

**COMMERCE, JUSTICE, SCIENCE, AND RE-
LATED AGENCIES APPROPRIATIONS FOR
FISCAL YEAR 2018**

THURSDAY, JUNE 8, 2017

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:03 a.m., in room 192, Dirksen Senate Office Building, Hon. Richard Shelby (chairman) presiding.

Present: Senators Shelby, Boozman, Capito, Kennedy, Shaheen, Leahy, Coons, and Van Hollen.

DEPARTMENT OF COMMERCE

STATEMENT OF HON. WILBUR ROSS, SECRETARY

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The subcommittee will come to order.

Good morning, Mr. Secretary. Welcome to the subcommittee.

This morning we will hear from Commerce Secretary Wilbur Ross regarding the President's request for the department's programs and activities in 2018.

Secretary Ross, I want to thank you for coming before this subcommittee to discuss the priorities of the new administration.

Federal agencies across Government have been tasked with significantly cutting down on spending. Creating a budget is not easy, but it is a first step toward achieving fiscal responsibility.

The Department of Commerce is charged with addressing several critical functions for our Nation, which include operating weather satellites and forecasting severe storms, enforcing trade laws to ensure American businesses can compete on a level playing field, working with distressed communities to spur economic development for all of our people, and properly managing our Nation's fisheries, among others.

The President's fiscal year 2018 request is \$7.8 billion, which is \$1.4 billion below the 2017 enacted level, representing a 15 percent proposed cut in the department's budget.

The President's request focuses on generally increasing efficiencies through a tighter budget. The request recognizes NOAA's need to recapitalize its aging fleet of operational vessels, which is essential for NOAA to continue its core missions in mapping, charting, and fishery data collection, among others.

While I am pleased to see the department recognize the importance of these activities and the administration's prioritization of national security, I am troubled by some of the proposed cuts to other core programs.

The department has requested a 45 percent reduction in NOAA's Polar Follow-On, PFO, satellite program. PFO is intended to provide the next generation of polar orbiting weather satellites, which currently contribute more than 80 percent of the data needed for numerical weather prediction models to forecast hurricanes and severe storms. These weather satellites help save lives and protect property.

Secretary Ross, I am interested in hearing the department's long-range strategy behind the requested decrease. What does the administration consider to be an acceptable risk posture for the future of polar weather satellites?

I am also concerned, Mr. Secretary, about the department's budget decreases for programs that would advance weather-forecasting capabilities. For example, proposed cuts to the National Water Model could significantly impact our Nation's ability to predict and respond to severe floods. These cuts would slow operations at NOAA's National Water Center, which provides invaluable forecasts and services to the Nation for water-related hazards.

The department also proposes to eliminate important external competitive grant programs that partner with States and local communities across the Nation, and which use matching funds to maximize any Federal investment. For example, the Economic Development Administration, the EDA, provides small but valuable investments for economically distressed areas in our country to spur development and support job creation. Many rural communities across the Nation, including my State, have benefited from EDA's assistance programs.

Importantly, I believe EDA grants, like those at NOAA and NIST, allow States and localities to steer priorities through a bottom-up approach instead of Federal bureaucrats driving each decision.

I fear, Mr. Secretary, the department's request to eliminate external partnerships will further consolidate power within Washington rather than maintain flexibility and decisionmaking within local communities, which the President talked about when he ran.

Another way the department significantly impacts local communities is by overseeing the management of our Nation's fisheries. I was deeply disappointed in NOAA's decision to shorten the recreational fishing season for red snapper to just 3 days in the Gulf of Mexico. Because this subcommittee has provided unprecedented resources and strict direction for NOAA to improve its management of reef fish in the gulf, I find NOAA's determination unacceptable. In 2017, the subcommittee made permanent the extension of State boundaries in the gulf for managing red snapper and provided \$10 million to conduct an independent stock assessment, which will be compared to NOAA's internal process.

Secretary Ross, it is my hope that the department will work to alleviate the hardship placed on recreational anglers and businesses, such as tackle shops, boat manufacturers, ice houses, and

small businesses that rely on greater access to this abundant resource in the Gulf of Mexico.

Finally, I have questions about the department's accountability and oversight of the upcoming 2020 census, which we have talked about privately. Not only did the Government Accountability Office add the 2020 census to its high-risk list, but a critical computer system was recently discovered to have surpassed its budget by \$309 million. However, that was before you got there; I know that. Nonetheless, as the 2020 census approaches, such news does not instill confidence in this subcommittee for the department's preparation for this constitutional requirement.

Mr. Secretary, I look forward to hearing your views today on these and other matters, and we also look forward to working with you.

Senator Shaheen.

STATEMENT OF SENATOR JEANNE SHAHEEN

Senator SHAHEEN. Thank you, Mr. Chairman.

Secretary Ross, thank you very much for being here to testify this morning.

I especially appreciated your coming to speak to New Hampshire Business Day yesterday and talking to our group of business folks who are here from New Hampshire. One of the things you talked about was your work on the infrastructure plan that the President announced yesterday. I am encouraged by the new administration's interest in tackling the backlog of investment in our country's infrastructure needs—not just the roads and bridges but also the investments that smaller communities like we have in New Hampshire so sorely need for clean water and the expansion of broadband.

I have to say I am disappointed, however, to see that the proposed budget for the department would eliminate a number of initiatives that are especially important to rural communities in small States like mine in New Hampshire. In fiscal years 2015 and 2016, the Economic Development Administration, which is one of those programs that the budget proposes to eliminate, created or retained more than 72,000 jobs and leveraged an additional \$9.3 billion in private funding.

I was also disappointed to hear that the department proposes to eliminate NIST's Manufacturing Extension Partnership—again, something that supports our small- and medium-sized businesses in New Hampshire and around the country. The \$130 million invested in MEP in 2016 returned \$1.13 billion in Federal income tax, a return of almost \$9 for every \$1 spent, and created or retained more than 142,000 jobs.

I certainly understand that the administration and, therefore, you, as Secretary, are determined to cut the budget. But when I look at those kinds of numbers, I do not see how eliminating programs like the EDA and the Manufacturing Extension Program really make good fiscal sense.

The Administration also says that it is reprioritizing national security, but, like the Chairman, I fear that the budget would leave many of our shorelines and seacoasts unprotected. The budget proposed for the National Oceanic and Atmospheric Administration

would eliminate development of hurricane and tornado forecast models, reduce the lead time and accuracy of tsunami warnings, and compromise the major satellite system used to forecast oncoming storms.

I hope, Mr. Secretary, that you might consider coming up to New Hampshire at some point to meet some of the everyday Americans who are affected by the budget of the Department of Commerce and to see the good work of the employees and the efforts of your department. I know that you understand that, but I would like to introduce you to some of those folks like the Sea Grant researchers at the University of New Hampshire working on sustainable aquaculture or the fishermen in New Hampshire—who have almost been put out of business by some of the regulations of the department—but who also depend on accurate science and good management practices from the National Marine Fisheries Service. You should also come to the weather observatory at the top of Mount Washington, the highest point in the Northeast, to meet some of the rural business owners and town managers who rely on timely and accurate forecasts, as well as census data, to support their communities.

All of these programs that I have mentioned are facing cuts under the proposed budget. I believe that the money saved from those cuts would be vastly outweighed by the damage done to our rural communities and small businesses that depend on these programs.

So, Mr. Secretary, I look forward to continuing this discussion today and in the weeks ahead as we develop a budget for fiscal year 2018. I again thank you for testifying today.

Senator SHELBY. The chair now recognizes the distinguished Senator from Vermont, who is also our former President pro tem and is our senior Senator in the United States Senate, Senator Leahy, the ranking member on this full committee.

STATEMENT OF SENATOR PATRICK J. LEAHY

Senator LEAHY. Thank you very much, Senator Shelby.

Mr. Secretary, thank you for being here today. We have a lot of issues to discuss, not the least of which is, of course, today's hearing on the President's budget proposal for the Department of Commerce.

The request for the department cuts nearly \$1.5 billion, or 16 percent, from the fiscal year 2017 appropriations level. It has cut out a lot of popular grant research and State-based programs. It has cut the next-generation weather satellites. And, most people would agree, it fails to invest sufficiently in the 2020 Census. It eliminates the Economic Development Administration. It eliminates much of NOAA, the National Oceanic and Atmospheric Administration, grant funding. You have recommended severe cuts to our weather and storm warning models. And you do not sufficiently invest, as I said, in the Census.

Now, this can go on and on, but as I said to other members of the Cabinet who have testified before our committee, I looked at each one of these budgets as vice chairman of the overall Appropriations Committee, and my conclusion is that the budget is abys-

mal. It does not maintain America's greatness. This is not a budget to make America great. It is a budget to diminish America.

Every American has a stake in the strength of our economy, Republican, Democrat, independent. Vermont small businesses—even in our little State—have a global footprint. They rely on our trading policies to keep them competitive. I believe that we export more per capita to Canada than any State in the country. We rely on the Department of Commerce to facilitate trade, and to protect our work force from unfair practices. We want you to promote innovation, keep us competitive in a global economy.

Now, our closest trade partner, international trade partner, is an hour's drive from my home to our northern border. Each year, we export hundreds of billions of dollars—remember, Vermont is a State of 600,000 people. We export hundreds of billions of dollars in goods and services to Canada, our Nation's largest export market in the world. We in Vermont are an active contributor to this global commerce. And supporting initiatives that help that will certainly help our businesses, but I am sure they will help in New Hampshire and virtually every other State on the border.

Now, of course, we protect, first and foremost, our interests at home. But we are not isolated as a country. As you know, from your own business experience, our economy relies on partners around the world.

Now, you show no daylight—and this is, of course, your decision—between you and President Trump regarding your attempt to renegotiate trade deals, including NAFTA. The President said he will renegotiate to make NAFTA better for the American people. I look at the billions of dollars we trade with Canada, and I am interested in knowing what that renegotiation is going to amount to. But if this budget proposal reflects his definition and yours of “better,” then I am greatly concerned.

I expect you to be an independent and thoughtful counselor to the President, as your predecessors have been in both Republican and Democratic administrations, on these complicated matters, because they are not matters he has had experience in, and one cannot expect any President to have experience in all matters. These are going to require you to be independent and your recommendations.

Thank you, Mr. Chairman.

Senator SHELBY. Thank you, Senator Leahy.

Mr. Secretary, again, welcome to the subcommittee, your written testimony will be made part of the hearing record in its entirety. You may proceed as you wish. Thank you.

SUMMARY STATEMENT OF HON. WILBUR ROSS

Secretary ROSS. Thank you, Mr. Chairman. Chairman Shelby, Ranking Member Shaheen, and Members of the Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies, thank you for this opportunity to discuss President Trump's fiscal year 2018 budget request, a new foundation for American greatness. And thank you also for your previous support of the Department of Commerce.

When I was confirmed as Secretary of the Commerce on February 27, I took on the great responsibility of ensuring that our

taxpayers' dollars are targeted to our core missions of keeping us safe and creating economic growth. The President's fiscal year 2018 budget request of \$7.8 billion in discretionary funding for Commerce is a first step toward accomplishing those aims.

The President's budget request prioritizes and protects investments in core government functions. These include ensuring fair and secure trade, preparing for the 2020 decennial census, and providing the satellites necessary to produce timely and accurate weather forecasts. The budget also reduces or eliminates duplicative or redundant grant programs.

The administration is devoting resources toward critical investments in our Nation's economic and national military security. The President's budget provides an additional \$4.5 million to the International Trade Administration for its enforcement and compliance section. These resources will be directed toward the self-initiation of antidumping and countervailing duty investigations.

We will ensure that no country or foreign corporation can take unfair advantage of U.S. markets. This budget increase will create 29 new positions to accelerate these cases and shield U.S. businesses, which are concerned about retaliation.

The President's budget also provides a \$1 million increase in funding for the Bureau of Industry and Security. This requested funding would add 19 new special agents within the BIS's export enforcement offices across the United States. BIS, despite its current size of only about 120 special agents, punches far above its weight in the defense of our country.

In March, we announced a combined civil and criminal fine of \$1.9 billion against ZTE, a large Chinese telecommunications company, for illegally shipping sensitive equipment to Iran and North Korea. BIS took the lead in cracking this case open. So I am confident that these 19 additional agents and the bandwidth they represent will have real impact.

The President's fiscal year 2018 budget also requests \$1.5 billion for the U.S. Census Bureau, a 2 percent increase from the 2017 omnibus funding level. This is a recognition of the important work that the Department of Commerce does in fulfilling the constitutional responsibilities of the executive branch. The President's budget funds key activities that prepare for the 2020 decennial census and in support of the bureau's other data collection functions.

As you are well aware, the Census director has reported a large cost overrun in one area of the operation. The Commerce Secretary and Office of Management and Budget are jointly crosschecking and re-examining these numbers. In addition, we are retaining outside consultants to conduct a third-party review. We hope to have more clarity on this issue soon.

The fiscal year 2018 budget also proposes \$4.8 billion for the National Oceanic and Atmospheric Administration. NOAA's budget is tailored to fund its core missions of data collection and environmental stewardship. Within NOAA's topline, \$1 billion is recommended for the National Weather Service. Funding is included for the Advanced Weather Interactive Processing System cyclical refreshment. This reduces the risk of system downtime that can impede critical weather forecasts and warnings.

With its \$1.8 billion request for the National Environmental Satellite and Data Information Service, NESDIS, NOAA will continue its work to deploy the next generation of weather satellites.

These items are just a small cross-section of our department's overall budget. I hope they have given you a glimpse into the priorities set by President Trump and the administration.

I am glad for this opportunity to get into more detail with you and to get you answers to any specific questions you may have. Thank you.

[The statement follows:]

PREPARED STATEMENT OF HON. WILBUR ROSS

Chairman Shelby, Ranking Member Shaheen, and Members of the Senate Appropriations Subcommittee, thank you for this opportunity to discuss President Trump's fiscal year 2018 budget request for the U.S. Department of Commerce.

When I was confirmed as the Secretary of the Commerce on February 27, 2017, I took on a great responsibility of ensuring that our Nation's taxpayer dollars are targeted to those programs and projects that will grow our economy and create a pro-growth environment. The Department of Commerce's fiscal year 2018 budget request of \$7.8 billion in discretionary funding is a good first step toward accomplishing those aims. The fiscal year 2018 request is a 16 percent decrease (-\$1.4 billion) from the fiscal year 2017 Omnibus enacted level (\$9.2 billion).

President Trump has previously laid out a budget framework that places an increased emphasis on defense, national security, immigration enforcement, and reducing violent crime and drug epidemics. In addition, the President also has provided a roadmap for placing our Nation on a responsible fiscal path and not increasing the debt.

Our fiscal year 2018 budget request aligns with President Trump's foundational underpinnings by zeroing in on our key mission areas and core competencies. In support of the President's goals, we had to make very difficult choices, including proposing to eliminate some of our bureaus as well as making sizable reductions in other programs and activities.

Specifically, the fiscal year 2018 budget proposes to eliminate the Minority Business Development Agency (MBDA) and the Economic Development Administration (EDA). Furthermore, we are proposing to consolidate the Economics and Statistics Administration (ESA) into other Commerce bureaus.

Another proposed elimination is the discontinuation of Federal funding for the Manufacturing Extension Partnership (MEP) program. This would result in a savings of \$124 million.

These eliminations and reductions are consistent with the approach throughout the fiscal year 2018 budget to focus on core Federal missions and reduce funding, such as grants, for programs supporting other levels of government.

Please note that, while we greatly appreciate the support Congress provided the Department in the recently enacted fiscal year 2017 Omnibus appropriations bill, a full-year 2017 appropriation was not enacted at the time the Department's fiscal year 2018 budget was being prepared. As a result, our fiscal year 2018 budget request and the funding levels, policy guidance and decisions contained within are based off the annualized funding level provided by the 2017 Continuing Resolution (CR). However, for the purposes of this hearing, I have updated my budget references to reflect the more recent fiscal year 2017 Omnibus levels.

Our fiscal year 2018 budget is a starting point for a larger dialogue that I look forward to having with you about where best to allocate resources to enable the Department to carry out its major missions to the best of its abilities. Despite some of the proposed reductions and eliminations, our budget recommendations uphold the proud tradition of this agency's legacy of investing in our greatest resource: The American people.

Enumerated below in greater detail are specific investments that we have prioritized in the fiscal year 2018 Department of Commerce budget:

STRENGTHENING TRADE ENFORCEMENT AND COMPLIANCE:

The United States currently has a \$700 billion trade deficit (in goods) and is the top importer in the world. In addition, we are one of the least protectionist countries in the world. The fiscal year 2018 budget begins to create a more level playing field for Americans by reshaping the International Trade Administration (ITA).

The fiscal year 2018 President's budget requests \$443 million for ITA, which is \$41 million or 8 percent below the fiscal year 2017 Omnibus enacted amount. Within that topline, increased funding (+\$3 million) is allocated for strengthening ITA's trade enforcement and compliance by adding 29 positions.

These requested funds will help ITA fulfill President Trump's directives to review trade agreements, increase enforcement of our Nation's trade laws, and support "Buy American, Hire American" policies.

Furthermore, the budget enables ITA to add capacity to address the growing number of antidumping and countervailing duty investigations. In a five-year period from fiscal year 2011 to fiscal year 2015, the number of new investigations initiated each year increased. In fiscal year 2016, 56 new investigations were initiated, which was an all-time high by historical standards. In addition, the requested funds will enable the Department to self initiate trade cases to further level the playing field for domestic manufacturers.

Conversely, the fiscal year 2018 budget eliminates a number of ITA trade and promotion-related offices and functions, resulting in a reduction of 159 positions.

Although the trade and promotion offices are downsizing, ITA will continue to implement measures to strengthen the effectiveness and efficiency of these activities to minimize the impact on U.S. business, with a specific focus on small and medium-sized enterprises (SMEs).

To bolster ITA's enforcement and compliance actions, the President's budget requests \$114 million for the Bureau of Industry and Security (BIS), a \$1 million increase over the fiscal year 2017 Omnibus level (+1 percent). The requested funding will add 19 new special agents within BIS' export enforcement offices across the United States, including New York, Dallas, Chicago, Los Angeles, Washington State, San Jose, and Washington, DC. Resources also will be dedicated to BIS' ongoing domestic and international efforts to curtail illegal exports while facilitating secure trade with U.S. allies and close partners.

I'm especially pleased that BIS' export enforcement office is already taking a proactive approach and demonstrating results. In March, I announced a combined civil and criminal fine of over \$1 billion on ZTE, a Chinese telecommunications company, for illegally shipping telecommunications equipment to Iran and North Korea.

As part of the settlement, ZTE has agreed to pay a \$661 million penalty to BIS, with \$300 million suspended during a 7-year probationary period to deter future violations. Based on a court-approved settlement, ZTE's \$1.19 billion fine would be the largest civil penalty ever levied by BIS and the largest criminal penalty ever levied by the U.S. Government in an export control case. Over the last 7 years, BIS' enforcement offices have collected an average of \$74 million in fines, \$26 million in administrative fines, and approximately \$46 million in forfeitures (on an annual basis).

SUPPORTING RESEARCH AND DEVELOPMENT TO BETTER SERVE OUR CUSTOMERS

The fiscal year 2018 budget strengthens our core research and development programs while meeting the diverse needs of our customers. The proposed request of \$725 million for the National Institutes of Standards and Technology (NIST) represents a \$227 million decrease (-24 percent) from the fiscal year 2017 Omnibus enacted level. These proposed reductions will occur in areas that have been determined to be lower priorities based on their technological readiness, level of effort required, or where NIST's expertise is no longer required.

Funding in fiscal year 2018 will enable NIST to provide the measurements and standards necessary to facilitate innovation in mission-critical areas, such as advanced manufacturing, communications, quantum science and cybersecurity. In addition, NIST will address high priority repairs and upgrade its facilities. Some of these planned efforts include removing asbestos from NIST's Building 1 facility in Boulder, Colorado, and renovating and modernizing the Radiation Physics Building in Gaithersburg, Maryland.

Equally important is that the budget allows NIST to continue its outreach and engagement with the public to improve the Nation's cybersecurity posture. For example, NIST recently sponsored the Global City Teams Challenge that brought together universities, companies, and other interested participants to develop solutions for implementing advanced cyber-physical systems concepts to make our communities more livable, workable, safer, and sustainable. Fiscal year 2018 funding will help NIST enhance the Framework for Improving Critical Infrastructure Cybersecurity.

I do want to mention a few of the proposed reductions in NIST's budget. Among the significant proposed decreases is a \$69 million reduction to the National Laboratories, which includes a reduction of 285 positions. Additionally, the fiscal year 2018

budget proposes to cut \$25 million and 46 positions from the Standards Coordination and Special Programs Office that primarily focuses on research and development activities.

Also, as previously mentioned, the fiscal year 2018 budget proposes to end Federal funding for the Manufacturing Extension Partnership (MEP) program. The proposed reduction of \$124 million will eliminate \$110 million in funding to the MEP centers, \$4.8 million in contract support for the MEP system, and \$9.3 million and a 100 percent reduction of NIST MEP Federal employees who support and administer the MEP program. The \$6.0 million in the fiscal year 2018 budget will be used for an orderly shutdown of the program.

Helping to establish policy and standards that govern the Internet, broadband and the digital economy, \$36 million is proposed for the National Telecommunications and Information Administration's (NTIA) fiscal year 2018 budget. This proposed funding level will assist NTIA with its development and implementation of policies to meet challenges related to Internet openness, privacy, security, and the digital economy.

Within its topline, NTIA will strengthen its multi-stakeholder approach to address Internet policymaking, standards development, and related governance issues. These efforts include developing and presenting U.S. Government policy positions at interagency, bilateral, multilateral and international organizational meetings and stakeholder forums.

Moreover, NTIA will assist the Department of Commerce, United States Trade Representative (USTR) and other Federal agencies to help ensure that U.S. free trade agreements preserve and create jobs for Americans while facilitating economic growth. NTIA will provide issue expertise and policy support, particularly on issues involving e-commerce services and the free flow of information across borders.

Augmenting its existing efforts, the fiscal year 2018 budget also will enable NTIA to increase its participation in Department of Commerce-led bilateral commercial dialogues to improve understanding with counterpart trade and economic ministries. NTIA will continue to provide technological and policy advice as part of the established trade dispute resolution processes.

STREAMLINING GOVERNMENT OPERATIONS AND IMPROVING EFFICIENCY

The administration's fiscal year 2018 budget proposes transferring approximately \$54 billion in discretionary spending previously allocated for civilian agencies to support defense and national security initiatives. To comport with the administration's larger policies, the Department proposes to eliminate the Minority Business Development Agency (MBDA) and the Economic Development Administration (EDA).

The fiscal year 2018 budget request for MBDA of \$6 million is a \$28 million decrease from the fiscal year 2017 Omnibus (-82 percent). This reduction would result in the loss of 55 positions. The \$6 million request will cover anticipated costs associated with winding down MBDA. These costs include personnel costs and miscellaneous costs (such as records and archives management and the responsible disposal of IT equipment).

The budget assumes that the orderly wind down of MBDA functions would begin on October 1, 2017 and be completed by February 3, 2018.

Similarly, the fiscal year 2018 budget requests \$30 million for EDA for costs associated with closing the agency. This would result in the loss of 98 positions in 2018. These eliminations are part of a broader effort to eliminate duplicative and unauthorized economic development programs across the Federal Government.

Another area the fiscal year 2018 budget proposes to eliminate is the Economics and Statistics Administration's (ESA) policy support activities. ESA's remaining functions will be consolidated into other parts of Commerce, including the Office of the Secretary, Bureau of Economic Analysis (BEA), and the U.S. Census Bureau.

The consolidation of ESA would provide nearly \$4 million in budget savings and would consolidate 15 positions into other parts of Commerce. For example, ESA's Under Secretary for Economic Affairs will better serve the Secretary and Department from the Office of the Secretary and will continue to provide analysis and guidance on matters related to economic policy.

The fiscal year 2018 budget recommends \$97 million for BEA, a \$10 million decrease from the fiscal year 2017 Omnibus (-10 percent). The fiscal year 2018 budget enables BEA to provide timely and accurate economic data and produce key statistical measures, such as gross domestic product (GDP) and personal income statistical indicators. Careful thought was given to which initiatives could be reduced with minimal impact on BEA's core programs. Some of BEA's proposed reductions include discontinuing efforts to separately measure the impact of small businesses

on the U.S. economy and ceasing work to provide more frequent and detailed trade-in-services data for some of the most dynamic industries of the U.S. economy.

EMPOWERING THE DATA ECONOMY

The fiscal year 2018 budget request of \$1.5 billion for the U.S. Census Bureau (+\$27 million or +2 percent over the fiscal year 2017 Omnibus level) is a recognition of the important work that the agency is undertaking to reach a number of its critical milestones.

Of the \$1.5 billion total, a \$46 million increase is requested for activities related to the ramp up associated with the 2020 Decennial Census. The budget provides funding for the final year of a 4-year plan focused on operational, design, development and systems testing in preparation for the 2020 Census.

In addition, the budget supports an End-to-End Census Test in 2018, which will allow for a complete test of the major field operations and IT systems planned for the 2020 Census, beginning with the development of the address list and ending with the release of a set of prototype geographic and data products. This test will give the Census Bureau an opportunity to reaffirm that the reengineered 2020 Census will function according to the specified design.

The American Community Survey (ACS) serves as a testbed for the 2020 Census. The fiscal year 2018 budget proposes a reduction to the telephone non-response follow up operations in order to promote data-driven decisions within this program and increase efficiency.

Requested funding levels in the fiscal year 2018 budget will help the Census Bureau fulfill a requirement in the United States Code to submit the Census 2020 and ACS questions and some topics to Congress by the statutory deadline (April 1, 2018).

The fiscal year 2018 budget also supports data collection and processing operations for the 2017 Economic Census and Census of Governments, which provide the foundation for economic data that drive investment and job creation.

Another notable increase within Census is an additional \$13 million for its enterprise data collection and dissemination systems. This increase would consolidate funding for enterprise data dissemination and includes support for the Administrative Records Clearinghouse, which enables the strategic reuse of administrative data collected by government programs.

A \$24 million reduction from the 2017 Omnibus for Census' Current Economic Statistics Program is proposed in the fiscal year 2018 budget. This program provides the public and private sectors with national statistical profiles the U.S. economy and its industries. While the reductions will scale back planned research and make operational and methodological changes to surveys, the data and information that businesses use to make investment decisions that drive economic growth will be preserved.

The \$3.5 billion request in fiscal year 2018 for the U.S. Patent and Trade Office (PTO) will help American entrepreneurs and businesses bring their innovations to the marketplace. Funded entirely by fees from their users, PTO's focus in fiscal year 2018 will be on accomplishing the pillars of its 2014–2018 Strategic Plan. These goals include reducing patent backlogs, maintaining trademark quality, providing domestic and global leadership in intellectual property, and educating small businesses on obtaining and protecting intellectual property.

In fiscal year 2018, PTO also plans to optimize its workforce with planned examiner staffing reductions through attrition in its patent examiners while also increasing investments in its IT portfolio, and replacing employee laptops and network equipment at the end of their useful life.

Other planned enhancements will be to upgrade PTO IT systems. For example, PTO is implementing a fee processing next generation system that assists in the implementation of fee collection process recommendations. Some of the new features that are planned to be added in fiscal year 2018 include additional capability to request and track refunds as well as reconciling international payments to international applications.

SUSTAINING OUR NATURAL RESOURCES WHILE FOSTERING ECONOMIC OPPORTUNITIES

The fiscal year 2018 budget proposes \$4.8 billion for the National Oceanic and Atmospheric Administration (NOAA), a decrease of \$905 million or 16 percent below the fiscal year 2017 Omnibus. The budget is tailored to fund NOAA's core missions of environmental and public stewardship while increasing economic opportunities.

Within NOAA's topline, \$1.0 billion is recommended for the National Weather Service (NWS). Funding is included for the Advanced Weather Interactive Proc-

essing System Cyclical Refreshment, reducing the risk of system downtime that can impede critical weather forecasts and warnings.

The budget also supports the Service Life Extension Program on the aging Automated Surface Observing System, which increases accuracy and timeliness of NWS forecasts and warnings, particularly near airports, enhancing aviation safety and efficiency. However, funding for these and other NWS activities required difficult tradeoffs, such as reducing or eliminating components of NOAA's Tsunami Research and Operational Warning program as well as terminating investment in Mid-Range Weather Outlooks.

