COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2019

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

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U.S. GOVERNMENT PUBLISHING OFFICE

32–413 WASHINGTON: 2018

AUTHENTICATED U.S. GOVERNMENT INFORMATION GPO

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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2019

TUESDAY, MARCH 20, 2018.

DEPARTMENT OF COMMERCE

WITNESS

HON. WILBUR ROSS, SECRETARY OF COMMERCE

Mr. CULBERSON. Good morning, ladies and gentlemen. The Commerce, Justice, and Science Appropriations Subcommittee hearing will come to order.

First, I would like to welcome our witness, Commerce Secretary Ross, who is here with us this morning to discuss the Department of Commerce's fiscal year 2019 budget request.

Secretary Ross, we are happy to have you here and we want to thank you for your service to the country.

This is our first hearing of the year, so I want to remind our members that we will, as usual, follow the 5-minute rule, and I will, of course, not cut anybody off mid-sentence. We will recognize members in the order of seniority in which they have arrived at the hearing, going back and forth between the parties. And for latecomers, I will recognize you in the order in which you have arrived at the hearing.

And while I am sure we will not always agree on the issues before the subcommittee, all members and witnesses will be heard and respected. And we always on this committee work together in a collegial and cordial manner, and always manage to find a way to get our work done, because this subcommittee is pure good, all the things that we do are pure good.

And I want to get back to the matter at hand. In the last year, the Department of Commerce forecasted and responded to the 2017 Atlantic Hurricane season, which included Hurricane Harvey in Houston, which is the largest housing disaster in the history of the country. I have still got tens of thousands of constituents who are living on the second floor of their homes, were forced to move. The disaster was just catastrophic. And the Weather Service, as a part of their forecast fleet, launched flagship weather satellites, NOAA–20 and GOES–17, as well as released an updated cost estimate for the census, which is the first thing I want to visit about this morning, Mr. Secretary.

We expect this diverse work to continue in 2019 when the Commerce Department will continue to execute its important missions, including preparing for the 2020 census; forecasting the weather;

managing our fisheries; exploring the oceans, which is especially important in this era when the Chinese control 98 percent of all rare earth elements produced on earth. We have got the exclusive economic zone of the United States, which expands the area of the United States by about 50 percent and contains vast amounts of rare earth elements. The Department also administers our patent and trademark laws.

And, in executing these missions, Mr. Secretary, we hope you will continue to bring your extraordinary skill set and innovative cost-saving ideas from the private sector to the Department. I am especially interested in hearing any suggestions you have got on how the subcommittee can help you give you more authority to do what you do best and that is to achieve efficiency, productivity, and to make not only the Census Bureau, but the entire Department run more efficiently and effectively.

The budget recommendation, which was developed by OMB before there was an agreement on adjusting the budget caps, proposes reshaping the Department to focus on the highest-priority missions, while significantly reducing funding for other activities across the Department. We will carefully consider the President's budget request to ensure that we are responsibly funding critical Department of Commerce activities while protecting our constituents' very precious, very scarce, and hard-earned tax dollars.

In this hearing and in the coming months, I look forward to discussing how we can work together to ensure that the 2020 census and weather satellite programs are staying within their projected costs and achieving their important goals.

Before we proceed, I would like to recognize my colleague and good friend Mr. Serrano for any remarks that he would like to make.

Mr. SERRANO. Thank you, Mr. Chairman. And I would like to join you in welcoming the Secretary of Commerce, the Honorable Wilbur Ross, back to the subcommittee.

The Department of Commerce is vital in promoting job creation and opportunity for all; understanding our planet; ensuring fair trade conditions for our businesses and workers; providing accurate data to our nation's lawmakers and businesses; and assisting under-served and economically distressed communities. Unfortunately, the budget request undermines several of these key missions.

The President's budget for fiscal year 2019 requests $9.8 billion for the Department of Commerce, which is $573 million or a 6.2 percent increase from the 2017 enacted level. This level of funding, while an increase from last year's request, endangers core missions at the Department.

For example, the budget once again, very foolishly, proposes the elimination of critical agencies and programs such as the Economic Development Administration and Manufacturing Extension Partnership or MEP Program. EDA is the only agency across the Federal Government that focuses exclusively on economic development and economically distressed areas around the Nation, while the MEP equips our small and medium-size manufacturers with the resources needed to grow and to thrive.

It is estimated that for every $1 of Federal investment the MEP national network generates $17.90 in new sales growth for manufacturers and $27 in new client investment.

In short, this program enhances the productivity and competitiveness of small and medium-size manufacturers and creates well-paying jobs, while reducing our trade deficit with other countries. It is also an agency with strong bipartisan support in Congress, which demonstrates how politically tone deaf this proposal is.

Another agency that is severely cut by more than 70 percent is the Minority Business Development Agency. This agency promotes the growth of minority-owned businesses and helps them compete in the world economy, and it is the only Federal agency with this focus.

The budget also proposes a $43 million cut to the U.S. Commercial Service, and calls for the closing of 35 posts overseas and ten U.S.-based Export Assistance Centers. This program supports and creates American jobs by helping U.S. businesses and workers to export more products.

These budget cuts, if enacted, will hurt small businesses and workers in economically distressed areas.

In a different area, the President's budget severely undermines NOAA's mission by decreasing its funding by more than $1 billion, a more than 19-percent decrease. In particular, the budget proposes to zero out funding in targeted NOAA grants and programs that support coastal and marine management research and education benefitting industry, States, and local stakeholders.

The Regional Coastal Resilience Grants, for instance, ensure that our states and communities are prepared to face changing ocean conditions, from acidification to sea level rise, as well as major catastrophes. We need to make sure that we are here to help our coastal communities to be more resilient in the face of climate change and we must allow our marine research programs to continue as necessary for America's economic and environmental health.

I am particularly concerned about the status of preparations for the 2020 census, which is behind in schedule and has been under funded. There are major issues that are still unresolved that will impact the rollout and response process, including a lack of permanent leadership, that the Bureau fears that we have not sufficiently tested in urban and minority-language communities, and the need to quickly ramp up outreach in traditionally under-counted areas.

I am also deeply troubled about a highly political request that the Department of Justice made to the Department last December, asking the Bureau to add a question on citizenship status to the form. This question was not previously considered or tested by the Bureau, nor was it included in last year's report to Congress on the topics to be included in the 2020 census.

Including such a question would drive response rates down in minority and immigrant communities, increasing costs and harming accuracy. Unfortunately, this request seems purely partisan, as evidenced by yesterday's email from the Trump campaign attempting to fund raise off this very issue.

It is also important to note that none of the affected communities asked for this question to be included in the 2020 census.

Congresswoman Meng and I wrote to you in a letter earlier this year and made these points to you. I look forward to hearing more from you on these issues.

There are many, many other issues that we have to discuss, Secretary Ross, but understand that our desire is to make the Department respond more efficiently and more properly, it is never to be adversaries, unless we see real harm being done. But we are worried, very worried on this side about the census asking questions that will undermine the count rather than build the count up to where it should be.

Thank you, Mr. Chairman.

Mr. CULBERSON. Thank you, Mr. Serrano.

Mr. Secretary, we are delighted to have you here with us this morning and we look forward to hearing your summary of testimony, and your written testimony will be entered into the record in its entirety, if there is no objection.

Mr. CULBERSON. Mr. Secretary, thank you very much. We look forward to hearing from you.

STATEMENT OF THE SECRETARY OF COMMERCE

Secretary ROSS. Thank you, Chairman Culberson, Ranking Member Serrano, and members of the House Appropriations subcommittee. Thank you for this opportunity to discuss President Trump's fiscal year 2019 budget request for the U.S. Department of Commerce.

And thank you for enabling the Department to meet its major strategic objectives of helping the American economy grow and ensuring our national security. We are accomplishing this by preparing for a successful 2020 Decennial Census; providing the observational infrastructure and personnel to develop timely and accurate weather forecasts; by supporting investment in job creation, and helping American businesses and industries compete globally in a fair and secure environment.

To that end, the Department of Commerce's fiscal year 2019 budget request of $9.8 billion in funding is a 6-percent increase from the fiscal year 2018 continuing resolution. It does not include the $1 billion that was recently appropriated to the Department as part of the Supplemental Assistance Package enacted in the aftermath of the severe storms in Texas, Florida, Puerto Rico, and the Virgin Islands.

The fiscal year 2019 budget makes key strategic investments. A few highlights. The 2020 Decennial Census is the Department's top priority. A complete and accurate Decennial Census is critical, as it informs the policymaking process and apportionment.

To support this critical endeavor, the Department's fiscal year 2019 budget requests $3.8 billion for the Census Bureau, $3.1 billion of which will directly support 2020 census operations. The proposed $2.3 billion increase from the fiscal year 2018 continuing resolution reflects the Department's commitment to count everyone.

With its $1.6 billion request for the National Environmental Satellite and Data Information Service, NOAA will continue its work to deploy the next generation of weather satellites and observa-

tional infrastructure. These satellites will provide faster, more accurate, and more detailed data than legacy satellites to track storm systems, lightning, wildfires, coastal fog, and other hazards.

When President Trump tapped me to serve as the Commerce Secretary, I vowed to work hard to reduce the nation's trade deficit. Increased enforcement of our trade laws has been a major effort in this regard. We requested $440 million for the International Trade Administration. ITA will use the requested funding to hire more subject matter experts and enhance its trade enforcement and analysis capacity for anti-dumping and countervailing duty investigations, and in support of Section 232 investigations.

ITA's budget includes more than $90 million, an increase of $6 million from 2018, for enforcement and compliance programs.

To continue building on these important enforcement and national security initiatives, $121 million is requested for the Bureau of Industry and Security, an $8.9 million increase from the 2018 continuing resolution. BIS has a remarkably broad impact on our national security and this increased funding will enable them to hire additional staff to address an increased workload.

The fiscal year 2019 budget seeks to transform the Minority Business Development Agency into a policy-focused operation that can better assist minority business across America. Consistent with this transformation, the budget proposes to eliminate funding for MBDA's business centers. Instead, MBDA's fiscal year 2019 budget will allot its present 50 positions for this new endeavor no change in number of personnel, which will ensure minority entrepreneurs have access to the resources they need to create jobs and help fuel our nation's prosperity.

These are just a few highlights from our fiscal year 2019 budget submission. I look forward to getting into more detail with you as you ask your questions.

Thank you.

[The prepared statement of Secretary Ross follows:]

WRITTEN TESTIMONY BY SECRETARY WILBUR ROSS
U.S. DEPARTMENT OF COMMERCE
FISCAL YEAR 2019 BUDGET REQUEST

Chairman Culberson, Ranking Member Serrano, and members of the House Appropriations Subcommittee, thank you for this opportunity to discuss President Trump's Fiscal Year 2019 Budget Request for the U.S. Department of Commerce.

Thank you for enabling the Department to meet its major strategic objectives of helping the American economy grow, and ensuring our national security. We are accomplishing this by supporting investment and job creation; preparing for a successful 2020 Decennial Census; bolstering trade enforcement and export controls; and providing the observational infrastructure and personnel to develop timely and accurate weather forecasts.

Under my stewardship, our resource allocations in the FY 2019 Budget are centrally focused on helping American businesses and industries compete globally while improving the economic conditions and everyday lives of the American people and their communities.

To that end, the Department of Commerce's FY 2019 Budget Request of $9.8 billion in funding is a 6 percent increase (+$637 million) from the FY 2018 Continuing Resolution ($9.1 billion). This does not include the $1.0 billion that was recently appropriated to the Department as part of the supplemental assistance package enacted in the aftermath of severe storms in Texas, Florida, and other U.S. territories (the Economic Development Administration was provided $600 million and the National Oceanic Atmospheric Administration was allocated $400 million).

The FY 2019 Budget carries forward key strategic investments from FY 2018 and introduces new initiatives that I believe are critical to sustaining the economic momentum that we have established.

Our laser focus remains on helping the American Economy grow. The Department's FY 2019 Budget recognizes the challenges facing American workers and businesses as they attempt to navigate a rapidly changing and increasingly competitive world.

I believe the budget request is uniquely tailored to leverage the innovation, talent, expertise, and technological prowess of the Department's programs, projects, and activities to ensure businesses and the American people are receiving a good return on their taxpayer investments.

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 more information about the Department's FY 2019 Budget, please visit the Department's Web site at: http://www.osec.doc.gov/bmi/budget/FY19_CBJ.html.

Highlights of the FY 2019 Commerce Budget Request

CENSUS:

The 2020 Decennial Census is the Department's top priority. A complete and accurate Decennial Census is critical as it informs the policy making process, governs the apportionment of seats in the House of Representatives allocated to the States, and helps direct more than $675 billion annually in Federal funds to local communities to improve homeland security, education, and infrastructure.

To support this critical endeavor, the Department's FY 2019 Budget requests **$3.8 billion** for the Census Bureau, $3.1 billion of which will directly support 2020 Census operations. The proposed $2.3 billion increase from the FY 2018 CR reflects the Department's commitment to count everyone once and in the right place. The additional funding will provide pivotal investments in information technology and field infrastructure.

TRADE:

When President Trump tapped me to serve as the Commerce Secretary, I vowed to work hard to reduce the nation's trade deficit. Increased enforcement of our trade laws has been a major effort in this regard.

$440 million is requested in the Department's FY 2019 Budget for the International Trade Administration (ITA). ITA will use the requested funding to hire more subject matter experts and enhance its trade enforcement and analysis capacity as it relates to antidumping and countervailing duty and Section 232 investigations.

The FY 2019 Budget includes more than $90 million, an increase of $6 million, for ITA's enforcement and compliance programs. This funding will enable ITA to conduct robust investigations into alleged trade violations and aggressively advocate for U.S. businesses facing tariff and non-tariff barriers abroad. A portion of this would be specifically allocated to Department of Commerce self-initiation efforts on behalf of American workers and businesses.

Trade is also closely linked to our national security. Separately, in 2017, the Bureau of Industry and Security (BIS) successfully completed 13 administrative enforcement cases, with total civil penalties of $692,296,500—the highest annual level of civil penalties in the history of the Bureau.

To continue building on these important enforcement and national security initiatives, **$121 million** is requested in the FY 2019 Budget for BIS, a $8.9 million increase from the 2018 CR. This increased funding will enable BIS to hire additional staff to address the increased workload associated with the Committee on Foreign Investment in the United States (CFIUS) and support the ongoing work of BIS. The International Trade Administration is also provided with additional funding for CFIUS to support its ability to detailed sector reviews required under CFIUS and perform its role as the Department's CFIUS coordinator.

WEATHER SATELLITES:

With its $1.6 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 FY 2019 Budget includes $878 million for the Polar Weather Satellites, which supports continued work on the Joint Polar Satellite System -2 (JPSS-2) and allows the program to maintain the previously scheduled Launch Readiness Dates of second quarter in 2024 for JPSS-3 and the fourth quarter of 2026 for JPSS-4.

The Budget meets this objective, while lowering overall costs, by combining the current JPSS Program of Record (POR) with the Polar Follow On (PFO) program into a single program, allowing NOAA to more efficiently manage the acquisition of these satellites. The JPSS satellites provide space-based observations that are critical data for weather forecast models in support of forecasting short, mid- and long term severe weather events.

The FY19 Budget also fully funds continued work on the Geostationary Operational Environmental Satellite-R (GOES-R) Series, including the continued development of the third and fourth satellites of the series, GOES-T and GOES-U. On March 1, 2018, NESDIS launched GOES-S (now known as GOES-17), the second of the GOES-R Series. GOES-17 will move to a western position to join its sister satellite, GOES-EAST. Together, these satellites will provide faster, more accurate, and more detailed data than legacy satellites to track storm systems, lightning, wildfires, coastal fog, and other hazards. These satellites will observe the majority of the Western Hemisphere from the west coast of Africa all the way to New Zealand.

Streamlining Government Operations and Improving Efficiency

The Department's FY 2019 resource allocations are designed to fuel American prosperity, the national economy, and the nation's taxpayers. Difficult tradeoffs have to be made for which Commerce programs are prioritized.

The FY 2019 Budget seeks to transform MBDA into a policy-focused operation that can better assist minority businesses across America. Consistent with this transformation, the Budget proposes to eliminate funding for MBDA's business centers.

Instead, MBDA's FY 2019 Budget will allot its present 50 positions for this new endeavor, which seeks to ensure minority entrepreneurs have access to the resources they need to create jobs and help fuel the Nation's prosperity.

Similar to the Department's budget request in FY 2018, the FY 2019 Budget once again proposes significant savings to maximize every taxpayer dollar. These initiatives include eliminating the Economic Development Administration (EDA). These proposals are consistent with the approach throughout the Budget to focus on core federal missions and reduce lower priority expenditures, such as grants.

The proposed elimination of EDA's grant-making functions and salaries and expenses would result in an approximately $300 million savings.

We are also once again recommending the discontinuation of federal funding for the Hollings Manufacturing Extension Partnership (MEP) program, which subsidizes up to half the cost of state centers that provide consulting services to small- and medium-sized manufacturers. This would result in a projected savings of $125 million. There has been enough private sector support for this program that we believe it can function well without the need for Federal money.

NOAA is once again proposing to reduce or eliminate a number of its external grant programs, which total approximately $405 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.

Finally, NOAA is re-proposing to terminate the Office of Education for a savings of $27 million from the FY 2018 CR. This includes terminating the Competitive Education Grants and Educational Partnership Program with Minority Serving Institutions (EPP/MSI) grants. The Budget further proposes to end the Bay-Watershed Educational and Training (B-Wet) Regional Programs.

NOAA will continue to provide watershed educational experiences for students through other programs, including National Marine Sanctuaries.

Mr. CULBERSON. Mr. Secretary, thank you very much.

As you mentioned, the census is constitutionally required and the Department is preparing ramp-up activities for the 2020 census. About 70 percent of those costs will be incurred over the next two fiscal years and the Department now estimates the total cost will be over $15 billion, an increase of 3 billion from the previous cost estimate. And I know you are doing everything within your power to ensure that our constituents' very precious, hard-earned, and scarce tax dollars are spent frugally and effectively on the census.

And I would like to ask you, what could this committee do to help you and empower you to do what you think you need to do to make the Department, and the census in particular, more efficient and productive, and what steps are you taking to contain the costs of the 2020 census, and to make sure that the IT systems are cost-efficient and secure?

Secretary ROSS. Well, thank you. Those are very, very good questions, Mr. Chairman. I will especially try to address what are we doing to try to make sure we live up to the budget I just presented.

As you know, the original budget submitted well before my time severely underestimated some of the costs that would be involved and severely overestimated the economic benefits that would come from changes in technology.

I have been devoting quite a bit of my personal time, as has Karen Dunn-Kelly and as has the Career Management, who is now in charge on an acting basis of the census day-to-day.

To give you a little example of the differences between how things were run before and how they are run now, we have developed a monthly monitoring system, which is illustrated here; it shows the actual progress in the workload and actual monies expended, in both cases relative to our forecast. We also have routine census-critical path reports with a summary of the technical integration status, again, actual versus budget and results versus projected results, and we do that in every single sub-segment of all of the budget categories.

None of those processes and procedures had been used in the 2010 census and none, frankly, had been used prior to our administration.

In addition, we have a critical path system that we follow. The green, which happily dominates this whole diagram, are ones that are on schedule and on or below budget. The orange colors are those about which we are somewhat concerned. You will see they are relatively few and relatively small at this early stage. There are no red ones, which so far means there are none that we view as being in very serious danger of big overruns.

The reason we are indulging in such intense measurement is it is my belief that what you can't measure, you can't manage. So we are trying in excruciating detail to manage the intricacies of the costs. This is one of the most complicated management tasks that will confront any government agency, the introduction of all these new technologies and the act of hiring over 500,000 enumerators part-time to do the census in 2020. The hiring was not such a huge task in 2010, because the country was unfortunately in a recession,

so there were plenty of people available. In 2020, we are liable to have a much more difficult time hiring people. And so one of the big tasks ahead of us is how to accomplish finding that many people, getting them trained with the technology, and getting them out there to do faithfully the enumeration of every person where that person resides.

Mr. CULBERSON. Right. I know that FEMA has had difficulty hiring inspectors and adjusters to come out and inspect homes for people affected by the hurricanes——

Secretary ROSS. Yes.

Mr. CULBERSON [continuing]. For that very same reason, but the reforms that you have put in place, commonsense, good business practices, I know all of us are very grateful for that and you have seen results. And I am confident you have a lot of very competent people at the Census Bureau and in the Department who you probably discovered just hadn't had the scrutiny or the oversight, or the measurement, as you said before, of their work, which sounds like you are heading in the right direction.

So you are encouraged. What are some of the frustrations you have encountered in your first year at the Department of Commerce that differ from what you saw in the private sector and what could this committee do to help give you greater authority to help manage and encourage productivity at the Department?

Secretary ROSS. Well, I think the main thing the committee could do would be, we intend to prepare a very detailed accounting of lessons learned as we complete the 2020 census and we hope that that will form a basis for continued guidance by the committee as we move toward the 2030 census, because the 2030 census will be conducted in a somewhat different fashion even from the 2020 based on what we have learned and based on the full application of technology and use of administrative records.

The other thing would be, most importantly, to support our budget request. We feel that as to all the knowable unknowns, which may sound oxymoronic, but we have tried to risk-adjust our budget for the knowable unknowns. Given the complexity and the scale of this activity, there is a risk of unknowable unknowns, and that was why we had originally proposed a 10-percent additional contingency of unallocated funds. That is not normal practice for an agency, but I wanted to remind everyone that was part of the request originally, it is not in the budget. We are going to try our level best to live without needing any contingency, but if something truly unknowable comes up, we may, unfortunately, have to come back.

CENSUS AUDIT RECOMMENDATIONS

Mr. CULBERSON. Mr. Secretary, very quickly, the Government Accountability Office made 33 recommendations to improve the efficiency of the 2020 census and the Department has yet to implement those recommendations. Some of them go back to 2007. I know that is a source of frustration for you, sir. And I know when you were in the private sector, if your auditor told you to do something, you wouldn't wait 11 years to do it. When do you plan to implement them and what, if anything, can this committee do to help you in that effort?

Secretary ROSS. Well, as to the GAO, they made 84 very detailed and very helpful, and, in my view, very useful recommendations. Of those, 51 have been closed as we sit here. Five are not due yet; by their very nature, they have a later due date than the present. There are 14 that are ongoing, life-cycle cost estimates, so those cannot be completed until we get further——

Mr. CULBERSON. OK.

Secretary ROSS [continuing]. Into the process. Of the remaining 14, we have submitted documentation to GAO and we are hopeful that perhaps half of them could be resolved within the next month or so, and that the final seven hopefully could be resolved within 3 months. So that is where we stand precisely on the GAO recommendations. They have been very cooperative, very helpful, and we are very grateful for their support.

CENSUS BUREAU MANAGEMENT

Mr. CULBERSON. Since this is really extraordinarily important, I know you have got it at the top of your list, and when do you expect to have a permanent director in place?

Secretary ROSS. Well, first of all, I have total confidence in the long-term career people who are now the acting number one and number two in Census. They have a combined 52 years of experience, so they are very, very thoroughly experienced in Census. And while they are not 100-percent accustomed to this kind of management process, the work with Karen Dunn-Kelly, myself, and outside consultants that we have brought in, both technology consultants and people with prior experience in the 2010 and earlier censuses. So those are on an ongoing basis. We continually are scrubbing things; we meet quite regularly with the contractors and the subcontractors.

One of the many complexities here is that they decided to do a lot of subcontractors. There typically is a relatively small firm who was awarded the general contracting for a particular area and then some very large firms as subcontractors. Initially, that created some obscurity as to what was actually going on, because there wasn't direct interaction with the subcontractors. We have changed all that. We meet with the GC, we meet with the subcontractors on quite a regular basis, and have some, as the diplomats would say, frank and open discussions with them.

Mr. CULBERSON. Thank you very much.

Mr. Serrano.

Mr. SERRANO. Thank you, Mr. Chairman.

CENSUS QUESTIONS

Secretary Ross, I know from your testimony that you take the administration of the census very seriously and part of that duty is to administer in a nonpolitical, nonpartisan way, is that correct?

Secretary ROSS. Yes, sir.

Mr. SERRANO. Should political parties and campaign politics ever factor into what is asked of every household in the country on the census?

Secretary ROSS. No political party has asked us to do anything on the census. We have had a request, as everyone is aware, from

the Department of Justice to add a citizenship question to the 2020 census.

Mr. SERRANO. Thank you. The reasons I asked the first question is because I was very disappointed to see yesterday that the Republican party campaign to reelect the President put out an appalling email specifically noting that the President wants a new citizenship question added to the census and seeking campaign supporters to weigh in if they are, quote, "on his side," end quote.

Do you disavow this campaign email? Has the President or anyone else in the White House directed you to add this or a similar question to the 2020 census?

Secretary ROSS. I am not familiar with the email. I am not part of the Republican campaign committee, so I have not seen it; I have heard about it this morning. We are responding solely to the Department of Justice's request, not to any campaign request, not to any other political party request.

We are listening to stakeholders, many have written to us, some have come in to talk with me, and we have initiated a cold series of phone calls to stakeholders on both sides of the question. We will come to a conclusion prior to March 31st, which as I understand it is the date by which we must submit the questions to the Congress. We will comply with that date. And we are going very, very carefully and very thoroughly, analyzing all aspects of the request and its implications for the census were it to be approved and were it not to be approved.

Mr. SERRANO. Thank you. I am not a lawyer and certainly not a constitutional lawyer——

Secretary ROSS. Neither am I, sir. I am a civilian.

Mr. SERRANO. OK. But the Constitution is pretty clear to me, even though I am not a lawyer, it says count the people within the states, not the citizens. And some Federal agencies bring fear to people that are here as immigrants, who were not born here, and the purpose of the census should be to increase the count every 10 years, make it better, and this question troubles us a lot.

Mr. Secretary, staying on that line. In March 2017, the Department sent to Congress a list of subjects planned for the 2020 census. Then in December of 2017, the Justice Department wrote to the Acting Director of the Census Bureau, asking that the Census Bureau include on the 2020 census questionnaire a question regarding citizenship. Many advocates and stakeholders have expressed strong concerns that including such a question will discourage many communities from participating in the 2020 census.

Question, Mr. Secretary. Since this topic was not included in the March 2017 report to Congress on the topics to be covered in the 2020 census, may we assume that the Commerce Department itself is not supportive of adding this question?

Secondly, would you agree that it would be totally inappropriate to include any question that has not been thoroughly tested in the lead-up to the census?

Secretary ROSS. We have not yet made a decision on the Department of Justice request. It is a very big and very controversial request. We are taking it very seriously, but I have not yet made a decision.

I would like to address, though, what steps are we doing to make the 2020 census more accessible to people whose first language is not English, perhaps don't even have English as a language, what we are doing to call their attention to the census, to its importance, and to the privacy of their responses. So, if I may, I would like to describe a few of the steps that we are taking.

First of all, we are using many more languages in the census than was used in 2010. 2010 used as an alternative to English-Spanish, Chinese, Vietnamese, Korean, and Russian, five languages. We are including those five plus Arabic, Tagalog, Polish, French, Haitian-Creole, Portuguese, and Japanese. That is twelve languages versus five. That new list should cover 95.3 percent of all those who are limited to English speaking households in the country, so it is, for all practical purposes, everyone. [1]

The Q&A paper questionnaire and mailing materials, every one of them will be immediately in both Spanish and in English. The additional support materials will be in 59 languages, including the ones that I mentioned before. And the ads and partnership material also will be quite multi-lingual. We also will have in the call centers multilingual people able to converse with folks in their native tongue.

So those are the things we are doing to try to make language less of a barrier to people's responses.

In terms of media, we are going to have far more, hundreds of millions of dollars more spending on the communications program, which is organized by Y&R. It will be multilingual. It in fact has included among its subcontractors firms who specialize in media for non-English language citizens and residents.

Further, we are increasing the number of partnership specialists. Last time in 2010, there were 700 partnership specialists hired by the census; we will have 1,000 partnership specialists. [2]

The partnership concept is one that embraces local community organizations, health organizations, local governments, all sorts of things, and we have already signed up local governments that constitute well over 90 percent of the population to cooperate with us.

In addition, for the first time we will be having kiosks in the U.S. Postal Service branches. I don't know how well you can see these, but there are big banners, 14-by-70-inches, going up, promoting the census. There will be an instruction booth that one can access on a computerized basis. There are table stands which will hold hand-helds, so that people can fill out the form.

So we are doing everything to make this census more accessible to everybody regardless of native tongue or inclination. We are working very, very hard at it and I think it will produce good responses.

In addition, for the first time people have online response capacity; they are not required to respond online, but it is an additional facility. So now you can respond by Internet, by telephone, or by the physical, written document.

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[1] CLERK'S NOTE: The Department of Commerce corrected this percentage of coverage to 87 percent.

[2] CLERK'S NOTE: The Department of Commerce updated the number of partnership specialists in 2010 to be approximately 800.

And if all that fails, even after repeated mailings and repeated phone calls, we will have door-to-door enumerators coming multiple times.

So, as a former enumerator myself, I can promise you I understand the process, I understand its importance, and we will get it done.

Mr. SERRANO. Thank you. And I appreciate all that you are doing to make this census a better census than any other before.

Let me just close by saying this very briefly. We may have in this country, in fact we do, an immigration issue to deal with and it is going to take both parties to come together to resolve it, fix it, fix what is broken, but I don't think the census should be used to create more division, more fear, more hiding from people who should come forward and be counted. So, when you make your decision—I shouldn't tell you, you are a tough guy—don't be afraid to tell somebody, "Have you read the Constitution?"

Thank you.

Mr. CULBERSON. Thank you, Mr. Serrano.

I am pleased to recognize the gentleman from New Jersey, chairman of the full committee, Mr. Frelinghuysen.

The CHAIRMAN. Great. Welcome, Mr. Secretary. Thank you for a distinguished career outside the responsibility you have taken on and I know you are a good spokesman for the present administration.

So let me direct this to your staff more than to you. I often say in my opening remarks that the power of the purse resides in this committee and of course the power of the purse affects public policy. And you and I have yet to be acquainted. You have been on the job for over a year. I say to the Secretary's staff, the power of the purse resides with this Committee, and I think it is about time that you and I became acquainted.

I find it odd that we are engaged in a trade war, and you can tell from the tone of my voice what I think of it, but I respect the fact that you are extremely knowledgeable, and there has not been a consultation with the members of the Appropriations Committee.

I know we have great leadership, Chairman Culberson here, great leadership on Mr. Serrano's part, but, I worry as a Member of Congress representing Northern New Jersey where we have a lot of our major corporations, and as I travel around the world and see us stepping back from certain responsibilities militarily or in some cases taking on responsibilities that perhaps we shouldn't, I worry that now we are engaged in a trade war, which is further going to alienate us from our adversaries.

So I just want to say for the record, I look forward to discussing some of these matters with you and appreciate your time and effort, but it is this committee that provides the resources for all of our trade negotiations and it might be good to recognize through maybe steps to follow after this hearing that the communications can be improved.

Thank you, Mr. Chairman.

Secretary ROSS. Congressman Frelinghuysen, I will ask my staff this afternoon to talk with your staff and arrange for us to get together. I am sorry if we have not taken the initiative prior to this.

Mr. CULBERSON. I want to recognize the gentleman from Washington State, Mr. Kilmer.

TRIBAL CONSULTATION ON HALIBUT QUOTA

Mr. KILMER. Thank you, Mr. Chair, and thank you, Mr. Secretary.

It has come to my attention that several tribal leaders from my district have written to you and requested formal government-to-government consultation before a decision is made regarding the allocation of halibut quota in Area 2–A where these tribes hold treaty-reserved fishing rights under the Point Elliott Treaty of 1855.

We have copies of the letters and, with the permission of the Chair and the Ranking Member, I would like to submit those for the record.

Mr. CULBERSON. Yes, you may.

Quinault Indian Nation

POST OFFICE BOX 189 • TAHOLAH, WASHINGTON 98587 • TELEPHONE (360) 276-8211

March 7, 2018

Wilbur Ross, Secretary Commerce
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

RE: Request for Formal Government-to-Government Consultation/Halibut Management

Dear Mr. Ross:

Under the 1855 Treaty of Olympia, the Quinault Indian Nation (QIN), a federally recognized Indian tribe, has reserved fishing rights in marine waters 30 miles off the coast of Washington State, where it has fished since time immemorial. The federal court has consistently affirmed those rights.

National Oceanic and Atmospheric Administration's (NOAA) recommendation to reduce the tribal allocation of the halibut fishery in Area 2A by 49,000 pounds has a significant impact on QIN's ability to fully exercise its treaty rights. NOAA's decision was made without consultation with QIN and the other tribes that also have recognized treaty fishing rights in Area 2A. Conservation of the resource is NOAA's purported reason for the reduction, however, it has not provided any evidence or articulated the conservation concern.

Further, the federal government's role as our trustee requires its agencies consult with us before making decisions that impact our treaty rights. There has been no meaningful consultation between NOAA, QIN, and the other tribes regarding the halibut fishery.

The Quinault Indian Nation requests a government-to-government consultation to discuss NOAA's rationale, process and decision making regarding the tribal allocation before any final rule or decision is made concerning the tribal allocation of the halibut fishery. It is necessary that the consultation occur on an expedited schedule as soon as possible because the halibut fishery will be opened on March 24, 2018. QIN understands there are other tribes with treaty fishing rights who have also requested a government-to-government consultation regarding the halibut fishery.

Please contact my Executive Assistant Rose Enos-Weedmark at (360) 276-8211 ext. 2010 or renos@quinault.org to determine a mutual agreed time for the requested consultation.

Respectfully,



Fawn R. Sharp, President
Quinault Indian Nation

Cc:

Chris Oliver, Assistant Administrator NOAA fisheries
Maria Cantwell, Senator
Patty Murray, Senator
Derek Kilmer, Representative

QUILEUTE TRIBAL COUNCIL
POST OFFICE BOX 279
LA PUSH, WASHINGTON 98350-0279
TELEPHONE (360) 374-6163
FAX (360) 374-6311

March 8, 2018

Wilbur Ross, Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

RE: Request for formal Government-to-Government consultation on pacific halibut management

Dear Secretary Ross:

I am writing today on behalf of the Quileute Tribal Council to request formal government-to-government consultation regarding National Oceanic and Atmospheric Administration (NOAA-Fisheries) planning for the 2018 Area 2A halibut fishery. Under the 1855 Treaty of Olympia, the Quileute Tribe, a federally recognized Indian Tribe, has reserved fishing rights, including the right to take halibut, in marine waters out to 40 miles off the coast of Washington state. Federal courts have consistently affirmed these rights. As the Tribe's trustee, the federal government and agencies such as NOAA Fisheries have a responsibility to consult with the Tribe before taking actions that impact our treaty rights.

We understand NOAA Fisheries is considering reducing the allocation of halibut to the fishery in Area 2A, this would result in a reduction to the treaty tribal fishery by as much as 49,000 pounds. Any such reduction will have a significant adverse impact on the Quileute Tribe's treaty rights, culture, and economy. Regardless of the nature, status and rationale for any such recommendation, NOAA Fisheries has failed to properly consult with the Quileute Tribe concerning its planning for the 2018 Area 2A halibut fishery. The Quileute Tribe regards NOAA Fisheries actions to date to be arbitrary and in violation of its duties as a federal trustee. We urge you to remedy this situation by directing NOAA Fisheries to initiate formal government-to-government consultations immediately with the Quileute tribe regarding the 2018 Area 2A pacific halibut fishery. With the fishery scheduled to open on March 24, 2018, it is imperative that the consultation commence immediately and before any final decision is made concerning the Area 2A and subsequent treaty tribe fishery allocation.

Please contact Mr. Frank Geyer, Deputy Director of Quileute Natural Resources, at 360-374-2027 or frank.geyer@quileutetribe.com to set a mutually agreeable time for the consultation.

Respectfully,

for Douglas Woodruff, Jr., Chairman

CC: Chris Oliver, Assistant Administrator, NOAA Fisheries
Barry Thom, Regional Administrator, NOAA Fisheries
Patty Murray, Senator
Maria Cantwell, Senator
Derek Kilmer, Representative

COPY

MAKAH TRIBAL COUNCIL

P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201

The Makah Tribe is an equal opportunity employer.

Wilber Ross, Secretary Commerce
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

February 28, 2018

RE: Request for formal Government to Government Consultation regarding halibut management

Mr. Ross

The Makah Tribe is a Federally recognized Indian tribe and the signature to the Treaty of Makah 1855. We are one of the largest fishing tribes in the Lower 48. Ceremonial, subsistence, and commercial fishing have sustained the Makah Tribe since time immemorial and is an integral part of the way of life and the identity of the Makah people. Our treaty rights have been affirmed by the courts several times over through Boldt and subsequent decisions and we expect that NOAA will implement those very legal decisions. As our Federal trustee, NOAA has the obligation and responsibility to ensure that our treaty rights are respected and that Makah's positions and concerns are included in the processes and decision making NOAA undertakes on our behalf.

We are writing to communicate grave concerns over NOAA's deficiencies in upholding our treaty rights relative to determining the tribal allocation of halibut fisheries in our area, Area 2A, and are requesting government to government consultation to discuss the process, rationale, and decision making.

Specifically, we are concerned with the following observations: 1) NOAA has failed to adequately meet and consult with the tribes relative to halibut management, thus abdicating their trust responsibility. 2) NOAA has provided an arbitrary recommendation to cut the Area 2A quota, resulting in the tribal quota to be cut by 49,000 pounds. NOAA suggests that the cuts are necessary due to "conservation", yet has not provided clear evidence or rationale (or Consultation) for this decision. Our stocks are healthy, and our catch history will reflect this.

The Makah Tribe is requesting a Government to Government Consultation before any rulemaking, and before any decisions are made for the Area 2A quota. With the decision making scheduled to be complete by just days before the International Opening Date of March 24, we request that this consultation be done on an expedited time frame. Please contact Rosina Depoe, Chief of Staff at 3606453257 or email rosina.depoe@makah.com

Respectfully Submitted,

Nate Tyler
Chairman Makah

(cc)
Chris Oliver, Assistant Administrator NOAA Fisheries
Maria Cantwell, Senator
Patty Murray, Senator
Derek Kilmer, Representative

THE SUQUAMISH TRIBE
TRIBAL COUNCIL
LEONARD FORSMAN, CHAIRMAN

Post Office Box 498
Suquamish, WA 98392-0498
Phone (360) 394-8461
Fax (360) 598-4666

March 7, 2018

Wilbur Ross, Secretary Commerce
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

RE: Request for formal Government-to-Government Consultation regarding halibut management

Dear Mr. Ross:

The Suquamish Tribe is a federally recognized Indian tribe and a signatory to The Point Elliott Treaty of 1855. As a principal Puget Sound fishing tribe we have utilized the bountiful waters and shorelines of the Salish Sea since time immemorial to sustain our culture. Our treaty fishing rights have been affirmed many times over through Boldt and subsequent judicial decisions, and we expect that NOAA will recognize and abide by what the courts have determined.

As our Federal Trustee, NOAA has the highest fiduciary duty and responsibility to ensure that our treaty rights are respected, and that the Suquamish Tribe's positions and concerns are included in the processes and decision-making NOAA undertakes on our behalf. Moreover, final NOAA decisions must meet substantive standards developed by the federal courts regarding our Treaty fishing rights. We are gravely concerned that NOAA has, to date, been deficient in upholding our treaty fishing rights in determining tribal allocation of halibut fisheries in Area 2A. We are requesting government to government consultation with NOAA to pursue a resolution.

NOAA suggests that the cuts are necessary for "conservation," yet has not provided clear evidence or rationale for this decision. Unilateral and unexplained reductions in Treaty fishing opportunity in the name of "conservation" by non-Indian agencies such as NOAA is what has generated decades of treaty fishing right protection litigation. Our demand for formal consultation is an effort to resolve this dispute before adding to that record of litigation.

The Suquamish Tribe is requesting a government-to-government consultation before any rule making decisions occur regarding the Area 2A quota. With the decision-making scheduled to be complete in just days before the tribal opening on March 24th, we request an expedited time frame to initiate this consultation process required by Executive Order 13175 (attached).

Please contact Fish & Wildlife Director, Robert Purser, at 360-394-8436 or email: rpurser@suquamish.nsn.us, to determine a mutually agreeable time to discuss our concerns and schedule the start of the consultation process.

Respectfully,

Leonard Forsman
Chairman Suquamish

(cc) Chris Oliver, Assistant Administrator NOAA fisheries
Maria Cantwell, Senator
Patty Murray, Senator
Derek Kilmer, Representative

67249

Federal Register
Vol. 65, No. 218
Thursday, November 9, 2000

Presidential Documents

Title 3—

The President

Executive Order 13175 of November 6, 2000

Consultation and Coordination With Indian Tribal Governments

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes; it is hereby ordered as follows:

Section 1. *Definitions.* For purposes of this order:

(a) "Policies that have tribal implications" refers to regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

(b) "Indian tribe" means an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a.

(c) "Agency" means any authority of the United States that is an "agency" under 44 U.S.C. 3502(1), other than those considered to be independent regulatory agencies, as defined in 44 U.S.C. 3502(5).

(d) "Tribal officials" means elected or duly appointed officials of Indian tribal governments or authorized intertribal organizations.

Sec. 2. *Fundamental Principles.* In formulating or implementing policies that have tribal implications, agencies shall be guided by the following fundamental principles:

(a) The United States has a unique legal relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions. Since the formation of the Union, the United States has recognized Indian tribes as domestic dependent nations under its protection. The Federal Government has enacted numerous statutes and promulgated numerous regulations that establish and define a trust relationship with Indian tribes.

