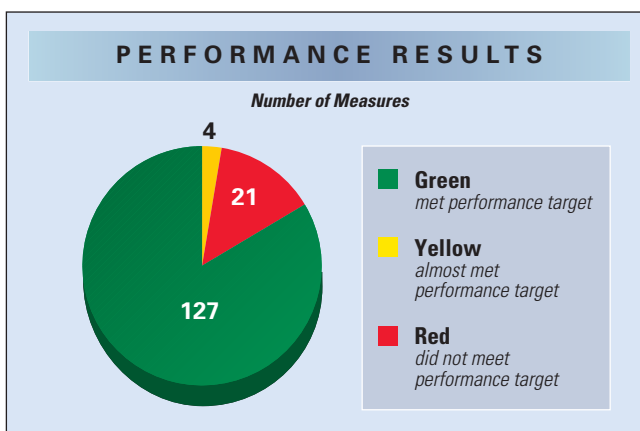


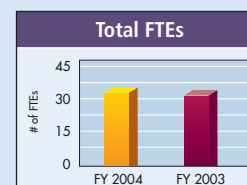
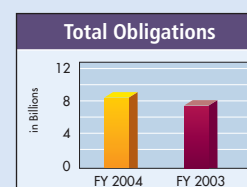
**FY 2004 PERFORMANCE AND FINANCIAL HIGHLIGHTS**

**PERFORMANCE HIGHLIGHTS**

Overall performance results for the Department show that of the 152 performance targets, we achieved 84 percent at or above target, 2 percent slightly below our target, 14 percent did not achieve the target. The Department performance indicators reflect increased performance results over last year, from 79.6 percent to 84.0 percent. Below are the performance results by strategic goal. Achieving results in each of the strategic goals helps further the Department's mission. Discussions and highlights of successes can be found in the performance discussions of each performance goal. This simply provides a snapshot of our targeted achievements.

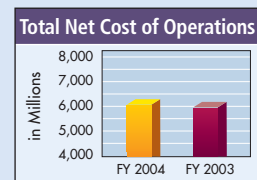
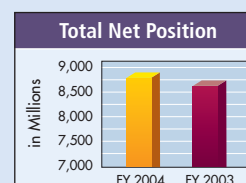
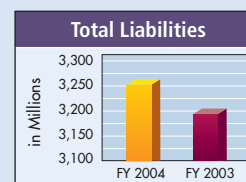
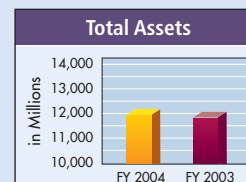


| (Dollars In Millions)  | Percentage Change | FY 2004        | FY 2003        |
|--|-------------------|----------------|----------------|
| <b>For the Period Ended September 30, 2004 and 2003</b>  |                   |                |                |
| <b>Obligations by Strategic Goal:</b>  |                   |                |                |
| <i>Strategic Goal 1: Provide the Information and Tools to Maximize U.S. Competitiveness and Enable Economic Growth for American Industries, Workers, and Consumers</i>     | -10%              | 1,856.8        | 2,065.3        |
| <i>Strategic Goal 2: Foster Science and Technological Leadership by Protecting Intellectual Property, Enhancing Technical Standards, and Advancing Measurement Science</i> | -4%               | 2,147.5        | 2,241.3        |
| <i>Strategic Goal 3: Observe, Protect, and Manage the Earth's Resources to Promote Environmental Stewardship</i>   | +19%              | 4,100.0        | 3,458.5        |
| <i>Management Integration Goal: Achieve Organizational and Management Excellence</i>   | +3%               | 75.8           | 73.4           |
| <b>TOTAL OBLIGATIONS</b>   | <b>+4%</b>        | <b>8,180.1</b> | <b>7,838.5</b> |
| <b>Full Time Equivalents (FTEs) by Strategic Goal:</b>   |                   |                |                |
| <i>Strategic Goal 1: Provide the Information and Tools to Maximize U.S. Competitiveness and Enable Economic Growth for American Industries, Workers, and Consumers</i>     | +6%               | 12,019         | 11,343         |
| <i>Strategic Goal 2: Foster Science and Technological Leadership by Protecting Intellectual Property, Enhancing Technical Standards, and Advancing Measurement Science</i> | -1%               | 10,005         | 10,074         |
| <i>Strategic Goal 3: Observe, Protect, and Manage the Earth's Resources to Promote Environmental Stewardship</i>   | +2%               | 12,086         | 11,898         |
| <i>Management Integration Goal: Achieve Organizational and Management Excellence</i>   | -5%               | 310            | 326            |
| <b>TOTAL FTEs</b>  | <b>2%</b>         | <b>34,420</b>  | <b>33,641</b>  |

