



OFFICE OF THE SECRETARY

Top Management Challenges Facing the Department of Commerce

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INFORMATION MEMORANDUM FOR THE SECRETARY

FROM:

Todd J. Zinser

SUBJECT:

Top Management Challenges Facing the Department of Commerce in Fiscal Year 2015

Enclosed is our report on the Department of Commerce's top management challenges for fiscal year (FY) 2015. We have aligned our report with the Department's FYs 2014–2018 Strategic Plan—and, within each of the plan's strategic goals, we discuss the challenges we have identified:

1. ***TRADE AND INVESTMENT: Expand the U.S. economy through increased exports and inward foreign investment that lead to more and better American jobs.***
 - The International Trade Administration must work to realize fully the benefits of its recent consolidation and reorganization; meet the demands of the Administration's new, long-term export-promotion strategy, NEI/NEXT; and complete the procurement and deployment of a replacement for its Client Tracking System.
 - The Bureau of Industry and Security (BIS) will need to meet the challenge of completing the transfer to BIS of licensing responsibilities for numerous categories of items previously handled by the State Department. BIS will also need to work with the Defense and State Departments to complete the creation of a single customer portal for the submission of license applications, as called for under the Administration's Export Control Reform Initiative.
 - Due to the 2012 IT disruption at the Economic Development Administration (EDA), its Revolving Loan Fund Management System (RLFMS) has been unavailable. The unavailability of RLFMS, the absence of a reliable and consistently applied interim tool, and turnover among EDA's regional staff who monitor RLF program activities have allowed the internal control weaknesses that we first reported in 2007 to continue.



- Under new rules issued by the Office of Management and Budget that go into effect December 2014, the Department and each of its bureaus must assume new responsibilities regarding single audits of grants. This new approach will place a greater burden on the Department and, if not properly deployed, may affect the performance of its trade and research grant programs, which in FY 2013 totaled more than \$1.2 billion.
2. ***INNOVATION: Foster a more innovative U.S. economy—one that is better at inventing, improving, and commercializing products and technologies that lead to higher productivity and competitiveness.***
- The U.S. Patent and Trademark Office (USPTO) must address a variety of internal and external challenges, including reducing waiting times for filings, responding to stakeholder concerns about patent quality, and advocating for greater global protection for intellectual property rights. USPTO also faces challenges in managing its large and dispersed workforce.
 - To find ways of sharing radio frequency spectrum among federal and commercial entities, the National Telecommunications and Information Administration (NTIA) faces many challenges—such as a lack of incentive for commercial providers to bid for shared spectrum, revenue generation, and rights-of-use issues. The First Responder Network Authority (FirstNet), which is charged with establishing a nationwide public safety network, faces challenges in establishing an effective organization, leveraging existing infrastructure, and conducting effective outreach to ensure buy-in from the public safety community it is designed to serve. NTIA’s Broadband Technology Opportunities Program, which has awarded \$3.9 billion since 2009 in support of a variety of broadband infrastructure projects, must pay close attention to the sustainability of these projects beyond the federal funding period.
 - The National Institute of Standards and Technology’s Hollings Manufacturing Extension Partnership (MEP), which works with U.S. manufacturers to grow and create jobs, must ensure that the 3-year process of re-competing all 58 MEP centers is implemented without disrupting the MEP system and degrading the program’s overall performance.

3. ***ENVIRONMENT: Ensure communities and businesses have the necessary information, products, and services to prepare for and prosper in a changing environment.***

- As the lead agency for addressing the Department’s environmental goal, the National Oceanic and Atmospheric Administration (NOAA) faces challenges posed by satellite acquisitions and development, potential data gaps, efforts to improve forecast accuracy, the competing needs among fisheries stakeholders, and limited marine technology.
- Acquisition and development delays could lead to gaps in NOAA’s Geostationary Operational Environmental Satellite-R Series and the Joint Polar Satellite System coverage, potentially degrading its ability to perform storm tracking, weather forecasting, and climate study functions.
- In addition, a broad range of National Marine Fisheries Services concerns—including the difficult balance of stakeholder roles and interests, the need for scientific and technological advancement, and the continuing call for National Observer Program improvements—pose challenges for NOAA.

4. ***DATA: Improve government, business, and community decisions and knowledge by transforming Department data capabilities and supporting a data-enabled economy.***

- This Departmental goal will challenge the Economics and Statistics Administration and the U.S. Census Bureau. Various Census Bureau 2020 decennial research projects are experiencing delays. Also, because it has not integrated the 2020 decennial’s research and testing schedule with budget and cost data, the Census Bureau is challenged with designing a more cost-effective 2020 decennial census.
- Keeping up with rapidly changing technology is another challenge faced by Departmental data providers such as the Census Bureau and NOAA. The population data and business indicators that the Census Bureau provides—and the weather, climate, and environmental information that users access through NOAA—are only two examples of the Department’s diverse data resources.

- The Department’s goal of “transforming Department data capabilities and supporting a data-enabled economy,” along with the Digital Accountability and Transparency Act of 2014, challenge the Department (and the new Chief Data Officer it will hire) to develop and implement a vision for the future of the Department’s diverse data resources.

5. ***OPERATIONAL EXCELLENCE: Deliver better services, solutions, and outcomes that benefit the American people.***

- The Departmental goal of “operational excellence” calls on all facets of the Department to maintain “customer-focused” drive. To meet this challenge, the Department must focus on three types of customers. First, for its internal customers, the Department must address security weaknesses in its incident-detection and response capabilities; persistent security deficiencies make the Department vulnerable to cyber attacks. In addition, a long-standing fragmented IT governance structure provides additional challenges to effectively strengthening Department-wide cybersecurity.
- Next, its customers in the public at large expect a culture of accountability from the Department. Over the past 2 years, the Department and its bureaus have worked closely with OIG to resolve management issues raised through OIG’s hotline.
- Finally, the Department’s customers in the American business sector seek help from Commerce to become more innovative at home and more competitive abroad. The Department’s challenges are to improve financial data quality by addressing financial management issues—as well as to reduce acquisition risk by monitoring both the awarding of high-risk contracts and contractor performance.

We remain committed to keeping the Department’s decision-makers informed of problems identified through our audits and investigations so that timely corrective actions can be taken.

A summary of this report will also be included in the Department’s *Annual Financial Report*, as required by law.¹

¹ 31 U.S.C. § 3516(d).

We appreciate the cooperation received from the Department, and we look forward to working with you and the Secretarial Officers in the coming months. If you have any questions concerning this report, please contact me at (202) 482-4661.

cc: Bruce Andrews, Deputy Secretary of Commerce
Kelly R. Welsh, General Counsel
Justin Antonipillai, Deputy General Counsel
Steve Cooper, Chief Information Officer
Ellen Herbst, Chief Financial Officer and Assistant Secretary
for Administration
Wendy Anderson, Chief of Staff to the Secretary
Operating Unit Heads
Operating Unit Audit Liaisons

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*COVER: Detail of fisheries pediment,
U.S. Department of Commerce headquarters,
by sculptor James Earle Fraser, 1934*

Departmental Strategic Goal I: TRADE AND INVESTMENT

Expand the U.S. economy through increased exports and inward foreign investment that lead to more and better American jobs

Trade and investment are critical to the nation's prosperity. In 2013, the United States exported nearly \$2.3 trillion worth of goods and services. These exports fuel U.S. economic growth; support good jobs; and spread ideas, innovation, and American values.

As the lead trade and investment promotion agency in the federal government, the Department of Commerce faces the challenge of ensuring that it fulfills its role as a key player in making U.S. companies more competitive abroad and attracting foreign investment into the United States. The International Trade Administration (ITA)—which leads the Department's export and investment platform—must work to fully realize the goals of its recent reorganization. It must also meet the challenge of NEI/NEXT, which aims to build on the work of the National Export Initiative (NEI).

Through the Bureau of Industry and Security (BIS), the Department enforces export control laws to ensure that national security is protected. BIS must continue the migration of export licensing functions to the Department of Defense's USXPORTS system and work to fully implement the changes called for by the Administration's Export Control Reform Initiative, which is designed to streamline the country's export control laws and regulations and enhance U.S. exporters' ability to sell their controlled products abroad.

The Economic Development Administration (EDA), by means of strategic investments in distressed communities, assists U.S. communities to leverage regional capacity and attract foreign investment. EDA faces a challenge with the management of its Revolving Loan Fund (RLF) program, due to the unavailability since early 2012 of its RLF Management System (RLFMS), which automates many aspects of the RLF program and provides critical reports and data analysis.

Throughout the Department, an added challenge will be to comply with new requirements from the Office of Management and Budget (OMB) regarding grant administration that go into effect December 26, 2014. The new approach places a greater burden on the Department and, if not properly implemented, may affect the performance of its trade and research grant programs.

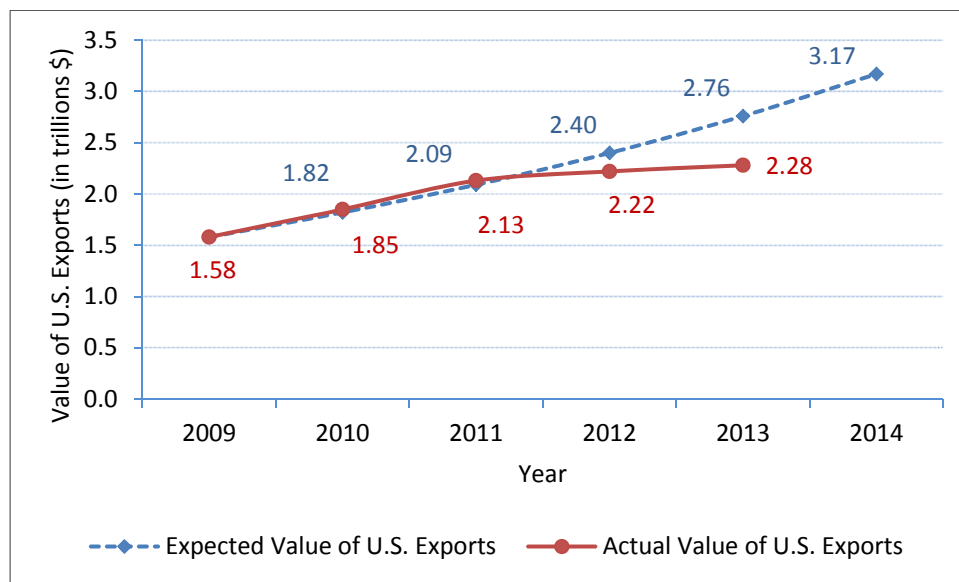
Delivering trade promotion and enforcement services to the Department's clients and effectively working with federal partners

The International Trade Administration (ITA) is tasked with strengthening the competitiveness of U.S. industry, promoting trade and investment, and enforcing fair trade laws. To achieve its mission, the bureau has undertaken two major initiatives over the past few years—the NEI and a consolidation of its business units—and continues to build upon the work of the NEI through NEI/NEXT, a new data-based, customer-service-driven strategy.