(b) Our Nation, under the law of the United States, in accordance with treaties, statutes, Executive Orders, and judicial decisions, has recognized the right of Indian tribes to self-government. As domestic dependent nations, Indian tribes exercise inherent sovereign powers over their members and territory. The United States continues to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, tribal trust resources, and Indian tribal treaty and other rights.

(c) The United States recognizes the right of Indian tribes to self-government and supports tribal sovereignty and self-determination.

Sec. 3. *Policymaking Criteria.* In addition to adhering to the fundamental principles set forth in section 2, agencies shall adhere, to the extent permitted by law, to the following criteria when formulating and implementing policies that have tribal implications:

(a) Agencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments.

(b) With respect to Federal statutes and regulations administered by Indian tribal governments, the Federal Government shall grant Indian tribal governments the maximum administrative discretion possible.

(c) When undertaking to formulate and implement policies that have tribal implications, agencies shall:

(1) encourage Indian tribes to develop their own policies to achieve program objectives;

(2) where possible, defer to Indian tribes to establish standards; and

(3) in determining whether to establish Federal standards, consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes.

Sec. 4. *Special Requirements for Legislative Proposals.* Agencies shall not submit to the Congress legislation that would be inconsistent with the policymaking criteria in Section 3.

Sec. 5. *Consultation.* (a) Each agency shall have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications. Within 30 days after the effective date of this order, the head of each agency shall designate an official with principal responsibility for the agency's implementation of this order. Within 60 days of the effective date of this order, the designated official shall submit to the Office of Management and Budget (OMB) a description of the agency's consultation process.

(b) To the extent practicable and permitted by law, no agency shall promulgate any regulation that has tribal implications, that imposes substantial direct compliance costs on Indian tribal governments, and that is not required by statute, unless:

(1) funds necessary to pay the direct costs incurred by the Indian tribal government or the tribe in complying with the regulation are provided by the Federal Government; or

(2) the agency, prior to the formal promulgation of the regulation,

(A) consulted with tribal officials early in the process of developing the proposed regulation;

(B) in a separately identified portion of the preamble to the regulation as it is to be issued in the **Federal Register**, provides to the Director of OMB a tribal summary impact statement, which consists of a description of the extent of the agency's prior consultation with tribal officials, a summary of the nature of their concerns and the agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of tribal officials have been met; and

(C) makes available to the Director of OMB any written communications submitted to the agency by tribal officials.

(c) To the extent practicable and permitted by law, no agency shall promulgate any regulation that has tribal implications and that preempts tribal law unless the agency, prior to the formal promulgation of the regulation,

(1) consulted with tribal officials early in the process of developing the proposed regulation;

(2) in a separately identified portion of the preamble to the regulation as it is to be issued in the **Federal Register**, provides to the Director of OMB a tribal summary impact statement, which consists of a description of the extent of the agency's prior consultation with tribal officials, a summary of the nature of their concerns and the agency's position supporting the

need to issue the regulation, and a statement of the extent to which the concerns of tribal officials have been met; and

(3) makes available to the Director of OMB any written communications submitted to the agency by tribal officials.

(d) On issues relating to tribal self-government, tribal trust resources, or Indian tribal treaty and other rights, each agency should explore and, where appropriate, use consensual mechanisms for developing regulations, including negotiated rulemaking.

Sec. 6. *Increasing Flexibility for Indian Tribal Waivers.*

(a) Agencies shall review the processes under which Indian tribes apply for waivers of statutory and regulatory requirements and take appropriate steps to streamline those processes.

(b) Each agency shall, to the extent practicable and permitted by law, consider any application by an Indian tribe for a waiver of statutory or regulatory requirements in connection with any program administered by the agency with a general view toward increasing opportunities for utilizing flexible policy approaches at the Indian tribal level in cases in which the proposed waiver is consistent with the applicable Federal policy objectives and is otherwise appropriate.

(c) Each agency shall, to the extent practicable and permitted by law, render a decision upon a complete application for a waiver within 120 days of receipt of such application by the agency, or as otherwise provided by law or regulation. If the application for waiver is not granted, the agency shall provide the applicant with timely written notice of the decision and the reasons therefor.

(d) This section applies only to statutory or regulatory requirements that are discretionary and subject to waiver by the agency.

Sec. 7. *Accountability.*

(a) In transmitting any draft final regulation that has tribal implications to OMB pursuant to Executive Order 12866 of September 30, 1993, each agency shall include a certification from the official designated to ensure compliance with this order stating that the requirements of this order have been met in a meaningful and timely manner.

(b) In transmitting proposed legislation that has tribal implications to OMB, each agency shall include a certification from the official designated to ensure compliance with this order that all relevant requirements of this order have been met.

(c) Within 180 days after the effective date of this order the Director of OMB and the Assistant to the President for Intergovernmental Affairs shall confer with tribal officials to ensure that this order is being properly and effectively implemented.

Sec. 8. *Independent Agencies.* Independent regulatory agencies are encouraged to comply with the provisions of this order.

Sec. 9. *General Provisions.* (a) This order shall supplement but not supersede the requirements contained in Executive Order 12866 (Regulatory Planning and Review), Executive Order 12988 (Civil Justice Reform), OMB Circular A–19, and the Executive Memorandum of April 29, 1994, on Government-to-Government Relations with Native American Tribal Governments.

(b) This order shall complement the consultation and waiver provisions in sections 6 and 7 of Executive Order 13132 (Federalism).

(c) Executive Order 13084 (Consultation and Coordination with Indian Tribal Governments) is revoked at the time this order takes effect.

(d) This order shall be effective 60 days after the date of this order.

Sec. 10. *Judicial Review.* This order is intended only to improve the internal management of the executive branch, and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by a party against the United States, its agencies, or any person.

William J. Clinton

THE WHITE HOUSE,
November 6, 2000.

[FR Doc. 00–29003
Filed 11–8–00; 8:45 am]
Billing code 3195–01–P

Mr. KILMER. Thank you.

The formal consultation process is part of the Federal Trust responsibility, it is an essential component of meeting our treaty obligations to Federally-recognized tribes.

So I would like to know how you have responded to these requests, whether you will commit to engaging in formal consultation with each of these affected tribes before finalizing any decision on rulemaking that will affect the allocation of halibut quota in that area.

Secretary ROSS. As you know, the fisheries operation is part of NOAA and I have requested NOAA to engage with the tribal leaders.

Mr. KILMER. Thank you. And do you know, will that be a formal consultation?

Secretary ROSS. NOAA is going to work that out with the leaders.

EXPORT-IMPORT BANK OPERATIONS

Mr. KILMER. OK. On another note, the Export-Import Bank doesn't have a quorum and it is unable to do deals over $10 million and, as a consequence, there is over $35 billion in pending deals that are stuck in the pipeline without being able to be approved with a board quorum. Without a quorum, these deals are in jeopardy, which will result in the loss of American jobs.

So, two questions. One, do you agree that the Export-Import Bank needs to be fully operational; and, secondly, when will the Administration send a new chairman nominee?

Secretary ROSS. Well, I am not aware that the Administration intends to send a new nominee or does not; I just am not aware where they stand. That is not a decision that will be made within Commerce, that is a decision that will be made solely within the White House.

I am on record as suggesting that I do believe we need a financing mechanism to help us in international trade, if for no other reason than the extremely sturdy activities of China, European Union, and other parties.

So in terms of the overall objective, we need to solve the financing issue, but I am not privy to any decision that the President has made regarding any other nominees for the Ex-Im Bank board. I do sit on it as an ex officio member, but that is the only real relationship that I have at this moment with the Ex-Im Bank.

Mr. KILMER. Coming from the most trade-dependent state in the country, we would sure like to see that to be fully operational.

Secretary ROSS. I understand that, sir.

STEEL AND ALUMINUM TARIFFS

Mr. KILMER. Finally, Commerce Department decisions on exclusions from impending steel and aluminum tariffs will be made on a company-by-company basis rather than by product, and granting an exclusion from tariffs to one company means that that company gains a potentially huge economic advantage over its competitors. Given that, it is important that the process be impartial and fair.

So how will the Commerce Department make sure that companies with political and business connections to President Trump

are not favored in that process, and will the process be open and transparent?

Secretary ROSS. Well, the process will be open and transparent. We have posted a notice in the Federal Register and on our website earlier this week and accompanied that with a press release. We have shortened the time period, we are not requiring big, long, protracted things, because we want to minimize the amount of inconvenience that any of the affected parties will suffer as a result of the process.

So we are gearing up to be fast, to be fair, and to be practical.

Mr. KILMER. It looks like my time is up.

Thank you, Mr. Chairman.

Mr. CULBERSON. Thank you, Mr. Kilmer.

I am pleased to recognize at this time the former chairman of the full committee, the gentleman from Kentucky.

COAL COMMUNITIES

Mr. ROGERS. Mr. Chairman, thank you very much for recognizing me.

Secretary, welcome. We are glad to have you here again.

As you helped lead the Administration's efforts to boost the American economy, particularly in trade and particularly in juxtaposition from China, as you lead those efforts, we cannot afford to leave behind Americans in certain sections of the country like mine. So I want to ask you about the Economic Development Administration, which you have proposed to zero out for the second straight year. We disregarded your recommendations last year and I have hopes that we will do the same for the coming year.

As you explicitly note in your budget proposal, "The EDA has led the Federal economic development agenda for over 50 years by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy," end of quote. I entirely agree with you.

Further, your own evaluations show EDA programs have exceeded performance goals in private sector investment in distressed communities and jobs created as a result of EDA grants. Yet, for the second year in a row, you propose to eliminate the agency entirely.

Now, here is a knowable known, a knowable known. My district is among the poorest, most economically distressed congressional districts in the country. In more than half of my 30 counties, more than half, at least 30 percent of residents live below the poverty level. Even the county with the lowest percentage is still well above the national average. This dire need is exactly why over the years, these 50 years, this EDA administration has been so helpful to us in recruiting jobs to keep our people at home and to prevent starvation.

Mr. Secretary, I am very concerned about this proposal, how it would affect rural America, and I would like to hear your answer.

Secretary ROSS. Thank you for that question.

The Administration's 2019 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. The Administration has made the

necessary tradeoffs and choices, difficult choices inherent in pursuing these goals. This means changing the role and size of the Federal Government and prioritizing the programs that provide a good return for the taxpayer, as well as those that serve the most critical functions, while 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 those.

Mr. ROGERS. Well, within EDA, I am particularly troubled about the loss of money we have historically directed to assist coal-mining communities.

Now, I come from the war field, the war on coal. I have 12,000 laid-off coal miners in my district alone, who are able people, mechanically talented people, who are now trying to find a job at McDonald's, unsuccessfully, I might add. In the past, EDA has worked to help these types of communities that need some assistance from somewhere. The only place to turn to, frankly, Mr. Secretary, is EDA.

I would hope that you could reconsider your budgetary recommendation in this regard.

Secretary ROSS. Yes, sir. I am sure you are aware, Congressman, that the President has tried very hard to end the war on coal, has tried very hard to make a more level playing field for the coal operators, and has developed a whole Appalachian strategy, which he is trying to implement.

We also, as part of the negotiations with China, when we were over there in November, got agreement in principle on a huge project in the state that we think will answer to some degree the question of putting people to work. We are not running away from that objective, it is just this particular means of trying to achieve it doesn't seem to fit within the budget. And I am sorry to say that, because I like the EDA.

Mr. ROGERS. Well, so do I, as you may have suspected. But, yes, the war on coal was real, and this President promised to end that war and I think he has, but in the meantime we have got a lot of wounded soldiers on the battlefield who are desperately in need of some help from this President who promised to help.

So, again, I would hope you would reconsider your decision to cut this agency, which you personally like, and so do I.

Secretary ROSS. Well, thank you, Congressman. We will give careful thought to that.

Mr. ROGERS. Thank you.

Mr. CULBERSON. Thank you, Mr. Rogers. And of course the budget is simply a recommendation, which we appreciate very much.

And I am pleased to recognize the gentleman from Pennsylvania, Mr. Cartwright.

ECONOMIC DEVELOPMENT ADMINISTRATION

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

Mr. Secretary, I want to follow up on Chairman Rogers' line of questioning. It seemed to me, and I might be incorrect about this, but when he asked you about, you know, why are you cutting EDA, Chairman Rogers was very eloquent in explaining the importance

of EDA to depressed areas, areas that include my district as well, a former coal-mining region, and it occurred to me that you were reading the response, Mr. Secretary.

You were talking about, I think you said, unsuccessful and duplicative programs in the Federal Government. You don't mean to say EDA was unsuccessful or duplicative, do you?

Secretary ROSS. Well, we do have the Small Business Administration, which helps local companies. We have proposed a very big infrastructure project or series of projects, a lot of which hopefully will help those areas that need capital investment, rural areas that need broadband and infrastructure needs that will facilitate economic development.

So the Administration is not running away from the idea of helping. What it is doing is trying to have a reasonable overall budget, and that means we have to make very difficult choices, very uncomfortable choices, one of which is the EDA.

Mr. CARTWRIGHT. Mr. Secretary, since taking office in 2013, I have seen firsthand how the EDA has provided opportunities for communities in my district. Despite this great work in my district and Chairman Rogers' district and across the country, what you call your laser focus on investing in our economy, despite all of that, the Administration, again, for the second year in a row, proposes to eliminate the EDA.

Now, I am the lead Democrat on a bill that Chairman Rogers introduced called the RECLAIM Act, and Senator McConnell also in the Senate introduced that. That would inject $1 billion to benefit communities that have been significantly impacted by the declining use of coal. Even without the RECLAIM Act, the past Appropriations bills have directed $90 million per year administered by the EDA to help the exact types of communities this Administration has repeatedly claimed to want to help.

So are you really suggesting that the Small Business Administration and this infrastructure program where 80 percent of the money has to come from local and state governments, are you really suggesting that those will effectively supplant the great work that EDA does in these depressed areas?

Secretary ROSS. Well, the best way to help all communities is to have a stronger overall economy, that is the number one priority of the President. I believe he is delivering very, very well on that promise. There is economic growth in the last several quarters that economists previously had said were not achievable.

We are trying very hard to balance the needs of the economy and, as I mentioned, unfortunately, difficult choices have to be made and the decision on EDA was one of those difficult choices. We just cannot afford everything that we would like to do had we had the money.

Mr. CARTWRIGHT. Just I want to make sure I understand you perfectly clearly, Mr. Secretary. You have used the word duplicative. Over the past 18 years, the EDA has provided $18.5 million in funding to my area, Northeastern Pennsylvania, with a 50-percent match by state or local governments. Can you provide a specific example of private sector resource that would be available should state and local governments be unable to cover the loss of Federal support with their own cash-strapped budgets?

Secretary ROSS. All right. Well, as you know, Congressman, for the first time in many, many years, a new coal mine actually opened in Pennsylvania and we helped them negotiate shipping coal overseas. So that has nothing to do with EDA, that was done elsewhere in the Commerce Department.

EDA is not the only way that we try to help communities. We have Foreign Commercial Service people in many, many, many communities around the country trying to help businesses develop export activity. One of the great tragedies of our current situation is that fewer than three percent of all American businesses ever export anything. We are trying very, very hard to change that.

In addition, we have Select USA, which is the largest foreign direct investment program that we have. We had 3,000 participants last year here in Washington in the middle of June. The State of West Virginia and the State of Washington, if memory serves, were both very well represented with their economic development people, and I believe that some actual investments by foreigners in those States came as a result of it.

So there are many other ways that we are trying to help the communities and it is unfortunate that we have to cut out this particular one, but we are in a financially stringent period.

Mr. CARTWRIGHT. Well, finally, Mr. Secretary, I represent a district that has communities that do continue to struggle, but with the help of EDA's Regional Strategies Program, for example, Ben Franklin Technology Partners of Pennsylvania will invest in over 15 startups and manufacturers that will create 200 new jobs with a median salary of $72,000. These startups and manufacturers often struggle early on.

Now, Secretary Ross, in September of 2017 you stated, "RIS projects will enable entrepreneurs in communities across the U.S. to start new businesses, manufacture innovative products, and export them throughout the world, increasing America's global competitiveness," unquote. Today, despite this glowing review showcasing exactly why this program is a wonderful investment of our taxpayer dollars, you are proposing the elimination of that program, a part of EDA.

And I just want to end by echoing Chairman Rogers and I am not sure you answered his question. Will you reconsider elimination of EDA?

Secretary ROSS. Well, we have submitted the budget proposal that is before you and we will seriously consider everything that we hear and learn today, but it would be inappropriate for me to commit to you that there will be any change in our proposal.

Our proposal is what it is, we feel it is what is necessary, and I am afraid that is where we are at this point.

Mr. CULBERSON. Thank you, Mr. Secretary.

Mr. CARTWRIGHT. I yield back.

Mr. CULBERSON. Thank you, Mr. Cartwright.

I will recognize the gentleman from West Virginia, Mr. Jenkins.

COAL EXPORTS

Mr. JENKINS. Thank you, Mr. Chairman.

I would like to associate myself with the comments from the gentleman from Kentucky. And I think you have heard from a bipar-

tisan group that we are all supportive of the EDA. I am from coal country, I am from West Virginia, and I appreciate you coming to West Virginia recently. So I join with my colleagues, I am a staunch defender and supporter of the EDA, and will fight tooth and nail to make sure that that program gets funded.

Mr. Secretary, you referenced coal exports in your comments. You have also referenced deals to try to improve coal exports. What I hear oftentimes is the issue of many States prohibiting the export of coal out of ports in their States and trying to drive an ideological, anti-coal agenda.

What can you and your department do to make sure that we have free-flowing commerce, that we get our incredible natural resource like coal through our ports to get on this trade deficit that you are so focused on? We have got to get our resources moving, we have got to get them through our ports, we cannot allow local governments to try to drive an ideological agenda.

Secretary ROSS. Well, if you would let me know or let my staff know which are the ports and which are the States, we will see what——

Mr. JENKINS. Washington. I could run through the list. I think we know what they are. I mean, these are all well recognized and acknowledged local governmental and State-driven initiatives to put up barriers on the ability to export coal out of ports in their States. Washington.

Secretary ROSS. Right. I don't know that the Commerce Department has jurisdiction over those actions. As a layperson, it strikes me that it is more likely that would take some sort of congressional action to deal with that.

Mr. JENKINS. Well, we would like to work with you to try to explore options, because I think there are ways that we can, defining certain things as interstate commerce and all, where we can prohibit states from taking these types of action.

So I would like to work with you, Mr. Secretary, to try to make sure any barriers that we do have the ability to break down that we do so.

Secretary ROSS. Well, I am certainly eager to facilitate exports in general and exports of coal in particular, and I think we have already proven that with some of the other actions that we have taken.

Mr. JENKINS. Thank you. Secondly and, again, thank you for the trip to China and referencing West Virginia's participation. For the Members of the committee, a memorandum of understanding was signed with China suggesting an investment of $80 billion in West Virginia's oil and gas industries.

What is your level of confidence, having been there in person, having been a part of the negotiating team, is this real? Can we count on it? I have met with our Governor, I have talked with our Secretary of Commerce in West Virginia.

Tell me your opinion about how realistic and reliable these announcements are for creating economic activity in our state.

Secretary ROSS. Well, I met with your Governor when he was up here in Washington recently for the Governors Conference and at that point he indicated it was his understanding that things were

progressing in a reasonably satisfactory fashion. I have certainly not heard anything from the Chinese side to the contrary.

So as far as I know, it is early days, this is an enormous project, enormously complicated, enormously large in scope, and consequently it is not something that will happen Monday morning. But as far as I can tell from the inputs we have been receiving, the early stages look favorable.

Mr. JENKINS. I would like to make sure our congressional office is working with your office, and I appreciate that you are getting updates from the Governor on how it is going, we would like to be supportive of your staff's engagement. There is obviously a very important role from DOC under your supervision to be a key player in this very complicated, as you described, business opportunity.

So I think it is going to take all of us working together. We want one plus one to equal three. And so I just encourage the continued engagement. I appreciate your support and let's all work together, whether it be this project or others. We have got great economic needs and we have great opportunity to invest in West Virginia.

Secretary ROSS. Well, Mike Platt in our office, the Office of Legislative Affairs, would be a very good working relationship with your staff. So I would urge you to have your staff reach out to Mike and we will do our best to keep them abreast.

Mr. JENKINS. We look forward to working with you. Thank you, Mr. Secretary.

Secretary ROSS. Thank you, Congressman.

Mr. ROGERS. Ms. Meng.

CENSUS QUESTIONS

Ms. MENG. Thank you, Mr. Chairman.

Thank you, Mr. Secretary for being here today.

What is the purpose of the census as required by the Constitution?

Secretary ROSS. I'm sorry.

Ms. MENG. What is the purpose of the census as required by the Constitution?

Secretary ROSS. The Constitution requires us to enumerate every person at the place of their normal residence.

Ms. MENG. And do non-citizens count as every person?

Secretary ROSS. Non-citizens do count as a person.

Ms. MENG. And do you believe non-citizens count equally as citizens for the purpose of the census?

Secretary ROSS. That is a more complicated question because, as you know, early on in the census certain parties were counted as a fraction of a person. So we have no intention in the 2020 census of counting anyone except as a person.

Ms. MENG. Thank you. And will adding the question of citizenship help improve accuracy for the census?

Secretary ROSS. Well, that is one of the questions with which we are grappling and one of the important issues that will inform our ultimate decision. We will make a decision by March 31st, which is the date on which we must inform the Congress of the final questions for the 2020 census.

Ms. MENG. Well, if it helps, and I am sure you do know this, that four former directors of the census who have served in both Repub-

lican and Democratic administrations have all written that they are concerned in asking about citizenship status, that it would exacerbate privacy concerns and lead to inaccurate responses, and that the sum effect would be bad census data.

Secretary ROSS. We are very aware of the views of those four directors and also of the views of other former census directors.

Ms. MENG. And what are the costs associated with adding a last-minute question like the citizenship question?

Secretary ROSS. Well, the cost question is one of the ones that we would obviously be grappling with. The actual cost of the incremental printing and all that is pretty trivial, so that is not the big issue. The question is response rate and the follow-up activity that is needed.

Ms. MENG. The in-language testing and marketing and research that you previously mentioned today, has it been tested on a question such as the citizenship question?

Secretary ROSS. The citizenship question has been used repeatedly in the American community survey.

Ms. MENG. In the 2020 census operation plan, it states that if the final English content changes after April 2018, then there will not be adequate time in the schedule to translate, design, and produce non-English questionnaires for the 2020 census.

Secretary ROSS. Well, that is correct. That is why we will be certain to make the decision one way or the other by March 31st.

Ms. MENG. And going back to Mr. Serrano's question about potential politicizing of this question and input on the census, you mentioned that you had not seen the email that the Trump campaign sent out, so I just wanted to show you a copy.

And if I could submit it for the record, Mr. Chairman?

[The information follows:]



[click.campaigns.rnchq.com]

Friend,

The President wants the 2020 United States Census to ask people whether or not they are citizens.

In another era, this would be COMMON SENSE... but ***19 attorneys general*** said they will fight the President if he dares to ask people if they are citizens.

The President wants to know if you're on his side.

Do you believe the 2020 United States Census should ask if people are American citizens?

ABSOLUTELY! IS THAT EVEN A QUESTION?

NO [click.campaigns.rnchq.com]

Secretary ROSS. My eyesight is not good enough to read it from over here.

Ms. MENG. Neither is mine, but I have extra copies.

Has the President or anyone in the White House discussed with you or anyone on your team about adding this citizenship question?

Secretary ROSS. I am not aware of any such.

Ms. MENG. Many advocates have noted that the inclusion of a question around citizenship will greatly decrease immigrant community participation in the census, which goes against its purpose. Have you considered this impact of including the citizenship question and what is your assessment of the impact and what will you do to ameliorate this problem?

Secretary ROSS. Well response rate is one of the central issues, especially as it relates to cost and potentially as it relates to accuracy. So that is one of the very many factors that we have been considering actively. I mentioned before, I think perhaps when you were not in the room, some of the other measures that we're taking to make the census more accessible to people. So if I may, I'd like to briefly summarize those steps that we are taking. We're do——

Ms. MENG. If I could, I—actually, Mr. Secretary, I was in the room, I did hear.

Secretary ROSS. Oh, you were.

Ms. MENG. And I do appreciate your efforts. I am just concerned about how those measures will affect the minute addition of a question. My time is running out, but I do hope sincerely, Mr. Secretary, that you will take away what you have heard from today's meeting. The mission of a census is to serve, as on your website, states that it is to serve as the leading source of quality of data. So I implore you in the interest of the taxpaying American people that you do what you can and in your power to make this process as less expensive and as much accurate as possible. Thank you. I yield back.

Secretary ROSS. I stand by what we said on the website.

Ms. MENG. Thank you.

Mr. ROGERS. Judge Carter.

INTELLECTUAL PROPERTY RIGHTS

Mr. CARTER. Thank you, Mr. Chairman. Secretary Ross, welcome. We are really honored to have you here today. You have consistently stated that unfair trade practices put our businesses at disadvantage in the global markets. The President has made it clear that free and fair trade is critical to the economy and the strategic position of the United States. And I don't need to tell you how important trade is to the great State of Texas. It is clear that trade enforcement and compliance are a focus for you in the budget.

What changes are you making within the International Trade Administration to put the nation on a level playing field? Back home in Texas we have a large computer technology presence with many highly skilled computer experts. What steps are you taking to level the playing field in regards to intellectual property rights?

Secretary ROSS. Well, as I am sure you are aware, intellectual property rights, Congressman, are the topic of a section 301 investigation, which should be coming to a conclusion in the fairly im-

mediate future. And depending on what the study recommends and depending on what the President does with it, that will be a direct response to the problem of intellectual property rights.

Meanwhile, the new Patent Director, Mr. Iancu, is also taking steps to improve the durability and the quality of patent protection that we give. And on that score it is interesting to note an amazing statistic: around about June of this year, the U.S. Patent Office will issue its ten millionth patent. That is a pretty extraordinary achievement. And it is symbolic of how important intellectual property rights are to our everyday citizen and to every business in this country.

INTERNATIONAL TRADE

Mr. CARTER. Our founding fathers clearly recognized that our ideas had worth. And I think this is very important to the future of the United States of America. Let me stress, and I can't stress more that NAFTA is very important to the State of Texas and to our farmers. Completely withdrawing from NAFTA could spell disaster for the wheat and corn farmers. In large part that trade is conducted through NAFTA. NAFTA has been great for U.S. farmers and for our ranchers helping U.S. agricultural exports to Canada and Mexico to increase 350 percent since 1993. One out of every seven Texas jobs is connected to agriculture. However, the NAFTA negotiations progressing and will this trade budget suffice on those negotiations? Dairy farmers are important to Texas. Can you elaborate on what measures you are considering with concern to Canada in allowing dairy farmers to access Canadian markets?

Secretary ROSS. Well, I made no secret that I am very opposed to the dairy management system that the Canadians use. I think it is a terrible system. It has been very, very detrimental to the milk industry and the dairy industry in general in the United States. It is one of many problems that we have in terms of the relationship with Canada.

But in terms over the overall question, a withdrawal from NAFTA, the President has said his first choice is not to withdraw. His first choice is to get a better deal in agriculture and in manufactured goods and in services, both financial services, digital services and other kinds of services. So it is not anyone's favored alternative. But unless you are at the end of the day known to be prepared to take an extreme measure if the deal is lousy you won't win.

So it is very important that people understand that status quo is not acceptable. That there are problems that have come in. And I think the good news is that there have now been these seven sessions done some in Mexico, some in Washington, some in Canada, and there has been progress made on a lot of what I would call the easier issues. And those are all going to bring some sort of benefit to the U.S. The harder issues are the ones that are being grappled with now. But I don't believe that the President would have granted a temporary absolution from the 232 tariffs on steel and the 232 tariffs on aluminum if he didn't think there was a reasonable chance that we could not only resolve the national security aspects of those, but also come to fruition in an overall economic sense with

Canada and Mexico. He may be wrong, but it certainly represents a good faith effort to do it.

Mr. CARTER. I agree. Thank you.

Mr. ROGERS. Thank you. Mr. Secretary, consistent with your demands for time, we are hopeful that we can have at least an abbreviated second round of questions. Is that agreeable with the Secretary?

Secretary ROSS. Yes. I believe it has been scheduled for as long as 11:30 if need be. I am happy to do a second round.

Mr. ROGERS. 11:30?

Secretary ROSS. Yes.

Mr. ROGERS. All right. We will meet your request.

Secretary ROSS. Now, perhaps I shouldn't have volunteered that time. That may be an unpolitical move on my part.

INTERNATIONAL TRADE LAW ENFORCEMENT

Mr. ROGERS. I was thinking just 5 minutes, but I am glad you are giving us another forty minutes. Mr. Secretary, it has been mentioned here before about steel. Several steel companies have had to close their plants and lay off employees at an alarming rate due to unfair trade practices from their foreign competitors. Several of these companies joined together and filed a complaint with the International Trade Administration and the International Trade Commission accusing China and other countries of purposefully undervaluing their corrosion resistant steel imports in order to increase their market share in the U.S.

However, there is a significant backlog of anti-dumping cases pending before the International Trade Administration, which is having a negative impact on the domestic steel industry. Over the last few years this Committee has steadily provided funding increases for the International Trade Administration's enforcement and compliance division. I am pleased to see that the President's request continues this trend with some money above the House passed bill in fiscal 2018. How do you plan to use these resources, these increased fundings to prevent such large case backlogs in the future?

Secretary ROSS. Well, the ITA has been—and Commerce in the aggregate has been much more active than in any prior administration. We have been running seventy, eighty percent more cases initiated than had been true in the prior administration. We have also completed far more cases than any administration ever has completed. We had over a hundred cases.

In terms of total trade orders outstanding, we have some 424 in existence and in force right now, about half of which relate to various steel products. We have 87 or thereabouts pending cases at the moment, of which 38 also relate to steel and steel products. So I can assure you that is one of the materials that is very much on our mind.

The problem with a trade case under the World Trade Organization rules is it gets to be a little bit of a game of whac-a-mole. What happens is we are required to file in the case very precise product specifications. Sometimes to the extent of saying "two-tenths of a millimeter in depth is the product." And we also have to be very specific as to the geography. So what that results in is the offend-

ing dumper will then move it to another country and it will suddenly come in as though it were manufactured in that other country.

We had it recently with oil country tubular goods. A lot was starting to come in, steel products, that was starting to come in from a country that doesn't even have an oil and gas industry at all. So the only reason that they got into the business was to take dumped hot rolled coil, fabricate it into oil country tubular goods and then dump it in the U.S. And that kind of problem of direct transshipment and sometimes transshipment after additional manufacture is one of the factors that motivated us to do the 232 proceeding. Because the 232 proceeding, unlike a normal trade case, can cover the entire world. It doesn't have to be a product. It doesn't have to be limited to a country. So that was one of the motivations in order to try to protect the national security interest in steel and aluminum.

Mr. ROGERS. Well, back onto the International Trade Administration. We have increased funding over the years lately for the Administration. And yet the caseload at ITA still is high.

Secretary ROSS. Well, it is high, sir, because we are initiating more actions. It isn't that they are being negligent. It isn't that they are not pursuing the cases. When we initiate more actions naturally the caseload will go up. There is no backlog because there are all sorts of statutory dates of a case. I am not aware of any significant number of cases where we have failed to adhere to the statutory deadlines unless requested to do so by the petitioners. Our general practice has been if the American petitioner requests more time to prosecute the case we generally will grant it. If the adverse party, the foreign dumper or alleged dumper, requests time we normally do not grant it. But we do grant it if the American party does not object.

So if there are individual cases that you feel or any of your constituents feel have not met the statutory deadlines or have otherwise been unnecessarily delayed, I would be very eager to hear about them. And I promise you I will deal with them promptly.

Mr. ROGERS. I appreciate that. I will offer one to you. AK Steel in Ashland, Kentucky——

Secretary ROSS. Yes, sir.

Mr. ROGERS [continuing]. Is a part of the group that filed a complaint with ITA and ITC at Commerce.

Secretary ROSS. Yes.

Mr. ROGERS. That is one where we have 700 employees laid off.

Secretary ROSS. Yeah, I am familiar with AK Steel. And we have been in touch quite recently. If I am not mistaken they participated in the group of CEOs that came to the White House a few weeks ago. As it happens on the very day that the President announced what his decision was going to be on the 232s. So we are actively in touch with AK. I am quite familiar with their problems, both in their Kentucky operation and with the electrical steel situation elsewhere in their system. And I think you will find that they are very happy with the 232 measures that we have put in.

Mr. ROGERS. They are indeed. What affect on these pending cases will the President's 232 proposal, if put in place, how will that affect these pending cases?

Secretary ROSS. Oh, they will go forward. The concept of the 232 is that those tariffs are in addition to any normal trade case that we bring. Ones before this and ones subsequent to it. Now, if we have designed the 232s right, there should be somewhat fewer cases in the future because it covers such a wide range of products. Between the two cases I think it is some 700 odd products that are covered. So our hope is that this kind of omnibus thing will reduce somewhat the flow of cases. But it is always possible that the serial dumpers will decide to eat the tariffs and find some other way to get around them. And therefore we'll be at least as diligent going forward on dealing with individual infractions as we have been heretofore.

Mr. ROGERS. Well, Mr. Secretary, if this 232 action is successful I would like to visit with you and we'll sample a taste of bourbon together. How does that sound?

Secretary ROSS. I am sorry, I didn't hear. Someone coughed and I don't know if that was a nervous reaction to your comments or what, but it drowned it out so I couldn't hear it.

Mr. ROGERS. I said if it is successful we'll toast each other with a glass of bourbon.

Secretary ROSS. All right. The bourbon may be readily available if the EU falls through.

Mr. ROGERS. Mrs. Lowey.

Mrs. LOWEY. Welcome, Mr. Secretary.

Secretary ROSS. Congresswoman Lowey, good to see you.

Mrs. LOWEY. Good to see you. We usually see each other in July.

Secretary ROSS. Right.

Mrs. LOWEY. And I hope to see you same place, same time.

Secretary ROSS. Yes.

Mrs. LOWEY. Nice to see you. And I would love to take you to my district. The question that I am going to ask relates to the Lamont-Doherty program, which is superb. It is in Rockland County.

Secretary ROSS. I am sorry, I couldn't hear.

Mrs. LOWEY. I was just saying that I would like to take you to the Rockland County part of my district. It used to be all Westchester. Now I have both. And there is a program called Lamont-Doherty, which is really an important service to the community. And I would like to—I will even take you to lunch. We could have a visit there one of these days. So——

Secretary ROSS. Well, given the sensitive attitude about men and women interacting we have to be very cautious to have the lunch be well attended.

NOAA SEA GRANT PROGRAM

Mrs. LOWEY. And I won't offer you bourbon, you could be sure of that. I would rather have an ice cream soda, but OK. Mr. Secretary, for the second straight year, the Trump administration is proposing to eliminate the National Sea Grant Program. This national network of colleges and universities conducts vital scientific research in support of the conservation and practical use of the coasts, Great Lakes, and other marine areas. In addition, according to information provided by the Sea Grant network and reported by NOAA, in 2016 alone, the Federal investment in Sea Grant helped produce more than $600 million in economic benefit, with more

than 7,000 jobs created or sustained and 1.4 million acres of habitat restored or protected, to name just a few of the program's impacts.

Given these statistics, isn't there a credible and persuasive case for continuing the federal investment in the National Sea Grant program? Which refers to my invitation before.

Secretary ROSS. Right.

Mrs. LOWEY. That this is such a valuable program. And I have met with those who run the program, I have talked to students that have produced real economic benefit.

Secretary ROSS. The Sea Grant Program is a successful program, we certainly agree with that. But providing grants to states is a lower priority than the core NOAA functions. And therefore things like surveys, charting, weather forecasting and fisheries management, in our view, unfortunately the monies needed for those overwhelm the monies that we would have had to put into the Sea Grant program. In budget stringency periods you simply have to make difficult choices. And this was one of the very difficult choices we made.

Mrs. LOWEY. Well, I do hope if I can encourage you to come visit the program, that you may understand how important it is and how essential the benefits are, and maybe we can change your mind. I think it would be a worthwhile trip. And we will follow up. You don't have to respond right now, but I hope you——

Secretary ROSS. Thank you for the invitation, Congresswoman.

Mrs. LOWEY. OK. The Commerce Department's new strategic plan makes special mention of the need to reduce extreme weather impacts. Yet once again the Trump administration is proposing to eliminate funding for the Regional Coastal Resilience Grant program, which provides competitively awarded funding to enable coastal communities to withstand extreme weather and related hazards. In announcing the most recent grants provided under this program, Dr. Russell Callender, the Assistant NOAA Administrator for the National Ocean Service, stated, and I quote, "From restoring estuaries that provide natural shoreline protection to reducing coastal flooding impacts, the projects supported by these grants assist in ensuring the safety and vibrancy of our nation's coastal communities and economies. We are pleased to be partnering with local agencies and groups on the ground to have the greatest impact." Mr. Secretary, would you agree with Dr. Callender that the funding provided through the Regional Coastal Resilience Grant program is of great value?

Secretary ROSS. Once again, we are in the unfortunate position, NOAA needs lots of money and the Department needs lots of money. But we are in a very budget constrained period. And consequently we had to make some very, very uncomfortable decisions, including that one.

Mrs. LOWEY. Well, frankly we are in the middle of negotiating the bill, the big omnibus bill, which we hope will be completed on Thursday, and there is still items outstanding. And it seems to me that it is more money than we have ever had. And so it is a matter of choices. And I would hope that we can continue the conversation so I can encourage you or persuade you to understand the value of these programs. There are some that I wouldn't even discuss.

But these two programs I think are essential, and I would appreciate your consideration.

Secretary ROSS. Thank you. And I know you have given it very serious thought.

Mrs. LOWEY. Thank you. Thank you, Mr. Chair.

Mr. CULBERSON. I will recognize the gentlemen from Texas, Judge Carter.

INTERNATIONAL TRADE ENFORCEMENT CASE BACKLOG

Mr. CARTER. Thank you, Mr. Chairman. Mr. Secretary, concerning your 232 exemptions and your backlog we were just previously discussing with Chairman Rogers, we will talk about backlogs in a minute. But 232 exemptions that allow countries to petition for relief from imposed tariffs, it is been reported the Department expects 4,500 applications that could result in 24,000 hours of increased workload to process. Does this budget proposal take into account that number and that number of hours? And how do you intend to address the increased workload?

Secretary ROSS. Well, we have provided for more staffing in the 2019 budget request. And we have gotten more staffing in earlier periods. We believe that we can handle the influx. The 4500 was our estimate as to the number of exemption requests that we would receive. We have no way to judge whether that is correct or incorrect. But as you know we are required to make an estimate of those factors. And that was the best judgment we could make at the time.

Mr. CARTER. Well, having inherited a bench which had a 2,000 case backlog, the only way you can deal with a backlog is build a fire under both parties and make them come in for resolution. And I worked until ten o'clock at night every night for two years to get it done. Maybe your boys can't do that, but you can't live with a backlog in a business community, as you well know, you are a businessman.

Secretary ROSS. Oh, no. And that is why we waived a lot of the normal trade procedures about hearings and response dates and all that. Also, as I am sure you are well aware, we took enormous amounts of testimony, oral and written, and had enormous amounts of meetings with parties prior to issuing the 232. So we don't come to this process with a blank canvas.

Mr. CARTER. Well, I know you are famous for being very efficient. And I know you are well aware that the business community gets very nervous when they see backlog, potential backlogs that could keep them from having access.

Secretary ROSS. Well——

Mr. CARTER. And I encourage you, as you sound like you are going to do that.

Secretary ROSS. Well, that is what we do. That is what we do, Congressman.

Mr. CARTER. Thank you. Thank you, Mr. Chairman.

DISASTER RECOVERY

Mr. CULBERSON. Thank you, Judge Carter. Mr. Secretary, I would like to ask you about the disaster relief supplemental. EDA is—you have heard from our other members of the committee, is

an important agency that has a lot of vital and important functions. One of which is to provide grants where they can do the most good for people recovering from disasters through the emergency supplemental bill that the Congress passed. We provided $600 million for EDA for areas that had multiple major disaster declarations. And that certainly includes Houston. The way that was written we want to make sure Houston and Texas are at the top of the list. And that money can be used for, not only for economic development, but for mitigation of flood damage to help repair damage to existing flood structures and to mitigate or enhance flood control structures to promote economic growth. That money was specifically appropriated for that purpose.

And one of the reasons I had to step out for a moment is Secretary Carson is next-door on my other subcommittee on THUD and he is a capable good man, as are you. But these agencies move so slowly. One of our greatest sources of frustration as members of Congress is when we have an emergency like this when Puerto Rico got hammered by the hurricane, and we urgently need this money to reach our constituents to help them recover and rebuild. HUD has a reputation of moving like frozen molasses. That is just not acceptable. Judge Carter is right, we are going to light a fire under whoever we need to light a fire under to get help to our constituents.

I know, Joe, you have got family, friends in Puerto Rico that have suffered as a result of that terrible storm. The EDA, the $600 million that we provided EDA needs to get out the door, sir. Could you tell us the status, what progress have you made in getting those EDA grants out the door to where they can do the most good to help these communities that have suffered so much from these terrible hurricanes?

Secretary ROSS. I think we are acutely aware of the immediate need for solutions to the distribution of the money. And we have been working quite actively and aggressively with state and local authorities to make sure that we go about it in a proper fashion. We understand that sooner is infinitely better than later because people are very much in a crisis condition. So I assure you we are doing our level best not to be a source of delay in Houston or in Florida or Puerto Rico——

Mr. CULBERSON. Thank you, sir.

