information Readily Available to Everyone.*** Information should be available to everyone, from the least to the most experienced data user, requiring cost-effective strategies for the continued delivery of useful information to a very diverse customer base.
- ***Integrate Federal Economic Accounts.*** Data users have long demanded greater consistency among the various economic accounts provided by the decentralized U.S. statistical system, and that demand has only grown stronger as the economy has become more complex.
- ***Maintain the Relevance of the U.S. Economic Accounts.*** The most pressing public policy issues today call for new and expanded statistics that extend the GDP and related accounts beyond their long-established boundaries to address national priorities such as health care and innovation. At the same time, more detail is required within the conventional boundaries of the accounts in areas such as consumer and small business spending and debt that have significant impacts on U.S. economic growth.

NOAA faces a number of key challenges in the following areas: Varied and growing requirements levied upon their observing systems greatly exceed the current capacity; sustaining and enhancing atmospheric-oceanic-terrestrial-biological and human observing systems and their long-term data sets; and collaboration across all scientific disciplines—chemical, physical, geological, biological, social, behavioral, and economic.

EXTERNAL FACTORS

The ability of the Department to adapt quickly to a rapidly changing society and economy, along with providing the resources needed to support a healthy, competitive business environment, is affected by many external factors.

- ***Customer Influences.*** Meeting the needs of its customers is at the heart of ESA's vision to be the leading source of quality data about the Nation's people and economy so that the United States can retain its position in the world economy. The Census Bureau is continuing to improve access through new tools on the Internet and through data dissemination networks, such as the State Data Centers, Census Information Centers, and Research Data Centers. Likewise, BEA is currently undertaking a comprehensive modernization of its IT systems in an effort to produce U.S. economic accounts with greater efficiency, and to make these statistics more transparent and easier to access.

ESA, the Census Bureau, and BEA have an extremely diverse customer base that ranges from the most sophisticated analyst to the inexperienced one-time user. Recent technological advances allow the Department's statistical agencies to make more information available more quickly to more users. In many respects, ESA, the Census Bureau, and BEA set the pace in providing data electronically. However, challenges are associated with creating data dissemination tools that meet everyone's needs.

With technological advances, the tension between providing access to information and protecting confidentiality is growing. ESA, the Census Bureau, and BEA must continue to explore options that achieve both. The use of modeled data and remote access may become more common.

Serving customers well requires that ESA, the Census Bureau, and BEA accurately anticipate and plan for future requirements. The Department's statistical agencies are always learning and must ensure that they continue to gather information on how best to serve customers' needs.

- ***Societal Influences.*** Privacy is a complex issue that involves more than confidentiality. In the Internet era, the public has grown wary of private sector use (and misuse) of personal information collected for one reason and used for a different reason without their knowledge or consent. Identity theft using social security numbers has made many wary about providing personal information.

To address privacy issues, the Census Bureau is working with external groups to understand their concerns and possible options. To minimize burden, the Census Bureau is working to make even greater use of administrative records. The Census Bureau recognizes that this may raise additional concerns about data stewardship, and plans to address such concerns by continuing to release privacy impact assessments, by establishing a visible and active privacy function to educate the public on how the information is used and how their privacy is protected, and by implementing other effective means of communication. Similarly, BEA is undertaking research to increase the use of administrative records and to exploit opportunities to use data about businesses from other government agencies in preparing its economic statistics.

A second important societal influence is cultural diversity, as racial and ethnic minorities become a proportionately larger component of the population. Growing cultural diversity will affect the methods the Census Bureau uses to collect information and the presentation of the resulting information. Traditional surveys may require more materials in languages other than English and different approaches to garner responses from different communities. Other aspects of diversity, such as the aging of the population and the workforce, and differences in the ways younger generations approach work, will need to be addressed.

- ***Technological Influences.*** It will be increasingly difficult for the Census Bureau's core businesses—censuses and surveys—to satisfy policymakers' demands for timely information on emerging economic and societal trends unless it leverages state-of-the-art technology. The same is true for BEA and its ability to produce the key economic statistics that Congress, businesses, and the U.S. household require—and to deliver them on time and with a high degree of accuracy.

As the Census Bureau moves to more data collection through automated means, it needs to ensure that it applies technology effectively. Usability tests, along with behavioral and cognitive studies, will be needed to maintain and improve response rates. The President's E-Government agenda directs agencies to expand the use of the Internet. For data collection and dissemination, the Department's statistical agencies must adapt their processes to serve the public by following that mandate. ESA, the Census Bureau, and BEA must consider and mitigate the possibility of criminal or malicious access to its networks and data.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

Several agencies play a vital role in meeting this overall objective. ESA monitors and measures socioeconomic and macroeconomic trends. The Census Bureau measures the rapidly changing economic and social fabric of the Nation by collecting and disseminating data to enable policymakers at all levels of government to make informed decisions. BEA produces the GDP and related economic measures, based largely on data provided by the Census Bureau, which provide essential information to improve decision-making on such matters as monetary policy, federal and state budget projections, allocation of federal funds to states, and trade negotiations. NOAA utilizes multiple systems to provide continuous monitoring of weather events and sea-state, long-term climate data records, and critical solar weather data, while supporting marine, fishery, weather, climate, and water mandates.

PROGRAM EVALUATIONS

All agencies within the Department will conduct program evaluations and progress tracking. Each of the agencies' programs will be reviewed in depth every three years, with annual self-evaluations, GPRA performance measurement reporting, program base reviews, and quarterly review of balanced scorecard performance measures.

ESA, the Census Bureau, and BEA review programs internally through dashboards, Annual Performance Plans, Strategic Plans, customer satisfaction surveys, organizational assessment surveys, and other program-specific measures. External evaluations are conducted by advisory committees and the National Academy of Sciences. In combination, these approaches to program evaluation determine the overall effectiveness, usefulness, and success in meeting the information needs of the Nation.

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

BUREAU	PERFORMANCE MEASURE
CENSUS	<ul style="list-style-type: none"> ● 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 ● Release monthly export statistics on schedule ● 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 ● Release data products for key Census Bureau programs on time to support effective decision-making of policymakers, businesses, and the public ● Meet or exceed the overall federal score of customer satisfaction on the E-Government American Customer Satisfaction Index (ACSI) ● Complete key activities for cyclical census programs on time to support effective decision-making by policymakers, businesses, and the public and meet constitutional and legislative mandates
ESA/BEA	<ul style="list-style-type: none"> ● Timeliness: Reliability of delivery of economic statistics (scheduled releases issued on time) ● Relevance: Customer satisfaction (mean rating on a 5-point scale) ● Accuracy: Percent of GDP estimates correct ● Improvement of GDP and the economic accounts

OBJECTIVE 15

Improve weather, water, and climate reporting and forecasting

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Reduce Loss of Life, Property, and Disruption from High-impact Events

Essential components of a weather-ready nation are integrated, impact-based forecasts, and decision support services so that citizens, businesses, communities, governments, and first responders are prepared, ready to act, and able to recover. To be effective, the information must clearly communicate risk, impacts, and uncertainties, and be delivered through multiple channels. Increased and enhanced availability and use of weather-related information by citizens, businesses, and government can reduce the negative impacts of weather-related events on lives and livelihoods.

To achieve this objective, NOAA will focus its efforts to be more service focused, which requires a deeper understanding of user needs through continuous user engagement; alignment of products, services, research and development to those user needs; and an improved capacity to monitor and evaluate service performance and outcomes. Key requirements include improving and expanding information services for hurricanes, severe weather, and fire weather; providing consistent, reliable, and accessible forecasts and warnings focused on specific impacts, risks, and confidence levels, particularly in urban areas; and leveraging new technologies to ensure data is available, accessible, and timely. In collaboration with its partners, NOAA will provide direct, interpretive support to public sector officials and emergency responders, and expand environmental education and weather safety programs.

Improve Water Resource Management

Freshwater resources are one of the most significant challenges facing the United States in the 21st century. Demands for water continue to escalate, driven by agricultural, energy, commercial, and residential usage. Sustained growth requires viable long-term municipal water supplies and, by extension, sophisticated predictions and management practices. Working with core partners, NOAA will integrate and extend its water prediction capabilities to provide information and forecasts for a full suite of water services. The Nation's water resources managers need new and more integrated information to more effectively and efficiently manage limited water supplies in a changing environment.

To achieve this objective, NOAA will enhance the integration and utility of services for weather and water forecasts and information. With partners such as the U.S. Geological Survey and U.S. Army Corps of Engineers, NOAA will develop integrated decision support tools and services, offering a seamless suite of high-resolution, summit-to-sea forecasts. NOAA will also expand services to provide forecasts for such parameters as water flow, temperature, quality, dissolved oxygen content, and soil moisture conditions for inland and coastal watersheds.

Improve Transportation Efficiency and Safety

Weather accounts for approximately 70 percent of all air traffic delays within the United States, costing billions of dollars to the U.S. economy. Winter storms can cripple surface transportation networks for days at a time and are a tremendous hazard to drivers. Marine transportation is disrupted by hurricanes and storms at sea causing delays and loss of cargo and lives. Volcanic ash can cause widespread flight cancellations. In partnership with local and state government as well as other federal agencies, NOAA can provide improved observations and services to minimize the impacts of weather-related events on the national transportation system.

To achieve this objective, NOAA will improve engagement with transportation user communities in the aviation, surface, and marine transportation sectors to gain a better understanding of needs and integrate that knowledge into improved weather-related products and services that support safety, mobility, and efficiency. NOAA will give complete consideration to the Federal Aviation Administration's requirements for enhancements in aviation weather services to support the NextGen effort, including enhancements in accuracy, level of detail, timeliness, and other characteristics of NOAA's aviation weather services and the advanced data management approaches embodied in the NextGen 4D Weather Data Cube. Ultimately, NOAA expects to apply the advanced data management approaches embodied in the 4D Cube to other types of environmental information to increase the efficiency and effectiveness of all of its environmental information services. NOAA will provide consistent, reliable forecasts and warnings focused on transportation-related impacts and risks.

Improve Air and Water Quality

Poor air quality causes people to suffer from chronic respiratory illnesses and is responsible for up to 60,000 premature deaths in the United States each year, while access to clean, safe water is a growing concern for communities and ecosystems. Changing water temperatures and increases in salinity, nutrients, and other pollutants affect the Nation's rivers and estuaries and the species living in them. Such pollutants impact fish and shellfish populations and lead to harmful algal blooms, expansive dead zones, and increased incidents of human illness. NOAA is in a unique position to combine predictive weather information with its understanding of weather, water, climate, oceans, and coasts to develop integrated environmental predictions and analyses that can improve the health of ecosystems and communities.

To achieve this objective, NOAA will continue to develop and deploy a suite of integrated, nationwide ecosystem-based weather and water information services to address regional needs. Key requirements include high-resolution ozone, smoke, and dust forecasts; data on extreme temperatures; and improved water quality forecasts. Enabling this objective are strong, collaborative partnerships with local, state, tribal, and national health, water, and environmental managers. NOAA scientists and partners will conduct research and development for ecological-based predictions, scenarios, and projections for multiple time and space scales.