Since 2010, ITA has collaborated with other federal agencies in carrying out the NEI, which aimed to double U.S. exports by the end of 2014 over 2009 levels. In 2013, U.S. exports rose

to \$2.28 trillion, which is below the target of \$2.76 trillion for that year (see figure 1). Although it appears unlikely that ITA and its partner agencies will achieve the overall goal of doubling U.S. exports in 5 years, the bureau is moving forward with a new effort that will build upon the achievements of the NEI.

Figure 1. Export Growth—Expected Versus Actual (in Current Dollars)



Source: OIG analysis of Census Bureau export data as of June 4, 2014

In May 2014, the Secretary announced the launch of NEI/NEXT. This effort—to be implemented by the Export Promotion Cabinet, which also implemented the NEI, and the Trade Promotion Coordinating Committee, an interagency task force chaired by the Secretary of Commerce—involves 20 federal departments and agencies with export-related programs. NEI/NEXT aims to: connect more U.S. businesses to their next global customer; make U.S. businesses' next international shipment easier and less expensive; expand access to financing for U.S. businesses' next export transaction; promote exports and foreign direct investment attraction as the next economic development priority; and create, foster, and ensure U.S. business' next global opportunity.

As it transitions from one major export promotion effort to another, ITA must ensure that it strategically directs its resources and coordinates with federal partners to build upon the achievements of the NEI and serve the nation's exporters. This task takes on greater significance in light of ITA's recent consolidation and reorganization.

Realizing the benefits of an ITA consolidation and reorganization

In October 2013, ITA initiated a reorganization to consolidate its operations from four business units to three. Among the benefits of consolidation listed in the Department's request to Congress to consolidate the bureau were: better service to customers through a strategic realignment of expertise; reduction of redundancies and operating costs; and creation of a

more flexible organizational structure that can adapt to changing priorities and new global realities.

In February 2014 at the request of the Senate Committee on Appropriations, our office initiated an audit of ITA's consolidation to assess its status, examine changes in the level of resources within the organization, and identify any challenges that might hinder this effort.

On July 25, 2014, we issued a memorandum to the committee that summarized our initial results.¹ We found that the bureau continues to develop work streams and new business processes to effectively realize the benefits of consolidation, as noted above. In addition, ITA saved \$8 million from the consolidation based on employee attrition that happened between the end of fiscal year (FY) 2011 and January 2014. Based on the results of an ITA-wide employee survey that we conducted from April 23 through May 9, 2014, we identified five broad areas that warrant ITA management's attention and further examination: (1) collaboration within and among ITA business units following the consolidation, (2) levels of management, (3) duplication of effort and program changes, (4) changes in employee responsibilities, and (5) management communication and employee feedback.

Since the consolidation, a new ITA Under Secretary and a new Assistant Secretary of Commerce for Global Markets and Director General of the U.S. and Foreign Commercial Service were appointed to help lead the organization through this transition. They can also help address the issues we have identified. This must be done while continuing to deliver trade promotion and enforcement services to ITA's clients and work effectively with federal trade partners. If the bureau is unable to complete the consolidation, the benefits of the consolidation may not be realized, thus adversely affecting ITA's mission.

Improving ITA's Customer Tracking System/customer relationship management system

In its FY 2013 appropriation, ITA received \$6 million to implement a new customer relationship system to replace its current system, called the Client Tracking System (CTS). CTS is used by trade specialists and compliance analysts in ITA's Global Markets unit to centrally manage client information for its services and commercial diplomacy cases. ITA is working to replace this system with one that will be part of a new Department-wide customer relationship management system. According to ITA, the bureau awarded a new contract for a commercial off-the-shelf system on September 15, 2014. The current contract with the vendor that developed, owns, and licenses CTS expires at the end of June 2015. If needed, ITA will work with the Department to extend the current CTS contract until the new system is ready. Meeting the schedule to implement the new system and avoiding or minimizing additional contract extensions will be challenging. Given the problems with CTS (on which we reported in 2012),² ITA needs an efficient system to manage and deliver client services effectively and to compile performance measures as soon as practicable.

¹ Letter from Inspector General Todd J. Zinser to Sens. Mikulski and Shelby, Senate Committee on Appropriations, Commerce, Justice, Science, and Related Agencies Appropriations Subcommittee, July 25, 2014.

² U.S. Department of Commerce Office of Inspector General, November 30, 2012. *U.S. Export Assistance Centers Could Improve Their Delivery of Client Services and Cost Recovery Efforts*, OIG-13-010-I, Washington, DC: DOC OIG, 5.

Continuing the Bureau of Industry and Security's migration of export licensing functions to the Department of Defense's USXPORTS system

The Bureau of Industry and Security (BIS) is transitioning to an interagency, mission-critical IT system, as directed by the Export Control Reform (ECR) Initiative. In April 2010, the Administration announced the ECRI, which is designed to streamline the country's export control laws and regulations.

Part of that effort was to determine which items were to shift from the U.S. Munitions List to the Commerce Control List (CCL), which are administered by the State Department and BIS, respectively.³ Once those decisions were made, BIS estimated that items generating approximately 46,000 State Department license applications per year would be transferred to the CCL over several stages. As of August 2014, as related in an OIG audit report published in September 2014,⁴ items that generated nearly 40 percent of State Department license applications annually had been transferred to BIS, with items responsible for the remaining 60 percent to be transferred to the CCL at dates to be determined.

Since FY 2011, BIS has worked with its Department of Defense counterpart to migrate its licensing operations to Defense's IT system, called USXPORTS. This system is currently used by the Departments of Defense and State to process munitions license applications. According to BIS, end-to-end testing of USXPORTS conducted in August 2014 uncovered several development and programming issues.

Because USXPORTS does not support BIS' enforcement screening of license applications subject to Commerce regulations, BIS developed a separate system, called Commerce USXPORTS Exporter Support System (CUESS), to interface with USXPORTS. Before migrating to USXPORTS, the Defense Department will need to resolve the issues that were identified in August. Once the migration is completed, BIS will eventually discontinue use of its legacy licensing system—the Export Control Automated Support System (ECASS)—and instead operate CUESS to handle the screening of export license applications,⁵ and use USXPORTS for license processing.

Although both BIS and the State Department will soon be processing license applications using USXPORTS, for the near term U.S. exporters will continue to access separate portals at Commerce and State to submit applications, depending on the export.⁶ Moving forward with ECR activities, BIS will need to continue working with the Departments of Defense and State to create a single customer portal on USXPORTS to submit license applications to USXPORTS for processing by either BIS or State.

³ Items are listed in either the U.S. Munitions List or the Commerce Control List depending on the export controls to which they are subject.

⁴ DOC OIG, September 4, 2014, *BIS' Implementation of Export Control Reform Requires Several Improvements to Address Challenges*, OIG-14-028-A, Washington, DC: DOC OIG.

⁵ CUESS will also serve as a backup system to process license applications in the event USXPORTS fails.

⁶ For exports licensed by BIS, exporters will go through the Simplified Network Application Process Redesign; for exports licensed by State, the Defense Trade Electronic Licensing System.

Addressing conditions and issues with EDA's Revolving Loan Fund Program

As the only federal government agency focused exclusively on domestic economic development, EDA plays a critical role in fostering regional economic development efforts in distressed communities throughout the United States.

As part of EDA's Economic Adjustment Assistance program, the RLF Program provides grants to state and local governments, political subdivisions, and nonprofit organizations to operate a lending program that offers low-interest loans to businesses in distressed regions that cannot get traditional bank financing. As of September 2013, there were approximately 557 RLF operators, with original federal grant funds totaling \$554.6 million.

In response to a 2007 OIG audit of the RLF program, EDA created the RLFMS to automate grantees' semi-annual reporting, track loan activities in the RLF portfolios, generate reports for EDA staff, and provide data analysis. Due to the IT disruption at EDA that occurred in 2012—detailed in a report issued by OIG in 2013⁷—the RLFMS has been unavailable to EDA as a management tool and inaccessible to RLF operators. The unavailability of the RLFMS, the absence of a reliable and consistently applied interim tool while the RLFMS is not functioning, and changes in EDA regional staff who monitor RLF program activities have allowed the internal control weaknesses that OIG reported during our previous audit to continue.⁸ We are currently reviewing whether EDA (a) takes appropriate corrective actions with RLFs that are experiencing performance problems and (b) if it addresses indications that communities previously identified as “distressed” may no longer be considered distressed.

Ensuring the accuracy of grants management financial and performance metrics

According to the Single Audit Act of 1984 as amended in 1996, nonfederal entities—such as states, local governments, and nonprofit organizations—are required to have annual audits of federal awards received. Currently, OMB's Circular A-133 provides implementing instructions for that law and sets forth the requirements that must be followed by grantees and federal agencies. Effective December 26, 2014, updated requirements from OMB, detailed in “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards” (“Uniform Guidance”),⁹ must be followed by nonfederal entities that receive federal awards. This document consolidates eight existing OMB Circulars, including OMB Circular A-133. Under the new Uniform Guidance, the Department and each of its bureaus with grant programs must assume new responsibilities, including (a) ensuring that agencies effectively use the single-audit process and (b) implementing metrics to evaluate the single-audit process and audit follow-up. Per the new OMB guidance, OIG will no longer be involved in the audit resolution process for single audits.

⁷ DOC OIG, June 26, 2013. *Malware Infections on EDA's Systems Were Overstated and the Disruption of IT Operations Was Unwarranted*, OIG-13-027-A. Washington, DC: DOC OIG.

⁸ DOC OIG, March 2007, *Aggressive EDA Leadership and Oversight Needed to Correct Persistent Problems in RLF Program*, OA-18200-7-0001, Washington, DC: DOC OIG.

⁹ 2 C.F.R. Part 200

The new approach to grant administration will place a greater burden on the Department and, if not properly deployed, may affect the performance of its trade and research grant programs. In FY 2013, Commerce awarded over \$1.2 billion in grants across more than 50 programs, including \$723 million through the National Oceanic and Atmospheric Administration (NOAA), \$185 million through the National Institute of Science and Technology (NIST), and \$198 million through EDA. Because of their lack of experience with the single-audit process, these and other awarding bureaus will be challenged to develop the required processes and metrics for providing effective oversight of grant funds.

Departmental Strategic Goal 2: INNOVATION

Foster a more innovative U.S. economy—one that is better at inventing, improving, and commercializing products and technologies that lead to higher productivity and competitiveness

Innovation is the primary driver of competitiveness, wage and job growth, and long-term economic growth in the United States. As much as half of U.S. economic growth can be attributed to advances in science, technology, and business processes. The Department of Commerce has a central responsibility for supporting and expanding innovation, and has the relationships with businesses and industry necessary to address the challenges the country faces in this area.

The U.S. Patent and Trademark Office (USPTO) protects the work of innovators and ensures the integrity of their intellectual property rights through the review and issuance of patents and trademarks. It faces challenges with reducing wait times for issuing determinations on new patent applications, appeals, and other filings and with responding to stakeholder concerns related to patent errors that might lead to abusive and unnecessary litigation. USPTO also faces challenges in managing its large and dispersed workforce.