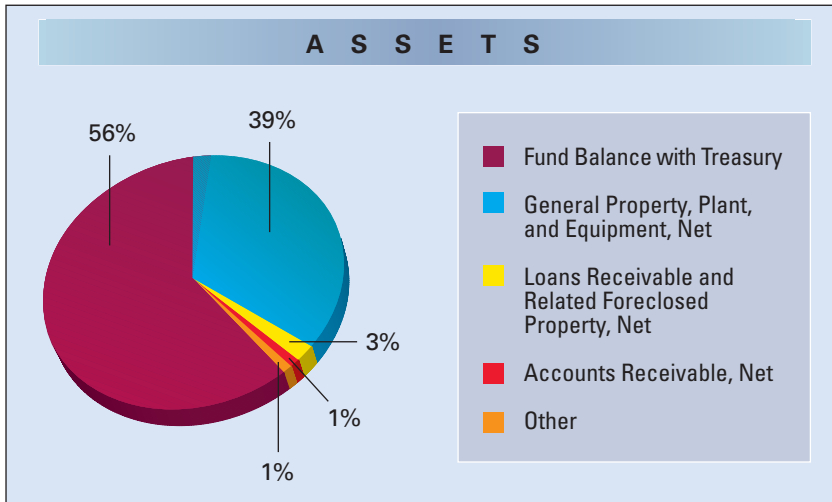


## FINANCIAL HIGHLIGHTS

| (Dollars in Thousands)   | Percentage<br>Change | FY 2004              | FY 2003              |
|--|----------------------|----------------------|----------------------|
| <b>As of September 30, 2004 and 2003</b>   |                      |                      |                      |
| <b>Condensed Balance Sheets:</b>   |                      |                      |                      |
| <b>ASSETS:</b>   |                      |                      |                      |
| Fund Balance with Treasury   | +2%                  | \$ 6,652,727         | \$ 6,502,932         |
| General Property, Plant, and Equipment, Net  | -4%                  | 4,652,882            | 4,670,018            |
| Loans Receivable and Related Foreclosed Property, Net  | +16%                 | 317,138              | 272,675              |
| Accounts Receivable, Net   | +4%                  | 143,929              | 138,414              |
| Other  | -3%                  | 169,631              | 173,993              |
| <b>TOTAL ASSETS</b>  | <b>+2%</b>           | <b>\$ 11,936,307</b> | <b>\$ 11,758,032</b> |
| <b>LIABILITIES:</b>  |                      |                      |                      |
| Unearned Revenue   | +9%                  | \$ 1,088,142         | \$ 999,116           |
| Actuarial FECA Liability and NOAA Corps Employee Retirement Benefits Liabilities   | -2%                  | 557,679              | 568,732              |
| Accrued Grants   | -11%                 | 350,452              | 392,621              |
| Accounts Payable   | -12%                 | 325,124              | 367,986              |
| Accrued Payroll and Annual Leave   | +10%                 | 321,114              | 290,976              |
| Debt to Treasury   | +30%                 | 274,426              | 211,700              |
| Other  | -6%                  | 333,262              | 355,589              |
| <b>TOTAL LIABILITIES</b>   | <b>+2%</b>           | <b>\$ 3,250,199</b>  | <b>\$ 3,186,720</b>  |
| <b>NET POSITION:</b>   |                      |                      |                      |
| Unexpended Appropriations  | +1%                  | \$ 4,209,311         | \$ 4,181,364         |
| Cumulative Results of Operations   | +2%                  | 4,476,797            | 4,389,948            |
| <b>TOTAL NET POSITION</b>  | <b>+1%</b>           | <b>\$ 8,686,108</b>  | <b>\$ 8,571,312</b>  |
| <b>TOTAL LIABILITIES AND NET POSITION</b>  | <b>+2%</b>           | <b>\$ 11,936,307</b> | <b>\$ 11,758,032</b> |
| <b>For the Years Ended September 30, 2004 and 2003</b>   |                      |                      |                      |
| <b>Condensed Statements of Net Cost:</b>   |                      |                      |                      |
| <i>Strategic Goal 1: Provide the Information and Tools to Maximize U.S. Competitiveness and Enable Economic Growth for American Industries, Workers, and Consumers</i>     | -8%                  | \$ 1,626,669         | \$ 1,768,842         |
| <i>Strategic Goal 2: Foster Science and Technological Leadership by Protecting Intellectual Property, Enhancing Technical Standards, and Advancing Measurement Science</i> | -1%                  | 875,061              | 884,991              |
| <i>Strategic Goal 3: Observe, Protect, and Manage the Earth's Resources to Promote Environmental Stewardship</i>   | +9%                  | 3,617,242            | 3,329,289            |
| <b>TOTAL NET COST OF OPERATIONS</b>  | <b>+2%</b>           | <b>\$ 6,118,972</b>  | <b>\$ 5,983,122</b>  |
| Total Gross Costs  | +3%                  | \$ 8,092,700         | \$ 7,830,947         |
| Total Earned Revenue   | +7%                  | (1,973,728)          | (1,847,825)          |
| <b>Total Net Cost Of Operations</b>  |                      | <b>\$ 6,118,972</b>  | <b>\$ 5,983,122</b>  |

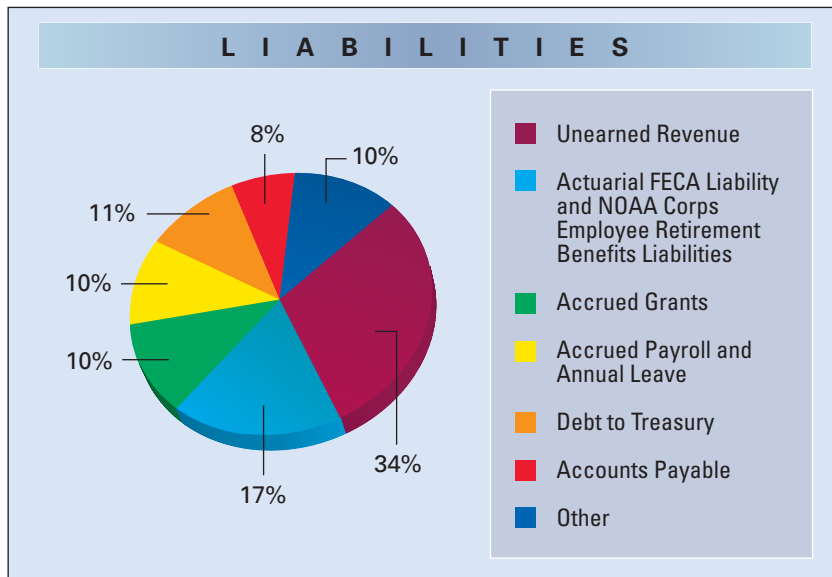


REVIEW OF FINANCIAL POSITION AND RESULTS



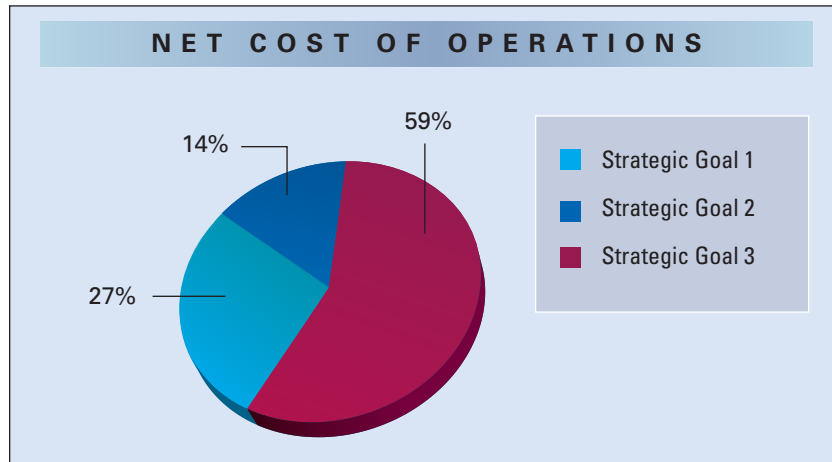
**Assets**

The Department had total assets of \$11.9 billion as of September 30, 2004. This represents an increase of \$178 million (2 percent) over the previous year's total assets of \$11.8 billion. The increase is primarily the result of Fund Balance with Treasury increasing by \$150 million, which primarily resulted from higher Appropriations Received, net of rescissions, of \$247 million or 4 percent.



**Liabilities**

The Department had total liabilities of \$3.3 billion as of September 30, 2004. This represents an increase of \$63 million (2 percent) over the previous year's total liabilities of \$3.2 billion, primarily due to higher unearned revenue from increased patent and trademark application and user fees that are pending action at September 30.



### Net Cost of Operations

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In FY 2004, Net Cost of Operations amounted to \$6.1 billion, which consists of Gross Costs of \$8.1 billion less Earned Revenue of \$2.0 billion. Strategic Goal 1 includes Gross Costs of \$1.9 billion related to providing information and tools to maximize U.S. competitiveness and enable economic growth for American industries, workers, and consumers. Strategic Goal 2 includes Gross Costs of \$2.3 billion related to fostering science and technological leadership by protecting intellectual property, enhancing technical standards, and advancing measurement science. Strategic Goal 3 includes Gross Costs of \$3.8 billion related to observing, protecting, and managing the Earth's resources to promote environmental stewardship.