Support a More Productive and Efficient Economy through Environmental Information

The Nation's capacity to increase renewable energy generation is fundamental for economic security and sustainable development. This capacity is based in part on its ability to predict and harness precipitation, wind, and cloud patterns. Burgeoning renewable energy industries need more accurate resource assessments with better observations tailored for the sources (such as wind profiles over sea and land, solar output and cloud cover measurement) as well as forecasts to support electrical load balancing and energy supply planning on hourly, daily, weekly, seasonal, and interannual scales. Geomagnetic storms affect electrical grid stability while the productivity of U.S. agriculture requires weather and climate information over a wide range of time scales. Timely and accurate weather, climate and water information and forecasts can make a significant contribution to a secure, reliable infrastructure for energy, communications, and agriculture.

To achieve this objective, NOAA's integrated environmental information services will consider the needs of weather-sensitive sectors including solar, wind, and oceanographic information critical to the development, production, and transmission of renewable energy. NOAA has plans in place to improve forecasts and warnings of space weather and geomagnetic storms so that they are within the accuracy and confidence levels required for decision-making. NOAA will support improved understanding of how to use weather, water, and climate information to mitigate health sector impacts; and enhance modeling and prediction capabilities needed to address global food supply and security challenges. NOAA will rely on partnerships with the Nation's weather and climate industry which enables the bureau to provide information relevant to key sectors of the economy and rely on market forces to supply decision tools and other specialized services for the specific companies, farms, hospitals, etc. that compose these sectors.

KEY CHALLENGES

- Demands for water continue to escalate, driven by agricultural, energy, commercial and residential usage;
- Weather accounts for approximately 70 percent of all air traffic delays within the United States, costing billions of dollars to the U.S. economy;
- Marine transportation is disrupted by hurricanes and storms at sea, potentially causing delays and loss of cargo and lives;
- Volcanic ash can cause widespread flight cancellations;
- U.S. rivers and estuaries—and the species living in them—are being affected by changing water temperatures and increases in salinity, nutrients, and other pollutants; and
- Poor air quality causes people to suffer from chronic respiratory illnesses and is responsible for up to 60,000 premature deaths in the United States each year.

EXTERNAL FACTORS

- Ongoing occurrence of catastrophic events will continue to be frequent, severe, and often surprising in their impacts. New catastrophic events—defined by their economic and natural-system impacts—are expected to occur more frequently in the Arctic region because of increased industrial and marine transport activity in the area.
- According to the United Nations Secretary General, “Half the nations of the world will face freshwater stress or shortages by 2025.” Water availability and utility will continue to be linked to population growth, development, and weather patterns.
- NOAA recognizes the critical importance of collaboration and partnership with numerous public, private, and academic partners to achieve the Nation’s vision. The dissemination, communication, and validation of National Weather Service (NWS) forecasts and warnings to the public are dependent on the media, emergency management community, and the U.S. weather and climate industry. NWS views this diverse and growing industry—the companies, media outlets, and others that create weather programming, provide consulting services, and deliver information to U.S. society—as a key strategic partner that provides valuable services to many businesses while also being an important economic sector in its own right.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NOAA is an agency with a diverse mission to understand and communicate changing conditions in the weather, climate, oceans, and coasts and use that understanding to manage natural resources, including managing the Nation’s fisheries and supporting healthy coastal habitats and species. NWS expertise in weather, water, and climate prediction, contributes to NOAA-wide initiatives such as air and water quality forecasts and ecological prediction and monitoring. NOAA’s commitment to science, service, and stewardship informs society to respond and adapt to environmental conditions within a changing and uncertain world.

PROGRAM EVALUATIONS

Each of NOAA’s programs will be reviewed in depth with the Department every three years, with annual self-evaluations, GPRA performance measurement reporting, program base reviews, and quarterly balanced scorecard performance measure evaluation.

OBJECTIVE 15: IMPROVE WEATHER, WATER, AND CLIMATE REPORTING AND FORECASTING

BUREAU	PERFORMANCE MEASURE
NOAA	<ul style="list-style-type: none"> ● Severe weather warnings for tornados (storm-based) – Lead time (minutes) ● Severe weather warnings for tornadoes (storm-based) – Accuracy (%) ● Severe weather warnings for tornadoes (storm-based) – False alarm rate (%) ● Severe weather warnings for flash floods (storm-based) – Lead time (minutes) ● Severe weather warnings for flash floods (storm-based) – Accuracy (%) ● Hurricane forecast track error (48 hours) (nautical miles) ● Hurricane forecast intensity error (48 hours) (difference in knots) ● Accuracy (%) (threat score) of day 1 precipitation forecasts ● Winter storm warnings – Lead time (hours) ● Winter storm warnings – Accuracy (%) ● Marine wind speed accuracy (%) ● Marine wave height accuracy (%) ● Aviation forecast accuracy for ceiling/visibility (3 mile/1,000 feet or less) (%) ● Aviation forecast FAR for ceiling/visibility (3 mile/1,000 feet or less) (%)

THEME

ENVIRONMENTAL
STEWARDSHIP

ENVIRONMENTAL
STEWARDSHIP

THEME – ENVIRONMENTAL STEWARDSHIP

GOAL: PROMOTE ECONOMICALLY-SOUND ENVIRONMENTAL STEWARDSHIP AND SCIENCE

The Department's fifth strategic goal focuses on generating and providing the means by which the Department seeks to protect essential marine resources as well as coastal communities from harm.

MAJOR ELEMENTS OF THE GOAL

Support Climate Adaption and Mitigation

Climate-related changes projected for the future include 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. 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.

Develop Sustainable and Resilient Fisheries, Habitats, and Species

Ocean and coastal ecosystems provide many extremely visible human benefits—they provide us with nourishment, they provide recreational opportunities and they support our economies. Yet ocean and coastal resources are already stressed by human uses and habitat changes resulting in 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 can directly impact human health and well being. As long-term environmental, climate, and population trends continue, global demands for seafood, recreational use of the marine environment, and other pressures on habitats and over-exploited species will increase and concerns about the sustainability of ecosystems and safety of seafood will rise commensurately. 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—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, affecting recreational, economic, and conservation activities.

The National Oceanic and Atmospheric Administration (NOAA) will ensure that our ocean, estuarine, and related ecosystems and the species that inhabit these ecosystems are vibrant and sustainable in the face of these challenges. A stronger understanding of these systems will support an ecosystem-based approach to management. These approaches account 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, and can assist policymakers weigh trade-offs between alternative courses of action. By working toward the long-term sustainability of all species, NOAA will also ensure, for present and future generations, that seafood is a safe, reliable, and affordable food source; that seafood harvest

and production, recreational fishing opportunities, and non-consumptive uses of living marine resources continue to support vibrant coastal communities and economies; and that species of cultural and economic value can flourish.

Many of the species have reached a level where, without intervention, they would simply die out. Restoration of these species does not occur overnight; it often requires a substantial amount of time to restore their natural habitat and their depleted levels. The levels of 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.

Support Coastal Communities that are Environmentally and Economically Sustainable

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. For example, continued growth in coastal populations, economic expansion, and global trade will further increase the Nation’s need for safe and efficient maritime transportation. Similarly, the Nation’s profound need for conventional and alternative energy presents many economic opportunities, but also will result in greater competition for ocean space, challenging our ability to make informed decisions that balance economic and environmental considerations. At the same time, the interdependence of ecosystems and economies makes coastal and Great Lakes communities increasingly vulnerable to chronic—and potentially catastrophic—impacts of natural and human-induced hazards, including climate change, oil and other hazardous material spills, overfishing, harmful algal blooms and pathogen outbreaks, and severe weather hazards.

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.

BUREAUS CONTRIBUTING TO THIS GOAL

NOAA contributes to this goal, primarily through its climate and research activities.

NOAA plays a key role in determining the short and long-term worldwide climate impacts. NOAA focuses its observation, monitoring, research, and modeling efforts to close the gaps remaining in the understanding of the climate system. In particular, NOAA emphasizes regions that are especially vulnerable to climate impacts, socially, economically, and environmentally. NOAA seeks to provide reliable information to support international, national, state, and local efforts to limit greenhouse gases. This information supports emissions verification as well as tracking climate changes and mitigating their impacts on society. NOAA assessments play a major role in summarizing the current scientific understanding about the causes and consequence of global climate change and its impact.

NOAA also focuses on maintaining sustainable and resilient fisheries, habitats, and species and restoring those fisheries and species that have been weakened by overfishing, intrusion of protected habitats, invasion by outside species, and other disruptive events such as oil spills and natural disasters. The Magnuson-Stevens Act of 2003 mandates that overfishing end by 2011, with NOAA's responsibility being to ensure that this happens. While NOAA is limited in that stock and species assessments confirming the 2011 end to overfishing cannot accurately be concluded before the end of FY 2013, NOAA can identify the current levels of fishing by the commercial and recreational industry and therefore project whether this will occur and take the necessary actions to ensure that it will. NOAA is currently taking a variety of steps to end overfishing, including annual catch limits and "catch-shares," a program in which the total allowable catch in a fishery is divided into shares, typically allocated based on historical participation in the fishery. Participants are allowed to fish up to their assigned limit. Catch share participants also agree to stop fishing when they have caught as much as they are allowed.

NOAA also focuses on sustaining marine habitats. NOAA manages marine sanctuaries in order to protect and conserve their resources and to allow uses that are compatible with resource protection. Marine sanctuaries are similar to national parks in that they permit human interaction; however, it is limited so as to not disrupt the natural environment. The National Marine Sanctuary System consists of 14 marine protected areas that encompass more than 150,000 square miles of marine and Great Lakes waters from Cape Cod to American Samoa. The system includes 13 national marine sanctuaries and the Northwestern Hawaiian Islands Marine National Monument.

NOAA also protects approximately 300 total marine species that are either listed under the Endangered Species Act, candidate species for Endangered Species Act listing, proposed for Endangered Species Act listing, species of concern, or marine mammal species listed under the Marine Mammal Protected Act. Finally, in partnership with 12 other federal departments and agencies, NOAA is responsible for managing invasive species. In August 2008, these agencies developed the 2008-2012 National Invasive Species Management Plan, designed to "direct federal efforts (including overall strategy and objectives) to prevent, control, and minimize invasive species and their impacts within the next five fiscal years (2008 through 2012)." This plan focuses on the prevention, early detection and rapid response, control and management, restoration, and organizational collaboration involving invasive species.

NOAA seeks to support coastal communities by preparing them for both natural and man-made disasters, by providing them with preparation and recovery strategies in the event of an emergency. By increasing the accuracy of its hurricane forecasting, NOAA can better prepare the coastal communities residing in the paths of projected hurricanes. While tsunamis destroy everything in their paths, by warning communities, hours in advance of an oncoming tsunami, NOAA can minimize the loss of life as a result of such an event.

Since more than 77 percent by weight and 95 percent by volume of overseas trade is carried out by the shipping industry, it is essential to this industry and to the economic health of the ports it serves, to have accurate maps of the ports throughout the United States. NOAA provides current maps of these areas, particularly ones that have experienced a major disaster that may have shifted the topography of a given area.