Secretary ROSS [continuing]. Or Virgin Islands or anywhere else.

Mr. CULBERSON. Thank you. While ensuring that our money is spent efficiently, again, we share the same goal.

Secretary ROSS. Yes, sir.

Mr. CULBERSON. We don't want to just shove the money out the door. We want to make sure it is spent efficiently and it is actually reaching the people who are hurt. And in particular this funding I was heavily involved, of course, in drafting this part to make sure that it——

Secretary ROSS. Oh, I am well aware.

Mr. CULBERSON [continuing]. Goes to help repair damaged flood control infrastructure and to enhance existing flood control infrastructure where it will have the greatest economic benefit. And I point out I had in mind as I was drafting West Houston is to the oil and gas——

Secretary ROSS. Right.

Mr. CULBERSON [continuing]. Industry what Silicon Valley is to the computer industry.

Secretary ROSS. Sure.

Mr. CULBERSON. British Petroleum's North American headquarters were completely flooded out.

Secretary ROSS. Right.

Mr. CULBERSON. And they still are not back in their offices. We have had major damage to a lot of the oil and gas service companies, oil and gas exploration and production companies in West Houston. So the economic impact of flood mitigation work in West Houston will be profound. And that is why I wrote that language that way. So thank you for making sure it goes out the door efficiently. But boy do we need it to get out in the hands of the Harris County flood control district, needs that money as quickly as possible.

Secretary ROSS. Oh, we know that, Mr. Chairman. We also though have to be mindful, we don't want to have some of the problems that have accompanied other disaster relief in other hurricanes. We are not going to be having trailers sitting idle and all sorts of programs——

Mr. CULBERSON. Exactly.

Secretary ROSS [continuing]. That occurred elsewhere. So it is a balancing act to make sure that we do it fast but correctly.

Mr. CULBERSON. Efficiently.

Secretary ROSS. Fast but correctly is our——

Mr. CULBERSON. Yes, sir.

Secretary ROSS [continuing]. Motto.

Mr. CULBERSON. That is why I appreciate you focusing on local government. The Harris County flood control district has a superb reputation of using scarce and precious tax dollars wisely and frugally and managing our flood control network very well. So appreciate that very much.

And I also want to mention that Texas has submitted a request, Mr. Secretary, to the Department for a fishery disaster declaration in the wake of Hurricane Harvey. Can you tell us the status of that request? When can we expect to see the outcome of that review?

Secretary ROSS. Many of the disaster requests already have been granted. We have a plan to submit the spend plan for the remaining 200 non-fishery disaster funding around the 26th of this month. NOAA is developing a spend plan overall for how to allocate the disaster funds. And we hope to provide it to the Congress very, very quickly.

Mr. CULBERSON. Thank you, Mr. Secretary. $400 million of the money in the emergency supplement was also for NOAA that was broken out help repair and replace damaged assets, debris removal, mapping, charting, improving weather forecasting and 200 million for fishery disasters——

Secretary ROSS. Right.

Mr. CULBERSON [continuing]. In 2017.

Secretary ROSS. Now, the weather forecasting I am happy to say in this past hurricane season, even though the outcome was horrible, we don't control the weather, we just get to forecast it. And the statistics show that our forecast were 25 percent more accurate

this time than in the last big hurricane season. So NOAA is performing pretty good work. And I believe the new satellite that has been put up just a couple of weeks ago will help a lot with that, especially in the western part of the U.S. and out into the eastern part of the pacific. Because these new sensors will have three times the resolution, four times the speed and accuracy. They are much, much improved. We therefore think that there can be further improvement, at least in giving people earlier and more accurate warnings. Because as you know that helps a lot to mitigate damage if people get enough warning in advance and it is accurate.

Mr. CULBERSON. Thank you, Mr. Secretary. Let me recognize my good friend from New York, Mr. Serrano.

Mr. SERRANO. My next question was going to be—so I will simply say ditto. The question that the Chairman asked about the monies getting out that were voted on by Congress. And as you know I was—I have a special interest in Puerto Rico because I was born there.

Secretary ROSS. Right.

Mr. SERRANO. And we want to see that—there is still a large percentage or a significant percentage of people without lights. There are still roads that need to be cleaned. There are different things that need to be done. And in fact, right across the hallway they are having a panel on the fact that this is six months since Hurricane Maria went through Puerto Rico.

Secretary ROSS. Right.

Mr. SERRANO. And the situation is still dire in many places. So if at the minimum I want to tie my sentiments to the Chairman in saying that we need to see that money go out. I understand your desire not to see money wasted and we support you on that. But Congress saw a need, Congress voted an amount. And it is not that easy to get money out of Congress for these kinds of programs, as the Chairman knows. So anything you could do would be helpful. To all the people, but especially those folks in Puerto Rico.

Secretary ROSS. Yes. We are devoting a huge amount of time and effort to that very project. It is complicated, as you know, because there are multiple U.S. Government agencies involved. And particularly Army Corp of Engineers in terms of the electricity situation. So we are doing our best. We have dedicated staff to it and they are reporting to me quite frequently as to what they are getting done. It is a horrible situation, we have to get it fixed and we have to get it fixed quickly. So we are keenly aware of the dire need.

NOAA STAFFING

Mr. SERRANO. Thank you so much. Appreciate anything you could do on that. Mr. Secretary, among the President's administration's many proposed cuts in NOAA, there is a cut of 248 funded positions from field offices of the National Weather Service as part of a new framework for staffing weather forecast offices. The budget submission notes that the implementation of this proposal could present some short term risks. So my questions, Mr. Secretary, isn't there a real possibility that these cuts will create the risk of reduced timelines and accuracy in weather forecasting?

Secretary ROSS. We really don't think so because the satellite activity is becoming more and more important. And we have had a lot of automation in the offices. The layoffs can only occur by agreement with the union, unless we get into a RIF, reduction in force, situation. We are trying to avoid that by negotiation with the union. But we are not going to layoff anybody or leave any positions unfilled if we think there is any material risk of reducing the accuracy and timeliness of the forecast.

Mr. SERRANO. Thank you. I hope so because more than ever now we need the National Weather Service to be able to function as modern as possible, if there is such a phrase.

Secretary ROSS. I am personally aware of it because my normal residence before coming here was a coastal community in Florida. So I understand the problem.

TRADE ENFORCEMENT

Mr. SERRANO. OK. Thank you. Mr. Secretary, both you and other officials in the Trump administration have spoken of the need for strong enforcement of our trade laws. I want to ask you about the President's meeting last week with the Canadian Prime Minister, as well as the President's statements following the meeting. It was reported that in a fund-raising speech last Wednesday President Trump boasted that he made up information in his meeting with the Canadian Prime Minster, claiming that the United States runs a trade deficit with Canada. On Thursday morning, President Trump posted on Twitter that the United States is running a trade deficit with Canada. In reality the U.S. had a trade surplus with Canada of $12.5 billion in 2016. So, Mr. Secretary, what does this do to the credibility, in your opinion, of the United States in trade negotiations and in trade enforcement when the President of our country makes a public claim about trade that simply has no basis in fact?

Secretary ROSS. Well, I was not at the meeting with the Canadian Prime Minister, so I am not aware of the context. I only knew of it from the newspapers. But I do know that the Canadian Government reports to the Canadian public that it has a trade surplus with the United States. That is in their published records on their website.

Mr. SERRANO. And therefore.

Secretary ROSS. There is no therefore. I was not part of that discussion.

Mr. SERRANO. OK.

Secretary ROSS. I have met subsequently with the Trade Minister for Canada and I have not noticed any change in the relationship that we have with her or with the Government overall.

Mr. SERRANO. Well, I hope we don't because, you know, more and more we are finding countries throughout the world that disagree with us. And we have a partner like Canada we should not get caught up in comments that could hurt that relationship in any way when they are not necessary. I mean if something is wrong of course you bring it up. So I would hope that you play a role behind the scenes there, as I know you are capable of, of just saying, you know, some things need to be left alone.

Secretary ROSS. Thank you, sir.

Mr. SERRANO. Thank you.

Mr. CULBERSON. Thank you, Mr. Serrano. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. Mr. Secretary, thank you for being here today. Over the past decade the worldwide consumption of fish and seafood has increased 17 percent. This means more seafood is being imported and exported around the world from more countries into the U.S. According to the CDC study report in February of 2017, 97 percent of fish and shellfish consumed in the United States are imported. Last year we had a U.S. dollar trade deficit of 4.5 billion from shrimp alone. And representing the historic seafood capital of the world, Biloxi, Mississippi, could you tell me what is the Department doing to help reduce the seafood trade deficit?

Secretary ROSS. Well, it is one of my pet peeves. I hate the idea that with all the water surrounding us and all the water inland that we have a trade deficit in fish. And I have been putting a lot of pressure on the fisheries management group at NOAA to try to deal with the situation. I think there is some potential that some of the constraints that we have had on fresh catch here maybe need to be relaxed a little bit. I think it is easy to be a little bit over zealous and therefore hold down the production of fish.

Second, I believe there are some inappropriate practices in some of the foreign countries in their aquaculture. It seems to me that we should be very careful about importing seafood from places that do not adhere to the same standards we would have for aquaculture here in the U.S. So we are mindful of it both from the point of view of seeing what we can do either with aquaculture or reevaluation of what are the needs of the fish stock so that we—my goal is to have maximum sustainable catch be the target for our domestic fishing industry. And as to the foreign industries to the degree that they are conducting their activities inappropriately we are going to try to constrain them as best we can.

DISASTER RECOVERY

Mr. PALAZZO. Well, thank you. And I appreciate your agency's work on that subject. Switching gears, being that I represent a gulf state and we have been hit really hard by natural and manmade disasters in the recent past, these disasters have had the negative environmental and economic impacts, particularly on commercial and recreational fishing industries, their supply chain and their communities. Could you tell me, if any, what investment is the Department of Commerce making to help industry and these communities recover and be more resilient?

Secretary ROSS. Well, we have repeatedly declared a fishery disaster situation. And I don't remember just all the places where we have, but it is quite a few. And there are a couple more applications that are pending. So that is one very specific step. The best thing we can do though is to try to get an early warning system so that people can try to get prepared. Because it is not just the fish themselves, it is also the vessels that are at issue.

And I don't know if you were in the room when I mentioned, but in this past hurricane season our forecasts were 25 percent more accurate and they were more timely than they had been before. We are trying to increase the advance warning that we can give to the

affected communities so that they can try to prepare themselves. And also trying to be more accurate in the location and the severity. So that is one of the major steps that we are in a position to take. Then when disasters do hit, as you know, Congress has made appropriation and we will try to deal with that.

NAFTA NEGOTIATION

Mr. PALAZZO. Well, thank you for your support and assistance in that regards. Last question. You know, I come from a very rural state where agriculture is our number one industry. And as you know overall NAFTA has been good for U.S. agriculture. Since implementation agricultural exports to Canada and Mexico have totaled approximately 310 billion and increased by more than 300 percent from pre-NAFTA levels. The administration is wrapping up final talks with our trading partners in Mexico and Canada. And the U.S. farm economy is in a major downturn right now. And the farmers in my district are very worried about our Mexican and Canadian markets going to other countries for their ag products. In fact, Mexico announced they have already begun discussions with numerous countries in South America for corn and other grain products. Could you provide the Committee with the latest update from the NAFTA negotiations from an agriculture perspective?

Secretary ROSS. Surely. We have now had seven rounds of negotiation. And a lot of issues, mostly not the most contentious ones, but a lot of issues have been negotiated. A lot of language has been put to bed. We think there is a practical time limit, not a contractual one, not a legislated one, but a practical time limit on the negotiations due to the political calendar. Mexico, as you know, has a general election coming up in the beginning of July. Canada has its provincial elections in June. Our fast track authority, the trade promotion authority expires on the 8th of July here in the States. And, of course, we have the midterm congressional elections in the fall.

Why all that is important is it is my view that if we don't have a resolution within the next month or so very likely it will be kicked over for quite a little while because of the election cycle. Especially in Mexico where, as you know, there is one candidate who is running on a quite anti-American platform.

Mr. PALAZZO. Mr. Secretary, thank you very much. Mr. Chairman, I yield back.

Mr. CULBERSON. Thank you, Mr. Palazzo. Mr. Kilmer.

MBDA BUSINESS CENTERS

Mr. KILMER. Thank you, Chairman. The budget proposes to close the business outreach centers for the Minority Business Development Agency and establish the MBDA as a policy office in Washington, DC. The City of Tacoma, which I represent, was fortunate enough to receive a grant to operate an MBDA business center and I got to visit with the folks who were really benefitting from the technical expertise and from additional resources. That is not unique in the western region. MBDA offices have helped businesses access over $200 million in loans and equity investments, as well as $800 million in procurement contracts. So can you explain how a centralized MBDA will serve the needs of minority business own-

ers located in communities around the country, many of whom face difficult barriers as it is, and can you give us the rationale for closing these business centers?

Secretary ROSS. Surely. The general concept, well, first of all, I have been individually very supportive of the efforts of the MBDA. As you know I have addressed minority groups all over the countryside and have tried very hard to foster their activities. The good news is that minority businesses are growing very, very rapidly and are constituting an increasing percentage of the new businesses created in the country. And they, of course, are very major beneficiaries of the overall economic strength and growth that has come on with the Trump administration.

But in terms of MBDA specifically we intend to refocus it as a policy-based and as a leveraging-based entity, rather than one making direct grants out in the field. We think that at the end of the day that may very well better equip the agency to fulfil its mission. Because it is a limited number of localities that can get grants in a given year. Whereas, if we can change overall policies, we can influence the direction of policy more effectively, that might very well have a broader impact to the benefit of minority businesses.

MANUFACTURING EXTENSION PARTNERSHIP

Mr. KILMER. You know, I can understand the value of policy development here, that is what we do. But I got to tell you, you know, seeing the benefits on the ground in communities that benefit from this really makes a difference. So I would certainly ask that the Department reconsider that.

I similarly was disappointed to see the Manufacturing Extension Partnership also under attack for a second year in a row. The program's stated goal is to help bring manufacturing back to the United States. And in the State of Washington our local MEP affiliate, Impact Washington, has done a tremendous job. Has really made a difference for manufacturers and has had substantial statewide impact. Can you explain how eliminating the MEP program that has such local and national impact on job retention and growth in manufacturing aligns with the President's focus?

Secretary ROSS. Surely. Again, it was a very difficult decision. But if you go back to the original concept of the MEP it was really meant to be a bridge to elicit local support as well. And we have had indications that in many, many localities because of the success the obligation to continue it in some form at some level of activity will now be subsumed by the private sector. And so our hope is that there will be a lot of the objectives met in that format. But again, it is one of the difficult decisions that we had to make in a time of extreme budgetary stringency.

Mr. KILMER. I would just point out, I think that in both MBDA and the MEP that decision is sort of divorced from the reality on the ground. You know, in Tacoma the ability to receive those resources, that technical expertise to entrepreneurs is something the MBDA has done very well. And Impact Washington, which is the MEP program in Washington State, you know, I look at the rural parts of my district where you have seen expertise provided on the ground that has led to job creation. You know, there is not a whole lot of, you know, private capacity to step into that void if the fed-

eral government backs away. So again, I would just ask that the Department reconsider that.

Secretary ROSS. Thank you very much for your comment.

Mr. KILMER. Thank you. I yield back.

Mr. PALAZZO. Thank you, Mr. Kilmer. The Chair recognizes Mr. Cartwright for 5 minutes.

TRADE TARIFFS

Mr. CARTWRIGHT. Thank you, Mr. Chairman. I don't know that I will take that. But I want to follow up about trade a little bit, Mr. Secretary. I sent the Department of Commerce multiple letters supporting using Section 232 of the Trade and Expansion Act to help the struggling aluminum and steel industries. I also know you were a strong advocate to the President to take such action.

I do have deep concerns about the rollout by the administration of tariffs. There are, as you know, certain bad actors around the globe who artificially dump and depress steel and aluminum prices. Those advocating the use of Section 232 made very clear that we wanted you to go after the bad actors and not our friends and allies. And my concern is the way we are going about this is we are going to hurt the 6.5 million Americans who work in industries where steel or aluminum is used. It could also damage our relationship with close allies, lead to a trade war that could severely damage our whole economy and undermine the international trading system. And it could raise prices for every American for everyday products.

My question is do you believe that a directed application of Section 232 would have been insufficient for our national security needs and to protect these industries?

Secretary ROSS. Well, as I believe you know, the 232 reports recommended a variety of ways of achieving the same objective. The President chose one of those alternatives in the case of steel and a similar one in the case of aluminum. The reason we are now going through an exclusion process and an exemption process is to try to make sure that that broad approach does not do undue harm in either category.

Mr. CARTWRIGHT. Are you personally involved in that exemption process?

Secretary ROSS. Oh, extremely. Extremely.

Mr. CARTWRIGHT. And will you do your dead level best to make sure we don't hurt our friends and allies and the people that are playing by the rules?

Secretary ROSS. Right. Well, certainly the people who are playing by the rules we will try our best not to hurt. A complication is that not everyone who is a defense ally is necessarily playing by the fair trade rules.

Mr. CARTWRIGHT. Thank you, sir. I yield back.

Mr. PALAZZO. Thank you, Mr. Cartwright. The Chair recognizes Ms. Meng for 5 minutes.

CENSUS COUNT OF CHILDREN

Ms. MENG. Thank you, Mr. Secretary. I wanted to ask a question about the traditional census undercount of young children. Children, particularly those under the age of 5 are at high risk for an

undercount during the 2020 decennial census. According to data published by the Census Bureau the undercount for these children in 2010 was a net 4.6 percent. And this undercount interferes with our ability to accurately provide needed resources for federal programs, such as TANF, special education grants, Head Start and the National School Lunch program.

I represent a district in the bureau of Queens, which was in the top ten counties in the country for undercount of young children. And I wanted to know what are some steps the Census Bureau is taking to address this issue?

Secretary ROSS. Well, it relates to the overall issue of how do we encourage count? And you were here when I described the additional marketing efforts we are doing, the additional community outreach with community partnership. Anything you can do to encourage local organizations within your district to cooperate with us is probably the best way to do it. Because the local people have a different relationship to the population in their immediate neighborhood. And therefore I would hope that being one of those that apparently had a very severe undercount that you will try your best to get people to cooperate at the partnership level and even at the individual level. We can't require people to cooperate. And it is the—so the best we can do is to try to encourage them, try to make it easy for them through the multiple languages, through the marketing and through voices such as yours that have the respect of the community.

GATEWAY TUNNEL PROJECT

Ms. MENG. Thank you. And my other question is about the Gateway Project. Mr. Secretary, as someone who was born and raised in New Jersey and commuted two hours daily to attend school in Manhattan, I wonder what your views and thoughts are on the Gateway Tunnel Project that will connect New Jersey and New York.

Secretary ROSS. Well, as you know, the Port Authority of New York and New Jersey was originally conceived decades ago to provide linkages between New York and New Jersey. And as far as I know the original project that it was mandated to do never occurred. So it is not new, the idea of needing gateway projects. The infrastructure bill, assuming that the Congress passes it, will provide funding and the funding has an allocation formula to it that you are, I think, well aware of. We hope that legislation will be passed. And we are sure that Gateway will get due consideration, along with other projects.

Ms. MENG. Thank you. As you know, up to 100,000 people per day travel between New York and New Jersey. You are right, it is not a new issue. Tunnels are corroding. There will be a harsh economic impact to America's economy if these workers were not able to go to work. This is just one example of how important the Gateway Tunnel Project is to New Jersey and to New York, but also to America's broader economy. Respectfully I encourage you to do everything you can within the Administration to ensure that this project is treated fairly and that it remains a top priority of our federal government.

Secretary ROSS. Thank you for your comments.

Ms. MENG. Thank you.

Mr. PALAZZO. Thank you, Ms. Meng. Secretary Ross, thank you for your time today and thank you for your service to our nation. The Committee on Commerce, Justice and Science stands adjourned. Thank you.

Secretary ROSS. Thank you.

[Answers to submitted questions for the record follows:]

The Honorable John A. Culberson

Subcommittee on Commerce, Justice, Science, and Related Agencies

Questions for the Record

Department of Commerce Budget Hearing

Patent Backlog

According to the Patent and Trademark Office (PTO), the "ideal" patent backlog inventory is ten months' worth of patent applications. The FY 2019 President's Budget estimates that PTO will have more than ten months' worth of backlog applications through at least 2023.

1. Ten months is a long time, why is it the "ideal" patent processing time?

ANSWER:
The USPTO's goals to reach ten-month first office action and twenty-month total pendency were based on an analysis of factors related to international filings (which generally occur 12 months after domestic filing); patent term adjustment considerations (which provide patent term adjustment if a first action is not mailed within 14 months of filing); publication of patent applications (which occurs at 18 months after filing); patent application docket management; and international best practices, with an overall objective of providing optimal and efficient service to our stakeholders. In addition, the ten-month target is consistent with the first action pendency targets of major foreign patent offices. The USPTO will continue to work with its stakeholders to examine long-term patent pendency goals, while remaining mindful of the need for quality examination.

As part of its current strategic plan, the USPTO issued a Federal Register notice in 2014 seeking public input on optimal patent first action and total pendency target levels. Responses to this notice were generally supportive of the current goals, although stakeholders stressed the need to maintain high quality patent examination while working to reduce pendency.

2. When does PTO estimate it will reduce the patent backlog inventory to ten months?

ANSWER:
The USPTO estimates that a ten-month inventory will be achieved within the next five to ten years.

3. Why is PTO planning to have an above ideal backlog of for at least the next five years?

ANSWER:
The USPTO is working to reduce both the pendency and unexamined inventory of patent applications over the next five years. The USPTO believes that a steady decline over five years will allow it to maintain high quality and efficiency, as well as the ability to adapt to

changing circumstances as needed. Steady improvements are preferable to sudden, dramatic decreases that could jeopardize patent examination quality and hiring goals among other issues.

4. What are the effects on patent applicants of this higher than ideal backlog?

ANSWER:
Our patent system must balance efficiency with quality to ensure that the U.S. patent system continues to issue reliable patents. However, it should not take years to issue a patent, especially in industries where technology moves very fast. The timely issuance of quality patents helps to provide certainty in the marketplace, drive investment and help businesses and innovators make informed decisions on the development and marketing of their products and services. Unnecessary delays related to an excessive backlog hinder those efforts. Reducing the backlog while providing reliable and predictable patent rights requires a careful balance and the current time frame for achieving this ideal backlog strikes the appropriate balance.

Internet Security

1. At ICANN 61, the Assistant Secretary of Commerce for Communications and Information stated, "The United States will not accept a situation in which Whois information is not available or is so difficult to gain access to that it becomes useless for the legitimate purposes that are critical to the ongoing stability and security of the internet." And yet, ICANN is preparing for enforcement of the European General Data Protection Regulation without a way to ensure timely, continuous, access to the Whois data for legitimate interests. How will the US ensure that legitimate interests, including law enforcement, are able to access the Whois information in a timely manner without interruption?

ANSWER:
The issue of ensuring continued access to WHOIS information for legitimate purposes such as law enforcement, cybersecurity, and IP rights enforcement has been a top priority for the Department in its ICANN related work. On April 9, I wrote to European Union Commissioner Věra Jourová asking for her help in securing temporary forbearance from (GDPR) enforcement on the processing of WHOIS information. This was done with the explicit goal of preventing the interruption of the critical work of cybersecurity specialists and law enforcement who rely on this information. NTIA, in coordination with interagency partners, continues active engagement with Europe on this matter and is working towards a concrete solution.

How is NITA partnering with law enforcement agencies to ensure that law enforcements' concerns are addressed in the ICANN process?

ANSWER:
In the ICANN process itself, NTIA, as the U.S. Government (USG) representative to ICANN's Governmental Advisory Committee (GAC), continues to aggressively push for an ICANN solution that maintains access to the WHOIS service to the greatest extent possible in the face of GDPR. Working with law enforcement agencies through the GAC's public safety working group, NTIA is actively engaged and convenes a weekly USG GDPR WHOIS related interagency meeting to coordinate efforts and strategy.

2. At ICANN 60 the ICANN board unilaterally decided to "temporarily suspend" the Security, Stability and Resiliency Review Team (SSR Review Team), one of the fundamental accountability mechanisms of ICANN, over the concerns of the US representative. What steps is the US taking to ensure this SSR Review Team restarts?

ANSWER:
The ICANN Board's decision to suspend the SSR Review Team was made without consulting the broader ICANN community, including NTIA. Once announced, NTIA staff immediately raised concerns via the GAC, followed by NTIA's Administrator David Redl directly engaging with ICANN's leadership. In response, the ICANN Board announced its commitment to the continuation of the group and a desire to get the work resumed quickly. To make that happen, and at the request of ICANN stakeholders, a facilitator was selected and the SSR Review Team met in August and is now back on track.

What action can the US take if ICANN continues to delay restarting the SSR Review Team?

ANSWER:
If the team's restart is delayed, NTIA will work with other U.S. stakeholders to determine how best to use the community powers put in place to hold ICANN accountable.

The Honorable Robert Aderholt

Subcommittee on Commerce, Justice, Science, and Related Agencies

Questions for the Record

Department of Commerce Budget Hearing

Buy American

On April 17, 2017, the President signed Executive Order 13788, *Buy American and Hire American*. Beyond implementing policies supporting American jobs and families, the Executive Order required the Secretary of Commerce to, within 220 days of the signing of the order, submit a report to the President that includes specific recommendations to strengthen implementation of "Buy American Laws."

Q. What is the status of this report and the other requirements of EO 13788?

ANSWER:
The President issued an Executive Order on Buy American and Hire American on April 18, 2017. The Executive Order directed the Department of Commerce to co-lead, with the Office of Management and Budget (OMB), an assessment of Executive Branch agencies' implementation of and compliance with existing Buy American laws relating to federal procurement and federal grants. The Department and OMB collected information from other agencies to assess their compliance with Buy American laws and use of waivers and exceptions to the Buy American Act in federal procurement and federal financial assistance.

In addition, the Department researched and analyzed the impact of U.S. free trade agreements and the World Trade Organization Agreement on Government Procurement on the operation of Buy American laws. The Department used these analyses to provide recommendations on strengthening the implementation of Buy American laws and other methods to increase procurement of domestically made goods. As required by the Executive Order, the Secretary submitted the report with findings and recommendations to the President on March 20, 2018.

Q. What efforts are being taken to ensure that we are using all available tools to give domestic manufacturing operations, and their workers, the first shot at supplying goods, products, and materials, for federal and federally-assisted government procurements?

ANSWER:
The Department of Commerce's report submitted to the President pursuant to EO 13788 provides analyses and recommendations aimed at providing domestic manufacturers and their workers first-shot opportunities at supplying goods, products, and materials, for federally-assisted government procurements.

2020 Census

Parts of Alabama and others in the rural south are commonly known as "hard-to-count" and, according to the Census Bureau, had the highest regional undercount rate in 2010. With census workers likely focusing on address verification and relying on paper questionnaires left at homes for the actual count.

Without completion of a full field test to determine potential complications and gaps with the rural broadband system, stakeholders are concerned that the 2020 Census will result in another severe undercount.

Q. What is the Department doing to develop a census procedure that will fairly treat – and count - all regions of the country?

ANSWER:
The goal of each decennial census is to count everyone once, only once, and in the right place. Societal, demographic, and technological trends can result in a population that is harder to enumerate. The approaches we employ to count the entire population include traditional enumeration methods, such as sending a questionnaire to the household and having them mail it back. The Census Bureau also uses and has thoroughly tested methods that are tailored to historically hard-to-count populations. For example, in very rural areas, and on many Tribal lands, the Census Bureau will conduct two operations – known as Update Enumerate and Update Leave, in which Census enumerators will either conduct interviews with every household (Update Enumerate) or walk every street and leave paper questionnaires on the doorsteps of each household while simultaneously updating the address list (Update Leave). Housing units who do not respond during the Update Leave operation will be included in the Nonresponse Follow-up operation.

A new objective for the 2020 Census is for a majority of respondents to complete their census questionnaire online. The Census Bureau recognizes, however, that there are areas with low Internet connectivity and other characteristics that make it less likely that respondents will complete the census questionnaire online. The Census Bureau plans to send a paper questionnaire in the first mailing ("Internet Choice") to about 20 percent of households with traditional mailing addresses. Research was undertaken to identify areas expected to have lower Internet usage and thus would be more likely to benefit from an earlier paper questionnaire. These areas were identified using data from the American Community Survey including self-response rates overall and by mode (Internet or paper questionnaire), demographics including age, and data on Internet subscribership. We will continue to enhance the methodology with the most-current data available as we get closer to 2020. It is important to note that all households will eventually receive a paper questionnaire if they have not responded after a few weeks. All mailings will include information about how to respond by mail, online or by phone. After all the mailings are

complete, if a household still has not responded, the Census Bureau will send an enumerator to gather the data in person.

The Census Bureau is implementing a robust communications and partnership program that will advertise in multiple languages and partner with the trusted voices in communities across the nation to get people to respond to the 2020 Census. The communications program will use strategies to reach the hard-to-count populations using both traditional and digital media, as well as ethnic and local media. Partnerships will be formed with national organizations, churches and other faith-based organizations, health clinics, legal aid centers, and other support organizations that traditionally undercounted populations rely on.

Q. Is the Department working with the Census Bureau to ensure that they have the staff and related resources to get out to all of the rural areas to prevent another undercount?

ANSWER:
Yes, I meet regularly with the Census Bureau team and their contractors to bring oversight and accountability into the 2020 Census operation. My staff also conducts weekly 2020 Census oversight reviews on issues related to the program's budget, scope, and schedule. These management meetings include detailed reviews of the evolving budget and lifecycle cost estimate for the 2020 Census. The results of these meetings are reported directly to me by Under Secretary Karen Dunn Kelley and her staff so that I can personally oversee the progress of the 2020 Census.

The FY 2019 budget request is aligned with the lifecycle cost estimate for the 2020 Census, and contains all contingency funding determined by the Department's independent cost estimate. It fully funds all of the operational and systems development necessary to ensure a comprehensive and accurate 2020 Census, including opening the remaining field offices and conducting the first major 2020 Census field operation, the In-Field Address Canvassing operation.

Committee on Foreign Investment in the United States (CFIUS)

The CFIUS review process is an inter-agency effort to look at the national security implications of foreign investments in U.S. companies or operations. It is my understanding that Chinese and Russian investors are targeting U.S. aerospace and advanced computing start-up companies that NASA, DOD, and DARPA have invested in, and could potentially gain access to, and influence over, these strategic U.S. technologies.

Q: Does CFIUS currently investigate these investments in U.S. firms by actors from hostile nations, and are there additional steps which should be taken to protect cutting-edge technologies under development by these firms for the U.S. government and allied customers?

ANSWER:
CFIUS has the authority to review mergers, acquisitions, and takeovers that could result in foreign control of a U.S. business to determine the effects of such transactions on the national security of the United States. The Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA), which was signed into law as part of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, expands the types of transactions subject to CFIUS's jurisdiction to include any investment by a foreign person in an unaffiliated U.S. business that, inter alia, owns, operates, manufactures, supplies, or services critical infrastructure or produces, designs tests, manufactures, fabricates, or develops critical technology. Commerce defers to Treasury, as chair of CFIUS, for details on specific transactions reviewed by the committee.

Q: There have been proposed reforms to the CFIUS process which have come to my attention, including the Foreign Investment Risk Review Modernization Act. How would the reforms to CFIUS proposed in this legislation help the Department of Commerce prevent the transfer of emerging technologies to potential adversaries?

ANSWER:
Commerce has been working closely with interagency partners and with Congress to modernize CFIUS. It is crucial that CFIUS, like the export control system, remain adaptive to current and evolving security challenges. FIRRMA, which was recently enacted into law, takes several important steps in this direction including the following. First, FIRRMA contains a provision requiring mandatory filings for certain transactions involving foreign government-controlled entities. Second, it contains a provision that facilitates greater cooperation and information sharing with our allies and partners. Such international cooperation is an essential part of our export control system and benefits CFIUS as well.

By strengthening CFIUS while ensuring that CFIUS and export control authorities remain distinct, FIRRMA enables even stronger protections of U.S. technology.

Q: I have additionally heard concerns related to foreign interests acquiring or making significant investments in movie studios and other media companies, to influence editorial decisions of U.S. media properties. Are these censorship activities by foreign interests considered a strategic threat, and how can Commerce, CFIUS, or other U.S. government authorities address this concern?

ANSWER:
CFIUS has the authority to review mergers, acquisitions, and takeovers that could result in foreign control of a U.S. business to determine the effects of such transactions on the national security of the United States and gained expanded authority to review the national security implications of certain investments through the passage of FIRRMA. Commerce defers to Treasury, as chair of CFIUS, for details on specific transactions reviewed by the committee and the factors considered during such reviews.

Group Product Discounts and Access to Banking Services

In February of this year, several companies announced they would be terminating their partnerships with the NRA because of their support for Americans' second amendment rights.

> Q: What is the Department of Commerce's Legal Counsel's opinion on the decision to withhold discounted products for NRA members by certain companies including United, Delta, Hertz, MetLife, Avis, etc.?

ANSWER:
Actions by private companies to grant or withhold discounts are not subject to regulation by the Department of Commerce. Therefore, there is no basis for the Department of Commerce's Office of General Counsel to provide a legal opinion on the policy decision by certain private companies to withhold discounted products for NRA companies.

> Q: With the recent decision by Citigroup to limit banking services to firearms dealers and the potential consequences this could impose on the legal sale of products to consumers nationwide, has there been any analysis by the Department of Commerce legal staff into the legality of this decision?

ANSWER:
The Department of Commerce does not regulate the provision of banking services. Therefore, there is no basis for the Department of Commerce's Office of General Counsel to provide an analysis of a decision by the investment bank and financial service group, Citigroup, to limit banking services to firearms dealers.

> Q: Are there concerns within the Department of Commerce regarding the potential for additional lenders to make similar decisions limiting services to firearms dealers, and any related antitrust violations? Is this a matter that would fall under the jurisdiction of the Federal Trade Commission (FTC)? Is the Commission already looking into the matter?

ANSWER:
The issue of whether financial institutions could decide to limit services to firearms dealers and whether such a decision could constitute violations of law is not within the purview of the Department of Commerce.

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Department of Commerce FY 2019 Budget Request

2020 Census and question on citizenship:

1. On March 29, 2018, the Commerce Department sent the planned questions for the 2020 Census to Congress, as required by law. The planned questions include a question on citizenship that is both confusing and inaccurate. As written, the question asks individuals to delineate how they obtained their citizenship—whether through naturalization, birth in the United States, birth in the territories of the United States, or birth abroad to citizen parents—and appears to prioritize certain types of citizenship over others. In particular, I am deeply concerned about the message this sends to the almost 4 million American citizens living in the territories, whose citizenship is singled out. What is the purpose behind phrasing the question in this manner? What public policy goal does it serve?

ANSWER:
The citizenship question to be included on the 2020 Census form is identical to the question currently used in the American Community Survey (ACS) since 2005. It does not prioritize any type of citizenship and does not "single out" persons living in U.S. territories. It provides useful demographic data and is similar to citizenship information that is collected by census authorities in other major democracies. This type of information regarding citizenship has historically been collected in the United States as well. As part the first decennial censuses of the 20th century, in order to tabulate citizenship, enumerators asked all respondents to indicate their place of birth, such as state, U.S. territory, or foreign country. In the 1970 and 1980 decennial census long forms, respondents wrote in their place of birth. In 1990, the Census Bureau modified the question by providing separate "check box" response options to indicate whether the person was born in the United States; born in Puerto Rico, Guam, the U.S. Virgin Islands, or the Northern Mariana Islands, born abroad to U.S. citizen parent or parents; was a U.S. naturalized citizen; or was not a citizen. This is the same version of the question used since 2005 on the ACS.

The citizenship question that will appear on the 2020 Census contains identical wording to the question that currently appears on the ACS. The Census began using this question in 2005 and, through 2017, the Census Bureau has sent the questionnaire to 42 million households and 2.5 million group quarters locations. The current citizenship question has been answered by 61 million respondents. In contrast, the 2015 National Census Content Test, which evaluated and compared different census questionnaire content, including the race and Hispanic origin questions, was sent to a far smaller sample of only 1.2 million households.

2. The request to add a question on citizenship to the 2020 Census came from the Justice Department's Management Division, is that correct? It did not come from the Justice Department's Civil Rights Division, which actually enforces the Voting Rights Act, is that correct?

ANSWER:
The request on behalf of the Department of Justice was signed by Arthur E. Gary, General Counsel of the Justice Management Division of the Department of Justice.

3. The Census Bureau's National Advisory Committee on Racial, Ethnic and Other Populations did not request the addition of this question, is that correct? Doesn't that undermine the case for including such a question?

ANSWER:
The National Advisory Committee on Racial, Ethnic and Other Populations and the Census Scientific Advisory Committees did not request the addition of a citizenship question on the 2020 Census. However, the lack of a request from these advisory bodies does not undermine the case because the advisory committees offer suggestions and comment on many census-related issues and plans, including suggesting inclusion of questions or question wording should they wish. The advisory committees are not part of the formal process for approving census questions or question content.

It is important to note that these two advisory committees are not the only forums in which census content is reviewed. For example, in 2014, the U.S. Census Bureau conducted a comprehensive content review process for the ACS to ensure that only the information needed is requested, and that the justifications provided by federal agencies for the ACS questions are current and valid. Throughout each decade, regular content reviews are conducted by the Department of Commerce and the Census Bureau to ensure that the information collected through the Decennial Census program is required by federal programs. The Department of Commerce and the Census Bureau conduct a rigorous legal, technical, program, and policy review of each question to determine whether it should be included for the Decennial Census Program, which includes the 2020 Census and the ACS.

4. The Census Scientific Advisory Committee also did not recommend the inclusion of a citizenship question on the 2020 Census, is that correct? Doesn't this, too, undermine the case for including such a question?

ANSWER: See answer to question 3 above.

5. Since 1950 was the last time every household in the United States received a census form that included a question about citizenship, what research has the Census Bureau conducted as to the effect on self-response rates of including a citizenship question on every household's census form for the 2020 Census, particularly when compared to the other options laid out in Secretary Ross's March 26, 2018 memorandum on this issue?

ANSWER:
The Census Bureau will add the citizenship question to the 2020 Census using the version and wording currently used on the ACS, which has been tested in the past. While the citizenship question was last asked on the short census form in 1950, a citizenship question has been asked since 1960 on the long form and asked in the same manner since 1990. It has been asked on the ACS every year since the survey began in 2005 and replaced the long form for the 2010 Census. Since 2005, the citizenship question has been sent to 42 million households and 2.5 million group quarter locations, and 61 million people have provided responses to the citizenship question.

6. While the Census Bureau has included a question on citizenship in the American Community Survey, it has not attempted to test the impact of including this question on the decennial census form sent to every household in the country and in the current political climate, is that correct?

ANSWER:
The citizenship question that will appear on the 2020 Census contains identical wording to the question that currently appears on the ACS. The Census began using this question in 2005 and, through 2017, the Census Bureau has sent the questionnaire to 42 million households and 2.5 million group quarters locations. The current citizenship question has been answered by 61 million respondents. In contrast, the 2015 National Census Content Test, which evaluated and compared different census questionnaire content, including the race and Hispanic origin questions, was sent to a far smaller sample of only 1.2 million households.

7. The Constitution requires that reapportionment be made based on the number of 'persons' residing in each state. Since 1790, that number has included both citizens and non-citizens. Does the Department intend to adhere to the constitutional requirement to release 2020 apportionment data based on total populations of all persons, regardless of citizenship status?

ANSWER:
Consistent with past censuses, the apportionment population for the 2020 Census will consist of all persons (citizens and noncitizens) with a usual residence in one of the 50 states, plus the overseas federal employees (military and civilian) and their dependents living with them, who are included in the total population of their home states.

National Weather Service Cuts:

8. Among the Trump Administration's many proposed cuts in NOAA is a cut of 248 funded positions from field offices of the National Weather Service, as part of a new framework for staffing weather forecast offices. The budget submission notes that the implementation of this proposal could present some short-term risks. In addition, among the many other proposed cuts are cuts in National Weather Service Observations related to the National Mesonet Program, Weather and Oceans Platforms, and the Tropical Atmosphere Ocean (TAO). Won't these cuts create the risk of reduced timeliness and accuracy in weather forecasting?

ANSWER:
The Administration's FY19 budget reflects the Administration's goals, including supporting national security, public safety and economic opportunity while returning the country to a sustainable fiscal path. The Administration has made the necessary tradeoffs and choices inherent in pursuing these goals. This means prioritizing the programs that provide a good return for the taxpayer, as well as those that serve the most critical functions.

The FY19 budget proposes to reduce the geographic scope of the National Mesonet Program to prioritize areas most susceptible to tornadoes and severe weather. The FY19 budget also calls for NOAA to reduce the Tropical Atmosphere Ocean (TAO) buoy array. NOAA is able to rely on satellite and aircraft data to obtain the information most critical to numerical weather prediction models used to generate forecasts to protect life and property.

Travel by the Secretary

9. Please list all travel conducted by the Secretary from his first day in office through the date of receipt of this question, including both official and political travel and categorizing each trip (or segments of a trip) as official or political.

   Please indicate the date of departure and return to Washington, D.C., for each trip; the purpose of each trip; the number of Commerce Department staff persons accompanying the Secretary; the total cost of the trip, including all costs incurred by all persons accompanying the Secretary; the total cost for all trips by person; and whether the cost of the trip was borne by the Commerce Department, another agency, or a non-governmental entity.