With its \$1.8 billion request for the National Environmental Satellite and Data Information Service (NESDIS), NOAA will continue its work to deploy the next generation of weather satellites and observational infrastructure. The fiscal year 2018 budget fully funds the Geostationary Systems –R (GOES–R) and Joint Polar Satellite System programs, including a \$317 million planned programmatic decrease related to the GOES–16 (formerly GOES–R satellite), which successfully launched on November 19, 2016. Another proposed decrease within the budget is a \$189 million reduction for the continued development of the Polar Follow On (PFO) satellites. The PFO satellites will provide continuity of polar observations beyond the Joint Polar Satellite System program.

The budget recommends \$845 million for NOAA's National Marine Fisheries Service (NMFS) to conduct sound science and an ecosystem-based approach to management to provide productive and sustainable fisheries; safe sources of seafood; the recovery and conservation of protected resources; and healthy ecosystems.

NOAA's fiscal year 2018 Office of Marine and Aviation Operations' (OMAO) request of \$332 million includes \$75 million to begin the construction of a second Auxiliary General Oceanographic Research (AGOR II) vessel as part of NOAA's multi-year fleet recapitalization initiative. In addition, the budget includes a \$2 million increase (for a total of \$34 million) to fund increased lease and fuel costs at a new Aircraft Operations Center (AOC) in Lakeland, Florida. NOAA is in the process of relocating from the MacDill Air Force Base in Tampa and expects to be moved into its new location by June 1, 2017. The fiscal year 2018 budget fully funds all of the AOC's fiscal year 2018 new leasing requirements and related costs.

To comply with the administration's overarching policy priorities, NOAA is proposing to eliminate a number of its external grant programs, which approximately total \$350 million. This includes \$72 million for NOAA's National Sea Grant College and Marine Aquaculture grant programs; a \$75 million reduction to the National Ocean Service's Coastal Zone Management and the Regional Coastal Resilience grant programs; and \$65 million for the Pacific Coastal Salmon Recovery Fund (PCSRF), which provide resources to restore and conserve Pacific salmon and steelhead.

NOAA also proposes to terminate its Office of Education. This includes terminating the Competitive Education Grants and Educational Partnership Program with Minority Serving Institutions (EPP/MSI) grants. It also includes the termination of Bay-Watershed Educational and Training (B-Wet) Regional Programs where NOAA will continue to provide watershed educational experiences for students through other programs, including National Marine Sanctuaries.

EVOLVING THE DEPARTMENT OF COMMERCE FOR THE 21ST CENTURY

We are continually exploring ways to do things better and adopt best practices, both from the government and from the private sector. The \$64 million included in the fiscal year 2018 budget request for the Departmental Management (DM) account is \$2 million above the fiscal year 2017 Omnibus enacted level or an increase of 3 percent. Highlights of this request include a \$5 million program increase for the Investigations and Threat Management Division, which crosscuts all Commerce operating units in an effort to detect critical threats to the Department's U.S. economic advancement mission. The requested increase also devotes resources for mandated requirements such as, Insider Threat, Transnational Organized Crime, and national strategies for counterintelligence.

In fiscal year 2018, the Department will continue to focus on Enterprise Services to achieve cost savings while improving customer service. The Department is embarking upon updating its IT infrastructure and initiating an IT Shared Services Initiative aimed at consolidating commodity services across bureaus to gain economies of scale, improve service delivery, and improve customer satisfaction. As part of this effort, six IT shared services were identified and prioritized for deployment in the fiscal year 2016–fiscal year 2017 timeframe. As these IT shared services are deployed, Commerce's Office of Chief Information Officer will focus on the delivery

and measurement of achieved functionality and improvements in customer satisfaction and value delivered to our various customers and stakeholders.

Our budget request also provides \$1 million for ongoing renovation and modernization of the Herbert C. Hoover Building (HCHB). Commerce is in the process of modernizing its infrastructure to protect the safety of employees and provide quality service to citizens. This renovation provides the solutions to replace major building systems (mechanical, electrical, plumbing, heating, ventilation, air conditioning, and life safety systems) that are beyond their useful life and deteriorating. Funding in the fiscal year 2018 budget will support five positions. The renovation project is anticipated to continue through unobligated balances. There are no programmatic increases for further renovation as the Department plans to pause before undertaking the next phase (Phase 5) of the HCHB building renovation.

Finally, in fiscal year 2018, the request for the Department of Commerce's Office of Inspector General is \$38 million, including \$32 million in direct appropriations, a \$2 million USPTO transfer, a \$1.3 million transfer from NOAA, and a transfer in total of \$2.6 million from Census. The fiscal year 2018 request includes a \$1.0 million increase from the Census Bureau to provide oversight and to monitor vital 2020 Decennial activities, which includes the final major test of a new IT system, new strategies to contact households, and improved field operations.

CONCLUSION

Although my tenure at Commerce has been short, we have hit the ground running and already are creating additional business opportunities by working with a broad coalition of stakeholders to remove unnecessary regulations and increasing consumer confidence. By prioritizing our industries, trade and economic advantages, and our workforce, we will continue to be an economic engine, both in the United States and around the world.

I look forward to working with this Committee and the rest of the Congress to achieve our shared goals on behalf of the Nation's taxpayers.

For additional information about the Department's fiscal year 2018 budget, please visit the Department's website at: <http://www.osec.doc.gov/bmi/budget/>.

Senator SHELBY. Thank you, Mr. Secretary. I will start the questioning.

RED SNAPPER

For the past several years, this subcommittee has provided what we believe is clear direction for the department and NOAA to improve its management of reef fish in the Gulf of Mexico by counting fish in areas where fish live, such as around artificial reefs, which the gulf is full of.

The fiscal year 2017 omnibus continued unprecedented funding levels for an independent stock assessment to better understand the abundance of red snapper, for example, in the gulf. Additionally, the omnibus permanently extended State fishery boundaries in the gulf to provide more days on the water for recreational anglers.

Despite these efforts, the department has continued to decrease fishing days for recreational fishermen. What was once a 46-day season back in 2012 has dwindled to merely 3 days in 2017—3 days.

My questions are these: How does the department's 2018-budget request align with the subcommittee's past direction and continued goal to provide more days on the water for recreational anglers? Secondly, how will the department's new leadership team, which you head as Secretary of Commerce, ensure that NOAA looks for ways to help recreational fishermen gain greater access to the abundant red snapper fisheries instead of finding ways to restrict them?

We have a problem there, Mr. Secretary. Go ahead.

Secretary ROSS. First of all, thank you for your leadership on this issue, Chairman Shelby.

NOAA continues to execute the funding provided last year to conduct an agency independent abundance estimate for the Gulf of Mexico and red snapper. This work is on track to be completed in fiscal year 2019.

The NMFS will use new information gathered from this independent estimate to improve its stock assessment as appropriate. While the work on the independent estimate is ongoing, the 2018 budget allows NOAA to continue to produce stock assessment for red snapper as part of its national stock assessment program.

There have been many management challenges over the years, and I assure you the management of this fishery is a high priority for the department. I share the President's commitment to cutting unnecessary red tape and eliminating failed regulations. I understand how Congress and fishermen, particularly private anglers, are frustrated that the Federal fishing season continues to shorten even as the total quota increases.

What we have been doing is meeting with congressional staff quite repeatedly, and then with State fishing authorities. We believe we are very close to a compromise where they will yield some of the days allocated to their parties to the recreational fishing.

So I have fairly good confidence that we will end up with far more than the 3-day season that had originally been laid out in the allocation of catch.

Senator SHELBY. Mr. Secretary, anecdotally, I will tell you I have never seen fish so large, red snapper, and so abundant in the gulf. Nobody wants to overfish anything. We should not do that. But underfishing is a dangerous thing, too, and it affects the whole Gulf of Mexico.

NATIONAL WATER CENTER

Mr. Secretary, getting into another area, with regards to the weather operations and research conducted at the department, one area I feel is very important is advancing our Nation's capabilities in forecasting water-related natural disasters such as floods, droughts, and high-impact storm surges.

We have on this subcommittee for years supported the National Weather Service's efforts to consolidate and to create a streamlined, integrated water prediction program into the National Water Center, which we will all benefit from, the goal of which is to provide our communities with better tools to predict severe weather and to manage our water resources.

Yet the budget that the President's request proposes curtails recent advances in weather prediction and cuts weather research. It seems like a contradiction.

Question to you, Mr. Secretary. What was the administration's rationale, if any, for cutting funding for weather operations and research for water-related hazards? In particular, how does a cut to the newly created National Water Model, which vastly improves flood forecasting, consistent with the administration's prioritization of public safety?

I think we have some work to do here. Go ahead.

Secretary ROSS. I thank you for the subcommittee's support for the National Water Model in the 2017 fiscal year omnibus. Using those funds, NOAA has made great progress with the National Water Model, and those efforts are sustained in the fiscal year 2018 budget.

I will give you a little bit of background. The fiscal year 2018 budget cuts investment from the National Water Model by \$3.1 million from the fiscal year 2017 annualized continuing resolution. This will slow upgrades to the National Water Model and will delay development of centralized weather prediction products and services at the National Water Center.

In fiscal year 2016, NOAA launched the first centralized operational National Water Model. We believe that it has adequate funding to continue at a reasonable level those developments.

We certainly appreciate the urgency and the importance of continuing good, accurate, timely weather forecasting.

Senator SHELBY. Thank you.

2020 CENSUS COSTS

My last question has to do with the 2020 census cost, which is very important to this subcommittee, because it is a very expensive item.

This subcommittee has been consistently concerned with the ballooning cost of the decennial census, and it has directed the Census Bureau before to prioritize its spending toward activities that have the greatest potential to reduce overall costs. The subcommittee's goal for the past several years has been to obtain an overall cost for conducting the 2020 census at or below the cost to the 2010 census.

GAO recently added the 2020 census to its list of high-risk programs, Mr. Secretary, and is clearly skeptical of the 2020 census cost estimates and the number of mostly untested approaches, which we have talked about, for carrying out the census.

A couple questions here. How does the 2018 budget request keep the department on track to ensure that the total cost of the 2020 census is at or below the cost of the 2010 census? Secondly, are there changes planned for the upcoming year that will affect current cost projections?

Secretary ROSS. Mr. Chairman, as you know, John Thompson has submitted his resignation as the director of the Census. We have appointed a temporary replacement for him, and we are actively seeking a new permanent director of the Census. So we intend to have that completed as soon as we possibly can.

From the very first day that I joined the department, the Census Bureau has been of great concern to me from both points of view. The first point of view is making sure that we do accurately count every person where that person normally lives. That is first and foremost in my mind. The second objective is to do that as economically as we possibly can.

The census, as you know, undertook a very large technological change in the way the census is taken. Their hope is to preserve the accuracy and yet to reduce the budgetary costs.

My concerns about it have been the complexity of what they are trying to do and the number of moving parts that have to be

brought together at the right time under the right costs. I have particular concerns that many of the key contracts are on a time and material basis, and that is a very dangerous way to do contracting, in that it has an implied incentive for the contracting partner to perhaps use more time than one might if it were on a fixed-cost basis.

So what we have done is we have put together a team from the parent Commerce Department finance staff plus the OMB staff to do a crash review of what has been going on, why there was suddenly this 47 percent surprise overrun, what are the implications for the relationships between the Census department and these contractors going forward, and what may be the maximum possible cost that we could encounter should we continue with the full technological effort that they had underway or should there be some modification.

It will probably take us another 30 days or 45 days, or something of that general magnitude, in order to come back with very good answers. So at the moment, unfortunately, I do not feel that I have a high degree of confidence in the budget that Mr. Thompson had indicated. But I promise you that, when we come back, it will be a number I can stand behind.

Senator SHELBY. Thank you.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

FISHING REGULATIONS

I would like to return to the question of fishing. We have a different challenge in New Hampshire and the Northeast than they do on the Gulf Coast. We have only 18 miles of coastline in New Hampshire, but it is very important to our economy. We have a fishing industry that goes back to the 1600s when people first landed on our shores.

Unfortunately, our commercial fishing industry, because of NOAA regulations, has seen their allowable fishing quota cut by 95 percent. I am going to repeat that, because I think it is important—95 percent since 2012 because of the Federal regulations restricting their catch.

As a result, the number of groundfish vessels in New Hampshire has declined by two-thirds over the same time period, so that now we have just 21 boats left. While that may not seem like anything that we should worry about for some people looking at the big picture, those boats and the industry are very important to our sea-coast economy because they support restaurants and locally caught seafood that are important to the tourism industry.

One of the things that is further exacerbating the challenge that our fishing boats are facing right now is that the National Marine Fisheries Service is enforcing a new and an unaffordable fee on fishermen to pay for the cost of Federal observers.

Now, this is something that has been raised before with the fisheries service and with NOAA, but I am hoping that you will give me your commitment today to take a look at this issue and see if there is some relief we can provide to the fishing boats in New Hampshire and other places in the Northeast where they are really being hit by these costs.

Secretary ROSS. I understand that many New England fishermen are facing intense financial pressure due to reduced catch limits.

My objective is to get to the maximum sustainable catch in each of the various regions of the country. A number of the regions have raised a similar issue to what you mentioned, raising the question, has NOAA gone a little bit too far in its judgment as to just exactly what is needed?

I am also troubled by the fact that the United States, despite our huge coastlines and our huge rivers and lakes inland, we run, believe it or not, a trade deficit in fish products that is over \$10 billion a year. I find it unimaginable that this is an appropriate situation for us.

So while we can no longer continue to fully cover industry's costs for the at-sea monitoring program, NOAA Fisheries will continue to reimburse groundfish vessels for a portion of their at-sea monitoring costs in fishing year 2017, albeit it will be at a rate lower than the 85 percent reimbursement that was made previously.

The total reimbursement rate is still being determined and will depend on a variety of factors, including fishing activity and the funds remaining in the grant to the Atlantic States Marine Fisheries Commission. We expect to finalize those calculations and make the announcement in the very near future.

In the Greater Atlantic Region, NOAA Fisheries is collaborating with multiple industry and governmental organization partners to test the use of video camera systems in place of human at-sea monitors in the groundfish fishery. However, challenges remain, including having the ability to distinguish between similar species.

In addition, perspectives on electronic monitoring, the so-called EM, such as on privacy and cost, vary from coast to coast and sometimes even within a single fishery. The regional fishery management council process allows us to get these sometimes conflicting perspectives out into the open and addressed, and we continue to work through that process to explore electronic monitoring.

Senator SHAHEEN. I appreciate that, and I hope that you will continue to work with the fishing industries in the Northeast as we address this, because this is the last straw that could really break the fishing industry in New Hampshire.

Mr. Chairman, I know my time is up. Can I ask one more question?

Senator SHELBY. Go ahead. Proceed.

INTERNATIONAL TOURISM

Senator SHAHEEN. Secretary Ross, you mentioned the concern that you have about our export deficit. One of the proposals in the budget that really puzzled me was the proposal to eliminate Brand USA, which is the public-private partnership that promotes tourism internationally.

I was surprised because it seems to me that tourism is one way to reduce the trade deficit, and the U.S. was one of the last, I think the last, Western countries in the world who actually put an advertising campaign in place through Brand USA that does not use taxpayer dollars, but rather asks foreign travelers to pay fees when they are traveling to the United States.

Now one of the things that I have learned as Governor is that international travelers spend more money when they get to the U.S. and they stay here longer. In New Hampshire, we see a \$9 return on investment for every \$1 that State and local governments put into promoting tourism, and the return on investment is even higher at a national level.

I am really puzzled by the decision to eliminate a program that has been working. Brand USA brought in over \$4 billion in 2016. It added revenue and currently supports 60,000 American jobs without spending a dime in taxpayer dollars.

So I wonder if you can share with us the thinking of the department in eliminating a program that is working so well without using taxpayer dollars.

Secretary ROSS. Well, we certainly are in support of the tourism industry. In fact, I just spoke at the big annual conference of the tourist groups a few days ago, which had a huge attendance at that session, and a very receptive audience.

I think the tourism industry has a number of challenges to face. One is the increased security that has, unfortunately, become very necessary at the airports because of the whole terrorist situation and the absolute importance of passenger safety.

The second challenge, of course, is that the U.S. dollar has been very strong relative to most of the currencies of the other countries from which people come to the United States.

So one suggestion that I had for the tourist industry, which they actually seemed to appreciate, was the idea of perhaps including in their promotion destinations that are not the big box-office cities that are the most expensive, but also including some of the smaller but still fascinating and very attractive locales that are underserved in terms of how many foreign visitors come.

So we have been continuing to try to work very actively with the tourism industry, because we recognize not only does it bring a lot of dollars in from regular tourists but also people come here for educational purposes. They come here for medical purposes. They come for a variety of reasons, not least of which is the potential that, as they become a little more familiar with the United States, they may very well consider investing here, putting a business here, doing other things that promote activity.

But the reality is we have had to make some very hard choices in a period of budget stringency. And this program was deemed to be one of those that, at least for the time being, we could live without.

Also, we are not reducing our overall effort. It is just this particular program is not going to be included in the budget.

Senator SHAHEEN. Well, Mr. Secretary, I think you just made a very good argument for why the international marketing that is done through Brand USA is a program we should continue.

Thank you, Mr. Chairman.

Senator SHELBY. The Senator from West Virginia.

Senator CAPITO. Thank you, Mr. Chairman. I thank the ranking member. And, Mr. Secretary, thank you for being here today.

ECONOMIC DEVELOPMENT

As you may recall, when we first met in my office and then in the Commerce Committee when you came before the Commerce Committee in your confirmation hearing, I did ask and we spent some time talking about the EDA. And I was greatly encouraged by your comments then that the EDA could “be a valuable source of seed money for projects,” understanding this is seed money and that, due to budgetary constraints, that would be the most that they could do.

Well, this budget further constrains the EDA. You mentioned it briefly in your opening statement. It zeros out the funding. I think you mentioned that it is duplicative, or it is not serving its intended purpose.

I would say, and I think I emphasized this in my statements to you, in our State of West Virginia, we are just now getting EDA to really seed some very good projects, expanded broadband, which you and I have talked about, and other very valuable economic decisions, I think, in a State that has had a major downturn over the last 8 years.

And we have also been using the EDA funds to help us transition, which because of our downturn from the last administration, we have to do, and we are doing it.

So I guess my question is, number one, I am going to register a complaint on that, and I think there will be no surprise there. But why do you feel that these functions are provided elsewhere or are duplicative? And where else are those needs being met?

Secretary ROSS. Thank you for that question, Senator Capito.

I am proud of the investments that the EDA has made in the last 52 years in economically distressed regions, and I am proud of the outcomes of those investments, which spurred local innovation and entrepreneurship, and saved jobs and leveraged private investments.

But the administration’s 2018 budget prioritizes rebuilding the military and making critical investments in the Nation’s security. It also identifies the savings and efficiencies needed to keep the country on a responsible fiscal path. The administration has made the necessary tradeoffs and choices, as painful as many of them, including this one, have been. And this means changing the role and size of the Federal Government and prioritizing those programs that provide a good return for the taxpayer, as well as those that serve the most critical functions while also consolidating or eliminating duplicative, ineffective, or less critical programs.

Many difficult decisions were necessary to reach the funding level provided in this budget, and unfortunately, the elimination of EDA is one of them.

Since 2011, the Government Accountability Office has been issuing annual reports entitled “Opportunities to Reduce Fragmentation, Overlap, and Duplication, and Achieve Other Financial Benefits.” The economic development programs were among the first areas that the GAO identified as an area with duplication.

You may be amazed to hear that there are 80 economic development programs at four agencies—Commerce, HUD, SBA, and the U.S. Department of Agriculture. Even as recently as 2016, while

these GAO reports identified that the agencies were making good progress in better coordination of the activities of the programs, the fact remains that there are multiple economic development programs throughout the Federal Government. And in a time of tough budget choices, it is incumbent on us to identify such opportunities to reduce duplication.

The budget does include \$30 million to cover the costs associated with closing down the EDA in fiscal year 2018. There will be additional costs in out-years for the EDA or any successor agency. So this budget assumes that the orderly closure of agency functions will begin in fiscal year 2018.

Senator CAPITO. Well, thanks for the lengthy explanation. And I could quibble with certain parts of it, which I will not take my time to do, although I will say that I was just in a hearing yesterday with Secretary Carson at HUD. The administration has zeroed out the CDBG funds, another source of local economic development funds that are used to leverage not just private investment but State and local resources to get these water projects over the way, to get the broadband expansion.

So I know this subcommittee will be taking another look at this and at EDA in particular.

I have another question about NOAA, but I will just submit that to you maybe in writing, and maybe you could make a response to me in that way.

Thank you so much.

Secretary ROSS. Thank you, Senator Capito.

Senator SHELBY. Senator Coons.

Senator COONS. Thank you, Mr. Chairman, Ranking Member Shaheen.

Thank you, Secretary Ross.

MANUFACTURING EXTENSION PARTNERSHIP

When we first sat down and met in my office in March, we discussed a number of issues that come under your purview now: the importance of a strong patent system in protecting our intellectual property; continuing to grow our exports, particularly poultry and exports to Africa; and especially the importance of manufacturing.

As you may recall, I spent 8 years in the private sector in a manufacturing company, and in my now 7 years in the Senate, I visited dozens and dozens of small and medium manufacturers, mostly in my State, and have been impressed with one of the Federal Government's most effective programs.

So you can imagine both my surprise and disappointment when I saw that the Commerce Department's budget completely eliminated funding for the Manufacturing Extension Partnership program and significantly cut funding for NIST's Manufacturing USA program.

I was, frankly, also surprised by the degree to which the entire budget cuts nondefense R&D. As a person who trained as a chemist and who has seen in the private sector the value of investing in research and development, the roughly \$14 billion cut overall, about 20 percent, to nondefense R&D strikes me as something that will really weigh on our competitiveness long-term.

Let me turn to the MEP. In your opening statement, you suggested that your budget proposal eliminates duplicative and redundant grant programs. I take that as having been a reference to the EDA and MEP, and that you focus on programs with a good return for the taxpayer, and that advance the department's core mission.

Given that the President ran on a platform of strengthening American manufacturing, something I embrace and would enjoy working with you more closely on, help me understand your argument that the Manufacturing Extension Partnership, a relatively small but very effective program with a demonstrated 9-to-1 leverage, in terms of the economic impact for every Federal dollar, is duplicative, or that somehow nonfederal sources will make up for the loss in Federal funding if it were completely eliminated.

Secretary ROSS. Thank you for that question, Senator Coons.

As you know, I spent most of my adult life in manufacturing, so I am certainly not an anti-manufacturing person.

Senator COONS. I understand.

Secretary ROSS. But this budget is about priorities. The President has made the safety of our people his budget's number one priority, and, as such, he prioritized increased funding for defense and public safety-related activities.

Manufacturing is naturally critical to our economic and national security, but investing in programs that duplicate capabilities already offered by the private sector is not the best use of Federal resources.

Senator COONS. I will interrupt you there, if I might, Mr. Secretary. I am simply asserting that, as someone who worked in the private sector, like you, and is now in the public sector, in my role first as a county-elected official and now as a U.S. Senator, I see no comparable Federal program or private-sector program that provides the significant connection to cutting-edge resources, insights, innovation on value-stream mapping, on inventory control, and on quality control, and on continuous improvement that the MEP does.

Help me understand why eliminating this is a good choice when you are making difficult choices in your department.

Secretary ROSS. Well, Senator, as you probably remember, the original intention when that program was established was that it would transition solely to nonfederal revenue sources, and this is consistent with that original objective that it had.

We also have been trying very hard as part of the Workforce of the Future project that Ivanka Trump is leading, and in which I am participating quite actively, to try to figure out ways to work through community colleges and other sources that have expressed interest in picking up some of these kinds of intellectual resources that had previously been provided through the Manufacturing Extension Partnership.

So it is a work in progress. We are not losing track of the objective, which is to try to have those services provided. It is just that, in a period of difficult choices, some things that we otherwise would very much like to keep going, we just cannot afford to do.

Senator COONS. Well, I appreciate that response, at least to the extent that you recognize that this is a program that is not flawed. It is not a program that fails to deliver results. You are simply de-

scribing it as one that, in a time of tough choices, falls below the line.

I disagree with the administration's prioritization that says strengthening small and medium manufacturing is not a high priority for our country. But that is part of the point of having Appropriations Committee hearings, is for us to set our priorities. That is part of the role that Congress will play.

I will just close by saying that Manufacturing USA and the critical role of NIST is also something I just wanted to elevate. I have visited NIST at Gaithersburg. It is one of this country's real jewels. They do remarkable research, and I think they are underrecognized and underappreciated. I think we would really be causing harm to our competitiveness as a country to significantly cut NIST and to abandon the Manufacturing USA direction.

I look forward to trying to find ways to work together on a bipartisan basis to preserve and sustain those programs that I think have demonstrated effectiveness in strengthening manufacturing and to find other ways that we can keep our country safe and secure.

What I hear from Delawareans week in and week out is they want good jobs. And in a State that lost a lot of its manufacturing jobs, they care deeply about small and medium manufacturers.

Thank you, Mr. Secretary.

Senator SHELBY. The Senator from Louisiana, Senator Kennedy.

Senator KENNEDY. Thank you, Mr. Chairman.

Thank you, Mr. Secretary, for your service. I want to cover, in the 5 minutes I have, just a couple thoughts.

Number one, your proposed budget does impact some programs in my State, and I would like, at some point, to sit down with you and your staff and talk about your thinking in that regard. I really do want to understand your point of view. I do not want to take the time to do that today.

I do want to thank you, though for your overarching approach and your understanding that we cannot continue to spend more money than we take in and expect a good result. I think most Americans believe that we in Washington are worse than a drunk sailor. A drunk sailor at least stops spending when he runs out of money. We just keep doing it and borrowing more.

I want to return to a subject that our leader talked to you about, Senator Shelby, who is an expert on this issue and can explain it much better than I can, but that is the red snapper population in the gulf.

RED SNAPPER IN THE GULF

You are a very skilled businessperson, and I hope you will bring some of those skills to NOAA. I do not mean any disrespect in what I am about to say. I am sure that there are many fine people at NOAA, but NOAA's management of the red snapper population has been an unmitigated disaster. They ought to hide their heads in a bag. It has been horrible.

Our recreational fishermen have been totally screwed. They deserve a seat at the table. I hope you will consider allowing the States, the Gulf States, to have more involvement in the management of the red snapper population. And, frankly, I hope you will

consider, in your request to try to make your department more efficient, for which I congratulate you sincerely, I hope you will consider allowing the Gulf States to manage the red snapper population. Because, frankly, there are some folks in Washington in charge of this program, they do not know a red snapper from a red-nosed reindeer.

We have a problem. And I would like, at the appropriate time, to come by and see you and bring some of my people. Would you work with me on that?

Secretary ROSS. I surely will.

We have already been working with the States, trying to work out a reallocation, because it does seem to me that just 3 days as a fishing season for recreational does not really seem to be the most logical solution.

As to the overall management of the fisheries, you are well aware of the provisions of the Magnuson Act, and we are obviously bound by those. And if memory serves, the members of those local fisheries are actually proposed by State government and ratified by us.

So I think one way perhaps to deal with what you feel is the lopsidedness of the allocations between the commercial fisheries and the recreational fellows might be to try to change who gets put on the fishery panels, because they are the ones who really have the big power, as far as I can see.

Senator KENNEDY. Yes, and I think that is an excellent suggestion. I am thinking I would like to at least talk about helping you in your quest to make your department more efficient, and to prioritize your responsibilities, and respectfully suggest that you consider just turning over the management of red snapper to the Gulf States.

STEEL TARIFFS

But before I run out of time, because I do want to respect my 5 minutes, are you going to impose tariffs on steel coming into the United States? And if you are, have you thought about the impact on our ports? I am sure you have.

Secretary ROSS. Sure. The report itself which is conducted under the authority of the Trade Expansion Act of 1962, as amended Section 232 investigation is, at this moment, a work in progress. So it will be completed very, very shortly.

But the remedies that could be recommended—and if we do recommend remedies, will include a fairly wide range of alternatives. And then the question will be, what does the President do with whatever recommendation we make, because this is just a recommendation. This is not a final action.

There are basically three kinds of actions that could be recommended, if one concluded that remedies were needed. The first would be, as you suggest, imposing tariffs at some sort of a level above and beyond the countervailing duty and antidumping ones that we already have. The second would be imposing quotas. Then the third would be a kind of hybrid, a so-called tariff-rate quota, where you would set the quotas based on the actual experience in recent years, and then provide that, in the event that there were imports of those particular products from those particular countries

in excess of the quotas, then there would be an additional tariff imposed.

That last one would be not very impactful on inflation, because it would essentially say we are protecting something like the original status quo and only imposing additional tariff burden in the event that the quotas are exceeded. Well, presumably, they are not going to go over the quota by 50 percent over 100 percent, so the overall impact on inflation, were that to be the route, should be relatively modest.