With a goal of promoting economically-sound environmental stewardship and science in the coming years, the Department has taken steps to ensure the protection of natural habitats and is taking actions to make certain that overfishing ends. The Department is also seeking to prepare coastal communities in their disaster planning. Finally, the Department is maintaining its ongoing process of insuring that all major coastal ports are adequately mapped so as to protect the coastal communities from man-made hazards and to assist the shipping industry in its export and import of goods to and from the United States.

OBJECTIVE 16

Support climate adaptation and mitigation

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Improve Scientific Understanding of the Changing Climate System and Its Impacts

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 also be informed by a solid scientific understanding of the climate system.

To achieve this objective, NOAA will continue its world-class observation, monitoring, research, and modeling efforts and increase efforts to close gaps remaining in the Nation's understanding of the climate system. This effort will require comprehensive, global, and regional-scale climate observing and monitoring networks that provide high-resolution information; conducting and sponsoring fundamental physical, chemical, and biological research to discover new approaches and opportunities to understand the climate system, along with research to explore the effects of a changing climate on social and economic systems. NOAA will conduct and sponsor research on how climate variability and change affect selected regions that are especially vulnerable to climate impacts, characterize key uncertainties and integrate this knowledge into models to improve predictive capabilities, and increase the number and quality of climate predictions through high performance computing and model advancements. NOAA will also actively engage the external research community through competitive research programs.

Integrate Assessments of Current and Future States of the Climate System that Identify Potential Impacts and Inform Science, Services, and Decisions

Stakeholders and the general public need a clear understanding of the best available science describing the state of the climate and the likely impacts of climate change. Scientific assessments at the global, national, regional, and local levels integrate knowledge from many disciplines to provide decisionmakers with authoritative information on climate impacts, identify gaps in understanding, and help prioritize future research and service development efforts to fill those gaps. When pursued on a sustained basis, assessments build relationships between researchers and users and provide context for climate services developed and delivered by NOAA and others.

To achieve this objective, NOAA will play a leading role in international and national assessments that survey and summarize current scientific understanding about the causes and consequences of global climate change and its impacts. NOAA will work closely with partner agencies and the external research community to ensure that these assessments are of the highest scientific quality. Special attention will be given to generating state-of-the-art simulations of future climate conditions and ensuring model simulations and analyses are directed to informing an assessment of impacts, adaptation, and vulnerability. NOAA will develop high-resolution climate information that identifies key vulnerabilities and informs the development of climate services to meet the needs of targeted audiences. Given its stewardship responsibilities and expertise, NOAA will play a leading role with respect to assessing economic and environmental risks to ocean and coastal ecosystems, living marine resources, and water resources.

Support Mitigation and Adaptation Efforts through Sustained, Reliable, and Timely Climate Services

Human-induced changes in Earth's climate, as well as natural climate variability, complicate the Nation's ability to effectively plan for the future, manage resources, support national security, and sustainably develop the U.S. economy. Resource managers; state, local, and tribal governments; public and private businesses; and organizations are recognizing that climate change complicates their ability to achieve their goals. Existing information is not readily available to those who need it or formatted in a way that makes it easy to use. The Nation needs a comprehensive, authoritative, and coordinated source of climate information to support adaptation and mitigation strategies and to incorporate into risk assessments and related decision-making processes.

To achieve this objective, NOAA will build upon its strong scientific foundation and external partnerships to develop and deliver climate services. These services will include updated descriptions of the state of the climate; regional information derived from global climate models; useful predictions of likely climate impacts; and the timely delivery of climate information, short-term and long-term forecasts, and early warnings. Services that help decisionmakers use climate information and model output and understand the associated uncertainties will accompany these products. NOAA's initial service development efforts will focus on producing climate predictions, information, and ecosystem impact assessments for the water, coastal, and living marine resources sectors, including improved sea level rise and ocean acidification monitoring, predictions, and information on related ecosystem and infrastructure impacts. Over time, NOAA will also develop and improve similar services for other sectors such as health, traditional and renewable energy, agriculture, transportation, terrestrial resources, tourism, and national security. Developing services that meet these diverse needs will require increased coordination and collaboration across NOAA and with other government agencies, tribal governments, academia, nongovernmental organizations, and the private sector. NOAA will produce new and improved data management and access systems—including a NOAA Climate Services portal—that enhance the communication and dissemination of climate information and products to ensure that a diverse community of customers can access and use NOAA's data products and information services.

Inform the Public so that it Understands its Vulnerabilities to a Changing Climate and Makes Informed Decisions

The success or failure of climate adaptation and mitigation in the United States and around the world depends on the ability of leaders, organizations, institutions and the public to understand the challenges and opportunities climate change presents. The routine incorporation of climate information into decisions requires an awareness of how climate change may affect individuals, families, businesses, and communities. A society educated about climate change and actively engaged in dialog about its causes and effects will better address today's problems and plan for tomorrow.

To achieve this objective, NOAA will work with diverse partners in academia and elsewhere to increase understanding of the likely impacts of climate variability and change through investments in climate awareness efforts, capacity building, education, and outreach. NOAA will engage stakeholders at multiple levels, foster community dialog, and educate citizens and students both formally and informally. The NOAA Climate Services portal will offer a broad array of climate communications and educational materials that stem from NOAA's climate research, observations, modeling, and services.

KEY CHALLENGES

- The scope, complexity, and timeframe of climate change impacts;
- Population growth, urbanization, and migration trends;
- Growth in energy demand in different segments of society and the availability of energy supply; and
- Uncertainty in societal trends toward "green" business practices and lifestyles.

EXTERNAL FACTORS

- Human-induced changes in Earth's climate, as well as natural climate variability, complicate the Nation's ability to effectively plan for the future, manage resources, support national security, and sustainably develop the U.S. economy.
- Domestic climate adaptation and mitigation strategies depend heavily on the climate literacy of the public and its perception of climate change trends.
- Challenges that arise with gaining a multi-national agreement of a global strategy toward climate adaptation and mitigation policies and actions.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NOAA provides reliable climate data, information, and decision-support services to help individuals, businesses, communities, and governments make smart choices in anticipation of a climate changed future. The climate research, observations, modeling, predictions, and assessments generated by NOAA scientists—including Nobel Peace Prize award-winners—will continue to provide the scientific foundation for extensive on-the-ground climate services that respond to several requests each day for data and other critical information.

PROGRAM EVALUATIONS

Each of NOAA's programs will be reviewed in depth with the Department every three years, with annual self-evaluations, Government Performance and Results Act (GPRA) performance measurement reporting, and program base reviews; and quarterly balanced scorecard performance measure evaluation.

OBJECTIVE 16: SUPPORT CLIMATE ADAPTATION AND MITIGATION	
BUREAU	PERFORMANCE MEASURE
NOAA	<ul style="list-style-type: none"> ● U.S. temperature forecasts (cumulative skill score computed over the regions where predictions are made) ● Reduce uncertainty of the North American (NA) carbon sink to better understand the contribution of human activities toward increasing atmospheric CO2 and methane ● Error in global measurement of sea surface temperature ● Percentage of U.S. regions, states, and territories that use NOAA climate information and services to improve decision-making ● Improved climate model performance and utility based on model advancements (planned milestones), model evaluations, and formal assessments benefited ● Percentage improvement in the quality of relationship between engagement personnel and the public they serve

OBJECTIVE 17

Develop sustainable and resilient fisheries, habitats, and species

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Improve Understanding of Ecosystems to Inform Resource Management Decisions

Fully implementing ecosystem approaches to management requires ongoing scientific exploration in the Nation's marine, coastal, and riverine systems, and increased understanding of the complex linkages among the human, biological, and physical components of the ecosystem. NOAA does not yet fully understand how complex ecosystems will respond to a changing climate, or to many of the approaches that could be taken to manage living marine resources. Decisionmakers in fishery management, protected species recovery, and coastal and marine spatial planning will need to consider the effects of alternative actions on ecosystems, individual species, and the human communities with which they interact.

To achieve this objective, NOAA will coordinate internal and external research on the linkages between biological, physical, and human components of aquatic ecosystems. Key components include maintaining observation platforms to collect global, regional, and local ecosystem data and exploring innovative technologies such as genomics, ecosystem models, and alternative sampling techniques to improve the Nation's ability to accurately assess the status and health of living marine resources and the ecosystems on which they depend. Just as importantly, NOAA will work to improve coordination and cooperation between scientists, policymakers, and stakeholders to ensure that this work is well understood and incorporated in management practices. NOAA also will support socioeconomic research and policy analyses to evaluate management strategies with respect to both ecological and social outcomes, and will assist partners in the development of ecosystem-based plans that include all aspects of the biological, social, and economic environment. NOAA will ensure that this information is used in transparent regulatory and policy decision-making processes, and that it is well-communicated to a wide range of stakeholder communities.

Recover, Rebuild, and Sustain Marine and Coastal Species

The wide range of human and natural impacts on marine, estuarine, and diadromous species has led to listing of many of these species as threatened or endangered under the Endangered Species Act and petitions to list additional species are received every year. NOAA has statutory responsibility for such listed species as well as for most marine mammals under the Marine Mammal Protection Act. As human populations increase and the impacts of global climate change are realized, ensuring the recovery and long-term sustainability of all these species is an important goal for our Nation. To ensure the sustainability and resilience of these species and the ecosystems that support them, NOAA, federal, state, tribal and local agencies, nongovernmental organizations, and industry require science-based policy guidance, economic incentive programs, and sound regulations and enforcement.

To achieve this objective, NOAA will improve its understanding of the status of listed and at-risk species and develop and implement robust recovery and conservation for listed and at-risk species. NOAA will undertake strong efforts to effect robust listing decisions, and conduct effective consultations for listed and at-risk species, permitting processes and similar regulatory efforts. NOAA will continue to work in strong partnership with other federal, state, local and tribal agencies, nongovernmental organizations, and stakeholder groups to ensure that recovery and conservation plans are robust, useful, and implemented. The international dimensions of this objective require participation in international species management, such as anadromous fish, and marine mammals worldwide. Together, these efforts will ensure that our iconic and at-risk species can flourish.

Restore and Maintain Healthy Habitats that Sustain Resilient and Thriving Marine Resources and Communities

Healthy marine, coastal, and riverine systems provide valuable habitats for species that humans value for harvest and for non-economic uses. They are also places that humans use for renewal, for swimming, recreational fishing, and a host of other activities. Thoughtful and appropriate management of these areas is vital to ensuring that these treasured locations maintain their value in the face of human and natural changes to these systems. Healthy habitats are critical for sustaining healthy marine ecosystems. NOAA has broad habitat conservation responsibilities that include protecting and restoring essential fish habitat under the Magnuson-Stevens Act and the critical habitat of species listed under the Endangered Species Act. These requirements are intended to ensure that key habitats are identified, protected, and restored to support these important species. However, in carrying out these and other conservation mandates, NOAA is not only sustaining healthy marine ecosystems but also supporting other valuable ecosystem services. Recreational opportunities, stabilized shorelines, reduced erosion, and buffered impacts of hurricanes and flooding are all benefits of healthy habitats. NOAA will increase the scale and effectiveness of habitat conservation to improve marine, coastal, and riverine habitats and the ecosystem services they provide.