### Other Financial Information

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All other financial information such as the introduction letter from the Department's Chief Financial Officer (CFO), financial management discussion and analysis, debt management, payment practices, the audited financial statements and other supplementary information, and the Independent auditor's report can be found starting on page 174 of the Financial Section.

**MOST IMPORTANT RESULTS AND THE FUTURE:  
PERFORMANCE, PRIORITIES, AND CHALLENGES**

The Department's three strategic goals and a Department-wide management integration goal promote the mission of the Department through the various actions of each bureau. Due to the diverse activities within the Department, the table below reflects a sample of the activities by strategic goal. Following each strategic goal, the Priorities, Challenges, and Future Plans to Improve Departmental Performance are identified as the foundation for identifying the actions being taken to further the Department's mission.

A few of our key diverse performance goals are:

| SUMMARY OF KEY DIVERSE PERFORMANCE RESULTS  |   |  |                     |
|---|---|--|---------------------|
| STRATEGIC GOAL  | OBJECTIVE   | PERFORMANCE GOAL   | FY 2004 MET/NOT MET |
| Provide the information and tools to maximize U.S. competitiveness and enable economic growth for American industries, workers, and consumers     | Enhance economic growth for all Americans by developing partnerships with private sector and nongovernmental organizations                        | Increase private enterprise and job creation in economically distressed communities  | Met                 |
|   |   | Improve community capacity to achieve and sustain economic growth  | Met                 |
|   | Advance responsible economic growth and trade while protecting American security  | Protect the U.S. national security and economic interests by enhancing the efficiency of the export control system   | Met                 |
|   | Enhance the supply of key economic and demographic data to support effective decision-making of policymakers, businesses, and the American public | Meet Constitutional and legislative mandates by implementing a re-engineered 2010 Census that is cost effective, provides more timely data, improves coverage accuracy, and reduces operational risk | Met                 |
| Foster science and technological leadership by protecting intellectual property, enhancing technical standards, and advancing measurement science | Develop tools and capabilities that improve the productivity, quality, dissemination, and efficiency of research                                  | Provide leadership in promoting national technology policies that facilitate U.S. preeminence in key areas of science and technology   | Met                 |
|   | Protect intellectual property and improve the patent and trademark system   | Improve the quality of patent products and services and optimize patent processing time  | Met                 |
|   | Advance the development of global e-commerce and enhanced telecommunications and information services   | Efficient and effective allocation of radio spectrum   | Met                 |
| Observe, protect, and manage the Earth's resources to promote environmental stewardship   | Advance understanding and predict changes in the Earth's environment  | Improve accuracy and timeliness of weather and water information   | Met                 |

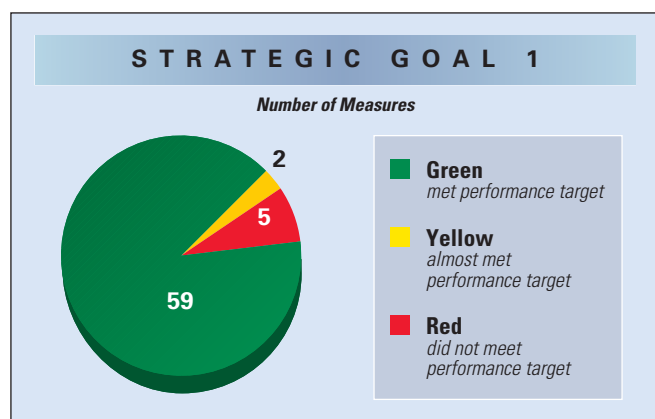
These performance goals are only a small representation of the Department's goals. It should be noted that the Department did not meet some of its performance goals at this time. In addition, the Department is not able to report two performance goals due to the unavailability of data. Overall performance of each goal can be found in the rainbow charts at the beginning of each performance narrative. The goals not met are addressed in Appendix A at the measure level.

Future Performance and Accountability Reports developed by the Department will include discussions around both achievement and non-achievement of performance goals as well as discussions of those performance goals that do not have results to report on during the reporting cycle.

**STRATEGIC GOAL 1**

*Provide the information and tools to maximize U.S. competitiveness and enable economic growth for American industries, workers, and consumers*

**Most Important Results**



The Department achieved success in 89 percent of the targets that were set. Such achievements can be measured through the many activities that support this goal.

The Department invested \$1.5 million in the Southwest Key Program, Inc., in Austin, Texas, to assist with the construction of an Economic Development Training Center. This Center will house the Southwest Key Program's national corporate offices, as well as provide space for workforce development training and a business incubator. This investment is part of a \$4 million project that will help create over 350 jobs, save an additional 70 jobs, and attract over \$3.7 million in private investment in the first stage. This investment, and others like

it, helps to attract private capital investment and jobs that address problems of high unemployment, low per capita income, and severe economic challenges.

The Department established the Economic Development Information Coalition (EDIC) in an effort to expand its information dissemination efforts. With the Economic Development Administration's (EDA) support, EDIC is producing a weekly e-newsletter, a quarterly magazine, 20 economic development forums, and four satellite broadcasts during 2004. The magazine and e-newsletter are distributed to about 12,000 people, and the forums attract between 100 and 150 people at each event. While there is no way to track the actual number of viewers, an agreement reached with DISH NETWORK makes it possible that up to 9.85 million subscribers are now viewing these telecasts. In addition, the Association of Public Television Stations (APTS) promoted the Economic Development Today telecast to affiliate stations nationwide. APTS represents 80 percent of the market of public television stations.

This year, the Department hosted a highly successful national conference in Washington, D.C. Over 1,000 economic development practitioners and policymakers attended "Translating Ideas into Regional Prosperity – the Innovation Imperative Conference." The conference featured top Administration and Cabinet members discussing timely economic issues, policies, and practices. At the conference, EDA awarded eight "Excellence in Economic Development" awards in seven categories. These awards recognize outstanding economic development practices in the categories of Urban or Suburban Economic Development, Rural Economic Development, Enhancing Regional Competitiveness, Economic Adjustment Strategies, Technology-led Economic Development, Community and Faith-Based Social Entrepreneurship, and Innovation. With over 1,000 attendees, the EDA national conference successfully provided a forum for economic development practitioners to hear and take part in discussions of cutting-edge economic development theories and methodologies. The conference also provided an opportunity to showcase best practices and to recognize extraordinary and creative efforts in the field of economic development through the Excellence in Economic Development Awards program.

To maximize U.S. competitiveness, the Department ensured the successful completion of ten international inspections of U.S. chemical plants under the Chemical Weapons Convention (CWC). The Department ensured commercial factors received due consideration in the Administration's development of a strategy to implement the Additional Protocol to the International Atomic Energy Agency Safeguards Agreement. During 2004, the Bureau of Industry and Security (BIS) contributed to the U.S. defense industrial base by processing approximately 22 Defense Priorities and Allocations cases, reviewed 35 cases on foreign investment in the United States, and completed five defense industrial base reports.