So we are very mindful of the need both to protect the domestic steel producers from inappropriate behavior on the part of foreign dumpers but also to protect this steel consumers, the steel fabricators, the auto companies, everybody else who uses steel.

So in the event we come with a recommendation, it will be, one that reflects the balance of the needs of these various segments.

But there is, I believe, a genuine national security issue that must be considered in this case because steel is used in over 10,000 different products that the military needs, and there is no steel mill in the country that can operate just on government business. There are very few steel mills that are able to produce the certain kinds of alloyed steels that are very important for armor plate and other very specialized applications, including the great big bomb that was used so successfully in Afghanistan.

That bomb comes from the same plant that normally makes oil-field tubular goods. So while the bomb itself is not a huge item, it certainly proved its usefulness in Afghanistan.

So it is a complicated issue. I am sure it is one to which the President will give very serious and very thoughtful consideration about all the implications of it, and we certainly will try to in the report we put out.

Senator KENNEDY. Thank you, Mr. Secretary. You are a smart guy, and I am glad you are with us. And thank you for your willingness to serve.

Secretary ROSS. Thank you, Senator Kennedy.

Senator SHELBY. The Senator from Maryland, Senator Van Hollen.

Senator VAN HOLLEN. Thank you.

ECONOMIC DEVELOPMENT

I want to pick up on some of the questions asked by Senator Capito regarding the Economic Development Administration. She talked about West Virginia. I can tell you that this has been put to very good use with economic development in western Maryland, a very rural part of our State, the Eastern Shore, Baltimore City, in the rural areas building out broadband, trying to spur more manufacturing in those areas.

And I would point out that, back in February, Ivanka Trump visited the Raymond V. Haysbert Sr. Center for Entrepreneurship in Baltimore City, organized by the Baltimore Urban League—I have been to this center—where she talked about the important work that was being done at that center to encourage more economic activity, in this case in the African-American community in Baltimore City.

I think it is important to point out that that center was funded within the last few years by a \$300,000 EDA grant. So I hope the administration will go back and consult with Ivanka Trump, who I believe recognized the merits of that important investment when she made that visit to the Baltimore center.

There is also another cut, and I do want to get to your point about the fact that there is duplication in some of these programs. It would be one thing if the administration had come to Congress and said here is our plan for actually better organizing these activities and pooling those resources. But what it looks like in this budget, as Senator Capito said, is just cutting everywhere without any real plan of consolidation.

She mentioned cuts to HUD. Another cut that was made to your own budget is the Minority Business Development Agency, which eliminated that program. Now maybe you are arguing that there is duplication with the Economic Development Administration. You also eliminate that program.

I just do want to point out that, with respect to the Minority Business Development Agency, I just got a call from some people in Maryland just the other day, and I want to quote from the letter I received from an organization that is putting this to good use in the minority community.

And I do want to point out that, on your website, the Department of Commerce website, you make the point that, if MBEs were to obtain entrepreneurial parity with other businesses, you would see 13 million more jobs created. In other words, you have about 29 percent of all firms in the United States are MBEs, but only 11 have paid employees, very small. So if we can grow these businesses, it benefits everybody, and that is the purpose of these grants.

And I am just quoting from the Baltimore center, which says, "Our officers awarded a new grant that focuses on an area the current administration has deemed a priority, advanced manufacturing. Our office has focused on the development of minority manufacturers and firms associated with advanced manufacturing. If MBDA is eliminated, this new innovative program will die."

I mean, that is their source of funding. It will go away.

So I really ask you to go back and revisit this. You cited the GAO report, but as I say, as you look through this budget, there is no evidence—if you can point me to evidence where you actually consolidated these programs in a thoughtful way, I would be interested in knowing.

Secretary ROSS. Thank you for that question, Senator Van Hollen.

The administration's approach to economic development, in general, is to try to boost the entire economy with regulatory reform, with energy unleashing, with trade reform, and with the tax cuts that have been proposed for businesses and people. Our feeling is that, if we can get the whole thing running better and have there be a better and stronger economy, all parties, whether minority or not, will benefit from that.

So that is the overriding objective of the economic side of the budget. The infrastructure program, which was announced yesterday in some fair detail, is also one that will hopefully help many,

many segments of the population, including the minority populations as well.

So there are programs that are trying, at the macro level, to deal with the problems that result in the dislocations at the micro level, such as you addressed.

Senator VAN HOLLEN. Mr. Secretary, with all due respect, I think we all want to grow the economy. I think we all would like to grow it in a way with more shared prosperity. But my view is that cutting these programs actually undermines the goal you are talking about.

Your original response to Senator Capito was that you were doing this because of duplication. I just ask you to point to any evidence where this administration has actually taken the time to go through and coordinate this rather than just using it as an excuse for a cut. But if you want to respond in writing, that would be helpful.

Secretary ROSS. Well, as I said to Senator Capito's question, I am proud of the investments that the EDA has made during its 52 years. I think they have been an effective program. But there is a limited amount of funding to go around, and one has to make unpleasant and difficult choices.

This was one of the more unpleasant and difficult ones. But nonetheless, we have to make decisions, because there is a limited pie.

Senator VAN HOLLEN. That is true, Mr. Secretary. I would point out that the budget includes a very large tax cut that goes to mostly wealthy people, and I am not talking about the one coming down the line. I am talking about the repeal of the Affordable Care Act where people who make \$1 million will get an average \$50,000 tax cut.

So you are looking at a budget where that is a tradeoff, a decision, that you have made. It is not one that I would make. But I am not sure what that says about the priority at the national level and the goal that you mentioned, which we all share, which is to grow the economy.

Secretary ROSS. Well, as you point out, Senator, it is a judgment call, and that was the judgment that we made.

Senator VAN HOLLEN. Thank you, Mr. Secretary.

Senator SHELBY. Thank you. The Senator from Arkansas.

Senator BOOZMAN. Thank you, Mr. Chair and ranking member, for holding this hearing.

We appreciate you, Mr. Secretary, for coming over and appreciate your willingness to serve.

I also apologize for running in and out. There is just lots going on today. That is just the situation that we have.

ECONOMIC DEVELOPMENT

I do not want to belabor the point and do not really have a question regarding it, Mr. Secretary, but like so many others on the subcommittee, the Senator from Maryland, I would also have the same concerns, the Senator from West Virginia, so many on this subcommittee, about the Economic Development Administration.

It has been a big help in Arkansas. I understand your point, and hopefully we can work together and get things worked out. But it

really has played an important part in creating jobs. And that is really what it is all about, is jobs, jobs, jobs.

FIRST NET

The question that I have, real quickly, has to do with broadband, which is so, so very important. I was really pleased to see the announcement of the agreement between FirstNet and AT&T regarding building out the wireless broadband network for first responders.

I would like for you to talk a little bit about that, and maybe talk about some of the lessons and best practices that were learned throughout that process that can be translated toward more widespread broadband deployment in rural and underserved areas, maybe some of the specific barriers that we had, the hurdles that were overcome, and if you have any ideas as to how we can maybe take the knowledge that we learned from that, again, to try to get broadband in our rural areas, which is a real challenge.

Secretary ROSS. Well, it is a real challenge, so let me first address the FirstNet.

I think the FirstNet deal with AT&T is a very good example of the kind of public-private partnership that hopefully will become more prevalent as we go forward, because what we were able to do was to leverage about \$6 billion worth of spectrum that was going unused, contribute that into this venture with AT&T, and they will be putting out some \$40 billion of actual real, hard cash. So that is a pretty good ratio of government contribution in-kind to private sector contribution in money and also in intellectual resources.

So we are very proud of that. We believe that that activity will be a great help to America's first responders. We also think that in addition to protecting communities, it will directly create some 10,000 jobs, many in the most rural areas.

So we are very proud of that. And as I said, we hope that it will be a model for other kinds of uses.

And thanks to the successful spectrum auctions, FirstNet is now fully funded with the \$7 billion that Congress authorized and is on a sound path to achieve its goal of deploying the nationwide public safety broadband network.

As to the general question of broadband availability and adoption in the United States, NTIA is providing technical assistance through BroadbandUSA to help State and local governments, industry, and nonprofits.

Currently, BroadbandUSA has provided support to more than 720 communities through its regional events, workshops, educational webinars, with 140 communities and 36 States receiving direct, individualized assistance on both infrastructure and digital inclusion issues.

The biggest hurdles facing communities with limited broadband access are planning and funding. In response, BroadbandUSA is beginning to develop publicly available online tools focused on broadband planning, cost-modeling, and mapping tools that enable communities to accelerate their broadband planning and shift limited public-private resources to implementation.

Broadband USA is working hand-in-hand with hundreds of State, local, industry, and nonprofit broadband leaders to develop

the connectivity assessment tool, an online planning tool designed to support communities as they convene, assess, and promote local broadband priorities. NTIA began beta testing this tool just in May of this year.

Additionally, NTIA co-chairs the broadband interagency working group with the Rural Utility Service within the Department of Agriculture. This group continues to identify further actions agencies can take to remove barriers to broadband development and digital inclusion.

The Department of Commerce remains committed to enabling Americans across the country to have access to affordable broadband.

Senator BOOZMAN. Thank you, Mr. Secretary.

This is infrastructure week, and we cannot just think in terms of the 3Rs, the roads, railways, and runways. We have to think in terms of broadband.

That is something the President has certainly expressed a lot of interest in. Congress is very supportive in a very bipartisan way.

But I appreciate your knowledge and, again, hopefully you will be weighing in big time as we go forward to make sure that broadband is a big part of any infrastructure package.

Thank you, Mr. Chairman.

Senator SHELBY. Thank you, Senator.

I have one last question, Mr. Secretary.

NATIONAL WEATHER SERVICE OPERATIONS

This subcommittee on appropriations here has consistently provided strong funding for National Weather Service operations and has provided basically more funding than requested each year by the executive branch to accommodate full staffing capacity. We think that is very important.

We further directed NOAA in the 2017 omnibus to accelerate the staffing of the National Water Center to achieve full operating capability. However, despite this, I was dismayed by the recent GAO report that details the growing amount of job vacancies—in other words, unfilled positions—at the National Weather Service and the government's inability to reduce this backlog at this time.

My question to you, a couple of them, what responsibility does the Department of Commerce, and you as the Secretary, have in reducing this? In other words, to fill the void there. And what do you plan to do about it? And what hiring freezes, if any, is the department planning to implement currently as part of the 2018 budget request?

We think that is important. We know that probably in a government agency, there are a lot of people that are overstaffed. But these are understaffed positions, very important ones, too.

Mr. Secretary.

Secretary ROSS. Yes, Mr. Chairman.

One of the problems that NOAA has been—their human relations element and their hiring procedures. As of April 2017, NOAA estimated a backlog of 1,100 vacancies at NOAA.

Although the Department's Enterprise Services, which I will discuss separately, has not started providing hiring support as part of Enterprise Services, although they will later on this summer, the

Enterprise Services did arrange for Accenture, who is our contractor, to provide contracted service to support 400 vacancies directly to NOAA to help get the hiring backlog down.

With the Accenture hiring assistance from January through April, 271 NOAA vacancies have been posted, 151 selections have been made, and an additional 57 vacancies are in the process of being posted.

The department began providing service to NOAA through its Enterprise Services effort earlier this year, and we have already begun to see some improvement in the backlog of human relations work that it built up, as you know, over many, many years.

The Enterprise Services is something you will be hearing more about from us as time goes, but it basically involves centralizing the human relations functions, which particularly at NOAA, but also to some degree at other departments, were not functioning at optimal levels. We think and we hope that there will also be some cost savings as a result.

But the main idea of it is to centralize, professionalize, and improve the hiring function. They have had positions that have been vacant for far too long simply because of the way that they were processing them. So that is under—the modification and remedy that is very much under way as we sit here.

Senator SHELBY. Mr. Secretary, would you work with us on the subcommittee to see that we fully staff the National Water Center, which is so important, I think, to allow the safety and could be a money-saving investment?

Secretary ROSS. We will be delighted to work with you, Mr. Chairman.

Senator SHELBY. Thank you.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Secretary. I just have one more question.

COMMERCIAL TRADE

When we met in my office yesterday, we talked about the importance of trade. I very much appreciate that this budget proposal includes an increase for trade enforcement, including for anti-dumping and countervailing duty cases. I think that American businesses, when they have a level playing field, can compete with any other business in the world, and I think those efforts to address dumping cases are very important.

But I think that there is also another side to the coin of trade, and that is, how do we help our American companies get into foreign markets so that they can compete?

In New Hampshire, 99 percent of our employers are small businesses, and small businesses often face a greater challenge getting into foreign markets. About 95 percent of the world's customers are outside the U.S., but only about 1 percent of our small- and medium-sized businesses are exporting their goods and services abroad.

I was disappointed, as we discussed yesterday, to see that the budget request reduces funding for the Commercial Service. It proposes closing 35 Foreign Commercial Service posts and 10 U.S. Export Assistance Centers. We have one of those Export Assistance

Centers in New Hampshire, which is very important to the northern New England States.

And I wonder how this budget envisions helping those small businesses to increase exports and get into those international markets, if we are rolling back on the export assistance that we provide.

Secretary ROSS. Well, several things. As you probably know, I am an ex officio board member at the Export-Import Bank, and I have been encouraging them to do much better outreach to small businesses, because a small business wanting to export, finds it often very difficult to deal with the foreign exchange issues, the letter of credit issues, and numerous other financial transaction topics. And I feel that while they have been doing some good work in that regard, I think there is quite a bit more that they could do. The same with OPIC, the Overseas Private Investment Corporation—they, too, could have much more of an outreach to smaller businesses, and to help them.

Beyond that, we are not eliminating the Foreign Commercial Services, by any stretch of the imagination. The lists and the posts are still under review. There have been no final decisions made yet.

The whole issue is simply affordability. It is not a question of lack of desirability, but there are a few of them that probably have not been up to par, so those will be easy. There may well be some that we would infinitely prefer not to have a close, but we have to get within the budget.

So, again, tough budgets make tough decisions, and we are trying to do our best to do the least damage with the decisions that we are forced to make.

Senator SHAHEEN. I appreciate that. I hope you will take into consideration small States like New Hampshire where the volume may not be as great as some of the other Export Assistance Centers, but where, because they do not have other resources, these centers are absolutely critical to businesses.

And let me just say how pleased I am to hear you talk about the importance of EXIM Bank and OPIC.

We have had, for far too long, a debate in this Congress that has held up the critical operations of EXIM Bank. I am pleased to hear that you think that we need to move on, making sure that they can provide assistance to businesses, because I have heard a lot of frustration in New Hampshire from companies that want to use EXIM. And because of where we are in terms of appointments to the board, they are not able to get the deals done that they would like to do.

Let me just close with a final request. I know, again, when you and I were in my office, we talked about sugar negotiations. You talked about the importance of getting those done, and I agree that is a critical effort.

I hope, as you work to finalize the agreement, that you will take into consideration not only the interest of the sugar producers, but also the interests of consumers and businesses that are going to be affected. According to 2012 Census data, in New Hampshire, we have about 1,500 jobs that could be threatened by this agreement. And we also know that consumers are going to pay an estimated \$1 billion more per year in higher food prices.

So I do hope, as you are finalizing these negotiations, that you will also consider consumers and businesses.

Secretary ROSS. Thank you for that question.

We are, indeed. We have met with numerous consuming industry groups, with soft drink people, the food manufacturing people, and the confectioners. We have met with them all.

We understand their points of view. But there is an unfortunate truism. Whenever you are solving a dumping problem, and that is basically what the sugar trade negotiation was, it does mean that there will be some small increase in cost, because nobody has a God-given right to buy dumped material that is coming into the country and appropriately. So there will be some small increase. But I do not think it is a very gigantic one. And many of the consuming industries were, frankly, much more worried that there would be an interdiction of their supply than whether it was a penny more are not. So we had to balance not only their needs, in general, but their needs for continuity of supply against the issue of price.

Senator SHAHEEN. Thank you. I appreciate that. I think the dumping situation, as you point out, is a critical, one-time sort of issue. I hope that, as we go forward, you will look at the whole sugar program and see that there might be an opportunity for reform of that program that will make more sense to the balancing of interests of both consumers, businesses, and sugar producers. Thank you.

Secretary ROSS. The overall sugar program, as you know, is not in the domain of Commerce.

Senator SHAHEEN. I understand.

Secretary ROSS. That belongs to the Department of Agriculture. Sonny Perdue was very active with me in providing technical help and advice as we went forward with the sugar negotiations. And I am sure he has learned even more about sugar as a result of this discussion. So I think you will find that it has a very well informed view on this one the sugar program comes back up.

Senator SHAHEEN. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Senator SHELBY. Mr. Secretary, the Senator from New Hampshire mentioned the Export-Import Bank. A lot of us have fundamental differences on that. The majority of the Republicans in the Senate voted not to reauthorize the Export-Import Bank. I fought for years and have had hearings on the Banking Committee concerning where it should be reformed or simply abolished.

I believe when you have one or two companies, big companies in America that can have their own bank, using it, is not for mostly small businesses and medium-sized businesses. Something is wrong there. I do not know if we will ever do it.

Everybody, including this President, Republicans, talked about reforming if not abolishing the Export-Import Bank. Everybody here that I know about calls it corporate welfare, a subsidy. I hope, it is not this hearing today, that we can, if not abolish it, reform it and make it—it is not a perfect institution, by a longshot.

I just wanted to set my views on that.

ADDITIONAL COMMITTEE QUESTIONS

Thank you for appearing with us today. If there are no further questions, Senators, some of them were at other hearings today, may submit additional questions for the subcommittee's official hearing record, which is important, and we request the Department of Commerce's responses within 30 days to these additional questions.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. WILBUR ROSS

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

WEATHER SATELLITES

Question. The Department oversees two flagship weather satellite programs that are critical for forecasting hurricanes and severe weather outbreaks.

While the Department's budget keeps the current flagship weather satellites on track for their respective launch dates, the budget request includes a significant cut—over 45 percent from the 2017 enacted level—for follow-on polar satellites.

The timely launch of Polar Follow-on satellites is required to ensure continuity of weather data that is critical to maintaining and improving weather forecasting.

Mr. Secretary, how does the Department's 2018 request address the need for our Nation to continue obtaining polar satellite data beyond the current generation of polar orbiting satellites?

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. NOAA is working to improve its constellation strategy for polar weather satellite continuity while seeking cost efficiencies, managing system technical risks, and leveraging partnerships. The funding level identified in the Department's fiscal year 2018 request will allow NOAA to continue to develop the instruments for the Polar Follow On (PFO) missions in a manner that maintains the cost efficient synergies with JPSS-2, while conducting the overall re-plan of the PFO program.

Question. Given the Department's proposed cut to the Polar Follow-on program, and the length of time it takes for large government procurements, when can we expect a new program of record that outlines a budget profile, expected launch dates, and associated risks?

Answer. The JPSS Program of Record (POR) is the original Joint Polar Satellite System (JPSS) program (encompassing SNPP, JPSS-1 and JPSS-2), which has an established budget profile and schedule that will not be affected by the PFO re-plan. NOAA is currently working on the new budget profile for the PFO program and anticipates that it would be made available to Congress with the release of the fiscal year 2019 President's budget. The PFO re-plan will reflect the new expected out-year costs for the PFO/JPSS-3 and JPSS-4 missions for fiscal year 2019 and beyond, based on the fiscal year 2018 President's budget request.

CENSUS: CONTROLLING 2020 CENSUS COSTS

Question. This subcommittee has been consistently concerned with the ballooning costs of the Decennial Census, and has directed the Census Bureau to prioritize its spending towards activities that have the greatest potential to reduce overall cost.

The Committee's goal for the past several years has been to attain an overall cost for conducting the 2020 Census at or below the cost of the 2010 Census.

GAO recently added the 2020 Census to its list of high risk programs, and is clearly skeptical of 2020 Census cost estimates and the number of mostly untested approaches for carrying out the Census.

How does the 2018 budget request keep the Department on track to ensure the total cost of the 2020 Census is at or below the cost of the 2010 Census?

Answer. As I indicated in prior testimony, the Department is currently reviewing the life cycle estimate for the 2020 Census. As part of this review, the Department is reassessing the fiscal year 2018 estimate, in concert with the other fiscal years, to ensure it reflects what is needed to keep the program on track and continue innovation and change in core areas, which are also higher risk areas. Once the review

is complete, I will report back to the Committee when I have a number that accurately estimates both the likely cost of the 2020 Census and a worst-case scenario and what that means for the Census Bureau's funding needs for the rest of the decade, including any potential changes to fiscal year 2018.

Question. Are there changes to planned activities for the upcoming year that will affect current cost projections?

Answer. In addition to the Department's review of the life cycle estimate mentioned above, the fiscal year 2018 budget prioritizes the 2020 Census and the CEDCAP systems, which support the 2020 Census. The Department is committed to conducting a high quality Census that implements cost-saving innovations. fiscal year 2018 also prioritizes funding for the final major field test of core operations and systems, while continuing to build and secure the infrastructure—both field offices and IT—needed for the 2020 Census. Additionally, the fiscal year 2018 budget request includes funding for several ongoing 2020 Census operations including geographic programs necessary to ensure the accuracy of the 2020 Census maps and address list, the redistricting data program, and the Local Update of Census Addresses.

CENSUS: COUNTING OPERATIONS

Question. Mr. Secretary, when you and I met ahead of your confirmation, you shared with me—and with other senators—your concerns about the Census Bureau's operation.

In particular, you expressed some apprehension that the Bureau might plan to statistically sample the U.S. population as part of the 2020 Census instead of actually counting every individual where they live.

The Supreme Court, in 1999, clearly identified the method of counting for the decennial as counting every individual, wherever they live in the country, without supplementing the count with sampling.

Now that you are serving at the Commerce Department and have a better understanding of the Census Bureau's plans, do you believe that the Bureau intends to use statistical sampling methods to supplement the count of the 2020 Census?

Answer. The Census Bureau has no plans to use statistical sampling methods to supplement the count of the 2020 Census.

NOAA OPERATIONS

Question. Mr. Secretary, I was pleased to see that the 2018 budget request for NOAA includes \$75 million for new vessel construction, which follows the subcommittee's direction and tempo for revitalizing the agency's aging fleet.

Last fall, the subcommittee approved NOAA's updated Fleet Recapitalization Plan, which established a foundation for new vessel construction over the next 10 years.

In addition to ships, NOAA also operates 9 aircraft—including the Hurricane Hunters—and several unmanned aerial vehicles that are critical for weather forecasting and research missions.

In contrast to NOAA's marine operations, the Subcommittee has not received an Aircraft Recapitalization Plan that outlines the agency's current and future aviation needs.

When can we expect to receive such a plan?

Answer. We are currently working on the plan, and will submit it to Congress once it is complete.

DEPARTMENT-WIDE SHARED SERVICES

Question. Last year, the subcommittee approved the administration's request to transition to a "Shared Services" model to handle Department-wide operations, such as accounting and hiring across the Department's agencies.

The Shared Services model should increase transparency and improve accounting for operations that are currently clouded by numerous funding transfers made by each agency to the Department's Working Capital Fund.

Despite the advantages of a Shared Services model, its implementation has been slow and agencies within the Department have seen little benefit so far.

Mr. Secretary, what is your impression of the Shared Services model, and what efficiencies would you like this transition to accomplish?

Answer. The shared services model is widely accepted across the private and public sector as a way to decrease costs and increase customer service. More than 75 percent of Fortune 500 companies and countless national, State, and local governments across the globe use some sort of shared services delivery model to improve

their performance, drive efficiencies, and cut costs.¹ Additionally, a recent Partnership for Public Service survey of government professionals across multiple agencies showed that more than 90 percent saw cost reductions from the practice and 70 percent witnessed sharper service.²

Enterprise Services was launched in 2014 with the objectives of improving the quality of the mission-enabling services (i.e., human resources, information technology, financial management, and acquisition) that Commerce's Bureaus receive, enhancing the employees' overall experience, giving time back to employees so they may focus more on mission-related work, reducing ongoing operating costs, and avoiding future capital outlays for mission-enabling systems.

Through the implementation of Enterprise Services, DOC will realize both direct cost savings and increased cost avoidance. Direct cost savings will be realized by the elimination of duplication of efforts, and increased cost avoidance will be realized due to economies of scale, scope, and geography. Enterprise Services intends to provide high quality, high-value service delivery to the DOC Bureaus. Enterprise Services was designed using a customer-centric model, with high quality as a core tenet in service delivery.

Since its inception, Enterprise Services has begun to deliver HR and ACQ services (e.g., PAR Processing) via its HR vendor, Accenture Federal Services (AFS); migrated human capital providers to a unified human capital management platform; and expanded the Department's strategic sourcing program, resulting in cost avoidance of \$36 million. In the coming months, Enterprise Services will provide continuous rollout of HR Services, assume responsibility for the provision of ACQ services across much of the department, and evaluate opportunities for increased scope and service delivery. Based on ES' financial analysis, the Department expects a 34 percent operating cost savings in fiscal year 2022 with the continuous rollout of new services.

Question. Do you share the subcommittee's desire to bring greater transparency to accounting and spending of the Department's Working Capital Fund?

Answer. Yes. The Shared Services model should continue to increase transparency and improve accounting for operations. The Working Capital Fund follows a governance policy where key changes and issues are presented to the Department's CFO Council and Departmental Management Council. The Chief Financial Officer/Assistant Secretary for Administration hosts monthly meetings with the Councils and communicates key Working Capital Fund requests, changes and issues with the representatives of each Departmental Bureau. We agree that transparency is an important factor in managing the Working Capital Fund and Shared Services Organization.

AQUACULTURE & SEAFOOD TRADE DEFICIT

Question. During your confirmation hearing you expressed a desire to take advantage of our Nation's vast coastlines and resources to become self-sufficient in fishing and potentially a net exporter of seafood.

Currently, the U.S. imports 90 percent of consumed seafood, and a vast amount comes from countries routinely engaged in unfair trade practices.

I believe America is poised to be the leader in seafood production through greater access to wild fisheries and support for domestic aquaculture.

Mr. Secretary, the Department's budget eliminates funding for aquaculture grants to overcome basic science barriers to increased domestic production; how does this request align with the Department's goal to lower the seafood trade deficit?

Answer. The President's fiscal year 2018 budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. To meet these goals, NOAA made some difficult decisions to consolidate or eliminate programs, including extramural aquaculture research funded by Sea Grant. The Department of Commerce's fiscal year 2018 funding request for the National Marine Fisheries Service includes \$6.3 million for Aquaculture, which will be used to continue work to advance the domestic marine aquaculture industry, create jobs, provide sustainable seafood, and reduce the U.S. seafood trade deficit.

Question. Will the Department work to ensure our Nation has access to all available resources to lower our seafood trade deficit?

¹Building a Shared Services Marketplace (<http://ourpublicservice.org/publications/viewcontentdetails.php?id=470>).

²Acquisition Shared Services: Progress, Lessons and Opportunities (<https://ourpublicservice.org/publications/download.php?id=755>).

Answer. The Department of Commerce will continue to explore the best opportunities to lower the U.S. seafood trade deficit and included funding in the President's fiscal year 2018 budget to address this goal.

CYBERSECURITY

Question. The recent "Wanna Cry" virus was a challenge for many foreign government agencies.

I have heard that there are variants of the "Wanna Cry" virus that will now infect devices, which means IP-connected devices, or "endpoints," that are separate from desktops and laptops.

I am concerned that the Department has a great deal of this equipment on its networks, especially those agencies—such as NOAA or the Census Bureau—that rely on connected equipment to conduct their operations.

Did you find instances of "Wanna Cry" on Department of Commerce computers?

Answer. No instances of Wanna Cry (or any variant) were found on Department of Commerce computers, nor were there any incident reports submitted for investigation of Wanna Cry related behavior.

Question. If no, then, what do you think was key to the prevention of the attack from compromising Department computers?

Answer. Commerce's robust vulnerability scanning and patch management processes serve as a critical line of defense against nefarious attacks and exploits. These processes are based on requirements conveyed in formal enterprise policies and supplemented by sub-organization level customizations. Based on Commerce's adherence to the Department Information Technology Security Program Policy (ITSPP) and Commerce Information Technology Requirements (CITRs), all identified vulnerabilities are patched within a defined timeframe, based on system impact rating. Since Wanna Cry leveraged a number of vulnerabilities that were addressed in Microsoft Security Bulletin MS17-010 in Mar-2017, a significant majority of Commerce assets were already patched and not vulnerable to the Wanna Cry attack when it surfaced in May-2017. The Department's investments in cybersecurity policy, cybersecurity compliance, Enterprise Cybersecurity Monitoring and Operations (ECMO), and the Enterprise Security Operations Center (ESOC) were the keys in the prevention of the attack from compromising Department computers. While these investments are sufficient for the current threats facing the Department, cybersecurity threats are constantly evolving and additional appropriated funding for these programs would significantly bolster the Department's cybersecurity defenses against future threats.