To achieve this objective, NOAA will apply robust habitat science to develop effective policy measures, will strengthen collaboration among all NOAA programs engaged in habitat conservation, and enhance capacity to support conservation actions. NOAA and its partners will use rigorous assessments of habitat quantity, quality, and integrity to prioritize marine, coastal, and riverine habitats that support the trust species for conservation actions. NOAA will also focus protections and restoration efforts in key geographic areas. Measuring social and economic impacts of habitat conservation and restoration efforts will provide policymakers with key information to develop effective management plans. Working with climate information, as well as academic and agency partners, NOAA will develop and implement habitat adaptation strategies to reduce the effects of a changing climate on habitat conditions. This will support fishery management, ecosystem and recovery plans that incorporate appropriate habitat conservation measures into, and will ensure that the financial and technical assistance for on-the-ground conservation projects.

Ensure Safe and Sustainable Seafood for Healthy Populations

As human populations grow, demand for protein sources, including seafood, will also increase. However, current demand is already depleting natural fish stocks, driving down harvest opportunities and reducing jobs along the coasts. Seafood-related health hazards, such as paralytic shellfish poisoning and industrial toxics in harvested species, are on the rise, yet only a very small percentage of seafood in the United States is inspected for toxins and disease. NOAA's legal responsibilities for the effective management of natural fish stocks and development of ecologically-sustainable aquaculture programs encompass management of over 500 fish stocks or stock complexes under the Magnuson-Stevens Act. Currently, more stringent regulation, including reduced quotas and shortened fishing seasons, has become common-place, limiting recreational and commercial fishing opportunities. Implementing management strategies to rebuild and manage fish stocks, maintain access to fisheries, and improve opportunities for aquaculture can build and sustain economically robust coastal communities and contribute to long-term food security for the Nation. Maintaining sustainable fisheries and safe marine-origin foods is a priority for NOAA.

To achieve this objective, NOAA will pursue science and policies that promote a suite of practices to ensure long-term stability of wild stocks, support sound aquaculture programs, and improve seafood safety. Specifically, NOAA will continue ongoing work to eliminate overfishing, rebuild overfished stocks, and improve long-term economic stability of commercial and recreational fisheries. Rigorous ecosystem and single-species assessments will inform fisheries management plans to support long-term sustainability of stocks. Management efforts, such as catch share programs, will be implemented with effective monitoring to evaluate their impact on stock status, while improved socio-economic data collection will allow managers to evaluate and improve the social sustainability of commercial and recreational fishery programs. NOAA will also work to strengthen the enforcement of fishery regulations concerning international imports and exports in support of improving stock status, and will work in international species management programs such as those for highly migratory species of fish and for fisheries in Polar regions.

KEY CHALLENGES

- Understanding of the complex linkages among the human, biological, and physical components of the ecosystem;
- Limited understanding of many of the more than 500 fish stocks or stock complexes for which NOAA has statutory responsibility;
- Ensuring the sustainability and resilience of living marine resources and the ecosystems that support them;
- Protecting the critical habitat of species listed under the Endangered Species Act as well as essential fish habitat; and
- Current demand for safe seafood is depleting natural fish stocks, driving down harvest opportunities, and reducing jobs along the coasts.

EXTERNAL FACTORS

- Scope and complexity of long-term ecosystem stressors; and
- Uncertainty in societal trends toward “green” business practices and lifestyles.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NOAA Fisheries works within the Magnuson-Stevens Act, the Marine Mammal Protected Act, and the Endangered Species Act to fulfill its mission of promoting healthy ecosystems via programs such as Protected Species Research and Management, Fisheries Research and Management, and Habitat Conservation and Restoration. Federally-managed living marine resources provide an important source of food and recreation for the Nation, as well as thousands of jobs and a traditional way of life for many coastal communities. As a world-class science agency that serves the entire country, the mission of NOAA Fisheries is to ensure healthy fisheries and habitat for the benefit of all Americans.

PROGRAM EVALUATIONS

Each of NOAA's programs will be reviewed in depth with the Department every three years, with annual self-evaluations, GPRA performance measurement reporting, and program base reviews; and quarterly balanced scorecard performance measure evaluation.

OBJECTIVE 17: DEVELOP SUSTAINABLE AND RESILIENT FISHERIES, HABITATS, AND SPECIES	
BUREAU	PERFORMANCE MEASURE
NOAA	<ul style="list-style-type: none"> ● Fish stock sustainability index (FSSI)¹ ● Number of federal fishery management plans requiring catch limits to end overfishing¹ ● Number of stocks subject to overfishing¹ ● Percentage of fish stocks with adequate population assessments and forecasts ● Percentage of protected species with adequate population assessments and forecasts ● Number of protected species designated as threatened, endangered, or depleted with stable or increasing population levels ● Number and percentage of recovery actions ongoing or completed ● Number of habitat acres restored (annual)
¹ This tracks a Department priority goal.	

OBJECTIVE 18

Support coastal communities that are environmentally and economically sustainable

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Develop Resilient Coastal Communities that can Adapt to the Impacts of Hazards and Climate Change

Coastal communities contain over one-half of the U.S. population, generate nearly 60 percent of U.S. economic output, and account for hundreds of millions of dollars in flood loss claims. Their vulnerability to coastal hazards increases with growing populations, declining coastal ecosystems, and changing climate conditions. The overarching need is to improve the resilience capacity of the Nation's coastal communities so as to (1) absorb impacts while maintaining an acceptable level of functioning, (2) reduce the amount of time and resources needed to return to full level of functioning, and (3) adapt to future risks by learning from past disasters and adopting risk reduction measures. Coastal decisionmakers need current science-based information, accurate tools and technology, and the skills to apply them to effectively reduce their communities' vulnerabilities.

To achieve this objective, NOAA will continue to develop and provide coastal decisionmakers with updated decision support tools, technical assistance, training, and management strategies related to adaptation, risk communication, hazard response and recovery, and resource conservation. NOAA will continue to work with partners to acquire, protect, and restore habitat and ecosystem services to support the resilience of both ecosystems and the built environment.

Ensure Comprehensive Ocean and Coastal Planning and Management

The Nation's coastal zones are becoming busy places, with people living and recreating alongside a wide array of existing and emerging ocean-dependant industries. 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, sustained ecosystems, maintained cultural heritage, and limited cumulative impacts. A coastal and marine spatial planning framework 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.

To achieve this objective, NOAA will promote sustainable resource use and stewardship by continuing to implement key NOAA mandates, including the National Marine Sanctuaries Act, the Coastal Zone Management Act, the Magnuson-Stevens Act, the Endangered Species Act, the Marine Mammal Protection Act, and the National Sea Grant College Program Act, and further its programmatic efforts to support coastal and marine spatial planning and management. In these efforts, NOAA will seek to balance the use of coastal and ocean resources with long-term conservation of special places in the planning and management of coastal and marine areas; support institutional infrastructure needed to coordinate and facilitate the planning process, engage stakeholders, and execute management actions. NOAA will enhance geospatial data and visualization tools while acquiring and sustaining resource monitoring networks that are capable of integrating across spatial and temporal scales to determine the effectiveness of local management actions. NOAA plans to develop models, tools, and best practices for long-term planning and management, and conduct social and economic studies needed to evaluate and improve the effectiveness of management decisions.

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 77 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.

To achieve this objective, NOAA will support operational decisions on the Nation's oceans and coasts with such fundamental services as marine weather forecasts, nautical charts, underlying surveying and mapping data, real-time oceanographic information, oceanographic predictions and forecasts, and an accurate national positioning framework. NOAA will also bring its sciences and search and rescue functions to bear on emergency preparedness and response in the MTS to help save lives and mitigate the environmental and economic impacts of hazardous incidents, including oil spills. NOAA will also strengthen international partnerships to encourage the production and distribution of navigation information, and to ensure that global standards and policies are consistent with U.S. interests.

Improve Coastal Water Quality Supporting Human Health and Coastal Ecosystem Services

U.S. coastal communities and economies, including tourism, recreation, and commercial fisheries, rely on healthy coastal environments. Through work and recreation, over 70 percent of the U.S. population comes into contact with coastal waters that can contain a diverse array of chemical contaminants, excessive nutrients, pathogens, biotoxins, and marine debris that degrade habitat quality and can negatively impact human health and the services provided by ecosystems in the coastal zone. More than 10 percent of coastal waters are considered unfit for designated uses, and over 50 percent of the Nation's estuaries experience hypoxia. In the face of these trends, state, tribal, and federal partners need early warning networks to identify and predict threats to human and ecosystem health, and to implement effective and timely management efforts.

To achieve this objective, NOAA will research the fate and transport of chemicals, nutrients, sediments, pathogens, harmful algal blooms, toxins, and marine debris in waterways; collect chemical, biological, and economic and other social data; develop appropriate marine and biological sensors; and monitor, assess, and predict ecological and human health threats. Efforts to remove marine debris from coastal habitats will continue, and research will more clearly identify the damage marine debris causes to coastal economies and habitats. NOAA and partners will develop, implement, and improve advanced water quality monitoring programs for nationally significant areas, trust resources, and coastal and Great Lakes areas to improve resource managers' knowledge of ecological stressors and to assess the efficacy of management decisions. Results of water quality monitoring and research activities will be provided to our collaborators to further inform their development and refinement of nationwide early warning efforts, predictions, and ecological forecasts.

Maintain Safe, Environmentally Sound Arctic Access and Resource Management

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.

To achieve this objective, NOAA will build on the capabilities noted in its other strategic objectives such as climate, marine weather, and increased observing capacity to support Arctic coastal communities and safe navigation to and through the Arctic. Modernizing the Arctic geospatial framework will provide the foundation for many of NOAA's activities in the region, including effective climate adaptation, community resilience, and coastal resource and marine spatial planning strategies. NOAA will support the Arctic region by monitoring sea level and ice conditions, providing services to make infrastructure more resilient, supporting safe and efficient marine transportation, building storm surge model, and supporting habitat restoration. Accurate weather and navigation tools, building the capacity to respond to natural and human-induced coastal hazards, and research to improve Arctic oil spill response and restoration capabilities are essential services NOAA

will bring to the region. Arctic communities will also find NOAA a reliable source for climate information to inform decisions about moving communities, human health, and other adaptive strategies. Throughout this effort, NOAA will engage domestic and international partners to promote cooperation and sharing of data, observational platforms, and intellectual resources.

KEY CHALLENGES

- Responding to increasing coastal community vulnerability to coastal hazards as a result of growing populations, declining coastal ecosystems, and changing climate conditions;
- Ensuring continued access to coastal areas, sustained ecosystems, maintained cultural heritage, and limited cumulative impacts;
- Limiting the vulnerability of the MTS to natural and human-caused disruptions;
- Protecting over 70 percent of the U.S. population that comes into contact with coastal waters that can contain a diverse array of chemical contaminants, excessive nutrients, pathogens, biotoxins, and marine debris that degrade habitat quality and can negatively impact human health; and
- Managing widespread, dramatic change in the Arctic region, with local to global implications from national security to economic development.