*Under Secretary of Commerce Kenneth I. Juster and Indian Foreign Secretary Shyam Saran discuss the first phase of the U.S.-India Next Steps in Strategic Partnership initiative.*

On September 16-17, Under Secretary Kenneth Juster met with Indian Foreign Secretary Shyam Saran to conclude Phase One of the Next Steps in Strategic Partnership (NSSP) initiative with India. As part of the NSSP discussions, Under Secretary Juster and Foreign Secretary Saran signed an end-use visit arrangement, which sets forth procedures for conducting end-use checks on U.S.-origin items shipped to India. The government of India also presented a letter to the United States providing assurances meeting U.S. concerns on the diversion of U.S.-origin items and onward proliferation activities.

Other Department efforts have contributed to every American man and woman in uniform in Afghanistan and Iraq now having an Interceptor personal body armor vest. For the past 18 months, the Department of Commerce has been responding to "Requests for Special Priorities Assistance (RSPA)," as provided under

Defense Priorities and Allocations System (DPAS) regulations, to allocate production of critical materials needed for body armor manufacture. BIS responds to these requests after the Department of Defense endorses the monthly requirement of material needed to manufacture the body armor vests. The Department's Bureau of Industry and Security then issues monthly "Directives" to the individual U.S. companies manufacturing these critical materials. The "Directives" specify the order in which the companies should allocate and ship their production to their contract customers in order to meet the highest priority requirements for body armor.

To enable economic growth for U.S. industries, workers, and consumers, the Department assisted in the development of a trade relationship with China. The Chinese economy is organized under principles that are inconsistent with the World

Trade Organization (WTO) rules, resulting in an enormous amount of complexity and friction in joint trade relationships. China has until 2017 to phase in all WTO requirements. This year the United States and China agreed to formalize their bilateral textile dialogue through the creation of a Textiles Consultative Group (TCG). The International Trade Administration (ITA) will co-chair the TCG with Vice Minister Ma Xiuhong of the Ministry of Foreign Trade and Economic Cooperation. TCG will focus on addressing problems where U.S. companies see roadblocks to trade with China, including protecting U.S. intellectual property rights and increasing U.S. textile exports to China.

The Department issued its manufacturing report, *Manufacturing in America, A Comprehensive Strategy to Address the Challenges to U.S. Manufacturers*, in January 2004. The report recognizes the unprecedented challenges to U.S. global leadership, and recommends reforms to strengthen manufacturing competitiveness. ITA has begun implementing recommendations made in the manufacturing report and is fostering an environment in which U.S. firms can compete and succeed in manufacturing.

The Department undertakes standards initiatives since standards are a critical issue for manufacturing competitiveness in global markets, as they can facilitate international trade or impede access to foreign markets. Many in U.S. industries view standards as the principal non-tariff barrier in markets around the world. ITA estimates that standards issues impact 80 percent of world commodity trade.

The Department responds to almost 6,000 requests for standards-related information annually from exporters and U.S. industry in general. The Department's automated Export Alert! service on a daily basis selectively notifies subscribers of regulatory changes proposed by any of more than 130 nations worldwide. These changes cover 25 industry sectors and participate in more than 100 private-sector standards organizations to help U.S. industry develop voluntary standards and encourage international acceptance of these standards. The result is great acceptance of U.S. products by other countries.

The Department's Census Bureau, within the Economics and Statistics Administration (ESA), successfully tested planned innovations for the 2010 Census at New York and Georgia sites, including improving Census questionnaire wording and the use of hand-held computers for personal visit follow-up operations. The Department also successfully completed updates to geographic reference features for all planned counties. Testing of these innovations and improving the Census Bureau's geographic data are important in order to improve accuracy, reduce operational risk, and contain the cost of the 2010 Census. Census data are used for the apportionment of seats in the U.S. House of Representatives and for the distribution of billions of dollars in federal funds to states and localities.

The Department exceeded the targeted unit response rates for the annual economic surveys. Meeting response rates is important for maintaining economic surveys data quality, as these data provide government policymakers and private decisionmakers with timely information about the current performance of the U.S. economy. The Department also exceeded the targeted response rates for the demographic surveys that are used to make policy decisions and allocate



*Manufacturing is important to the economy of the United States.*

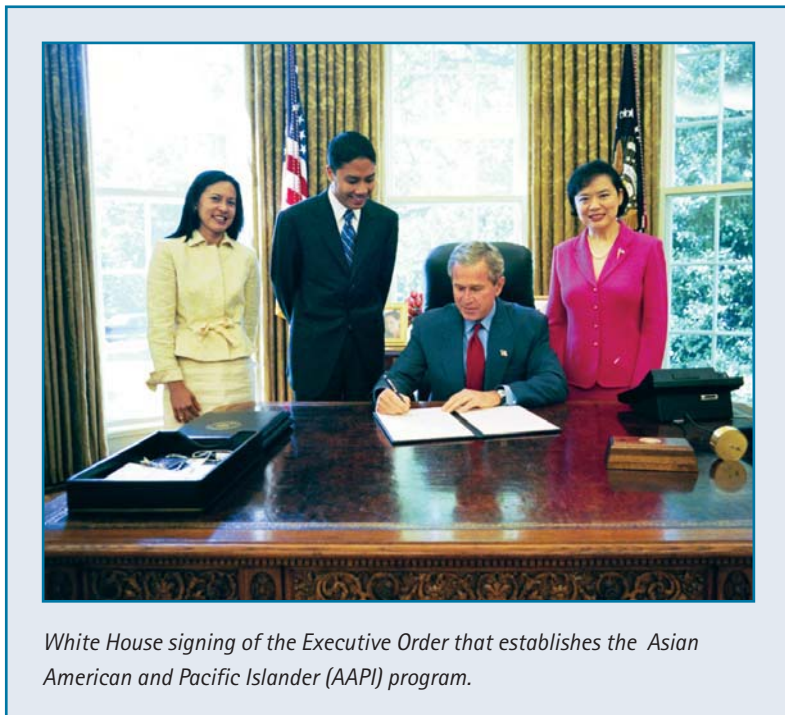


federal program funds that support schools, employment services, housing assistance, hospital services, and programs for the elderly and disabled. These data are also used to modify programs such as Social Security, Medicare, and Medicaid. The Department successfully conducted the 2002 Economic Census and Census of Governments. The 2002 Economic Census provided a significant expansion to content and coverage, as well as an accelerated release schedule. In March 2004, the 2002 Economic Census Advance Report was released. The Economic Census provides the nation with comprehensive, detailed facts about the structure of the U.S. economy. The Census of Governments represents the primary source of facts about the public sector of the U.S. economy.

The Department's Bureau of Economic Analysis (BEA), within ESA, accelerated the release of state personal income data. Working with the Bureau of Labor Statistics, the Department was able to accelerate the release of quarterly state personal income from four months after the reference quarter to three months. State budget officers around the country, who rely on quarterly state personal income to produce state budget estimates, praised this acceleration. By getting the data one month earlier, budget officers have more time to provide estimates to governors and state legislators for inclusion in their budget and policy deliberations.