Question. Do you have a way of inventorying all this connected equipment and to profile it to see whether it has been compromised?

Answer. Commerce maintains an Enterprise Cybersecurity Monitoring and Operations program that addresses asset and patch management to efficiently identify applicable vulnerabilities on systems, per Office of Management and Budget (OMB) memoranda M-10-15 and M-11-29. Commerce also maintains an Enterprise Security Operations Center (ESOC) to provide timely detection and rapid response to security incidents, per OMB M-16-04. These capabilities allow Commerce not only identify present vulnerabilities, but also to detect behavior that would indicate attack and/or compromise.

Question. If no, then, isn't detecting and profiling connected devices one of the key Continuous Diagnostics and Mitigation requirements? Will DOC meet those requirements?

Answer. Commerce has already implemented these capabilities, but intends to leverage the services provided by Continuous Diagnostics and Mitigation (CDM) to enhance the protection, detection, and response capabilities of the Department.

 QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

Question 1. The four broad innovation areas that the Census Bureau believes will drive significant cost savings in 2020—(1) the Internet, (2) new approaches to building the address list, (3) re-engineered data collection methods, and (4) administrative records—have not been used in prior decennials and will require significant testing to ensure they will function as planned. However, the Bureau cancelled a field test that was scheduled for 2017, and has de-scoped the 2018 End-to-End test among other actions moving from 3 test sites to only one. What steps is the Department of Commerce taking to ensure these innovations will work under operational conditions come Census Day?

Answer. For the 2018 End-to-End Census Test, the final major field test before the 2020 Census, the Census Bureau has made decisions that will prioritize the

readiness and testing of its integrated system-of-systems in the field in a Census-like environment. The lessons learned from how these systems interact with each other, with the operations being tested, and, where relevant, with the field staff and residents in the test sites, will be invaluable to finalizing the operational plan and putting the finishing refinements on the systems and operations in advance of the 2020 Census.

The 2018 End-to-End Census Test began in August 2017 with the address canvassing operation. The plan for the address canvassing portion of the 2018 End-to-End Census Test includes three sites: Bluefield-Beckley-Oak Hill, West Virginia; Providence County, Rhode Island; and Pierce-County Washington. Collectively these three diverse sites already is helping the Census Bureau gain invaluable experience in conducting the challenging process of building the address list in 2019 across a wide area of physical geography, housing structures, and residence types.

Following the conclusion of address canvassing operations in early October 2017, the Census Bureau plans to proceed with the remaining operations in scope for the 2018 End-to-End Census Test in Providence County, Rhode Island. Peak operations will commence in March 2018.

Providence County is an ideal microcosm of the 2020 Census experience, as its demographics mirror those of the Nation. As such, the Census Bureau remains confident that the 2018 End-to-End Census Test is sufficiently robust to test all of the systems and operations that must be assessed.

Question 2a. GAO testified in May 2017 that the 2020 Census life-cycle cost estimate is unreliable and that costs are already increasing above the original estimate. What steps is the Department of Commerce taking to address GAO's recommendations and develop a more reliable cost estimate? What steps will Commerce take to control costs going forward?

Answer. In its 2016 audit, GAO recognized that the Census Bureau has taken significant steps to improve its cost estimation approach. GAO also found a number of recommendations for further improvements, which the Census Bureau agreed to in a comprehensive formal action plan and have since implemented. These included ensuring that the cost estimates are comprehensive, well documented, accurate, and credible; establishing clear guidance and traceable procedures for changing assumptions; and improving control over how risk and uncertainty are accurately incorporated into the lifecycle cost estimate.

As I indicated in prior testimony, the Department is currently reviewing the life cycle estimate for the 2020 Census. This review is a necessary part of developing a credible estimate and improving on past practices, as well as it moves the Census Bureau forward in addressing GAO's recommendations. Once the Department's review of the life cycle estimate is complete, I will report back to the Committee when I have a number that accurately estimates both the likely cost of the 2020 Census and a worst-case scenario and what that means for the Census Bureau's funding needs for the rest of the decade.

Question 2b. What steps will Commerce take to control costs going forward?

Answer. As the final years of the decade approach, monitoring and mitigating risks at the Census Bureau is among the most important things being done to ensure the Census Bureau can execute its plan for a fair and accurate 2020 Census.

In recognition of the complexity, scale and importance of conducting a fair and accurate count of the Nation each decade, GAO added the 2020 Census to its high risk list. The GAO included Census 2000 and the 2010 Census on its list as well.

Actions underway to address risks in the program include:

- Karen Dunn Kelley has been confirmed as the Under Secretary for Economic Affairs. The Department appreciates Congress' support in her confirmation.
- Department and OMB officials are carefully reviewing the program and implementing an oversight plan designed to recognize and manage risks.
- Census Bureau leaders have governance structures in place that include the weekly 2020 Executive Steering Committee and the 2020 Systems and Alignment meetings, which facilitates Census Bureau leadership engaging in regular risk mitigation.
- The Census Bureau and the Department are analyzing the root causes of the issues encountered, developing action plans to address these and measuring progress.
- The Census Bureau is actively working to address and close recommendations from GAO and the Department's Office of Inspector General.
- The Census Bureau monitors risks internally and welcomes stakeholders into the process. Specifically, the Census Bureau:
 - Holds quarterly Program Management Reviews that are open to the public.
 - Has documented largest decisions in the 2020 Census Decision Memorandum Series.

- Lists all decisions that have been made so far, along with the timeline for making those that remain in the 2020 Census Operational Plan, last updated in October 2016.
- Shares the 2020 Census Integrated Master Schedule with GAO on a monthly basis.

Another related and equally important component to success is collaboration with the Congress and at GAO to continually review and assess our designs, plans, systems, and operations to identify areas of improvement.

Question 3a. GAO added the 2020 Census to its high-risk list because key innovations areas, IT systems, and cost estimation efforts are all facing challenges. Do you see additional risks going forward and if so, what steps are being taken to mitigate them? Is more attention needed to the Census Bureau's overall enterprise risk management efforts?

Answer. As the final years of the decade approach, constantly monitoring and rigorously mitigating risks at the Census Bureau is among the most important things being done to ensure the Census Bureau can execute its plan for a fair and accurate 2020 Census.

In recognition of the complexity, scale and importance of conducting a fair and accurate count of the Nation each decade, GAO added the 2020 Census to its high risk list. The GAO included Census 2000 and the 2010 Census on its list as well.

Plans to address risks in the program includes:

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- Census Bureau leaders have governance structures in place that include the weekly 2020 Executive Steering Committee and the 2020 Systems and Alignment meetings, which facilitates Census Bureau leadership engaging in regular risk mitigation.
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Another related and equally important component to success is collaboration with the Congress and at GAO to continually review and assess our designs, plans, systems, and operations to identify areas of improvement.

Question 3b. Is more attention needed to the Census Bureau's overall enterprise risk management efforts?

Answer. The Department and the Census Bureau have a formal and rigorous risk management process in place at the program and project levels, which takes into account budget, schedule, technical, and external factors that may impact the Census Bureau and the 2020 Census. The Census Bureau Enterprise Risk Management (ERM) framework is a tiered framework with risks managed at the project, program, and enterprise levels. Formalized risk review boards are in place and functioning at all levels of the organization to ensure that risks are managed at the appropriate level. Risks are proposed and accepted by the risk review board, documented in the risk register, owners are assigned, mitigation plans are developed and executed. These plans outline strategies for reducing the likelihood of delays, design changes, and major budget shortfalls. Where risk exposure is high, contingency plans are developed so we can recover quickly should a risk be realized or implement an alternative approach. Risk status and mitigation plan progress is monitored on a regular basis. This process ensures robust management attention to, and mitigation of, program risks.

Review of risks is also integral to developing a credible cost estimate. As I indicated in prior testimony, the Department is currently reviewing the life cycle estimate for the 2020 Census. This review takes into account risks that are associated

with the 2020 Census in order to estimate the worst case scenario and an appropriate level of contingency needed to recover quickly from a realized risk.

Question 4. The Census Bureau will soon be without a permanent Director and Deputy Director at a time when the End-to-End test is about to begin, costs are increasing, and key budgetary and operational decisions need to get made. What steps is Commerce taking to ensure there is adequate and sustained leadership, oversight, and accountability at the Bureau to address its many management challenges and keep the agency on-track?

Answer. Karen Dunn Kelly has been confirmed as the Undersecretary for Economic Affairs. The Census Bureau Director reports to her. Regarding the Census Bureau Director, I appreciate John Thompson's service to the Nation as Census Bureau Director. A search is underway for a replacement, and for a permanent replacement for the Census Bureau's Deputy Director. Until permanent successors are appointed or confirmed, I have announced the interim leadership of the U.S. Census Bureau under the Vacancies Reform Act. Ron Jarmin will perform the non-exclusive functions and duties of the Director, and Enrique Lamas will perform the non-exclusive functions and duties of the Deputy Director of the Census.

Ron Jarmin currently serves as the Associate Director for Economic Programs at the U.S. Census Bureau, leading the team for the 2017 Economic Census, which provides the foundation for other key measures of economic performance including the Nation's Gross Domestic Product. Starting his Census Bureau tenure in 1992, Mr. Jarmin has also performed the roles of Assistant Director for Research and Methodology, Chief Economist, and Chief of the Center for Economic Studies.

Enrique Lamas currently serves as the Associate Director for Demographic Programs, overseeing the Demographic Programs Directorate which provides accurate information on the size, distribution, and characteristics of the Nation's population. Beginning his career in 1980 in the Census' Population Division, Mr. Lamas previously served as Chief of the Population Division, Assistant Division Chief in the Demographic Surveys Division, Chief of the Poverty and Wealth Statistics Branch, and Chief of the Labor Force and Transfer Programs Statistics Branch.

Additionally, the 2020 Census program has stable and permanent leadership in place, with Lisa Blumerman serving as Associate Director for Decennial Census Programs, and Deborah Stempowski serving as Chief of the Decennial Census Management Division.

Question 5. In 2013 the Census Bureau completed an enterprise-wide competency assessment and identified several mission-critical gaps in such technical areas as IT, program and project management, and budgeting. At the same time, a large number of Bureau employees may become eligible for retirement in the years ahead. From the perspective of your business background, what steps should the Bureau be taking to ensure effective succession planning throughout the agency, particularly in its mission critical occupations, and that it has the capacity to carry out its mission in the years ahead?

Answer. In order to ensure effective succession and workforce planning throughout the Bureau, the Census Bureau is doing a number of activities:

- After the 2013 enterprise-wide competency assessment, in June 2015, the Census Bureau established a permanent Office within the Human Resources Division that is dedicated to workforce analysis and succession planning. The purpose of this office is to build strategic workforce planning capabilities across the organization to ensure that the workforce is aligned to the strategic intent of the Bureau.
- The Census Bureau is examining the changing work at the Bureau and identifying the right skills and competency mixes needed for the future.
- The Census Bureau is examining several mission critical occupations in the Human Resources Division and the Information Technology and Economic Directorates to assess the changing work requirements and are determining which competencies and skills are needed in the immediate and longer-term perspectives and which are at risk of leaving through attrition.
- Within our leadership workforce, the Census Bureau identified and created a Census-based leadership competency model that identifies the most important competencies needed to be a successful leader at the Bureau. In addition, to plan for immediate succession risk, the Census Bureau identified 16 at-risk, executive-level leadership positions and created strategic transition plans that identified the top priorities, initiatives, and decision points required to enable a smooth transition with a successor should that executive retire.

Question 6. As GAO has reported, the ongoing IT development schedule for the 2018 End-to-End Census Test (a key operational test) appears aggressive. What assurance do you have that the IT systems will be developed, tested, and secure in time for the 2018 test and 2020 operations?

Answer. The Census Bureau learned many lessons in systems development and readiness from the 2010 Census. Foremost among these was to develop and field test proof of concept systems, which the Bureau did for the 2020 Census from 2012 through 2015.

Building off the lessons learned from these tests, the Census Bureau is now far along in the process to develop and integrate approximately 50 different IT systems to handle the many preparatory, support, collection, processing, and tabulation operations for a Census. These include the systems used to update and maintain our Master Address File and digital map to ensure Census results are assigned to the correct jurisdictions; enable people to respond via the Internet; identify the households that have not responded to the Census, and define and manage the in-person visits assigned to each interviewer on a daily basis; capture, process, and tabulate the data we receive from people whether they respond online, over the telephone, by mailing back a paper questionnaire, or through an in-person interview via an enumerator's mobile device. Many of these systems—like background checks, payroll, and questionnaire design—are legacy systems already in place, while some others are being developed and tested for the first time, and have been top priorities in recent fiscal years. The Census Bureau is able to focus resources on the newly developed systems to ensure they are developed, tested, integrated, and secured ahead of the 2020 Census.

The Census Bureau is well on its way to systems readiness for the 2018 End-to-End Census Test. The successful deployment of the public-facing self-response systems this spring in the 2017 Census Test was an important milestone in the Census Bureau's systems readiness. In this test, the Census Bureau successfully implemented Internet Self-Response and Real-Time Non-ID Processing in a cloud environment, the Operational Control System, and Census Questionnaire Assistance with live agents at two call centers assisting respondents in multiple languages. The Bureau learned lessons in the test that will serve to improve the Internet Self-Response system, Forms Printing operation, and the processes by which they capture data submitted on paper forms. The Census Bureau is making these and other refinements now based on the lessons we learned in that test, so all of the systems are refined ahead of the 2018 End-to-End Census Test.

As we approach the 2018 End-to-End Census Test, the Census Bureau is rigorously tracking the status of the systems each with its own well-defined scope, requirements, schedule, and costs, and run by an experienced project manager who reports regularly on progress and any risk to timely delivery. The Census Bureau also is implementing enhanced security architecture and technology based on the Department of Homeland Security Continuous Diagnostic and Mitigation program to protect the confidentiality, integrity, and availability of the 2020 Census data, processes, and systems. This includes securing internal Census Bureau systems, securing field data collection on mobile devices and on the mobile network, securing the self-response mode for paper with physical and technical security at processing sites and systems, and securing self-response modes for public-facing Internet data collection (using Cloud-based security and performance) and Census Questionnaire Assistance.

The Census Bureau also have a robust governance process with three governing bodies that work together to ensure that all contracts meet business requirements on time. Additionally, during this past year they have brought in expert help from a team of private sector IT experts to aid with the integration of the systems. Having fully integrated systems ahead of the 2018 End-to-End Census Test is key to 2020 Census systems readiness.

Now with the in-field address canvassing operation for the 2018 End-to-End Census Test having started in August 2017, these rigorous processes are paying off as all of the systems for this portion of the test are ready and undergoing final integration testing before going live. The Census Bureau will continue these processes as it prepares to ready the systems needed for the remaining peak operations of the 2018 End-to-End Census Test by spring of 2018.

Question 7a. GAO recently reported on the significant information security challenges that the Bureau faces in the 2020 Census. With the change to a more Internet-focused response to the 2020 Census, what do you see as the biggest risks and challenges to securing the personally identifiable information of American households? In addition, how confident are you in the Census Bureau's ability to handle potential computer security or data breach incidents?

Answer. The Census Bureau takes the cyber-security posture of the 2020 Census very seriously and is taking steps to address these concerns. The Census Bureau is not going about this on its own. It is working closely with DHS to review technology architecture, perform penetration testing to ensure the website is safe and secure, and utilize its set of Federal cyber-security services effectively in the cloud.

The main cybersecurity areas the Census Bureau is focusing on are cybersecurity threats associated with (1) data breaches, (2) compromising user devices, (3) disrupting the Internet Self Response website, which are within the Census Bureau's direct control (Perimeter/Internal). The Bureau is also focusing on threats including (4) compromising external network access and (5) impersonating the U.S. Census Bureau which are outside of the Census Bureau's direct control.

Question 7b. In addition, how confident are you in the Census Bureau's ability to handle potential computer security or data breach incidents?

Answer. Cyber threats may be external, on the perimeter, and/or internal to the Census Bureau's systems. The Census does not have direct control of mitigations for threats external to the Census Bureau's systems. The Bureau can detect some of these threats but will rely on and partner with industry and other Federal agencies which are tasked with and have authority to take actions to resolve external threats. Examples of external threats include impersonating the Census, inserting invalid responses, compromising external network access and compromising user devices (public).

For the threats in the perimeter and/or internal to the Census Bureau's systems, such as data breaches, compromising user devices (Census) and disrupting the Internet Self Response website, the Census has the ability to take direct actions to prevent and resolve these threats. The Census Bureau has intentionally designed systems with many layers and levels of isolation to apply the right balance of security and performance at each isolated area without sacrificing the overall security of capability.

This approach will create a "funnel effect" where the Census Bureau will be able use very high levels of security early on in publicly facing systems like Internet Self Response, which will allow the Census Bureau to remove bad actors early on in the process without affecting the respondents' ability to move through the system and fill out their surveys. It will give us the best opportunity to prevent, detect, respond and recover from possible cyber threats.

The Census Bureau is engaging with other Federal agencies, most prominently Department of Homeland Security to provide assistance in reviewing the design and security architecture for the 2020 Census. In addition, the Census Bureau works closely with the Department of Commerce Office of Security for assistance in threat analysis and related counter-terrorism assistance and also with the National Institute of Standards and Technology (NIST) to investigate IT solutions, such as cloud-computing architectures. The Census also works with the Information Technology Laboratory at NIST in a number of security initiatives. The Census Bureau has developed and implemented a Risk Management Framework in close collaboration with Dr. Ron Ross of NIST and has also worked with NIST on the Derived Credential initiative, which will allow Census to use Homeland Security Presidential Directive 12 required authentication for our general field force.

The Census Bureau continues to reach out to other Federal agencies, including the FBI and NSA to see what can be gained from their experience and knowledge of the threat environment.

Question 8a. What will the complete lifecycle cost be for the 2020 Census? What portion of that cost is related to IT?

Answer. As I indicated in prior testimony, the Department is currently reviewing the life cycle estimate for the 2020 Census. I will report back to the Committee when I have a number that accurately estimates both the likely cost of the 2020 Census and a worst-case scenario and what that means for the Census Bureau's funding needs for the rest of the decade.

Question 8b. What portion of that cost is related to IT?

Answer. Once the Department's review of the life cycle estimate is complete, I will be able to provide information on the IT costs included in that estimate.

In regards to fiscal year 2018, the budget request prioritizes the 2020 Census and the CEDCAP systems, which support the 2020 Census. The Department is committed to conducting a high quality Census that implements cost-saving innovations. The fiscal year 2018 budget request also prioritizes funding for the final major field test of core operations and systems, while continuing to build and secure the infrastructure—both field offices and IT—needed for the 2020 Census. Additionally, the fiscal year 2018 budget request includes funding for several ongoing 2020 Census operations including geographic programs necessary to ensure the accuracy of the 2020 Census maps and address list, the redistricting data program, and the Local Update of Census Addresses.

Question 9. GAO has reported that the Bureau has not yet determined all of the systems that will be used in 2020 operations. When is the Census Bureau going to finalize decisions for key operations (e.g., coverage measurement) and IT systems (e.g., Internet self-response) to be used in the 2020 Census?

Answer. The Census Bureau has clearly laid out the decisions for each operation comprising the 2020 Census in the 2020 Census Operational Plan. These include decisions that are related to IT systems and those that are not. The Operational Plan has shown all decisions that we had already made at the time of the most recent update in October 2016, identified the questions that still remained to be answered, and set a schedule for answering those questions and making those decisions.

To date, the Census Bureau has remained on schedule for making all of its decisions, and as of July 2017 has made 276 out of 350 decisions. The remaining decisions require input from the 2018 End-to-End Census Test or pertain to late operations such as archiving, data products, and evaluations. All but three of the outstanding decisions are scheduled to be made by the end of 2018. The Census Bureau will continue to be open with its decisionmaking process and timeline, and will release an updated 2020 Census Operational Plan in the fall of 2017.

In determining the systems that will be used for the 2020 Census, the Census Bureau has already defined the systems needed for every defined 2020 Census Operation. If the 2020 Census requires additional operations, then additional systems may be defined. The Census Bureau is far along in the process to develop and integrate this system of systems to handle the many preparatory, support, collection, processing, and tabulation operations for a Census. While some of these systems are being developed for the first time, a great number are legacy systems—like background checks, payroll, and questionnaire design—that are already in place and will require little configuration to ready and make interoperable with one another. The Census Bureau is able to focus resources on the newly developed systems to ensure they are developed, tested, integrated, and secured ahead of the 2020 Census.

Question 10a. The Pacific Coastal Salmon Recovery Fund (PCSRF) supports activities related to the recovery of listed stocks of Pacific salmon, an iconic symbol of economic and ecological health for Washington State and the entire Pacific Northwest. Washington State has more listed species, more river miles, and more of its population impacted by species decline than any other State. Throughout Washington, cities, counties, Tribes, and the State work cooperatively to create recovery plans and implement projects related to salmon recovery. Federal funds have been matched by millions in State and local dollars to implement these projects and the States of Washington, Oregon, Idaho, California, Nevada, and Alaska each contribute substantial resources to protect salmon and count on a robust Federal partnership. PCSRF has a proven success record, restoring more than 1 million acres of fish habitat and opening more than 9,100 miles of streams for fish passage.

Secretary Ross, Senator Murray tells me that your Department has declared six fisheries disasters in Washington State. Are you aware of these? Did you consider the impacts of eliminating PCSRF on these ongoing disasters? Further, did you analyze the economic and health impacts of eliminating funding for PCSRF or take steps to ensure these actions would not impact Tribal treaty obligations?

Answer. Yes. In January 2017, then-Secretary of Commerce Pritzker declared fishery resource disasters for nine salmon and crab fisheries.

Question 10b. Did you consider the impacts of eliminating PCSRF on these ongoing disasters?

Answer. The President's fiscal year 2018 budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. To meet these goals, NOAA made some difficult decisions to eliminate programs, including the Pacific Coastal Salmon Recovery Fund. NOAA recognizes the significant ecological, economic, and cultural importance of Pacific salmon and requests sustained funding across other programs (such as NMFS' Pacific Salmon and Salmon Management lines) to continue to support conservation and recovery and fulfill our statutory mandates for these species.

Question 10c. Further, did you analyze the economic and health impacts of eliminating funding for PCSRF or take steps to ensure these actions would not impact Tribal treaty obligations?

Answer. The unique relationship between the Federal and Tribal governments is based on the U. S. Constitution, congressional legislation, treaties, executive orders, and judicial decisions that recognize reserved rights of Native Americans to protect their property and their way of life. Tribes are co-managers of the fishery resource in partnership with the States and Federal Government. As noted above, while the fiscal year 2018 President's budget made difficult decisions to eliminate some programs, NOAA will continue its Federal commitment to advancing Pacific salmon and steelhead conservation and recovery, and Tribal treaty fishing rights through sustained Pacific salmon related programs in the President's fiscal year 2018 budget.

QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

Question 1a. Mr. Ross, it was a pleasure to sit down with you in my office earlier this year and give you what I like to call, the “fish talk.” I have had a pleasure working with you and your staff on issues that have come up since.

I applaud your statements supporting the United States becoming a “net exporter” of seafood and your desire to “close the seafood trade deficit.” However, I implore you to consider the realities of seafood trade and how our domestic companies need the U.S. to negotiate better deals to reduce tariffs that other countries apply to the U.S., like how tariff rates for U.S. exports are higher than tariff rates for other countries, or how Russia imports massive amounts of seafood into our country like King Crab, yet Russia maintains its import ban on American seafood.

The Department of Commerce’s International Trade Administration needs to focus on these trade barriers and work with the USTR to make positive change happen. Can you assure me that you will work within your Department and with USTR to fix things like the Russian seafood import ban and tariff issues?

Answer. ITA works with many sectors within the processed food and beverage industry on trade barriers, including standards, tariffs, labeling, inspection and documentation requirements, ingredient labeling, and others. Although the Department of Agriculture’s Foreign Agriculture Service has worked specifically on Russia’s seafood import ban, our Industry and Analysis unit, along with our Commercial Service offices in Anchorage, AK and Moscow, are also available to join with FAS and other agencies to work directly with you and Alaska’s crab industry to address Russia’s import ban and can work to address other export barriers throughout the world. Through the Trade Promotion Coordinating Committee we will ensure this issue is raised with both USTR and the Foreign Agricultural Service.

Question 1b. The proposed budget includes significant cuts to the International Trade Administration?

Answer. The administration’s 2018 budget prioritizes rebuilding the military and making critical investments in the Nation’s security. It also identifies the savings and efficiencies needed to keep the Nation on a responsible fiscal path. Many difficult decisions and tradeoffs were necessary to reach the funding level provided in this budget. The President’s budget aims to change the role and size of the Federal Government by prioritizing programs that serve the most critical functions and consolidating or eliminating duplicative or less critical programs. The administration’s approach is to boost the entire economy through regulatory reform, unleashing energy resources, trade reform and tax cuts for businesses and individuals. The President’s budget needed to make difficult choices among competing funding priorities, to expand resources to ensure job growth and the enforcement of laws promoting fair trade. The budget for ITA strengthens trade law enforcement functions to ensure American businesses get fair opportunities in the global marketplace. Funding increases will help ITA build capacity to self-initiate antidumping duty (AD) and countervailing duty (CVD) investigations, as well as strengthen all AD and CVD investigations. While lower-priority activities are reduced, the Department will nevertheless continue to work to ensure the execution of a robust program of programs and activities that grow U.S. exports.

Question 1c. The United States has some of the world’s most sustainable and productive wild fisheries, but this alone will not close our trade deficit. The proposed NOAA budget proposes to defund several aquaculture and seafood marketing programs. Could you please explain how the Nation will achieve this goal without these programs?

Answer. The President’s fiscal year 2018 Budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. To meet these goals, NOAA made some difficult decisions to consolidate or eliminate programs, including extramural aquaculture research funded by Sea Grant. The Department of Commerce’s fiscal year 2018 funding request for the National Marine Fisheries Service includes \$6.3 million for Aquaculture, which will be used to continue work to advance the domestic marine aquaculture industry, create jobs, provide sustainable seafood, and reduce the U.S. seafood trade deficit.

Question 2. Mr. Secretary, are you aware that your colleagues, Secretary Kelly of DHS and Secretary Acosta of Labor, are maintaining a huge barrier to U.S. seafood production by not allowing more H-2B workers to be hired? If swift action is not taken, the seafood industry may not get to the necessary staffing levels and major economic damage will be done to the processing companies and the thousands of independent fishermen that represent thousands of small businesses across all of Alaska and the Pacific Northwest. These economic effects ripple throughout our

communities. Can I count on you to encourage your colleagues in this administration to act quickly for the sake of our seafood industry?

Answer. The Department of Commerce will continue to explore the best opportunities to lower the U.S. seafood trade deficit and included funding in the President's fiscal year 2018 budget to address this goal. The Department of Commerce's fiscal year 2018 funding request for the National Marine Fisheries Service includes \$6.3 million for Aquaculture, which will be used to continue work to advance the domestic marine aquaculture industry, create jobs, provide sustainable seafood, and reduce the U.S. seafood trade deficit.

Question 3a. Only 4.7 percent of the U.S. Arctic has been charted to modern standards, an increase from the 1 percent reported in 2015. Shipping has increased 59 percent in the last 8 years and the trend is expected to continue as sea ice diminishes. I am concerned we are not moving quickly enough to mitigate the risks associated with this increased activity in the remote region. Furthermore, I am worried that NOAA's desire to conduct hydrographic surveys its own assets is preventing the work from being completed as quickly, and at a reduced expense, as it could with contracted assets. I thank NOAA for contracting for some surveys, unfortunately often times the contracts are awarded late in the season, further decreasing the amount of survey work that can be completed each year.

Will you prioritize underserved areas in the Arctic for survey to ensure the maritime industry has safe access to U.S. waters?

Answer. Yes, NOAA will prioritize underserved areas in the Arctic in the same manner as all underserved U.S. waters. In fiscal year 2017 NOAA plans to use both in-house and contract surveys for several areas in Alaska, two of which are in the Arctic, including the approaches to the Yukon River and Port Clarence. In addition, NOAA will survey Alaska waters covering West of Prince of Wales Island, north coast of Kodiak Island, and Yakutat Bay, Lisianski Strait, Tracy Arm, Cold Bay, as well as Pavlof Islands and surrounding area. In fiscal year 2018, NOAA plans to use both in-house and contract assets for its hydrographic survey requirements in Alaska, although specific locations have not been finalized.