EXTERNAL FACTORS

- The scope, complexity, and timeframe of climate change impacts;
- Population growth, urbanization, and migration trends;
- Growth in energy demand in different segments of society and the availability of energy supply; and
- Uncertainty in societal trends toward "green" business practices and lifestyles.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

NOAA's National Ocean Service delivers the tools and services needed to understand, predict, and respond to the challenges the Nation faces along its 95,000 miles of shoreline and 3.5 million square miles of coastal, Great Lakes, and deep-ocean waters. The Mapping and Charting, Geodesy, and Tides and Currents program is instrumental in serving the MTS and providing services in support of Arctic exploration. The Response and Restoration program coordinates oil spill response, such as the recent Deepwater Horizon oil spill. Coastal science, habitat protection, and coastal resilience services are provided by the Coastal Management, National Centers for Coastal Ocean Science, and the Marine Sanctuaries programs.

PROGRAM EVALUATIONS

Each of NOAA's programs will be reviewed in depth with the Department every three years, with annual self-evaluations, GPRA performance measurement reporting, and program base reviews; and quarterly balanced scorecard performance measure evaluation.

OBJECTIVE 18: SUPPORT COASTAL COMMUNITIES THAT ARE ENVIRONMENTALLY AND ECONOMICALLY SUSTAINABLE

BUREAU	PERFORMANCE MEASURE
NOAA	<ul style="list-style-type: none"> ● Annual number of coastal, marine, and Great Lakes ecological characterizations that meet management needs ● Cumulative number of coastal, marine, and Great Lakes issue-based forecasting capabilities developed and used for management ● Percentage of tools, technologies, and information services that are used by NOAA partners/customers to improve ecosystem-based management ● Annual number of coastal, marine, and Great Lakes habitat acres acquired or designated for long-term protection ● Percentage of U.S. coastal states and territories demonstrating 20% or more annual improvement in resilience capacity to weather and climate hazards (%/year) ● Reduce the hydrographic survey backlog within navigationally significant areas (square nautical miles surveyed per year) ● Percentage of U.S. counties rated as fully enabled or substantially enabled with accurate positioning capacity ● Percent of all coastal communities susceptible to harmful algal blooms verifying use of accurate HAB forecasts

THEME

CUSTOMER SERVICE

CUSTOMER
SERVICE

THEME – CUSTOMER SERVICE

GOAL: CREATE A CULTURE OF OUTSTANDING COMMUNICATION AND SERVICES TO OUR INTERNAL AND EXTERNAL CUSTOMERS

MAJOR ELEMENTS OF THE GOAL

Provide Streamlined Services and a Single Point of Contact Assistance for Customers, Improving Interaction and Communication through CommerceConnect, Partnerships, and Other Means of Stakeholder Involvement

Through its CommerceConnect initiative, the Department provides a one-stop approach to expose businesses to the array of programs, services, and data available from the federal government. Teaming up with its partner bureaus, other federal and local agencies, CommerceConnect hopes to develop and improve programs that meet business needs, and to identify existing programs to better target areas of business need.

CommerceConnect will provide assistance to U.S. businesses through a Web-based portal, call centers, stand alone field offices, and bureau field offices. All assistance portals are fully integrated with a customer relationship management (CRM) system to track customer service and performance metrics, respecting business privacy.

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

The Department is working to improve information sharing to promote open and transparent access to information generated by the Department and bureaus. An understanding of existing processes, along with the willingness to accept change, is a critical factor in creating an atmosphere of open and transparent access to information.

The Department will develop 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.

Provide a High Level of Customer Service to Our Internal and External Customers through Effective and Efficient Functions Implemented by Empowered Employees

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

BUREAUS CONTRIBUTING TO THIS GOAL

All bureaus contribute to this goal. Departmental Management (DM), which provides policy direction and oversight to bureaus, will work collaboratively with bureau managers to ensure that this initiative is executed efficiently and uniformly.

In addition, each operating unit will develop strategies unique to its mission. They will, for example:

- Establish a uniform customer survey (Chief Financial Officer (CFO)/Assistant Secretary for Administration (ASA));
- Advocate for the Department in implementing the Herbert C. Hoover Building renovation project (CFO/ASA). CFO/ASA will effectively represent the Department in all aspects of the project for which the General Services Administration (GSA) has responsibility; and plan and coordinate all aspects of the project for which the Department has responsibility;
- Evaluate and improve the means by which economic, statistical, trade, and other data may be made available to businesses, communities, and individuals (Economics and Statistics Administration (ESA));
- Create a modern information technology (IT) infrastructure for a scientific enterprise (National Oceanic and Atmospheric Administration (NOAA));
- Increase the percentage of calls resolved directly by the Bureau of Industry and Security (BIS) call center operators (BIS); and
- Expand outreach to new stakeholders who participate in the open government initiative. (Economic Development Administration (EDA)).

OBJECTIVE 19

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

In its mission to support U.S. business innovation and entrepreneurship, enhance economic resiliency, assist job creation, and help U.S. firms transform themselves into globally competitive enterprises, CommerceConnect strives to connect U.S. businesses with Department programs, products, and services that meets their needs at every point in their life cycle.

STRATEGIES TO ACHIEVE THIS OBJECTIVE

CommerceConnect provides a conceptual framework for coordinated one-stop federal assistance to businesses and communities, the intent of which is to:

- Streamline U.S. businesses' access to government services and solutions—in particular, the Department's 60-plus technical assistance, grant, and information-based programs;
- More effectively deliver the Department's existing business-focused programs;
- Create a culture of customer service Department-wide;
- Promote a no-wrong-door approach in addressing business needs; and
- Connect to other federal agencies (e.g., Small Business Administration).

CommerceConnect will provide assistance to U.S. businesses through four levels of support with one-stop touch points:

- **Web-based Portal.** Externally-facing Virtual CommerceConnect Web-based portal with robust program content;
- **Call Centers.** Telephone support, initially by CommerceConnect specialists in the Michigan Field Office, then through call centers;
- **Stand Alone Field Offices.** Dedicated CommerceConnect specialist case managers to provide face-to-face interaction and support in regions of greatest need (e.g., Michigan);
- **Bureau Field Offices.** Host existing program specialists who receive enhanced training and access to CommerceConnect virtual tools to direct businesses where they can best be served; and
- **Customer Relationship Management (CRM) System.** All four levels will be fully integrated with an internal CRM system to track customer service and performance metrics, respecting business privacy.

CommerceConnect depends on referrals to the Department, and other federal and local economic development partners to deliver services to its clients. To work better with its partners and to make a larger impact on the business community, CommerceConnect will develop a better understanding of partner programs and the characteristics that make up a good candidate for referral to partner programs.

Also, as part of this effort, CommerceConnect will execute its marketing plan and brand itself as a one-stop shop for federal assistance to the business community,

KEY CHALLENGES

Strategically, it is critical that CommerceConnect establishes a clear value proposition for bureaus so that bureaus are willing to launch physical locations. The ability of CommerceConnect to create performance measures tied to mission, thereby demonstrating its effectiveness, will go a long way toward building support in the Department for CommerceConnect.

Operationally, there are also concerns about handling the demand for CommerceConnect services. A strong marketing campaign could overwhelm call centers, which in turn, could overwhelm the case managers and the capacity of bureau resource coordinators to provide support and program information to case managers. Too soft a marketing campaign could leave CommerceConnect with excess resources without the demand for services. Finally, the complexity of the organizational scheme poses a challenge for developing content and making it release-ready in a short time frame.

EXTERNAL FACTORS

The U.S. economy is rapidly changing due to factors such as the strength of the world economy, foreign political upheaval, and technological advances. What makes the economic environment different today, and into the future, is the unprecedented speed and depth of change.

This reality requires that CommerceConnect adapt quickly to address those challenges faced by its client companies. For CommerceConnect to help U.S. businesses, case managers need to be able to recommend a portfolio of programs that provide benefit to client companies.

As the pilot moves forward, it will become critical for CommerceConnect to identify assistance gaps in programs—those areas where there is a business need, but no programs to address that need. As an ongoing process, CommerceConnect needs to work with its partners to develop and enhance programs that meet business needs, and to identify existing programs to target areas of business need.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

CommerceConnect cuts across all Department bureaus as well as other federal agencies. Specific programs that were most referred by the CommerceConnect pilot program include:

Department bureaus:

- National Institute of Standards and Technology (NIST) – Hollings Manufacturing Extension Partnership (MEP);
- International Trade Administration (ITA) Foreign and Commercial Service – U.S. Export Assistance Center;
- Minority Business Development Agency (MBDA); and
- Economic Development Administration (EDA) – Trade Adjustment Assistance Centers, Revolving Loan Program.

Other federal agencies:

- Small Business Administration – Guaranteed Loan Program; and,
- Department of Defense – Tank Automotive Research, Development and Engineering Center (TARDEC), Procurement Technical Assistance Centers (PTAC).

A list of contributing Department bureaus is shown in the table below:

COMPLETE LIST OF DEPARTMENT BUREAUS CONTRIBUTING TO THIS OBJECTIVE	
<p>Office of the Secretary</p> <ul style="list-style-type: none"> ● Office of Small and Disadvantaged Business Utilization (OSDBU) <p>Economic Development Administration</p> <ul style="list-style-type: none"> ● University Centers ● Revolving Loan Fund <p>Economics and Statistics Administration</p> <ul style="list-style-type: none"> ● Economic Indicators <p>Census Bureau</p> <ul style="list-style-type: none"> ● Statistics of U.S. Business ● Survey of Business Owners ● Economic Census ● Industry Classification ● Decennial Census ● American Community Survey ● Current Population Survey ● Survey of Income and Program Participation ● Local Employment Dynamics/On the Map ● BusinessHelp site ● Small Business Ombudsman ● AES Direct ● USA Trade Online 	<p>Bureau of Economic Analysis</p> <ul style="list-style-type: none"> ● Survey of Current Business <p>National Oceanic and Atmospheric Administration</p> <ul style="list-style-type: none"> ● Marine Mapping Tool ● Fishery Contingency Fund ● Navigational Services ● Small Business Innovation Research ● Digital Coast ● Fishing Vessel Capital Construction Fund ● Fisheries Finance Program ● Seafood Inspection <p>U.S. Patent and Trademark Office</p> <ul style="list-style-type: none"> ● Roster of Patent Attorneys ● Inventors Assistance Program ● Intellectual Property Awareness Campaign ● Patent and Trademark Depository Libraries ● Trademark Assistance Center <p>National Institute of Standards and Technology</p> <ul style="list-style-type: none"> ● Measurement Services ● Office of Technology Partnership/SBIR ● Manufacturing Extension Partnership ● Technology Innovation Program

(continued)

COMPLETE LIST OF DEPARTMENT BUREAUS CONTRIBUTING TO THIS OBJECTIVE *(continued)*

International Trade Administration

- U.S. Export Assistance Centers (USEAC)
- Trade Information Center
- Advocacy Center
- Office of Intellectual Property Rights
- Trade Finance Guide – Financial Services
- Sustainable Manufacturing
- Export Trade Certificate
- Export Yellow Pages
- Strategic Partnership Program
- Invest in America
- Trade Missions Program
- Featured U.S. Exporters (FUSE)
- Global Teams Program
- Trade Agreements Compliance Program
- International Buyer Program
- Two for One Earned Import Allowance Programs
- Florence Agreement Program
- U.S. Foreign-Trade Zones
- Haiti Earned Import Allowance
- Office of Textiles and Apparel
- Subsidies Enforcement Office
- Steel Import Monitoring and Analysis
- Trade Remedy Compliance
- Petition Counseling and Analysis
- Watch and Jewelry Program
- Wool Fabric Tariff

Bureau of Industry and Security

- Export Controls Counseling Center

Minority Business Development Agency

- Minority Business Enterprise Centers
- Native American Business Enterprise Centers
- Minority Business Opportunity Centers
- Minority Business Internet Portal

National Technical Information Service

- World News Connection®
- National Technical Reports Library
- DEA Active Controlled Substances Act (CSA) Registrants Database
- Social Security Administration's Death Master File
- NTIS Customer Contact Center

National Telecommunications and Information Administration

- Manual of Regulations and Procedures for Federal Frequency Management
- Coordination of Spectrum Frequencies
- Broadband Technology Opportunities Program

PROGRAM EVALUATIONS

The ultimate objective of CommerceConnect is to create U.S. jobs by connecting U.S. businesses with Department programs, products, and services that meet their needs at every point in their life cycle.