The debate over the extent and the effects of outsourcing by U.S. companies to overseas firms intensified in early 2004. In recognition of this ongoing public interest, the Department accelerated by several months the release of summary statistics on the operations of multinational companies and their employment, sales, and capital expenditures for the year 2002. In addition, the Department published a detailed note describing long-term patterns in the domestic and overseas

activities of U.S.-based multinationals in the *Survey of Current Business*. This can be found at [www.bea.gov](http://www.bea.gov). Noted economists and journalists use the Department's data as their principal source of information for examining the issue of offshore outsourcing.



*White House signing of the Executive Order that establishes the Asian American and Pacific Islander (AAPI) program.*

On May 13, 2004, President George W. Bush signed Executive Order (EO) 13339, an initiative to provide equal economic opportunities and full participation of Asian American and Pacific Islander (AAPI) businesses. The EO houses the Office of the White House Initiative on AAPI at the Department of Commerce's Minority Business Development Agency and renews the President's Advisory Commission on AAPI (Commission) and the Interagency Working Group (IWG) on AAPI. Comprised of 14 members representing the public and private sectors, the Commission has a long-standing history of involvement with the AAPI community. The Commission provides recommendations to the President on efforts that

improve economic and community development opportunities for AAPI businesses in the public and private sectors. It looks at ways to increase the diversification of this business community as well as ways to foster research and data collection on its levels of participation in the national economy. The IWG will be comprised of 34 federal agencies chaired by an individual designated by the Secretary of Commerce. The IWG is responsible for developing and implementing

government-wide policies to support economic opportunities for AAPI businesses. To accomplish this, each agency will submit an implementation plan that will address increasing participation in federal programs through equal access, ensuring nondiscrimination in federal contracting and procurement opportunities, providing equal opportunity for public and private-sector partnerships, and fostering research and data collection about this business sector.

### **The Future: Performance, Priorities, and Challenges**

***Continue to meet the needs of the fast growing population:*** The Department will develop products and services through customer survey feedback such as the ACSI and the Survey of Business Owners. Commerce will further expand the Strategic Growth Initiative for medium to large size minority businesses enterprises, while continuing to provide the same level of service for the smaller minority business enterprises. The Census Bureau's American Community Survey has begun to provide, on an annual basis, decennial census type social and economic data. Data currently are available for 862 local areas, including 241 counties, 206 congressional districts, all 50 states, and the District of Columbia.

***Bringing economic prosperity to distressed communities:*** The Department will work to ensure regions attract private capital investment and create higher-skill, higher-wage jobs through infrastructure investment and capacity building investments.

***Strengthening the Export Control System:*** The Department will continue to improve the business processes in order to strengthen and streamline the dual-use export control system. Further, Commerce will continue to improve its process for writing the regulations that translate law and policy into rules for exporters, while also managing the rising number and complexity of licensing applications and other export control requests. Commerce will continue to improve its enforcement capabilities by prioritizing its efforts, working with other federal law enforcement and intelligence agencies, and increasing outreach with industry to create a robust enforcement environment.

***Furthering the use of electronic intervention:*** The Department will work to create a seamless environment for exporters to research markets, gather trade leads, and conduct a majority of their export transactions using [www.export.gov](http://www.export.gov), the government's existing online portal for small business export assistance information.

***Meeting needs for quality information:*** The Department will make improvements in the use of state-of-the-art technology in data collection, processing, and dissemination in order to stay ahead of demand from policymakers for information of emerging economic and societal trends.



*Wall Street and business economists rely on the Department's measures of national economic activity.*

**Improving both national and international trade for U.S. firms:** The Department will develop and implement a joint, public/private global supply chain initiative to promote access for U.S. small to medium enterprise (SME) manufacturers. The Department also is focusing and sharpening expertise in China by creating a China Compliance office that devotes more resources to China and cases and issues unique to non-market economies. Commerce will also focus on trade-related standards issues, allowing the organization to support U.S. industry's desire for more analysis of emerging overseas standards issues and their effect on U.S. companies' competitiveness.

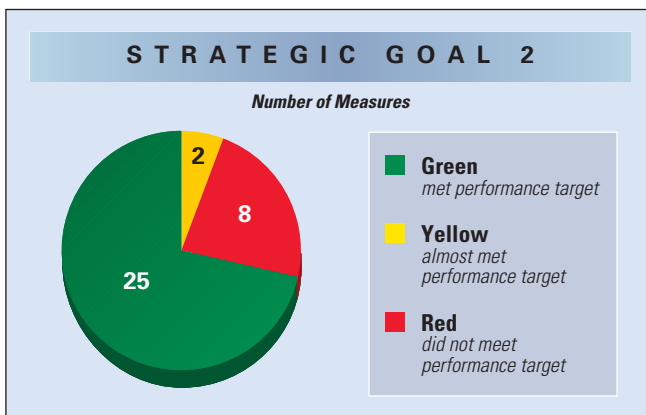
**Expanding global intellectual property rights (IPR) enforcement:** China and the United States will establish an IPR working group under the Joint Commission on Commerce and Trade (JCCT) through which U.S. and Chinese trade, judicial, and law enforcement authorities will cooperate on the full range of IPR issues. Commerce is also focusing resources to enforce U.S. negotiated trade agreements and combat violators of IPR around the world. The Department will pursue perpetrators along the entire chain, including manufacturers and importers, and will exert pressure on countries where problems are found. The Department will work with U.S. industry and coordinate with other U.S. agencies, and the U.S. Food and Drug Administration (FDA), to investigate allegations of piracy and help resolve market access and trade compliance cases.

**Meeting the needs of policymakers, businesses and non-profit organizations, and the public for current measures of the U.S. population, economy, and government:** The Department will continue its efforts to meet the needs and demand for quality data, including obtaining and maintaining targeted response rates for the various surveys conducted, and continuing to maintain respondent confidentiality.

**Promoting a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic data in an objective and cost-effective manner:** The U.S. economy is in constant flux. The Department is challenged to understand the structural changes in the economy, improve measurement methodologies, and locate and incorporate data sources to capture the changes. Its challenge is to continue to keep pace with these changes in order to provide the nation with the most timely, relevant, and accurate economic statistics possible.

**STRATEGIC GOAL 2**

*Foster science and technological leadership by protecting intellectual property, enhancing technical standards, and advancing measurement science*



**Most Important Results**

The Department achieved success in 71 percent of the targets that were set.

With a focus on developing next generation measurements and standards needed by industry, the Department completed construction on the Advanced Measurement Laboratory (AML). Considered the most technically advanced research facility of its kind in the world, the \$235 million, 536,507 square foot AML features five separate wings—two of them buried 39 feet



*The new Advanced Measurement Laboratory at the National Institute of Standards and Technology.*

under ground—with stringent environmental controls on air quality, temperature, vibration, and humidity. The new facility allows researchers to provide the sophisticated measurements and standards needed for key 21st century technologies such as nanotechnology, semiconductors, biotechnology, advanced materials, quantum computing, and advanced manufacturing.