The National Telecommunications and Information Administration (NTIA) manages national spectrum resources that are needed for expanded high-speed broadband service. The bureau faces challenges with identifying spectrum for commercial broadband use; addressing the First Responder Network Authority's implementation of a nationwide wireless broadband network for public safety users; and ensuring the sustainability of its Broadband Technology Opportunities Program (BTOP) grants after federal funding ends.

The National Institute of Standards and Technology (NIST) promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology. Its Manufacturing Extension Partnership (MEP) program faces challenges in exercising better oversight of conference activities by its grantees and in completing the re-competition of its 58 MEP centers that began in FY 2014.

Facing internal and external challenges at USPTO in promoting innovation through the protection of intellectual property rights

USPTO, as the U.S. authority for issuing all patents and trademarks, has a critical role in awarding intellectual property (IP) rights and working on the global stage to further IP policy, protection, and enforcement.

As a fee-funded agency with over 12,000 employees, USPTO has undergone significant changes over the past five years. In September 2011, the President signed the Leahy-Smith America Invents Act (AIA), representing the most fundamental change to the U.S. patent system in over 50 years. AIA moved the USPTO toward a "first inventor to file" patent system, led to the opening of permanent satellite USPTO offices in Denver and Detroit, and created new avenues

to challenge patents.¹⁰ Additionally, under AIA, Congress gave USPTO greater authority to set and retain fees, to ensure it has sufficient resources for its operations. In FY 2015, USPTO expects to collect over \$3 billion in revenue from patent and trademark fees. USPTO has also greatly expanded the size of its examiner and patent trial and appeal judge workforce over the past 5 years, while expanding its telework program. Amid these changes, USPTO must address both internal and external challenges as it strives to promote U.S. innovation and industrial competitiveness.

Reducing wait times for issuing determinations on new patent applications, appeals, and other filings

Although USPTO has made progress in reducing the time an applicant waits to have a new application reviewed (known within USPTO as “pendency”), waiting times for other types of filings have increased (see table 1, next page). The patent application backlog decreased from 718,835 applications in FY 2009 to 616,019 applications as of the third quarter of FY 2014. During that same time, however, waiting times for another type of filing, the Request for Continued Examination (RCE), increased from 2 months in FY 2009 to 8.7 months as of the third quarter of FY 2014.¹¹ Pendency also grew for appeals filed with the Patent Trial and Appeal Board (PTAB).

Although USPTO has begun to reduce the backlog of RCEs, the rapid rise in the RCE backlog over the last 5 years highlights the challenges USPTO encounters when it prioritizes the review of new applications to the detriment of other types of filings. The steady growth in the appeal backlog and in waiting times also raises concerns about the timely adjudication of IP rights at USPTO.

¹⁰Although the AIA required USPTO to establish, subject to available resources, at least three satellite offices by September 2014, USPTO has to date opened up only two permanent satellite offices, in Denver and Detroit. Patent examiners and administrative patent judges work in both these locations. In FY 2015, USPTO plans to establish its third and fourth permanent satellite offices, in San Jose, CA, and Dallas, TX. Currently, some administrative patent judges already work in temporary offices in these two locations.

¹¹RCEs are patent applications resubmitted for consideration after an examiner has previously closed the review.

Table I. Backlogs and Pendency at USPTO for New Patent Applications, Appeals, and RCEs, FY 2009–FY 2014, Q3^a

FY	Patent Application Backlog	Traditional Patent Pendency (Months) ^b	PTAB <i>Ex Parte</i> Appeal Backlog	PTAB <i>Ex Parte</i> Appeal Pendency (Months) ^c	RCE Backlog	RCE First-Action Pendency (Months) ^d
2014 Q1–Q3	616,019	27.8	n.a.	n.a.	61,037	8.7
2013	584,998	29.1	25,308	26	78,272	7.8
2012	608,283	32.4	26,484	23	95,200	5.9
2011	669,625	33.7	23,963	17	63,487	4.0
2010	708,535	35.3	17,754	12	40,939	2.4
2009	718,835	34.6	12,489	7.7	14,620	2.0

Source: USPTO

^a Green arrows indicate period of sustained decreasing backlog or pendency; red arrows indicate period of sustained increasing backlog or pendency.

^b Average number of months between an application's filing and its disposal.

^c Average number of months between PTAB's assigning an appeal number and its making a decision.

^d Average number of months between the filing of an RCE and the examiner's initial decision.

n.a. = data not available

Maintaining awareness of stakeholder concerns related to patent errors

USPTO must also balance the pressure to issue patents in a more timely manner with its responsibility to ensure that it issues high-quality patents.

In April 2014, OIG initiated an audit of USPTO's quality assurance programs, to determine their sufficiency in preventing the issuance of low-quality patents and assess quality reviews performed by USPTO to measure examiner performance.

Although USPTO's quality metrics indicate there is a low percentage of errors in the patent process, stakeholders remain concerned about patent quality and have voiced their concerns in public comments and forums. There has also been significant stakeholder interest in reducing abusive patent litigation by so-called "patent trolls." USPTO has an important role to play in protecting U.S. companies from patent litigation arising from ambiguous or overly broad patents. As USPTO explores new options to improve patent quality—such as crowd-sourcing searches of relevant technology (or "prior art")—it will at the same time need to work to increase stakeholder confidence in its quality assurance processes.

Assisting U.S. companies to protect and enforce IP rights and providing technical assistance to the Office of the U.S. Trade Representative to implement IP rights provisions in international agreements

USPTO also faces challenges as it seeks to advocate for greater global protection for IP rights. U.S. industry benefits from certainty in the creation, protection, and enforcement of IP rights abroad. USPTO has strived to facilitate this by providing technical assistance to foreign governments as well as to U.S. government entities that are negotiating bilateral and multilateral and IP agreements. Since the IP rights granted by a U.S. patent and trademark apply only throughout the United States and its territories, and do not extend abroad, U.S. companies wishing to obtain protection of their IP rights in other countries must apply for protection in those countries or in regional offices. As USPTO and other U.S. government agencies strive to increase the number of bilateral IP agreements and strengthen global IP standards, they must contend with countries less supportive of efforts to enhance IP standards.

Managing a larger and more dispersed workforce

USPTO also faces workforce management challenges, including operating without a permanent director since January 2013.

In the summer of 2014, our office issued two high-profile investigations related to concerns with hiring practices at the Trademark Office and poor supervisory oversight at the Patent Trial and Appeal Board (PTAB).¹² In the Trademark Office investigation, we found that a senior official improperly intervened in the hiring process to ensure that a candidate who was not the most qualified, but who had ties to the official, received a position. In the PTAB investigation, we found that the lack of work for paralegals resulted in waste totaling more than \$5 million, and that senior USPTO officials were aware of the situation for years and failed to take action to prevent further waste.¹³ In fact, our investigation found that USPTO management provided over \$680,000 in bonuses between FY 2009 and FY 2013 even when the paralegals who received these bonuses did not have enough work to keep them fully engaged.

Challenges also exist with the management of USPTO's telework program. In a memo dated July 8, 2013, USPTO responded to OIG's request that it conduct a review of allegations of systemic time-and-attendance abuse by teleworkers, and how supervisors were not empowered by USPTO senior management to adequately address abuse when it occurred.

USPTO reported at that time that their investigative team "was not able to reach a conclusion on whether some Patent Examiners are accurately reporting T&A [time and attendance]" and that "there are no records that could be relied upon or referenced to support such findings." The agency did, however, provide a series of recommendations in eight areas that would

¹² See DOC OIG, July 8, 2014. *Review of Conduct by a High-Ranking Employee in the Hiring of a Trademark Organization Official*, 13-0726, Washington, DC: DOC OIG, and *ibid.*, July 28, 2014, *Review of Waste and Mismanagement at the Patent Trial and Appeal Board*, 13-1077, Washington, DC: DOC OIG.

¹³ On February 14, 2013, USPTO received a referral from OIG to look into complaints about the impermissible use of non-production time by PTAB paralegal specialists. USPTO completed its fact-finding, and substantiated the allegations of improper use of non-production time. As one of several recommended corrective actions, USPTO agreed to retain a consultant to analyze and make recommendations on the sufficiency of workloads.

benefit from improvements, including supervisory training and better oversight of such practices as “endloading”¹⁴ and “patent mortgaging.”¹⁵

After receiving USPTO’s July 2013 memo, OIG was informed of a possible earlier version that analyzed the abuse issues in much starker terms. This unsigned, undated version found that supervisors who raised concerns about potential time fraud among teleworkers had been prevented by top USPTO officials from obtaining the information they needed to discipline examiners, and reported the concerns of supervisors that patent quality was being negatively impacted by endloading and patent mortgaging. While these findings were not formally issued by the agency, but published in the media, they highlight additional challenges that USPTO must address.

The findings of the internal USPTO investigation and the two OIG investigations raise concerns over USPTO’s ability to hire and manage an expanded workforce, many of whom work from home.

Identifying spectrum for commercial broadband use, and administering FirstNet and the Broadband Technology Opportunities Program

The Department faces challenges with identification of federal spectrum for commercial broadband use by the National Telecommunications and Information Administration (NTIA), the implementation of a nationwide public safety broadband network by the First Responder Network Authority (FirstNet), and sustainability of grants made by BTOP beyond the grant period.

Identifying spectrum for commercial broadband use

Radio frequency spectrum provides an array of wireless communications services critical to the U.S. economy and supports a variety of essential government functions. Spectrum capacity is needed to deliver the wireless broadband that stimulates economic growth, spurs job creation, and boosts the nation’s capabilities in education, healthcare, homeland security, and other areas.

In June 2010, the President requested that 500 megahertz (MHz) of federal or nonfederal spectrum be freed up for commercial wireless broadband. In response, NTIA announced in March 2012 that the federal government intended to repurpose 95 MHz of prime spectrum for commercial use. However, the \$18 billion that NTIA estimated it would have cost to relocate existing federal users to other parts of the spectrum could have made this prohibitive. NTIA now estimates that costs will be significantly reduced, based on a revised reallocation and sharing approach and a review of agency transition plans.

A June 14, 2013, presidential memorandum¹⁶ directs federal agencies to accelerate shared access to spectrum. While progress has been made to enhance spectrum sharing, challenges—

¹⁴ *Endloading* occurs when examiners turn in a disproportionate percentage of their work at the end of the quarter to meet productivity targets.

¹⁵ *Patent mortgaging* occurs when an examiner submits an incomplete work product for credit and then later revises the submitted work product.

such as lack of incentives for federal agencies to share spectrum—must be addressed for this effort to succeed.