The proposed initial performance measures for CommerceConnect include a mix of data and outcome-based metrics. In some cases, after establishing a baseline, the Department will collect data over a longer operating period to ensure credible and meaningful results and to inform expectations throughout the process. Indeed, the process has begun: the Department has integrated these metrics into the new CommerceConnect CRM system.

Breadth of CommerceConnect Business Community Impact:

- Number of referrals made to partner agencies indicates that CommerceConnect is exposing its clients to new programs; and
- Number of contacts with U.S. businesses speaks to the impact of CommerceConnect on the business community.

Depth of CommerceConnect Client Impact:

- Client-to-client referrals to CommerceConnect imply that the client felt that the CommerceConnect interaction was worthwhile enough to recommend it.
- Clients that pursued a new program recommendation made by CommerceConnect indicates that CommerceConnect has analyzed the client's situation appropriately and exposed the client to a program in which the client felt was worth investing his or her time.
- Jobs created or retained indicate that CommerceConnect has achieved its ultimate objective, along with leveraging the impact of collaboration between CommerceConnect and its partners.

Looking ahead, the Department intends to develop more robust outcome-based performance measures for CommerceConnect that will leverage data from throughout the Department.

The Department anticipates intra-departmental synchronization and shared success stories throughout the Department's 13 bureaus and 60-plus programs resulting from the CommerceConnect initiative. The Department will also look for ways to establish measures of client loyalty and satisfaction.

OBJECTIVE 19: PROVIDE STREAMLINED SERVICES AND A SINGLE POINT OF CONTACT ASSISTANCE FOR CUSTOMERS, IMPROVING INTERACTION AND COMMUNICATION THROUGH COMMERCECONNECT, PARTNERSHIPS, AND OTHER MEANS OF STAKEHOLDER INVOLVEMENT

BUREAU	PERFORMANCE MEASURE
DM	<ul style="list-style-type: none"> ● Number of companies engaged by CommerceConnect ● Number of referrals made by CommerceConnect

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

The Department-wide strategies to develop a culture of information sharing to promote outstanding customer service and transparency include the following:

- 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.

KEY CHALLENGES

The Department is working to improve information sharing to promote open and transparent access to information generated by the Department and bureaus.

The major challenges to promote open and transparent access to information are:

- Ensuring that the information is accurate;
- Meeting quality standards;
- Satisfying privacy and security guidelines; and
- Delivering this information in a timely and cost-effective manner.

Many tools are available to assist in the dissemination of information. An understanding of existing processes, along with the willingness to accept change, is a critical factor in creating an atmosphere of open and transparent access to information. These changes will create a culture that will improve information dissemination and increase transparency.

EXTERNAL FACTORS

In addition to the internal challenges presented above, there are several external factors which must be recognized as parameters in this initiative:

- The Department's customers are diverse, with a broad range of needs and expectations that cannot be met through a single approach.
- The Department's programs give rise to demands for greater productivity and increased services against a backdrop of limited federal funds.
- Government employees are frequently perceived disparagingly by the general public, necessitating extra efforts to build trust and respect.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

The Department Office of the Chief Information Officer (OCIO), working with the bureaus' CIOs, will implement the technical infrastructure and approve the tools required to meet this initiative.

DM, which provides policy direction and oversight to bureaus, will work with bureau managers to ensure that this initiative is executed efficiently and uniformly.

PROGRAM EVALUATIONS

Surveys of customers and other stakeholders will be conducted regularly to monitor progress and to improve business processes. Additional assessment methods will be employed in order to collect accurate and comprehensive data, including telephone interviews and meetings with customers.

OBJECTIVE 21

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

In seeking to develop a culture which emphasizes outstanding customer service, a variety of strategies will be developed and measured using a strategic planning and management system known as the Balanced Scorecard. The Department-wide strategies include 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 open government initiative to improve transparency, collaboration, and cooperation with the public and across all levels of government (see Objective 20).
- Implement 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 Federal 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).

In addition, each operating unit will develop strategies unique to its mission; for example:

- Establish a uniform customer survey (CFO/ASA);
- Partner with GSA to effectively represent the Department in all aspects of the Herbert C. Hoover Building renovation project for which GSA has responsibility, and plan and coordinate all aspects of the project for which the Department has responsibility (CFO/ASA).
- Evaluate and improve the means by which economic, statistical, trade, and other data may be made available to businesses, communities, and individuals (ESA);
- Create a modern IT infrastructure for a scientific enterprise (NOAA);
- Increase the percentage of calls resolved directly by the BIS call center operators (BIS); and
- Expand outreach to new stakeholders who participate in the open government initiative (EDA).

KEY CHALLENGES

Employee training may, in part, meet the challenge to build a workforce demonstrating courtesy, productivity, and knowledge. The key topics deserving attention are employee attitude, time management, and knowledge of service. Beyond training, however, is the need to develop a culture in which excellence in customer service is deemed to be integral.

EXTERNAL FACTORS

In addition to the internal challenges presented above, there are several external factors that must be recognized as parameters in this initiative:

- The Department's customers are diverse, with a broad range of needs and expectations that cannot be met through a single approach.
- The Department's programs give rise to demands for greater productivity and increased services against a backdrop of limited federal funds.
- Government employees are frequently perceived disparagingly by the general public, necessitating extra efforts to build trust and respect.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

All bureaus contribute to this goal.

PROGRAM EVALUATIONS

Surveys of customers and other stakeholders will be conducted regularly to monitor progress and to improve business processes. Additional assessment methods will be employed in order to collect accurate and comprehensive data, including telephone interviews and meetings with customers.

THEME

ORGANIZATIONAL
EXCELLENCE

ORGANIZATIONAL
EXCELLENCE

THEME – ORGANIZATIONAL EXCELLENCE

GOAL: CREATE A HIGH-PERFORMING ORGANIZATION WITH INTEGRATED, EFFICIENT, AND EFFECTIVE SERVICE DELIVERY

The Department will seek to achieve more efficient and more effective management by strengthening financial and non-financial internal controls, managing risk, and re-engineering key business practices. For example, the Department recently initiated a Balanced Scorecard to focus and manage Department-wide priorities. Each bureau has developed its own Balanced Scorecard using Department themes, goals, and objectives established.

MAJOR ELEMENTS OF THE GOAL

Strengthening Financial and Non-financial Internal Controls

The Department will strengthen financial and non-financial internal controls 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 (CAP) to address any identified weakness, and continuously monitoring the progress made on corrective actions.

Managing Risks

The Department has established a new office to implement a process for managing program risks for the benefit of the Department's bureaus. The process will emphasize the sharing and use of best practices, and focus on collaboration between the bureaus and Departmental Management (DM). By better identifying, quantifying, and mitigating risks, the new office will help major projects achieve their goals on schedule and within budget.

Re-Engineering Key Business Practices

Through the Performance Excellence Program, the Department will establish a framework for improving effectiveness, efficiency, and customer focus. Emphasis is being placed on core processes, customer service, and employee involvement. The Department will review program processes through teams of stakeholders who have been trained in methodologies. Support processes will also be redesigned, notably acquisitions, human resources, and information technology.

BUREAUS CONTRIBUTING TO THIS GOAL

All Departmental bureaus contribute to this objective with DM providing policy direction, oversight, and administrative services to the bureaus. Bureau managers work collaboratively with DM to ensure administrative functions, such as risk management as well as financial and non-financial internal controls, are in place to ensure compliance with statute and regulation to prevent waste, fraud, and abuse of government resources. The Office of Inspector General (OIG) monitors and tracks the use of taxpayer dollars through audits, inspections, evaluations, and investigations.

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

The Department ensures the success of objective by conducting OMB Circular A-123 financial internal controls assessments annually, by performing non-financial management internal controls reviews on select sensitive programs, by overseeing the development of CAPs to address any identified weaknesses, and by continuously monitoring the progress made on the corrective actions.

KEY CHALLENGES

The Department has many diverse programs that have varying risk and impact on its budget. While emphasizing internal control over financial reporting, achieving effective and efficient operations, and ensuring compliance with laws and regulations, the Department has the challenge of striking the right balance between the establishment of internal controls and the costs and benefits of maintaining those controls, ensuring that the Department has the right controls, in the right place, at the right time.

EXTERNAL FACTORS

Many external factors affect the Department's ability to achieve this objective, such as revisions to statutes and regulations, and resource constraints. The Department addresses these external factors by continuously monitoring pertinent statutes and regulations, and accessing their impact on the Department's objectives, and by using internal staff whenever possible to perform internal control assessments and reviews.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

All Departmental bureaus contribute to this objective. DM provides policy direction and oversight to bureaus within the Department and assists smaller bureaus with the testing and assessment of key internal controls. Bureau finance offices work collaboratively with DM to ensure that financial and non-financial internal controls are in place to ensure compliance with statutes and regulations, and prevent waste, fraud, and abuse of government resources. Success in these efforts enables Department bureaus to maximize the effectiveness and efficiency with which programmatic activities are carried out and service is provided to the U.S. public.

DM coordinates its internal control activities with the Office of Inspector General (OIG), and the OIG's independent public auditors review the Department's annual A-123 assessment results.

The OIG examines bureaus' internal financial controls during annual financial statement audits, conducts audits and reviews, and provides reports and recommendations to the Department and bureaus on financial and non-financial internal controls.

PROGRAM EVALUATIONS

The Department uses internal reviews; audits, reviews, and reports generated by the OIG; reviews by the Government Accountability Office (GAO) and other Congressional organizations; and other objective sources to evaluate Departmental internal controls. For example, the

Department conducts an OMB Circular A-123 financial internal controls assessment targeting key financial processes. The Department and its bureaus prepare CAPs to address any internal control weakness identified, and monitor the progress of the completion of the CAPs. The Department uses the results of these efforts as needed to assess achievement of performance targets.