   If the trip was paid by the Commerce Department, please indicate from which account the funding was drawn.

   If any costs were initially borne by the Commerce Department or another federal agency for a political trip, please indicate when the Commerce Department or the other federal agency was reimbursed for its expenditures, by whom, and whether reimbursement in full has been received.

ANSWER: See attachment.

Travel by Political Appointees

10. Please provide the same travel information as in the previous question for all political appointees, by name, on the current Commerce Department roster for travel conducted prior to the date of receipt of this question.

ANSWER: See attachment.

Department of Commerce Political Appointees Official Travel
March 1, 2017- April 9, 2018

Organization	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Total Cost
BUREAU OF INDUSTRY AND SECURITY (BIS)	ASHOOH, RICHARD	12/7/2017	12/10/2017	Manchester, NH, United States	To speak/participate at the Massachusetts Export Controls Forum	BIS O&A	$472.67
		2/25/2018	3/2/2018	Tokyo City, Japan	Speak at the Asian Exp. Control Seminar and participate in bilateral mtgs	BIS O&A	$2,278.32
		3/18/2018	3/23/2018	Munich, Germany	To speak at the BAFA Export Control Day Seminar.	BIS O&A	$3,629.57
		3/26/2018	3/29/2018	San Francisco, CA, United States	To attend the BIS West Coast Forum	BIS O&A	$1,824.78
	ASHOOH, RICHARD Total						$8,205.34
	RICARDEL, MIRA R	11/27/2017	11/29/2017	Los Angeles, CA, United States	Meet and be briefed by the BIS -EE Los Angeles and Western Regional Office	BIS O&A	$556.23
		2/2/2018	2/10/2018	Singapore, Singapore	Trade Ministries Japan, Singapore and Singapore Air Show	BIS O&A	$2,008.84
		3/4/2018	3/8/2018	Warsaw, Poland	Warsaw Conference on Export Administration Transshipment	BIS O&A	$10,540.02
	RICARDEL, MIRA R Total						$13,105.09
BUREAU OF INDUSTRY AND SECURITY (BIS) Total							$21,310.43
CENSUS BUREAU	QUINLEY, KEVIN M	3/22/2018	3/23/2018	Bristol, VA, United States	CBAMS Focus Group	CENSUS O&A	$323.85
		4/3/2018	4/5/2018	Beverly Hills, CA, United States	CBAMS Focus Groups	CENSUS O&A	$1,258.59
	QUINLEY, KEVIN M Total						$1,582.44
CENSUS BUREAU Total							$1,582.44
INTERNATIONAL TRADE ADMINISTRATION (ITA)	BEAUMONT, DINA M	11/7/2017	11/10/2017	Beijing, China	Advance Bilateral Meeting with Secretary of Commerce *	ITA O&A	$2,477.61
		1/16/2018	1/27/2018	Zurich, Switzerland	To execute all of the Secretary's Advance needs for Davos. *	ITA O&A	$4,469.76
		2/4/2018	2/6/2018	Cape Canaveral, FL, United States	To execute all of the Secretary's Advance needs for Space X Event *	DM S&E	$1,352.55
	BEAUMONT, DINA M Total						$8,299.92
	LAROSKI, JOSEPH A	8/24/2017	8/24/2017	Lafayette, LA, United States	Participate in Senate Small Business Committee Field Hearing	ITA O&A	$529.50
		10/19/2017	10/20/2017	Houston, TX, United States	To Speak at Ethanol Summit of the Americas	ITA O&A	$985.79
		12/4/2017	12/5/2017	Orlando, FL, United States	Joe will speak on a panel regarding U.S. trade deals and facilitation	ITA O&A	$476.22
	LAROSKI, JOSEPH A Total						$1,971.51
	RENNA, STEPHEN M	10/14/2017	10/20/2017	London, United Kingdom	Participating in Trade Wind and EBRD site visit	ITA O&A	$4,309.91
		11/10/2017	11/15/2017	Dubai, United Arab Emirates	Dubai Air Show	ITA O&A	$3,984.65
		2/2/2018	2/10/2018	Singapore, Singapore	Participating in the Singapore Airshow and Sri Lanka site visit for meeting.	ITA O&A	$6,181.96
	RENNA, STEPHEN M Total						$14,476.52
	SMITH, PRENTISS L	9/22/2017	9/30/2017	Paris, France	Attend Steel Committee and Global Forum Meetings	ITA O&A	$5,584.06
		11/14/2017	11/18/2017	Paris, France	To represent the US government in the Global Forum on Steel Excess Capacity	ITA O&A	$3,386.76
		11/28/2017	12/2/2017	Berlin, Germany	To represent the US government in the Global Forum on Steel Excess Capacity	ITA O&A	$2,882.28
		2/7/2018	2/9/2018	Mexico City, D.F., Mexico	To lead the U.S. delegation for the NASTC meeting	ITA O&A	$1,444.56
		3/3/2018	3/8/2018	Paris, France	Attend Global Forum and Steel Committee Meetings	ITA O&A	$3,766.12
	SMITH, PRENTISS L Total						$17,065.78
	STEFF, IAN P	8/9/2017	8/10/2017	Los Angeles, CA, United States	Moderate Panel at the Global Supply Chain Summit	ITA O&A	$1,012.52
		9/15/2017	9/23/2017	Vienna, Austria	Speaker for the IAEA Annual Conference	ITA O&A	$2,574.13
		9/24/2017	9/28/2017	San Jose, CA, United States	Traveler will attend and serve as a panelist at the Med Tech Conference	ITA O&A	$2,317.78
		10/2/2017	10/2/2017	Chicago, IL, United States	Participate and speak at the WEFTEC Conference	ITA O&A	$876.65
		10/17/2017	10/18/2017	West Lafayette, IN, United States	Speak at Purdue University at Manufacturing Forum	ITA O&A	$224.50
		10/29/2017	11/3/2017	Busan/Pusan, Korea	MFG participate in the annual Government/Authorities Mtg GAMS2	ITA O&A	$4,504.27
		11/8/2017	11/9/2017	Detroit, MI, United States	MFG will participation and deliver the lunch-time keynote address	ITA O&A	$652.68
		12/15/2017	12/20/2017	Riyadh, Saudi Arabia	To co-lead the US Civil Nuclear Round table	ITA O&A	$6,458.80
		1/11/2018	1/12/2018	Columbia, SC, United States	Give Remarks at Samsung Ribbon cutting Event	ITA O&A	$998.36
		2/8/2018	2/12/2018	Riyadh, Saudi Arabia	Meet with Westinghouse on Nuclear Plan Opportunity	ITA O&A	$3,951.89
		3/20/2018	3/30/2018	Taipei, Taiwan	Meet w/Taiwan authorities and semiconductor industry	ITA O&A	$5,805.45
	STEFF, IAN P Total						$29,176.97
	SULLIVAN, JAMES M	8/6/2017	8/11/2017	Los Angeles, CA, United States	SME at USC Supply Chain Digital Transformation Hackathon	ITA O&A	$2,653.63
		9/11/2017	9/13/2017	Chicago, IL, United States	Deliver keynote address at BAFT's 27th Annual Conference	ITA O&A	$898.01
		11/4/2017	11/10/2017	Berlin, Germany	Participate in panel discussions on the EU-U.S. Privacy Shield Framework	ITA O&A	$5,308.76
		12/4/2017	12/8/2017	Munich, Germany	Participate in the fourth German-American Data Protection Day Conference	ITA O&A	$2,880.81
	SULLIVAN, JAMES M Total						$11,741.20
	TURPIN, MATTHEW J	3/7/2018	3/10/2018	Berlin, Germany	Attend US China coordination	ITA O&A	$2,181.64
	TURPIN, MATTHEW J Total						$2,181.64

Department of Commerce Political Appointees Official Travel
March 1, 2017- April 9, 2018

Organization	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Total Cost
INTERNATIONAL TRADE ADMINISTRATION (ITA)							
	WALSH, ELIZABETH E	9/18/2017	**9/20/2017**	Cleveland, OH, United States	**Discover Global Markets**	ITA O&A	$1,016.06
		10/10/2017	**10/12/2017**	Minneapolis, MN, United States	**Listening tour**	ITA O&A	$1,207.33
		10/31/2017	**11/3/2017**	Nashville, TN, United States	**Domestic Outreach**	ITA O&A	$904.90
		11/13/2017	**11/14/2017**	Pittsburgh, PA, United States	**CMU Innovation Week event**	ITA O&A	$1,013.91
		2/24/2018	**3/4/2018**	Dublin, Ireland	**Meetings with US ambassadors and key foreign investors**	ITA O&A	$13,702.14
		3/20/2018	**3/23/2018**	Addicks, TX, United States	**Access Asia outreach program**	ITA O&A	$1,341.90
	WALSH, ELIZABETH E Total						**$19,186.24**
INTERNATIONAL TRADE ADMINISTRATION (ITA) Total							**$104,099.78**
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)	**COPAN, WALTER G**	11/20/2017	**12/2/2017**	St. Louis, MO, United States	**St. Louis to Mid-American Transplant, then NIST, Boulder, CO**	NIST WCF	$2,045.08
		12/20/2017	**12/28/2017**	Boulder, CO, United States	**Meet/Greet Boulder District Staffer and also attend meetings at NIST**	NIST WCF	$1,208.83
		1/2/2018	**1/5/2018**	Boulder, CO, United States	**Meeting with Government Officials in Boulder, Denver, and Colorado Springs**	NIST WCF	$718.77
		2/12/2018	**2/19/2018**	Palo Alto, CA, United States	**Stanford visit, LES IP100 Meeting, AAAS Meeting, AUTM Meeting**	NIST WCF	$3,325.99
		4/8/2018	**4/9/2018**	Baltimore (City), MD, United States	**Baldrige Award Ceremony**	NIST WCF	$186.43
	COPAN, WALTER G Total						**$7,485.10**
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) Total							**$7,485.10**
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)	**ELSNER, BRANDON N**	1/23/2018	**1/28/2018**	Seattle, WA, United States	**Visit and meet with NOAA offices and partners**	NOAA ORF	$2,284.77
	ELSNER, BRANDON N Total						**$2,284.77**
	GALLAUDET, TIMOTHY C	12/10/2017	**12/15/2017**	New Orleans, LA, United States	**Speaker at the 2017 American Geophysical Union Conference. Visit NOAA office**	NOAA ORF	$1,877.46
		1/7/2018	**1/13/2018**	Austin, TX, United States	**To give a talk at the 98th Annual AMS Conference and visit NOAA offices**	NOAA ORF	$2,328.74
		1/24/2018	**1/28/2018**	Seattle, WA, United States	**Speaker Alaska Marine Science Symposium. Visit NOAA employees and partners**	NOAA ORF	$2,039.50
		2/13/2018	**2/16/2018**	Portland, OR, United States	**NOAA Town Hall at the 2018 Ocean Sciences Mtg, visit Port Of Portland**	NOAA ORF	$1,910.25
		2/27/2018	**3/3/2018**	Orlando, FL, United States	**To attend NOAA GOES-S Satellite Launch and related activities**	NOAA ORF	$1,410.07
		4/2/2018	**4/4/2018**	Miami, FL, United States	**PORTS Dedication Ceremony and Miami PORTS Tour AOML Site Visit**	NOAA ORF	$1,535.76
	GALLAUDET, TIMOTHY C Total						**$11,101.78**
	JACOBS, NEIL A	2/28/2018	**3/2/2018**	Cocoa Beach, FL	**NOAA GOES-S Launch**	NOAA ORF	$1,135.67
		4/3/2018	**4/11/2018**	Miami, FL/Singapore, Singapore	**PORTS Dedication/WMO, World Bank, InterMET Asia Forum**	NOAA ORF	$11,669.83
	JACOBS, NEIL A Total						**$12,805.50**
	JORDAN, TAYLOR R	2/27/2018	**3/3/2018**	Orlando, FL, United States	**NOAA GOES-S Launch**	NOAA ORF	$1,243.35
	JORDAN, TAYLOR R Total						**$1,243.35**
	LEVENBACH, STUART	2/27/2018	**3/3/2018**	Orlando, FL, United States	**To participate in the Launch of NOAA GOES-S Satellite and related activities**	NOAA ORF	$1,636.32
	LEVENBACH, STUART Total						**$1,636.32**
	NOBLE, ERIK U	7/16/2017	**7/20/2017**	New York, NY, United States	**To participate in NOAA's 2017 Satellites Conference.**	NOAA ORF	$1,533.40
		8/25/2017	**9/1/2017**	Honolulu (Incl NAV and MC RES Ctr), HI, United States	**He'ela National Estuarine Research Reserve Designation Cong Stf Site Visit**	NOAA ORF	$3,790.12
		2/20/2018	**2/21/2018**	Cocoa Beach, FL, United States	**Attend National Space Council Meeting**	NOAA ORF	$946.56
		2/27/2018	**3/3/2018**	Cocoa Beach, FL, United States	**Attend the GOES-S Launch**	NOAA ORF	$1,678.84
	NOBLE, ERIK U Total						**$7,948.92**
	OLIVER, CHRISTOPHER W	7/19/2017	**7/13/2017**	Orlando, FL, United States	**Attending the FishCon 2017.**	NOAA ORF	$216.48
		8/7/2017	**8/13/2017**	San Antonio, TX, United States	**Will attend the Gulf of Mexico Fishery Management Council Meeting**	NOAA ORF	$1,350.35
		9/21/2017	**9/24/2017**	Tampa, FL, United States	**Tour and Flight with Hurricane Hunters**	NOAA ORF	$957.30
		10/3/2017	**10/9/2017**	Anchorage INCL NAV RES, AK, United States	**North Pacific Council Meeting**	NOAA ORF	$1,836.02
		10/10/2017	**10/11/2017**	Tampa, FL, United States	**American Sports fishing Association Meeting.**	NOAA ORF	$799.89
		11/15/2017	**11/19/2017**	Seattle, WA, United States	**Pacific Marine Expo/Seattle Field Office Visits**	NOAA ORF	$1,438.88
		12/12/2017	**12/13/2017**	Shepherdstown, WV, United States	**Will attend meeting on ESA Regulations with DOI/FSW.**	NOAA ORF	$243.83
		1/30/2018	**2/1/2018**	New Orleans, LA, United States	**Attending the Gulf Council Meeting.**	NOAA ORF	$1,052.66
		2/14/2018	**2/18/2018**	Miami, FL, United States	**Attending the Miami International Boat Show.**	NOAA ORF	$1,215.55
		3/1/2018	**3/4/2018**	Portland, ME, United States	**Attending the Maine Fishermen's Forum.**	NOAA ORF	$1,072.87
		3/10/2018	**3/12/2018**	Boston, MA, United States	**Attending the Seafood Expo North America.**	NOAA ORF	$1,249.28
		3/19/2018	**3/20/2018**	Charleston, SC, United States	**Attending the State Directors Meeting.**	NOAA ORF	$1,134.56
		4/4/2018	**4/7/2018**	Portland, OR, United States	**Attending the Pacific Fishery Management Council Meeting.**	NOAA ORF	$1,669.68
	OLIVER, CHRISTOPHER W Total						**$14,237.35**

Department of Commerce Political Appointees Official Travel
March 1, 2017- April 9, 2018

Organization	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Total Cost
	ROBERTS, JULIE K	9/27/2017	10/4/2017	Phoenix, AZ, United States	Attend NEMA Conference to be held in Scottsdale, AZ	NOAA ORF	$3,198.85
		11/10/2017	11/19/2017	Los Angeles, CA, United States	JPSS-1 Launch and IAEM and Pacific Marine Expo	NOAA ORF	$3,500.35
		12/11/2017	12/14/2017	New Orleans, LA, United States	Traveler travelling to facilitate the Admiral while attending the AGU Confer	NOAA ORF	$1,522.65
		1/24/2018	1/28/2018	Seattle, WA, United States	Staff and facilitate NOAA's Actg Administrator at AMSS and Seattle Line Off	NOAA ORF	$1,899.60
		2/27/2018	3/3/2018	Cocoa Beach, FL, United States	Facilitate NOAA Leadership and Media at the GOES-S Launch	NOAA ORF	$1,802.73
		4/1/2018	4/5/2018	Miami, FL, United States	Facilitate the media while attending the PORTS Dedication and HSRP events	NOAA ORF	$2,498.09
	ROBERTS, JULIE K Total						$14,422.27
	WHEELER, KEVIN R	2/11/2018	2/16/2018	Portland, OR, United States	Ocean Sciences Week Meeting	NOAA ORF	$2,252.56
		4/2/2018	4/5/2018	Miami, FL, United States	PORTS Dedication, site visits to NHC and AOML	NOAA ORF	$1,110.63
	WHEELER, KEVIN R Total						$3,363.19
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) Total							$68,043.48
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA)	REDL, DAVID J	12/16/2017	12/20/2017	Geneva, Switzerland	2017 United Nations Internet Governance Forum (IGF)	NTIA S&E	$4,336.68
		1/7/2018	1/10/2018	Las Vegas, NV, United States	Panelist during CTA's CES Technology Program	NTIA S&E	$368.37
		2/24/2018	2/28/2018	Barcelona, Spain	ICANN Mtg and Global Internet and Jurisdiction Conf.	NTIA S&E	$6,074.66
		3/11/2018	3/13/2018	San Juan and NAV RES STA, Puerto Rico	ICANN/61	NTIA S&E	$1,271.01
	REDL, DAVID J Total						$12,050.72
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA) Total							$12,050.72
OFFICE OF INSPECTOR GENERAL (OIG)	GUSTAFSON, PEGGY E	5/17/2017	5/19/2017	Shepherdstown, WV, United States	2017 CIGIE Annual Inspector General Conference	OIG S&E	$431.64
		12/4/2017	12/8/2017	Denver, CO, United States	CO Visit wRO and Bureau's	OIG S&E	$1,851.04
		2/27/2018	3/4/2018	Orlando, FL, United States	GOES-S	OIG S&E	$1,900.02
	GUSTAFSON, PEGGY E Total						$4,182.70
OFFICE OF INSPECTOR GENERAL (OIG) Total							$4,182.70
OFFICE OF THE SECRETARY (OS)	BEDAN, MORGAN E	10/19/2017	10/23/2017	Detroit, MI, United States	To advance Secretary Ross in Detroit +	DM S&E	$781.50
	BEDAN, MORGAN E Total						$781.50
	BRANSON, ROSS W	8/27/2017	9/1/2017	Honolulu (Incl NAV and MC RES Ctr), HI, United States	He'eia National Estuarine Research Reserve, Meetings, and Site Visits	NOAA ORF	$2,821.54
	BRANSON, ROSS W Total						$2,821.54
	COMSTOCK, EARL W	6/27/2017	6/27/2017	New York, NY, United States	Keynote Speaker at Steel Survival Strategies	DM S&E	$526.86
		2/5/2018	2/6/2018	Orlando, FL, United States	SpaceX launch event*	DM S&E	$615.38
		2/20/2018	2/21/2018	Orlando, FL, United States	Space Council Meeting	DM S&E	$659.35
	COMSTOCK, EARL W Total						$1,801.59
	DAVIDSON, PETER B	9/26/2017	9/27/2017	Ottawa, Canada	Participate in NAFTA	DM S&E	$1,643.13
		11/28/2017	12/2/2017	Berlin, FRG (Other)	Attend 620 Ministerial Meeting	DM S&E	$2,447.23
		3/11/2018	3/12/2018	Austin, TX, United States	Speak at SXSW Conference	DM S&E	$1,092.51
	DAVIDSON, PETER B Total						$5,182.87
	KELLER, CATHERINE B	7/19/2017	7/23/2017	Aspen, CO, United States	Attend Conference	DM S&E	$3,305.26
		9/17/2017	9/19/2017	New York, NY, United States	Attend Conference	DM S&E	$1,290.22
	KELLER, CATHERINE B Total						$4,595.48
	LEACH, SALLY M	11/3/2017	11/11/2017	Beijing, China	To act as advance for the trade mission and participate in bilateral discussions with foreign dignitaries. *	ITA O&A	$3,690.57
		3/26/2018	3/28/2018	New York, NY, United States	Participating in the Saudi US CEO Forum with SWR (NYC) and assisting SWR w/VPOTUS's admin goals *	DM S&E	$1,564.36
	LEACH, SALLY M Total						$5,254.93
	PUGHE, JOHN R	4/2/2018	4/3/2018	Oklahoma City, OK, United States	Meet with Faith-Based Partners	DM S&E	$967.72
	PUGHE, JOHN R Total						$967.72

Department of Commerce Political Appointees Official Travel
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Organization	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Total Cost
	ROCKAS, JAMES G	3/11/2017	**3/12/2017**	New York, NY, United States	**To perform official duties in connection with United States government.**	DM S&E	$765.55
		4/1/2017	**4/2/2017**	New York, NY, United States	**To perform official duties in connection with the United States government.**	DM S&E	$605.34
		4/6/2017	**4/9/2017**	West Palm Beach, FL, United States	**Staffing the Sec'y at the Summit with Chinese Pres. XI Jinping at Mar a Lago ***	DM S&E	$2,103.34
		4/30/2017	**5/3/2017**	Los Angeles, CA, United States	**Accompany the Sec'y at public events which will be open to the press. ***	DM S&E	$2,096.92
		5/21/2017	**5/22/2017**	Cedar Rapids, IA, United States	**Accompany the secretary at an open press event related to trade negotiation ***	DM S&E	$450.55
		8/14/2017	**8/15/2017**	New York, NY, US (New York County)	**Accompanying the Secretary for Media Interviews +**	DM S&E	$48.17
		8/23/2017	**8/24/2017**	Nashville, TN, United States	**To perform duties in connection with the United States government.***	DM S&E	$598.49
		9/16/2017	**9/23/2017**	New York, NY, United States	**To perform official duties in connection with the U.S. government.**	DM S&E	$4,313.92
		10/5/2017	**10/7/2017**	Miami, FL, United States	**To perform official duties in connection with U.S. government.***	DM S&E	$827.85
		10/23/2017	**10/25/2017**	New York, NY, United States	**Mr. Rockas is accompanying the Sec'y on official business trip. ***	DM S&E	$1,204.11
		2/5/2018	**2/6/2018**	Cape Canaveral, FL, United States	**James Rockas will assist Sec'y Ross with all press and media. ***	DM S&E	$627.18
		2/20/2018	**2/21/2018**	Orlando, FL, United States	**To assist Sec'y with his Nat'l Space Council mtg. at the Kennedy Space Center ***	DM S&E	$438.06
		2/27/2018	**3/1/2018**	Orlando, FL, United States	**To support the Sec'y. as he attends the GOES-S Space Center ***	DM S&E	$1,007.61
		4/4/2018	**4/15/2018**	Lima, Peru	**Assist Secretary Ross with all media and press needs while at Summit of the Americas +**	ITA O&A	$4,437.86
	ROCKAS, JAMES G Total						**$19,514.95**
	TERAMOTO, WENDY L	4/6/2017	**4/7/2017**	West Palm Beach, FL, United States	**To accompany Sec Ross to West Palm Beach for Meeting with Chinese ***	DM S&E	$959.54
		4/16/2017	**4/19/2017**	Narita Japan	**To accompany the Secretary and to meet with the Vice President with the Japanese officials to launch the economic dialogue discussion. ***	ITA O&A	$8,504.26
		4/30/2017	**5/2/2017**	Los Angeles, CA, United States	**To attend Milken Institute Global Symposium in LA ***	DM S&E	$1,441.92
		5/19/2017	**5/22/2017**	Riyadh, Saudi Arabia	**Accompany Secretary Ross as Secretary Ross accompanies the President of the United States to the Kingdom of Saudi Arabia, including supporting the President's meetings with the King, Crown Prince, and the Deputy Crown Prince. He will also participate in a signing ceremony of several agreements that will further solidify United States - Saudi security and economic cooperation. Secretary Ross will also have the opportunity to meet with leading members of the United States business community in the Kingdom of Saudi Arabia and discuss the bilateral commercial relationship and market access issues with his counterparts in the Saudi Ministries of Commerce. ***	ITA O&A	$441.00
		6/20/2017	**6/20/2017**	Cedar Rapids, IA, United States	**To accompany SWR and POTUS for Meeting in Iowa ***	DM S&E	$16.10
		7/5/2017	**7/8/2017**	Warsaw, Poland; Hamburg, Germany	**Wendy Teramoto will accompany Secretary Ross who was requested to attend the meeting in Poland and the G-20 by the President of the United States as he meets with leaders from various countries participating in the G-20 for high level talks. ***	ITA O&A	$1,703.12
		9/18/2017	**9/22/2017**	New York, NY, United States	**To attend UN General Assembly With SWR**	DM S&E	$348.10
		9/23/2017	**9/27/2017**	Beijing, China, Hong Kong	**To accompany Secretary Ross to Asia to advance the President of the United States agenda for his upcoming trip to Asia in November. ***	ITA O&A	$3,040.95
		10/5/2017	**10/6/2017**	Miami, FL, United States	**To attend US Business Council Meeting in Miami ***	DM S&E	$310.65
		11/1/2017	**11/10/2017**	London, United Kingdonv Beijing, China	**Ms. Teramoto is traveling to London and Beijing, China with the Secretary of Commerce to participate in the Trade Mission and bilateral discussions alongside the President of the United States. ***	ITA O&A	$6,433.01
		1/9/2018	**1/9/2018**	New York, NY, United States	**To accompany Sec Ross to NYC for a speech to AIF ***	DM S&E	$357.05
		1/18/2018	**1/21/2018**	New York, NY, United States	**To attend event in New Jersey with Sec Ross +**	DM S&E	$196.25
		1/22/2018	**1/27/2018**	Davos, Switzerland	**World Economic Forum ***	ITA O&A	$6,430.42
	TERAMOTO, WENDY L Total						**$30,181.37**
	UTHMEIER, JAMES W	5/6/2017	**5/15/2017**	Casablanca, Morocco	**Admin Req 101 MENA Regional SME Development Conference Casablanca May 17**	ITA O&A	$4,743.28
		7/15/2017	**7/22/2017**	Amsterdam, Netherlands/Adjara Region, GRO (Batumi, (	**Admin request:129 GEO Georgia Against Counterfeiting Jul17**	ITA O&A	$4,378.21
		2/5/2018	**2/6/2018**	Orlando, FL, United States	**Attend Meeting***	DM S&E	$748.54
		3/1/2018	**3/4/2018**	Cocoa Beach, FL, United States	**NOAA GOES Launch**	DM S&E	$1,066.17
	UTHMEIER, JAMES W Total						**$10,936.20**
	WARDELL, JONATHAN B	9/24/2017	**9/29/2017**	Seoul, Korea/ Bangkok, Thailand/ Tokyo, Japan	**Advance Secretary Ross overseas. ***	ITA O&A	$2,437.41
		10/21/2017	**10/25/2017**	New York, NY, United States	**To advance Secretary Ross in New York City ***	DM S&E	$1,012.09
		1/7/2018	**1/10/2018**	New York, NY, United States	**To advance the Secretary in NYC ***	DM S&E	$969.73
		2/26/2018	**3/3/2018**	Orlando, FL, United States	**To advance the Secretary's visit to the GOES-S satellite launch ***	DM S&E	$1,855.08
		3/26/2018	**3/28/2018**	New York, NY, United States	**To advance SWLR in NYC for Saudi-US CEO Forum ***	DM S&E	$1,177.76
	WARDELL, JONATHAN B Total						**$7,452.07**
OFFICE OF THE SECRETARY (OS) Total							**$68,490.22**

Department of Commerce Political Appointees Official Travel
March 1, 2017- April 9, 2018

Organization	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Total Cost
PATENT AND TRADEMARK OFFICE	MCCOMMAS, BRENDAN N	5/29/2017	6/2/2017	Malta, Malta	Brendan McCommas will be traveling to Valletta, Malta to attend and staff at the IP5 meetings taking place on May 30 - June 1, 2017.	PTO S&E	$5,486.18
		9/17/2017	9/24/2017	San Fransico, CA/San Jose, CA, United States	IPO 45th Annual Meeting	PTO S&E	$2,110.74
		10/11/2017	10/12/2017	Tampa, FL, United States	Inventor Club Meeting - Tampa, FL	PTO S&E	$554.80
		2/26/2018	3/3/2018	Tokyo City, Japan	Trilateral Meetings	PTO S&E	$3,813.36
	MCCOMMAS, BRENDAN N Total						**$11,967.08**
	SHIPP, CHRISTOPHER J	9/17/2017	9/24/2017	San Fransico, CA/San Jose, CA, United States	To attend the IPO Annual Meeting	PTO S&E	$1,924.32
		9/30/2017	10/6/2017	Geneva, Switzerland	Traveler will be attending as a part of the Delegation for the General Assemblies in Geneva Switzerland in his role as an appointee of the PTO and Dept of Commerce for educational and messaging purposes.	PTO S&E	$4,843.02
		2/26/2018	3/3/2018	Tokyo City, Japan	Attending the Trilateral meeting on behalf of USPTO	PTO S&E	$3,684.93
		3/10/2018	3/12/2018	Austin, TX, United States	Traveler is attending the South x Southwest festival to unveil the new Patent Design Traveler will then visit the Dallas Regional office	PTO S&E	$1,667.58
	SHIPP, CHRISTOPHER J Total						**$12,119.85**
	IANCU, ANDREI	2/26/2018	3/3/2018	Tokyo City, Japan	Trilateral Meetings - Tokyo, Japan - Feb 26 - March 3, 2018	PTO S&E	$3,670.80
		3/10/2018	3/12/2018	Austin, TX, United States	SXSW - Austin, TX & Regional Office Visit - Dallas, TX - March 10-12, 2018	PTO S&E	$1,756.67
		3/18/2018	3/20/2018	Los Angeles, CA, United States	USC IP Law Institute	PTO S&E	$1,039.71
		3/23/2018	3/24/2018	New York, NY, United States	NYIPLA - New York, NY - March 23, 2018	PTO S&E	$758.62
		4/5/2018	4/5/2018	New York, NY, United States	Mr. Iancu will be speaking on the Fordham University - IP Panel, being held in New York, NY on April 5, 2018	PTO S&E	$254.50
	IANCU, ANDREI Total						**$7,480.30**
PATENT AND TRADEMARK OFFICE Total							**$31,567.23**
Grand Total							$340,612.07

1.) The Office of the Secretary (OS) is defined as Departmental Management (DM).

2.) All trips were for official business

3.) * - Denotes trips by political appointees who accompany the Secretary and are also listed in the Secretary's Travel Report.

4.) + - Advance Travel outside Secretary Ross official travel dates or leg of trip canceled. These trips are not contained in the Secretary's travel report.

Funding Sources:
Departmental Management (DM)
Salaries and Expenses (S&E)
Operations and Administration (O&A)
Operations Resource and Facilities (ORF)
Working Capital Fund (WCF)

Data Source: E2 Trip Summary by Traveler and CD-29
Validated by Bureaus

As of July 31, 2018

Department of Commerce
Secretary Wilbur Ross Official Travel
March 1, 2017 - April 9, 2018

Trip #	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Cost	Count of Staff Traveling and/or with Secretary
1	PLAIR, JOHNATHAN H	4/5/2017	4/10/2017	Fort Lauderdale, FL, United States	Protection for the Secretary of Commerce	DM S&E	$2,431.31	1
	ROCKAS, JAMES G	4/6/2017	4/9/2017	West Palm Beach, FL, United States	Staffing the Sec'y at the Summit with Chinese Pres. Xi Jinping at Mar a Lago *	DM S&E	$2,103.34	1
	SCRIBER, WILLIAM E	4/5/2017	4/10/2017	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$2,774.67	1
	SHORTRIDGE, MATTHEW T	4/5/2017	4/10/2017	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,885.97	1
	TERAMOTO, WENDY L	4/6/2017	4/7/2017	West Palm Beach, FL, United States	To accompany Sec Ross to West Palm Beach for Meeting with Chinese *	DM S&E	$959.54	1
1 Total							$12,204.83	5
2	PLAIR, JOHNATHAN H	4/16/2017	4/20/2017	Tokyo	Protection for the Secretary of Commerce	ITA O&A	$2,989.39	1
	PRICE, CLLICE	4/16/2017	4/20/2017	Tokyo	Protection for the Secretary of Commerce	ITA O&A	$14,852.58	1
	ROSS, WILBUR L	4/16/2017	4/19/2017	Narita, Japan	To accompany Vice President of the United States on site visit to Japan.	ITA O&A	$11,842.35	1
	SHORTRIDGE, MATTHEW T	4/16/2017	4/20/2017	Tokyo, Japan	Protection for the Secretary of Commerce	ITA O&A	$2,662.93	1
	TERAMOTO, WENDY L	4/16/2017	4/19/2017	Narita Japan	To accompany the Secretary and to meet with the Vice President with the Japanese officials to launch the economic dialogue discussion. *	ITA O&A	$8,504.26	1
2 Total							$40,851.51	5
3	GAVIN, DENNIS A	4/30/2017	5/3/2017	Los Angeles, CA, United States	Protection for the Secretary of Commerce	DM S&E	$1,835.20	1
	RAFFERTY, SHAWN P	4/28/2017	5/2/2017	Los Angeles, CA, United States	Protection for the Secretary of Commerce	DM S&E	$2,790.36	1
	ROCKAS, JAMES G	4/30/2017	5/3/2017	Los Angeles, CA, United States	Accompany the Sec'y at public events which will be open to the press. *	DM S&E	$2,096.92	1
	ROSS, WILBUR L	4/30/2017	5/2/2017	Los Angeles, CA, United States	To attend Milken Institute Global symposium ^	DM S&E	$942.25	1
	SCRIBER, WILLIAM E	4/30/2017	5/3/2017	Los Angeles, CA, United States	Protection for the Secretary of Commerce	DM S&E	$1,508.95	1
	TERAMOTO, WENDY L	4/30/2017	5/2/2017	Los Angeles, CA, United States	To attend Milken Institute Global Symposium in LA *	DM S&E	$1,441.92	1
3 Total							$10,615.60	6
4	RAFFERTY, SHAWN P	5/19/2017	5/22/2017	Riyadh, Saudi Arabia	Protection for the Secretary of Commerce	ITA O&A	$441.00	1
	ROSS, WILBUR L	5/19/2017	5/22/2017	Riyadh, Saudi Arabia	To accompany President of the United States on site visit to Saudi Arabia ^	ITA O&A	$441.00	1
	TERAMOTO, WENDY L	5/19/2017	5/22/2017	Riyadh, Saudi Arabia	Accompany Secretary Ross as Secretary Ross accompanies the President of the United States to the Kingdom of Saudi Arabia, including supporting the President's meetings with the King, Crown Prince, and the Deputy Crown Prince. He will also participate in a signing ceremony of several agreements that will further solidify United States - Saudi security and economic cooperation. Secretary Ross will also have the opportunity to meet with leading members of the United States business community in the Kingdom of Saudi Arabia and discuss the bilateral commercial relationship and market access issues with his counterparts in the Saudi Ministries of Commerce. *	ITA O&A	$441.00	1
4 Total							$1,323.00	3
5	ROCKAS, JAMES G	6/21/2017	6/22/2017	Cedar Rapids, IA, United States	Accompany the secretary at an open press event related to trade negotiation *	DM S&E	$450.55	1
	ROSS, WILBUR L	6/20/2017	6/20/2017	Cedar Rapids, IA, United States	To accompany POTUS on site visit to Cedar Rapids Iowa ^	DM S&E	$15.10	1
	SCRIBER, WILLIAM E	6/21/2017	6/22/2017	Cedar Rapids, IA, United States	Protection for the Secretary of Commerce	DM S&E	$584.51	1
	SHORTRIDGE, MATTHEW T	6/20/2017	6/22/2017	Cedar Rapids, IA, United States	Protection for the Secretary of Commerce	DM S&E	$1,218.08	1
	TERAMOTO, WENDY L	6/20/2017	6/20/2017	Cedar Rapids, IA, United States	To accompany SWR and POTUS for Meeting in Iowa *	DM S&E	$15.10	1
5 Total							$2,283.34	5
6	GAVIN, DENNIS A	7/5/2017	7/8/2017	Warsaw, Poland, Hamburg, Germany	Protection for the Secretary of Commerce	ITA O&A	$1,782.30	1
	ROSS, WILBUR L	7/5/2017	7/8/2017	Warsaw, Poland; Hamburg, Germany	G20 Summit	ITA O&A	$1,703.12	1
	SHORTRIDGE, MATTHEW T	7/5/2017	7/9/2017	Warsaw, Poland; Hamburg, Germany	Protection for the Secretary of Commerce	ITA O&A	$1,706.27	1
	TERAMOTO, WENDY L	7/5/2017	7/8/2017	Warsaw, Poland; Hamburg, Germany	Wendy Teramoto will accompany Secretary Ross who was requested to attend the meeting in Poland and the G-20 by the President of the United States as he meets with leaders from various countries participating in the G-20 for high level talks. *	ITA O&A	$1,703.12	1
6 Total							$6,894.81	4
7	GAVIN, DENNIS A	8/21/2017	8/24/2017	Nashville, TN, United States	Protection for the Secretary of Commerce	DM S&E	$2,465.92	1
	ROCKAS, JAMES G	8/23/2017	8/24/2017	Nashville, TN, United States	To perform duties in connection with the United States government *	DM S&E	$588.49	1
	ROSS, WILBUR L	8/23/2017	8/24/2017	Nashville, TN, United States	Site Visit in Nashville, TN ^	DM S&E	$369.07	1
	SCRIBER, WILLIAM E	8/23/2017	8/26/2017	Nashville, TN, United States	Protection for the Secretary of Commerce	DM S&E	$1,192.46	1
7 Total							$4,615.94	4

Department of Commerce
Secretary Wilbur Ross Official Travel
March 1, 2017 - April 9, 2018

Trip #	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Cost	Count of Staff Traveling and/or with Secretary
8	PRICE, OLLICE	9/18/2017	9/22/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,743.03	1
	ROSS, WILBUR L	9/20/2017	9/20/2017	Washington, DC, United States	To attend official event at National Gallery of Art	DM S&E	$133.66	1
8 Total							$1,876.69	2
9	GAVIN, DENNIS A	9/22/2017	9/29/2017	Bangkok, Thailand	Protection for the Secretary of Commerce	ITA O&A	$2,845.63	1
	PLAIR, JOHNATHAN H	9/20/2017	10/1/2017	Beijing, China; Hong Kong, China; Bangkok, Thailand; Vientiene Laos	Protection for the Secretary of Commerce	ITA O&A	$8,346.32	1
	PRICE, OLLICE	9/23/2017	9/30/2017	Beijing, China; Hong Kong, China / Vientiene Laos	Protection for the Secretary of Commerce	ITA O&A	$16,980.26	1
	ROSS, WILBUR L	9/23/2017	9/30/2017	Beijing, China; Hong Kong, China, Bangkok, Thailand; Vientiene Laos	Trade Mission	ITA O&A	$9,920.17	1
	SHORTRIDGE, MATTHEW T	9/23/2017	9/30/2017	Beijing, China; Hong Kong, China; Bangkok, Thailand; Vientiene Laos	Protection for the Secretary of Commerce	ITA O&A	$7,821.69	1
	TERAMOTO, WENDY L	9/23/2017	9/27/2017	Beijing, China, Hong Kong	To accompany Secretary Ross to Asia to advance the President of the United States agenda for his upcoming trip to Asia in November. *	ITA O&A	$3,040.95	1
	WARDELL, JONATHAN B	9/24/2017	9/29/2017	Seoul, Korea/ Bangkok, Thailand/ Tokyo, Japan	Advance Secretary Ross overseas. *	ITA O&A	$2,437.41	1
	WOODSIDE, CLINT J	9/20/2017	10/1/2017	Beijing, China; Hong Kong, China; Bangkok, Thailand; Vientiene Laos	Protection for the Secretary of Commerce	ITA O&A	$8,139.53	1
9 Total							$59,531.96	9
10	CARMONA, JULIO A	10/5/2017	10/5/2017	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,227.72	1
	PLAIR, JOHNATHAN H	10/5/2017	10/9/2017	Miami, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,057.11	1
	ROCKAS, JAMES G	10/5/2017	10/7/2017	Miami, FL, United States	To perform official duties in connection with U.S. government.*	DM S&E	$827.86	1
	ROSS, WILBUR L	10/5/2017	10/8/2017	Miami, FL, United States	Give Speech to CEO Business Roundtable in Miami FL ^	DM S&E	$83.10	1
	SHORTRIDGE, MATTHEW T	10/4/2017	10/8/2017	Miami, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,540.01	1
	TERAMOTO, WENDY L	10/5/2017	10/8/2017	Miami, FL, United States	To attend US Business Council Meeting in Miami *	DM S&E	$310.65	1
	WOODSIDE, CLINT J	10/4/2017	10/9/2017	Miami, FL, United States	Protection for the Secretary of Commerce	DM S&E	$2,960.31	1
10 Total							$8,006.76	7
11	GAVIN, DENNIS A	10/26/2017	10/30/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,724.60	1
	LINTON, ALEXANDER J	10/26/2017	10/29/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,176.75	1
	ROCKAS, JAMES G	10/23/2017	10/26/2017	New York, NY, United States	Mr. Rockas is accompanying the Sec'y on official business trip. *	DM S&E	$1,204.11	1
	ROSS, WILBUR L	10/24/2017	10/25/2017	New York, NY, United States	To attend meetings and deliver remarks in NYC ^	DM S&E	$251.65	1
	SCRIBER, WILLIAM E	10/22/2017	10/26/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$2,294.69	1
	VARGA, JANOS	10/21/2017	10/26/2017	Riverhead, NY, United States	Protection for the Secretary of Commerce	DM S&E	$2,662.98	1
	WARDELL, JONATHAN B	10/21/2017	10/25/2017	New York, NY, United States	To advance Secretary Ross in New York City *	DM S&E	$1,012.09	1
	WOODSIDE, CLINT J	10/21/2017	10/25/2017	Riverhead, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,556.94	1
11 Total							$11,883.81	8
12	BEAUMONT, DINA M	11/7/2017	11/10/2017	Beijing, China	Advance Bilateral Meeting with Secretary of Commerce *	ITA O&A	$2,477.61	1
	CARMONA, JULIO A	10/27/2017	11/7/2017	London, England	Protection for the Secretary of Commerce	ITA O&A	$3,785.95	1
	GAVIN, DENNIS A	11/5/2017	11/10/2017	Beijing, China	Protection for the Secretary of Commerce	ITA O&A	$3,755.89	1
	LEACH, SALLY M	11/3/2017	11/11/2017	Beijing, China	To act as advance for the trade mission and participate in bilateral discussions with foreign dignitaries. *	ITA O&A	$3,690.57	1
	PLAIR, JOHNATHAN H	11/1/2017	11/6/2017	London, England/ Beijing, China	Protection for the Secretary of Commerce	ITA O&A	$5,480.68	1
	PRICE, OLLICE	11/1/2017	11/7/2017	London, England	Protection for the Secretary of Commerce	ITA O&A	$2,362.08	1
	ROSS, WILBUR L	11/1/2017	11/10/2017	London, United Kingdom/ Beijing, China	Trilateral Commission/ Trade mission	ITA O&A	$5,679.90	1
	SHORTRIDGE, MATTHEW T	11/1/2017	11/7/2017	London, England	Protection for the Secretary of Commerce	ITA O&A	$2,452.14	1
	TERAMOTO, WENDY L	11/1/2017	11/10/2017	London, United Kingdom/ Beijing, China	Ms. Teramoto is traveling to London and Beijing, China with the Secretary of Commerce to participate in the Trade Mission and bilateral discussions alongside the President of the United States. *	ITA O&A	$6,433.01	1
	WOODSIDE, CLINT J	10/31/2017	11/10/2017	Beijing, China	Protection for the Secretary of Commerce	ITA O&A	$6,550.29	1
	WRIGHT, RODNEY J	10/26/2017	11/7/2011	London, England	Protection for the Secretary of Commerce	ITA O&A	$3,571.74	1
12 Total							$46,239.86	11