Addressing the First Responder Network Authority’s implementation of a nationwide wireless broadband network for public safety users

The 2012 legislation that established FirstNet reallocated some existing public safety spectrum, along with the so-called “D-block” spectrum (the 10 MHz bandwidth), and authorized up to \$7 billion in funding for the establishment of a nationwide public safety broadband network.¹⁷

Questions about the sufficiency of funding provided to implement a nationwide network that meets public safety–grade standards and provides coverage in every state and territory presents FirstNet with a challenge. As detailed in a February 2014 OIG memo to the First Responder Network Authority,¹⁸ FirstNet will need to establish an effective organization and leverage existing infrastructure by entering into agreements with commercial carriers and local and state governments. Effective outreach will be necessary to achieve buy-in from the public safety community that FirstNet is designed to serve. Also, experiences gained from the four BTOP public safety grants that FirstNet entered into spectrum lease agreements with (Adams County, Colorado; Los Angeles Regional Interoperable Communications System Authority; New Jersey Department of Treasury; and New Mexico Department of Information Technology) will need to be factored into the network’s design. Further, FirstNet is operating under commercial accounting standards, per its authorizing legislation, but is also required to comply with federal accounting standards due to its status as an independent authority within NTIA. This has caused several operational challenges and contributed to a material weakness being reported in the audit of FirstNet’s federal financial statements.

In a separate matter, OIG will issue an audit report of FirstNet ethics- and procurement-related issues in fall 2014.

Sustainability of Broadband Technology Opportunities Program grants after the federal funds end

Under the American Recovery and Reinvestment Act of 2009, NTIA awarded approximately 230 BTOP grants valued at approximately \$3.9 billion. The awards were made in three major areas: program infrastructure, public computer centers, and sustainable broadband adoption.

In 2014, OIG initiated two audits of BTOP. One is looking at the inventories of excess equipment that may be held by grantees, and NTIA’s procedures for disposition of it. The second audit is looking at BTOP public computer centers, to determine if equipment was procured appropriately and if claimed results of the program are verifiable.

¹⁶ Presidential Memorandum, “Expanding America’s Leadership in Wireless Innovation,” 78 Fed. Reg. 37431 (June 20, 2013).

¹⁷ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012).

¹⁸ Memo from Inspector General Todd J. Zinser to the First Responder Network Authority, February 20, 2014, “Management Challenges Facing the First Responder Network Authority.”

In an OIG audit report issued June 2014,¹⁹ we noted that three of six BTOP grant recipients we reviewed may not be able to sustain their networks beyond the grant period. Additional revenue sources and/or cash infusion will be needed to keep the projects sustainable. Project shutdown or sale of infrastructure remains a possibility for some BTOP projects.

With multiple projects either initiated with BTOP grant funds or first-time federal fund recipients, NTIA will need to pay close attention to the sustainability of the projects beyond the federal funding period, and make sure that appropriate steps are taken to secure the federal interest in equipment purchased.

Completing the re-competition of Manufacturing Extension Partnership centers

The Hollings Manufacturing Extension Partnership (MEP) of the National Institute of Standards and Technology (NIST) works with small and medium-sized U.S. manufacturers to help them create and retain jobs, increase profits, and save time and money.

MEP is built around a network of 58 manufacturing extension centers that are located throughout the 50 states and Puerto Rico. This network provides a variety of services—from development of innovation strategies, to making process improvements, to implementation of green manufacturing practices. MEP officials also work with partners at the state and federal levels on programs that help manufacturers develop new customers, expand into new markets, and create new products. The program brings together more than 1,200 technical experts who serve as business advisors to help U.S. manufacturers. The MEP budget for FY 2014 is \$128 million, and NIST requested a budget of \$141 million for MEP in FY 2015.

MEP has recently experienced some significant challenges. OIG audits in 2009 found that several state centers had serious compliance violations regarding their expenditures.²⁰ In addition, the poor financial condition of some center operators led to the closure of one center and use of new operators at three centers since 2010. Finally, as reported in another OIG audit, MEP incurred the costs of unnecessary contract concessions and subsidized lodging for its 2012 annual conference.²¹ Although MEP management agreed to change the program's future conference practices, MEP can demonstrate implementation of these changes following the completion of its next conference.

An additional challenge began in summer 2014, when MEP launched a 3-year process of formally re-competing all 58 MEP centers with a demonstration program in 6–10 states. Periodic full and open competition is the mechanism chosen by MEP managers to ensure the effective and efficient management of the entire national network of MEP centers. The demonstration program will enable procedures, milestones, and resource requirements to be tested and refined.

¹⁹ DOC OIG, June 25, 2014. *Excess Equipment, Weakness in Inventory Management, and Other Issues in BTOP Infrastructure Projects*, OIG-14-023-A. Washington, DC: DOC OIG.

²⁰ In 2009, OIG audited MEP awards in South Carolina (report no. ATL-18567, March 2009); Massachusetts (report no. DEN-18135, March 2009); Florida (report no. ATL-18568, March 2009); Texas (report no. DEN-18573, June 2009); Ohio (report no. DEN-18604, March 2010); and California (report no. DEN-18572, July 2010).

²¹ DOC OIG, February 21, 2014. *Manufacturing Extension Partnership Incurred Avoidable Conference Costs*, OIG-14-013-A, Washington, DC, DOC OIG.

The challenge to MEP management is ensuring that this re-competition process can be implemented without disrupting the MEP system and degrading the program's overall performance. MEP staff will be required to conduct re-competitions in all 50 states and Puerto Rico in 3 years while continuing to perform their current duties at a high level of performance. The goals of balancing a quality re-competition to ensure that the best candidates to be MEP operators are found, accomplishing the necessary transition activities that occur between the old cooperative agreements and the new operators' cooperative agreements, and maintaining current program standards will be difficult to achieve if MEP does not have the necessary resources to complete this ambitious program.

Departmental Strategic Goal 3: ENVIRONMENT

Ensure communities and businesses have the necessary information, products, and services to prepare for and prosper in a changing environment

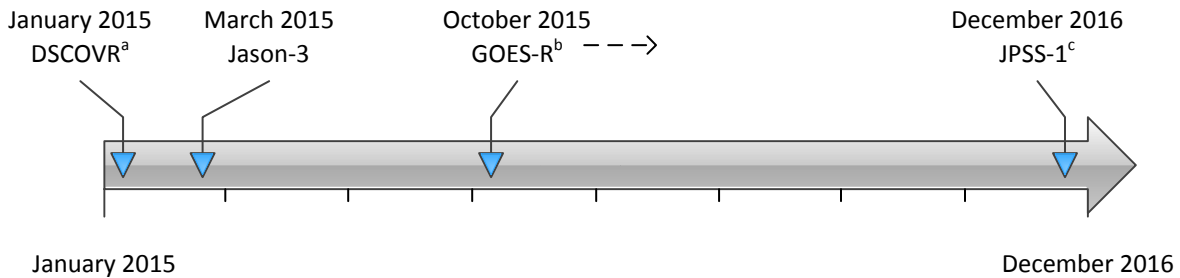
The Department's objectives under its environmental strategic goal include advancing understanding and prediction of changes in the environment; building a weather-ready nation; and fostering healthy and sustainable marine resources, habitats, and ecosystems. As the lead agency for addressing this goal, the National Oceanic and Atmospheric Administration (NOAA) faces challenges posed by costly, complex satellite acquisitions and development and potential data gaps; efforts to improve forecast accuracy; the competing needs of fisheries stakeholders; and limited marine technology. Overcoming these challenges enables our country to prepare for and prosper in a changing environment through the use of "actionable environmental intelligence."

Keeping next-generation satellite acquisition programs on track to provide critical environmental observations

The Geostationary Operational Environmental Satellite-R Series (GOES-R) and the Joint Polar Satellite System (JPSS) are the Department's largest investments, accounting for more than 20 percent of its \$8.8 billion FY 2015 budget request. These satellites are essential components in understanding and predicting the environment: they provide data and imagery used to track severe storms, forecast weather, and study climate and other environmental conditions. However, acquisition and development delays could lead to gaps in NOAA's satellite coverage, potentially degrading its ability to perform these functions.

While OIG audits have focused on these two largest programs, NOAA's satellite portfolio includes investments in two other missions with launches planned in early 2015: the Deep Space Climate Observatory (DSCOVR) and Jason-3 Ocean Surface Topography²² (see figure 2, next page). Over the next 2 calendar years, NOAA leadership will need to direct or oversee all four programs through critical reviews to ensure mission and launch readiness, while maintaining effective communication with stakeholders (including the Administration, Congress, and international partners).

²² Jason-3 is a partnership between NOAA and two European space agencies, with the United States providing approximately half of the funding.

Figure 2. Planned NOAA Environmental Satellite Launches

Source: NOAA planned launch dates as of August 2014

^a DSCOVR has a 60-day launch window beginning January 13, 2015.

^b GOES-R launch is likely to be delayed to the second quarter of FY 2016, which is its launch commitment date.

^c Shown is the current estimate for JPSS-1; its launch commitment date is no later than second quarter of FY 2017.

Managing GOES-R program costs, schedule milestones, and system requirements

The GOES-R program, consisting of four satellite missions (GOES-R, -S, -T, and -U), has an estimated cost of \$10.8 billion spread over 37 years.²³ For FY 2015, NOAA has requested \$981 million for GOES-R. The program faces acquisition and development challenges that could delay the launch of its first satellite in FY 2016 or its operational capabilities after launch, resulting in potential data gaps.

The GOES-R program must manage acquisition and development risks in order to provide required capabilities within its cost and schedule baselines. This entails ensuring sufficient ground system, instrument, and spacecraft development maturity to successfully complete integration and test activities—and be ready for an October 2015 launch (although the launch date is very likely to be delayed). The GOES-R mission’s compressed development schedule emphasizes the need for effective management of activities between its flight and ground projects. In April 2013, we reported concerns about GOES-R’s readiness to launch due to schedule slips and a potential reduction in testing activities.²⁴ We recommended that NOAA implement a comprehensive plan to mitigate the risk of potential launch delays and communicate to National Weather Service and other users—as well as the Administration and Congress—the changes that may be necessary to maintain GOES-R’s launch readiness date.

In March 2014, we issued a memorandum on the program’s core ground system development and made critical observations about the performance of NOAA and its contractor, noting there was risk the ground system may not be fully operational when needed and may incur cost overruns.²⁵ While leadership has increased its attention to the issues we raised, we remain concerned given the amount of development yet needed to ready the core ground system.

²³ FYs 2000–2036.