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

BUREAU	PERFORMANCE MEASURE
DM	<ul style="list-style-type: none"> ● Provide accurate and timely financial information and conform to federal standards, laws, and regulations governing accounting and financial management ● Effectively use commercial services management
OIG	<ul style="list-style-type: none"> ● Percent of OIG recommendations accepted by Departmental and bureau management ● Percent of OIG recommendations accepted that have been implemented by Departmental and bureau management ● Dollar value of financial benefits identified by the OIG ● Percent of criminal and civil matters that are accepted for prosecution

OBJECTIVE 23

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Department-wide Performance Excellence Program

The Performance Excellence Program establishes a framework for improving effectiveness, efficiency, and customer focus. Emphasis is being placed on core processes, customer service, and employee involvement. The Secretary will recognize outstanding examples on a quarterly basis. (See also Objective 21).

Multi-disciplinary Program Reviews

The Department is establishing a capability to review programs from new and diverse perspectives, providing opportunities to identify efficiencies and enhance the effectiveness of its programs. Undertaken by multi-disciplinary teams drawn from around the Department, any effort of this nature requires a consistent approach and methodology. Communication will also be a key to developing an organization that welcomes external evaluations. With a dedicated unit, this activity will provide an objective basis for decision-making and prioritizing Department programs in an era of increased demands and decreased resources.

Identify and Mitigate Risks to Mission-critical Projects and Programs

A new Office of Risk Management aligned with the program review capability and office will implement integrated, enterprise-wide risk management policies, tools, and internal controls, while also focusing on specific high priority, high risk areas. The office will provide oversight of these high priority, high risk programs and projects in conjunction with applicable bureaus.

KEY CHALLENGES

The diversity of Department programs pose challenges for external evaluations involving staff that may lack technical knowledge about any given program. Identifying staff from across the Department who can serve as needed on program review teams will also need to be addressed so as not to disrupt core-mission programs. Ongoing communication and coordination with bureaus will be essential to promote a culture that recognizes the value of program reviews, as well as efforts to identify and mitigate risks to mission-critical projects and programs. Similar challenges must also be addressed with a Performance Excellence Program. Many bureaus across the Department have implemented performance improvement programs internally to improve morale and efficiency. A strong commitment and open communication from senior management will contribute significantly to obtaining buy-in at all levels for the Performance Excellence Program.

EXTERNAL FACTORS

Throughout the government, efforts are underway to identify savings, reduce costs, and improve program effectiveness to best serve internal and external customers and stakeholders. Thoughtful consideration of Department programs in the context of funding realities requires a dedicated effort to ensure that resources are distributed and utilized for maximum potential. Identifying and mitigating risks is also crucial to ensuring efficient and effective program operations to advance Department priorities. Obtaining staff from across the Department to undertake program reviews and staff to advance a risk management program must be carefully balanced against the need to meet customer and stakeholder requirements. The same is true for the Performance Excellence Program. The program must draw on existing staff resources who must balance their assigned duties within their respective organizations in addition to their responsibilities as members of the Performance Excellence Council.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

Every office and bureau in the Department will ultimately contribute to meeting the objectives. Multi-disciplinary teams for program reviews and staff support for the Performance Excellence Program involve participation from across the Department. The same is true for risk management and mitigation.

PROGRAM EVALUATIONS

The program review process will require input from bureaus and offices, but will also require evaluation teams to draw on a wide array of sources from GAO and OIG reports to internal analyses of program operations. The risk management process will also require input throughout the Department, as well as reliance on additional sources of information and expertise. In coordination with the Department's Balanced Scorecard, the Performance Excellence Program will provide a structure for promoting continuous and breakthrough enhancements to the efficiency with which the Department manages its programs, provides customer service, and carries out its overall missions.

OBJECTIVE 23: RE-ENGINEER KEY BUSINESS PROCESSES TO INCREASE EFFICIENCIES, MANAGE RISK, AND STRENGTHEN EFFECTIVENESS

BUREAU	PERFORMANCE MEASURE
DM	<ul style="list-style-type: none"> ● Obligate funds through performance-based contracting

OBJECTIVE 24

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

The priorities driving the achievement of this objective are to (1) improve the effectiveness of information technology (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 Chief Information Officer (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 will look at optimization and consolidation across geographically distributed organizations, while smaller co-located bureaus will be 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.

KEY CHALLENGES

Bureaus must think of IT resources as corporate resources, and not as local resources. This will require a cultural change. This change has already started to take place with the submission of the 2012 Cyber Security Strategic Plan. Priorities were developed in collaboration with the bureaus ensuring alignment with their operating units' priorities.

EXTERNAL FACTORS

A key external driver is directed and escalating cyber security attacks, requiring the Department to protect its intellectual property and infrastructure assets.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

All bureaus contribute to this effort for their part of the federation. Selected bureaus are taking the lead at a Department level. For instance, the Census Bureau has taken the lead for Department-wide data center consolidation, while the National Oceanic and Atmospheric Administration (NOAA) is leading the implementation of the Enterprise Security Operations Center, the International Trade Administration (ITA) is looking at Department-wide customer relationship management requirements, and the U.S. Patent and Trademark Office (USPTO) is looking at call center consolidation.

The OIG conducts annual reviews of bureaus' information security programs under the Federal Information Security Management Act. Please refer to Objective 22 for activities central to the mission of the OIG.

PROGRAM EVALUATIONS

The Enterprise Architecture Program is linked to the capital planning and investment review process and the cyber security processes through the strategic IT plans and the business cases that form the basis of budget initiatives, investment reviews, and operational IT plans.

The Department IT Review Board evaluates the IT portfolio, as does the OMB IT Dashboard. Additionally, the OIG audits the IT security program.

OBJECTIVE 24: CREATE AN IT ENTERPRISE ARCHITECTURE THAT SUPPORTS MISSION-CRITICAL BUSINESS AND PROGRAMMATIC REQUIREMENTS, INCLUDING EFFECTIVE MANAGEMENT OF CYBER SECURITY THREATS

BUREAU	PERFORMANCE MEASURE
DM	<ul style="list-style-type: none"> ● Improve the management of information technology

THEME

WORKFORCE
EXCELLENCE

WORKFORCE
EXCELLENCE

THEME – WORKFORCE EXCELLENCE

GOAL: DEVELOP AND SUPPORT A DIVERSE, HIGHLY QUALIFIED WORKFORCE WITH THE RIGHT SKILLS IN THE RIGHT JOBS TO CARRY OUT THE DEPARTMENT'S MISSION

MAJOR ELEMENTS OF THE GOAL

Recruitment and Retention

The Department will implement the President's Hiring Reform Initiative, effective November 1, 2010. This initiative is expected to streamline the process and increase 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 developed a Veterans Recruitment and Employment Operational Plan in FY 2010 that it will use over the next few years as a model to develop an operational plan for recruiting veterans and persons with disabilities. The Department will continue to provide retention incentives to retain skilled employees at all levels of the organization. The Department will continue to implement its pay for performance systems that have proven to be positive factors in the scientific and engineering fields, where historically, private sector pay scales for these difficult-to-fill positions are much higher than in the federal sector.

Leadership, Accountability, and Succession Planning

The Department will create, sustain, and strengthen its development of emerging leaders to assume leadership positions within all levels so they can provide leadership during the Departmental changes that are sure to come within future decades. A continuous cycle of improved performance will become the culture of the Department by putting systems for accountability in place that will drive performance and excellence.

Promoting a Culture of Safety

The Department must ensure that 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 will enhance the role of leadership by ensuring 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. The Department will conduct a gap analysis and prepare 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.

BUREAUS CONTRIBUTING TO THIS GOAL

All Departmental bureaus contribute to this objective with Departmental Management (DM) providing policy direction, oversight, and administrative services to the bureaus. Bureau managers work collaboratively with DM to ensure administrative functions, such as risk management as well as financial and non-financial internal controls, are in place to ensure compliance with statute and regulation to prevent waste, fraud, and abuse of government resources.

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Hiring Reform

The Department is committed to implementing the President's Hiring Reform Initiative, effective November 1, 2010. This initiative will allow applicants to apply by submitting only a resume and cover letter for positions within the Department. In their initial submission, applicants will no longer be asked to respond to essay-style questions. In addition, the current "rule of three" will be eliminated; therefore, hiring managers will no longer be limited to receiving only three applicants on referral lists of candidates from outside the federal government. This will enable hiring managers to review and select from a larger applicant pool. The Hiring Reform Initiative will likely increase the number of applicants who apply for positions, thus assist in attracting the next generation of scientists and engineers, as well as other mission-critical occupations.

Recruitment of Veterans and Persons with Disabilities

The Department developed a Veterans Recruitment and Employment Operational Plan in FY 2010, which will continue to be used over the next few years. The plan outlines strategies such as leadership commitment, skills development and employment, marketing veterans' employment, and information gateway. The Department will continue to forge partnerships with other federal agencies, universities, colleges, and other institutions that have veterans as students, members, and affiliates. In addition, the plan will be used as a model to develop an operational plan for recruiting persons with disabilities. Both the veterans plan and the disability operational plan will assist the Department with recruiting a diverse skilled workforce to include veterans and persons with disabilities.

Recruitment and Retention of Scientists and Engineers

The Department will continue to use flexibilities such as recruitment and relocation incentives, as well as the student loan repayment plan, to assist with the hiring of the next generation of skilled employees in difficult-to-fill positions, including scientists and engineers. In addition, the Department will continue to provide retention incentives to skilled employees as part of succession planning in order to retain those eligible to retire so they can transfer their knowledge and assist with training the next generation. Telework, a workplace flexibility, is also being expanded throughout the Department and will assist in recruiting and retaining top talent. Dual compensation (salary offset) waivers under the National Defense Authorization Act will continue to be used as a tool to reemploy annuitants in the scientific and engineering fields to assist with mentoring and grooming the next generation in many mission-critical occupations.

Pay for Performance

Both the Department's Alternative Personnel System and the National Institute of Standards and Technology's (NIST) Alternative Personnel Management System are tools to attract and retain the best talent. Both of these pay-for-performance systems have proven to be positive factors in the ever-growing competition for top talent, especially in the scientific and engineering fields, where historically, private sector pay scales for these difficult-to-fill positions are much higher than in the federal sector.

Technology

A comprehensive business case analysis detailing the Department's need of an automated front-end system has been developed that will better enable hiring managers and human resources professionals to submit and track requests to advertise and fill positions. A front-end system will also assist with the on-boarding process for applicants. Applicants will be able to submit forms electronically and reduce the duplication in the on-boarding process. An automated front-end system will assist with reducing the time to hire, which ultimately will improve the overall recruitment process for applicants and increase the number of skilled applicants hired.

KEY CHALLENGES

The Department faces several key challenges in recruiting and retaining a high-performing, diverse workforce with the critical skills necessary for mission success, including growing the next generation of scientists and engineers. One of the major challenges is competing with private sector overall higher starting salaries for entry-level positions, especially within the scientific and engineering professions. Even with the Department's pay-for-performance systems, the private sector tends to have more flexibility in their total compensation packages than the federal government. Another key challenge is budgetary constraints. Budgetary constraints impact bureaus' ability to provide useful recruitment and relocation incentives.