Department of Commerce
Secretary Wilbur Ross Official Travel
March 1, 2017 - April 9, 2018

Trip #	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Cost	Count of Staff Traveling and/or with Secretary
13	PLAIR, JOHNATHAN H	11/30/2017	12/3/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,672.63	1
	ROSS, WILBUR L	11/30/2017	12/1/2017	New York, NY, United States	To meet wth Klaus Schwab of the World Economic Forum ^	DM S&E	$314.15	1
	SCRIBER, WILLIAM E	11/29/2017	12/3/2017	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$2,561.26	1
13 Total							$4,548.04	3
14	CARMONA, JULIO A	1/8/2018	1/15/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$2,438.21	1
	PLAIR, JOHNATHAN H	1/9/2018	1/9/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$195.63	1
	ROSS, WILBUR L	1/9/2018	1/9/2018	New York, NY, United States	To give Speech to AIF Annual Investors Meeting	DM S&E	$176.75	1
	SCRIBER, WILLIAM E	1/8/2018	1/16/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$4,930.47	1
	TERAMOTO, WENDY L	1/9/2018	1/9/2018	New York, NY, United States	To accompany Sec Ross to NYC for a speech to AIF *	DM S&E	$357.05	1
	WARDELL, JONATHAN B	1/7/2018	1/10/2018	New York, NY, United States	To advance the Secretary in NYC *	DM S&E	$969.73	1
14 Total							$9,067.84	6
15	BEAUMONT, DINA M	1/16/2018	1/27/2018	Zurich, Switzerland	To execute all of the Secretary's Advance needs for Davos. *	ITA O&A	$4,469.76	1
	LINTON, ALEXANDER J	1/17/2018	1/20/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$2,365.27	1
	PLAIR, JOHNATHAN H	1/22/2018	1/27/2018	Zurich, Switzerland	Protection for the Secretary of Commerce	ITA O&A	$2,197.13	1
	ROSS, WILBUR L	1/21/2018	1/27/2018	London, United Kingdom/ Davos, Switzerland	World Economic Forum	ITA O&A	$6,519.81	1
	SHORTRIDGE, MATTHEW T	1/22/2018	1/27/2018	Zurich, Switzerland	Protection for the Secretary of Commerce	ITA O&A	$2,711.77	1
	TERAMOTO, WENDY L	1/22/2018	1/27/2018	Davos, Switzerland	World Economic Forum *	ITA O&A	$6,430.42	1
	WRIGHT, RODNEY J	1/15/2018	1/27/2018	Zurich, Switzerland	Protection for the Secretary of Commerce	ITA O&A	$6,309.54	1
15 Total							$31,003.70	7
16	LINTON, ALEXANDER J	1/31/2018	2/1/2018	White Sulphur Springs, US (Standard Rate)	Protection for the Secretary of Commerce	DM S&E	$226.64	1
	ROSS, WILBUR L	1/29/2018	1/30/2018	New York, NY, United States	Travel to NYC for McCain Institute Dinner ^	DM S&E	$228.06	1
	SCRIBER, WILLIAM E	1/28/2018	1/30/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,498.97	1
	VARGA, JANOS	1/28/2018	1/30/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,155.09	1
	WOODSIDE, CLINT J	1/29/2018	1/30/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$215.54	1
16 Total							$3,324.30	5
17	BEAUMONT, DINA M	2/4/2018	2/6/2018	Cape Canaveral, FL, United States	To execute all of the Secretary's Advance needs for Space X Event! *	DM S&E	$1,352.55	1
	CARMONA, JULIO A	2/1/2018	2/6/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,869.98	1
	COMSTOCK, EARL W	2/5/2018	2/6/2018	Orlando, FL, United States	SpaceX launch event*	DM S&E	$615.38	1
	LINTON, ALEXANDER J	2/5/2018	2/6/2018	Orlando, FL, United States	Protection for the Secretary of Commerce	DM S&E	$815.82	1
	NEWMAN, WILLIAM E	2/1/2018	2/6/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$2,946.61	1
	ROCKAS, JAMES G	2/5/2018	2/6/2018	Cape Canaveral, FL, United States	James Rockas will assist Sec'y Ross with all press and media. *	DM S&E	$627.18	1
	ROSS, WILBUR L	2/6/2018	2/6/2018	Cape Canaveral Afs, FL, United States	To attend Launch of Space X at Cape Canaveral ^	DM S&E	$15.10	1
	UTHMEIER, JAMES W	2/5/2018	2/6/2018	Orlando, FL, United States	Attend Meeting*	DM S&E	$748.54	1
	VARGA, JANOS	2/5/2018	2/7/2018	Orlando, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,009.98	1
	WOODSIDE, CLINT J	2/2/2018	2/6/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,095.69	1
17 Total							$11,096.83	10
18	GAVIN, DENNIS A	2/16/2018	2/21/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,410.73	1
	PRICE, OLLICE	2/23/2018	2/23/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$644.29	1
	ROCKAS, JAMES G	2/20/2018	2/21/2018	Orlando, FL, United States	To assist Sec'y with his Natl Space Council mtg. at the Kennedy Space Center.*	DM S&E	$436.06	1
	VARGA, JANOS	2/15/2018	2/21/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$4,003.10	1
18 Total							$6,494.18	4

Department of Commerce
Secretary Wilbur Ross Official Travel
March 1, 2017 - April 9, 2018

Trip #	Traveler Name	Start Date	End Date	Destination	Purpose	Funding Source	Cost	Count of Staff Traveling and/or with Secretary
19	GAVIN, DENNIS A	2/28/2018	3/3/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,805.25	1
	LINTON, ALEXANDER J	2/28/2018	3/3/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$2,466.07	1
	ROCKAS, JAMES G	2/27/2018	3/1/2018	Orlando, FL, United States	To support the Sec'y. as he attends the GOES-S Space Center *	DM S&E	$1,007.61	1
	WARDELL, JONATHAN B	2/26/2018	3/3/2018	Orlando, FL, United States	To advance the Secretary's visit to the GOES-S satellite launch *	DM S&E	$1,855.08	1
	WOODSIDE, CLINT J	3/1/2018	3/4/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,193.06	1
19 Total							$8,327.07	5
20	LINTON, ALEXANDER J	3/8/2018	3/12/2018	West Palm Beach, FL, United States	Protection for the Secretary of Commerce	DM S&E	$3,286.66	1
	NEWMAN, WILLIAM E	3/8/2018	3/9/2018	Brunswick, GA, United States	Protection for the Secretary of Commerce	DM S&E	$665.49	1
	PLAIR, JOHNATHAN H	3/6/2018	3/12/2018	Brunswick, GA, United States	Protection for the Secretary of Commerce	DM S&E	$1,871.69	1
	ROSS, WILBUR L	3/8/2018	3/9/2018	Jacksonville, FL, United States (Sea Island, GA)	Participation in American Enterprise Institute (AEI) Forum Conference ^	DM S&E	$124.67	1
	SCRIBER, WILLIAM E	3/6/2018	3/9/2018	Jacksonville, FL, United States	Protection for the Secretary of Commerce	DM S&E	$1,892.12	1
	SHORTRIDGE, MATTHEW T	3/8/2018	3/12/2018	Brunswick, GA, United States	Protection for the Secretary of Commerce	DM S&E	$1,197.92	1
20 Total							$9,038.76	6
21	CARMONA, JULIO A	3/26/2018	3/28/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,135.03	1
	LEACH, SALLY M	3/26/2018	3/28/2018	New York, NY, United States	Participating in the Saudi US CEO Forum with SWR (NYC) and assisting SWR w/VPOTUS's admin goals *	DM S&E	$1,564.36	1
	NEWMAN, WILLIAM E	3/26/2018	3/29/2018	Minneapolis, MN, United States	Protection for the Secretary of Commerce	DM S&E	$1,895.16	1
	ROSS, WILBUR L	3/26/2018	3/26/2018	Minneapolis, MN, United States	Travel with Vice President of the United States. ^	DM S&E	$370.66	1
	SHORTRIDGE, MATTHEW T	3/25/2018	3/26/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,011.85	1
	VARGA, JANOS	3/26/2018	4/3/2018	Minneapolis, MN, United States	Protection for the Secretary of Commerce	DM S&E	$3,976.44	1
	WARDELL, JONATHAN B	3/26/2018	3/28/2018	New York, NY, United States	To advance SWLR in NYC for Saudi-US CEO Forum *	DM S&E	$1,177.76	1
	WOODSIDE, CLINT J	3/25/2018	3/28/2018	New York, NY, United States	Protection for the Secretary of Commerce	DM S&E	$1,197.98	1
21 Total							$12,329.24	8
Grand Total							$289,330.04	122

Footnotes:

1.) The Office of the Secretary (OS) is defined as Departmental Management (DM).

2.) All trips were for official business

3.) * - Denotes trips by political appointees who accompany the Secretary and are also listed in the Political Appointees Travel Report.

4.) ^ - Indicate trips by Secretary Ross that was no cost or at a reduced cost to the government (Trips number 1, 3, 4, 5, 7, 10, 11, 13, 16, 17, 18, 19, 20, and 21.) Some of Secretary Ross's trips were at a lower cost because he paid for his transportation (including upgrades), incurred no lodging, or accepted under gift and bequest authority.

Funding Sources:

Departmental Management (DM)

Salaries and Expenses (S&E)

Operations and Administration (O&A)

Operations, Research, and Facilities (ORF)

Data Source: E2 Trip Summary by Traveler and CO-29

Validated by Bureaus

As of July 17, 2018

The Honorable Derek Kilmer

Subcommittee on Commerce, Justice, Science, and Related Agencies

Questions for the Record

Department of Commerce FY 2019 Budget Request

1. Several tribal leaders from my district have written to you requesting formal government to government consultation before a final decision is made regarding the allocation of Halibut quota in Area 2A where these tribes hold treaty reserved fishing rights under the Point Elliott Treaty of 1885. The formal consultation process is part of the federal trust responsibility and an essential component of meeting our treaty obligations to federally recognized tribes. As the Secretary of Commerce, it is your responsibility to engage in consultation on any issue within your Department's jurisdiction, which includes the National Oceanic and Atmospheric Administration. How have you responded to these requests and will you commit to engage in formal consultation with each of the affected Tribes before finalizing any decision or rule making that will affect the allocation of Halibut quota in Area 2A?

ANSWER:
As you are most likely already aware, I have responded to each of the requests for formal government-to-government consultation regarding the 2018 tribal allocation of halibut fisheries in Area 2A. As my response explains, due to timing constraints, we were unable to fulfill the Tribes' requests for formal government-to-government consultation prior to the start of the Pacific halibut fishery on March 24, 2018. However, the National Marine Fisheries Service engaged with all thirteen Tribes throughout the past year, including the March 19th webinar teleconference, and ensured that tribal positions concerning tribal trust resources were taken into account when issuing the final management decision.

I assure both you and the tribal leaders that the Department takes its responsibility as a Tribe trustee seriously, and the Department looks forward to government to government consultations with the tribes on the development of the 2019 halibut quotas.

2. The Export Import Bank does not have a quorum and is unable to do deals over $10 million. Subsequently, there are over $35 billion in pending deals that are stuck in the pipeline without being able to be approved with a board quorum. Without a quorum, these deals are in jeopardy of moving overseas, which will result in the loss of American jobs. Do you agree that the Export Import Bank needs to be fully operational? When will the Administration send a new Chairman nominee?

ANSWER:
As I have previously testified, I believe that it is critical to restore EXIM Bank to full functionality. I look forward to the confirmation of the four pending nominees and hope any concerns that are causing delay will be resolved very quickly.

Please contact the White House on the timing of a new nomination for EXIM Bank Chairman.

3. Commerce Department decisions on exclusions from impending steel and aluminum tariffs will be made on a company-by-company basis rather than by product. Granting an exclusion from tariffs to one company means that that company gains a potentially huge economic advantage over its competitors. Given that, it's important that the process be impartial and fair. How will Commerce make sure that companies with political and business connections to President Trump are not favored in the process? Will the process be open and transparent?

ANSWER:
Pursuant to the Presidential Proclamations under section 232 establishing limitations on imports of steel and aluminum, the Secretary of Commerce is authorized to grant requests by directly affected parties in the United States for exclusion from those limitations if a specific product that affected party seeks to import is not available in the United States in sufficient quantity or quality, or if there are specific national security reasons to grant such an exclusion request.

The review of exclusion requests from domestic industry, and any related objections, rebuttals, and surrebuttals, is being conducted on a case-by-case basis in an impartial and transparent process managed by the Department of Commerce Bureau of Industry and Security.

The procedures published in the September 11, 2018, interim final rule set forth the requirements for submitting requests for exclusion. The exclusion request procedure also includes opportunity for objections, rebuttals, and surrebuttals to be filed. Objections to exclusion requests may be filed during a 30-day period after an exclusion request has been filed. After the 30-day objection period, an exclusion requester, has seven days in which to file a rebuttal to any objection to the exclusion request. After the close of the rebuttal period, objectors will then also have seven days to file surrebuttals to any rebuttal. If an exclusion request does not receive any objections, otherwise meets the requisite criteria, and does not present any national security concerns, BIS will expeditiously grant the exclusion request. The Department is confident that this process will allow the Department to make well informed determinations on exclusion requests. We also have the discretion to make broader exclusions available to all importers if we find the circumstances warrant, and we will exercise this discretion as appropriate.

As stated in the March 19, 2018, interim final rule, Commerce will post responses in regulations.gov to each steel and aluminum exclusion request submitted.

4. The Budget proposes to close the business outreach centers operated by the Minority Business Development Agency and establish the MBDA as a policy office in Washington, D.C. Can you explain how a centralized MBDA will serve the needs of minority business owners located in communities around the country? Can you explain your rationale for closing the MBDA business centers?

ANSWER:
The Administration's FY2019 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. The Administration has made the necessary tradeoffs and choices inherent in pursuing these goals. To support these priorities, MBDA will concentrate on securing a strong return on investment of taxpayer dollars by transitioning from serving individual Minority Business Enterprises (MBEs) toward removing obstacles to growth of the entire minority business community through policy advocacy. MBDA will shift its spending priorities and programmatic focus in an effort to create policies that encourage MBEs to grow. This operational change will provide a new foundation to ensure that minority entrepreneurs have access to the resources they need to create jobs and drive our nation's prosperity.

Moving forward, MBDA will focus on:

- **Measuring and rewarding the efficacy of public and private sector programs and policies that contribute to the growth of MBEs;**
- **Commissioning and conducting research to inform policy makers and markets for and about MBEs;**
- **Leveraging federal funds through public-private-partnerships to broaden outreach to MBEs; and**
- **Exploring market-driven, programmatic synergies to better assist MBEs.**

5. The Manufacturing Extension Partnership under attack for a second year in a row. The program's stated goal is to help bring manufacturing back to the United States make manufacturers more competitive globally. In the state of Washington, our local MEP affiliate, Impact Washington, has had tremendous impact on manufacturers. Specifically, Impact Washington has provided over $488 Million in economic impact statewide and nearly $68 Million in my district alone over the last two years. Can you explain how eliminating the Manufacturing Extension Partnership program that has such local and national impact on job retention and growth for the manufacturing industry aligns with the President's focus on job growth?

ANSWER:
The fiscal year 2019 budget for the Department of Commerce prioritizes the 2020 decennial census, next generation weather satellites and increased staff support to step up the enforcement of our trade laws. With these critical needs, the Administration made a difficult choice to propose to eliminate federal funding for MEP. The Administration believes that the MEP Centers will transition to non-federal revenue sources, which was originally intended when the program was established.

6. The Budget proposes to eliminate the Economic Development Administration. This proposed elimination will undermine economic development in rural communities. Can you explain your rationale for eliminating the EDA? What work has the Department done over the last year to find a solution to this alleged duplication? What efforts are being made to fill the gap left by the elimination of the EDA? Will other programs pick up the EDA's work?

ANSWER:
The Administration's 2019 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. The Administration has made the necessary tradeoffs and choices inherent in pursuing these goals. This means changing the role and size of the Federal Government and prioritizing the programs that provide a good return for the taxpayer, as well as those that serve the most critical functions, while consolidating or eliminating duplicative, ineffective or less critical programs. Many difficult decisions were necessary to reach the funding level provided in this budget, and the elimination of EDA is one of them.

To cover the costs of closing down EDA in FY19, the President's Budget requested $14.9 million for EDA's Salaries and Expenses (S&E) account plus authority to use unobligated and deobligated amounts from the Economic Development Assistance Program (EDAP) appropriation. This would include funding in the out years for the administration of grants and loans to rural communities.

EDA's authorities for economic development emanate from the Department and are delegated to the EDA for execution. Should EDA be eliminated, the Department will retain the expertise and authorities currently housed in EDA.

The Administration's proposed Bureau of Economic Growth within the Department of Commerce outlines a new vision for how federal economic assistance resources can support economic and job growth in a coordinated and efficient manner. For more information see "Delivering Government Solutions in the 21st Century Reform Plan and Reorganization Recommendations," pages 17 (item 17) and 78-80, available at:

https://www.whitehouse.gov/wp-content/uploads/2018/06/Government-Reform-and-Reorg-Plan.pdf.

7. Access to high-speed Internet is crucial for rural communities, and developing and maintaining a high-quality telecommunications infrastructure, including broadband, is essential both for promoting economic growth and for expanding access to important services like health care and education. The President's Budget recommends $35 million for NTIA to "ensure adequate access to scare spectrum resources." What plans does NTIA have to support the deployment of new broadband systems to rural communities?

ANSWER:
NTIA supports rural communities around the country that are looking to expand connectivity through our BroadbandUSA program. We work together to identify resources and provide technical assistance, and have helped more than 250 communities to develop public-private partnerships to meet their connectivity needs and digital inclusion goals.

BroadbandUSA serves as a trusted and neutral strategic advisor to federal, state and local governments as well as industry leaders working to advance broadband initiatives, especially in rural areas, designed to attract new employers, create quality jobs, improve educational opportunities, increase health outcomes and advance public safety.

Another major priority for this Administration is removing barriers to broadband deployment. NTIA is working to improve federal coordination around this goal through the Broadband Interagency Working Group (BIWG), which we co-chair with the Department of Agriculture's Rural Utilities Service. Our efforts are focused on three work streams on federal permitting, federal funding and leveraging federal assets that align with key recommendations of the President's Task Force on Agriculture and Rural Prosperity.

We also support a State Broadband Leaders Network (SBLN) to facilitate information sharing among representatives from more than 30 states. In March, we held a summit in Tennessee, working with the Tennessee Economic Development Authority, which brought more than 200 state and local officials together to share their best ideas for furthering the state's connectivity.

Finally, the Rural Prosperity Task Force recommended assessing the current state of broadband access nationwide. Congress has appropriated funds for NTIA to work with the FCC and the states to update the broadband map with more diverse data sources. NTIA also plans to work with other federal agencies to review their relevant data sources. This will produce a more accurate assessment of broadband capabilities and provide a tool for policy makers both here on the Hill and across the executive branch to better target the funds that are allocated to broadband.

8. A recent report detailed that the core copyright industries, just one portion of America's intellectual property sector, added $1.2 trillion to the U.S. economy in 2015, accounted for 6.88% of the entire economy, employed over 5.5 million American workers, and brought in $177 billion in foreign sales and exports. IP promotes our global competitive advantage, and the PTO's Office of Policy and International Affairs is critical to these efforts. It advises the President on IP matters, conducts on-the-ground training in countries across the globe, served as an expert resource to foreign governments, and help Americans protect their property abroad. In order to guarantee the success of the Office, will you commit to preventing any attempt to reorganize, merge, or redistribute the functions and programs of the OPIA without prior consultation and sanction of both the Committee on Appropriations and the Committee on the Judiciary?

ANSWER:
There are currently no plans to change the organizational structure of USPTO's Office of Policy and International Affairs (OPIA) and any improvements can be addressed with increased internal communications. We recognize the important value of the OPIA to assist Director Iancu and the Department in providing the Administration with the best possible advice on all areas of intellectual property.

9. In a Commerce press release from September of 2017, you were quoted regarding the Regional Innovation Program, "These projects will enable entrepreneurs in communities across the United states to start new businesses, manufacture innovative products, and export them throughout the world – increasing America's global competitiveness." This statement was given after the Regional Innovation Program awarded $17 million in a new round of 1:1 matched awards — including to nonprofits, institutions of higher education, and entrepreneurship-focused organizations — to awardees in 28 states to create and expand cluster-focused proof-of-concept and commercialization programs, and early-stage seed capital. One of the awards to my home state is helping to support maritime innovation, including a tech demonstration of electric conversion for the largest ferry system in the U.S. Given the Trump Administration's commitment to global competitiveness through strengthening U.S. production and exports, how does eliminating the Regional Innovation achieve this goal for Washington?

ANSWER:
The Administration's 2019 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. The Administration has made the necessary tradeoffs and choices inherent in pursuing these goals. This means changing the role and size of the Federal Government and prioritizing the programs that provide a good return for the taxpayer, as well as those that serve the most critical functions, while consolidating or eliminating duplicative, ineffective or less critical programs. Many difficult decisions were necessary to reach the funding level provided in this budget, and the elimination of EDA is one of them.

While the Administration has proposed and continues to propose EDA's elimination, it is my responsibility as Secretary of Commerce to ensure that funding currently provided by Congress to EDA be invested in ways that are consistent with Administration priorities. I will efficiently and effectively invest the taxpayer dollars that Congress provides to EDA, but support the Administration's recommendations to reach a more responsible fiscal path, as outlined in the President's 2019 budget.

10. Strategies like those supported by the Regional Innovation Program have successfully sparked job creation and business-strengthening outcomes in our communities, and preliminary results from the FY14 and FY15 program rounds (with projects only 22 and 11 months completed, respectively) are promising. For example, under the i6 Challenge, more than 950 full-time jobs have been created and $166 million has been raised in funding outside of EDA's investment. Under the Seed Fund Support program, funds primarily targeted at underserved regions and populations have raised $11 million in seed capital. Since 2014, the Regional Innovation (RI) Program has received more than 620 applications from all 50 states, including my home state of Washington, which recognizes innovation and entrepreneurship as key drivers of our economy. During your testimony before the House Appropriations Committee, you stated the Trump Administration's Infrastructure plan could replace the EDA, which you called a "duplicative program." How does the Trump Infrastructure plan help entrepreneurs develop their innovations, access seed capital and create high-growth businesses?

ANSWER:
Rebuilding America's infrastructure is critical for U.S. businesses to succeed now and in the future, including our nation's entrepreneurs. President Trump's American Infrastructure Initiative will:

- **Stimulate at least $1.5 trillion in new investment over the next decade;**
- **Shorten the approval process for projects to two years or less;**
- **Focus on infrastructure needs for rural areas;**
- **Encourage training for American workers; and**
- **Create opportunities for state and local governments to invest in "large-scale infrastructure projects."**

11. Reliable census data is pivotal for disaster preparedness at the federal, state and local levels in populous areas prone to extreme weather events. How does the Budget request account for the additional costs associated with developing and applying modified Census procedures in these impacted areas? What changes in procedures does the Census Bureau plan to make to contend with the challenges of conducting the count in these areas?

ANSWER: The Department of Commerce's October 2017 Life Cycle Cost Estimate of $15.6 billion includes nearly $1.2 billion in unallocated contingency funding above the

independent cost estimate of $14.1 billion to address unknown risks, such as impacts of a natural disaster.

The Census Bureau prepares for special enumeration of areas impacted by natural disasters using a similar procedure to enumerating hard-to-count populations, which is the Update Leave operation. During this operation, Census enumerators will update the address frame and leave a paper questionnaire and invitation to answer via the Internet, by phone or by mail at the household door.

12. The original plan for the 2018 End-to-End Census Test encompassed three sites, including one in Pierce County, Washington. That was canceled due to the administration's insufficient original budget request for Fiscal Year 2018. The Census Bureau also canceled three site tests in 2017 that would have tested modified census methods used in many rural and remote communities and on tribal lands. All of these cutbacks mean that the Census Bureau will conduct the census in 2020 without having tested its new design and methods in a rural area. How will you ensure that the census will be successful in rural communities in the absence of testing new operations and IT systems in a contemporary rural environment?

ANSWER:
We conducted the early operations of the 2018 End-to-End Census Test in three locations that included the very rural areas of the Bluefield, Beckley, Oakhill region of West Virginia, and in Pierce County, Washington. We gained valuable experience in implementing census operations in areas with no Internet connectivity, and we are currently adjusting our systems and operations based on what we learned. The Census Bureau successfully implemented its management systems in these areas, and field staff were able to receive their assignments and submit their payroll and operational data at the beginning or end of their shifts when they could connect to the Internet, but they did not require Internet access while they were actually doing their work. This is important to the Commonwealth of Puerto Rico, which includes areas with sporadic Internet connectivity particularly in the aftermath of Hurricane Maria.

The primary goal of any end-to-end test is to ensure the effective integration of all of our systems and operations, and the Providence, Rhode Island site is ideal for that. Moreover, the operations we are implementing in rural areas, and on American Indian Reservations, are identical to those implemented in prior censuses, so they are well-established and have proven to be effective in the past.

We recognize the importance of counting people in rural areas and the unique challenges that represents. We do recognize that the Internet response option is not feasible or acceptable to the entire population; alternative modes will be provided for respondents to complete their 2020 decennial census questionnaire, such as the paper methods used in the past. Our self-response contact strategies include invitation letters, post-cards, and questionnaires mailed to households. Although our objective is for a majority of respondents to complete their census questionnaire online, in areas with low Internet

connectivity and other characteristics that make it less likely that respondents will complete the census questionnaire online, we offer an Internet Choice contact strategy where a questionnaire is provided on the first contact, in addition to information about how to respond online or by phone.

A second step we take to ensure an accurate count in rural areas involves an operation we call "Update/Leave." This operation is designed to update the address frame in areas where the majority of housing units either do not have mail delivered to the physical location of the housing unit, or the mail delivery information for the housing unit cannot be verified. The purpose of the operation is to update the address and feature data for the area assigned, and to leave a 2020 Census Internet Choice Questionnaire Package at every housing unit identified to allow the household to self-respond. The choice questionnaire package will offer occupants two different ways to respond to the census: through the Internet or by mailing back a completed paper questionnaire. All households can also choose to respond by phone. Households that do not respond will be included in the Non-response Follow-up operation with correct geographic information.

Our Partnership and Communications Program also will include organizations that are focused on rural communities and advertising and promotion that will reach these areas as well.

Our efforts to enumerate tribal areas are equally strong. The Census Bureau announced on July 1, 2015, that it would seek input from tribal leaders for the 2020 Census. The Census Bureau conducted 18 tribal consultation meetings that started two years earlier than those conducted for the 2010 Census. These meetings requested input on topics like geography, data collection operations, and tribal enrollment. Connectivity issues were discussed in these meetings, and the Census Bureau continues to explore ways to ensure that it has measures in place to address them. As we move closer to the 2020 Census we are working with leaders from each tribe to determine the best way to conduct census operations in their areas. In many cases, the Census Bureau will use the Update Leave Operation in these areas as well.

We also are working closely with tribal leaders as we develop the Communications and Partnership program. Our contracting team, led by Young & Rubicam (Team Y&R) includes G+G Advertising. G+G Advertising has been a leader in American Indian and Alaska Natives (AIAN) advertising and outreach to AIAN audiences for more than 20 years. The firm also has extensive decennial experience, having participated in the 2000 and 2010 Census advertising campaigns. Team Y&R, G+G Advertising, and Census Bureau staff, both at the headquarters and local level, have been working on two key elements: research and partnerships. Working in conjunction with the Census Bureau, Team Y&R recently completed the Census Barriers Attitudes and Motivators Survey (CBAMS). CBAMS is a quantitative and qualitative research effort which includes a survey with a sample of 50,000 households and 42 focus groups in 14 cities across the United States. The AIAN population was a significant focus of this study. In addition, the Census Bureau is implementing its Community Partnerships Engagement Program

(CPEP). CPEP is an effort that focuses on building and engaging community or grassroots level partnerships throughout the United States.

13. Cyber threats and phishing attempts are a major concern for the 2020 Census, our first high-tech census. How do you plan to protect against these online threats, including through education and outreach campaigns? Do you believe you have and will have the funding needed to do so?

ANSWER:
The Census Bureau places a high priority on cybersecurity for the 2020 Census and is drawing upon the best resources in the Federal Government to prepare for and address cyber threats. The Census Bureau is working closely with the Department of Homeland Security (DHS) to review technology architecture, perform penetration testing to ensure the Internet Self Response website is safe and secure, and to utilize DHS cybersecurity services effectively in the cloud.

Cyber risks may be external, on the perimeter, and/or internal to the Census Bureau's systems. The Bureau can detect some of these risks but will also rely on and partner with industry and other federal agencies, which are tasked with and have authority to take actions to resolve external threats.

There are other risks on the perimeter or directed at the Census Bureau's internal systems, such as data breaches, compromising Census user devices, and disrupting the Internet Self Response website. The Census Bureau 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.

With this approach, the Census Bureau will use very high levels of security in publicly facing systems, such as Internet Self Response, which will allow the Bureau to remove bad actors early on in the process without affecting respondents' ability to move through the system and fill out their surveys. It will give the Census Bureau the best opportunity to prevent, detect, respond, and recover from possible cyber threats.

In addition to technology design and development, the Census Bureau requires employees to take cybersecurity training and regularly conducts cyber threat response exercises. The Census Bureau is also developing a comprehensive communications campaign to educate the public and the Bureau's partners, to better prepare them to identify, protect themselves against, and communicate with the Census Bureau about cybersecurity threats.

In May 2017, I directed members of my senior leadership team to work with the Census Bureau to conduct an evaluation and produce an updated independent lifecycle cost estimate for the 2020 Census. The revised lifecycle estimate is $15.6 billion, which was informed by the team's independent cost estimate of $14.1 billion to ensure adequate

resources are available to conduct a complete and accurate 2020 Census. The October 2017 Lifecycle Cost Estimate includes costs to secure IT systems for the 2020 Census. The FY 2019 budget request is aligned with the lifecycle cost estimate for the 2020 Census, and contains all contingency funding determined by the Department's independent cost estimate. It funds known requirements for IT systems development and security and contingency funding to address program risks related to IT security. While there exists uncertainty in the need for additional unallocated contingency funding of $1.2 billion above the independent cost estimate at this time, should it become necessary as the lifecycle cost is informed and refined with the results of the 2018 End-to-End Census Test, the Administration will work closely with Congress to reconsider.

14. At the second meeting of the National Space Council on February 21, 2018, you put forward a recommendation which was adopted, to consolidate the Office of Space Commerce with the Commercial Remote Sensing Regulatory Affairs office and elevate the combined office to the Secretary level. The stated goal of this consolidation and elevation is to create a "one-stop shop for space commerce," an industry with $32 billion of non-U.S. government investment in 2016. Are the combined budgets and personnel for those two offices – approximately $3.6 million and 9 personnel – sufficient to create an effective "one-stop shop for space commerce"? What plan do you have for developing such a "one-stop shop" in terms of future roles and responsibilities?

ANSWER:
The Department of Commerce is in the process of determining how to best align resources with space commerce functions as it carries out directives from the National Space Council to become a "one stop shop" government interface for commercial space industry needs. In addition to the $3.6 million and nine personnel dedicated to the Office of Space Commerce and the Commercial Remote Sensing Regulatory Affairs Office, the Department is also coordinating the space commerce functions of its various agencies engaged in activities that impact space commerce as it works to serve the President and the reinstated National Space Council. These activities include NTIA (federal spectrum management), BIS (export licensing), NOAA (managing the Administration's largest civil operational fleet of 18 weather satellites), NIST (standards and technology) and ITA (international trade promotion and advocacy).

The Department will determine whether additional funding for space commerce activities are required and describe these activities further in the President's FY20 budget submission.

15. In the Strategic Plan for 2018-2022 for the Department of Commerce, you stated that "current government regulations are an impediment to the commercial space sector." Given your goal of developing "an adaptive and relatively permissive" environment for the commercial space industry, what changes to government regulations do you plan to make or

propose to Congress? Given the Department of Transportation's role and responsibility for regulating the airspace, what plan do you have to coordinate with them in this process?

ANSWER:
At the direction of the National Space Council, Commerce is working as part of a robust interagency process to evaluate current regulations facing the commercial space industry, and the Department is actively pursuing new regulatory frameworks that will better accommodate the rapidly changing commercial space industry. Eliminating outdated, inflexible, and unnecessary regulatory barriers to commercial space activity will benefit U.S. economic growth, jobs, innovation, and national security.

The Department continues to meet frequently and communicate on a weekly basis with the Departments of Transportation, Defense, and State, as well as NASA and other agencies, as we work to ensure that America remains the flag of choice for space commerce.

The Honorable Matt Cartwright

Subcommittee on Commerce, Justice, Science, and Related Agencies

Questions for the Record

Department of Commerce FY2019 Budget Hearing

Question 1: ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

We can all agree that natural disasters are becoming more frequent. Yet the Stafford Act prevents FEMA from engaging in economic development to help a community recover following a disaster. For years, EDA has filled this indispensable disaster recovery role, addressing the unique issues businesses and communities face in the months and years following a disaster. In your statement you mentioned the additional $600 million EDA has dispensed in disaster recovery just this past year.

- Secretary Ross, last year you stated that the Department would work with the Administration and Congress to identify another bureau or federal agency to assume the leadership of the EDA over its disaster recovery support function. Can you please share with us options the Department has identified since then?

ANSWER:

Under the National Disaster Recovery Framework (NDRF), the Department of Commerce is assigned as the lead coordinating agency for the Economic Recovery Support Function (ERSF). EDA's responsibility under this function is a result of the Department's decision to delegate it to EDA. The Department will continue to execute its leadership role under the ERSF and administer any supplemental funding at the Departmental level.

Of the $600M appropriated under the Disaster Supplemental, up to 2% of funds ($12.0 million) may be transferred to "Salaries and Expenses" for administration and oversight and $1M is available for the OIG. The remaining $587.0M is available for grants. EDA's authorities for economic development emanate from the Department and are delegated to the EDA for execution. Should EDA be eliminated, the Department would assume responsibility for administration and oversight of the disaster recovery awards and would draw upon the up to 2% appropriated for administration and oversight. As of the date of this hearing, EDA has requested $1.5M of the up to $12.0M, and the balance of those funds remain available for future Department administration and oversight activities.

Question 2: NIST's Manufacturing Extension Partnership (MEP)

In 2017, Congress raised the amount NIST could provide to MEP Centers to 50% because it believed that a federal cost share of one-third was inadequate. The FY2019 President's budget request would make centers responsible for 100% of the cost of their operations. Most, if not all centers, may be unable to secure funding from nonfederal sources to make up for the loss of federal funding.

Has the Commerce Department conducted a cost-benefit analysis to determine the effects the elimination of federal funding would have on the volume, scope, and quality of services MEP

centers would be able to provide to small manufacturers? If so, what were the results? And if not, why would you propose such a dramatic change without a thorough analysis?

ANSWER:
There has not been a cost-benefit analysis conducted to determine the effects of the elimination of the MEP program because only the federal funding support will be terminated. The Administration believes that the MEP Centers will transition to non-federal revenue sources, which was originally intended when the program was established.

Question 3: MEP
Has the Commerce Department conducted a thorough study of the local, regional, and national effects the possible closure of MEP centers would have on the U.S. manufacturing sector, supply chains, small and medium-sized manufacturers, and their workers? If so, what were the results? And if not, why would you propose such a dramatic change without a thorough analysis?

ANSWER:
No study has been conducted to determine local, regional and national effects the possible closure of MEP centers would have on the manufacturing sector, supply chains, small and medium-sized manufacturers and their workers. The Administration believes that the MEP Centers will transition to non-federal revenue sources, which was originally intended when the program was established.

Question 4: MEP
According to your NIST FY2019 budget justification report, "MEP centers act as the go-to experts who promote business growth and connect manufacturers to public and private resources essential for increased competitiveness and profitability." Who will take place of these "go-to experts" if the centers are no longer able to operate or if they must substantially reduce the services they provide to 26,313 manufacturers?

ANSWER:
MEP centers have access to widespread community support for funding from several key partnerships with local institutions that will allow them to continue to be the go-to experts for manufacturers to connect them with needed resources to help increase competitiveness. We believe that the MEP Centers will transition to non-federal revenue sources, which was originally intended when the program was established.

Question 5: CENSUS BUREAU
On December 12, 2017, the Department of Justice (DOJ) sent a letter to the Census Bureau, "formally" requesting that the bureau "reinstate on the 2020 Census a question regarding citizenship," intended to cover the entire population. The letter indicated that DOJ made the request because the full census, not a sample, "is the most appropriate vehicle for collecting" citizenship data, which are "critical to the Department's enforcement of Section 2 of the Voting Rights Act and its important protections against racial discrimination in voting." This request raises the issue of potential increases in census nonresponse among U.S. population groups who, in past censuses, have already been hard to count. A climate of fear in many communities, as anti-immigrant rhetoric

and federal enforcement activities ramp up, only exacerbates this problem. I'm sure you would agree that we do not want that climate of fear to send people fleeing from the census.

- Do you think a citizenship question will impact self-response?

ANSWER:
In support of my decision, the Census Bureau considered whether inclusion of the citizenship question would impact self-response, thereby increasing the nonresponse follow-up workload, in which census takers, enumerators, contact non-responding households to complete the questionnaire. There was limited data to determine the potential impact to response rates, but the Census Bureau was able to evaluate information from the 2000 Census short and long form and from the American Community Survey programs. Ultimately, at the time of my decision the Census Bureau estimated that the nonresponse follow-up workload could potentially increase by approximately 630,000 households, or 0.5 percent. I also directed the Census Bureau to continue their work on the estimated nonresponse follow-up workload, so the latest research could inform 2020 Census field operations.

Because there has been so much public confusion of the difference between self-response and net undercount, I want to further elaborate. Neither the Census Bureau nor any other stakeholder supplied any quantitative evidence that the addition of a question on citizenship would impact the net undercount in the 2020 Census.

Question 6: CENSUS
If this question resulted in need for an enhanced nonresponse follow-up with apprehensive U.S. residents, would additional funds be made available for this enhancement, considering past budget shortfalls? What other costs may be associated with adding this question (redesign of forms, new instruction materials, new training materials etc.)?

ANSWER:
As set forth in the my March 26, 2018, decision memorandum, a copy of which is available at https://www.commerce.gov/sites/commerce.gov/files/2018-03-26_2.pdf, the Census Bureau estimated that the reinstatement of the citizenship question could potentially increase Nonresponse Follow-up costs by up to 0.5 percent, which would equate to a potential cost increase of up to $27.5 million. However, as discussed in my decision memorandum, this increased cost is well within the scope of the contingency funding included in the October 2017 Lifecycle Cost Estimate. While the Census Bureau in 2017 predicted a self-response rate of 60.5 percent, the October 2017 Lifecycle Cost Estimate included contingency funding to accommodate for several possible variables, including a reduction in self-response rate to 55 percent. So even though the October 2017 Lifecycle Cost Estimate was prepared before the reinstatement of the question and therefore could not have included its impact in the self-response assumption, the October 2017 Lifecycle Cost Estimate adopted by Congress in the FY 2018 Omnibus provides more than sufficient funding to address the potential drop-off in self-response that the Census Bureau predicted could result from reinstating the question.