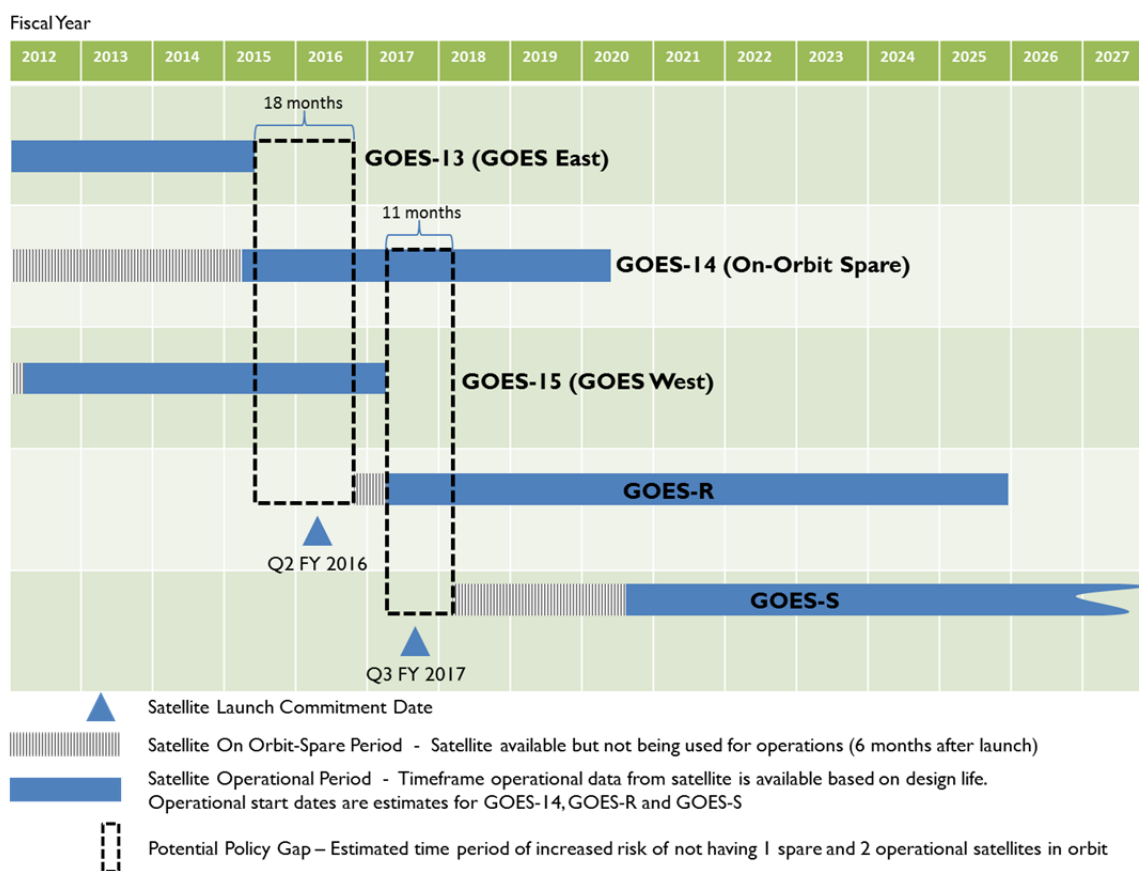
²⁴ DOC OIG, April 25, 2013. *Audit of Geostationary Operational Environmental Satellite-R Series: Comprehensive Mitigation Approaches, Strong Systems Engineering, and Cost Controls Are Needed to Reduce Risks of Coverage Gaps*, OIG-14-024-A. Washington, DC: DOC OIG.

²⁵ DOC OIG, March 16, 2014. *Interim Memo re: Audit of NOAA’s Geostationary Operational Environmental Satellite-R Series Core Ground System*, OIG-14-014-M. Washington, DC: DOC OIG.

Avoiding potential gaps in geostationary satellite coverage

NOAA operates two primary geostationary satellites, GOES-East and GOES-West, which orbit at fixed positions over the Earth—providing observations of North and South America, as well as much of the Pacific and Atlantic Oceans. Having two active geostationary satellites provides crucial capability, allowing for greater geographic coverage and targeted observations of severe weather systems. NOAA also maintains a spare satellite on-orbit, which can be (and has been) activated should one of the primary satellites malfunction. This fault-tolerant policy is at risk under current schedules (see figure 3, below) for launching GOES-R series missions. If NOAA experiences further GOES-R schedule delays, they will present a risk to the agency’s ability to maintain a spare, on-orbit satellite—and, therefore, increase the risk of a gap in coverage from either of the two primary satellites.

Figure 3. Potential Policy Gaps for NOAA Geostationary Satellites



Source: OIG analysis of NOAA information as of September 2014

Preparing the JPSS program to develop and launch next-generation polar-orbiting satellites

The JPSS program is responsible for the acquisition and development of two afternoon orbit polar satellites (JPSS-1 and JPSS-2) and a ground system, which currently supports the operation of Suomi National Polar-orbiting Partnership (Suomi NPP)²⁶ and provides data services for partner satellites. It is estimated to cost \$11.3 billion through FY 2025; NOAA requested \$916 million for JPSS in FY 2015.

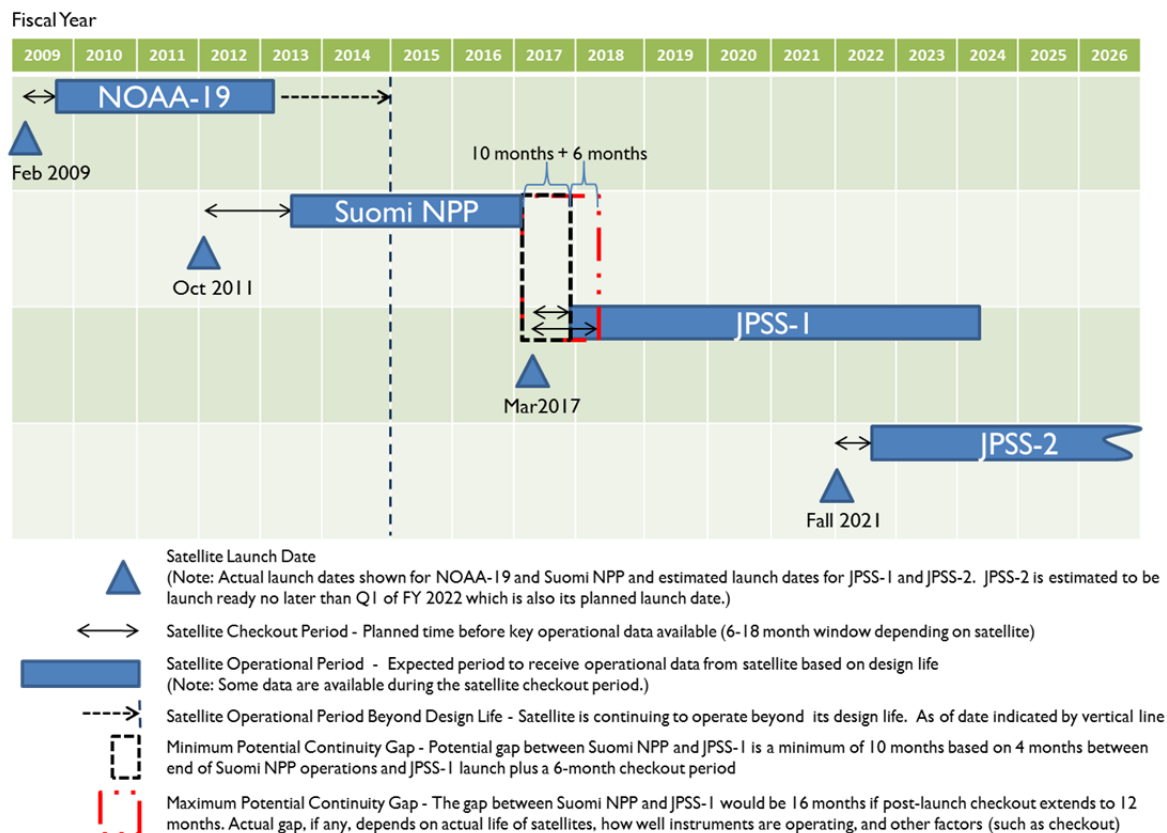
Currently, NOAA and the program are formulating follow-on missions beyond JPSS-2 to ensure continuity of observations and reduce the potential for gaps in key data. In early FY 2014, NOAA's independent review team recommended that the agency adopt a policy to ensure sufficient overlap of missions so that two on-orbit failures would be necessary before a gap in data would occur. If formally adopted, this would be consistent with NOAA's policy for its geostationary satellites.

In our June 2014 audit report,²⁷ we continued to raise concerns regarding the time between when Suomi NPP's design life ends and JPSS-1 satellite data becomes available for operational use. During this potential gap of 10–16 months, there will be significant risk of actual gaps in key data (see figure 4, next page). These data are used primarily in NOAA's 2–10-day weather forecasts. We recommended that NOAA explain the effects of a gap in terms of diminished forecast hours and added economic costs—or, conversely, the contribution to forecast accuracy and the economic benefits of afternoon orbit data.

²⁶ Suomi NPP, a risk-reduction satellite launched in October 2011, is flying the first versions of JPSS sensors.

²⁷ DOC OIG, June 17, 2014. *Audit of Joint Polar Satellite System: To Further Mitigate Risk of Data Gaps, NOAA Must Consider Additional Missions, Determine a Strategy, and Gain Stakeholder Support*, OIG-14-022-A. Washington, DC: DOC OIG.

Figure 4. NOAA Afternoon-Orbit Polar Satellite Constellation with Potential Continuity Gap



Source: OIG analysis of NOAA data as of September 2014

Improving forecasts to support a weather-ready nation

As described in the Department’s Strategic Plan, building a weather-ready nation protects against “increasing vulnerability to extreme weather and water events.” The Department’s objective is to improve severe weather preparedness, response and recovery capabilities through strategies to (1) evolve the National Weather Service, (2) improve the accuracy and usefulness of forecasts, and (3) enhance decision support services for emergency managers. A significant challenge to the second strategy is to objectively improve NOAA’s forecast accuracy and warning lead time.

One of the Department’s key indicators of near-term progress in building a weather-ready nation, identified as an agency priority goal, is the improvement of NOAA’s overall weather forecast model accuracy from 8 to 9 days by the end of FY 2015. This represents a significant increase in forecast skill, which has remained at the 8-day level since 2010. NOAA plans to invest in further high-performance computing improvements after having transitioned to new supercomputers in FY 2013. Other efforts to improve data assimilation (supported with funds from the Disaster Relief Appropriations Act, 2013) should likewise contribute toward meeting this goal—but will need continued management attention. There has been some evidence that next-generation polar satellite data from Suomi NPP have improved forecasts. A polar-satellite

coverage gap, however, could lessen the accuracy of numerical weather prediction models. To address that risk, the Department must fully develop a contingency plan to mitigate forecast degradation in the event of a polar satellite coverage gap.

Fostering healthy and sustainable marine resources

Fisheries play a significant role in the U.S. economy. In 2012, U.S. commercial fishermen landed 9.6 billion pounds of seafood valued at \$5.1 billion. Recreational fishers in 2012 caught an estimated total weight of more than 200 million pounds of landed catch. The Dutch Harbor, Alaska, commercial fishing port was the 2012 national leader in volume, with 752 million pounds landed; the New Bedford, MA, port had the highest value of catch in 2012, with \$411 million landed. However, a broad range of National Marine Fisheries Services (NMFS) concerns—including the difficult balance of stakeholder roles and interests, the need for scientific and technological advancement, and the continuing call for National Observer Program (NOP) improvements—pose challenges for NOAA.