The Department has begun efforts to strengthen intellectual property protection by enhancing protection for copyrights, geographical indications, patents, trademarks, trade secrets, and other forms of intellectual property with representative from many countries throughout the world including those in which the United States is negotiating or has negotiated Free Trade Agreements (FTAs)<sup>2</sup>.

The Department's component bureau, the U.S. Patent and Trademark Office (USPTO), deployed a new electronic system known as Public PAIR (Patent Application and Information Retrieval). Anyone with Internet access throughout the world can use USPTO's PAIR Web site to track the status of a public patent application as it moves from publication to final disposition, and review documents in the official application file including all decisions made by patent examiners and their reasons for making them. Also, USPTO deployed two additional systems: the Image File Wrapper (IFW) system to all patent examiners and technical support staff, and the E-Patent Reference system that provided applicants with electronic access via Private PAIR to U.S. references referred to in examiner's Office Actions. This eliminated the need to mail paper copies of U.S. patents and published application references to applicants. *For additional information on the PAIR system and other patent electronic business products, visit the Patent Electronic Business Center (EBC) Web site at <http://www.uspto.gov/ebc/index.html>.*

Electronic filing of trademark applications reached historic levels, making the process much more efficient. Over 70 percent of the new trademark applications filed with USPTO were filed via the Internet using the USPTO Trademark Electronic Application System (TEAS). *For additional information on TEAS and other trademark electronic business products, visit the Trademark Home Page at: <http://www.uspto.gov/main/trademarks.htm>.*

<sup>2</sup> Countries include China, Brazil, Paraguay, Mexico, Eastern Europe, the Republic of Korea, the Philippines, and many other countries. Countries in which the United States is negotiating or has negotiated FTAs include Morocco, Bahrain, the Central American countries, Australia, Panama, the Andean countries, Thailand, the Southern Africa Customs Union, Chile, Jordan, and Singapore.

In the patent examining corps, an enhanced Quality Assurance Program was implemented that includes end product reviews, in-process reviews, and enhanced "second pair of eyes" reviews. Additionally, to ensure that the Department's primary patent examiners maintain the knowledge, skills, and abilities (KSAs) necessary to perform a high-quality examination, USPTO implemented a recertification program with primary examiners being recertified once every three years. A certification program was also implemented for junior examiners to ensure that they had the required KSAs prior to promotion to the level where they are given legal and negotiation authority.

The USPTO created a new "in-process review" standard for assessing work in order to create a more comprehensive, meaningful, and rigorous review of what constitutes quality. The results of an Examiner's first and final office action are reviewed for the quality of the substantive basis for decision making, search strategy, evidence, and writing. The new measure considers more elements for review and evaluation with training targeted to topics that warrant improvement. Examiners are given specific feedback about their work to further improve quality.

Department researchers at the National Institute of Standards and Technology (NIST) have developed measurements, standards, technology, and data crucial to private industry's development of products for a nanotechnology market that could reach \$1 trillion during the next decade. In the past year alone, scientists reported on important developments such as a central system for an atomic clock with potential communications and military applications that is the size of a grain of rice, nanoscale materials for magnetic refrigeration that could replace bulky compressor technology; the use of carbon nanotubes for improved polymer processing, and a better way for making uniform nanocells that may have applications for encapsulating drug therapies. This work also supports federal agencies' efforts to use nanotechnology to further their missions, such as national security and environmental protection

The Department has collaborated with stakeholders to develop a comprehensive U.S. spectrum policy for the 21st century that fosters economic growth; ensures national and homeland security; and maintains U.S. global leadership in communications technology. Accordingly, the Department has released two reports that propose innovative ways to better manage the nation's crowded airwaves, including the establishment of an innovation test bed to foster increased sharing between federal and non-federal spectrum users.

Among its broadband-related activities, the Department provided technical guidance to the Federal Communications Commission (FCC) for the responsible deployment of broadband over power line (BPL) systems, contributing significantly toward fulfillment of affordable broadband Internet access for all Americans by 2007. Broadband technology opens up new opportunities for telemedicine, long distance education, and countless other services that will foster investment, improve productivity, and promote job producing economic growth. The National Telecommunications and Information Administration (NTIA) has taken the lead in the areas of next-generation Internet Protocols, ultra wideband technology, wireless broadband applications, wireless sensor technologies, and child-friendly Internet content.

### **The Future: Performance, Priorities, and Challenges**

*Breaking down trade barriers:* Commerce will promote worldwide acceptance of U.S. test and calibration data to facilitate the marketing of U.S. products and providing assistance to other governmental agencies, industry, trade associations, exporters, and standards-developing organizations.

**Processing of patent and trademark applications:** Commerce will work to reduce both patent and trademark pendency. In the short term, USPTO will focus attention to reducing first action pendency to 18 months. In the longer term, however, patents will pursue achieving the optimum 18-months total pendency. Trademarks is committed to supporting the elements of the 21st Century Strategic Plan that will allow it to achieve strategic plan pendency goals of 2.0 months to first office action and an average total pendency of 12 months. The Department will further these processes through better workforce planning and fully automated systems.

**Furthering radio spectrum policy for 21st century:** Commerce will better manage the nation's airwaves, enhance homeland and economic security, increase benefits to consumers, and ensure U.S. leadership in high-tech innovations.

**Providing the technology infrastructure for U.S. business:** The Department will develop the measurement methods and standards needed to accelerate the commercialization of technology advances in burgeoning fields such as biotechnology, nanotechnology, homeland security technology, and information technology (IT). In addition, the effectiveness of the manufacturing supply chain requires critical measurement technology, standards, and data to allow the efficient and accurate exchange of parts and raw materials. NIST measurement methods and standards facilitate secure, accurate, and efficient communication throughout the supply chain and with customers by aiding the development of information exchange standards, providing tools to accurately specify product performance and attributes, and improving cybersecurity.

**Ensuring broader availability and support for new sources of advanced telecommunications and information:** Furthering technology will continue to open new opportunities for everything in people's lives. Commerce must continue its efforts to also lead the way in the next-generation Internet Protocols, ultra wideband technology, wireless broadband applications, wireless sensor technologies, and child-friendly Internet content.



The NTIA Institute for Telecommunication Sciences' 4th generation Radio Spectrum Measurement System (RSMS) is equipped with state-of-the-art instrumentation, measurement methods, and analysis capabilities to support federal spectrum management, usage assessments, interference resolution, propagation research support and other federal agency needs.

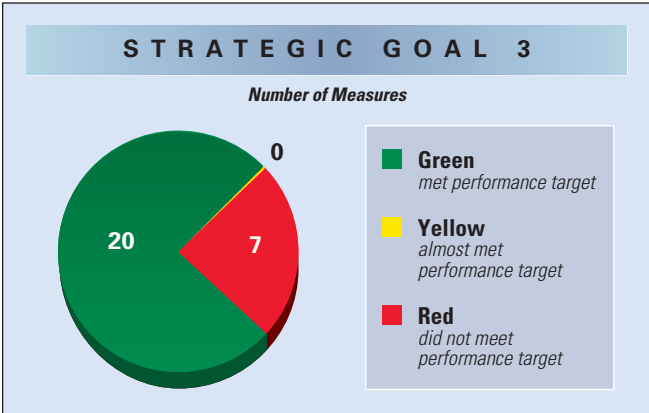
**STRATEGIC GOAL 3**

*Observe, protect, and manage the Earth’s resources to promote environmental stewardship*

**Most Important Results**

The Department achieved success in 74 percent of the targets that were set.