I also directed the Census Bureau to continue their work on the estimated nonresponse follow-up workload, so the latest research could inform 2020 Census field operations. While that work continues, all of the scenarios are afforded within the October 2017 Lifecycle Cost Estimate.

Question 7: CENSUS

All other questions for the 2020 Census will be tested before the census occurs to ensure accuracy. Does the Census Bureau have enough time to test a citizenship question? If so, how would the question be tested?

ANSWER:

The citizenship question that will appear on the 2020 Census contains identical wording to the question that currently appears on the American Community Survey. The Census began using this question in 2005 and, through 2017, the Census Bureau has sent the questionnaire to 42 million households and 2.5 million group quarters locations. The current citizenship question has been answered by 61 million respondents. In contrast, the 2015 National Census Content Test, which evaluated and compared different census questionnaire content, including the race and Hispanic origin questions, was sent to a far smaller sample of only 1.2 million households.

Question 8: CENSUS

The 2018 End-to-End Test surveys all operations and systems for the 2020 decennial census, to determine whether they perform as intended and allow for necessary corrections in 2019. It was planned to originally cover more than 700,000 housing units in four counties. However because of past budget shortfalls, the full test is now being in one country with about a third of the originally planned households.

- Secretary Ross, will the Providence County site by itself allow for a sufficient 2020 census "dress rehearsal" and what information could be lost by limiting the test to one area and fewer housing units than planned initially?

ANSWER:

Yes. The goal of the 2018 End-to-End Census Test is to test the integration of the key systems and operations necessary for the 2020 Census. The Census Bureau selected Providence County as the location of the test for peak operations for a multitude of factors, but primarily, because it presents unique challenges that we will face in 2020. It is an ideal way to simulate a microcosm of the 2020 Census experience because the demographics of Providence County mirror those of the nation. Providence County has a population of over 600,000 (626,667) and more than a quarter-million housing units (264,048). It includes historically hard-to-count populations and skews Hispanic. The Census Bureau will test 24 of the 35 operations in the End-to-End Census Test to ensure that the systems supporting self-response, Nonresponse Follow-up and the rest of the operations work seamlessly together. Some operations, such as the Local Update of Census Addresses, are not being tested because those operations have already begun for the 2020 Census. Others, such as the Post Enumeration Survey, are operations that are little-changed from the 2010 Census; the Census Bureau is using proven methods and technology for those operations. The

Census Bureau is testing the operations that have been substantially redesigned from the 2010 Census to incorporate the use of technology.

In addition, the address canvassing operation was tested in three locations in 2017: Pierce County, Washington; Providence County, Rhode Island; and the Bluefield-Beckley-Oak Hill, West Virginia area. This operation allowed the Census Bureau to test systems in areas without Internet connectivity and hone the critical address list development operations in a wide range of geographical situations. The Census Bureau also was able to test management systems in areas without Internet connectivity, which will be very important in rural and tribal areas. Census field staff were able to receive their assignments and submit their payroll and operational data at the beginning or end of their shifts when they could connect to the Internet, but they did not require Internet access while they were actually doing their work.

Question 9: CENSUS

The Census Enterprise Data Collection and Processing System (CEDCaP) is the IT system intended for use in many of the Census Bureau's major data collections, including the 2020 census, the American Community Survey, and the census of state and local governments. In October 2017 congressional testimony, Secretary Ross, you acknowledged a 40% cost overrun in CEDCaP, which GAO has repeatedly called an "IT investment in need of attention." The FY2018 budget request for CEDCaP was $137.3 million. But the FY2019 request is for a little more than half of that.

- How will the FY2019 request for CEDCaP provide sufficient funds to correct remaining problems with the system that the end-to-end test may identify?

ANSWER:

The FY 2019 Budget includes funding for the CEDCaP program to resolve technical defects discovered during the 2018 End-to-End Census Test, as well as deliver capabilities for the Address Canvassing operation and support integration and performance testing in preparation for 2020 Census operations. The CEDCaP development efforts remain on schedule and the program is in the midst of performance and scalability testing. The decrease in the CEDCaP budget for FY 2019 is consistent with the program's life cycle and reflects the fact that as the systems are released into production, development costs decline.

The Census Bureau has focused the CEDCaP program on 2020 Census so that the systems development aligns with the 2020 Census program's business objectives and schedule. As I have previously testified, this decision was an important risk-reduction measure to ensure that CEDCaP and the other systems needed to fulfill the Constitutional mandate to conduct the decennial census would be ready. The decision to focus CEDCaP on the 2020 Census does delay the development of CEDCaP capabilities for the Census Bureau's other programs.

It is important to note that the CEDCaP program contains only a subset of the 2020 Census IT systems. In addition to the funding requested for CEDCaP, the FY 2019 Budget includes over $1 billion for development and implementation of other 2020 Census IT systems. While the Census Bureau does not anticipate significant issues with delivering the systems needed to conduct the 2020 Census – including those provided by the CEDCaP program – the Census Bureau is still testing its

IT systems in the field and testing scale and performance. There is contingency funding for these known risks associated with IT systems in the FY 2019 budget.

Question 10: CENSUS

In 2003, the Census Bureau, at the behest of Congress, conducted a study analyzing the feasibility of making participation in the American Community Survey (ACS) voluntary. The study determined that making the survey voluntary would reduce the response rate by at least 20% and increase annual costs by 30%. Canada's recent experience with a voluntary censes created similar results: the survey's overall response rated dropped from 94% to fewer than 69% and costs increased by $22 million. These low response rates precluded Statistics Canada from producing reliable socio-economic estimates for 25% of all areas in the country – mostly small and rural communities.

- Secretary Ross, in October 2017, you told the House Oversight and Government Reform Committee that you supported maintaining the ACS as a mandatory survey. How will you and the Census Bureau work to ensure the ACS does not become voluntary?

ANSWER:

The Department and Census Bureau takes very seriously the responsibility to balance the national demand for data with the individual burden of answering the ACS questionnaire. If the ACS were voluntary, it would result in reduced response rates, reduced quality and availability of the data, and increased costs. As a result, the Census Bureau works to balance the response rates, data quality and availability, costs and individual burden of the ACS in several ways.

First, the Census Bureau has a regular process to review, revise, and approve questions on the survey to ensure all questions have a statutory, regulatory, or programmatic purpose. Secondly, the Census Bureau has a respondent advocate to listen to and try to address questions and concerns of individuals who have received the ACS questionnaire. Third, the ACS program has robust outreach and partnership efforts that encourage survey responses by explaining the importance of the data to respondents and the program's value to stakeholders. Finally, the Census Bureau continues to evaluate how to make improvements to survey methods that will minimize the burden on individuals, such as to improve survey materials and the way we ask questions, reduce follow-up contacts, obtain data from administrative and third-party records, and remove questions or ask questions less frequently.

These strategies show the Department's and Census Bureau's commitment to continue to listen and make the right changes to the ACS to balance the data needs of the nation with the cost to the individual to provide us those data. As an example, recently, by using previously collected data, the Census Bureau determined that the burden on the individuals could be reduced by lowering the number of ACS telephone contact attempts with minimal impact to both quality and cost, eliminating an estimated 1.5 million phone calls a year.

Question 11: United States Patent and Trademark Office (USPTO)

The Patent Trial and Appeal Board (PTAB) was created to reduce costs of litigation and speed the time to final adjudication. Neither of these purported goals has been met. In fact, a large number

of patents that are challenged before the PTAB are invalidated. Only 8% of all patents leave the PTAB unscathed. This is knocking the bottom out of investment markets for independent investors, startups, and small businesses that rely on patent protection. Patents lose their value when they can be easily invalidated by the same agency that issued them.

- What specific measures is the PTO taking to strike a balance between public access to cutting-edge technologies and rewarding our innovators for their research and development through strong patent protections?

ANSWER:
The USPTO continues to study the impact of its post grant proceedings and to make improvements as necessary to best serve the patent system. This is a critical area in which Director Iancu is focusing time and engaging stakeholders to ensure that the USPTO's review in these proceedings is consistent with the intent of the 2011 America Invents Act (AIA), and the overall goals of predictable, high quality patent rights. The USPTO is considering potential changes to ensure that the congressional goals of the 2011 America Invents Act (AIA) are met. Some of the issues currently being studied include the institution decision, the amendment process, and the conduct of hearings.

The Department of Commerce is committed to working with USPTO leadership and members of the stakeholder community to assess how to best address these concerns.

Question 12: USPTO
Last year, former PTO Director Michelle Lee said it was necessary to raise fees associated with PTAB trials to ensure "full cost recovery" and that trials are "self-funding." American innovators depend on the effective operations of the PTO which has the responsibility of issuing patents in a timely manner. I am concerned that the PTO is diverting necessary patent examination resources to the PTAB, which is at odds with the PTO in that its responsibility is invalidating patents after they have been issued.

- Secretary Ross, is funding adequate enough to do faster patent examinations and to issue stronger patents? In FY2017, there was a patent backlog of nearly 526,579!

ANSWER:
The USPTO is actively working to reduce the backlog and continuously meets with stakeholders to ensure funding is adequate to issue strong patents in a timely manner.

Question 13: USPTO
Small businesses have voiced concerns over the PTO's rejection of certain patents involving cutting-edge technology as unpatentable "subject matter." How will the PTO address the rapidly evolving nature of technology with a statutory prohibition on patenting abstract ideas?

ANSWER:
The Supreme Court has issued several recent decisions in the area of subject matter eligibility (35 U.S.C 101). The USPTO has significant expertise in the practical and policy implications of patentable subject matter jurisprudence. The USPTO has issued subject matter eligibility guidance, and regularly updates this guidance in response to recent decisions. The USPTO has recently published a new revision to the Manual of Patent

Examining Procedure to make this guidance readily available to patent examiners and the public. The USPTO is also working to improve its subject matter eligibility guidance to clarify what is and is not patentable. This will help ensure that inventions that should be eligible for patenting are not excluded from patent eligibility.

Question 14: USPTO

The issue of "renting" sovereign immunity to avoid PTAB proceedings and make patents challenge-proof has received a lot of attention recently, particularly as it may impact the availability of generic drugs and drug pricing. Legislative reforms have been introduced that would eliminate sovereign immunity for such proceedings. With complex schemes involving patent ownership, how will PTAB ensure those who challenge valid patents have standing, and those who defend patents are truly the rightful owners?

ANSWER:

The PTAB rules require that all petitions challenging a patent must include a "Grounds for Standing" section in which the petitioner certifies that the patent for which review is sought is available for review and that the petitioner meets the eligibility requirements (*e.g.*, is not barred or estopped from requesting the review challenging the patent claims). If the eligibility of the petitioner is challenged by the patent owner, PTAB reviews the arguments and evidence to determine whether or not the petitioner has the requisite standing to proceed with its challenge.

Each party is also required to identify all of its real parties in interest so that PTAB may assure proper application of the statutory estoppel provisions and that any non-parties exercising control over the proceeding are identified.

Additionally, PTAB has rules and procedures in place to ensure the party defending the patent is the rightful owner. For example, in a recent proceeding involving sovereign immunity, a panel of the PTAB held that a tribe may not assert a defense of sovereign immunity. The panel also determined that the tribe was not a necessary party to the proceeding because the license between the tribe and the prior patent owner transferred all "substantial rights" back to the prior patent owner. Thus, the PTAB panel determined the prior patent owner remains the effective patent owner and the proceedings could continue without the tribe. That decision is currently on appeal at the Court of Appeals for the Federal Circuit.

The USPTO will continue to carefully study the issues involving sovereign immunity standing and transfer of patent rights. The USPTO will also continue to work with stakeholders, others in the Administration, and Congress on these issues, including consideration of any proposed legislation.

Question 15: Economics and Statistics Administration (ESA) Consolidation

As it did last year, the President's 2019 budget proposal states it will consolidate the "mission, policy support, and administrative functions of the Economics and Statistics Administration (ESA)

within the Bureau of Economic Analysis (BEA), the U.S. Census Bureau, and the Department of Commerce's Office of the Secretary." However, the Census Bureau and the Bureau of Economic Analysis already are under the Economics and Statistics Administration in the Commerce Department's organizational structure.

- If the Administration's proposal were adopted, how will eliminating the ESA change the organizational structure of the Commerce Department with respect to the BEA and Census Bureau?

ANSWER:
The structural organization of the Department of Commerce with respect to the Bureau of Economic Analysis (BEA) and the Census Bureau (Census) will be maintained with both Bureaus continuing to report through the Under Secretary of Commerce for Economic Affairs. The Under Secretary of Commerce for Economic Affairs will continue to ensure the economic and statistical programs align with departmental goals, leadership, and policy.

Question 16: ESA
What challenges do you anticipate by eliminating an organization dedicated to collecting, compiling, and analyzing data collected by the Census Bureau, BEA, and Office of the Chief Economist? What reduction in quantity or quality data being collected and verified by the government can we expect from this consolidation?

ANSWER:

The Department of Commerce does not anticipate any challenges in collecting, compiling, and analyzing data by eliminating the Economics and Statistics Administration. The Census and BEA will continue to be the leading source of quality data collection and compilation, respectively, about our nation's people and economy. The Under Secretary of Commerce for Economic Affairs will coordinate more efficient economic analysis by leveraging the existing resources, high-quality economists and data analysts, available throughout the Department of Commerce.

The Department anticipates no reduction in the quantity or quality of data collected and analyzed as a result of this proposed consolidation.

Question 17: ESA
What organizational disharmony or dis-synergy can be expected by removing coordinated oversight for these three interconnected agencies? How will that potentially harm our understanding of our nation's economic health and performance?

ANSWER:

The Department of Commerce does not anticipate any negative consequences resulting from the proposed consolidation. The Under Secretary of Commerce for Economic Affairs will continue to serve as the Secretary of Commerce's lead executive in matters involving BEA and Census. The Directors of BEA and Census will continue to report through the

Under Secretary. Additionally, with BEA's recent relocation to the Suitland Federal Center, in Suitland, MD, BEA and Census are now co-located, providing improved efficiency in coordination and communication.

This consolidation will not impact the production, quality, timeliness, or the release of important statistics generated by BEA and Census. Protecting the integrity and accuracy of BEA and Census products is one of the Department of Commerce's highest priorities.

Question 18: Minority Business Development Agency (MBDA)
In the last fiscal year, the Minority Business Development Agency's network of over 40 business centers helped minority businesses of all sizes win $3 billion in contracts and obtain $5 billion in financing, resulting in 10,000 jobs created and 8,000 saved. Many of the businesses successfully served exceeded the small business size standard and were therefore disqualified from receiving service from other agencies. What is the U.S. Department of Commerce's plan to continue generating this level of economic impact with zero funding for the MBDA business centers?

ANSWER:
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 to economic development in general is to boost the entire economy through regulatory reform, unleashing energy resources, tax reform and the removal of unfair trade practices. MBDA will focus on securing a return on investment of taxpayer dollars by transitioning from an agency serving individual MBEs to one that removes obstacles to growth of the entire minority business community through policy advocacy. MBDA's funding will be used more efficiently and effectively to ensure that Minority Business Enterprises (MBEs) are included in the economic growth of the nation. As an organization focused on policy, MBDA will better position itself toward assisting minority businesses of all sizes so as businesses expand they are still able to receive the benefits MBDA has to offer. MBDA will be able to assist not only all sizes of businesses, but also continue to support businesses from their infancy though all stages of their growth.

Question 19: MBDA
As you're aware, entrepreneurship is a pathway to success and the MBDA represents a critical tool in the toolbox for many minorities to get to the next level. The agency appears to be carrying out its mission with a level of excellence and efficiency. Yet, as noted, minority enterprises currently have 29 percent of all firms but only have 11 percent have paid employees. If these firms can gain parity and pay more of these employees, the economy could create 13 million new jobs, according to the MBDA. What are your plans to help the agency help these firms, many of which are on the precipice of success and fortune?

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. We believe these priorities will make a better environment for all businesses, including minority businesses. To support these priorities, MBDA will concentrate on securing a strong return

on investment of taxpayer dollars by transitioning from an agency serving individual Minority Business Enterprises (MBEs) to one that removes obstacles to growth of the entire minority business community through policy advocacy. As an organization focused on policy, MBDA will better position itself toward assisting MBEs of all sizes so as businesses expand they are still able to receive the benefits MBDA has to offer.

Question 20: International Trade Administration (ITA)
The Commercial Service at ITA supports jobs across the country by helping out businesses export. In my district over the past two years 35 companies, employing 6,700 American workers, have been helped. These companies have exported everything from crayons to piping components to ultraviolet lamps to engineering services. Across the country 30,000 companies are helped annually, with 83% of those being small or medium sized businesses. However the budget proposes to cut $43 million, closing 35 posts overseas and 10 field offices. We can't win a trade war if we withdraw our troops from the field!

- Secretary Ross, given your overall budget is going up, how can you justify cutting these services that companies across the country rely on to export, especially at a time when the administration has been so focused on our trade deficits?

ANSWER:
While "troops in the field" remain an essential part of our export strategy, ITA is modernizing its services to provide a greater number of services as broadly as possible, including through digital and web-based services. These efforts are expected to expand the reach of ITA's services.

In rationalizing field staff to meet budget directives, Commerce's options often are constrained by local labor laws in the countries we are located. Once a final budget is enacted, if there is a need to close offices we will consult with Congress and submit a reprogramming notification.

Question 21: ITA
Where are these small and medium sized companies going to get this technical expertise? What do you plan to do to help small companies compete and export?

ANSWER:
At my direction, the ITA is working to ensure that the rationalization of our field staff results in coverage of the United States and overseas that maintains American companies access to markets. We are doing this by focusing resources in countries with the greatest opportunities for US goods and services and by maintaining offices that have regional coverage. I am confident the restructured offices will be available to assist U.S. exporters. We will reallocate resources to reach the greatest possible number of exporters domestically, and to gain access to major markets for U.S. exports overseas. In addition, we are already in the process of developing and expanding our digital, web-based capacity to assist U.S. exporters, especially SMEs.

We also work closely with the US Foreign Service to provide Commercial Service products and services in locations where the Commercial Service does not operate directly.

Question 22: ITA
And if these cuts are put into place, how many jobs would you estimate would be lost as a result? How much would this increase our trade deficit?

ANSWER:
The Department is not able to estimate jobs lost to the U.S. economy or overall trade figures based on the number of staff and offices it has. The Department supports job creation and trade through a variety of levers, including our staff and global reach. We do not have data tied to any single element of the services ITA provides. As part of our rescaling efforts, we are working to improve our digital client service presence to expand our on-line assistance capacity.

Question 23: ITA
Like most Americans, I believe we need to protect the steel and aluminum industry which employs 140,000 people across the country. Steel is a critical industry throughout Pennsylvania, which produces much of the steel used across the country for infrastructure, for manufacturing, and for our national defense systems. Mr. Ross, I sent the Department of Commerce multiple letters supporting using the Section 232 of the Trade Expansion Act to help the struggling aluminum and steel industries. I also know you were a strong advocate to the President to take such action. However, I have some deep concerns about the substance and the methods the administration has used to roll out the tariffs. There are certain bad actors around the world who artificially depress steel and aluminum prices, and those advocating the use of Section 232 made very clear we wanted you to go after the bad actors, and not our friends and allies. I'm concerned that the way the administration is implementing these tariffs will hurt the 6.5 million Americans who work in industries where steel or aluminum is an essential input. It could also damage our relationship with close allies and lead to a trade war that could severely damage our economy and undermine the international trading system. Finally it could raise prices for every American for everyday products.

- What retaliatory tariffs do you envision other countries pursuing, and what industries do you believe will be affected? What is the administration's plan to aid those industries, from motorcycles to cheese to bourbon to soybeans that could potentially be crushed by retaliatory tariffs?

ANSWER:
The actions taken by the President under Section 232 are wholly legitimate and fully justified as a matter of U.S. law and international trade rules. Instead of working with us to address the root cause of the problem, some of our trading partners have elected to respond with retaliatory tariffs designed to punish American workers, farmers and companies. The Administration has taken action against these unjustified actions, which we believe breach relevant international rules. The Administration has also taken action to make sure that American businesses are not left to bear the brunt of illegal retaliation by these countries.

Question 24: ITA

You went on CNN to discuss the economic impact of the tariffs on American consumers. You gave examples of how the tariffs will minimally impact the cost of goods for the average consumer. However, Mr. Ross, for many lower income families, any increase in cost for goods can create a challenge to make ends meet. U.S. business groups and industries have spoken out against the tariff because it will result in significant costs being passed onto consumers and it will have impacts on housing affordability, auto sales, and nearly all aspects of retail.

- What ripple effects do you see through the economy if every day Americans can purchase fewer essential items? What would the job impacts be?

ANSWER:

The tariff increases will have little effect on the U.S. economy as the value of aluminum and steel only represents a small portion of the value of consumer goods. These increases will protect existing U.S. jobs in aluminum and steel, and we estimate that thousands of jobs will be created by new investment in the U.S. aluminum and steel industries. The economy is strong, and since these tariff actions have been announced we have seen increased job and wage growth, with an unemployment rate for August 2018 of 3.9% along with the highest recorded number of job openings to date recorded in July (6.9 million).

WEDNESDAY, APRIL 11, 2018.

FISCAL YEAR 2019 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

WITNESS

REAR ADMIRAL TIM GALLAUDET, PH.D., USN (RET.)

Mr. ADERHOLT. All right. Good morning. The hearing will come to order, and I would like to welcome our witness here today, Admiral Gallaudet, the Assistant Secretary, the acting Under Secretary of Commerce of Oceans and Atmosphere.

Certainly your past experience makes you uniquely suited for this job and I appreciate your scientific background and your leadership experience that you bring to the agency, and we thank you for your service.

Admiral GALLAUDET. Thank you, sir.

Mr. ADERHOLT. It is good to have you here.

For fiscal year 2019, you are requesting $4.6 billion, which is a decrease of more than a billion dollars, or 23 percent, from fiscal year 2018. This budget was formulated before we had an agreement on adjusting the budget caps and seeks to cut almost every program that funds research or NOAA partners in academia and the states. And while I agree that we need to spend tax payer money wisely, we will carefully review the budget proposal to ensure that we are adequately funding mission critical expenses at NOAA in 2019.

So before we proceed with your statement, I would like to recognize the ranking member, the Honorable Mr. Serrano, for any remarks that he may have at this time.

Mr. SERRANO. Thank you, Mr. Chairman. I would also like to join you in welcoming our guest this morning, Admiral Tim Gallaudet, the Assistant Secretary of Commerce for Oceans and Atmosphere, and current acting Under Secretary of Commerce for Oceans and Atmosphere. I look forward to your testimony before our subcommittee as we discuss NOAA's fiscal year 2019 budget, and learn more about the vital work our friends are doing as we speak.

I believe that NOAA is one of the most underrated agencies under the jurisdiction of this subcommittee. The invaluable work and research that NOAA quietly conducts each year has a profound impact on our national economy and way of life, yet so many Americans do not even realize it.

NOAA's mission is to understand and predict changes to our climate, weather, oceans, and coasts. The data and information it collects is used by businesses, other federal government agencies, and state and local governments to help them make informed decisions that affect consumers and the public at large.

NOAA also protects and manages our nation's oceans and marine resources that make up a large part of the beautiful American landscape.

For fiscal year 2019, NOAA's requesting just over $4.5 billion, which represents more than $1.3 billion reduction from the fiscal year 2018 level. Coastal Zone Management Grants, climate and oceans research, national marine sanctuaries, environmental literacy programs, fish catch share, and stock replenishment programs, the National Sea Grant program, and countless others will see drastic cuts or complete elimination if this budget request is adopted.

Even the National Weather Service operating budget will see a cut of nearly 8 percent. It is as though the administration sees little value in the work conducted by the countless scientists and researchers at NOAA.

With the damage and devastation to Puerto Rico, the U.S. Virgin Islands, Florida, Texas, Louisiana, and others during the 2017 hurricane season, now is not the time to cut NOAA's budget by more than a billion dollars. Even NOAA acknowledged that the 2017 Atlantic hurricane season was record breaking, and the devastation it caused was unprecedented.

If that is true, why are we cutting this agency's budget so drastically? This shortsighted approach to saving money would only result in potentially catastrophic consequences further down the road. I do not say this lightly, but in the long term we will be paying an even higher price for these cuts in terms of money and lives lost. This makes no sense to me.

Our storms, as you know, are getting stronger. Our oceans are getting warmer and experiencing more pollution. Our climate is changing rapidly, and millions of lives hang in the balance. Certainly, Mr. Chairman, I know that the phrase climate change upsets a lot of people. So I have just decided to call it something is happening.

Mr. ADERHOLT. Very good. Proceed.

Mr. SERRANO. Something is happening. Of course, it is obvious.

I believe that we should be making stronger investments in NOAA so we can get a better understanding of these atmospheric changes and address the growing national security and economic challenges we face as a result. Therefore, I cannot support this administration's budget request for NOAA, as it represents a clear abdication of the agency's core mission.

I am hopeful that my colleagues on this Subcommittee can come together and spare this agency and its invaluable work once again. We must look at the larger picture here. If we do not get serious about the threat of climate change—and work to mitigate it through research, data collection, and collaboration, we will be putting nearly half of the American population, especially those who live along the nation's coastline at risk.

Thank you for joining us this morning, Admiral. I look forward to hearing your testimony about the great work that our scientists and researchers are doing, and know I also look forward to working with my colleagues on this Subcommittee to draft a CJS Appropriations Bill that we can all be proud of.

And may I say, Mr. Chairman, very briefly that the first round of the last bill had problems. The second round was one that we felt very comfortable about. So hopefully we can move in that direction as we put together this bill.

Mr. ADERHOLT. Thank you.

Mr. SERRANO. Thank you.

Mr. ADERHOLT. Thank you. You mentioned climate change, and I think most of us do know there is climate change out there. I think we agree to that. So you can say that. It is a——

Mr. SERRANO. Wow.

Mr. ADERHOLT [continuing]. Well, sometimes the cause——

Mr. SERRANO. Yeah.

Mr. ADERHOLT [continuing]. Of it sometimes is the——

Mr. SERRANO. I know.

Mr. ADERHOLT [continuing]. Thing that is debated. But needless to say, climate change is something, I think, that most of us can agree on.

But anyway, Admiral Gallaudet, thank you for being here, again. As I mentioned earlier, without objection, your written testimony will be entered into the record. At this time, I would ask you to summarize your statements, and you may proceed.

Admiral GALLAUDET. Chairman Aderholt and Ranking Member Serrano, thank you very much for your support of NOAA, and for the entire subcommittee I also thank you for your support in the recent Omnibus Appropriations Bill and the Hurricane Supplemental Appropriations. Your support will ensure NOAA will be able to successfully continue its very diverse and critical mission.

It has been a true honor to serve the past several months as the Assistant Secretary of Commerce for Oceans and Atmosphere and acting NOAA Administrator. I have seen first hand how the women and men of NOAA benefit public safety, economic growth, and national security.

I have been fortunate to visit a number of NOAA's facilities, including sites in seven states, and to meet hundreds of meteorologists, oceanographers, fisheries managers, scientists, engineers, lawyers, and devoted professionals that make up NOAA's diverse and first rate workforce. I have also had many people in your communities talk to me and tell me of the great work that NOAA does, and I have been very moved by their appreciation.

The past year was an extremely successful one for NOAA. I will share with you three examples of many that are—of our remarkable achievements.

First, we responded effectively to a record setting hurricane season, which you mentioned, Congressman Serrano, where we saw storms that impacted over 25 million people. Our efforts saved thousands of lives despite Hurricanes Harvey, Irma, and Maria being three of the five most costly hurricanes in history. Our track forecast accuracies for the three Category IV hurricanes that made landfall in the U.S. were 25 percent better than the last five-year average, and we are continuing to help communities recover today through our response efforts.

Second, NOAA had perfect launches of our GOES and JPSS satellites in March and November, respectively. Those platforms have

already proved their worth by supporting emergency managers responding to wildfires and severe storms.

Third, NOAA installed a system of precision navigation sensors in the port of Long Beach. That allowed a four-foot increase in ship draft for the ships entering port there, resulting in millions of dollars of extra cargo that each ship can carry every day in just that one port.

NOAA's fiscal year 2019 budget request of just over $4.5 billion is focused on two priority areas. The first one is reducing the impacts of extreme weather and water events by implementing the Weather Research and Forecasting Innovation Act. I will refer to this priority as the Weather and Water Priority.

The second priority is increasing our sustainable economic contributions of our fisheries and ocean resources. I will refer to this as our Blue Economy Priority.

Under the Weather and Water Priority, this budget invests more than $1.1 billion in weather forecasting capabilities, including an increase to the advanced weather interactive processing system, or AWIPS, which is the cornerstone of our field operations at the National Weather Service. This budget also invests $878 million in our polar orbiting satellites, and $408 million in our geostationary weather satellites that are essential for our weather forecasts and warnings.

NOAA's budget increases investment in the Office of Space Commerce, and the Commercial Remote Sensing, and Regulatory Affairs Office, both that promote growth in the commercial space industry.

Under the Blue Economy Priority, NOAA's budget ensures its oceanographic capability continues by investing $75 million to recapitalize our fleet of survey ships. Through a $200 million investment in hydrographic surveys, charting, and mapping, NOAA's budget promotes the safe and efficient navigation to maximize maritime commerce.

NOAA's budget continues investment in fisheries management, and the scientific research that supports it, and this budget request also supports domestic seafood production through a $9.3 million investment in marine aquiculture. This will support job creation and the growth of America's seafood industry.

Thank you for the opportunity to present NOAA's fiscal year 2019 budget request, and I am happy to take any questions.

[The prepared statement of Admiral Gallaudet follows:]

WRITTEN STATEMENT OF
RDML TIM GALLAUDET, Ph.D., USN Ret.
ASSISTANT SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE AND ACTING UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

ON THE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S FY 2019 BUDGET REQUEST

BEFORE THE
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

April 11, 2018

Chairman Culberson, Ranking Member Serrano, and members of the Subcommittee, thank you for your leadership and the continued support you have shown for the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA). As the Assistant Secretary of Commerce for Oceans and Atmosphere and Acting NOAA Administrator, I am honored to be here to discuss the FY 2019 President's Budget. The FY 2019 budget proposal supports the broad Administration goals of promoting national security, public safety, economic growth, and job creation.

NOAA's FY 2019 budget prioritizes core functions that provide the observational infrastructure, capabilities, and staff to produce timely and accurate weather forecasts and warnings; that recapitalize the NOAA fleet to ensure the continued collection of at-sea data vital to the U.S. economy for fisheries management and nautical charting; that support the government's legal obligations to manage and conserve marine resources; and, that foster safe and efficient ocean and coastal navigation. To ensure we can sustain these core functions and enable critical enhancements to our priorities in FY 2019, NOAA made difficult choices to reduce a number of

programs. The termination and re-scaling of programs is necessary to focus on national security and core government functions.

NOAA operates an integrated observing system of land-based weather platforms, ships, satellites, planes, and in situ stations, and leverages partner observations in order to provide data, products, and services that first responders and emergency managers, our armed services, and millions of Americans depend on each day. These products and services include, daily weather warnings and forecasts, navigational tools to support the nearly $4.6-trillion in annual economic activity generated at U.S. seaports, management of the Nation's $208-billion fisheries industry, and disaster response efforts. NOAA provides daily and long-term weather and marine forecasts critical for agricultural planning, emergency response to severe weather, and warning and mitigation of harmful algal blooms that negatively impact public health, tourism and the seafood industry. NOAA puts weather and other environmental information into the hands of people and industries to support the U.S. economy and create jobs.

Below we highlight some of our recent accomplishments, all of which we could not have achieved without your support, and collaboration with our partners in the research, corporate, and conservation communities.

RECENT ACCOMPLISHMENTS

Responded To An Historic Year Of Hurricanes: Devastation from the 2017 Atlantic hurricane season was unprecedented with Hurricanes Harvey, Irma, Maria and Nate impacting roughly 25.8 million people, and Harvey and Irma making U.S. landfall as Category 4 hurricanes, the first in 12 years. From the use of NOAA's weather observation platforms, response teams, and operational weather and water models, to experimental technologies, NOAA mobilized all of its assets to meet the challenge of forecasting these hurricanes. The combined work of NOAA before during and after the storms resulted in saving lives despite Hurricanes Harvey, Irma, and Maria becoming 3 of the top 5 costliest hurricanes on record.

During the storms, NOAA's first class forecasting capabilities enabled state and county officials to better protect communities, critical infrastructure, and general welfare. NOAA made its most accurate track predictions for a hurricane season. Based on preliminary data, track errors for the three landfall Category 4 hurricanes were 25 percent below the most recent 5-year mean. Armed with this information, NOAA's National Water Center in Tuscaloosa, Alabama, supported local officials in Texas during Hurricane Harvey by providing specialized and supplemental river flooding maps for a region that would experience days of excessive rainfall. This tailored information, coupled with accurate and consistent warnings of historic rainfall from NOAA's Weather Prediction Center, allowed Texas emergency managers to clear evacuation areas and safely stage resources, recovery encampments and other relief activities outside the areas of likely flooding.

Following the storms, NOAA collected more than 65,000 aerial images, covering more than 24,000 square kilometers using NOAA's King Air aircraft, uploading the images within 24 hours of their capture. In many cases, these images were useful to alert homeowners to the extent of damage to their property and help officials decide whether or not it was safe for them to return. NOAA rapidly updated nautical charts, protecting lives and property from any underwater dangers that might have entered waterways. NOAA survey operations enabled the major ports affected, including the Ports of Miami and Houston, to reopen within days. Throughout the Caribbean, NOAA Ship Thomas Jefferson was responsible for opening 18 ports in as many days, ensuring mobility of essential relief supplies into heavily impacted areas across the region.

Congress recently appropriated $400 million in disaster supplemental appropriations to NOAA. These resources will enable NOAA to repair observing assets, facilities, and equipment; help rebuild and restore damaged fisheries; remove debris that pollutes and damages marine resources; make progress in improving severe weather forecasting; and provide critical updates to mapping and charting services.

Improved Detection of Wildfires and Smoke: During 2017's historic fire season, NOAA played a critical role in aiding our federal and state partners in fighting wildfires. NOAA's newest Geostationary satellite, GOES-16, provides an unprecedented look at our Nation from the sky, providing sharper, more defined images of severe storms, hurricanes, wildfires and other weather hazards in near real-time 24/7. In the spring of 2017, GOES-16 imagery spotted new wildfires in California, Kansas, Oklahoma, and Texas, and was used to determine which fires were hottest and where the fires were spreading. This critical information was shared with and used by firefighters and emergency managers allowing them to take immediate action, marking the first time the satellite product has been used in wildfire forecasts. Throughout the wildfire season in the west, NOAA forecasters provided on-site support to Incident Management Teams during large wildfires. These specially-trained Incident Meteorologists (IMETS) provided detailed weather forecasts to the teams as they made plans to attack the wildfires.

Launched GOES-S Satellite: NOAA's GOES-S, the second in a new series of advanced geostationary weather satellites, launched from Cape Canaveral, Florida on March 1, 2018. The satellite will provide more and better data than currently available over the northeastern Pacific Ocean, the birthplace of many weather systems that affect the continental United States. The satellite reached geostationary orbit on March 12, 2018 and is now officially known as GOES-17. It will scan the Earth five times faster, at four times the image resolution, with triple the number of channels than older GOES spacecraft. Later this year, after undergoing a full checkout and validation of its six high-tech instruments, the new satellite will move to the GOES-West position and become operational. From there, it will constantly provide advanced imagery and atmospheric measurements, real-time mapping of lightning activity, and improved monitoring of

solar activity and space weather. In addition to improving weather forecasts, GOES-17 will help locate and track wildfires – invaluable information that emergency response teams need to fight fires and evacuate people who find themselves in harm's way. GOES-17 will also be an important tool for forecasters to track and predict the formation and dissipation of fog, which can disrupt airport operations. GOES-17 will work in tandem with GOES-16, the first satellite in NOAA's new geostationary series, now at the GOES-East position.

Launched JPSS-1 Satellite, A Game-Changer For Weather Forecasting: NOAA successfully launched the JPSS-1 satellite on November 18, 2017. Successful operational handover from NASA to NOAA occurred on March 7, 2018. Now known as NOAA-20, the satellite represents a vital piece of our national security and observing system infrastructure, improving the accuracy of three to seven-day weather forecasts. Eighty-five percent of the data that feed weather forecast models comes from polar-orbiting satellites. NOAA-20 includes the Advanced Technology Microwave Sounder and the Cross-track Infrared Sounder, which provide critical data for weather and climate applications, as well as the Ozone Mapping and Profiler Suite which will track the health of the ozone layer. Data from NOAA-20, along with the rest of NOAA's satellite fleet, provide information that help keep the nation's airplanes flying and our ships on course, help farmers decide when to plant, manufacturers decide when to ship merchandise, and first responders prepare for and respond to severe weather events such as hurricanes, tornadoes, and wildfires.

Improved Seasonal Forecasts And Explore Sub-Seasonal Prediction: NOAA is working to bridge the forecast gap between the existing two-week predictions and longer term weather outlooks on a seasonal time range, providing data to a wide range of users, including transportation, commerce, public utilities, tourism industries, with the longer term weather information they need to anticipate the months ahead. NOAA is issuing 3- to 4-week probability forecasts for temperature and precipitation. The North American Multi-Model Ensemble System (NMME) seasonal forecast system, transitioned to operational use in 2016, and is used to support NOAA's Climate Prediction Center (CPC) operational monthly and seasonal temperature and precipitation outlooks.

Precision navigation enabled the Port of Long Beach to increase its draft limit reducing shipping costs while supporting safe navigation: As cargo ships grow to keep pace with global demand, ports are increasingly in need of accurate, real-time information on conditions to operate effectively. NOAA and partners worked with the Port of Long Beach to build out the precision navigation observing infrastructure around the port and provide integrated data to support the safe navigation of deep draft ships. The success with precision navigation in the Port of Long Beach has led to a four-foot increase in the draft allowance. For every extra foot of draft, tanker ships can load 40,000 more barrels of crude oil, which equates to roughly $2 million of

extra product per tanker. The Department hopes to expand this product, through innovative public-private partnerships, to other busy ports and waterways in the United States.

Rebuilt three additional fish stocks in 2017: NOAA is proud of its efforts with partners to rebuild fisheries over the past two decades. With three fish stocks rebuilt in 2017, the total number of fish stocks rebuilt since 2000 is now 44. All three fish stocks are West Coast groundfish managed by the Pacific Fishery Management Council: Bocaccio, Darkblotched Rockfish and Pacific Ocean perch. In addition, overfishing rates are near all-time lows (9 percent overfishing and 16 percent overfished, compared to 17 percent and 24 percent in 2007 after MSA reauthorization). By ending overfishing and rebuilding stocks, NOAA is strengthening the value of U.S. fisheries to the economy, our communities, and marine ecosystems.

FY 2019 BUDGET REQUEST

NOAA's FY 2019 budget request of about $4.6 billion invests in NOAA's core missions and positions the agency for the years ahead. This budget is a decrease of $1.3 billion, or 23% percent below an FY2018 Consolidated Appropriations Act, 2018 level. This net decrease reflects difficult choices that Secretary Ross made to help reduce the budget deficit and focus resources on NOAA's core mission functions and services. The Administration's Budget sustains and in some cases enhances activities that support Secretary Ross' priorities to reduce the impacts of severe weather and water events and increase the sustainable economic contributions of our fishery and ocean resources.

Reduce the Impacts of Extreme Weather and Water Events

NOAA's FY 2019 budget request invests more than $1.1 billion to maintain weather forecasting capabilities, focusing on the highest priority weather research and development activities. NOAA will prioritize its core capabilities needed to maintain the current level of services and ongoing operations necessary to issue warnings and forecasts to protect life and property while being smarter and more efficient in the way it does business. The National Weather Service (NWS) will begin implementing a series of operational reforms aimed at increasing staffing flexibility to best match service demands with available resources. NWS will realize $15 million in workforce savings in FY 2019 as part of a longer term strategy to right-size the organization, it will do this in part by implementing recommendations outlined in the NWS' Operations and Workforce Analysis (OWA). The OWA recognizes inherent inefficiencies associated with the rigid field office structure and provides recommendations to further enable the NWS to evolve and build a Weather Ready Nation.

NOAA's FY 2019 budget also proposes modest increases to improve our ability to get critical weather data into the hands of people at the local level. This includes an additional $5.1 million

for the Advanced Weather Interactive Processing System (AWIPS) which supports the information processing display and telecommunications system that is the cornerstone of the National Weather Service field operations.

NOAA's FY 2019 budget continues to develop the current generation of polar orbiting satellites to sustain robust weather forecasting capabilities. This budget invests $878 million in Polar Weather Satellites, which provide the primary data for NOAA's Numerical Weather Prediction models. The Budget proposes to combine the current generation polar orbiting satellites with the planned follow-on satellites to allow more efficient management, thereby lowering costs compared to previous estimates without impacting schedule. NOAA's successful launch of NOAA 20 in November 2017 is a game changer for weather forecasting, as data from this satellite will be used to forecast severe weather like hurricanes, tornadoes and blizzards days in advance. NOAA will invest $408 million in operations and sustainment and development of the GOES-R series of geostationary weather satellite systems, which support NOAA's weather forecasting, tracking, and monitoring of severe storms.

NOAA is requesting $10 million in FY 2019 to continue work with the Naval Research Laboratory (NRL) to develop the compact coronagraph (CCOR) for launch readiness by 2024. NASA's Solar and Heliophysic Observatory (SOHO) launched in 1995 and significantly past its mission design lifetime, currently provides coronal mass ejection imagery used operationally by the National Weather Service's Space Weather Prediction Center for geomagnetic storm watches.