EXTERNAL FACTORS

The federal government adheres to Merit System Principles under Title 5, U.S. Code § 2301, which promotes open and fair competition. These principles sometimes create a challenge to compete against the private sector that are not mandated to follow the same set of rules, especially when recruiting recent college graduates for entry-level positions.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

All Department bureaus contribute to the goal of recruiting, developing, and retaining a high-performing, diverse workforce with the critical skills necessary for mission success, including growing the next generation in Department mission-critical occupations.

NIST supports science, technology, engineering, and mathematics (STEM) education through its Postdoctoral Research Associateship program.

PROGRAM EVALUATIONS

Individual bureaus are responsible for maintaining records of recruitment, relocation, and retention incentives, as well as student loan repayment plans. The Office of Human Resources Management (OHRM) is responsible for gathering the information and providing yearly reports to the Office of Personnel Management (OPM). In addition, the bureaus and OHRM will be responsible for maintaining statistical information on the recruitment of veterans and persons with disabilities. OHRM will also report in the annual Human Capital Management Report on measurable results in implementing hiring reform, and will continue to conduct evaluations of implementation and make improvements based on the results.

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

BUREAU	PERFORMANCE MEASURE
DM	<ul style="list-style-type: none"> ● Acquire and maintain diverse and highly qualified staff in mission-critical occupations

OBJECTIVE 26

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

STRATEGIES TO ACHIEVE THIS OBJECTIVE

The Department will employ a three-pronged strategy to develop a highly qualified workforce that is diverse in its composition and possesses the skill sets to carry out its assigned mission.

Leadership Development

The Department will strengthen its development of emerging leaders in all bureaus. All component organizations will identify their emerging leaders, select the most qualified from a diverse pool of applicants, and develop them through a rigorous learning program that will prepare them to assume leadership positions within the Department. These programs will focus on the development of the entry-level, the mid-level, and the senior leadership of the Department. In addition, a learning culture will be created and sustained that will make use of communities of practice, implementing project management principles, and the use of other electronic tools for capturing institutional knowledge.

Accountability

The Department understands that the systems put in place for accountability will drive performance and excellence. Therefore, the Department will install workflow and communications systems that will include the development of policies, programs, and activities that will link to the applicable merit system principles. Additional systems will be engaged to monitor and evaluate the effectiveness of these operational systems, so that a continuous cycle of improved performance will become the culture of the Department.

Succession Planning

The Department will create and sustain a leadership succession strategy for its workforce. This strategy will provide a comprehensive leadership pipeline for the development and meaningful engagement of emerging leaders at all levels in the organization. The ultimate purpose of this strategy is to prepare leaders to assume responsible positions throughout the organization so that they can provide leadership during the Departmental changes that are sure to come in the decades ahead.

KEY CHALLENGES

Future Workforce Requirements

Based upon data that show the Department has an aging workforce, the Department can expect waves of retirements that may affect its ability to successfully complete its mission. The Department needs to accelerate its Leadership Succession Strategy pipeline so that leaders that are more qualified will be prepared to assume leadership positions at all levels of the organization. The Department also needs to ensure that the workforce represents the diversity of the population at large, including the veterans who have served to protect this country. The challenges that lie within future decades will require less of some competencies and more of other competencies: It is incumbent upon the Department to identify those requirements and develop the workforce in the appropriate direction.

Addressing the Learning Needs of a Diverse Workforce

The Department may need to address a diverse workforce, where members have a variety of disabilities acquired as a veteran, or from an accident of birth or circumstance. Members of workforce that is truly diverse (i.e., gender, race, age, religion, and sexual orientation) may need other accommodations in order to be fully integrated into the mainstream of the organization. The supervisors in this workforce will need to learn how to equitably manage this diversity to the overall benefit of the Department and its mission.

EXTERNAL FACTORS

A major factor is the labor market which depends on the exchange of information between the Department and job seekers about wage rates, conditions of employment, level of competition, and job location. To minimize this risk factor, the Department must respond rapidly to its potential employees' changing needs and anticipate changes in the labor market.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

The Department will work with all bureaus and sub-components to provide policy, guidance, and assistance to facilitate the success of this goal. The Department will continue to work closely with all bureaus identified in this strategic plan.

PROGRAM EVALUATIONS

All of the flagship leadership development programs will be evaluated against the Kirkpatrick four-level system, which is the gold standard of the training industry. Reaching Level IV will measure the organizational impact of the program. Other indicators of success are:

- Is there a continual flow of graduates from the leadership programs?
- Has a learning culture been nurtured in the Department?
- Has a leadership succession strategy been created and sustained?
- Has the Department diversified its workforce to represent the general population?

OBJECTIVE 27

Provide an environment that empowers employees and creates a productive and safe workplace

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 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. Identifying and controlling exposures to occupational safety and health hazards are an essential part of everyone's duties in the Department. Doing so will enhance the Department's safety culture and ensure that it remains an employer of choice.

STRATEGIES TO ACHIEVE THIS OBJECTIVE

Enhance the Role of Leadership in Promoting a Culture of Safety

Knowledge of responsibilities and actions necessary to control exposures to hazards are an essential part of everyone's responsibility in the Department. Ensuring that Department managers, supervisors, and employees have the knowledge, skills, resources, and commitment to control hazards in the workplace will strengthen Department efforts to protect its employees, contractors, visitors, and others who enter its workplaces.

The Department must ensure that the executives and managers responsible for safety programs in their bureaus/organizations actively participate in safety activities, such as the Department's Safety and Health Council meetings; determine and maintain appropriate safety and occupational health staffing levels; provide resources and support to their safety staff by giving them time and resources to implement safety program components; attend safety meetings; participate in training; and conduct inspections. The Department must achieve this strategy by providing awareness training to the Department's Safety and Health Council members and their respective safety managers/coordinators.

Continuously Improve the Department's Safety and Health Program

The Department plans to reestablish and update DAO 209-4, *Occupational Safety and Health Program*, which prescribes policy and responsibilities for implementing the Occupational Safety and Health Program of the Department.

The Department intends to conduct a gap analysis and prepare 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/organizations' occupational safety and health programs. Decisions by the bureaus/organizations to integrate safety into their management programs influence the Department work environment and contribute to creating a productive and safe workplace.

The Department must measure this strategy by completing the gap analysis of the Safety and Health Program Manual and developing an improvement strategy.

KEY CHALLENGES

The Department's bureaus and organizations face many challenges that pose risks to its workforce and facilities, and have significant health and safety implications over the next several years. Some of these are shrinking resources, emergency response activities, infrastructure maintenance, and an aging workforce, as well as programmatic challenges. Also of concern in the challenge of providing productive and safe workplaces is the continuous turnover of bureau collateral duty safety coordinators.

EXTERNAL FACTORS

In the summer of 2010, OPM launched a Wellness Initiative that required all agencies to develop, measure and resource Health and Wellness Programs. The Office of Occupational Safety and Health is responsible for the coordination of the Department's Health and Wellness efforts.

In the fall of 2010, the President launched the POWER (Protecting our Workers and Ensuring Reemployment) initiative. POWER, the replacement for SHARE (Safety, Health, and Return to Employment), is designed to improve workplace safety and health of federal employees. Under POWER, federal agencies are required to track their progress in several critical areas of emphasis

The Department's Occupational Safety and Health Program continually faces increasing demands for greater productivity and increased services.

PROGRAMS CONTRIBUTING TO THIS OBJECTIVE

All Department bureaus and organizations have a role in empowering employees and creating productive and safe workplaces.

PROGRAM EVALUATIONS

The Department evaluates the bureaus' safety program management and uses reporting requirements from OSHA to assess bureau safety program performance. For example, the Department prepares an Annual Occupational Safety and Health (OSH) Report to the Department of Labor (DOL), which highlights both the strengths and weaknesses of the bureaus' occupational safety and health programs.

The Department can measure this strategy by the number of Safety and Health Council members completing training on their safety and occupational health responsibilities as well as by the number of effective management/employee bureau/organization safety committees.

In 2009, DOL Occupational Safety and Health Administration (OSHA) increased its inspection activity by targeting federal agencies and their programs for unannounced inspections. In 2010, OSHA conducted several announced and unannounced inspections of Department facilities. While some inspections resulted in no citations, there have been some facilities that received numerous citations. The good news is that the majority of the citations were minor.

APPENDIX

APPENDIX

APPENDIX A: GLOSSARY OF ACRONYMS

ABBREVIATION	TITLE	ABBREVIATION	TITLE
A AD	Antidumping	I IA	Import Administration
ASA	Assistant Secretary for Administration	ICE	Immigration and Customs Enforcement
ASEAN	Association of Southeast Asian Nations	IP	Intellectual Property
		IPR	Intellectual Property Rights
B BEA	Bureau of Economic Analysis	IT	Information Technology
BIS	Bureau of Industry and Security	ITA	International Trade Administration
BTOP	Broadband Technology Opportunities Program	ITS	Institute for Telecommunication Sciences
C CAFTA	Central America Free Trade Agreement	L LED	Local Employment Dynamics
CAP	Corrective Action Plan	LEED	Leadership in Energy and Environmental Design
CFO	Chief Financial Officer		
CIO	Chief Information Officer	M MAS	Manufacturing and Services Unit
CNST	Center for Nanoscale Science and Technology	MBDA	Minority Business Development Agency
CPB	U.S. Customs and Border Protection	MBE	Minority Business Enterprise
CRM	Customer Relationship Management	MDCP	Market Development Cooperator program
CVD	Countervailing Duty	MEP	Manufacturing Extension Partnership
		MTS	U.S. Marine Transportation System
D DM	Departmental Management		
DNS	Domain Name System	N NAFTA	North American Free Trade Agreement
DOJ	Department of Justice	NCNR	National Center for Neutron Research
DOL	Department of Labor	NEI	National Export Initiative
		NIPA	National Income and Product Accounts
E EDA	Economic Development Administration	NIST	National Institute of Standards and Technology
ESA	Economic and Statistics Administration	NOAA	National Oceanic and Atmospheric Administration
		NRC	National Research Council
F FCC	Federal Communications Commission	NTIA	National Telecommunications and Information Administration
FTA	Free Trade Agreement	NTIS	National Technical Information Service
		NTRL	National Technical Reports Library
G GAO	Government Accountability Office	NWS	National Weather Service
GDP	Gross Domestic Product		
GPRA	Government Performance and Results Act		
GPS	Global Positioning System		

ABBREVIATION	TITLE	ABBREVIATION	TITLE
O	OCIO Office of the Chief Information Officer	T	TARDEC Tank Automotive Research, Development and Engineering Center
	OHRM Office of Human Resources Management		TIP Technology Innovation Program
	OIG Office of Inspector General		TPCC Trade Promotion Coordinating Committee
	OMB Office of Management and Budget	U	USPTO U.S. Patent and Trademark Office
	OPM Office of Personnel Management		USTR U.S. Trade Representative
	OSH Occupational Safety and Health	V	VCAT Visiting Committee on Advanced Technology
	OSHA Occupational Safety and Health Administration	W	WTO World Trade Organization
P	PTAC Procurement Technical Assistance Center		
P	RLF Revolving Loan Fund		
S	SIMA Steel Import Monitoring and Analysis		
	SME Small and Medium-sized Enterprise		
	STEI Scientific and Technical Information		