Question 3b. Will you look into NOAA's contracting processes to ensure they are being awarded early enough each year to maximize the ice free season for hydrographic surveys?

Answer. NOAA will continue to ensure that it awards task orders with sufficient time to complete project areas during the survey season. NOAA is reviewing internal procedures to support earlier award of survey task orders. The goal of these procedure changes would be to award a greater percentage of task orders in the first half of the fiscal year, assuming timely availability of appropriations.

Question 3c. In the past, adjacent survey areas have been awarded to multiple survey companies decreasing the efficiency of the funds allotted—each contractor must establish a logistics base from which stage assets and operate.

When adjacent areas are identified and scheduled for survey can contracts be awarded to a single provider to ensure an efficient use of taxpayer dollars?

Answer. NOAA always strives acquire hydrographic survey data in a cost effective way. A surveyor's mobilization and other survey costs, along with past performance and ability to meet specific survey requirements, are the main considerations when determining which contract will be used to conduct a survey in a given area.

Question 4a. Mr. Secretary, I am concerned with the steady decline in NOAA's fleet—at least three of NOAA's ships have been in service for more than 40 years; 8 ships are due to retire in the next 10 years. This loss of capability will have far reaching impacts on NOAA's ability to conduct fisheries management activities in the Pacific Ocean, Bering Sea, and Arctic Ocean.

What is your fleet management plan?

Answer. In October, 2016 NOAA released the NOAA Fleet Plan: Building NOAA's 21st Century Fleet. This plan includes a strategy of designing and constructing up to eight new ships to maintain capabilities for fisheries management requirements, as well as hydrographic and oceanographic at-sea requirements. The plan also outlines fleet management best practices to maximize utilization of the existing NOAA fleet and mitigate the anticipated loss of NOAA vessels over the next decade.

Question 4b. Will NOAA be able to meet its fisheries stock assessments and marine mammal management activities without interruption under this plan?

Answer. NOAA Fisheries will need to develop contingency plans, including considering other options such as charters, in the case of service interruption on NOAA vessels. It is likely that the loss of a vessel used by NOAA Fisheries for stock assessments and marine mammal surveys may cause fishery independent surveys to be eliminated or become less frequent. NOAA Fisheries will continue to perform stock assessments to meet fishery management needs, but a decrease in data collection capabilities could introduce greater uncertainty into those assessments.

Eight of NOAA's ships will exceed their design service life by 2028. Of those, four are used by NOAA Fisheries for stock assessments and marine mammal surveys. The NOAA Fleet Plan's long-term strategies and fleet management best practices can mitigate the impending loss of these capabilities. The NOAA Fleet Plan has a timeline for the sequencing of new ship construction, providing a holistic approach, near- and long-term, to address these challenges. Apart from the acquisition of new ships, NOAA's ability to meet its fish stock assessment and marine mammal management mandates will depend significantly upon continued, reliable operation of its existing ships. The 2018 Budget requests \$12.9 million, an increase of \$1.2 million, to increase capital repairs to NOAA's fleet under the Progressive Lifecycle Maintenance Program.

Question 4c. Are any of these activities able to be conducted through public-private partnership or contracts?

Answer. If the fishery research capacity of the NOAA Fleet is reduced, whether by early retirement or late replacement of a vessel, NOAA Fisheries could compensate with increased days on charter vessels, which can be chartered from the fishing industry, private scientific research vessels, or academic partners. However, this would not be without impact to the scientific programs involved.

NOAA Fisheries has a long history of chartering with industry partners and available options vary by region. Contracted industry and academic vessels perform an important proportion of NOAA Fisheries' at-sea research efforts. That being said, the NOAA ships that NOAA Fisheries typically uses provide capabilities that are not available on industry vessels or in the academic fleet. For example, fishing industry vessels are not built with laboratory space or accommodations for large numbers of scientists. Academic vessels have the laboratory space and room for large numbers of researchers, but they lack fishing capability, acoustic quieting and other fishery specific capabilities.

Question 5. Mr. Secretary, it is the stated goal of this administration to grow American industries and the American workforce. In today's markets STEM careers are one of the largest growing sectors, and support countless other industries from mineral development to manufacturing. However, in the proposed commerce budget the majority of STEM education programs have been defunded, from Sea Grant to NASA. Could you please explain how the Department of Commerce plans to train more American scientists without the American training programs?

Answer. The Department of Commerce employs thousands of creative and vibrant scientists and engineers, including many leading experts from a diversity of academic disciplines. Within available resources, the Department will continue to look to bolster its STEM workforce to meet the core government functions prioritized in the President's fiscal year 2018 Budget, including research to support accurate and timely weather forecasts, sustainable management of our Nation's fisheries resources, safe and efficient maritime navigation, and the continued provision of measurements and standards needed to accelerate U.S. innovation and competitiveness. In addition, pursuant to Executive Order 13801, on Expanding Apprenticeships in America, the Department of Commerce is involved in efforts to reform federally funded education and workforce development programs to ensure these programs are tailored "to prepare workers to fill existing and newly created jobs and to prepare workers for the jobs of the future."

Specifically at NIST, young researchers participate in measurement science and engineering, standards and technology research. Our education-related programs provide NIST with opportunities to cooperate with the vast talent pool of students and postdocs in the U.S., to support our mission objectives and own workforce pipeline development in addition to that of the U.S. We have a successful record with several key NIST-wide programs, with our staff serving as mentors and advisers to students and young science, technology, engineering and mathematics (STEM) professionals.

Question 6. Mr. Secretary, as you know, for the Northwest United States tsunamis are devastating natural disasters that have the potential to endanger American lives and destroy millions of dollars of American infrastructure. Through the NOAA buoy array system and community resonance programs we currently have the ability to save lives and property. Could you please explain how we will be able to continue to protect our coastal communities, especially rural ones, without these programs?

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. The proposed reductions to the Tsunami DART systems and the Tsunami Hazard Mitigation Program grants represent budget trade-offs within NOAA to help meet the administration's overall priorities. Trade-off considerations factor both the likelihood and consequence of events, e.g. Tsunami

have a much lower likelihood of occurrence as compared to tornadoes or hurricanes. Without DART data, tsunami amplitude forecasts will be derived from seismic analysis which will have an impact on tsunami forecast accuracy and warning false alarm rates; however Tsunami watches, warnings, and advisories will continue.

The proposed budget ends National Tsunami Hazard Mitigation Program (NTHMP) grants to States. However, NOAA will maintain \$8.5 million in other tsunami program components to continue watches, warnings and advisories from a single national center. In addition, National Weather Service (NWS) and NTHMP would continue the TsunamiReady program at a reduced level. TsunamiReady is a voluntary community recognition program that promotes tsunami hazard preparedness as an active collaboration among Federal, State, and local emergency management agencies, community leaders, and the public.

Despite cuts to the Regional Coastal Resilience Grants, NOAA also will continue to support community resilience efforts through technical assistance activities of the National Coastal Zone Management Program. The technical assistance activities include providing observational data, decision support tools, and training to State and local decision-makers. In addition, NOAA's Navigation, Observations and Positioning products and services (e.g. water level gauges, current observations, shoreline LIDAR surveys, hydrography, and elevation modeling) all contribute to protecting coastal communities from hazards such as tsunamis. After disasters strike, NOAA's Coastal Science and Assessment and Coastal Zone Management and Services programs provide scientific support and technical assistance to help communities recover.

Question 7. As an Arctic nation, we are on the front line of the effects of climate change. In Alaska alone, we are already experiencing the economic and environmental affects within our communities from shore erosion degrading our marine ports to permafrost melting causing major infrastructure issues. The American arctic has become a strategic location for the northwest marine passage, but we will need to protect the investment in the region. In order to provide active mitigation efforts to our industry and constituents we need scientific research. Could you please help me understand why the office of NOAA climate research has been defunded?

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. To meet these goals, some difficult decisions needed to be made. The administration prioritized programs that provide a good return for the taxpayer, as well as those that serve the most critical functions, while consolidating or eliminating programs. NOAA will preserve many of its climate and weather research functions within the Climate Competitive Research and Regional Climate Data and Information budgets, funded at \$38.4M and \$31.9M respectively in the fiscal year 2018 PB. Functions include observations and modeling at NOAA laboratories, which advance NOAA's forecasting capabilities. NOAA will continue to support the Regional Integrated Sciences and Assessments program which helps expand and build the Nation's capacity to prepare for and adapt to climate variability and change and the NOAA-led National Integrated Drought Information Service.

Question 8a. Mr. Secretary, I have heard recent concerns over the Census Bureau's planning for the 2020 census and how it could affect Alaska Native, American Indian, and rural populations. I am told that the Census is cancelling some of what they call "dress rehearsal sites". Dress rehearsals are a way for the Census to fine-tune the various operations planned for the upcoming decennial census and to help achieve an accurate and cost-effective count. We have learned that they are canceling two of three 2018 dress rehearsal sites—Pierce County, Washington, and Bluefield-Beckley-Oak Hill area of West Virginia. That leaves Providence County, Rhode Island. We also know that the two 2017 census test sites that included Native American areas were canceled. The methods and findings used during these tests and rehearsals will be used in Alaska villages and rural communities, and in reservations, around the county. This leads me to believe that we will be heading into the 2020 census using untested or nearly untested methods in these communities. The census is crucial in making sure we have correct counts.

Mr. Ross, can you address the consequences of heading into the 2020 Census with methods and operations that are untested or not fully tested?

Answer. For the 2018 End-to-End Census Test, the final major field test before the 2020 Census, the Census Bureau has made decisions that will prioritize the readiness and testing of its integrated system-of-systems in the field in a Census-like environment. The lessons learned from how these systems interact with each other, with the operations being tested, and, where relevant, with the field staff and residents in the test sites, will be invaluable to finalizing the operational plan and

putting the finishing refinements on the systems and operations in advance of the 2020 Census.

The 2018 End-to-End Census Test began in August 2017 with the address canvassing operation. The plan for the address canvassing portion of the 2018 End-to-End Census Test includes three sites: Bluefield-Beckley-Oak Hill, West Virginia; Providence County, Rhode Island; and Pierce-County Washington. Collectively these three diverse sites will help the Census Bureau gain invaluable experience in conducting the challenging process of building the address list in 2019 across a wide area of physical geography, housing structures, and residence types.

Following the conclusion of address canvassing operations in early October 2017, the Census Bureau plans to proceed with the remaining operations in scope for the 2018 End-to-End Census Test in Providence County, Rhode Island. Peak operations will commence in March 2018.

Providence County is an ideal microcosm of the 2020 Census experience, as its demographics mirror those of the Nation. As such, the Census Bureau remains confident that the 2018 End-to-End Census Test is sufficiently robust to test the systems that support the 24 key operations that will be assessed in a field test prior to the 2020 Census. The systems supporting 11 operations that are not included in the 2018 End-to-End Census Test will be thoroughly tested in fiscal year 2018 and fiscal year 2019 prior to their deployment.

Question 8b. And can you elaborate at all on the Census Bureau's plan for conducting accurate counts in Indian country and rural America?

Answer. The Department of Commerce leadership is fully committed to a fair, accurate, and complete 2020 Census, and this is the number one goal of the Census Bureau. The modernization effort allows the Census Bureau to prioritize its resources to the parts of the country with higher degrees of nonresponding households to ensure they are counted.

The Census Bureau recognizes that not everyone has the same level of Internet connectivity and access to technology, and has designed alternatives that will provide ample response options for everyone. One of these options will be sending a paper form to up to 20 percent of housing units with the first mailing, in areas where ACS data show there is less connectivity. All households that do not self-respond initially will receive a paper form.

The 2020 Census nationwide partnership program is also vital to counting everyone, as they will have trusted community partners encouraging their community members on our behalf to respond to the 2020 Census.

To design a 2020 Census that will capture a complete, accurate count of American Indians and Alaska Natives (AIANs), the Census Bureau has gathered input from federally recognized Tribes. As part of an ongoing, government-to-government relationship with Tribal nations, the Census Bureau held 13 Tribal consultations with federally recognized Tribes and Alaska Native Claims Settlement Act (ANCSA) regional corporations from October 2015 to November 2016.

The topics covered by the consultations, which will assist the Census Bureau in 2020 Census operations relating to Tribal nations, included the accurate collection of population statistics on the Tribal nations, best practices for mapping Tribal geography, optimizing procedures for enumerating on Tribal lands, refinements to communications strategies about the 2020 Census to Tribal nations, recruitment of Tribal members for 2020 Census field positions, and strengthening the partnership program between the Census Bureau and the Tribal nations to promote the 2020 Census.

Question 9. Mr. Secretary, the Minority Business Development Agency is crucial for many small businesses across the country, including in my State of Alaska. In fact, the outcomes speak for themselves. There have been hundreds of jobs created or retained, and over \$67 million of contracts awarded with help from this program in Alaska alone. In fact, for every \$1 in Federal funds that go into MBDA and its business development work every year, well over \$100 in economic benefit (contracts, financing) results on the ground. There are over 8 million minority owned businesses in this country, and this agency has been one that has been proposed to be defunded under the budget proposal. What then is the Department of Commerce's plan to support and continue to help these businesses grow and thrive?

Answer. The administration's focus is to boost the economy through tax reform, regulatory reductions, unleashing our energy resources, and the removal of unfair trade practices. Our hope is that that will make a better environment for all businesses including minority businesses.

MBDA is a relatively small entity and a grant-making entity. MBDA has been proposed for elimination due to the duplicative activity between MBDA and the Small Business Administration in their district offices and in their small business development centers. However, the President's proposal to eliminate the agency

should not be viewed as an abandonment of the agency's core mission. Rather, it is an acknowledgment that the agency has succeeded in creating an environment that is more supportive of minority businesses today than it had been before the agency was founded way back in 1969. The administration hopes that the overall lift to the economy will drive growth for minority businesses and other small businesses.

There also are similar efforts at the State and local level, as well as private sector efforts to encourage minority business development. The expectation is that those efforts will go unabated by the elimination of MBDA.

QUESTIONS SUBMITTED BY SENATOR SUSAN M. COLLINS

SEAFOOD EXPORTS—CETA

Question. The Maine seafood industry exports a significant amount of products to European consumers. In fact, the Maine lobster industry alone generates an economic impact of more than \$1.5 billion annually, and it depends on the mature European market for approximately 15 to 20 percent of the annual global lobster trade. Concerns have been raised that the recently ratified Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union will interrupt the decades-old flow of lobster across the northern and eastern Maine borders, as European duties and tariffs on Canadian frozen, processed, and live lobster are phased out and eliminated. Moreover, a large portion of Maine lobster is processed in Canada, and CETA imposes a quota on the amount of U.S. lobster that can be exported for processing in Canada and still qualify for preferential treatment under the agreement. Does the Department have plans and marketing strategies to help to promote the sale of American seafood abroad, specifically in Europe?

Answer. ITA works with many sectors within the processed food and beverage industry on trade barriers, including standards, tariffs, labeling, inspection and documentation requirements, ingredient labeling, and others. Although the Department does not have a specific marketing strategy for promoting American seafood exports as that is done by the Department of Agriculture's Foreign Agriculture Service, our Industry and Analysis unit, long with our Commercial Service offices in Portland, ME and throughout the EU, are available to work with your office and the Maine lobster industry to maintain and grow its market share in the EU, and can also work to address other export barriers throughout the world.

SEAFOOD TRADE DEFICIT

Question. I continue to hear from Maine's fishing and aquaculture industries about the current seafood trade deficit, with the United States importing 90 percent of the seafood consumed each year. To reduce this seafood deficit, investment is needed in programs that support our domestic fisheries and our aquaculture industry. Building these businesses, including through increased efficiencies, can expand our ability to meet American seafood demand with domestic products. Given the concerns with the seafood trade deficit and the desire to promote domestic businesses, what opportunities will the Department pursue to support our domestic fisheries and the men and women whose livelihood depends on them?

Answer. The goal of fisheries management is to achieve fisheries that are environmentally and economically stable. In partnership with the regional fishery management councils, interstate fishery commissions, and our stakeholders, and driven by the Magnuson-Stevens Act, NMFS has effectively ended overfishing and is rebuilding our domestic fish stocks. By preventing overfishing and rebuilding fish stocks, we are strengthening the value of fisheries to the economy and communities that depend on them, and also ensuring a sustainable supply of seafood for the Nation in the future.

American's seafood industry is world-renowned and our fisheries set a global standard for sustainability. However, as you point out, the majority of the seafood we consume is imported. Improved fishery management may result in modest increases in harvest, but these increases alone are not sufficient to reduce the seafood trade deficit. The potential exists to expand domestic seafood production through marine aquaculture. The U.S. has substantial untapped potential for sustainable marine aquaculture, and Maine is a model for how to integrate wild and farmed seafood to support coastal communities and working waterfronts.

In fiscal year 2018, NOAA is investing \$6.3 million in marine aquaculture development in a number of ways. First, we are working with States and Federal agencies to streamline permitting processes. Second, we are supporting regional pilot projects, conducted in partnership with industry and fisheries commissions, to jump

start production. Third, we are investing in research and development (both internal and external) to develop science-based tools for coastal managers and to support industry development. Fourth, we are working with partners to improve public awareness about aquaculture.

In part due to NOAA's efforts, marine aquaculture is growing, but only at a modest rate. We are taking steps to accelerate this growth, including soliciting input and working with regional and national aquaculture associations such as the Maine Aquaculture Association and East Coast Shellfish Growers Association.

NOAA PROGRAMS

Question. In Maine, NOAA plays an important role in helping coastal communities and economies thrive. NOAA's core responsibilities include a diverse array of functions, including accurate and real-time weather data, research and support for fisheries stocks, and management strategies for coastal resources. The Coastal Zone Management program and the National Sea Grant College Program, for example, are improving coastal resiliency and providing important technical assistance and education. I remain very concerned that the Department's budget request for fiscal year 2018 proposes to eliminate these important partnership programs. Moreover, the commercial fishing industry is a significant economic driver for Maine and our Nation. Preservation of our Nation's working waterfronts is essential to protecting jobs and a way of life that is unique to coastal States. NOAA programs are helping to advance our understanding and stewardship of our oceans, commercial fisheries, as well as marine life. These efforts support economic vitality for our fishermen and the long-term sustainability of fisheries. Will the Department continue to prioritize programs that support our Nation's coastal economies and fishermen?

Answer. The President's budget includes funding to continue numerous projects, programs and activities within the Department of Commerce that support coastal economies and the fishing industry. Examples include navigation services, support for regional observing systems, applied research on marine and coastal ecosystems, rebuilding fish stocks, advancing fisheries science and management and aquaculture development, emergency preparedness for hazards, coastal and marine restoration and protection, and technical assistance to resource managers. We recognize that these programs, and many more within the Department, are vital to the prosperity of coastal communities and the Nation at-large, and we appreciate your strong support for them.

EDAT

Question. The forest products industry has a long and proud heritage in Maine and remains a significant economic driver. For 2016, the total economic impact of the forest products industry is estimated at \$8.5 billion and 33,538 total jobs. Rapid market changes, however, have led to the recent closure of six pulp and paper mills, two biomass electric facilities, and related declines in forest manufacturing and harvesting. In response to this economic crisis, in March 2016, Senator King and I requested that the Department coordinate and mobilize Federal partners to participate in an Economic Development Assessment Team (EDAT), which was deployed to Maine. In January 2017, the EDAT released recommendations for Maine's forest economy. The Economic Development Administration also announced critical Federal seed funding, including \$1 million to support the development of a long-term vision and strategic plan for private business, policy makers, and government officials to drive growth in the forest economy in rural communities across Maine. This strategic plan is under development by a broad coalition of industry and other stakeholders. Efforts include a global market analysis of opportunities for Maine's forest sector and a statewide wood supply analysis to attract new markets, which will also inform a marketing plan to attract investment in Maine. What role can the Department play to help support industry-led partnerships aimed at fostering local economic opportunities? For States that have gone through an EDAT program, will the Department remain engaged as industry and stakeholder partners develop and carryout strategic planning efforts?

Answer. One of the key recommendations of the Economic Development Assessment Team (EDAT) for the future of Maine's forest-based economy was to invest in long-term community infrastructure.

Rebuilding America's infrastructure is a critical pillar of the President's agenda to promote job creation and grow the U.S. economy, and public-private partnerships will play a key role in this agenda. The President's plan will unleash private sector capital and expertise to rebuild our cities and States. The fiscal year 2018 Budget Request dedicates \$200 billion for infrastructure that can be leveraged through pub-

lic-private partnerships into a \$1 trillion investment into our crumbling infrastructure systems.

QUESTION SUBMITTED BY SENATOR JOHN BOOZMAN

Question. Mr. Secretary, I share your desire to strengthen the U.S. economy and boost domestic manufacturing. For these reasons, I eagerly await the findings of the Department's Section 232 investigation into the effects of imported steel on U.S. national security.

While I would welcome the opportunity to work with you on ways to grow the domestic electrical steel industry, I am concerned that, in the short-term, tariffs on imported electrical steel may have unintended effects, reducing the competitiveness of equipment and products currently built in the U.S. and hurting manufacturing companies already providing good jobs to Americans.

How will you ensure that potential Section 232 action on steel doesn't adversely affect the competitiveness of manufacturers that rely on specialty steels that have limited domestic availability?

Answer. This investigation will examine the effect of steel imports on U.S. national security. The Department of Commerce heard testimony from 37 witnesses and received over 200 comments during our public comment period from a wide range of respondents on issues each consider relevant to the Section 232 investigation. We are conducting the investigation thoroughly, taking into consideration all available government and industry data, including information concerning the potential impact any actions might have on manufacturers who rely on specialty steels not produced in the United States. Testimony and comments are posted on the Bureau of Industry and Security (BIS) website at: <https://www.bis.doc.gov/index.php/232steel>.

QUESTION SUBMITTED BY SENATOR SHELLEY MOORE CAPITO

Question. NOAA continues to expand its supercomputing resources to meet the agency's rapidly growing high performance computing demands. The supercomputing demands are being driven by the need to process the growing data collected from various sources, such as, the GOES-16 satellite (which is collecting 40 times as much data as the old satellite). One of NOAA's key supercomputing resources is the NOAA Environmental Security Computing Center (ESCC), located in Fairmont, West Virginia.

In that regard, what is the funding needed to expand the electrical capacity of NOAA's ESCC and to complete "AREA B" at the ESCC to support this growth and are these funds included in the current budget request?"

Answer. The NOAA Environmental Security Computer Center (NESCC) is currently a 5-Megawatt (MW) site which is sufficient for all of the systems that NOAA currently operates in the NESCC. No funding is included in the fiscal year 2018 President's budget to support the expansion of electrical capacity of NOAA's ESCC because the 5 MW power capacity is sufficient for all of the systems that NOAA currently operates in the NESCC.

QUESTIONS SUBMITTED BY SENATOR JAMES LANKFORD

Question 1. Mr. Secretary, on May 31st, you met with Vietnamese Prime Minister Nguyen Xuan Phuc to discuss the economic relationship between the United States and Vietnam. The related press release noted in part: "President Trump is prioritizing engagement with Vietnam, an important trading partner of the United States." The U.S. Commission on International Religious Freedom's 2017 report recommended that Vietnam be designated as a country of particular concern, which is a country that engages in or tolerates particularly severe religious freedom violations that are systematic, ongoing, and egregious.

As part of the Trade Promotion Authority, I included an amendment that required religious freedom to be part of trade negotiations. Have you discussed the religious freedom and human rights violations in Vietnam as part of your discussions with the Prime Minister? If so, please provide a summary of those discussion as well as responses from the United States to address these violations.

Answer. The U.S. Government is not in trade agreement negotiations with the Government of Vietnam. That said, progress on human rights in Vietnam, including protecting religious freedom and human rights, is of the utmost importance to this administration.

In the Joint Statement issued following the Prime Minister's visit, President Trump and Prime Minister Phuc recognized the importance of protecting and promoting human rights, including religious freedom. The Joint Statement reflected discussions that took place on this issue during the Vietnamese Prime Minister's visit to the United States.

Leading up to this visit, my Deputy Assistant Secretary for Asia, Diane Farrell, traveled to Vietnam in May 2017 and communicated the importance of promoting human rights, through freedom of expression, in her bilateral meetings. Her trip was one of several visits to Vietnam by U.S. Government officials across various U.S. Government agencies in which this issue was raised.

We have also pressed Vietnam on human rights through formal dialogues. On May 23, 2017, the U.S. Government led by the Department of State held the 21st round of the United States-Vietnam Human Rights Dialogue, which covered a wide range of human rights issues, including the importance of making progress on labor law reforms and our concerns about restrictions on freedom of expression and religious freedom.

Question 2a. The U.S. Government, through the National Telecommunications and Information Administration (NTIA) at the Department of Commerce, previously held a "stewardship" role over the domain name system by virtue of a contractual relationship with the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN was authorized to manage the technical underpinnings of the DNS through its contract with the Commerce Department, which is called the Assigned Numbers Authority (IANA) functions contract.

On March 14, 2014, NTIA announced its intention to transition its stewardship role and procedural authority over key domain name functions to the global Internet multistakeholder community. On October 1, 2016, the contract between the U.S. Commerce Department and ICANN expired, and as a result, the U.S. relinquished its oversight of the Internet domain name system.

Currently, the ICANN community consists of three Supporting Organizations (SOs) and four Advisory Committees (ACs) that develop policies for approval by the ICANN Board. Together, these bodies comprise the DNS policymaking community. The ICANN SOs and ACs include the Governmental Advisory Committee (GAC), which provides advice on public policy issues and includes 110 governments and 35 observers from intergovernmental groups.

The President's fiscal year 2018 budget notes that "the bureau also continues to represent U.S. interests at multistakeholder forums on Internet governance and digital commerce." Since the expiration of the contract, what role has the NTIA played role as a GAC member?

Answer. Since the expiration of the IANA functions contract, NTIA has continued to participate actively in ICANN through the GAC. To best advance and defend U.S. policy interests, NTIA has convened U.S. Government agencies monthly to prepare and develop positions pertaining to a range of issues including those associated with domain name system (DNS) abuse, ICANN accountability, new generic top level domains (gTLDs), and access to domain name registration data for use by law enforcement.

More specifically, NTIA has worked with colleagues at the Department of Justice, Federal Bureau of Investigation, and Federal Trade Commission via the GAC in pressing ICANN to provide information on their DNS abuse prevention and mitigation efforts with the intent of holding ICANN to its existing commitments and introducing transparency around them. Further, as data protection and privacy rules expand in Europe, NTIA is actively engaging with ICANN and Europe, through the GAC and other channels, to ensure that U.S. law enforcement continues to have access to important domain name registration information that provides an important tool in law enforcement efforts.

Moving forward, NTIA will continue to vigilantly defend and advocate U.S. policy positions and interests, including ensuring that the GAC remains advisory and that ICANN's jurisdiction remains in the State of California.

In order to most effectively represent U.S. interests, however, NTIA needs political leadership. Swift confirmation of an Assistant Secretary for Communications and Information will best ensure U.S. Internet governance and digital economy interests are effectively advanced in this and other fora.

Question 2b. Has the ICANN Board has rejected consensus GAC advice or acted specifically counter to the vote from the NTIA representatives?

Answer. No. The ICANN Board has not rejected consensus GAC advice since the IANA transition nor does it have the ability to minimize the voice of NTIA within the GAC. As part of the IANA stewardship transition GAC consensus advice was enshrined in the ICANN bylaws by specifically defining GAC consensus as the lack

of a formal objection. This preserves the right of the United States to block GAC consensus advice, if needed.

U.S. interests are most effectively advanced when the United States stands with allies in the GAC. Swift confirmation of an Assistant Secretary for Communications and Information is critical to NTIA's ability to fully engage with other nations and drive consensus for U.S. positions.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

CANADA

Question. The President has agreed to take action on Canadian softwood lumber, a long-standing point of contention between our countries because of the way Canadian provincial governments sell logging rights. This is a complex trade issue that could have real financial impacts on the forestland owners and our loggers. Every northeastern State ships logs to Quebec, and many Vermonters and many other Americans also import large amounts of Canadian lumber for furniture-making. Similarly, the President has had tough words for the Canadian dairy industry concerning its prices for ultra-filtered milk, which has been undercutting the price of U.S. exports to Canada, one of our most important markets for dairy. These trade issues are extremely complex. Leaving aside retaliation, our own policies run the risk of hurting us.

What assurances can you provide to Americans who benefit from current export and import policies that as the administration pursues improvements to these policies you will not destroy their own livelihood?