Improving oversight of fisheries management, including rulemaking

U.S. fisheries management has grown more complex: more burdensome to regulate and manage, more demanding of the scientific and technological expertise required of all stakeholders. In January 2013,²⁸ we reported on NOAA's controls and processes surrounding fisheries rulemaking as part of our assessment of transparency and the role of Fishery Management Councils (FMCs)²⁹ in rulemaking. We learned FMC members' financial disclosures do little to increase transparency—and NOAA performs minimal reviews of the related forms. NMFS is in the process of implementing OIG recommendations designed to streamline its rulemaking, as well as clarifying expectations to ensure effective review of financial disclosures reported by council members. And, in May 2014,³⁰ we reported on NOAA's catch share³¹ programs, specifically the automated and manual systems and processes for collecting information for and administering these FMC programs. We identified issues concerning the sufficiency of NOAA's implementation and monitoring of the programs—and recommended improved internal controls for the Pacific Sablefish Permit Stacking Individual Fishing Quota, as well as reassessment of other programs not included in our review.

Maintaining relationships with and among stakeholders in the fishing industries

With a complex network of commercial and recreational fishing regulations in the United States, NOAA must strike the proper balance between oversight of and service to the various stakeholders—as well as between management of the commercial and the recreational fishing

²⁸ DOC OIG, January 16, 2013. *NOAA Needs to Continue Streamlining the Rulemaking Process and Improve Transparency and Consistency in Fisheries Management*, OIG-13-011-I. Washington, DC: DOC OIG.

²⁹ FMCs allow for regional, participatory governance by knowledgeable stakeholders. NMFS partners with FMCs—along with state agencies and other federal bureaus—to develop fishery management strategies and rules for the commercial and recreational fishing industries. There are currently 46 fishery management plans, developed by the eight regional FMCs or the Office of the Secretary under certain circumstances, to manage fishery resources.

³⁰ DOC OIG, May 1, 2014. *Review of NOAA Catch Share Programs*, OIG-14-019-I. Washington, DC: DOC OIG.

³¹ *Catch share* is a general term for several fishery management strategies that allocate a specific portion of the total allowable fishery catch to individuals, cooperatives, communities, or other entities.

industries. We have reported on the importance of NOAA promoting both commercial and recreational fishing as vital elements of our national economy while preserving populations of fish and other marine life. NOAA's challenge is to effectively balance those interests—and effectively communicate to stakeholders how the agency's efforts serve the long-term economic interests of the fishing industry.

Incorporating timely fisheries science and technology

In OIG's 2013 survey of FMC members and staff,³² we asked about hindrances to the development of fishery management plans and relationships with stakeholders. Improvements to the reliability and timeliness of scientific information consistently ranked among the top areas for improvement among those surveyed. Others felt the science was reliable, but necessary studies were sometimes incomplete or unavailable. NMFS solicited other input on science and technology issues. In January 2013, NMFS instituted a systematic peer review process at their six regional science centers and the Office of Science and Technology headquarters.³³ NMFS states the review process will include opportunities for public involvement as part of their broader dialogue with FMCs, the fishing industry, and other stakeholders.

Addressing stakeholder and industry issues related to NOP

Observer programs remain a source of some contention between NMFS and the commercial fishing industry. The latter has repeatedly raised concerns that the observers do not possess the required knowledge to collect fishery data, leading to NMFS using low-quality and inaccurate data. NOP's observers learn to collect catch data including species composition, weights and disposition of catch, seabird sightings, and marine mammal and sea turtle interactions. The resulting data provide scientific and technical information to NMFS, other government agencies, industry, and the public for conservation, fisheries and protected species management, and use of living marine resources. Because each fisheries science center conducts its own observer training program, there is increased potential for inconsistent observer training that does not address all of NMFS' standards.

Evaluating fishery monitoring options, innovations, and methods

To supplement and improve data collection for fisheries management, NMFS can leverage tools such as electronic monitoring and collaboration with knowledgeable fishermen. For several years, elected officials and members of the fishing industry have questioned NMFS's reluctance to adopt emerging management tools and update certain practices. Between 2002 and 2013, NMFS explored more than 20 electronic monitoring programs but implemented only 4. Further, of those 4 programs, NMFS uses none for scientific or management purposes; all are compliance-oriented. Programs such as electronic monitoring of catch and fishing activity and fish tagging are gaining popularity worldwide, while NMFS's use of such technology remains limited.

³² DOC OIG, April 5, 2013. *Results of Commerce OIG's Online Survey of Fishery Management Council Members and Staff*, OIG-13-022-I. Washington, DC: DOC OIG.

³³ Internal and external experts are required to examine the science programs on a 5-year peer review cycle with the intent to improve science program integration, identify best practices, and share successes and challenges.

Departmental Strategic Goal 4: DATA

Improve government, business, and community decisions and knowledge by transforming Department data capabilities and supporting a data-enabled economy

The Department's "Data" challenge, and its three strategic objectives, impacts the Economics and Statistics Administration and the U.S. Census Bureau. Due to research and testing delays, a lack of cost and budget integration, and other issues, the Census Bureau is challenged with designing a more cost-effective 2020 decennial census.

Keeping up with rapidly changing technology, in terms of providing as well as protecting data, is another key challenge faced by Departmental bureaus such as the Census Bureau and NOAA. The population data and business indicators that the Census Bureau provide—and the weather, climate, and environmental information that users access through NOAA—are only two examples of the Department's challenge of "transforming Department data capabilities and supporting a data-enabled economy."

These changes, along with the Digital Accountability and Transparency Act of 2014 (the DATA Act), promise to bring the Department into a new era: a federal government-wide community of data providers adhering to uniform standards. In July 2014, Secretary Pritzker announced that the Department will hire its first-ever Chief Data Officer. This new leader will be responsible for developing and implementing a vision for the future of the Department's diverse data resources.

Incorporating cost-saving decennial innovations while continuing to ensure an accurate decennial count

The Census Bureau faces multiple challenges as it prepares for the 2020 decennial and conducts on-going surveys. Various program delays have forced the Bureau to reevaluate the timing of 2020 research and testing, as well as reduce the cost of field operations—all while maintaining survey quality at a time when response rates are declining. In addition, the Census Bureau must improve cost accounting practices in order to demonstrate that its decennial programs have achieved actual cost savings. The Census Bureau also confronts the legal and public-relations challenge of innovating the use of administrative records, and other forms of data sharing, in order to introduce a more cost-efficient decennial for 2020.

Overcoming delays of research activities for the 2020 decennial

The Census Bureau continues to face project management challenges that pose risks to its ability to conduct a cost-effective 2020 decennial. During 2010 decennial planning and execution, OIG provided extensive audit oversight and identified significant issues, such as project management challenges, that contributed to the 2010 decennial costing U.S. taxpayers approximately \$13 billion. In order to control costs of the 2020 decennial, the Census Bureau committed to researching and testing design innovations that will reduce costs of the most expensive aspects: paper data collection and labor costs associated with nonresponse follow-up operations. However, recent OIG audit reports continue to identify issues similar to those encountered during 2010 decennial planning. For example, OIG issued a report in December

2013³⁴ concluding that, due to planning and project management deficiencies, many research projects are experiencing delays—and, after nearly 2 years, the research schedule is still unstable and incomplete. Further, the Bureau has delayed and restructured its field tests, which poses a risk for implementing design changes. OIG also found weaknesses in the Census Bureau's strategy for quality assurance and uneven implementation of program management practices. In order to make well-informed design decisions by the end of FY 2015, the Census Bureau must define and adhere to a final testing schedule. If innovations are abandoned prior to the 2020 decennial, the cost of a 2020 count using the 2010 decennial design is estimated to be as high as \$18 billion.

Integrating budget information with the research schedule, improving cost accounting, and revising research and testing cost estimates

Audits of the Census Bureau's 2010 decennial planning noted that the Census Bureau had not integrated the research and testing schedule with budget and cost data. OIG issued an audit report in May 2014³⁵ that identified the same issues in 2020 decennial research and planning; in addition, it concluded that the Census Bureau's cost accounting practices do not result in actual project cost being recorded in the accounting system. To effectively manage a program of the size, complexity, and cost of the 2020 decennial—and assess the return on investment of research efforts—managers need accurate accounting records. Integration of the research schedule with budget and cost information allows managers to better track the status of available funds, conduct cost-benefit analyses, and forecast impending underruns and overruns so that funds can be reallocated. Without accurate cost information, the Census Bureau will be challenged to demonstrate in a transparent manner that it achieved cost reduction goals. In response to our audit, the Census Bureau is revising its cost-accounting practices. However, the transition to accurate project costing may reveal unexpected cost trends that the Census Bureau will need to overcome in order to implement innovative design decisions.

Testing the feasibility of increased administrative records use, addressing legal impediments to data sharing, and achieving cost-saving design innovations for the 2020 decennial

A key tenet of the Census Bureau's 2020 decennial redesign efforts is that reducing nonresponse follow-up operation costs, as well as making other design changes, could reduce the overall 2020 decennial cost by billions of dollars. The use of administrative records³⁶ to remove nonresponding households from follow-up operations is critical to reducing these costs. However, the use of administrative records presents challenges: potential legal impediments to data sharing among the Census Bureau, other agencies, and the private sector exist, as does public sensitivity regarding the use of previously collected

³⁴ DOC OIG, December 3, 2013. *2020 Census Planning: Research Delays and Program Management Challenges Threaten Design Innovation*, OIG-14-003-A. Washington, DC: DOC OIG.

³⁵ DOC OIG, May 21, 2014. *The Census Bureau Lacks Accurate and Informative Cost Data to Guide 2020 Census Research Through a Constrained Budget Environment*, OIG-14-021-A. Washington, DC: DOC OIG.

³⁶ Data collected by federal agencies for program purposes (typically referred to as *administrative records*) contain personally identifiable information that, when combined with other records, can produce statistical information such as demographic, labor force, and socioeconomic indicators. Administrative records have the potential to decrease data collection costs and reduce respondent burden.

data. In addition, the validity of administrative record information must be verified and field-tested. As with other elements of the Census Bureau's decennial research program, administrative record testing has encountered delays, potentially hindering the Census Bureau's ability to develop new, cost-efficient methods for the 2020 decennial.

Meeting public demand for data

The Department's role in the data community is expanding, to a provider of information that reaches an increasing number of users. Two Departmental bureaus, the Census Bureau and NOAA, provide examples of looming challenges.

In order to meet changing expectations for data services, the Census Bureau has taken steps to provide vital economic information: for example, by modernizing its approach to issuing easy-to-use data. In 2012, the Census Bureau launched a mobile application for iPhone and iPad users that consolidated its indicators with those from the Bureau of Economic Analysis and the Bureau of Labor Statistics, which produce monthly and quarterly snapshots of key sectors within the U.S. economy. The app, "America's Economy," currently provides smartphone and tablet users with real-time releases of 19 key economic statistics—such as the producer price index and the consumer price index—that drive business hiring, sales, and production decisions useful to small businesses, the construction industry, the banking industry, journalists, economists, planners, policymakers, and anyone who monitors U.S. economic data.