The Department, in partnership with the Western Governors’ Association, developed a plan for “Creating a Drought Early Warning System for the 21st Century,” outlining the details for a National Integrated Drought Information System (NIDIS). With \$6 to \$8 billion in estimated losses to the U.S. economy and impacts widespread throughout society, Commerce recognized the value and importance of the NIDIS. This partnership will improve the Department’s existing capabilities in monitoring and forecasting drought.



Data from the Department’s (through National Oceanic and Atmospheric Administration (NOAA)/Pacific Marine Environmental Laboratory [PMEL]) Tropical Atmosphere Ocean (TAO) array of moored buoys in the Pacific Ocean has provided the observational backbone for detecting and forecasting evolving El Niño conditions in 2004. Data from the array are transmitted to shore in real-time from NOAA’s polar orbiting weather satellites and made available to operational weather forecasting centers and climate researchers around the world. The buoys, along with those from a complementary array maintained by the Japan Agency for Marine Earth Science and Technology in the Western Pacific, have tracked the evolution of subsurface ocean warming that typically precedes the full blown development of El Niño. The buoys have also defined the initial weakening of the trade winds and warming surface temperatures that characterize the onset and evolution of El Niño events. The development of El Niño conditions in 2004, just one year after the end of the last El Niño in 2002-03, is a startling development that challenges Commerce’s understanding of how the coupled ocean-atmosphere works to produce year-to-year climate variability. TAO data, which have previously enabled fundamental research into the causes and global consequences of El Niño as summarized in the May 2004 cover story of the Bulletin American Meteorological Society, will provide the key to unraveling this mystery.

As a result of a partnership with the fishing industry, NOAA was able to reopen closed U.S. commercial longline swordfish fisheries in the Northwestern Atlantic and the Western Pacific. These fisheries had been closed due to a high take of endangered marine turtles, but by using fishing vessels with experimental gear and techniques through the industry partnership, NOAA experts were able to reduce the turtle takes to levels acceptable under the Endangered Species Act, allowing the fisheries to reopen.

In FY 2004, NOAA announced the creation of three research centers in Seattle, Washington; Charleston, South Carolina; and Ann Arbor, Michigan, to study how humans impact the oceans and Great Lakes and how, in turn, those bodies of water can impact human health. The NOAA Center of Excellence for Coastal, Great Lakes, and Human Health will use multidisciplinary research to develop technology for predicting the formation of toxic algal blooms, beach closings, and

water quality in the coastal and Great Lakes regions. The goal of the centers is to use NOAA's broad scientific expertise to significantly reduce threats to human health through ecological forecasting, which uses scientific understanding and models of climate, weather, circulation patterns, hydrology, land use, and biology to predict the location and severity of toxins in the water, beach closures, and water quality conditions.

In September, NOAA took ownership of the former Navy surveillance ship USNS Capable and will convert the ship for dedicated support of NOAA's ocean exploration and research missions. The ship will be equipped for dynamic positioning, deployment of unmanned underwater robotics, hull-integrated multi-beam sonar sensing, and scientific study in onboard laboratories.

In early FY 2004, Hurricane Isabel wreaked havoc along the Mid-Atlantic, hitting the Chesapeake Bay, its beaches, and ports particularly hard. More than four days in advance of landfall, NOAA relied on its tide station network and meteorological sensors to monitor water levels in real time and issue accurate wave height, storm track, and localized storm surge predictions throughout the event. With these early warnings of extreme seas, ships at sea were able to take precautions to avoid those areas that would put lives, vessels, and cargo at risk. In just one landside example, NOAA's predictions gave a warehouse owner in Baltimore enough time to move his inventory off the first floor to save it from the rising tide. Close on the heels of the hurricane, NOAA worked tirelessly to respond to emergency requests by ports and states for help. In the Ports of Hampton Roads and Baltimore, NOAA vessels combed the waters with sonar searching for debris and obstructions that could impede commercial, military, and recreational maritime traffic. NOAA HAZMAT, which provides emergency response scientific support for oil and chemical spills, used marine weather and real-time tide data to identify spill risks associated with oil and chemical storage tanks knocked off their foundations. The day after Isabel landed, a NOAA aircraft was on-site to fly a digital camera over the altered coastline for precisely positioned damage assessment. By monitoring the impact of coastal erosion along the Mid-Atlantic shoreline, these surveys assisted in recovery and rebuilding and in mitigating the effects of future storms. NOAA's efforts enabled key Chesapeake Bay ports to reopen quickly so that commerce could flow efficiently. Mariners who were able to navigate safely were the immediate beneficiaries of these efforts. However, safe and efficient maritime transport benefits everyone by keeping prices lower on over two-thirds of consumer goods bought. The public also gains a tremendous benefit from a cleaner marine environment due to accidents avoided.

As Hurricane Ivan approached the northern Gulf Coast, NOAA's Office of Coast Survey was already making preparations to respond to the storm's anticipated impact. Our navigation managers had established communications during Hurricanes Charley and Frances and were in daily contact with other NOAA offices. They reached out to members of the Coast Guard plus pilots, ports' personnel, the Corps of Engineers and state emergency management centers from Louisiana to Florida. Three NOAA navigation response teams were



*Hurricane Ivan passed the western tip of Cuba on the 13th and spent the next three days moving northwestward in the Gulf of Mexico, slowly weakening. Early on September 16th, Ivan made landfall as a category 3 storm near Gulf Shores, Alabama.*



mobilized and positioned in Tallahassee, Pensacola, and Jacksonville, Florida. Two NOAA navigation managers for the Eastern and Western Gulf also prepared to move into areas hit by the hurricane. In total, NOAA has six regionally based navigation teams and their boats and equipment sit on trailers, ready to move at a moment's notice.

In February 2004, approximately 39,000 gallons of a toxic chemical leaked into the St. Clair River near Port Huron, Michigan. The leak caused authorities to close water intakes based upon water dispersion models in order to protect tens of thousands of people in the area. These water dispersion models were based upon survey depth data collected by a NOAA Navigation Response Team for the Michigan Department of Environmental Quality in 2000.

For the first time ever, NOAA was awarded 100 percent of requested funds for habitat restoration from the federal Oil Spill Liability Trust Fund (OSLTF) for a Natural Resource Damage Assessment claim in a case with no responsible party identified. In partnership with the Florida Department of Environmental Protection (DEP), NOAA was awarded \$2.2 million to restore beaches and marine habitat impacted by a mystery oil spill near Fort Lauderdale, Florida, in August 2000, which caused beach losses as well as injury to sea turtles, marine life, and seabirds. This award sets a precedent for seeking claims against unknown, bankrupt, or uncooperative responsible parties.