Answer. We fully appreciate the urgency and gravity of the situation facing your constituents. The administration is fully committed to resolving barriers to U.S. dairy exports and unfair Canadian softwood lumber imports to ensure our trading partners meet their international trade obligations. Canada's recent domestic policy change for dairy is particularly troubling. To address this issue, the administration will continue to press our concerns with Canada on this policy change and its potential effects on sales of U.S. dairy products. Commerce is examining Canada's policy change considering Canada's international trade obligations. The United States has also raised our concerns with Canada at the World Trade Organization Committee on Agriculture, including at the Committee's March 27–28 meeting.

As you indicate, the softwood lumber issue is very complicated but we are working toward an effective, enforceable, and sustainable long term solution to softwood lumber trade with Canada. We are ready to resolve the issue either under our trade remedy laws or through an enforceable agreement with the Canadian Government that will ensure fair and stable conditions. Commerce is committed to vigorously utilizing the U.S. dumping and countervailing duty laws to offset unfair trade practices that put American jobs at risk. Concurrently, I am actively involved in resolving the lumber issues to provide a level playing field for all American softwood lumber producers. We continue to work closely with a range of domestic stakeholders while engaging with the Government of Canada to ensure fair and stable conditions for trade in softwood lumber that reflects current market realities and helps maintain U.S. jobs.

The effective administration of our trade remedy laws is one of my highest priorities and, to the extent imports are affected by dumping or subsidization, we will follow our legal obligations to take remedial border measures and collect duties as appropriate.

TRADE

Question. Vermont's largest trading partner is Canada. In fact, in 2015 Vermont exported more than \$2.2 billion in goods to Quebec alone. Nationwide, the top five purchasers of American goods are China, Canada, Mexico, Germany, and Japan. The President has picked trade fights with four of those five nations. He claims he does so to protect American workers, yet his budget slashes workforce training programs. Of course we should oppose unfair trade practices as part of a comprehensive plan to improve U.S. competitiveness and create good, stable jobs here. But from what I see, there is no real plan.

What is this administration's plan—and please speak in specifics—for improving U.S. competitiveness in the global market, and when will Congress and the American people see that plan?

Answer. The administration is taking a rigorous analytic approach to improve the global U.S. competitiveness. We believe it is important to have programs targeted specifically at America's manufacturing base and emerging, strategic industry sec-

tors poised for growth. We are still undertaking in-depth analysis, which means some of our plans are currently still in development:

1. Updating and renegotiation our current trade agreements, specifically the North American Free Trade Agreement (NAFTA). We believe that these agreements need to be updated to address issues that are putting U.S. companies at a disadvantage. Our negotiation objectives for NAFTA will serve as a model for how we pursue trade agreement updates with other partners. The NAFTA negotiating objectives aim to apply the highest standards covering the broadest possible range of goods and services to ensure truly free and fair trade that supports higher-paying jobs and economic growth in the United States. Our efforts to improve our current trade agreements will also draw heavily on analysis under development on trade deficits, as well as a separate analysis on trade agreements violations and abuses.
2. Using our trade laws to protect American firms. In addition to increasing the amount of anti-dumping/countervailing duty cases through self-initiation, we are exploring other avenues such as Section 232 of the Trade Expansion Act of 1962 and Section 201 of the Trade Act of 1974.
3. Making sure U.S. exporters have the information they need. It is important that our companies know that the U.S. Government can help them resolve unfair trading practices that are impacting their businesses overseas and how they can leverage new and updated trade agreements.

NATIONAL WEATHER SERVICE (NWS)

Question. Improving the ability of the National Weather Service (NWS) to predict and forecast water and climate events will help save lives and protect property by allowing emergency managers to better prepare and respond to extreme weather incidents. The chronic underfunding of these services has resulted in reduced staffing across the country, and hampers storm surveys to examine damage after severe weather or floods, limits training opportunities for staff, and reduces the ability to recruit voluntary weather observation support. Sufficient resources would enhance NWS staff ability to do their jobs in 24 hour forecasting and build an infrastructure that will sustain increasingly severe weather patterns.

The budget proposal cuts the National Weather Service by \$62 million, or 6 percent. These reductions would only compound the chronic underfunding of resources available to the NWS. As the severity of weather trends increase, how do you expect NWS to create a weather and water ready nation with the resources your budget would provide?

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. The fiscal year 2018 President's budget request allows NWS to continue readiness, maintain 24x7 operations, and provide limited decision support services. With the request, NOAA will prioritize core functions that provide the observational infrastructure, capabilities, and staff to produce timely and accurate weather forecasts and warnings.

ECONOMIC DEVELOPMENT ADMINISTRATION

Question. The administration proposes to eliminate the Economic Development Administration (EDA) and the Manufacturing Extension Partnership (MEP), calling them "duplicative, ineffective or less critical." To me this proposal is misguided at best and dangerous at worst. It threatens efforts to revitalize communities that are struggling with job losses and rural communities that are losing population to urban centers. The EDA and MEP have supported projects to modernize American economies that are increasingly based on technology jobs, to spur on networks of entrepreneurs and to assist value added manufacturing. These are successes the administration should work to replicate and support, not eliminate.

Under which category does the administration label the MEP: duplicative, ineffective or less critical? If duplicative, duplicative of what? If ineffective, what substantiates that label? And if less critical, what manufacturing programs does the administration find more critical, and what resources is it dedicated to those programs?

Answer. The budget must be about priorities. Even though MEP has certainly performed a good function, we chose to increase spending for defense and military to protect our national security and believe any further funding for MEP centers should come from non-Federal sources. We are in a challenging budget period and difficult budget decisions had to be made.

Question. Given that the President has talked about "bringing back" manufacturing, what steps is the administration taking to help existing manufacturing businesses grow or to incubate new businesses?

Answer. The administration's approach to economic development is to boost the entire economy through regulatory reform, unleashing energy resources, trade reform and tax cuts for businesses and individuals. The administration is committed to bringing jobs back and to building jobs in existing U.S. businesses. The Department of Commerce believes that some MEP Centers will transition to non-Federal revenue sources, which was originally intended when the program was established.

Question. The EDA plays a key role in stimulating private infrastructure investment, and its elimination is at odds with the President's stated goal of significant economic development. How does the administration square these contrasting points and actions, and what alternative sources of capital would the administration direct rural communities towards as a replacement for this type of financial support for infrastructure projects?

Answer. The administration's 2018 budget prioritizes rebuilding the military and making critical investments in the Nation's security. It also identifies the savings and efficiencies needed to keep the Nation on a responsible fiscal path.

Rebuilding America's infrastructure is a critical pillar of the President's agenda to promote job creation and grow the U.S. economy. Regulatory reforms will spur growth and investment by, for example, dramatically reducing permitting time for infrastructure projects from 10 years to 2 years and to get a "yes" or "no" quickly by streamlining regulations. The President's plan will unleash private sector capital and expertise to rebuild our cities and States. The fiscal year 2018 Budget Request dedicates \$200 billion for infrastructure that can be leveraged through public-private partnerships into a \$1 trillion investment into our crumbling infrastructure systems. Investing in rural infrastructure is a key part of the President's plan.

QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

ATMOSPHERIC RIVERS

Question 1a. On the West Coast, major weather events in the form of Atmospheric Rivers can cause major flooding, as we saw this past winter in California. They can take down structures with their hurricane-like winds. They can also save counties and municipalities from periods of prolonged drought when managed correctly.

What is NOAA doing to address the West Coast's forecasting needs regarding Atmospheric River events, and how will these efforts be impacted by the Department's fiscal year 2018 budget?

Answer. Atmospheric river events account for up to half of the winter precipitation along the west coast of the United States. NOAA invests in research (e.g., NOAA Hydrometeorological Testbed, U.S. Weather Research Program, and CalWater) to better understand atmospheric rivers and their importance to both weather and climate using satellite, radar, aircraft and other observations, as well as major numerical weather model improvements. The NWS Western Region continues to work closely with NOAA's Office of Oceanic and Atmospheric Research (OAR) and academia, such as the Scripps Research Institute, to transfer improved atmospheric river observation tools and model analysis into the daily operations of the western Weather Forecast Offices (WFOs). This multi-year research to operations effort will continue, although potentially at a slower rate.

Further, NOAA invests in accelerating the advancement of modeling research into operations for improved warnings and forecasts through efforts that include development of the Next Generation Global Prediction System and other model coupling, data assimilation, and collaborative research efforts. NOAA also invests in research in support of the development of new features in, and services provided by, the National Water Model including the development of nested hyper-resolution modeling and enhanced hydro-meteorological forcing.

NOAA's newest geostationary satellite, GOES-S, will be launched in fiscal year 2018 and will be positioned over the western Pacific Ocean as the operational GOES-West satellite in late fiscal year 2018 or early fiscal year 2019. It will provide revolutionary observing capabilities that will assist in the monitoring and forecasting of atmospheric rivers.

The President's fiscal year 2018 budget requests resource reductions for global modeling and National Water Model research, development and transition efforts in order to prioritize sustaining NWS operational service delivery. The reduction is expected to slow the improvements in both the operational global atmospheric model as well as the National Water Model.

Question 1b. What is NOAA doing to ensure that Western weather forecasting is on par with Eastern efforts?

Answer. To ensure that western weather forecasting is on par with eastern efforts, NOAA is maintaining and enhancing regional in-situ observation and monitoring capabilities in the west as well as for the tropical and mid-latitude Pacific Ocean (which significantly impacts predictability for western weather forecasting). NOAA continues to invest in improved satellite reconnaissance through new instrumentation and improved analyses of data. NOAA's newest geostationary satellite, GOES-S, will be launched in fiscal year 2018 and will be positioned over the western Pacific Ocean as the operational GOES-West satellite in late fiscal year 2018 or early fiscal year 2019. It will provide the same revolutionary observing capabilities as GOES-16 (GOES-East) that assist in the monitoring and forecasting of weather. NOAA is investing in research to accelerate the advancement of modeling research into operations for improved warnings and forecasts through efforts that include development of the Next Generation Global Prediction System and other model coupling, data assimilation, and collaborative research efforts. NOAA is investing in research in support of the development of new features in, and services provided by, the National Water Model, a hydrologic model that simulates observed and forecast streamflow over the entire continental United States.

Question 1c. Has NOAA looked at permanently stationing aerial assets on the West Coast in order to better monitor and study Atmospheric Rivers?

Answer. Through NOAA Hydrometeorological Testbed, CalWater 2014, Calwater 2015, El Niño Rapid Response (ENRR) and other targeted field campaigns, NOAA has deployed aerial assets to better monitor and study atmospheric rivers and there now exists a wealth of observations spanning multiple years. NOAA and external partners are analyzing the multiyear data sets to determine the value of permanently stationing aerial assets on the west coast. Until these analyses are completed, it remains premature to make a determination on the added value of permanently stationing aerial assets on the West Coast to better monitor atmospheric rivers.

CLIMATE PREDICTION CENTER

Question 2. Better forecasts of precipitation a few weeks out (sub-seasonal forecasts) to a year out (seasonal forecasts) are critical to managing water more effectively in California. The Climate Prediction Center at NOAA produces sub-seasonal to seasonal (S2S) forecast for the Nation, including California.

There is increasingly intense competition for water in California among cities, farms, and fisheries, and California water managers need NOAA to place a higher priority on improving tools needed to help manage water more effectively in the face of this competition. This entails improving S2S forecasts, which means increasing the Climate Prediction Center's resources, not eliminating it.

Specifically, how will NOAA improve forecasting while merging the critical services of the Climate Prediction Centers with the Weather Prediction Center?

Answer. Under the fiscal year 2018 President's Budget, NOAA will create efficiencies by creating a single weather prediction center for all temporal scales. The integrated Weather Prediction Center will span the continuum of prediction services from the present through existing sub-seasonal and seasonal domains. While this will result in a more continuous suite of products, future advancements in 'week-two through seasonal' products and services will be affected.

HARMFUL ALGAL BLOOMS

Question 3a. Harmful algal blooms in both marine and freshwater threaten drinking water sources, cause human and wildlife illness and death, and can cause major fishery closures with severe economic impacts. Harmful algal blooms are a growing issue nationwide, particularly in California.

How does NOAA plan to increase inter-agency coordination and research needs to improve prediction and abatement of harmful algal blooms?

Answer. The primary, government-wide mechanism, through which NOAA is increasing inter-agency coordination, research, and planning is the Interagency Working Group for HABHRCA (IWG). NOAA co-chairs the IWG with the EPA. Since re-instituting the IWG-HABHRCA in 2014, NOAA has worked through the IWG to identify research priorities and gaps in Federal activities and capabilities, and has produced two interagency reports as directed by Congress.

NOAA routinely partners with Federal agencies to identify and address research needs related to HAB prediction, including when new needs emerge. Examples of these collaborations include:

1. Early warning of freshwater HABs: The Cyanobacteria Assessment Network involves research collaboration between NOAA, EPA, NASA, and USGS to detect HABs in freshwater lakes and reservoirs greater than 1km x 1km in size.

This satellite-based detection will enhance our ability to remotely monitor and predict freshwater blooms. The first national snapshot of freshwater HABs is anticipated by early 2018.

2. Forecasting HABs in Lake Erie: NOAA's Lake Erie HAB forecast relies on stream flow data from the USGS, weather, toxin sampling, and lake circulation models from NOAA, satellite data from NASA, monitoring and communication by EPA, with additional input from local partners.
3. Responding to HABs in Lake Okeechobee: NOAA supported EPA and local partners in the response to the July 2016 large cyanobacterial blooms in St. Lucie and Martin Counties. NOAA routinely provides imagery and can predict bloom trajectory as requested.

With respect to abatement, NOAA's Coastal Science and Assessment program funds development of promising technologies for preventing, controlling, or mitigating HABs and their impacts. In 2017, a NOAA-sponsored forecast (Pacific Northwest HAB Bulletin) helped Washington State to determine whether to open razor clam harvests, and to take the unprecedented step of increasing bag limits before toxin levels rose. In the Gulf of Mexico, NOAA funded development and deployment of an automated underwater microscope that alerts managers to rising levels of toxic algae. State agencies use these alerts to ensure the safety of seafood and recreation, and to investigate marine wildlife die-offs. Most NOAA efforts are partnerships that leverage funding and support from multiple Federal, State, academic, and other entities.

Question 3b. Communication to the public on these issues are also increasingly important. How does NOAA plan to improve public communication about this issue?

Answer. NOAA and its interagency partners are increasing the effectiveness and availability of public advisories and establishing more consistent communications for users. For example, NOAA issues a seasonal HAB forecast for Lake Erie each July that is similar to NOAA's seasonal hurricane and tornado forecasts. This year's forecast briefing in Ohio was attended by over a dozen media outlets with an additional 250 people participating in the accompanying webinar. The forecast was reported in the New York Times, Washington Post, and all major regional papers. During bloom season, NOAA sends twice-weekly HAB bulletins with 3- to 5-day forecasts of bloom location, concentration, and trajectory to more than 2,000 U.S. and 200 Canadian subscribers, including recreational and charter boaters, beachgoers, and water treatment managers.

When responding to a bloom, NOAA works with locally designated lead agencies to facilitate information flow between wildlife, veterinary, medical, and public health officials, and to disseminate information to the public via websites, press releases, and media events. NOAA's Phytoplankton Monitoring Network (PMN) engages hundreds of volunteers who monitor for phytoplankton and HABs in cooperation with trained scientists. NOAA's PNM website provides information on volunteering and training, a mobile app for species identification, access to monitoring data, and general information and news on HABs.

NOAA partners with communities to better understand socioeconomic and health-related impacts of HABs and hypoxia, and share that information with user groups. In 2018 NOAA anticipates supporting additional research on socioeconomic impacts of HAB forecasts and the cost-effectiveness of various mitigation approaches, which will help NOAA communicate with the public more effectively.

Question 3c. What efforts is NOAA undertaking to help determine sources for the harmful algal blooms and help other agencies develop best management practices to reduce these sources in both urban and rural areas?

Answer. NOAA's role in these activities varies by region. In Lake Erie, blooms are caused by excess phosphorus runoff from agricultural operations entering the lake from rivers. While NOAA does not regulate or manage the nutrients causing the problem, the HAB models funded and produced by NOAA are used to set regional nutrient reduction goals in the Great Lakes Water Quality Agreement. This agreement aims to achieve a 40 percent reduction in total phosphorus entering the western and central basins of Lake Erie. NOAA also contributes to nutrient monitoring to help States and counties determine if they are meeting their phosphorus reduction goals.

Along the West Coast, NOAA has invested heavily in research on bloom onset. HAB researchers in California were among the first to detect and understand the magnitude of the massive 2015/2016 West Coast bloom because they had deployed a high-tech armada of sensors as part of an ongoing NOAA-funded research project at the University of California, Santa Cruz. The university and its partners studied the role of upwelling and coastal land use patterns on the development of HAB hotspots along the California coast. The award was part of NOAA's Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) research program.

OCEAN ACIDIFICATION

Question 4. A recently released 3-year study by Oregon State University identified persistent, highly acidified stretches of water throughout the California Current System along the West Coast. In certain areas, pH levels were the lowest of any recorded in oceanic surface waters throughout the world. As atmospheric carbon dioxide continues to rise rapidly, these areas impacted by record levels of ocean acidification will continue to become even more acidified.

How is NOAA addressing this increasingly serious issue, and what additional funds are being devoted to studying and addressing ocean acidification?

Answer. Assessing the vulnerability of U.S. coastal ecosystems to the effects of ocean acidification is a primary goal for NOAA. NOAA works to determine how ocean chemistry is changing in response to acidification, evaluate the sensitivities of marine resources to these changes, and provide tools and information to impacted human communities. Ocean acidification is not the only change occurring in our Nation's ocean, and NOAA is also engaging in work that addresses the complexities of multiple aspects of ocean change.

Scientists expect ocean species and ecosystems to change with ocean acidification. NOAA funds research and monitoring to better understand the impacts of ocean acidification on species and ecosystems. This work includes how ocean chemistry changes will affect wild fisheries, which support industries and cultural practices intricately woven into the fabric of coastal communities and economies. NOAA funds laboratory research on commercially important species and fisheries forecasts. This research helps inform management of important fisheries such as the Alaska king and snow crab fishery. NOAA funding also supports educational opportunities to bring current research on ocean acidification and its potential impacts to fisherman throughout the U.S., from Alaska to the Gulf of Mexico.

Addressing ocean acidification requires collaboration of many stakeholders. NOAA is working with the aquaculture industry to help them monitor ocean chemistry conditions in their facilities and growing areas and to cultivate strains that are resilient under acidified conditions. Ocean acidification-related research and monitoring with the aquaculture industry helps managers make business decisions, while scientists learn from the data. NOAA also works closely with coastal State governments, many of which are now engaged in developing their responses to ocean acidification. NOAA also supports community-based efforts related to ocean acidification at a regional level through its founding (in concert with the Regional Associations of the Integrated Ocean Observing System) and investment in the country's six regional coastal acidification networks.

NOAA is a leader on ocean acidification nationally and internationally and is a trusted source of scientific information on the subject. NOAA helped launch and co-chairs the Global Ocean Acidification Observing Network and is the primary investor in and lead developer of the Ocean Acidification Information Exchange, a soon-to-be launched web-based collaboration site required by the Federal Ocean Acidification Research and Monitoring Act of 2009.

The fiscal year 2018 President's budget includes \$10 million for NOAA's ocean acidification efforts.

DRIFT GILLNETS AND DEEP SET BUOY FISHING GEAR

Question 5a. Secretary Ross, I was disappointed to hear that on June 9th, NOAA Fisheries announced its intention to withdraw a proposed rule that would place hard caps on the bycatch of protected species in the drift gillnet swordfish fishery. Hundreds of protected species, including critically endangered sperm whales, various pinnipeds, and the vulnerable leatherback sea turtle, are caught and killed annually due to current fishing practices that solely deploy miles long drift gillnets.

In response to this bycatch issue, in March 2014, the Pacific Fishery Management Council stated it would move toward a goal of developing a comprehensive plan to "transition the current drift gillnet fishery to a fishery utilizing a suite of more environmentally and economically sustainable gear types." Along with Senators Wyden and Boxer, I sent a letter applauding those efforts.

However, in June of 2015, the Council focused instead on hard caps for the use of drift gillnets. In a September 2015 letter, Senators Boxer, Wyden and I, once again, expressed our concerns to the Council and NOAA about the continued use of drift gillnets by the fishery, even with hard caps, and the need to move toward alternative, more sustainable gear, like deep-set buoys. As we noted, deep set buoy gear has been commercially deployed in the Atlantic swordfish fishery, tested in the Pacific, and proven to be successful at both limiting harm to other species and producing a high quality catch.

The resulting proposed rule was developed with significant public input and support from environmental groups as well as industry, and approved by the Pacific fishery management council. The Council then submitted the proposed rule to NOAA fisheries for approval and implementation. Per the Magnuson Stevens Act, the Secretary shall “approve, disapprove, or partially approve a plan or amendment” by written notice to the Council. The written notice of disapproval or partial approval shall specify: the applicable law with which the plan or amendment is inconsistent; the nature of such inconsistencies; and recommendations concerning the actions that could be taken by the Council to conform such plan or amendment to the requirements of applicable law. Further, “if the Secretary does not notify a Council within 30 days of the end of the comment period of the approval, disapproval, or partial approval of a plan or amendment, then such plan or amendment shall take effect as if approved.”

NOAA fisheries recently withdrew the hard cap rule citing that it was “unnecessary.” As withdrawal is not a procedural option in the Magnuson Stevens Act, do you consider this withdrawal to be a notice of disapproval?

Answer. The Pacific Fishery Management Council recommended revising the regulations implementing the existing Fishery Management Plan for Highly Migratory Species; the recommendation did not constitute a new plan or plan amendment. The Magnuson-Stevens Act provides that the Secretary undertake proposed and final rulemaking, and solicit public comment, before implementing such recommendations from fishery management councils. After issuing a proposed rule and requesting comment, the Secretary decided to withdraw the proposal in light of new information regarding economic hardships to American fishermen documented in the public comments received. The public comment caused NMFS to further analyze the costs and benefits of the proposal to the environment and the affected fishing industry in the context of the existing environmental protections afforded protected species under the Endangered Species Act and the Marine Mammal Protection Act. On June 9, 2017, the Regional Administrator for the West Coast Region provided a letter to the Pacific Fishery Management Council explaining the rationale for withdrawal of the proposal, and suggesting alternative paths that the Pacific Fishery Management Council might consider for improving management of the drift gillnet fishery. While NMFS did not characterize this decision as a “notice of disapproval,” the decision reflects a disapproval of the proposal, as informed by the appropriate public process and subsequent analyses.

Question 5b. Did you or your designee provide written notice to the Council concerning this rule withdrawal, and if so, did the written notice provide details, per the Magnuson Stevens act, regarding the applicable law with which the plan or amendment is inconsistent; the nature of such inconsistencies; and recommendations concerning the actions that could be taken by the Council to conform such plan or amendment to the requirements of applicable law?

Answer. Yes, NMFS provided written notice to the Pacific Fishery Management Council in the form of a letter delivered on June 9 2017. The letter explained the rationale, pursuant to the Magnuson-Stevens Act National Standard 7 (i.e., conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication) for concluding that implementing protected species hard caps for the drift gillnet fishery is not warranted at this time. The letter further noted that the purpose of the Council’s recommended hard caps was to conserve non-target species and further reduce bycatch in the fishery below levels currently permitted by applicable law, while maintaining or enhancing an economically viable U.S. West Coast-based swordfish fishery. NMFS advised that to meet this purpose, the Council could revise its proposed regulations so that any management action would not result in significant economic effects such as those that are expected during a fishery closure (e.g., through reduced time/area closures). As explained above, the Pacific Fishery Management Council’s recommendation was not in the form of a new fishery management plan, or amendment to a plan.

Question 5c. Per the Magnuson Stevens Act, without written notice, this proposed amendment would take effect as if it were approved. Can you explain why this should not be the case in this instance?

Answer. NMFS based its decision in part on comments received from the public on the proposal. Both Federal statute and standing executive orders compel executive agencies such as NMFS to consult the public on the costs and benefits of certain types of decisions. In this case, NMFS learned through public comment on the proposal that analysis supporting the proposed rule had not adequately considered short-term economic effects to American fishermen.

Question 5d. Use of deep set buoy gear has shown that it is not only profitable, but it also results in bycatch levels significantly below those of drift gillnets. Deep set buoys have also been tested with successful results in the Pacific fishery and

are already being considered in the Experimental Fishing Permit Process. Why hasn't this gear type been authorized for full use in the swordfish fishery?

Answer. The Pacific Fishery Management Council is developing alternatives to authorize deep set buoy gear as a legal gear type. These alternatives include gear definition, geographic area, permitting, gear tending requirements, and species retention. The Pacific Fishery Management Council is scheduled to make a final recommendation to authorize the gear to NMFS as early as June 2018. In the meantime, NMFS has issued and is considering issuing additional Exempted Fishing Permits to use the gear to collect additional data to inform the Pacific Fishery Management Council's decisionmaking process. Once the Pacific Fishery Management Council makes its final recommendation, NMFS would then propose regulations to authorize the fishery.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER A. COONS
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

Question 1. The Atlantic hurricane season just started, and the question during hurricane season is not if there will be a hurricane, it's when and where hurricanes will hit. Forecasters at NOAA say that we could see an above average number of hurricanes this year. Yet the administration's budget request makes cuts to programs that help us predict hurricanes, such as the National Weather Service, satellite programs, and ocean observation. The budget request also makes dramatic cuts to the foundational research that supports the Weather Service's predictions. Finally, the budget request eliminates Coastal Management Grants and other programs that help prepare our coasts for hurricanes by building resiliency.

What are you doing to ensure that these proposed cuts will not have an adverse effect on our ability to prepare for and respond to natural disasters?

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. NOAA is prioritizing functions that provide the observational infrastructure, capabilities, and staff to produce timely and accurate weather forecasts and warnings for the protection of life and property as well as make communities resilient to weather extremes. NOAA is also continuing to operate critical facilities, such as the National Hurricane Center, at the same funding levels and provide the same excellent service for analyzing and predicting the development and movement of tropical cyclones. The addition of new sensing sources, such as the GOES-16 weather satellite, will provide even more clarity for observing the vast tropical oceans. NOAA is supporting community resilience efforts through technical assistance activities of the National Coastal Zone Management Program. The technical assistance activities include providing observations data, decision support tools and training to State and local decision-makers to help them improve the resilience of their coastal communities and economies.

Question 2. In addition to the budget cuts, there is currently no director of NOAA. In the event of a hurricane or other natural disaster, there is serious concern that NOAA's hard-working civil servants, who are critical to protecting human lives, will not know what tools they will have or even who is in charge.

How can you assure the American people that this lack of leadership will not impede NOAA from providing critical information at a time when a difference of minutes can save lives?

Answer. NOAA has and will continue to provide the American public with the science, products, and services needed to protect life and property, the Nation's natural resources, and the economy. This includes the dissemination of timely and accurate forecasts and warnings for natural disasters, including hurricanes. In fact, this year NOAA's National Hurricane Center has launched a variety of new and improved products and services. NOAA also coordinates closely with other Federal agencies (such as FEMA) and States to help provide real-time weather information to the public.

Question 3. The administration's budget calls for the elimination of the National Estuarine Research Reserve System (NERRS), a savings of \$23 million. Congress created this program in 1972 because of the national interest in the coasts, both economically and environmentally.

The research reserves are critical coastal areas for protecting communities against storms and floods, especially along the eastern seaboard and Gulf of Mexico. \$625 million in property damages were avoided during Hurricane Sandy due to coastal wetlands, including ten reserves, protecting property and over 1,300 miles of roads.

Research reserves also provide protection and management of estuaries that keep commercial and recreational fishermen successful around the country. The NERRS contributes billions of dollars to the shellfish and seafood industries in States with a reserve and tens of billions of dollars to ocean-dependent industries along our coasts.

The NERRS is matched by State funds annually, leveraging an average of \$22 million in additional funds each year. If NERRS funding is eliminated, we will lose the great local return on investment and use of public land that happens when NOAA invests in reserves.

Please provide an explanation of how the benefits of NERRS spending—including contributions to coastal industries, protecting the safety of coastal communities, and avoiding significant property damage or emergency spending—were accounted for in the decision to eliminate NERRS funding.

Answer. The President's fiscal year 2018 Budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. To meet these goals, some difficult decisions needed to be made, including the decision to terminate Federal funds for this program.

Question 4a. NOAA Navigation Services Offices provide critical information to commercial vessels and other boat owners. For example, ships coming into and out of the Port of Wilmington and other ports around the country rely on the Office of Coast Survey to provide up-to-date charts and survey information. These ships also rely on the Physical Oceanographic Real-Time System (PORTS) for tide and current information. The budget for PORTS, like much of Navigation Services, has not increased in years.

With ships becoming larger, more ships transiting the Delaware River and other waterways throughout the country, and more demands on PORTS from commercial and military vessels, how do you expect to keep up with the needs of users?