However, as more people have access to data than ever before—fueling higher demand for data—the Department will need to keep pace with rapidly changing technology. In order to meet this challenge, the Census Bureau announced the Digital Transformation Program, with overall goals and objectives to increase access to Census Bureau statistics, increase external customer satisfaction, and increase awareness and audience. As part of its strategy, the Census Bureau is seeking assistance from the private sector to improve website content and usability, customer satisfaction management, web analytics support, mobile app communications, web applications, and data product development. The Census Bureau must keep pace with changing technology in such a way that facilitates dissemination of data to all interested users, from individuals to businesses to governments.

Likewise, the demand for weather, climate, and environmental data is increasing. According to NOAA, "of the 20 terabytes of data NOAA gathers each day—twice the data of the entire printed collection of the United States Library of Congress—only a small percentage is easily accessible to the public." In February 2014, NOAA requested information from the private sector to determine whether the capability and interest exists to position NOAA's considerable data holdings on the cloud, to be co-located with easy and affordable access to computing, storage, and advanced analytical capabilities. The private sector and NOAA must determine the feasibility of partnering, taking into consideration that NOAA must (1) ensure its existing services are not impacted, (2) remain compliant with statutes and regulations, and (3) retain and maintain the scientific stewardship of any data provided to industry partners. As with the increased demand for Census Bureau data, NOAA data providers must face an additional challenge along with service continuity, statutory compliance, and scientific stewardship: IT security. The Department's "Data" challenge, similar to its "Environment" and "Operational

Excellence” challenges, highlight a growing concern over the safety of computer systems of internal and external users.

Implementing a mandate for government-wide data standards

Finally, there has emerged a new government-wide challenge to expanding data capabilities and supporting a data-enabled economy: the DATA Act. This legislative mandate is intended to establish government-wide standards for financial data and requires that consistent, reliable, and searchable government spending data be displayed accurately for taxpayers and policy makers. Among other things, the DATA Act requires that, for any funds made available to, or expended by, a federal agency or component of a federal agency, the following information shall be posted on USASpending.gov, for each appropriations account: the amount of budget authority appropriated, the amount that is obligated, the amount of unobligated balances, and the amount of any other budgetary resources. Guidance on implementing data standards will be issued to agencies within 12 months of May 9, 2014 (the date of the enactment of the DATA Act), and inspectors general will follow with reviews of spending data submitted under the act within 18 months after guidance is issued. As a result, the Department will need to dedicate resources in FY 2015 to implement the established data standards and prepare for reviews of the reported data.

Departmental Strategic Goal 5: OPERATIONAL EXCELLENCE

Deliver better services, solutions, and outcomes that benefit the American people

The Department characterizes the goal of “operational excellence” as being responsive, nimble, and adaptive to fast changes. This goal’s objective calls on all facets of the Department to maintain “customer-focused” drive. To meet this challenge, the Department must focus on all customers, including (a) internal (its own operating units, striving to improve their cybersecurity posture and financial data quality), (b) the public at large (who expect a culture of accountability from the Department), and (c) U.S. businesses (who, according to the Department’s mission, seek help from Commerce to become more innovative at home and more competitive abroad).

Improving cybersecurity and IT management

The Department relies on more than 280 IT systems—20 of them categorized as high-impact systems—to support its business operations. Although the Department has taken actions to strengthen cybersecurity, our Federal Information Security Management Act of 2002 (FISMA)³⁷ assessments over the years repeatedly identify significant flaws in basic security measures protecting the Department’s IT systems and information. Our recent FISMA audits revealed significant security deficiencies in NOAA’s high-impact systems³⁸ and identified security weaknesses in the Department’s incident detection and response capabilities.³⁹ These persistent security deficiencies make the Department vulnerable to cyber attacks. In addition, a long-standing fragmented IT governance structure provides additional challenges to effectively strengthening Department-wide cybersecurity.

Improving the Department’s incident detection and response capabilities and overall cybersecurity posture

To deal successfully with cyber threats, the Department needs to establish a robust incident response capability, specifically within the Department of Commerce Computer Incident Response Team. In addition, the Department must deploy a sustainable implementation of its three enterprise-wide cybersecurity initiatives that are under way to continuously monitor its IT systems, provide cyber security situational awareness, and meet requirements to optimize and standardize its individual external network connections.

In our FY 2014 *Top Management Challenges*,⁴⁰ we reported that the Department has several enterprise cybersecurity initiatives under way to address mandates from the Office of

³⁷ FISMA requires agencies to secure their information systems through the use of cost-effective management, operational, and technical controls. FISMA also requires inspectors general to evaluate agencies’ information security programs and practices by assessing a representative subset of agency systems, and to report the results to the Office of Management and Budget and Congress annually.

³⁸ DOC OIG, July 15, 2014. *Significant Security Deficiencies in NOAA’s Information Systems Create Risk in Its National Critical Mission*, OIG-14-025-A. Washington, DC: DOC OIG.

³⁹ DOC OIG, April 24, 2014. *Inadequate Practice and Management Hinder Department’s Incident Detection and Response*, OIG-14-017-A. Washington, DC: DOC OIG.

⁴⁰ DOC OIG, November 25, 2013. *Top Management Challenges Facing the Department of Commerce*, OIG-14-002. Washington, DC: DOC OIG.

Management and Budget (OMB), including the Enterprise Cybersecurity Monitoring and Operations (ECMO) and Enterprise Security Operations Center (ESOC) initiatives. Ensuring timely implementation of these initiatives is crucial to significant improvement of the Department's cybersecurity posture.

While the Department has made progress from its ESOC initial planning stage—including completion of ESOC site selection and acquisition of hardware and software for ESOC's operation—it needs several years of the Department's commitment and strong cooperation among operating units to fully implement ESOC.

ECMO is an essential piece of the Department-wide continuous monitoring capability. As of August 2014, the majority of the operating units have deployed basic ECMO capability on more than 85 percent of their system components; however, three operating units (BIS, NOAA, and NTIA) lag behind (with 2, 62, and 50 percent, respectively, deployed as of August 2014). The Department must make a concerted effort to expedite ECMO deployment and thereby provide nearly real-time security status, support for patch management, and remediation of software configuration issues for Department-wide system components.

In addition, in order to improve its overall cybersecurity posture, the Department must maintain a fully operational and stable IT infrastructure at HCHB, which supports core IT services such as incident detection and response to multiple bureaus.

Managing a fragmented governance structure

We reported our concerns about the Department's fragmented IT governance in previous years. In response to OMB direction, the then-Acting Secretary issued a June 2012 memorandum that described a strategy to strengthen the Department's Chief Information Officer's (CIO's) ability to oversee the bureaus' IT investments, \$1.9 billion in FY 2014 alone as of August 2014. The CIO has leveraged this increased authority to lead the effort to consolidate commodity IT Department-wide—and continues to strengthen IT oversight through the Commerce IT Review Board. However, despite this increased authority, the CIO's responsibility to oversee satellite IT investments has been diminished, and IT investments still need to close the gap between planned and actual schedule and cost performance.

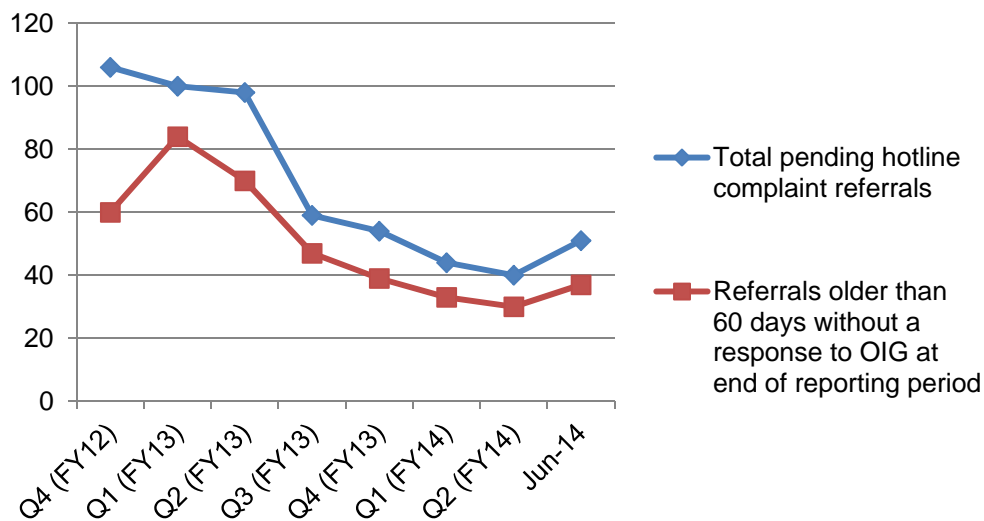
Strengthening stakeholder confidence in the Department

Fostering a culture of accountability, including responses to OIG hotline complaint referrals

OIG operates a complaint hotline for employees and the public to submit information about alleged wrongdoing, misconduct, or mismanagement. OIG's determination to review, investigate, or refer the complaint information to Departmental management for appropriate action helps to instill a culture of ethical conduct—and ensures that spending is appropriate and complies with laws and regulations. Over the past 2 years, the Department and its bureaus have worked closely with OIG to resolve management issues raised through OIG's hotline. Timely and thorough actions to resolve these issues help to create a culture of accountability in the Department.

On April 10, 2014, in written testimony submitted to the Senate Committee on Appropriations,⁴¹ OIG reported that the Department had made significant progress by looking into hotline complaints provided by OIG, reducing the total number pending by half. However, from April to June 2014, the number of pending hotline referrals increased (see figure 5), which demonstrates the need to consistently ensure that issues concerning compliance and ethics are addressed.

Figure 5. Complaint Referrals to Departmental Operating Units Awaiting Initial Response, Fourth Quarter of FY 2012–June 2014



Source: OIG, June 2014

Over the past several months, EDA has made progress in handling hotline referrals awaiting initial response, by designating responsive staff to manage efforts to review allegations in hotline complaints. NOAA and NIST need to take similar action, as certain older hotline referrals continue to await response without appropriate progress. Improved coordination among the Department's Office of General Counsel (OGC), operating unit leadership, human resources offices, and OIG is necessary to ensure that appropriate actions resulting from hotline inquiries and OIG investigations are executed in a timely manner.

Improving financial data quality

The lack of centralized data systems creates reporting and oversight challenges for the Department, including the ability to effectively report financial data and monitor financial activity across its bureaus. The Department and most of its bureaus use an outdated financial management system, developed with aging technology and augmented with in-house software, that is increasingly difficult to maintain. Limited system functionality, high support costs, lack of system integration, and lack of centralized reporting capability impede the Department's ability to oversee and manage Department-wide financial activities. Plans are in progress to replace

⁴¹ DOC OIG, April 10, 2014. *The Department of Commerce's Fiscal Year 2015 Budget Request*, OIG-14-015-T. Washington, DC: DOC OIG.

the legacy financial management system; however, there are significant challenges with this project, including an aggressive timeline, the need for successful conversion at the Census Bureau in time for 2020 decennial readiness, the use of a shared-service provider, the need to interface separate component systems, and funding adequate timely project completion.