In FY 2004, NOAA and Environmental Protection Agency (EPA) formed a "Smart Growth" Partnership. As an outgrowth of its Coastal Community Development Program, a program that assists coastal communities in their efforts to protect their environmental amenities, strengthen their economies, and improve their quality of life, NOAA recently partnered with EPA in a joint Smart Growth initiative. Smart Growth is defined as environmentally sensitive land development with the goals of minimizing dependence on auto transportation, reducing air pollution, and making infrastructure investments more efficient.

NOAA developed a Surface Weather Program to provide relevant weather and geospatial information to reduce fatalities, injuries, and economic losses from surface weather-related crashes and delays.

### **The Future: Performance, Priorities, and Challenges**

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*Advancing understanding of climate variability, potential responses, and options:* Commerce will work to develop a predictive understanding of the global climate system, with quantified uncertainties sufficient for making informed and reasoned decisions. Commerce will also target climate-sensitive sectors and the climate literate public and help them to more effectively incorporate the Department's climate products into their everyday planning and decision-making processes. These efforts involve providing sound, state-of-the-science descriptions and analyses of the Earth's climate system, including enhancing the understanding of climate forcings and feedbacks, as well as improved predictive capabilities and more widespread operational climate products and services.

*Improving accuracy and timeliness of weather and water information:* Tornado and other severe weather warnings help all Americans in an affected area by providing them with information about the weather in their area and what they can do to ensure they are safe.

*Advancing the place-based ecosystem approach to management:* Place-based ecosystem is a geographic area with specified systems of organisms, the environment, and the processes that control its dynamics. This approach will improve resource management by advancing the Department's understanding of ecosystems through better simulation and predictive models, environmental observing, and gathering of information needed for social and economic indicators. To facilitate this, the Department will engage and collaborate with its partners to achieve regional objectives by

delineating regional ecosystems, forming a regional ecosystem coordinating mechanism, and implementing cooperative strategies to improve regional ecosystem health.

***Improving integration and accuracy of marine, aviation, and surface transportation information:*** Safe and efficient transportation systems are crucial to the U.S. economy. To facilitate commerce, the Department will work to reduce the negative impacts of weather on aviation without compromising safety, refine surface weather forecasts for local transportation sector decision support, improve the accuracy of its maritime and positioning products and services, and respond to hazardous material spills and search and rescue events to save lives and money and to protect the coastal environment.

***Improving and expanding our knowledge of the world's oceans through deep-sea exploration:*** Over 70 percent of the Earth is water, yet less than 5 percent of the ocean floors have been explored. The ocean plays a role in regulating climate, assuring food security and energy resources, and allowing for worldwide commercial transportation. There is a lack of large-scale and long-term knowledge of the surrounding seas, which must be developed through a commitment to systematic exploration, research, and advancement of that knowledge for humankind.

***NOAA Science On a Sphere™ (SOS) dominated the G8 Summit's International Media Center and emphasized to the world press the global nature of the problems that the G8 Summit addresses.*** The FSL was invited to exhibit NOAA's SOS at the G8 Summit, June 8–10, 2004, at the International Media Center in Savannah, Georgia. Almost every major news organization at the center devoted significant air time or column inches to this new and innovative display of Earth and planetary images. These demonstrations allowed NOAA to showcase its technology, applications, and global partnerships to a worldwide media audience. The positive reaction from the press undoubtedly contributed to the success of the G8 meeting. SOS, developed by FSL, is a revolutionary system for communicating NOAA's science to the public, fostering science education, and aiding scientific visualization. The system presents a three-dimensional representation of the Earth's global features as if they are viewed from space. The sphere can display unlimited scientific datasets, such as imagery of the planets, weather events, ocean currents, and population growth over centuries. SOS (<http://www.fsl.noaa.gov/sos/>) offers an innovative approach toward improving science education, with its dramatic visualization of complex information in an understandable form. It is a unique instrument for teaching science, math, and geography for grades K through 12. The presentations support NOAA's goal to use its broad spectrum of scientific expertise to support environmental education for the public in schools, museums, science centers, and at special events.

As has been seen from the hurricanes that have struck U.S. coastal areas this fall, accurate hurricane projections are essential in saving lives and mitigating property damage. Commerce will work to improve the accuracy and lead time of forecasts of all severe weather events. At the same time, the Department will work to improve the accuracy of forecasts of daily weather patterns.

**MANAGEMENT INTEGRATION GOAL**

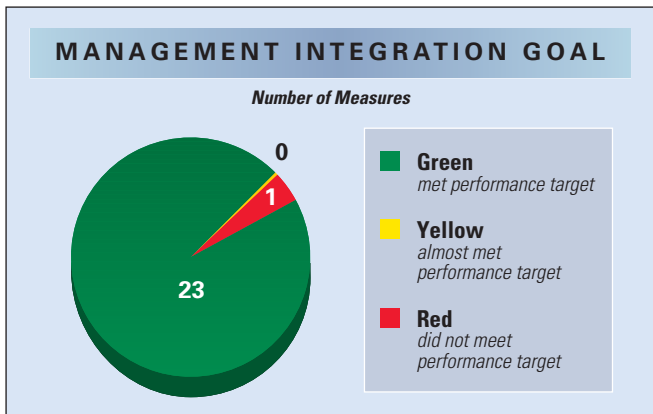
*Achieve organizational and management excellence*

**Most Important Results**

The Department achieved success in 96 percent of the targets that were set.

The Department achieved a clean audit opinion again this year. It also provided over 60 percent of its contract resources to small businesses. The Department well exceeded its utilization objectives for bankcard small purchases.

In response to competency needs assessments conducted in FY 2003, the Department implemented three leadership development programs targeting employees at various stages in their careers. The Senior Executive Service (SES) Candidate Development Program is designed to assure that senior level employees possess the executive core qualifications necessary for successful performance in SES positions. The Executive Leadership Development Program prepares employees at the GS-13 and 14 levels for management positions identified as mission critical. The Aspiring Leaders Development Program develops leadership and management skills of high potential employees at the GS-9 through 12 levels.



**The Future: Performance, Priorities, and Challenges**

**Managing human capital:** The Department is continually challenged to keep its workforce trained and ready to accomplish the work of the Department. As Commerce's qualified staff retire and/or otherwise leave the federal workforce, the Department must find ways to attract replacement staff, develop them to do the work of the Department, and retain them. Commerce will continue to develop programs to help train and retain a highly qualified workforce and avoid disruption in services offered by the Department.

**Promoting integrity, efficiency, and effectiveness and preventing and detecting fraud, waste, and abuse:** Commerce must constantly monitor the management of its programs to ensure that it is doing what is right, now and in the future.

**Promoting security throughout the Department:** Although substantial progress has been made in improving information security throughout the Department, challenges persist in ensuring adequate security for many Commerce systems. Meeting these challenges will require continued assessment of risks and determination of appropriate security controls, testing and evaluating the controls, certifying and accrediting systems, and ensuring that personnel with specialized information security responsibilities receive the necessary training.