Answer. NOAA will continue to support PORTS® in existing locations within the resources requested in the President's budget. When the program reaches the limits of its capacity to support new systems, NOAA will continue to maintain services in areas that PORTS® already serves while exploring alternative cost share models with future partner entities that wish to initiate operations in new locations.

Question 4b. Given these increased pressures, do you expect a future budget increase for Navigation Services?

Answer. The fiscal year 2018 President's budget does not request a budget increase for NOAA navigation services. Future budget requests will balance all mission requirements, administration priorities, and fiscal policy across the Federal Government.

U.S. PATENT AND TRADEMARK OFFICE.

Question 5. When we met, we discussed the importance of a strong patent system to a dynamic and growing economy. I note that the budget for the U.S. Patent and Trademark Office (USPTO) states that the biggest problem facing the patent system is abusive litigation. While abusive litigation should not be tolerated, I think there are other, greater problems.

Would you agree that the design of USPTO's post-issuance review proceedings, which lead to a devaluation of patent rights that has hurt small businesses, is also a major challenge that needs to be addressed?

Answer. While I cannot agree that USPTO's post-issuance review proceedings have hurt small businesses, I do agree that a challenge exists for USPTO to listen carefully to its stakeholders for input and continue to work to further refine those proceedings to ensure fairness and effectiveness for all parties while meeting all congressional mandates. USPTO's post-issuance proceedings were established by Congress to serve as less costly and more efficient alternatives to litigation on issues of patentability. As a general matter, I believe they have worked well, consistent with Congressional intent. USPTO has continually sought input from its stakeholders and made changes through rules to improve the proceedings when appropriate and will continue to do so.

Question 6a. Recently, there has been an effort at the Department of Commerce to set up new "backbone" shared services for human resources, information technology, acquisitions, and procurement for all of Commerce's bureaus, referred to as "Enterprise Services." I understand how this consolidation effort might lead to better services and lower costs for many of the bureaus within the Department of Commerce, especially the smaller ones, and I commend efforts to find cost savings. That said, I have yet to see a business case being made for the USPTO's participation because it is primarily a fee-funded agency that has unique needs compared to the rest of Commerce and has recently spent significant resources in upgrading many

of its systems. In fact, during the March 2017 meeting of the Patent Public Advisory Committee (“PPAC”), a representative for the USPTO stated that the USPTO was being asked to contribute as much as \$13 million during fiscal year 2017 to Enterprise Services and also represented that the USPTO did not anticipate being able to opt in to any of these newly-created services. I note that this same concern and a request for a cost-benefit analysis was expressed by members of the House Judiciary Committee in a letter sent in July 2016 and signed by Chairman Bob Goodlatte, Darrell Issa, Chairman of the Subcommittee on Intellectual Property as well as Representatives Mimi Walters, Zoe Lofgren, and Suzan DelBene.

Can you explain the rationale for having the USPTO contribute to the ongoing setup costs of enterprise services given that the USPTO has represented that they do not currently plan on using these services?

Answer. The USPTO’s leadership has supported the Enterprise Services initiative and currently uses a number of its services (outlined at the end of this paragraph). USPTO leadership has voted to fund and support shared services during official Departmental Management Council votes, supported enterprise services through past payments into the initiative, and reiterated its support through written confirmation of its continued participation. The USPTO, akin to all Bureaus, faces administrative costs which are necessary for the USPTO to achieve its mission. However, with appropriate investments, the USPTO will be empowered to minimize its operating costs for administrative functions by over \$47 million annually (34 percent reduction) in fiscal year 2022. To realize decreased operating costs, the USPTO must pay for its proportionate share of the investment. Additionally, USPTO already uses outside providers for a significant portion of its back office functions, including HR. This can be seen in the USPTO’s current active procurement request for an outside vendor to support their HR needs.

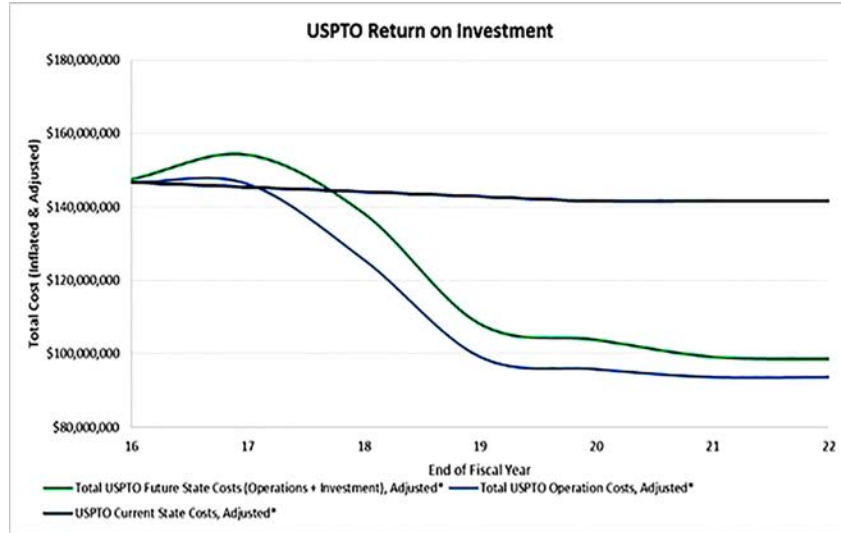
As for the provision of services, the USPTO is currently using several of ES’ services. ES manages the Department’s human resources management system, and is in the process of transitioning Learning Management System (LMS) Support from NTIS to continue providing support after the current expiration in November, 2017. The USPTO is a user of both those systems. Further, the USPTO is one of the largest users of the Department’s strategic sourcing program, which ES manages, having avoided an estimated \$9.3M in costs in fiscal year 2016 alone by leveraging the buying power of the entire Department.

Question 6b. Does Commerce have any analysis demonstrating whether and to what extent the USPTO is projected to have a net savings of money under Enterprise Services? If the answer is yes, please provide a copy of that analysis.

Answer. Prior to the launch of the Enterprise Services initiative, a comprehensive current state assessment was conducted to evaluate a case for implementing a shared services model at the Department of Commerce. As part of this assessment, focus groups, customer satisfaction surveys, and stakeholder interviews were conducted across all Bureaus. The current state assessment revealed significant challenges across the Department in three main areas: mission focus, performance management, and customer experience.

The current state assessment revealed the qualitative benefits each Bureau at the DOC could realize through implementing a shared services model. Additionally, a detailed financial analysis was conducted to examine the financial impact to transitioning the Bureaus to ES. The analysis contained data from all Bureaus, and demonstrated a compelling case for the Department to move to a multi-function, enterprise-wide shared services model by revealing both significant operational cost savings and increased indirect cost avoidance. Although inputs from all Bureaus were incorporated into the qualitative and quantitative aspects of the business case, individual cases, for each Bureau, were not crafted at the time.

ES continues to refine its analysis as ES learns new information and developments occur. ES conducted a financial analysis of the 7-year plan for the USPTO portion of the Enterprise Services Project. Based on ES’ financial analysis, with the USPTO’s participation, the Department expects a 34 percent operating cost savings in fiscal year 2022. By contributing the necessary investment costs to participate in ES, the USPTO could see more than \$47 million in annual operating cost savings by fiscal year 2022, enabling the USPTO to pass these savings on to their customers through reduced fees charged for Patent and Trade Mark services. As such, it is in the best interest of the USPTO’s customers and stakeholders for the USPTO to participate in ES. The following graph and table show the expected ROI analysis specific to the USPTO.



Category *	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022
Current Operating Costs	\$146,679,000	\$145,394,000	\$144,122,000	\$142,860,000	\$141,609,000	\$140,370,000	\$139,200,000
Future Operating Costs	146,679,000	144,608,000	125,687,000	99,230,000	95,876,000	92,889,000	91,600,000
Investment Costs	816,000	7,640,000	12,112,000	5,038,000	3,833,000	1,750,000	950,000
Operating Cost Variance	0	-786,000	-18,435,000	-43,630,000	-45,733,000	-47,481,000	-47,503,000
Operating + Investment Cost Variance	816,000	6,854,000	-6,323,000	-38,592,000	-41,900,000	-45,731,000	-46,650,000

* Costs are adjusted for inflation and discounted to NPV.

There are several specific instances where ES provides a compelling financial benefit to the USPTO. For example, the USPTO has shared its current costs for PAR processing and talent acquisition services, at a unit cost of \$102 and \$3,952, respectively. This is higher than the actual prices charged by ES. For PAR processing, ES charges \$78.22/PAR for its current customers (NOAA and six of the smaller Commerce bureaus). All bureaus are charged the same unit cost, so the USPTO would realize 23 percent savings per PAR by transitioning to ES. The HR services provider has also contractually committed to bringing this cost down over the next 3 years, increasing the savings to the USPTO. At the USPTO's fiscal year 2016 PAR count of 71,000, the USPTO would save a minimum of \$1.7M annually by participating in ES PAR Processing services.

Although ES has not fully finalized pricing for Talent Acquisition, ES is close to finalizing a price range with the HR services provider. This range would offer the USPTO savings over its current Talent Acquisition costs. Additionally, ES anticipates that the USPTO will realize the savings (on average, 15 percent estimated operational cost savings) for each of the mission-enabling services provided.

Question 6c. During the PPAC meeting, the USPTO representative stated that the USPTO was paying a "pro rata" share of standing up Commerce's shared services. How is this "pro rata" rate determined (i.e., is it based on overall budget, relative size of the bureau, or some other factor?), and what are the contributions-to-date of the other bureaus, and from what source? How much is the Department of Commerce itself contributing?

Answer. Enterprise Services is ultimately managed by the Enterprise Services Governance Board (ESGB). The Governance Board for ES provides active oversight and governance of ES and makes key project-wide decisions. It is comprised of a senior leadership team, consisting of the lead operational managers of each Bureau, including the USPTO. The current USPTO member is the Acting Deputy Director of the USPTO. All ES scope and service decisions are made by the ESGB.

One of the areas in which the ESGB managed Enterprise Services was with the chargeback methodology for the Bureaus. The ESGB determined that all Bureaus would pay a proportionate share of the initial stand up of Enterprise Services, after which time—once service delivery begins—each Bureau pays only for those services it receives. In evaluating these different methodologies and determining this approach, it was determined that investment costs should be proportionately supported by Bureaus through an FTE proration, while specific transactions would be billed their specific costs as negotiated through competitive vendor arrangements.

This was agreed-upon as the best method to allocate investment costs that span the plethora of future ES services. Specifically, the ESGB agreed to utilize an FTE-based method for the investment costs of Enterprise Services. The USPTO employs ~12,800 FTE of the Department's ~49,000 FTE, therefore the USPTO amounts to ~29.1 percent of the Department's ES investment costs. The USPTO's portion of investment costs are detailed below.

However, service costs are charged on a usage basis. HR transactions delivered by ES are charged using a per-transaction cost. Acquisition services are charged as a small percentage of dollars obligated relative to each specific transaction; the percentage charged by ES is actually 1.5–5 percent below comparative service providers. Nevertheless, all costs associated with ES are directly aligned to supporting the administrative functions and ultimately minimizing the costs that each Bureau will pay.

With respect to support, the USPTO, akin to its sister Bureaus, agreed in fiscal year 2015 that it would help fund the initial investment needed to stand up ES, with the understanding that the USPTO would eventually transition to ES. As such, the USPTO contributed \$7.6M in fiscal year 2016 to help stand-up ES operations and receive services. Then, in fiscal year 2017, the USPTO was asked by the Department to contribute \$12 million to fund its fair share of ES investment needs; the USPTO has already paid \$4.3M of that \$12 million.

Specifically, as the 3rd quarter Enterprise Services Quarterly Report To the Senate Committee on Appropriations, Subcommittee on Commerce, Justice, Science (CJS) and Related Agencies shows, Bureaus have paid the following into the Working Capital Fund and Direct Bill:

WORKING CAPITAL FUND

[\$ in Thousands]

BUREAU	Fiscal Year 2016 WCF Total	Fiscal Year 2017 WCF Total	First Quarter YTD	Second Quarter YTD	Third Quarter YTD	Fiscal Year 2017 Balance
Office of the Secretary	162	1,493	65	715	1,239	254
ITA	816	1,241	211	458	601	640
EDA	107	195	38	66	92	103
NTIA	253	463	97	159	218	245
NTIS	100	251	23	50	75	176
CENSUS	5,197	8,799	2,619	3,502	4,651	4,148
ESA/BEA	257	461	103	163	228	233
NOAA	6,674	10,599	2,916	4,239	5,629	4,970
NIST	1,811	2,860	672	1,169	1,563	1,297
MBDA	37	62	12	23	31	31
BIS	210	407	75	123	170	237
OIG	93	151	36	55	75	76
PTO	6,359	9,704	2,554	3,764	5,040	4,664
WCF	3,000
TOTAL	25,076	36,686	9,421	14,486	19,612	17,074

DIRECT BILL¹

(\$ in Thousands)

BUREAU	Fiscal Year 2016 Direct Bill Total	Fiscal Year 2017 Direct Bill Total	First Quarter	Second Quarter	Third Quarter	Fiscal Year 2017 Balance
Office of the Secretary	58	368	0	42	0	326
ITA	80	627	0	0	0	627
EDA	13	92	0	13	0	79
NTIA	29	199	0	29	0	170
NTIS	10	36	0	0	0	36
CENSUS	391	2,695	0	329	0	2,366
ESA/BEA	32	137	0	0	0	137
NOAA	829	5,797	0	0	0	5,797
NIST	205	975	0	0	0	975
MBDA	4	28	0	0	0	28
BIS	25	177	0	0	0	177
OIG	11	35	0	0	0	35
PTO	816	2,413	0	816	0	1,597
TOTAL	2,503	13,579	0	1,229	0	12,350

¹ Fiscal Year 2017 Direct Bill totals are subject to change depending on when service delivery begins for each Bureau, and on of final pricing from Accenture Federal Services for those services that have not yet begun.

QUESTIONS SUBMITTED BY SENATOR BRIAN SCHATZ

NOAA TSUNAMI PROGRAM

Question. The President's fiscal year 2018 budget request decimates tsunami preparedness: no funding for the National Tsunami Hazard Mitigation Program; elimination of funding for DART buoy moorings; and an \$11 million cut to the tsunami program itself. The budget further acknowledges that "Warnings will still be issued; however timeliness and accuracy will be reduced." Please explain the rationale for these severe cuts to a program that provides critical support for the National Weather Service's core mission: saving lives and protecting property.

Answer. The Department's fiscal year 2018 request prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. NOAA will prioritize NWS functions that provide the observational infrastructure, capabilities, and staff to produce timely and accurate weather forecasts and warnings. These tsunami reductions reduce the scope and operations of observations platforms and the tsunami program, while maintaining most core functions. Without DART data, tsunami amplitude forecasts will be derived from seismic analysis. This termination is anticipated to have a 20 percent or greater impact on the accuracy, certainty, and timeliness of NOAA's tsunami watches and warnings.

The proposed budget ends National Tsunami Hazard Mitigation Program (NTHMP) grants to States. However, NOAA will maintain \$8.5 million in other tsunami program components to continue watches, warnings and advisories from a single national center. In addition, NWS and NTHMP would continue the TsunamiReady program at a reduced level. TsunamiReady is a voluntary community recognition program that promotes tsunami hazard preparedness as an active collaboration among Federal, State, and local emergency management agencies, community leaders, and the public.

NOAA also anticipates working in close coordination with other Federal agencies, such as the U.S. Geological Survey, to continue monitoring and detection efforts.

NOAA COASTAL PROGRAMS

Question. The President's budget eliminates funding for the National Estuarine Research Reserve System, and Coastal Zone Management Act implementation. These programs offer Federal support for States to manage their coastal areas better against hazards such as flooding and storms. As a fellow coastal resident, why are you cutting coastal management funds when they are most needed?

Answer. The President's fiscal year 2018 Budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the coun-

try to a sustainable fiscal path. To meet these goals, some difficult decisions needed to be made, including the decision to terminate these programs.

The President's fiscal year 2018 Budget recommends reducing funding support and other assistance for external grants on a government-wide basis.

NOAA stands ready to provide technical assistance to States on coastal management and other issues, as requested.

NOAA SCIENCE AND RESEARCH

Question. The President's budget proposes severe cuts to NOAA's science and research budget by eliminating funding for the Sea Grant program, cutting \$30 million from atmospheric research, and cutting \$16 million from Oceanic Exploration and Research. These cuts jeopardize America's worldwide scientific leadership, and threaten the research advances that lead to better forecasts. Please explain the rationale for cutting support for the research and science that help to drive our economy.

Answer. The administration's 2018 Budget prioritizes rebuilding the military and making critical investments in the Nation's security. It also identifies the savings and efficiencies needed to keep the Nation on a responsible fiscal path. To meet these goals, some difficult decisions needed to be made. The administration prioritized programs that provide a good return for the taxpayer, as well as those that serve the most critical functions, while consolidating or eliminating programs.

NOAA will preserve many of its climate and weather research functions, including observations and modeling at NOAA laboratories, which advance NOAA's forecasting capabilities.

The Department of Commerce's fiscal year 2018 request of \$19.4 million for Ocean Exploration and Research (OER) is consistent with the funding levels requested for the OER program in each of the past 3 years. With these funds, NOAA and OER will continue to carry out missions to evaluate new marine resources, participate in the Extended Continental Shelf (ECS) mapping effort, and explore uncharted and little-known ocean areas. Reductions in the number of missions and mapping efforts will occur, however NOAA will prioritize and focus on the activities that provide the most support for the Nation's security, economy, and environmental health.

NIST CYBERSECURITY

Question. The NIST Cybersecurity Framework is the global standard for cybersecurity risk management and is a key focal point of the President's recent executive order on Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure. The Department of Commerce's budget request reduces funding for cybersecurity activities at NIST by \$5.9M and 24 FTEs. Rather than eliminate, would you support reallocating these funds to the implementation of the NIST Cybersecurity Framework?

Answer. Cybersecurity remains a priority for NIST and the Department of Commerce. The fiscal year 2018 budget request reflects the administration's priority to rebuild the military, make critical investments in the Nation's security, and keep the Nation on a responsible fiscal path. NIST plans to continue to support the Cybersecurity Framework and related activities by reprioritizing its cybersecurity resources within the funding levels requested in the budget.

CENSUS FUNDING

Question. The President's fiscal year 2018 budget request, while a 2 percent increase over fiscal year 2017 Omnibus level, is nearly \$140 million less than the fiscal year 2017 request. At the same time, the Census Bureau has decided to cancel two of the three end-to-end test sites set for fiscal year 2018, one in Washington State and one in West Virginia. This comes after the Census Bureau cancelled field test operations in Puerto Rico, South Dakota, and Washington State in fiscal year 2017. By cancelling testing in a diverse cross section of the country, you risk undercounting significant portions of America, including rural, Tribal, and minority communities. How will the Census Bureau ensure that all Americans are counted accurately without adequate testing? If the cancellations are related to the reduced fiscal year 2018 budget request, would you support reallocating funds to ensure adequate testing for the 2020 Census?

Answer. The Department of Commerce leadership is fully committed to a fair, accurate, and complete 2020 Census, and this is the number one goal of the Census Bureau. The modernization effort allows the Census Bureau to prioritize its resources to the parts of the country with higher degrees of nonresponding households to ensure they are counted. The fiscal year 2018 request supports this commitment.

The 2020 Census has already extensively tested throughout the decade, more so than the 2010 Census. The Census Bureau plan for modernizing the 2020 Census was to start early in the decade on an ambitious research and testing program that would allow them to research many potential innovations for the 2020 Census and test their impact on Census operations and data quality through a series of major field tests. The Census Bureau has conducted these tests throughout the decade, with major field tests of various operations in 2014, 2015, 2016, and 2017, and is about to begin the final major field test, the 2018 End-to-End Census Test. The Bureau is confident in its ability to successfully conduct this test, as it has learned invaluable lessons from each test in the robust series of field test throughout the decade. As the Census Bureau prepares for the 2018 End-to-End Census Test, it continues to refine operations and systems based on these tests.

The aspects of the design that are helping to ensure data accuracy in the 2020 Census have been and will continue to be tested. The 2017 Census Test included and the 2018 End-to-End Census Test and the 2020 Census will include a re-interview component, which will help to ensure quality in the data collected by our field staff. The Census Bureau has brought in private sector experts in the area of fraud detection to ensure utmost data accuracy amongst all responses and response modes. Additionally, the 2020 Census nationwide partnership program, which is already underway, is vital to counting everyone, as it will have trusted community partners nationwide encouraging their community members on our behalf to respond to the 2020 Census.

For the 2018 End-to-End Census Test, the final major field test before the 2020 Census, the Census Bureau has made decisions that will prioritize the readiness and testing of its integrated system-of-systems in the field in a Census-like environment. The lessons learned from how these systems interact with each other, with the operations being tested, and, where relevant, with the field staff and residents in the test sites, will be invaluable to finalizing the operational plan and putting the finishing refinements on the systems in advance of the 2020 Census.

The 2018 End-to-End Census Test begins in August 2017 with the address canvassing operation. The plan for the address canvassing portion of the 2018 End-to-End Census Test includes three sites: Bluefield-Beckley-Oak Hill, West Virginia; Providence County, Rhode Island; and Pierce-County Washington. Collectively these three diverse sites will help the Census Bureau gain invaluable experience in conducting the challenging process of building the address list across a wide area of physical geography, housing structures, and residence types.

Following the conclusion of address canvassing operations in early October 2017, the Census Bureau plans to proceed with the remaining operations in scope for the 2018 End-to-End Census Test in Providence County, Rhode Island. Peak operations will commence in March 2018. Providence County is an ideal microcosm of the 2020 Census experience, as its demographics mirror those of the Nation. As such, the Census Bureau remains confident that the 2018 End-to-End Census Test is sufficiently robust to test the systems that support the 24 key operations that will must assessed in a field test prior to the 2020 Census. The systems supporting 11 operations that are not included in the 2018 End-to-End Census Test will be thoroughly tested in fiscal year 2018 and fiscal year 2019 prior to their deployment..

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN, III

COLLABORATION WITH OTHER FEDERAL AGENCIES ON THE RURAL ECONOMY

Question 1a. Mr. Secretary, the administration has proposed a major re-organization of USDA's Rural Development portfolio, a move that would have considerable impact on rural housing and community development. Many of the Senators on this Subcommittee recently wrote to the President expressing our concern about this re-organization. Similarly, within the Department of Commerce, EDA, NIST/MEP, MBDA are being eliminated. These programs provide significant support to rural development and its industrial base. At the rural levels, many communities utilize funds from HUD, DOC, USDA, Treasury, private philanthropy to implement projects and programs.

Is DOC working with the States and affected communities to fill the gap when its funding goes away, from vital efforts such as those at EDA?

Answer. There is a plethora of State, local and regional programs and initiatives, including foundations and other public-private partnerships, with resources to support these types of development efforts. Moreover, the President's plan to boost the entire economy through regulatory reform, unleashing energy resources, trade re-

form and tax cuts for businesses and individuals will result in a greater amount of resources for these entities to invest in such efforts.

Question 1b. At the Secretarial level, do you work with Secretary Carson, Purdue and others to assess the best ways for the administration, as a whole, to effectively serve rural and underserved areas meet their housing, community development, and infrastructure needs?

Answer. The Department of Commerce works with Secretary Carson, Purdue and others through the President's Interagency Task Force on Agriculture and Rural Prosperity. The purpose of the task force is to identify legislative, regulatory, and policy changes to promote in rural America agriculture, economic development, job growth, infrastructure improvements, technological innovation, energy security, and quality of life, including changes.

WEATHER READINESS

Question 2a. In June 2016, West Virginia suffered a historic and catastrophic flooding event in the southern part of my State. Our emergency manager reported that the warning from the National Weather Service came about an hour before the deluge started. We had whole towns submerged, shoppers were stranded in malls. There is video on the Internet of houses floating off their foundations and being carried down creeks. I am concerned that the cuts to the NOAA satellite budgets may make us more vulnerable. For many years, the Congress has worked with NOAA to re-build the polar-orbiting constellation that supports the Nation's weather enterprise.

Additionally, our Armed Services worldwide absolutely depend on NOAA satellites to support their strategic and tactical operations and would be tremendously harmed if there was a gap in coverage from the geostationary and the JPSS polar-orbiting satellites.

What is the rationale for reducing the funding for NOAA's polar satellites and potentially placing U.S. citizens at home, and our military men and women here and abroad to gaps in coverage?

Answer. The President's fiscal year 2018 budget prioritizes programs that support national security, public safety, and economic opportunity, while returning the country to a sustainable fiscal path. The fiscal year 2018 requested funding level will allow for the continued development of the Polar Follow On (PFO) satellite instruments in a manner that maintains the cost efficient synergies with the JPSS-2 satellite. Concurrently, NOAA is conducting an overall re-plan of the PFO program that seeks additional cost efficiencies, manages system technical risks, and leverages additional partnerships.

Question 2b. Please provide a detailed explanation of the increased risk of a gap in coverage and the increased costs that the U.S. citizens will need to accept with this revised launch plan for the JPSS 2, 3, & 4 satellites.

Answer. JPSS-2 development has been given priority in the fiscal year 2018 President's Budget, and its launch date will not be affected by the budget request. The fiscal year 2018 President's Budget provides funding to continue JPSS-3 and -4 instrument development. Any potential effects on the risk of a gap or additional life cycle costs will be evaluated as part of the re-plan of the PFO program.

Question 2c. What is the basis for depending on commercial interests to provide data when no commercial entity has yet demonstrated that they are capable of meeting the government's operational weather data requirements?

Answer. Given that no commercial entity has yet demonstrated the capability of meeting NOAA's operational space-based weather data requirements, NOAA is not depending on commercial sources of space-based data to meet operational requirements.

The NOAA Commercial Space Policy calls for NOAA to undertake demonstration projects as appropriate to assess the viability of assimilating commercial data into NOAA meteorological models. The NESDIS Commercial Space Activities Assessment Process calls for these demonstration projects to be completed prior to any decision to purchase commercial data for operational use, and includes the following data evaluation criteria: Value (Concept legitimacy, accuracy, quality, timeliness, reliability, and validity), Cost Effectiveness (cost/value balance, availability, sustainability and support) and Exploitability (comprehensiveness, security and downstream use).

Over the past 2 years, NOAA has actively engaged with the commercial sector to understand how NOAA could benefit from the capability of industry to deploy and operate radio occultation (RO) instruments on their own satellites. The commercial data NOAA has purchased thus far through Round 1 of the Commercial Weather Data Pilot (CWDP) demonstrates that the commercial sector can provide RO data,

although Round 1 has not provided the quality or quantity of data necessary to support a decision on procuring commercial data for operational use.

Evolving vendor capabilities indicate that there is value in a second CWDP round of RO data purchases and evaluation. Round 2 will extend the work of the CWDP Round 1 by levying more stringent requirements upon vendors (e.g. data security, timeliness, availability) with the aim of assessing the potential for use in numerical weather prediction.

In addition to RO, NOAA will continue to explore the utility of other commercial data as the industry develops while also maturing NOAA's internal capability to use diverse commercial data sources operationally.

Question 2d. What types of coordination do you and Secretary Mattis have in place to ensure that our military men and women's global weather satellite data needs are taken into account when the funding and planning timeliness for NOAA satellites are being finalized?

Answer. NOAA does not have direct coordination with the Secretary of Defense as the space-based weather mission for the Department of Defense (DoD) is delegated to the U.S. Air Force (USAF). On January 9, 2017 the NOAA Administrator and the Secretary of the Air Force signed a Memorandum of Agreement (MOA) for Interagency Cooperation on Collection of Space-Space Based Environmental Monitoring (SBEM) Data (see BELOW).

THIS IS UNCLASSIFIED

MEMORANDUM OF AGREEMENT
BETWEEN THE UNITED STATES AIR
FORCE (USAF) AND
THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
(NOAA) FOR
INTERAGENCY COOPERATION ON COLLECTION OF
SPACE-BASED ENVIRONMENTAL MONITORING (SBEM)
DATA

This is a Memorandum of Agreement (MOA) between the USAF and the NOAA. When referred to collectively, the USAF and the NOAA are referred to as the "Parties."

1. AUTHORITIES: The Parties enter into this support agreement under the Economy Act; 31 U.S.C. §1535, as amended. Specific requests for interagency acquisitions or other instances of support will be documented through annexes to this agreement. An annex is defined as a detailed agreement between the Parties to accomplish specific interagency support that is within the scope of this overarching MOA. Annexes are subject to all provisions of this MOA and shall state such in their introductions. Any interagency acquisitions arising from this MOA shall comply with the requirements of Subpart 17.5 of the Federal Acquisition Regulation and shall be supported by a properly executed Determinations and Findings.