Addressing financial management issues

In FYs 2011–2013, the accounting firm KPMG LLP identified several significant control weaknesses at NOAA related to the financial accounting for satellites. NOAA has a large investment in satellites, comprising approximately 25 percent of the Department’s assets. As of the end of FY 2013, satellite construction work-in-progress amounted to \$6.5 billion—with completed satellites and ground systems costing another \$1.6 billion. The accounting for these satellite costs is highly complex; in addition, satellite accounting involves significant contracts and arrangements with contractors and other government agencies. These challenges have resulted in significant control deficiencies in NOAA’s satellite accounting for the past 3 fiscal years. Although NOAA develops a corrective plan each year, repeated satellite accounting deficiencies highlight other challenges. For example, the operation and management of NOAA’s satellite program needs strengthening to ensure integrity, accountability, and transparency. Further, it is essential that program and finance personnel work together to ensure that satellite investments are accurately identified, recorded, and reported.

The Department also must address financial management challenges within the Office of the Secretary’s Working Capital Fund (WCF). OIG’s recent audit of the fund identified that the Department relied on inaccurate information from Departmental service providers, including OGC, used incorrect bases to calculate customer charges and did not use current billing rates. In our report, we emphasized that OGC’s process for identifying the percentage of services provided to each customer is highly inefficient and subject to error. The Department must take actions to address the reported deficiencies to ensure customers are properly charged for their share of WCF project costs.

Contributing to the Department’s difficulties in addressing its financial management challenges is NOAA turnover within its financial management leadership ranks. Beginning in January 2014 and through August 2014, NOAA has operated without a chief financial officer. NOAA’s acting chief financial officer left the agency in August 2014, resulting in a key financial leadership post vacant. While this position remained unfilled, the financial statement audit—in a key substantive testing phase at NOAA—lacked leadership and operational direction. As the results of the FY 2014 financial statement audit are developed, the Department must count on NOAA to hire new financial management and provide timely responses to ongoing audit issues.

Reducing acquisition risk

Procurement continues to be a significant support mechanism for the Department’s overall mission, accounting for approximately \$2.4 billion annually for goods and services related to satellite acquisitions, support for intellectual property operations, management of coastal and ocean resources, IT, and construction and facilities management. Minimizing waste and abuse through acquisition management and oversight is an ongoing challenge for the Department—and particularly critical given current budget limitations and recent OMB and Congressional

initiatives emphasizing more accountability in federal contracting. Continuing to address high-risk contracts, better monitoring of contractor performance, and maintaining a qualified acquisition workforce will enable better management of the Department's day-to-day spending.

Awarding high-risk contracts

A government-wide initiative calls for federal agencies to reduce spending on high-risk contract types, such as time-and-materials and labor-hour contracts. Although the Department continues to report that it is reducing the use of these high-risk contract types, it still faces challenges in contract oversight and administration of these contracts. Our audits have found weaknesses in the Department's management of high-risk contracts, resulting in missed opportunities to improve program performance and save taxpayer dollars. For instance, our November 2013 audit report⁴² found \$169.5 million in questioned costs and \$1.3 million in funds put to better use. Our work continues to identify that, without proper oversight, the Department cannot be certain that contractors perform in accordance with contract requirements, justify the use of these contract types, support the certification of invoices for services performed, and ensure that services are performed, leaving the Department vulnerable to increased fraud, waste, and abuse.

Monitoring contractor performance and maintaining an acquisition workforce

Over the past few years, our audit work has identified opportunities for the Department to improve its management of contracts and resources—and save taxpayer dollars. For example, we reported on difficulties in the Department's implementation of the federal government-wide acquisition savings initiatives (in October 2011⁴³) and awarding and administering of cost-plus-award-fee contracts (in May 2012⁴⁴). Overall, our audit work has identified over \$300 million in unsupported costs and funds that could be put to better use. Furthermore, rapid career progression, a legislative hiring cap that limits the number of employees hired within some operating units, and employee retention issues are obstacles the Department faces in acquiring and retaining a qualified mid-level staff and an acquisition workforce possessing the appropriate skill sets.

⁴² DOC OIG, November 8, 2013. *The Department's Awarding and Administering of Time-and-Materials and Labor-Hours Contracts Needs Improvement*, OIG-14-001-A. Washington, DC: DOC OIG.

⁴³ DOC OIG, October 6, 2011. *Commerce's Office of Acquisition Management Must Continue to Improve Its Ongoing Oversight of Acquisition Savings Initiatives*, OIG-12-001-A. Washington, DC: DOC OIG.

⁴⁴ DOC OIG, May 18, 2012. *NOAA's Cost-Plus-Award-Fee and Award-Term Processes Need to Support Fees and Extensions*, OIG-12-027-A. Washington, DC: DOC OIG.

Appendix A: Related OIG Publications

This list presents OIG's past and current work related to FY 2014's top management challenges. These products can be viewed at www.oig.doc.gov. If the product contains information that cannot be released publicly, a redacted version or an abstract will be available on the website.

Challenge 1: Trade and Investment

- *BIS' Implementation of Export Control Reform Requires Several Improvements to Address Challenges* (OIG-14-028-A, September 4, 2014)
- Letter to Senators Mikulski and Shelby Regarding International Trade Administration's Consolidation (OIG-14-026-M, July 25, 2014)
- Nonfederal Audits Report for the 6 Months Ending December 31, 2013 (OIG-14-017-M, April 15, 2014)

Challenge 2: Innovation

- *Investigative Report: Review of Waste and Mismanagement at the Patent Trial and Appeal Board* (13-1077, July 28, 2014)
- *Investigative Report: Review of Conduct by a High-Ranking Official in the Hiring of a Trademark Organization Employee* (13-0727, July 8, 2014)
- *Rapid Rise in the Request for Continued Examination Backlog Reveals Challenges in Timely Issuance of Patents* (OIG-14-024-A, June 30, 2014)
- *Excess Equipment, Weaknesses in Inventory Management, and Other Issues in BTOP Infrastructure Projects* (OIG-14-023-A, June 25, 2014)
- *Manufacturing Extension Partnership Incurred Avoidable Conference Costs* (OIG-14-013-A, February 21, 2014)
- Letter to Representatives Walden, Gardner, and Tipton re: Review of NTIA's Broadband Technology Opportunities Program Grant to EAGLE-Net Alliance of Colorado (OIG-14-011-M, January 23, 2014)
- *Closeout Procedures for the Broadband Technology Opportunities Program Need Strengthening* (OIG-14-010-A, December 20, 2013)

Challenge 3: Environment

- *Audit of the Joint Polar Satellite System: To Further Mitigate Risk of Data Gaps, NOAA Must Consider Additional Missions, Determine a Strategy, and Gain Stakeholder Support* (OIG-14-022-A, June 17, 2014)
- *Investigative Report: Hurricane Sandy Relief Funding for the National Estuarine Research Reserve System (NERRS)* (13-0963, May 19, 2014)

- *Review of NOAA Catch Share Programs* (OIG-14-019-I, May 1, 2014)
- *Interim Memo re: Audit of NOAA's Geostationary Operational Environmental Satellite-R Series Core Ground System* (OIG-14-014-M, March 6, 2014)
- *Letters to Bicameral Task Force on Climate Change re: Review of Commerce Department's Climate Change-Related Policies, Environmental Programs, and Activities* (OIG-14-004-M, December 6, 2013, and OIG-13-021-M, March 20, 2013)

Challenge 4: Data

- *The Census Bureau Lacks Accurate and Informative Cost Data to Guide 2020 Census Research Through a Constrained Budget Environment* (OIG-14-021-A, May 21, 2014)
- *Investigative Report: Unsubstantiated Allegations that the Philadelphia Regional Office Manipulated the Unemployment Survey Leading up to the 2012 Presidential Election to Cause a Decrease in the National Unemployment Rate* (14-0073, May 1, 2014)
- *2020 Census Planning: Research Delays and Program Management Challenges Threaten Design Innovation* (OIG-14-003-A, December 3, 2013)

Challenge 5: Operational Excellence

- *Expedited Efforts Needed to Remediate High-Risk Vulnerabilities in the Joint Polar Satellite System's Ground System* (OIG-14-027-M, August 21, 2014)
- *Significant Security Deficiencies in NOAA's Information Systems Create Risks in Its National Critical Mission* (OIG-14-025-A, July 25, 2014)
- *Office of the Secretary's Working Capital Fund Billing Control Issues Resulted in Incorrect Charges* (OIG-14-020-A, May 15, 2014)
- *Inadequate Practice and Management Hinder Incident Department's Detection and Response* (OIG-14-017-A, April 24, 2014)
- *FY 2013 Compliance with Improper Payment Requirements* (OIG-14-016-I, April 15, 2014)
- *IG's Testimony on Commerce Department's FY 2015 Budget Request: Senate Appropriations Committee* (OIG-14-015-T, April 10, 2014)
- *FY 2013 Financial Statements Audit: Assessment of (Departmental) Information Technology Controls Supporting Financial Management Systems* (OIG-14-008-A, December 17, 2013)
- *FY 2013 Consolidated (Departmental) Financial Statements Audit* (OIG-14-007-A, December 16, 2013)
- *FY 2013 Financial Statements Audit: Assessment of (USPTO) Information Technology Controls Supporting Financial Management Systems* (OIG-14-006-A, December 13, 2013)
- *FY 2013 (USPTO) Financial Statements Audit* (OIG-14-005-A, November 25, 2013)

Appendix B: List of Acronyms

AIA	Leahy-Smith America Invents Act of 2011
BIS	Bureau of Industry and Security
BTOP	Broadband Technology Opportunities Program
CCL	Commerce Control List
CIO	chief information officer
CTS	Client Tracking System
CUESS	Commerce USXPORTS Exporter Support System
DATA Act	Digital Accountability and Transparency Act of 2014
ECASS	Export Control Automated Support System
ECMO	Enterprise Cybersecurity Monitoring and Operations
ECRI	Export Control Reform Initiative
EDA	Economic Development Administration
ESOC	Enterprise Security Operations Center
FirstNet	First Responder Network Authority
FISMA	Federal Information Security Management Act of 2002
FMC	Fishery Management Council
FY	fiscal year
GAO	Government Accountability Office
GOES	Geostationary Operational Environmental Satellite
IP	intellectual property
IT	information technology
ITA	International Trade Administration
JPSS	Joint Polar Satellite System
MEP	Manufacturing Extension Partnership
MHz	megahertz
NEI	National Export Initiative
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOP	National Observer Program
NPP	National Polar-orbiting Partnership
NTIA	National Telecommunications and Information Administration
OGC	Office of General Counsel
OIG	Office of Inspector General
OMB	Office of Management and Budget
PTAB	Patent Trial and Appeal Board
RCE	Request for Continued Examination
RLF	Revolving Loan Fund program
RLFMS	RLF Management System
USPTO	U.S. Patent and Trademark Office
WCF	Working Capital Fund

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