The CCOR would continue these observations. NOAA is currently considering options to host the CCOR on the NOAA GOES-U satellite platform or another partnership mission.

Expand Commercial Space Activities

The FY19 budget will increase by 50 percent the Department's investment in the Office of Space Commerce (OSC) to improve OSC's ability to serve commercial space services. The Department plans to invest $1.8 million in the Commercial Remote Sensing and Regulatory Affairs (CRSRA) Office to facilitate commercial remote sensing licensing actions, allow revision of outdated regulations, and promote the national economy. Investment in Space Commerce activities will also help the Department to take on a leading role in the Administration's efforts to make America the "flag of choice" for commercial space companies. Finally, it will enable the Department to prepare to implement the recommendations and goals of the recently revived National Space Council.

Increase the Sustainable Economic Contributions of Our Fishery and Ocean Resources

Currently, NOAA's fleet includes 16 research and survey ships, which comprise 50 percent of the Federal Oceanographic Fleet. Every year, NOAA's ships conduct more than 100 missions critical to national security, public safety and the national economy. Communities and businesses rely on NOAA data to keep U.S. ports open to commerce, monitor the status of fish stocks, and plan for severe storm events. However, the NOAA ship fleet faces declining capacity without recapitalization. Eight of NOAA's 16 ships currently exceed their design service life and are due to retire by 2028. The loss of these eight ships would undermine NOAA's mission, resulting in reduced mapping capabilities and the inability to conduct fishery stock assessments in multiple regions. NOAA's ships are a vital national infrastructure critical to fulfilling the Nation's primary mission essential functions and legal mandates. NOAA's FY 2019 budget addresses this need for critical infrastructure, investing $75 million in fleet recapitalization, continuing an effort that started in FY 2016. The FY 2019 budget provides funding for construction of a second NOAA Class A vessel to support oceanographic monitoring and research. NOAA will also further plan for Class B and Class C vessels as part of NOAA's Fleet Recapitalization Plan.

NOAA's FY 2019 budget recognizes the need to promote safe and efficient navigation to support and maximize the economic return of marine commerce flowing through the U.S. NOAA surveys and charts the navigationally significant waters of the U.S. Exclusive Economic Zone (EEZ), which extend 200 miles from our coasts. NOAA continually improves hydrography and charting technology through ongoing applied research and development. The importance of accurate charts will only increase given that the volume of traffic, and value of exports and imports via water, in U.S. seaports is expected to double by 2021 and double again shortly after 2030. To support this growing industry, NOAA's FY 2019 budget invests nearly $200 million in hydrographic survey, charting, mapping, and related efforts.

Assessments and monitoring efforts are the backbone of fisheries management. They provide the assurance that NOAA is managing fisheries to maximize fishing opportunity, while maintaining healthy stocks, so that the Nation's fisheries provide the maximum benefit to the U.S. economy and its fishing industry. NOAA's FY 2019 budget includes approximately $529 million to continue to invest in core fisheries management and scientific research functions including expansion of and improvements to fisheries stock assessments, which provide the technical basis for regional and local fishery management decisions.

NOAA's FY 2019 budget continues investments in domestic seafood production by supporting marine aquaculture. Currently, the U.S. imports more than 80 percent of its seafood, of which over half is from foreign-produced aquaculture. This reliance on foreign imports moves potential seafood jobs overseas and poses a risk to food security. Given wild fish stocks are at or near maximum harvest levels, the greatest opportunity to increase the seafood supply is through domestic aquaculture. The Nation has a large untapped potential for safe and sustainable aquaculture development, and the seafood industry is calling for NOAA to take steps to help

realize this potential. NOAA's FY 2019 budget invests $9.3 million in its National Marine Fisheries Aquaculture program to increase regulatory efficiency for the marine aquaculture sector and encourage sustainable marine aquaculture practices.

CONCLUSION

NOAA's FY 2019 Budget request reflects the President's commitment to advance national security and the economy. NOAA contributes to those priorities every day by putting data in the hands of those who need it to protect our communities and grow the economy.

America relies on NOAA to know when floods, forest fires, hurricanes and severe weather threaten our communities. The growing maritime industry looks to NOAA data to safely and efficiently maximize the value of U.S. ports, fisheries, and coastal economies. All of these are enabled by NOAA's supercomputers, satellites, ships, aircraft, laboratories, facilities, and most importantly, our world class workforce. In my short time at NOAA, I have come to know that we have the most competent and committed people across the entire Federal Government. This FY19 budget request will assure the core infrastructure and capabilities that these superior professionals at NOAA need to provide critical services for the American people.

Thank you for the opportunity to present NOAA's FY 2019 budget request. Secretary Ross and I look forward to working with the members of this Committee to achieve our shared goals. I am happy to respond to any questions from the Subcommittee.

Mr. ADERHOLT. Thank you, Admiral. And it is Chairman Culberson's policy that we do the five-minute rule, so we will each take five minutes to go around to ask questions. And I'll start out.

In the last six months, NOAA has successfully launched two flagship satellites, which you mentioned, JPSS-1 and GOES-S. First, I congratulate you and your team for a huge accomplishment. So we are certainly proud of that, but now that GOES-S is successfully launched, we have five GOES satellites on orbit, if I am correct.

My understanding is that the program only requires a total of three satellites, two operational satellites and one on orbit spare. Given the current surplus of GOES satellites, why should we continue building GOES satellites at the current rate? Is it best to use the taxpayers' dollars to build GOES satellites faster than we actually need them?

Admiral GALLAUDET. Thank you for your question, Chairman, and you're right. This has been a fantastic program, the—our GOES and JPSS satellite programs, and I did happen to see the GOES-S launch firsthand at Cape Kennedy, and it went off perfectly to the second on the planned launch time.

Now, we have—you are correct that we have three—a requirement for three satellites, two operational in east/west positions, and one to spare, on orbit as a—because it is really a no-fail mission in these weather satellites.

We have two extra surplus satellites currently that are all beyond their service life, so that we are just—they are just basically bonus and we are fortunate to have them flying still. They—we did not—they were not engineered to last this long.

So with that surplus, we are having discussions with the Department of Defense because they have a gap in the Indian Ocean region and the Western Pacific, and so we—if we—well, we continue to operate those extra satellites, we will share some of that data with—we are having discussions to potentially use one of them for the Department of Defense mission.

Mr. ADERHOLT. So would you be giving it to them, or would they just have access to that information? How would that be?

Admiral GALLAUDET. Well, we are not resourced to operate for them in that orbit, but we would probably partner in some way, and we are—those—that has been the focus of our discussions right now.

Mr. ADERHOLT. OK. So no decision has been made yet? Are you all still in discussions on that?

Admiral GALLAUDET. Yes, sir.

Mr. ADERHOLT. OK. The GOES and JPSS and their predecessors have provided critical weather and earth observation data for decades and remain a primary input for weather models, but space is evolving, as we know. Launches are getting cheaper, and space is no longer just the domain of governments. What is NOAA doing to take advantage of these changes and lower the cost of our observing infrastructure?

Admiral GALLAUDET. We have several efforts underway, Mr. Chairman. One is that we are studying the potential of using commercial satellite data for our weather models, and so we are in the second year of a pilot project to study that.

We also are conducting a fairly extensive satellite architecture study, and in that study we are assessing the potential for future commercial capabilities and integrating those within our current satellite programs using either commercial data or even different satellite designs like NanoSats and CubeSats.

Mr. ADERHOLT. I understand that the commercial weather data pilot program has gotten off——

Admiral GALLAUDET. Yes, sir.

Mr. ADERHOLT [continuing]. To a slower start than was first expected; is that correct?

Admiral GALLAUDET. I don't think we had a—it was—it is a modest endeavor. We don't have a large amount of funds dedicated to it, and it was primarily a kind of crawl, walk, run effort where we envisioned just looking at one type of data, radio occultation, and then in the future, should we receive more appropriations funding to conduct studies like this, we would look at other types of data.

Mr. ADERHOLT. Oh, and what would be your next steps for the pilot program?

Admiral GALLAUDET. We are—we have done the radio occultation study. We are going to examine that a little more as new commercial sources become available. And the idea would be in the future we would look at other data types. It could be anything from sea surface temperature to atmospheric measurements.

Mr. ADERHOLT. From what you observe from the pilot program, what are some of the things that stood out as far as things you have learned from that?

Admiral GALLAUDET. Well, one of the things we have learned is the industry isn't evolving as fast as we thought it would. In fact, the radio occultation systems that are available commercially are very few in number. I think there is only one company currently that has the potential to provide it.

So it is—but then again Secretary Ross, my boss in the Department of Commerce, he has been involved in a pretty active campaign to promote the development of commercial space capabilities, and so we anticipate growth in that area.

Mr. ADERHOLT. OK. Thanks very much. Mr. Serrano.

Admiral GALLAUDET. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you, Mr. Chairman.

Admiral, the hurricanes last year caused significant damage to NOAA facilities and equipment in the south and southeast of the United States, as well as Puerto Rico, and the U.S. Virgin Islands. The recently enacted bill provides funding for repairs or replacement of those facilities and equipment. Can you give us an update as to how that is going?

Admiral GALLAUDET. Sure, and I want to thank you very much, Congressman Serrano and this entire subcommittee, for appropriating that disaster supplemental funding. We will put that to very good use.

Currently, we have a spend plan for the 200 million allocated for the weather damage and weather research that we will use those funds for, and it is currently at the Office of Management and Budget under review.

We intend of that 200 million that 100 million will be dedicated to weather research and improved weather forecasting and warn-

ing, and then we will have another about—the other 100 million will be used for a number of different things like marine debris removal in Puerto Rico and in the southeast caused by the hurricanes.

And then there is also another 200 million that will be applied to fisheries disasters along the Gulf Coast, and Puerto Rico, and the Virgin Islands, and even some West Coast fisheries that were disasters—were declared last year.

Mr. SERRANO. Now, is that money flowing already or will be flowing?

Admiral GALLAUDET. Not yet. OMB has to approve it, our spend plan, and as soon as they do, we will start—and we are lining up, you know, our contracts and all the work to be done so we can execute it as soon as those funds are available.

Regarding Puerto Rico, we have much underway already in terms of removing marine debris, performing post-storm assessments. We worked with the Department of Defense to get a weather radar to replace the damaged one that we had—we operated there. And I will tell you personally, I have great sympathy and appreciation for all the people of Puerto Rico. During Hurricane Katrina, my house on the Gulf Coast of Mississippi was entirely washed away in 28 feet of storm surge, and so I have personal knowledge of what—of the sacrifices and loss they have experienced. And so you can be assured, personally I will be providing as much support and personal involvement I can to ensure we can recover quickly.

Mr. SERRANO. Thank you. The budget as presented by the administration cuts 248 funded positions from field offices of the National Weather Service, and we know how important the National Weather Service is, especially these days. So Admiral, won't these further cuts in Weather Service personnel as proposed by the President create a very real risk of reduced time lines and accuracy in weather forecasting?

Admiral GALLAUDET. Congressman, thank you for your interest in the Weather Service and support. They are all heroes in my opinion. I visited a number of the Weather Forecast offices, and they have made great sacrifices during the storm season. I have seen in Houston for example, the forecasters were there in the office five days straight, sleeping in the office, providing warnings to emergency managers, and then that is just one of many examples.

To answer your question, we don't believe that that reduction in the number of positions will introduce significant risk. In fact, there have been three studies on the work force at the Weather Service, and all have concluded that the Weather Service can operate more efficiently. There are just a number of either operating practices, like reducing the number of forecasters on watch, or even the hours any given forecast office operates, as well as using automation and improved processing technologies like the one I mentioned in my opening statement, the AWIPS.

So technology and better business practices at the Weather Service, I think, will allow for us to absorb the reductions in people in this budget.

Mr. SERRANO. Admiral, my last question for this round, the silliest question you will get all day today, but it is just something

I came up with last night. So whenever I turn on the TV or the radio, wherever I hear the weather forecast, they get that from you guys, right? They don't do their own weather forecasting?

Admiral GALLAUDET. Actually, TV meteorologists sometimes do their—often do their own forecast, but they get the baseline data and warning information from us, yes, sir.

Mr. SERRANO. I was wondering if they pay you for that.

Admiral GALLAUDET. Our taxpayer dollars pay for us.

Mr. SERRANO. I know.

Admiral GALLAUDET. The American taxpayers pay for our service, sir.

Mr. SERRANO. All right. Thank you, sir.

Admiral GALLAUDET. Thank you.

Mr. ADERHOLT. Mr. Palazzo.

Mr. PALAZZO. Well, thank you, Mr. Chairman. Admiral Gallaudet, it is great to see you again. Thank you for being here today.

During last year's hearing, Secretary Ross made a commitment to me and to this Subcommittee to work with the Gulf States to find a solution to better manage our red snapper fisheries. And Admiral, you and I have spoken about this issue as well. Fast forward to today, this administration has stood by these commitments, and I want to first say how much I and my Gulf colleagues appreciate the willingness of this administration to work with our states and the recreational fishing community on ways to improve red snapper manager, and which, as everyone knows, is by far the most popular and contentious off-shore fish in the Gulf of Mexico.

I am proud of the work that Mississippi and the other Gulf states have put into the developing proposals that will allow each of the States to manage recreational fishermen in both State and Federal waters over the next two years. Mississippi is more than capable of managing its fishery in a way that ensures conservation while maximizing access, and I believe it should be given the maximum management flexibility possible under this proposal.

And I know that the question I am about to ask could very easily be answered any time this week or next week, so without being a spoiler, Admiral, will you commit NOAA fisheries to working with Mississippi and the other states to ensure these proposals are approved and provide whatever assistance is needed to ensure their success?

Admiral GALLAUDET. Yes, Congressman, we will. And I think the red snapper story this year is a fantastic one, especially in light of the last year's season. And so I think we are going to be very successful, and I will work with Mississippi and all the Gulf states in managing the—in co-managing the red snapper fishery.

Mr. PALAZZO. Thank you for that commitment.

Shifting gears a little bit, as you know from your own science background as the—and career as oceanographer of the Navy, maintaining the competitive edge in the maritime environment is critical for both defense and non-defense. There is legislation introduced in both the House and Senate for the purpose of developing a NOAA Navy program for the assessment and acquisition of unmanned maritime systems to the benefit of several NOAA offices, including Ocean Exploration and Research.

However, the President's budget has reduced or eliminated programs that aim to maintain that competitive edge, especially through competitive programs and cooperative institutes with university scientists, such as with the University of Southern Mississippi, my alma mater, and others. What is your strategy for maintaining the United States competitive advantage in the area advanced technologies relevant to the NOAA mission, especially in unmanned maritime systems and ocean exploration with such dramatic reductions to the budget?

Admiral GALLAUDET. So Congressman, I understand and appreciate your interest and support of our technology development, certainly with respect to ocean capabilities, as well as the unmanned systems work we are doing, and we have discussed together personally.

And so yes, the budget choices, in terms of the unmanned systems work and our office of Ocean and Atmospheric Research, as well as many others that are important, we may because this administration is committed to prioritizing national security funding. And in it—from my past experience in the Navy, I support that prioritization.

And so we had to cut—we decided to reduce programs that we felt were either redundant or had—were primarily supporting grants to local stakeholders or States, and it was the core government work that we preserved.

With respect to unmanned systems and ocean exploration, we didn't zero those out. So even though we removed the unmanned systems research effort, there is still a vast amount of great unmanned work going on all across NOAA. Our fisheries, for example, are doing amazing things serving marine mammals, and acoustically with unmanned surface vehicles and underwater vehicles looking at fish and fish stocks that—in ways that are just much more efficient in cost-savings compared to our previous efforts.

And so we are flying drones. We are doing underwater and surface type of activity, and advancing that still in our—in the current line of funding we have today, but I will look forward to working with you and the Navy going forward to see how we can best continue those operations and the research and development behind it.

Mr. PALAZZO. Well, thank you, Admiral. Thank you for your service. And with that, I yield back.

Mr. ADERHOLT. Thanks, Congressman. Ms. Meng.

Ms. MENG. Thank you, Admiral, for being here.

I wanted to ask a question about a project that is near my district. The National Center for Coastal Ocean Science funds a critical research project called Mapping the Long Island Sound Floor. The Long Island sound is vital to the region's economy, security, and ecology. As you know, the challenge for effective coastal planning is balancing the demands of proposed development activities, such as telecommunication and cables, gas pipelines, and other infrastructure whilst ensuring the sustainability and health of marine environments there.

Your budget proposes significant cuts to the account that funds this project, and proposes to eliminate a number of navigation observations and positioning grant programs under the National

Ocean Service that impact these projects. Please explain why you think these programs should be eliminated.

Admiral GALLAUDET. Sure, Congressman Meng. Thanks for your question. Thanks for your support of our National Ocean Service and the offices under it.

The Ocean Service is a particularly high interest item for me as—with my degrees in oceanography, and the fact that I've been a coastal state resident in three states for my entire adult life, and overseas, and so I—and currently live on the Chesapeake Bay and I very much enjoy and value our coasts and all the work that the Ocean Service does.

With respect to the project you mentioned, again, our rationale behind the budget cuts wasn't that we thought these projects weren't good or valuable. It was just that we had to apply our cuts somewhere, and so we preserved much good work that the Ocean Service does in terms of coastal modeling, navigation, and surveying, but it was the grants that—to states that we decided to reduce because we just felt the core government services that we provided had a higher priority, and it wasn't that the work wasn't important. We just had to apply the cuts somewhere.

Ms. MENG. Okay. I hope that you will continue to prioritize. Any way that we can help—I mean, do you believe that—piggybacking off of Ranking Member Serrano's comment about climate changing and that something is happening within our oceans and the climate as a whole?

Admiral GALLAUDET. Oh, absolutely. From my background in the Navy, where I helped establish the Navy's climate change task force, and my scientific experience and knowledge, I am very aware of it. In fact, our organization does much great work still in terms of monitoring climate and climate change and the studies behind it, including the various aspects of it, whether it be drought or sea level rise, and we are applying that information every day in studies and assessments, and work with local officials to help manage and adapt to those changes.

Ms. MENG. Great. And back to hurricanes a little bit. You mentioned in your testimony about the accuracy and success of many of these programs.

NOAA requests a decrease of $4 million in reducing the overall computational capacity of research and development in high performance computing system. This decrease will eliminate one of NOAA's super computing systems jet located in Colorado, and reduce the super computing use and associated contract support in West Virginia. Some major transition projects include hurricane forecast, improvements, next generation global prediction system, and storm surge modeling that will no longer have use of the super computing system.

Why actively seek—why are you seeking to reduce our capability to forecast storms, such as Sandy that devastated New York City and the tri-state area? Harvey, Irma, Maria are just some examples that you've mentioned.

Admiral GALLAUDET. Yes, Congresswoman, and forgive me for calling you Congressman up front earlier.

We—first off those reductions are—they are not—we are not zeroing out the programs. We are—we made reductions based on the

fact that we feel the current funding is sufficient, the funding that we have proposed, still to continue to improve our work.

For example, we see great opportunity for research super computing in the cloud, and our—my counterpart, the Assistant Secretary for—of Commerce for Earth Observations and Predictions, Dr. Neil Jacobs, comes with great experience in that area, and he is already working on plans to leverage cloud computing for research applications.

The other piece about improving our modeling in super high performance computing to support modeling, we have much underway that is very good, and in fact, I will thank you for supporting the Sandy supplemental funding because that has led to many of the great advances in our weather modeling. We have an research or experimental model we call the Global Forecast System Finite Volume Cubed, or GFSFV3, that is in the process of transitioning to the Weather Service.

This model outperformed the European models for the hurricane track forecast for the three Category IV hurricanes that made landfall. So we are—our goal is to regain world leadership, take number one back for our weather model, and we are on track to do it. We expect to do that before 2020.

Ms. MENG. OK. Thank you. I yield back.

Mr. ADERHOLT. This young lady from Alabama.

Ms. ROBY. Well, good morning, sir. Thank you. I know you can tell that this committee is—has good representation from the Gulf States. And I want to apologize up front for the coming and going. I think every single one of us have all of our subcommittees meeting at the same time right now. So I just really want to make a quick comment and that is—and if we have some questions, we will submit for the record, but I just, alongside my colleague, Mr. Palazzo, I just want to commend you and the National Marine Fishery Service for your collaboration and your approval of allowing the State of Alabama, as well, recreational red snapper season to be set at 47 days in 2018 and next year, as well.

We all believe that cutting out the federal red tape and getting the local and state leaders involved in decision making is a true testament to working together. Each state and fishery are unique in our country and having decisions that are made jointly is key to finding the appropriate solution. So again, thank you so much for all you and your partners do in allowing our fisheries in Alabama, and around the nation, to thrive with innovative policies and cooperative decision makings. And I just want to thank you for your service to our great country and appreciate you being here today very much.

Admiral GALLAUDET. Thank you.

Ms. ROBY. So thank you.

Admiral GALLAUDET. Thank you, Congresswoman. Thank you for your support. And I will say that the credit goes to Chris Oliver, the director of our National Marine Fishery Service. He has got great experience and he is doing the right thing for our fisheries. And I thought the red snapper management plan is exactly what it should be.

Ms. ROBY. Great. Thanks again on being a role model. I will yield back.

Mr. ADERHOLT. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. And good morning, Admiral. Thank you for joining us and thank you for your many years of public service.

I want to follow up on Ms. Meng's questioning a little bit if I can. I think we are on the same page about the importance of climate change research. And I am going to rip through a number of quick questions to——

Admiral GALLAUDET. Sure. Yes, sir.

Mr. CARTWRIGHT [continuing]. Make sure we are on the same page about this. First, do you agree that the past three years have been the warmest three years in recorded history?

Admiral GALLAUDET. To the best of my knowledge, yes, sir.

Mr. CARTWRIGHT. Do you acknowledge that 17 of the 18 warmest years on record have happened since the millennium, 2000?

Admiral GALLAUDET. I will acknowledge that we have seen a trend in warming. I don't know the exact numbers.

Mr. CARTWRIGHT. Do you agree—the amount of carbon dioxide is higher now than at any time in the last 800,000 years and largely due to this carbon dioxide, the IPCC believes that global temperatures are expected to increase by at least 2.7 degrees Fahrenheit during the 21st century?

Admiral GALLAUDET. So I acknowledge that the carbon is at a record high in terms of the historical record in the atmosphere and oceans, but the 2.7 degree forecast rise that the IPCC acknowledges is also a forecast with uncertainty.

Mr. CARTWRIGHT. OK. Do you agree that global sea level rise in the next century will be better measured in feet and not inches?

Admiral GALLAUDET. I acknowledge that the sea level is rising. And again, forecasting the amount it will rise by the end of the century is—there is a significant uncertainty in our ability to do that accurately.

Mr. CARTWRIGHT. And finally, you acknowledged that we still have a lot more to learn about climate change and its dramatic effects on almost everything we do.

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. So I think you and I both recognize this. The subtle science on climate change, and we both know it is an existential threat to everything we know, I think we can agree we need to improve our understanding of climate change so that we can adapt and mitigate its effects. Fair statement?

Admiral GALLAUDET. I would say that that is—it is important to continue our NOAA research behind climate change because there is much we still don't know.

Mr. CARTWRIGHT. EPA administrator, Scott Pruitt, has repeatedly stated that carbon dioxide is not a primary contributor to the warming that we observed. Did you know he said that?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. Last fall, you presented the administration's three top priorities for NOAA and let me make sure I have them correct before I dive into it. Number one, leading the world in weather prediction. Number two, minimizing the impacts from severe weather. Number three, increasing sustainable economic con-

tributions from our fisheries and oceans. Have I got all of that correct?

Admiral GALLAUDET. Yes, Congressman.

Mr. CARTWRIGHT. And I notice that climate change is missing and for years NOAA has played an essential role in deepening our understanding of climate change, does that concern you? I know you have said in the past that, "The administration will continue to support NOAA's climate mission." Are you concerned about dropping that off the list?

Admiral GALLAUDET. I would say it is imbedded within all three of those priorities, Congressman. In fact, so when we talk—in my opening statement, we have combined those first two priorities to what we call a weather and water priority and minimizing the impacts of extreme events. And so that involves events on scales that are in weeks to seasonal and even sub-seasonal, and climate type of scales.

Mr. CARTWRIGHT. All right. I am looking at the numbers in your budget requests and it seems to me the administration has proposed to cut NOAA by over a billion dollars. That is about a 20 percent cut. Am I reading that correctly?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. That is troubling. Let's talk about some of these cuts. Admiral, let's look how they align with the administration's priorities for NOAA, how they align with our shared understanding. Budget proposed is stripping $2.4 million from regional climate centers, which answer millions of requests from businesses, farmers, and local communities every year. Am I correct in that?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. It will eliminate the climate resilience grants to states. And now the climate resilience grants showed us that for every one dollar invested in resilience, it results in $6 in savings from future extreme weather damages. Am I correct in that?

Admiral GALLAUDET. I don't know the exact number, sir, but I know that there is—the work our climate predictions provides the country saves money and lives.

Mr. CARTWRIGHT. The budget will eliminate the climate competitive research grants, right?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. It will dismantle, and that is the language the administration used, the climate program office as it currently exists, right?

Admiral GALLAUDET. I am unaware of that. That office is still funded in the fiscal year 2019 budget, sir.

Mr. CARTWRIGHT. The budget will cut research on ocean acidification by 23.4 percent. Am I correct in that?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. Even though ocean acidification can potentially harm and deplete our fishing stocks, right?

Admiral GALLAUDET. We are still continuing—even though there is a reduction in the funding, we still continue to do that research to support shellfish growers, for example, in the State of Washington. So yes, there are reductions in the program, but we are still looking at it, studying it, and supporting those who are affected by it.

Mr. CARTWRIGHT. We will come back to this, but the budget also proposes decreases to hurricane forecasting research, doesn't it, even though hurricanes cost our country an eye popping $306 billion in damages last year, and even though 400,000 American citizens in Puerto Rico are still without power over seven months after Hurricane Maria, correct?

Admiral GALLAUDET. So the rationale, as I mentioned earlier, Congressman, was not to—we didn't remove all hurricane research, for example. As I mentioned to Congresswoman Meng, we have a very solid and robust research program supporting hurricane forecast research. I went down to our Atlantic Oceanography and Meteorology Laboratory last week in Miami that has a hurricane research division. They are, and continue, and will be doing in this fiscal year 2019 budget terrific work to improve our hurricane forecasting and the research behind it. So we haven't zeroed it out. We have just made reductions in various areas we thought either were redundant or were—we had sufficient capability.

Mr. CARTWRIGHT. I think we will come back to this, but at this point, Mr. Chairman, I yield back.

Mr. ADERHOLT. Thank you. Let me switch gears and talk a little bit about—we have talked a little bit about hurricanes. Let me talk a little bit about tornadoes, as we had mentioned briefly before the hearing started. Of course, tornadoes in the southeast result in more deaths per capita than any other region in the United States. Since 2015, we have been funding the VORTEX-southeast program, SE program, which brings together meteorologists, researchers, and social scientists to better understand the storms and conditions that cause tornadoes in the southeastern part of the United States.

Can you share a little bit about what the program has accomplished thus far and how it will help protect the folks that I represent back in Alabama from these deadly tornadoes?

Admiral GALLAUDET. Yes, Mr. Chairman. The VORTEX program I think is a terrific one. Yeah, over the last year I know that our—it has been managed by our national severe storm lab in Oklahoma, but they have partners in your state that they have actively done field research in to study the damage, for example, at different—where different tornadoes have occurred in Alabama.

And then with that information, they have been able to reduce the uncertainty in tornado warnings and predictions and also better understand the decision/support type of work and how we provide warnings to emergency managers and the advice they should give the people because of the different nature of the storms in that—in, say, your region to those, say, in Texas. And so there has been great, I think, advances made by that program.

I note your concern about the fact that the 2019 budget reduces that funding for the VORTEX program. And again, that was one where we felt that the national severe storm lab was still doing, with their baseline funding, had a good tornado research program, as required by the Weather Act I mentioned in my opening statement. So we didn't pull back all the research in terms of tornado warning, but we made a reduction based again on what we thought was a sufficient level of capability.

Mr. ADERHOLT. OK. Well, please know that this is certainly important to us in the southeast and, of course, in Alabama, my home State.

It is my understanding that half of NOAA's ships are past their designated service life and are scheduled to retire by 2028, is that correct?

Admiral GALLAUDET. Yes, sir.

Mr. ADERHOLT. In light of that, NOAA has proposed $75 million each year to recapitalize its fleet. Before buying new ships for NOAA, we want to ensure that NOAA is fully utilizing commercial and partner assets. How does NOAA determine whether a mission can be completed by a partner vessel or are there additional missions that NOAA can use external ships to complete or reduce pressure on the NOAA fleets?

Admiral GALLAUDET. Yes, sir. We perform our oceanographic and hydrographic and fisheries research work with actually a kind of suite where we have our own vessels, but we also match that with sometimes contracted vessel support. And we do this in hydrography all the time. In fact, I would say it is roughly, I think 43 percent of our hydrographic surveys are contracted. The reason I think we can't entirely contract and use partner vessels, even though—because ships are expensive, is the fact that there are just some capabilities and instances where we will need a government only solution.

A great example was the hurricane season, sir. NOAA's ship, Thomas Jefferson, was able to go in to Puerto Rico and all around the southeast, actually, right after the storms hit and do critical hydrographic surveys to open ports. Now, that ship opened up 18 ports in as many days following Hurricane Maria in the U.S. Virgin Islands and in Puerto Rico. And so that was something we, a surge capability we just couldn't contract out.

Mr. ADERHOLT. OK. Let me go ahead and Mr. Serrano.

Mr. SERRANO. Maybe this is not a question for you, but for other people, but I would like to get an answer from as many people as I can. Right after Hurricane Maria hit Puerto Rico and the devastation that we saw, that many people claim is the worst ever under the American flag, it took such a long time for things to get going. And some of the excuses they were giving was that Puerto Rico was an island. And I sarcastically, or profoundly, said it was easy to invade it in 1898, so it was probably not difficult to reach it now. What was the problem? Was it administrative delays? Was it indifference, if you are free to say that? Is it the fact that it is a territory and they don't play in the same ballfield as states? I mean, something went wrong. Here goes that phrase again. Something went wrong and even people who are keeping quiet about it because they don't want to attack the administration or the agencies know that something went wrong.

Admiral GALLAUDET. Well, Congressman, again as I mentioned earlier based on personal experience, the people of Puerto Rico have my deepest sympathy. In my position at NOAA, I really—it is not mine to comment on the overall response of first responders and of FEMA. I met with Brock Long and we have a great partnership. I think I can tell you that NOAA's response, as I mentioned with the ship, Thomas Jefferson, and much the work we are doing

now to remove derelict vessels and areas where hazardous material and oil has been spilled, restored habitat in many areas that—and thank you again for the supplemental appropriations, which we will apply. It is a very good effect in Puerto Rico and other areas that were affected.

So I can tell you that NOAA's response has been terrific and I am very proud of the people of my organization.

Mr. SERRANO. Thank you. Well, you know, I just wanted to throw more information into the pot, if you will, because I have no qualms with NOAA. NOAA and NASA are two of our favorite agencies here, you know, except you are not sending anybody out into space anytime soon, right?

Admiral GALLAUDET. No, sir. No, and we are not funded to do it either. But I will tell you that we have——

Mr. SERRANO. Some staff members only.

Admiral GALLAUDET. The former administrator had some experience there, you know. But we have a very active ocean exploration program with our ship, *Okeanos Explorer*, which is discovering new things every year: a new species, new phenomena, and I think it is a program we are really proud of.

Mr. SERRANO. That is great. That is great. Among the many NOAA programs the administration wants to eliminate are the National Sea Grant Program and the Educational Partnership Program with Minority Serving Institutions. Among the many benefits these programs have provided is that they have encouraged a pipeline of talented young scientists to choose careers at NOAA. Admiral, won't the elimination of these programs harm NOAA's ability to maintain a high quality work force in many critical areas? I mean, you have been getting a lot of talent from those programs. How difficult is it going to be now?

Admiral GALLAUDET. Well, I will acknowledge and thank you for your support of both of those programs. And I will say that the sea grant program is a great one. It is very—we have recruited out of sea grants and the educational partnership program great talent. I have met many of our—of scientists in NOAA now who are veterans of those two programs. And in fact, last month, I spoke at the educational partnership program event at Howard University and I was able to see some new, young students who are all doing great research and partnership with NOAA. NOAA mentors these students. Our scientists enjoy that. And we gain because of it.

So I will tell you yes. We have benefitted from and we have been able to build a more diverse workforce based on those—support from those two programs. So they are important. I can only explain to you how previously that we had to make some tough calls given the cuts we were required to execute. And so some of the core services, like weather forecasting and the oceanographic and hydrographic surveys, are what we preserved.

Mr. SERRANO. Thank you. One last question here, Admiral. Would you please talk about the backlog of maintenance and repair needs at weather forecast offices? How bad is the problem, and to what extent is the backlog further harming the ability of the National Weather Service to make timely and accurate weather forecasts?

Admiral GALLAUDET. Thank you, Congressman. And again, I really appreciate your support to the weather service. It is just a really terrific organization, affecting Americans for the better every day. Yes, we have identified facilities across all of the weather service that are in need of repair. And I don't believe they are posing significant risk to the mission today. We are still saving lives, protecting property all across the country. And we proved it during this hurricane season.

But you are correct in acknowledging that I am concerned about a number of our facilities and that—not only at the Weather Service, but across all of NOAA. And so we are looking closely at what we need to recapitalize at fisheries too, and in other locations to ensure our workforce has the best place to do the best job.

Mr. SERRANO. Thank you. Just one last comment, a selfish comment, but important to our districts. Some years ago, you set up a weather station at a community center populated by a lot of young people in my community. And in all honesty, you know, the years go by and I don't know in what condition that weather station is. If you could just check on it to see if it is where it should be because at one point, we were having local cable T.V. channels pick up the weather forecast from the weather station at the community center, which was really a great thrill for the kids and a great learning experience. So if you could just check on that, we would appreciate it.

Admiral GALLAUDET. We sure will, Congressman. Thank you.

Mr. SERRANO. Thank you. Thank you, Mr. Chairman.

Mr. ADERHOLT. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Admiral, I want to pick up on—we were talking about some specific cuts and really these are—the overall budget is something that comes from the administration and some—many of the folks in your position are treated as, well, this is something we have to live with that is coming down from on high. And we have talked about some of the comments from the administration officials basically denying climate change. A lot of the cuts seem to align with those beliefs. I went through a bunch of them with you already.

The one that may be absolutely heartbreaking to you, Admiral, is the administration has proposed eliminating the arctic climate research program, hasn't it?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. And I know you spent much of your career working on arctic research. Are you concerned about the effects of the elimination of that program on our national security?

Admiral GALLAUDET. Congressman, I thank you for your interest in this important area. I am not concerned because we are doing—even though that research line has been eliminated, it doesn't mean we are not doing arctic research. I was just at the Pacific marine environmental lab in Seattle and they have a very active program that is continuing various lines of arctic research, but not in the name of an arctic research program.

For example, we have just contracted with an organization called Saildrone that operates unmanned surface vehicles. And we actually executed an arctic survey this year, just near the Bering Sea. And so we are undertaking a good amount of arctic research in the

ocean and on the ice and we operate the National Ice Center in Suitland, Maryland, which I encourage you to visit sometime.

So we do have a fairly—we are still continuing to do arctic research, sir.

Mr. CARTWRIGHT. I want to follow up about talking about ice. I know NOAA published its 2017 arctic report card last December. It found that the arctic was warming at a rate that was unprecedented. Am I correct in that?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. That is something the world has not seen in the last 1,500 years, am I correct in that?

Admiral GALLAUDET. I don't know the exact number, sir, but it has been warming, yes.

Mr. CARTWRIGHT. And it is warming at twice the rate of the rest of the globe in the arctic, right?

Admiral GALLAUDET. That is correct.

Mr. CARTWRIGHT. Last month, arctic sea ice, which we were just talking about, hit a record low, never before seen in the satellite era, correct?

Admiral GALLAUDET. For the winter, yes, sir.

Mr. CARTWRIGHT. And it was 62,000 square miles smaller than the previous record set just the previous year, right?

Admiral GALLAUDET. Yes, sir.

Mr. CARTWRIGHT. Well, warmth in the arctic affects the jet stream, does it not?

Admiral GALLAUDET. Yes, sir, it does.

Mr. CARTWRIGHT. And you said that before. What you said was, "Unlike Vegas, what happens in the arctic doesn't stay in the arctic, it affects the rest of the planet." Have I quoted you correctly?

Admiral GALLAUDET. You have done your homework, Congressman.

Mr. CARTWRIGHT. All right. Well, Admiral, you were the one who delivered the 2017 arctic report card to the administration, right?

Admiral GALLAUDET. Correct, yes, sir.

Mr. CARTWRIGHT. And you said, "The public should have high confidence in us," and that, "The White House is addressing the report, acknowledging it, and factoring it into its agenda." Did you say that?

Admiral GALLAUDET. That is correct. The Office of Science and Technology policy under the White House is supporting our arctic research efforts.

Mr. CARTWRIGHT. But with all these cuts to climate research, does it not seem like the White House is failing to address it and properly factor it into its agenda?

Admiral GALLAUDET. Again, sir, I think that the answer is no. The Office of Science and Technology policy under the White House has supported, for example, our arctic research and the—if not zeroed out our climate work. If you go to drought.gov or the Climate Prediction Center's website, you will see that we continue to put out seasonal and long range outlooks that are benefitting Americans and businesses in terms of drought temperature.

We continue to look at the arctic and support arctic with research and forecasting. The Navy recently completed or is conducting—just conducted its ice exercise, something I attended two

years up in the (indiscernible) where two submarines were basically doing research and tactical development. And we provided forecasts for—of the ice and the weather that supported the safety of those operations.

So I believe that through NOAA, we are continuing to do very good work. We haven't eliminated our climate work, it has just been reduced.

Mr. CARTWRIGHT. Well, I want to leave you with this. I want to have confidence in you, Admiral Gallaudet, and I do. You are clearly a good scientist, an able leader. I would say a good soldier or in your case sailor——

Admiral GALLAUDET. Sailor.

Mr. CARTWRIGHT [continuing]. Sticking up for the folks up top. But looking at this budget, I just don't have confidence in the administration. I think this budget is going to hurt our national security. I think it is going to hurt our economy. I think it is going to hurt our country and the world for generations to come. And I think this is a budget written by climate deniers that would derail the great work that has been going on, largely under your leadership at NOAA. And I hope this committee can fix the serious problems in this budget proposal. And I yield back, Mr. Chairman.

Mr. KILMER. Thank you, Chairman. And thank you, Admiral, for being with us. I have got a few things I was hoping to ask about. First off, I would like to ask for a status update on the process of distributing funds to communities impacted by recent fisheries disasters. As you know, Congress approved $200 million in supplemental funding to support those communities, but they continue to wait for relief while the agency works to develop a plan for how to distribute those funds. Can you tell the committee what the process—you know, when the process will be completed so that those funds can get out the door? We have got communities and folks who have been waiting for years.

Admiral GALLAUDET. Yes, Congressman. Thank you for your support of NOAA and your interest in this issue of fisheries disasters. We have developed a spend plan on how to allocate the $200 million of funding, both for the west coast fisheries disasters that were declared in 2017 and, of course, those that were declared in the wake of the hurricane season.

And so our spend plan is currently being reviewed at the department and will go to OMB we hope by the end of the—in the next two weeks or so. And then when OMB approves that, then we will be able to share—we will share with the states the allocations and then we will figure out exactly what those will fund in concert with your state and others.

Mr. KILMER. Great. If that is something once it is cooked by OMB that you can share with us, it would be very helpful.

Admiral GALLAUDET. Absolutely, sir.

Mr. KILMER. Thanks. I want to shift gears and thank you for visiting my state and learn more about the NOAA programs that are done in partnership with UW and that are pretty central to the economy in the Pacific northwest. In our neck of the woods, one of the most important programs is the IOOS program, which provides some real time data about ocean conditions, that is used by fishermen, and shellfish growers, and a host of other industries, and

agencies, and stakeholders. Unfortunately, the fiscal year 2019 budget doesn't reflect the value of this program. The proposed cut of more than 30 percent would really cripple that system and jeopardize the livelihoods of folks that rely on that data, not to mention the impact it would have on other critical services, like search and rescue, and flood warnings, and navigation safety that also depend on this data.

Now that you were able to go to Washington State and see the value and success of that program, I would be interested to hear whether you believe it is in the Nation's best interest for NOAA to divest from that critical program.

Admiral GALLAUDET. That is a great question, Congressman, and I have met with all the IOOS regional managers just recently in Washington, DC and I will say—I will agree it is a very important and impactful program. Being a career oceanographer, I get it very well. Again, as I mentioned, I don't think you were in the room, but we—in coming up with our fiscal year 2019 budget, we had to make some tough calls. And we decided to prioritize core government services, and so grants and local related work was what we had—we picked to reduce or in some cases eliminate, not because we didn't think they were important or good, it was just that we had to prioritize.

Mr. KILMER. Finally, let me ask about the role your agency plays in mitigating coastal hazards. About 40 percent of the U.S. population lives in coastal areas, so NOAA is very important in everything from protecting communities from hurricanes, to tsunamis, to sea level rise. Unfortunately, the administration hasn't made this a priority. The district I represent is already experiencing some of the threats of sea level rise. We also happen to be a tsunami zone. So NOAA is an incredibly important partner in our region from the national tsunami hazard mitigation program to regional coastal resiliency grants.