2. PURPOSE:

2.1. This MOA establishes overarching policies for reimbursable support between the Parties on a range of matters including, but not limited to, transfer of materiel assets, engineering support for development and installation of equipment, satellite operations, and collection of SBEM data by U.S. Government, international, and commercial environmental satellites to support operations and research. These matters may require domestic and international partnership efforts to ensure the USAF and NOAA have sufficient access to atmospheric, oceanographic, land surface (e.g., soil moisture), and space environment data, remotely sensed, and *in situ* in the case of space environment data, to support their operations. This agreement enables a broad range of mutually beneficial support activities between the Parties.

2.2. This MOA is not intended to preempt or foreclose any ongoing or established arrangements or agreements between the Parties. Such agreements will remain in effect until revised, rescinded, or expired pursuant to the terms of the individual agreement. It is intended to establish a mechanism through which the Parties may continue to pursue mutually beneficial interagency support and efforts, and to solidify oversight and execution plans for the same. The Parties intend that current and future SBEM data collection agreements between the Parties be incorporated as annexes to this MOA.

2.3. No subsidiary agreement under this provision will provide reimbursement for services, acquisitions, or activities over which the requesting party has mission responsibility under their organic statutes or for which it has otherwise received appropriations to execute.

3. REQUESTING ASSISTANCE:

3.1. Either party may request coordination of SBEM efforts (non-reimbursable) through a memoranda of understanding (MOU) or exchange of letters. Both Parties will:

3.1.1. Cooperate in mutual areas of interest and share data, information and findings of mutual concern;

3.1.2. Establish specialized working groups of personnel, when necessary or expedient, to conduct studies, develop plans and provide program implementation guidelines for specific SBEM data collection program areas as required; and

3.1.3. Cooperate and support the operation of program activities, technology applications, development and related work pertaining to cooperative activities pursued under this MOA.

3.2. Either party may request reimbursable SBEM assistance under this agreement for support of the following activities: (1) acquisition or transfer of equipment or assets; (2) data, data collection and data collection services; and (3) support services pertaining to engineering, research, satellite operation, acquisition, equipment installation or maintenance, or similar SBEM associated activities.

3.3. The Party requesting support (requesting agency) shall:

3.3.1 Identify the SBEM support, assets, and/or assistance needed from the other party;

3.3.2 Submit a letter requesting support under this agreement, providing all pertinent requirements, to the other party;

3.3.3 If the other party can support the request, draft an annex to this MOA for mutual coordination and execution;

3.3.4. Ensure full funding is available for obligation prior to execution of any reimbursable support annex;

3.3.5 Provide necessary funding information and certifying official required for prompt payment via Intra-Governmental Payment and Collection System;

3.3.6. Notify the Party supplying support of the receipt and acceptance/non-acceptance of that support. The requesting party shall report any noted deficiencies promptly and work with the supporting agency to resolve the matter in accordance with the governing annex; and

3.3.7. Provide prompt reimbursement for any accepted support upon receipt of an itemized statement from the supporting Party in accordance with the governing annex.

3.4 The Party providing support (supporting agency) shall:

3.4.1. Upon receipt of a request for support, determine whether the agency can satisfy the requesting Party's request under this agreement;

3.4.2. Provide an estimated cost of the requested SBEM services, assets, or other support to requesting Party. Identify and document the basis for any fees to be charged for support;

3.4.3. Provide pertinent funding information;

3.4.4. Coordinate on and execute a reimbursable support annex pursuant to the agreement;

3.4.5. Promptly address service, asset or other support acceptance issues or deficiencies on behalf of the requesting party in accordance with the governing annex;

3.4.6. Pay contractor, personnel, asset or other costs for support and present an itemized invoice to the requesting party for reimbursement of such costs pursuant to the governing annex.

4. NATURE OF THE AGREEMENT: Each party to this agreement is independently responsible for budgeting, funding and providing the services described herein. However, all commitments made in this MOA are subject to the availability of appropriated funds and each party's priorities. Nothing in this MOA, in and of itself, obligates any participant to expend appropriations. Any endeavor involving reimbursement or contribution of funds between the participants to this MOA will be handled in accordance with pertinent legal authorities, and will be subject to separate, subsidiary support agreements (annex) with reimbursements executed via Military Interdepartmental Purchase Requests.

5. GENERAL PROVISIONS:

5.1. POINTS OF CONTACT: The following points of contact (POC) will be used by the Parties to communicate in the implementation of this MOA. Each Party may change its point of contact upon reasonable notice to the other Party.

5.1.1. For the USAF-

5.1.1.1. Position and phone number of Primary POC:

Assistant Deputy Under Secretary of the Air Force (Space), (703) 695-9559

5.1.1.2. Position and phone number of Alternate POC:

Director of Staff, Deputy Under Secretary of the Air Force (Space),
(703) 693-5102

5.1.1.3. Position and phone number of Alternate POC for operational satellite data:

Air Force Director of Weather / Air Force Deputy to NOAA, (703) 614-7373

5.1.2. For the NOAA-

5.1.2.1. Position and phone number of Primary POC: Deputy Assistant Administrator, NESDIS, (301) 713-2010

5.1.2.2. Position and phone number of Alternate POC:

Director, Office of System Architecture and Advanced Planning, (301) 713-7311

5.2. CORRESPONDENCE: All correspondence to be sent and notices to be given pursuant to this MOA will be addressed, if to the USAF, to-

5.2.1. SAP/SP

1670 Air Force Pentagon
Washington, DC 20330-1670

5.2.2. HQ AF/A3W (Operational Satellite Data)

1490 Air Force Pentagon
Washington, DC 20330-1490

and, if to the NOAA, to-

5.2.2. NOAA Deputy Assistant Administrator for Satellite and Information Service

SSMCI, Suite 8300
1335 East-West Highway
Silver Spring, MD 20910

or as may from time to time otherwise be directed by the Parties.

5.3. REVIEW OF AGREEMENT: This MOA will be reviewed annually on or around the anniversary of its effective date for financial impacts and triennially in its entirety.

5.4. MODIFICATION OF AGREEMENT: This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives.

5.5. DISPUTES: Any disputes relating to this MOA will, subject to any applicable law, Executive Order, Directive, or Instruction, be resolved by consultation between the Parties or in accordance with DoDI 4000.19 and Treasury Financial Manual (TFM) Volume I, Part 2, Chapter 4700, Appendix 10.

5.6. TERMINATION OF AGREEMENT: This MOA may be terminated by either Party by giving at least 180 days written notice to the other Party. The MOA may also be terminated at any time upon the mutual written consent of the Parties.

5.7. TRANSFERABILITY: This Agreement is not transferable except with the written consent of the Parties.

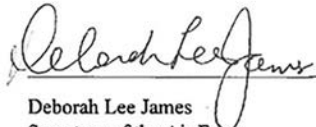
5.8. ENTIRE AGREEMENT: It is expressly understood and agreed that this MOA, as supplemented by future annexes, embodies the entire agreement between the Parties regarding the MOA's subject matter.


5.9. EFFECTIVE DATE AND DURATION : This MOA takes effect beginning on the day after the last Party signs. This MOA will terminate 5 years after the last Party signs, unless extended through a modification to this MOA.

AGREED:

For the USAF-

For the NOAA-


Deborah Lee James
Secretary of the Air Force


Kathryn D. Sullivan, PhD
Under Secretary of Commerce for Oceans and
Atmosphere
and Administrator, National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

JAN 9 2017
(Date)

1 - 9 - 17
(Date)

In addition, there are two primary ways that NOAA supports the DoD:

1. NOAA negotiates with global partners for free and timely access to weather data. Through NOAA's international partnerships, the DoD can leverage data from international counterpart agency satellite systems. Through coordinating groups such as the Coordination Group on Meteorological Satellites (CGMS), NOAA and counterpart agencies seek to further technical compatibility among systems to enhance usefulness of data from the different systems. NOAA meets with USAF counterparts prior to and following the CGMS annual conference to ensure we are representing DoD's interests.
2. Where it is most cost effective to leverage NOAA infrastructure and capabilities to support DoD-specific requirements, we enter into cost-reimbursable agreements. For example, we have a Memorandum of Agreement, updated most recently on February 21, 2017, with the USAF to operate their Defense Meteorological Satellite Program (DMSP) weather satellites from the NOAA Satellite Operations Facility (NSOF) on a cost reimbursable basis. Under other reimbursable agreements, data from NOAA satellites such as JPSS can be processed and forwarded to the USAF for their use.

WEST VIRGINIA AEROSPACE SECTOR

Question 3a. Over the past decade, my State of West Virginia has developed an aerospace center of excellence. The NASA Independent Verification and Validation Facility, NOAA Consolidated Backup for its operational satellites, West Virginia University supports NASA Heliophysics and work on NASA RESTORE-L missions, commercial interests in the State such as Orbital ATK, Lockheed Martin and others that contribute to the Nation's technological edge. I call this assemblage an "ecosystem of technology" that supports each other, the region, and the Nation.

I am disappointed that the administration's budget is moving some of the RESTORE-L activities from university-based academic laboratories in West Virginia to DoD's Defense Advanced Research Projects Agency, and the cancellation of five NASA Earth Science missions.

Do you have any insight into the administration's decisionmaking there?

Answer. The Department of Commerce does not have insight into the specifics of the DoD or NASA budget requests and their potential impact to the RESTORE-L programs.

Question 3b. What is the impact to NOAA's wider customer and user base with the loss of these missions?

Answer. NOAA is not planning to reduce funding to the NOAA Consolidated Backup in West Virginia, therefore no impact to our customer base is anticipated.

NIST MANUFACTURING EXTENSION PARTNERSHIP (MEP)

Question 4a. The DOC Budget reduces Federal support for NIST's Manufacturing Extension Partnership (MEP) program. West Virginia University administers the West Virginia MEP. Over the past 5 years, through the WV MEP, West Virginia University has delivered 231 assistance projects to West Virginia manufacturers, resulting in \$32 million in new sales; \$153 million in retained sales; and have helped create or retain 1,700 jobs.

For a rural and geographically challenged State like West Virginia with limited opportunities to diversify or augment our economic base, loss of this program and EDA assistance programs is extremely difficult to accept.

What was the rationale for reducing the MEP's Federal support?

Answer. The fiscal year 2018 budget prioritizes rebuilding the military, making critical investments in the Nation's security, and providing the savings and efficiencies needed to keep the Nation on a responsible fiscal path. Many difficult decisions were necessary with a limited amount of funding to go around. We believe that some MEP Centers will transition to non-Federal revenue sources, which was originally intended when the program was established. MEP has community support for funding from several partnerships that they have with local institutions and from the private sector.

Question 4b. Did the administration look across the landscape and determine how States and communities would survive with the loss of these critical funds?

Answer. The fiscal year 2018 budget prioritizes rebuilding the military, making critical investments in the Nation's security, and providing the savings and efficiencies needed to keep the Nation on a responsible fiscal path. Many difficult decisions were necessary with a limited amount of funding to go around. We believe that MEP Centers will transition to non-Federal revenue sources, which was originally intended when the program was established. MEP has community support for funding from several partnerships that they have with local institutions and from the private sector.

PRESERVING AMERICA'S AEROSPACE ADVANTAGE

Question 5. Secretary Ross, the U.S. currently has a competitive edge over our international counterparts in the area of developing and launching civil space research and operational satellites. I believe it is in our interest to maintain this edge. However, looking at the details and fine print of the administration's budget request, there are places where we are ceding that national edge to foreign competitors.

The Department does an excellent job monitoring the Nation's economic progress.

Does the Department monitor and report on the health of the U.S. aerospace sector and the contributions that our universities, private space industries, and government activities contribute to the Nation's technological and economic advantage?

Answer. The Bureau of Industry and Security (BIS) is currently assessing the health and competitiveness of the U.S. rocket propulsion industry in partnership with NASA and the Joint Army Navy NASA Air Force (JANNAF) Interagency Propulsion Committee. Survey results will be released in the fourth quarter of 2017.

Between 2012 and 2014, BIS utilized its authority delegated under the Defense Production Act of 1950, as amended (50 U.S.C. app. Sec. 2155) to design, distribute, and collect surveys of commercial companies, universities, non-profit organizations, and U.S. Government agencies with equities in the U.S. space industrial base. The request to assess the space sector was made by the United States Air Force, National Aeronautics and Space Administration (NASA), and the National Reconnaissance Office (NRO). The assessment, which included surveying approximately 3,800 organizations, sought to map the U.S. space industrial base supply chain in unprecedented detail and included the products and services the respondents provided,

their critical suppliers, their financial health and investment expenditures, and many other topics. In 2014 BIS completed its data collection for the Air Force, NASA and NRO and developed three reports based on survey responses, independent research, and field interviews: U.S. Export Controls and the U.S. Space Industrial Base; Small Businesses and the U.S. Space Industrial Base; and Employment Challenges Facing the U.S. Space Industrial Base. These reports may be found at <https://www.bis.doc.gov/dib>.

In addition, BIS administers the Transportation and Related Equipment Technical Advisory Committee, made up of more than 35 industry leaders, and specialists and technicians from the Departments of Commerce, State, Defense, Energy, and the intelligence community with expertise in gas turbine engines, airframes and overall aircraft integration, avionics, accelerometers, gyros and inertial navigations. This committee also has a working group dedicated to the space and satellite sector. The mission of this committee is to advise the Department of Commerce with respect to technical specifications and policy relating to those matters that are of concern to the Department; worldwide availability of products and systems, including the quantity, quality, and use of production technology; export licensing procedures that affect the level of export controls applicable to any goods, software, or technology; revisions of the Commerce Control List, including proposed revisions of multilateral controls in which the United States participates; the issuance of regulations; and any other questions relating to actions designed to carry out the policy set forth in Section 3(2)(A) of the Export Administration, as amended.

MARKET ACCESS

Question 6. Secretary Ross, you mention in your testimony that the United States currently has a \$700 billion trade deficit and is the top importer in the world. This indicates to me that there is much room for improvement and that we, the U.S. Government, needs to work on securing greater market access overseas for American businesses.

Now that the President has indicated his interest in renegotiating the North American Free Trade Agreement (NAFTA), we have an opportunity to make the necessary improvements to this monumental trade agreement to change this balance and increase market access that will benefit our businesses—particularly small businesses.

Although you state in your testimony that the International Trade Administration (ITA) will continue to focus on small and medium-sized businesses, I remain concerned by the proposed cuts to the International Trade Administration's trade promotion related activities—the exact programs that help American businesses take advantage of overseas markets. This doesn't seem like the right time to be cutting these programs.

In light of the proposed cuts to the International Trade Administration, how does the Department of Commerce intend to support small business exports to overseas markets, both in NAFTA and non-NAFTA countries, so that we can decrease our \$700 billion trade deficit?

Answer. The budget request prioritizes and protects investments in core Government functions across Commerce that benefit small businesses, including enforcing laws that promote fair and secure trade, and realigning our export promotion and market access work. We are also addressing administration priorities that seek to reduce trade deficits.

The ITA will strengthen its trade enforcement and compliance functions to ensure American businesses get fair opportunities in the global marketplace while enhancing the efficiency of export promotion and trade analysis activities. The proposed increase for Enforcement & Compliance will support staffing and associated costs to expand investigations and threat management activities. To complement these efforts, the ITA is developing and implementing plans to transform its operations to strengthen outcomes, improve efficiency, and meet trade and investment priorities. The ITA's transformational actions will be rooted in maximizing the delivery of the organization's value to clients, providing timely and actionable information and service to U.S. business (especially SMEs), eliminating or reducing lower-priority functions and activities, strengthening higher priority activities, and modernizing information management.

Effective use of digital technology and building a digital client engagement capability will enable the ITA to serve its existing U.S. small business customers more efficiently as well as increase the number of those assisted. By developing online content, self-help tools and content marketing campaigns based on this expertise, we can provide more timely and actionable market intelligence that informs businesses of all sizes about exporting basics. In addition, public and private-sector part-

nerships can be further leveraged to market online content and broaden our reach to new clients.

As a result of these productivity enhancements, we will enable our field staff to focus their time and efforts on clients needing higher value-added services and expand the number of small business exporters we assist.

Across the Department, pursuant to presidential directives, we are taking a close look at our existing trade agreements and considering ways to modernize or improve them to ensure a level playing field for U.S. businesses. We also continue to work with our clients, representing both large and small businesses, to strengthen capabilities in export markets where the U.S. already has a significant advantage.

TRADE ENFORCEMENT

Question 7a. Secretary Ross, first of all, I want to thank you for your commitment to increased trade enforcement measures. As we face countries that continue to undercut our workers, commit trade fraud, and evade duties, we owe it to our businesses to do everything within our ability to help level the playing field.

Unfair trade practices by foreign countries have cost my State of West Virginia dearly, with many steel and aluminum companies struggling to even maintain operations. That being said, I was particularly pleased to hear today that you intend to instruct your Department to self-initiate trade cases against bad actors. I am encouraged by these efforts and what they will mean for my State moving forward.

With the increased government-wide focus on trade enforcement actions, are you coordinating with other government agencies, such as the Department of Homeland Security or Department of Justice, to ensure synchronized efforts?

Answer. Commerce, through the International Trade Administration's Enforcement and Compliance (E&C) unit, works very closely with U.S. Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE) and the Department of Justice (Justice) to facilitate accurate AD/CVD assessment and enforce AD/CVD laws. E&C also serves as the main conduit between Commerce and CBP/ICE on fraud and evasion matters related to AD/CVD proceedings. To that end, the three agencies meet regularly to address open issues and explore avenues of further coordination and collaboration.

E&C makes full use of its statutory authority to provide information to CBP and ICE where any of the three agencies uncovers information that indicates possible fraud or evasion of the AD/CVD laws. When such investigations lead to prosecution, the U.S. Attorney's office may also request E&C's assistance in understanding the importance of the AD/CVD laws to ensuring a level playing field for U.S. companies and/or to serve as an expert witness at trial. As a result of this coordination, CBP and ICE also provide information to E&C that they have uncovered and believe might be relevant to an ongoing AD/CVD proceeding. In such cases, E&C places the information on the case record, allowing for parties to the proceeding to review and comment on the relevance of the information. As a result of this coordination, E&C has been able to identify and address circumvention (under E&C's statutes) in several cases, bringing the circumventing merchandise under the scope of the relevant AD/CVD order.

Question 7b. If not, how will you increase coordination moving forward so that we can better combat unfair trade practices?

Answer. Commerce is continually elevating its efforts to counter duty evasion, fraud and circumvention by working proactively and collaboratively with CBP, ICE and Justice to identify and address fraudulent activity. Specifically, Commerce, CBP and ICE share extensive information on AD/CVD matters to combat the increasingly complex strategies employed by foreign parties attempting to evade payment of AD/CVD. Additionally, Commerce works closely with Justice to support prosecutions resulting from CBP or ICE investigations. This broadened partnership has brought together the diverse set of knowledge and skills from the relevant agencies, resulting in fines, felony indictments and imprisonment of offending parties. Commerce is also working closely with CBP and Justice on the implementation AD/CVD enforcement plan required pursuant to the President's March 31, 2017 Executive Order on "Establishing Enhanced Collection and Enforcement of Antidumping and Countervailing Duties and Violations of Trade and Customs Laws."

WIRELESS CONNECTIVITY

Question 8. Wireless connectivity continues to be an important driver of our digital economy.

And I strongly support NTIA's [the National Telecommunications and Information Administration] efforts to make additional spectrum available for commercial wireless broadband in rural areas.

However, as the physical infrastructure of next generation broadband technologies grows smaller and the digital infrastructure that supports it grows larger, broadband deployment in rural America will continue to face unique and difficult challenges.

I remain concerned that the digital divide that currently exists in West Virginia will continue to grow into the next generation of wireless services.

Will you commit to focusing additional attention—at both NTIA and the Commerce Spectrum Management Advisory Committee—towards studying and expediting the introduction of new broadband services in rural areas?

Answer. Expanding broadband to unserved and underserved areas of the country, including rural areas, remains an NTIA priority. NTIA will continue its efforts to ensure that access to sufficient spectrum is not a constraint on the growth of broadband services, including in rural areas. A key to this is NTIA's Office of Spectrum Management and Institute for Telecommunication Sciences sustained efforts to study, develop and test tools and methodologies for the expansion of spectrum sharing to help efficiently and effectively meet escalating demand for access to this critical resource. As part of a multi-faceted collaborative approach to addressing diverse spectrum challenges, NTIA will continue to rely upon recommendations and other input it receives from both government and non-government sources (for example the Commerce Spectrum Management Advisory Committee, a Federal Advisory Committee consisting of experts from outside the Federal Government to offer expertise and perspectives on reforms to enable new technologies and services).

In addition, NTIA is committed to promoting broadband deployment and adoption in rural areas through its Broadband Programs. NTIA continues to take action through its BroadbandUSA program, which it launched in January 2015 to respond to demand from communities seeking to improve broadband connectivity. BroadbandUSA assists, educates, and convenes government, community, and industry leaders working to advance broadband initiatives and policy, offering support to help them overcome the unique challenges hindering their investment in broadband infrastructure and digital inclusion. BroadbandUSA serves as a trusted and neutral strategic advisor, working with public and private sector partners to assess local broadband needs and gaps; identify possible funding and other resources; and plan network infrastructure projects and digital inclusion programs. The centerpiece of BroadbandUSA is its technical assistance team, which provides individualized and group technical assistance to State, local, nonprofit, and industry leaders interested in planning, funding, and implementing broadband initiatives. As of July 30, 2017, BroadbandUSA has provided direct, individualized technical assistance to 200 customers in 38 States. More than 60 percent of these communities are considered rural. Overall, through direct technical assistance and workshops, BroadbandUSA has supported more than 800 communities.

BroadbandUSA also ensures that it specifically reaches rural communities and providers through webinars and targeted workshops held around the country. This year, our monthly Practical Broadband Conversations webinar series included webinars on the role of broadband in economic development, what programs increase rural broadband adoption, and how broadband is transforming agriculture. NTIA is also planning to hold technical assistance workshops in Des Moines, Iowa on August 21, 2017, and in Charleston, West Virginia on September 19, 2017.

DEPARTMENTAL LEADERSHIP

Question 9a. Secretary Ross, the movie “Home Alone” seems to capture your situation right now. As I look across the Department of Commerce, the vacancies affect Constitutionally mandated functions of government and the very fabric and backbone of the Nation's ability to protect its intellectual property. As a Senator from a rural State with populations dispersed in geographically isolated areas, I need some reassurance from you that you have the management

What is the timeline for the White House to announce a Deputy Secretary and other positions that require Senate-confirmation?

Answer. The White House has already announced several Department of Commerce nominees that are currently making their way through the Senate confirmation process as follows:

- Michael Platt for Assistant Secretary for Legislative and Intergovernmental Affairs has had his hearing and is awaiting a floor vote.
- Peter Davidson for General Counsel has had his hearing and is in markup.
- Mira Ricardel for Under Secretary for Industry and Security has had her hearing and is awaiting a floor vote.
- Richard Ashooh for Assistant Secretary for Export Administration has had his hearing and is awaiting a floor vote.

- Karen Dunn Kelley for Under Secretary for Economic Affairs has had her hearing and is in markup.
- Gilbert Kaplan for Under Secretary for International Trade is scheduled for a hearing on Thursday, August 3rd.
- Elizabeth (Erin) Walsh for Director General of the United States and Foreign Commercial Service and Assistant Secretary for Global Markets has had both of her required committee hearings and is in markup.
- David Redl for Assistant Secretary for Communications and Information has had his hearing and is in markup.

In coordination with the Commerce Department's Office of White House Liaison and the White House Presidential Personnel Office, I have recommended and the President has approved potential nominees for nearly all Senate-confirmed positions within the Department.

With respect to the Deputy Secretary position and the other remaining Senate-confirmed positions that have not yet been announced by the White House, the timing of the announcement process varies for each specific potential nominee. Therefore, there is no specific timeline that can be established. The White House will typically make public announcements for Senate-confirmed positions after the potential nominees have fulfilled all necessary paperwork and cleared all vetting requirements.

Question 9b. What are your plans for bringing permanent leadership at NOAA, NIST, NTIA Census, Patent and Trademark Office and additional senior staff to assist you?

Answer. Since being sworn-in, I have worked with the Commerce Department's Office of White House Liaison and the White House Presidential Personnel Office to identify exceptionally qualified candidates to recommend to the President for these Senate-confirmed positions and to fill other senior staff positions. The White House has already announced the President's nominee for NTIA, and I am confident that further announcements will be forthcoming regarding the other bureaus for which you have inquired.

Question 9c. In the interim, what is your strategy for ensuring that adequate management and oversight is being given to the Bureaus in the Department?

Answer. Until all Senate-confirmed positions are filled, I have great confidence that the staff who are currently filling those roles on an interim basis are providing the needed management and oversight to ensure the Department is running effectively. At my direction, my senior staff has been continually monitoring each bureau to ensure that the President's agenda is on-track for the good of the American people.

ROBOTICS

Question 10a. Mr. Secretary, in your written testimony you acknowledged your responsibility to ensure that our Nation's taxpayer dollars are targeted to those programs and projects that will grow our economy and create a pro-growth economy. One such area where the Federal Government is making great inroads in this regard is in advancing robotics and assistive technology. In my view, this is an area that is critical to increasing the United States' capability in manufacturing, developing a new space servicing and repair industry, and extending applications to national defense. In short, I believe there are great economic gains to be achieved in accelerating our Nation's focus in domestic, space and defense robotics, and creating new associated commercial sectors.

For example, the West Virginia Robotic Technology Center is developing technology to support the first robotic satellite servicing mission (Restore-L). The end goal of this mission is to prove satellites can be robotically serviced and repaired in-space. The innovative technology and capability created for this mission will be directly handed over to the commercial sector to utilize.

Do you agree that advanced robotics, such as innovative transportation technology, robotic drilling and extraction services such as those used in the energy sector, and robotics in space applications have a positive impact on the U.S. economy and commercial sector?

Answer. Yes. Many recent studies have shown evidence that advanced robotics have the potential to spur productivity gains in many applications and across many sectors. For example, a 2017 study by McKinsey Global Institute (A Future That Works: Automation, Employment, and Productivity, Jan 2017) estimated that advances in automation—including not only robotics but associated artificial intelligence and machine learning technologies—could supplement the human workforce to drive global GDP growth between 0.8 and 1.4 percent. NIST has programs that will help make this a reality by ensuring that "collaborative robots" that work close-

ly with people are safe and effective. Beyond economic impacts, robotics technologies can increase safety and quality of life. NIST has a program to support the development and use of emergency response robots, which can help firefighters, bomb technicians, and urban search and rescue specialists do their work while avoiding extreme hazards. NIST works with first responders and robot manufacturers to develop quantitative ways to measure whether robots are capable and reliable enough to perform mission tasks.

Question 10b. Do you agree that robotic technology is playing an increasing role in U.S. space and defense applications such as satellite refueling and space exploration focused on advancing our leadership and national security?

Answer. Yes. Many recent studies have shown evidence that advanced robotics have the potential to spur productivity gains in many applications and across many sectors. For example, a 2017 study by McKinsey Global Institute (A Future That Works: Automation, Employment, and Productivity, Jan 2017) estimated that advances in automation—including not only robotics but associated artificial intelligence and machine learning technologies—could supplement the human workforce to drive global GDP growth between 0.8 and 1.4 percent. NIST has programs that will help make this a reality by ensuring that “collaborative robots” that work closely with people are safe and effective. Beyond economic impacts, robotics technologies can increase safety and quality of life. NIST has a program to support the development and use of emergency response robots, which can help firefighters, bomb technicians, and urban search and rescue specialists do their work while avoiding extreme hazards. NIST works with first responders and robot manufacturers to develop quantitative ways to measure whether robots are capable and reliable enough to perform mission tasks.

Question 10c. Do you believe that it is important to maintain the schedule and funding for the Restore L mission and maintain the Commerce Department’s mission statement to create job growth and promote economic development?

Answer. It is the priority of the President to strengthen investment in National Security and Defense. As for the specifics of your question the Department of Commerce does not have insight into the specifics of the DoD or NASA budget requests, and their potential impact to the RESTORE–L programs.

SUBCOMMITTEE RECESS

Senator SHELBY. This subcommittee now will stand in recess until next Tuesday, June 13, at 10 a.m., when we take the testimony of the Attorney General of the United States, Jeff Sessions.

This subcommittee is adjourned.

Secretary ROSS. Thank you very much, Mr. Chairman.

[Whereupon, at 11:36 a.m., Thursday, June 8, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, June 13.]