NOAA provides a lot of funding and expertise that is really important for communities like Westport, where I was just last Friday, and Neah Bay, Ocean Shores. I could give you countless examples from my home state. But the fact is, every single coastal state, roughly half of all states in the Nation, benefit from these programs. In my view, we should be doubling down on them because these are communities that are really at risk. That is what I am going to advocate as part of this committee. And I am not going to ask you to defend the proposed cuts to these programs, but I would like you to tell the committee how these cuts would affect NOAA's ability to continue to protect vulnerable coastal communities?

Admiral GALLAUDET. Sure, Congressman. And I, again, have deep appreciation for your interest and support of these—of the coastal zone management programs and resiliency efforts that we will leave reduced. Again, we are not eliminating all of our coastal work and support, if you will. I mentioned this to Congressman Meng, that I have been a coastal state resident in three states and several countries, so I—and I live on the Chesapeake Bay. So I very much appreciate these programs.

And I will tell you, there is good work that will continue. Habitat restoration, for example, in Louisiana I visited a restored marsh

that had been under water for decades that we restored and that is—that provided an effective storm surge barrier during this hurricane season to the residents of that state.

And in your state, there is great work we are doing too. We have restored an estuary in your district, I believe, that is now very active for the salmon hatchery. We will continue good work and we just had to make reductions.

Mr. KILMER. Thank you, Chairman. I appreciate the time. I will just say as I yield back, I was in Westport and visited the Coast Guard station there and was meeting with a group of Guard members and their families and asked them, "What is keeping you up at night?" And the number of people who have mentioned the risk of tsunami was really significant.

Admiral GALLAUDET. Well, and that is great, sir. I will say, though, that again we continue to fund our tsunami program in this budget. It is reduced, but not eliminated. And I think the men and women that are working at our tsunami warning centers are experts, doing very good work, and we will—it is important for us to continue that capability.

Mr. KILMER. I agree. Thanks. I yield back.

Mr. JENKINS. Thank you very much. Welcome, Admiral, it is an honor to have you here. I am from West Virginia and NOAA has made a real investment in our State. One of your supercomputers is in Fairmont, West Virginia, and that has been an important driver of high tech talent into our state coming out of our universities and bringing people to West Virginia. Can you give me any sense of kind of NOAA's view of that positioning in West Virginia, and the supercomputer, and your investment in our state, and the future that you see of NOAA in West Virginia, that facility in Fairmont, in particular?

Admiral GALLAUDET. Yes, Congressman. And thank you for your interest and support, again. And definitely I enjoy your state. I am going to be visiting it next month for the Eagle Horizon exercise, that is our backup site, if you will, for when we have to do continuity of operations. And I look forward to that time.

And our supercomputing capability there is important to us. It is foundational for our numerical or high performance computing numerical weather prediction. And so we will maintain our presence in your State because that capability is so important.

Mr. JENKINS. Great. Thank you. There was a proposal for 10 years' worth of contracted work in the $533 million range. I appreciate your comments about the continued commitment to West Virginia. On your radar screen, some of this potential contracted work, half a billion dollars in West Virginia at this facility, your familiarity, what the game plan is, and what the outlook is?

Admiral GALLAUDET. Sir, I actually can't comment. I am not a—I will have to take this for the record on what our exact—in the fiscal year 2019 budget, what our program funds are for and our plans going forward in the future. I don't recall the numbers and so I will have to come back to you with that one.

Mr. JENKINS. Right. Thank you. I have no further questions. Thank you for being here. I understand we have had two rounds already, so unless there is nothing else, I will move that this hearing is adjourned.

The Honorable John A. Culberson
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
National Oceanic and Atmospheric Administration FY 2019 Budget Request

1. ***Operating an efficient and effective observational infrastructure.*** *What steps is NOAA taking to ensure that its observational infrastructure is cost efficient and effective? How does NOAA assess partners capacity to contribute to NOAA's observational requirements; and how does NOAA use this information to inform its own satellite procurements? How will NOAA develop a system architecture that is able to fully leverage partner observations while ensuring data reliability, security and accuracy?*

Answer:
Operating an efficient and effective observational infrastructure is at the heart of NOAA's strategy for gathering global data to meeting its observation requirements. NOAA documents its observing requirements in an extensive database that allows it to group the importance of the data requirements. Once these data requirements are documented, each observation requirement is subjected to a process to validate and classify whether the data requirements are Mission Critical, Mission Optimal, and Mission Enhancing.

NOAA's Technology, Planning and Integration for Observation division manages the observing system architecture assessment capability that evaluates whether an existing observation platform can meet NOAA's need, whether there is an available commercial source, or whether the data can be leveraged from national or international sources. This assessment capability ensures NOAA's observing system architecture is cost efficient and effective. All NOAA line and program offices participate in these assessments.

NOAA also maintains a secure Information Technology (IT) architecture that provides the necessary cybersecurity to safeguard NOAA's IT infrastructure as well as the integrity and quality of the data being acquired, processed, and used in NOAA's products and services.

Other federal agencies that NOAA currently leverages data from are the National Aeronautics and Space Administration (NASA), and the Departments of Agriculture, Defense, Energy and the Interior. These agencies share the data from their respective space-based and *in situ* observational networks with NOAA. Data from state and local governments is also leveraged to meet data needs, as well as data from international partners, who provide space-based and ground-based data to support NOAA's environmental monitoring. All of these data are subjected to rigorous data stewardship to ensure that the data are accurate and unbiased, and being handled in a secure IT environment.

NOAA's participation in multilateral organizations and bilateral partnerships enable cost efficient and effective environmental observation infrastructure. NOAA continues to incorporate potential partner and commercial contributions into its future system architecture studies, including working with many international organizations to ensure that global investments in satellite and *in situ* observations are interoperable and made in the most efficient manner possible.

2. ***Polar satellites.*** *The President's Budget proposed consolidating the JPSS and Polar Follow On programs into a single budget line to achieve cost and programmatic efficiencies. What specific programmatic efficiencies will NOAA achieve through the proposed consolidation that cannot be leveraged in the current budget structure using existing flexibilities (e.g. reprogrammings)? What is the cost savings associated with each of these efficiencies? What is the estimated program management cost savings, and what is the estimated total program management cost for the combined program line?*

Answer:
Combining the JPSS Program of Record (POR) and Polar Follow On (PFO) Program, Project, and Activities (PPA) into one Polar Weather Satellites (PWS) PPA will enable NOAA to execute the entire JPSS program for all four satellites more efficiently, similar to the four satellite series included under the GOES-R program. Developing all missions together allows for the flexibility to apply resources across satellite activities as needed. For example, the GOES-R program was recently able to replace a faulty component on GOES-S with one on GOES-U, allowing GOES-S to maintain its scheduled launch date. Even though it is possible to reprogram funds from one PPA to another with the consent of Congress, the combined PPA reduces risk to both schedule and cost by providing NOAA the flexibility to address issues as they arise to keep the satellite program on track, which results in cost savings for the taxpayer. NOAA will continue to track the different components of the PWS via Life Cycle Costs, as seen on page NESDIS-73 of the FY 2019 NOAA Congressional Justification.

We anticipate program management cost savings by strategic merging the separate NOAA and NASA program management offices into a single NOAA-NASA program management office. Within NOAA, additional cost savings will be realized through the consolidated management of the single PPA for PWS versus the current management process for two separate processes to manage a PPA for JPSS Program of Record and a separate PPA for JPSS-3 and JPSS-4. With the single PWS PPA, NESDIS can actively reduce existing duplication of effort as well as reduce overhead costs. NESDIS plans to baseline the JPSS-3 and -4 missions in FY 2019. Once the JPSS-3 and JPSS-4 missions have been baselined, NESDIS will be able to quantify the savings.

The Honorable Robert Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
National Oceanic and Atmospheric Administration FY 2019 Budget Request

I would like to highlight an area of concern which has been brought to my attention regarding the performance of NOAA's Climate Model at the Geophysical Fluid Dynamics Laboratory (GFDL). It is my understanding that there have been pervasive and significant discrepancies between predictions made by this model and results based on real-time data.

1. *Peer review is important, but only if you can demonstrate that the review panel has a diversity of viewpoints based on their published work. What new method will you undertake to ensure an independent and more objective analysis so that government and the private sector are provided with climate models with a better pattern of prediction?*

Answer:
NOAA's Geophysical Fluid Dynamics Laboratory (GFDL) develops models that are judged on a whole host of variables based on the different components of the Earth System. Model quality and performance evaluation occur at multiple levels, starting with peer review in leading journals. The journals conduct independent reviews of papers describing the model, the numerical simulations, and the results, adhering to rigorous standards set by editorial boards made up of experts from the various disciplines spanning climate science. This evaluation covers all aspects of a model, from the development of the individual components to describing their validity against observations of the climate system.

However, beyond journal peer review of individual papers, NOAA's climate model simulations are also submitted to the World Climate Research Program's Coupled Model Intercomparison Projects, which represent a worldwide, transparent exercise involving analyses of the model simulations, leading to hundreds of peer-reviewed papers by independent scientists from all over the world.

The combination of journal peer review of individual papers as well as NOAA's participation in the Coupled Model Intercomparison Projects ensures that NOAA's models are objective, independent and comprehensively scrutinized. NOAA encourages independent analysis and makes model data available to the public at http://nomads.gfdl.noaa.gov/.

2. *What steps have you taken to publicize the flaws of the already completed years (in terms of comparing the prediction to the data which was actually collected)?*

Answer:
Independent assessments of NOAA's climate models routinely report that they are among the best performing in the world. When GFDL's models produce data, it is then published in peer-reviewed papers and archived in the Coupled Model Intercomparison Project climate model data repository where it is open to the public.

Climate models are a tool to help us understand how the climate might change in the future, and to identify geographical regions that could be most heavily impacted by changing temperatures

or precipitation patterns. Model projections are presented with numerous variables, such as changing economic and population growth, or technological trends. Each set of inputs produces a range of predicted outcomes, with the most commonly occurring predictions being interpreted as being the most likely to occur. Climate models are the best tool we have for predicting future changes, but even the most accurate climate models still involve uncertainties in prediction of future trends, which is why projections are presented with a range of climate outcomes for any given scenario. Model-simulated results may vary from available observations, but such comparisons help us better understand uncertainties and improve the model. NOAA supports and sustains independent evaluation of our models as well as supporting further research focused on resolving the uncertainties in modeling. The agency makes data from its model simulations available to the public and accessible online at http://nomads.gfdl.noaa.gov/. This data access allows independent analyses by experts from other institutions.

I am very pleased my home state of Alabama is the host of NOAA's newest laboratory, the National Water Center (NWC) in Tuscaloosa. As you know, the NWC is an operational center that serves to coordinate all federal agencies involved in water science and water resources: NOAA, the U.S. Geological Survey and the U.S. Army Corps of Engineers.
As a NOAA operational facility, the first priority of the NWC is protecting the public safety in times of water emergencies such as flooding or other associated weather emergencies.

3. *With that mission in mind, please give us an update on the status of the NWC. Is it currently at its full operational status including being fully staffed and if not, when do you expect NOAA to meet that goal?*

Answer:
NOAA's ribbon cutting ceremony for the National Water Center (NWC), which marked an initial operating capability for the new facility, was held on May 26, 2015. Since that time, NOAA has steadily increased the number of staff resident in the facility to the current level of 68. These personnel are government FTE (i.e. full-time equivalents), contractors, and visiting scientists who are focused on the development, testing and implementation of state-of-the science water modeling and related decision support capabilities. This work occurs across four divisions which include the Analysis and Prediction Division, the Geointelligence Division, the Interdisciplinary Science and Engineering Division, and the Service Innovation and Partnership Division.

In 2017, the NWC added a fifth division -- the Water Prediction Operations Division (WPOD) -- to collaborate across NWS, NOAA, and government partners, to provide consistent national operational services that complement, support and enhance water resources decision support services delivered by NWS River Forecast Centers (RFCs) and other field offices. Efforts to staff this new division were initiated in FY 2017. The FY 2017 appropriation directed NOAA to hire the first 12 WPOD staff (and was reiterated in the FY 2018 appropriation), all of whom will be government FTE. In late April of this year, we hired the first director of the WPOD who joined the NWC team in mid-May. We expect to hire five additional WPOD employees by the end of FY 2018 and another six in FY 2019. With these additions, the WPOD, housed at the NWC, will achieve its initial staffing level and we expect to begin 14x7 operations by the end of FY 2019.

The Honorable Steven M. Palazzo
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
National Oceanic and Atmospheric Administration FY 2019 Budget Request

1. *Unmanned aircraft has tremendous potential for meeting NOAA data needs, and to provide new data to be able to better meet the challenges our society faces. What is the NOAA plan for research related to UAS?*

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies, including closing NOAA's Unmanned Aircraft Systems (UAS) program office. NOAA allows programs to use UAS to meet their mission, which includes both operational and research activities. In accordance with NOAA policy, programs will continue to seek approval from the Office of Marine and Aviation operations for the use of UAS.

2. *Modeling and simulation will play an increasingly important role in NOAA's mission. Does NOAA have a plan on how to provide the computational resources to meet these needs?*

Answer:
In FY 2016, NOAA began an effort to recapitalize two of its Research and Development High Performance Computing (R&D HPC) systems and to maintain its existing R&D HPC resources. With the increased funding provided in the FY 2016 and FY 2017 appropriations, NOAA was able to fully replace its R&D HPC located at Oak Ridge National Laboratory in Tennessee, and will be able to sustain the out-year operations and maintenance of the system based on NOAA's profile of anticipated costs. To provide the maximum computational resources possible within available funding, NOAA plans to recapitalize the R&D HPC system located at Fairmont, West Virginia with funding provided by the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018.

NOAA's current operational supercomputing contract expires in FY 2022.

3. *Globally, wild capture fisheries harvest is stationary. Growth in seafood production is coming from aquaculture and the United States is minor aquaculture producer. We import 90% of our seafood and 50% of that is aquaculture product. What is NOAA doing to expand aquaculture production in the United States?*

Answer:
NOAA supports U.S. aquaculture to promote domestic seafood production and create jobs. Consistent with the Department of Commerce's 2018-2022 Strategic Plan, NOAA is working to reduce regulatory burdens and drive aquaculture research to ensure the continued growth of this industry.

To reduce regulatory burdens, NOAA is working with other federal agencies and coastal states to streamline federal marine aquaculture permitting. In addition, NOAA invests in regulatory

efficiency measures and public-private partnerships to jump-start production. Last year, NOAA led a six-agency Memorandum of Understanding to streamline regulatory processes for aquaculture operations in the Gulf of Mexico.

To drive research, NOAA works in collaboration with industry to support research that advances commercial-scale marine aquaculture production. NOAA is the largest provider of federal funds to support the marine and Great Lakes aquaculture industry and provided $19.6 million in aquaculture grants in FY 2017. FY 2018 research grants will support 22 projects that address major constraints, barriers, or hurdles limiting aquaculture production in the U.S. Aquaculture research funding addresses issues identified by industry and the public such as feeds development, hatchery technologies, and siting tools to reduce conflicts with other coastal users.

4. *Unmanned vehicles have become a major asset in military and intelligence operations over the last decade. Similarly, NOAA and the U.S. Navy have each recently deployed commercial unmanned surface vehicles (USVs) with a track record of operational success, but USV technology needs to become fully integrated across NOAA line offices to meet respective mission requirements, where they are needed most. What are NOAA's plans to evaluate unmanned surface vehicles to meet its mission requirements? The Consolidated Appropriations Act of 2018 provided $2 million to NOAA for unmanned surface vehicle applications. How do you intend to use these funds?*

Answer:
NOAA has been gaining experience with commercial unmanned surface vehicles (USV) over the past several years, primarily in support of hydrographic survey, weather and climate, and fisheries stock assessment missions. NOAA plans to continue the evaluation of USV using the 2018 Consolidated Appropriations Act funds to support two key activities: (1) the Office of Marine and Aviation Operations (OMAO) will work with the NOAA-University of New Hampshire Joint Hydrographic Center to deploy and evaluate the capabilities and limitations of two commercial USV systems from NOAA hydrographic survey vessels; and (2) OMAO will work with the NOAA Pacific Marine Environmental Lab to continue to evaluate the Saildrone USV as a platform for obtaining data to support the NOAA Tropical Pacific Observing System, and to support climate observations in the Arctic. This also includes continuing to test the Saildrone USV's ability to collect acoustic data to support fisheries stock and marine mammal assessments.

5. *It would be far cheaper for NOAA to competitively procure ocean measurement data from private U.S. companies rather than buying, operating, and maintaining its own fleet of dedicated vehicles. Is further legislation needed from Congress to allow NOAA to competitively procure data from unmanned surface vehicles operated by the private sector, or can this be done with the funds Congress has already provided?*

Answer:
NOAA currently acquires ocean measurement data to meet its mandated mission requirements through its fleet of dedicated platforms, partnerships with other federal agencies, cooperative agreements with academic institutions, and competitive commercial procurements. This multi-pronged approach allows NOAA to meet our diverse program needs, maintain maximum

flexibility to respond to emerging requirements, respond to natural and man-made disasters, and meet federal requirements for public safety. Existing legislation authorizes NOAA to procure data from a variety of sources, including but not limited to USV. For example, under section 303(b)(1) of the Hydrographic Services Improvement Act (33 USC 892a(b)(1)), NOAA's National Ocean Service (NOS) has authority to "procure, lease, evaluate, test, develop, and operate vessels, equipment, and technologies necessary to ensure safe navigation and maintain operational expertise in hydrographic data acquisition and hydrographic services."

6. *When do you plan to establish a dedicated annual budget line for unmanned surface vehicles, so that multiple NOAA organizations can obtain and share measurement data collected from unmanned surface vehicles rather than each pursuing stand-alone contracts in an uncoordinated manner?*

Answer:
We appreciate your comments and are taking this suggestion into consideration. We look forward to working with you on this issue in the future.

7. *Please discuss NOAA's public-private partnerships with surface-based, aviation and space-based data providers, focusing on both innovation and benefits to both NOAA in meeting its mission needs, as well as benefits to the federal taxpayer.*

Answer:
On January 6, 2017, the NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) published the finalized version of its Commercial Space Activities Assessment Process. The document establishes a process by which NESDIS will assess and pursue commercial opportunities to support NOAA's space-based observational information requirements. NOAA has engaged commercial radio occultation (RO) providers for nearly ten years, including a study contract in 2008 and a Request for Information in 2014. In the last two years, NOAA has taken additional proactive steps to (1) develop policy documents to guide and standardize NOAA's use of commercial capabilities, and (2) execute a pilot program to demonstrate the quality of on-orbit commercial data and its impact on NOAA's numerical weather prediction models. NOAA will continue to execute Commercial Weather Data Pilot program activities in the near term and seek to meet occultation observation requirements with commercial data as those data become operationally available and their capability matures.

Furthermore, NOAA's Office of Oceanic & Atmospheric Research (OAR) has worked with Saildrone, a company developing USVs, under a Cooperative Research and Development Agreement for several years. OAR worked across NOAA to design equipment for the vehicle, plan and execute demonstration missions, and compare with current mission needs. The maturity of this work is currently advancing toward a higher readiness level.

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
National Oceanic and Atmospheric Administration FY 2019 Budget Request

1. *The Appropriations Committee has been made aware of problems NOAA has been having when it comes to the processing of hiring and other personnel actions in an accurate and timely manner.* ***What is the status of this issue, and what, if any, improvements are NOAA and the Department of Commerce making in this area?***

Answer:
Recruiting, developing, and retaining highly qualified staff is a tremendous challenge t. NOAA and the Department of Commerce have procured contractors to try to improve our hiring process. Due to the poor performance of one vendor, NOAA made the decision to stop work with that vendor, which temporary slowed the hiring process. Specifically, the vendor showed weaknesses in staff knowledge, supervision, and quality control measures among other issues. NOAA subsequently moved all hiring actions to the remaining vendor, who is staffing up to add capacity to handle the added hiring volume. The second vendor is now NOAA's sole provider for recruiting and hiring services and to date its performance has been satisfactory. However, the contract is nearing its spending ceiling, so NOAA and Enterprise Services (ES) have taken preemptive steps to ensure that adequate recruiting and hiring support will continue.

We believe awarding another contract for recruiting and hiring support services is the best way to optimize the hiring process in the short term. To this end, in April 2018, the Department of Commerce (DOC) released a Request for Information (RFI) for recruiting and hiring services with a similar scope to the current contract mentioned above. Once approved by the Department's Office of Small and Disadvantaged Business Utilization, a Request for Proposals (RFP) will be released.

The award of this Recruiting and Hiring (R&H) contract will provide immediate and critical relief to NOAA in its processing of hiring actions. However, this is a short-term solution to a broader problem, as the current Human Resource (HR) support services contract calls for a vendor to plug into existing technology rather than transforming it. To transform hiring across NOAA and other DOC bureaus, DOC and ES are in the process of developing a long-term solution for filling funded vacancies with quality candidates.

ES is in the procurement stage of building and deploying a technology-enabled, enterprise-wide, Talent Acquisition (TA) solution that relies on process improvements and a transformed service delivery model. An RFI has been released to gauge the market's ability to provide TA as a fully transformed, managed service. The goal of this future partnership is to enable ES to deliver a shorter time to hire, stronger candidates, and an improved experience for hiring managers.

In addition to these Departmental-level changes, NOAA's Workforce Management Office (WFMO) has undertaken a transformation of its operating model and processes in alignment with the several R&H service transitions. Most significantly, WFMO shifted its HR employees

towards a consultative and customer-centric service delivery approach, focused on such services as retirement, labor and employment relations, planning, and executive resources.

Since then, WFMO has created a series of hiring guidance resource tools to assist NOAA hiring managers clarify roles and responsibilities and further define the R&H process. For example, one tool created was the NOAA WFMO Hiring Guide, which is a comprehensive guide that helps managers navigate the hiring process.

2. *NOAA's FY 2019 request states that, "across all National Marine Sanctuaries, about $8 billion annually is generated in local coastal and ocean dependent economic activities such as commercial fishing, research and recreation/ tourism-related activities." At the end of 2016, I led a letter along with 13 of my colleagues in the House, asking the Obama Administration to begin the sanctuary designation process for Hudson Canyon, which is a massive underwater canyon about 100 miles off the coasts of New York and New Jersey.* ***Please give us an update on how NOAA is continuing to move forward with the designation process for Hudson Canyon, as well as others currently in inventory.***

Answer:
At this time, NOAA has proposed two sites from the sanctuary nomination process inventory for designation as new national marine sanctuaries: Wisconsin - Lake Michigan and Mallows Bay - Potomac River. In addition, NOAA is working on proposed boundary expansions for Flower Gardens Banks and Monitor National Marine Sanctuaries and a revision of management activities and regulations for the Florida Keys National Marine Sanctuary. NOAA is prioritizing these efforts and has not proposed designations of other new national marine sanctuaries at this time.

3. ***Given NOAA's assertion of the economic impact of National Marine Sanctuaries, why is the Trump Administration proposing to reduce funding for the Sanctuaries and Marine Protected Areas program?***

Answer:
The President's FY 2019 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, including the reduction to the Sanctuaries and Marine Protected Areas program.

The Honorable Matt Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
National Oceanic and Atmospheric Administration FY 2019 Budget Request

1. Elimination of Arctic Climate Research

The 2017 NOAA Arctic Report Card concluded that the changes we are seeing in the Arctic are unprecedented in the past 1,500 years. It is warming twice as fast as the rest of the globe. NOAA reported the findings to the White House Office of Science and Technology Policy (OSTP), and stated that, "The White House is addressing it, acknowledging it, and factoring it into its agenda." This budget, however, proposes to eliminate all Arctic climate research. The administration knows that the Arctic is warming, but it is choosing to cease studying the Arctic, let alone actually doing something along with the rest of world to combat the crisis.

a. *Does NOAA believe that this budget represents an adequate response to its report to OSTP?*

Answer:
The President's FY 2019 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, including the elimination of the Office of Oceanic and Atmospheric Research (OAR) funding for climate research in the Arctic. However, this is not a termination of NOAA's larger Arctic program. NOAA's other line offices will continue to conduct their Arctic activities highlighted in the Arctic Report Card, including observations, sea-ice modeling, hydrographic surveys, and natural resource surveys.

b. *What impact could cutting off funding have on national security? Could there be economic costs to a lack of understanding of the Arctic?*

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including the elimination of OAR funding for climate research in the Arctic. However, NOAA's other line offices will continue to conduct their Arctic activities highlighted in the Arctic Report Card, including observations, sea-ice modeling, hydrographic surveys, and natural resource surveys. The FY 2019 budget proposes to terminate improvements to sea ice modeling and predictions; however, existing models that support safety in the Arctic will remain available for reference.

2. Elimination of Arctic Climate Research

Warming in the Arctic alters the jet stream, which drives weather across America, and across the planet. Multiple NOAA scientists have stated that warming in the Arctic may have contributed to the destructive wildfires in California and the winter storms in the Northeast. A recent study by researchers from MIT found that a warm Arctic makes the blizzards that have bombarded the Northeast this winter two to four times more likely.

a. *How will eliminating Arctic climate research hamper our ability to understand its effects on U.S. weather? Please be specific as to which programs will be eliminated and how they would have helped us understand the effects of Arctic warming on our weather.*

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including the elimination of OAR funding for climate research in the Arctic. The proposed decrease includes the termination of Arctic research activities at the Earth System Research Laboratory's Global Monitoring Division and Physical Sciences Division; the termination of Pacific Marine Environmental Laboratory Arctic work; and the termination of the Climate Program Office's Arctic grants. However, with local, state, federal, tribal, private, and international partnerships, NOAA will continue to develop and apply technology and data in innovative ways to better provide Arctic residents weather and climate services, sea ice forecasting, nautical charting and other navigation services, natural resource management, and oil spill preparedness and responses.

b. *How will eliminating this research hinder our ability to prepare for costly blizzards and winter storms?*

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including the elimination of OAR funding for climate research in the Arctic. While research is always helpful to understand the weather–climate link, the National Weather Service (NWS) does not expect any significant impact to their primary seven to 10 day predictions. Eliminating NOAA's Arctic Climate Research will not hinder NWS' ability to issue timely watches and warnings for blizzards and winter storms.

3. Elimination of Arctic Climate Research

Eliminating Arctic research will directly impact Arctic fisherman, tourism, and local communities. Navigating the frigid Arctic Ocean is a dangerous task, one that our government should make as safe as possible. However, NOAA's own budget justification states that it will "terminate improvements to sea ice modeling and predictions that support the safety of fishermen, commercial shippers, cruise ships, and local communities."

a. *Exactly which safety-related improvements and programs will be terminated? Please be specific.*

b. *How will terminating those programs negatively impact the safety of our fisherman, commercial shippers, cruise ships, and local communities? What other organization, if any, is better situated to help keep our fishermen safe?*

Answer to a & b:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including the

elimination of OAR funding for climate research in the Arctic. However, this is not a termination of NOAA's larger Arctic program. NOAA's other line offices will continue to conduct their Arctic activities highlighted in the Arctic Report Card. NOAA is well situated to continue managing existing models that support safety in the Arctic. These will remain available for reference. Overall, the requested climate research reductions focus on external funding from NOAA's Climate Program while maintaining funding to critical missions such as earth systems research, long-term observations, seasonal-to-sub-seasonal research, and the National Integrated Drought Information System (NIDIS).

4. Climate Research Reductions and Eliminations

The NOAA budget proposes consolidating the Climate Prediction Center and the Weather Prediction Center. The proposal itself says the resulting decrease in funding will have negative impacts on national security at the DOD and USAID. It may increase food insecurity, hamper pandemic planning, and make it harder to reduce the risks of natural disasters.

a. Please describe in detail the impacts of this consolidation on our understanding of flood and drought risks?

Answer:

The budget language should have been clearer that current services and products will be maintained, but the development of new products would be slowed at the reduced funding level. The CPC will continue to produce existing two week forecasts, three-to-four week forecasts, and the seasonal to inter-annual predictions (including the United States Drought Outlook. Further, these global forecast products have supported national security planning and execution activities at the Department of Defense and the United States Agency for International Development, (USAID), including food security and disaster risk reduction, as well as pandemic health planning. Consolidating the Climate Prediction Center (CPC) with the Weather Prediction Center (WPC) will result in scaling back of decision support services at CPC as well as reduced capacity for some sub-seasonal to seasonal weather predictions and real-time blended weather observations.

CPC will continue to produce existing two week forecasts, three-four week forecasts, and the seasonal to inter-annual predictions including the USDO. However, development of new drought and flood risk products and their transition into operations will be reduced.

b. What do you feel are the negative impacts on national security from this consolidation?

Answer:

The consolidation will provide operational efficiencies and reduce costs to allow NOAA to continue to meet its core mission needs and ensure national security needs are met. However, this consolidation will limit some of NOAA's products and services such as climate prediction products with domains over hemispheres other than North America/Arctic. Some of these global climate predictions provide information that can lead to understanding of international phenomena like flood and drought that could impact food supplies. These global forecast products have supported national security planning and execution activities at the DoD and the USAID including food security and disaster risk reduction, as well as pandemic health planning.

c. How will this consolidation increase food insecurity, decrease disaster risk reduction, and hamper pandemic planning?

Answer:
See answer above.

5. Climate Research Reductions and Eliminations

Climate Competitive Research is vital to advancing our understanding of the Earth's climate system, and is a successful research program that brings together research universities, private partners, and NOAA laboratories. The current budget seeks to "dismantle the Climate Program Office as it current exists." What gaps in climate knowledge will be created by dismantling the Climate Program Office and ending all Climate Competitive Research grants? Please be specific as to the types of research and studies that will not take place if these grants are ended and this office is closed.

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including reductions to external funding provided by NOAA's Climate Program. However, internal funding for critical missions such as earth systems research, long-term observations, seasonal-to-sub-seasonal research, and the National Integration Drought Information System will be maintained. These activities provide the foundation for high priority programs and products such as advanced weather model development, the Tropical Pacific Observing System 2020 Project to improve El Niño-Southern Oscillation prediction, Regional Integrated Sciences and Assessments, and Drought Early Warning Systems, which the budget continues to support. The specific types of external research and studies that will be discontinued are lower priority activities that are not critical to NOAA's mission:

- Earth System Science that provides process-level understanding of NOAA's Earth climate system through observation, modeling, research analysis, and field studies to support the development of improved climate models and predictions.
- Modeling, Analysis, Predictions, and Projections to improve models of Earth system processes, and tests model capabilities to make them more relevant to decision makers for topics such as extreme heat, high water levels, drought, and tornado outbreaks.
- Climate and Societal Interactions work that enables scientists and decision makers to effectively co-produce and utilize climate information in risk management, adaptation and development.
- Climate and U.S. Fish Stocks research that advances understanding and projection of the impacts of climate variability and change on fish stocks, prey availability, and habitat to support sustainable fisheries management.

6. Climate Research Reductions and Eliminations

The Administration's budget would cut $2.4 million from our Regional Climate Centers (RCCs). RCCs have been around for more than 30 years helping businesses, farmers, and local communities to solve real world problems posed by climate change. RCCs respond to millions of requests for data every year. What organizations will fill the information gap left by defunding

RCCs? Who will provide critical information about emerging droughts and floods to our farmers, citizens, state and local agencies, and businesses that depend on RCCs?

Answer:
Regional Climate Centers (RCCs) are owned and managed through universities. While NOAA is the primary funding source for the RCCs, the RCCs receive funding from other state and local sources as well. The RCCs work with the NOAA Regional Climate Services Directors, State Climatologists, and other partners.

NOAA will work with the RCCs to prioritize the projects and work that address national needs.

7. Climate Research Reductions and Eliminations

The Administration is proposing the complete elimination of NOAA's resilience grants. These grants support coastal planning for floods and sea level rise while increasing the ability of communities to prepare for extreme weather. These grants are supported by a dollar for dollar match with the states, and states historically request many times the available funds. The National Institute of Building Sciences 2017 report found that every dollar invested in resilience saves $6 in future disaster costs. We just saw the most expensive year for extreme weather in the history of the nation. States are struggling. Why wouldn't we want to give them the tools to save taxpayer money and withstand severe weather? What additional funding will be made available to states so they are not left to foot the entire bill of resilience programs?

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including the elimination of NOAA's resilience grant programs. NOAA will continue to provide technical assistance and policy coordination support to coastal and Great Lakes states and communities that are at risk from extreme weather events. This assistance includes information resources, available through tools such as NOAA's Digital Coast, which help these communities to understand their risks and plan for improved resilience. NOAA also works with the Federal Emergency Management Agency and other federal partners to assist coastal managers with the resources they need to mitigate damage and sustain long-term recovery.

8. Forecasting Models and Next-Generation GFS

NOAA has proposed to delay the development of the next-gen GFS model. As a result it will, "reduce support to . . . research activities for the Hurricane Forecast Improvement Project." We just had an unprecedented year of catastrophic hurricanes. The damages totaled over $306 billion, shattering the previous record set during 2005 with Hurricane Katrina. 400,000 American citizens in Puerto Rico are still without power, over 7 months later. How can NOAA justify this reduction in funding given the devastating storms America has experienced the past year?

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including a proposal to slow the development of the Next Generation Global Prediction System (NGGPS), as

well as reducing support to research activities for the Hurricane Forecast Improvement Project. Progress on both of these initiatives will still be made, albeit slower. However, one-time funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018, will accelerate the pace of NGGPS development in FY 2018. In FY 2019 and beyond, NWS will continue to pursue rigorous efforts to advance both our global forecasts and our hurricane forecasts for the protection of life and property, but more time will be needed to achieve the end result.

9. ***Forecasting Models and Next-Generation GFS***

The United States has the most outbreaks of severe weather in the world. However, our weather prediction model, the Global Forecasting System, or GFS, is ranked 4th in the world. The European Union, United Kingdom, and Canada all beat us at weather prediction. America needs to be leading the way in developing next-generation weather prediction models. However, NOAA's budget proposes to slow down the development of the next-gen GFS.

a. One of the administration's priorities is "leading the world in...weather prediction." Has NOAA considered partnering with the world-leading Euro model or the geographically close Canadian model to improve GFS forecasts? If not, why not?

Answer:
NWS already collaborates with the European Center for Medium-range Weather Forecasts (ECMWF) and other international partners, such as the Canadian Meteorological Center (CMC) in sharing numerical weather prediction research and development knowledge and sharing model results in our operational modeling activities. For example, the North American Ensemble Forecasting System produces forecast guidance based on model ensemble forecasts run by both Canada and the United States. However, each country has different requirements and responsibilities for prediction models, providing unique perspectives that are complementary.

NOAA's prediction responsibilities range from the very short term – minutes to hours – to the longer term—10-15 days—to sub-seasonal and seasonal time-frames. ECMWF modeling responsibilities cover medium to seasonal ranges, and the ECMWF does not have short-term forecast and warning responsibilities similar to NOAA. We also partner with the Canadian Meteorological Center. All of the modeling centers share our model development and data assimilation techniques, and each works on improving their own modeling.

b. What negative economic impact can we expect from delayed development of the next-gen GFS? How will it affect our farmers, aviators, and energy utilities who depend on accurate weather forecasts?

Answer:
There is significant continuing work to develop and implement the next-generation global prediction system. However, we expect there will not be a negative economic impact if the improvements are slowed.

10. ***Forecasting Models and Next-Generation GFS***

The Weather Research and Forecasting Innovation Act of 2017, signed into law by the President, calls for the development of next-gen GFS. How does NOAA's proposal to slow down development square with the legal mandate to improve our weather forecasts?

Answer:
While the FY 19 budget proposes to slow down the development of the Next Generation Global Prediction System (NGGPS), progress will still be made; the progress outlined above clearly indicates NOAA is meeting the performance and public safety intent of the Act. In addition, one-time funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018, will accelerate the pace of NGGPS development.

Implementing the Weather Act is one of NOAA's top priorities and a lot of progress has been made in that effort. For example, the National Hurricane Center's track accuracy improved by 25 percent for the 2017 hurricane season. The NWS Hazard Simplification (or Haz-Simp) project is underway to improve communication of Hazardous Weather & Water events to the public, using new social, behavioral, and economic science & research. NOAA is also improving Sub-seasonal and Seasonal (S2S) Forecasts, providing data to a wide range of users, including transportation, commerce, public utilities, and tourism industries. Using the North American Multi-Model Ensemble (NMME) seasonal forecast system (transitioned to operational use in 2016), NOAA is providing monthly and seasonal temperature and precipitation outlooks to these sectors. Improvements will continue to be made, but just at a slower rate.

11. ***Polar Satellites***
Last year, this Committee included an additional $86 million on top of the administration's budget request of $877 million for the Polar Weather Satellites. We were concerned that the request level was not sufficient to avoid a gap in coverage. Once again, the administration is requesting a decrease in funding for the Polar Satellites. These polar satellites provide 85% of the critical data necessary for our weather forecasts.

a. *Where will the National Weather Service (NWS) get the data necessary to produce accurate forecasts about hurricanes, superstorms, blizzards, and tornadoes if there is a gap in polar satellite coverage?*

Answer:
NOAA is appreciative of the continued support from the Committee for its Polar Weather Satellites. The additional funding provided in the Consolidated Appropriations Act, 2018 for the Polar Follow On Program was used to continue the development of the ATMS, CrIS, VIIRS, and OMPS instruments for JPSS-3 and JPSS-4. It also allowed NOAA to maintain the original Launch Readiness Dates for JPSS-3 and JPSS-4. The FY 2019 funding will be used to develop essential spacecraft subsystems for JPSS-3 while enabling NOAA to strengthen the programmatic and technical synergies of JPSS-3 and JPSS-4 with JPSS-2 to increase cost efficiencies across the JPSS missions.

While it is a valid statement that a potential gap in polar coverage could lead to reduced model accuracy and potentially degrade official NWS forecasts, the satellites themselves have been providing data beyond their projected life cycle, sometimes almost double the expected timeframe, and this operation beyond planned lifetimes reduces the probability of a gap

occurring. Should a gap in polar coverage develop, NOAA has contingency plans for additional aircraft reconnaissance and other observations, as well as potentially using non-NOAA assets to fill some of the data void that would be created.

In addition, the NOAA data assimilation process is complex and robust, integrating data from many sources into forecast model systems. The observations system itself is robust and resilient, and while polar-orbiting satellites provide the largest fraction of data assimilated into NOAA's forecast models, these data are not supplied by a single satellite, but by a combination of operational, research, and international polar orbiters.

b. Are there any other agencies or organizations that could replicate the data lost by a gap in coverage?

Answer:
NOAA is committed to a robust polar satellite constellation to support NWS numerical weather prediction and maintain the level of services that the Nation relies upon. The Suomi National Polar-orbiting Partnership (Suomi NPP) continues to function well, meet all requirements, and serve as the primary satellite for operational weather data in the afternoon polar orbit. Joint Polar Satellite System-1 (JPSS-1) was successfully launched on November 18, 2017 and was made operational on May 31, 2018. In the unlikely event that JPSS-1 should fail before the end of its life or JPSS-2 (planned for launch in 2022) experiences a launch failure, NOAA would rely on data from international partners and legacy satellites.

c. If there is a gap in coverage as a result of reduced funding, how will that impact the ability of our emergency managers and first responders to protect life and property during extreme weather events?

Answer:
NOAA will continue to work hand-in-hand with emergency managers and first responders to provide the best information possible to protect life and property. As mentioned above, NOAA has contingency plans in the unlikely event of a gap in polar orbiting satellite data.

d. What are the potential impacts on our economic health as a nation if there is a gap in coverage and communities are unprepared for extreme weather?

Answer:
NOAA is committed to ensuring communities are prepared for extreme weather events by providing information that people use to guide or influence their decisions. Satellites, along with marine research vessels, researchers, and data systems are the backbone of NOAA weather products and services that provide such information. As highlighted above, in the event of a gap in coverage, NOAA will continue to work with emergency managers and first responders, especially during extreme events, to provide the best information possible to decision makers.

12. Reductions to National Mesonet Program

NOAA has made great progress in cultivating successful public-private partnerships. One example is the Mesonet Program. It uses existing observation stations at universities, energy

utilities, and private businesses to supplement its own dataset. This national program exists in all 50 states and collects data that would not otherwise be analyzed by NOAA. However, the budget proposes to decrease funding to the Mesonet program by $15.5 million and while also curtailing its geographic scope.

a. *Given the administration's emphasis on public-private partnerships and the need for the government to leverage private data, why is the Mesonet program—which does just that—being reduced?*

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including reductions to the supplemental observations of the Mesonet program. NOAA prioritizes the use of existing observing systems, such as NEXRAD radar, radiosondes, satellites, and other available observational data.

b. *If NOAA no longer has access to observations of imminent severe weather from its Mesonet partners, how will that impact NWS predictions? Will NWS warnings on tornadoes, flash floods, and imminent severe weather decrease in accuracy or precision?*

Answer:
NOAA will continue to meet its mission of issuing weather forecasts that protect lives and property. Current NWS operations use Mesonet data for situational awareness and as supplemental information that is used for the forecast and warning process. NWS relies heavily on radar, satellites, and spotter reports for issuing tornado, severe weather, and flash flood warnings. Further, NWS will still have access to some Mesonet data from priority states that are most susceptible to tornadoes and severe weather.

c. *One of the benefits of the Mesonet program is that it increases the geographic scope of NWS observations. How will the reduced scope and density of data impact the timely issuance of severe weather warnings, watches, and alerts for local communities?*

Answer:
NOAA will continue to meet its mission of issuing weather forecasts that protect lives and property. NWS relies primarily on radar, satellites, and spotter reports for issuing tornado, severe weather, and flash flood warnings. Further, NWS will still have access to some Mesonet data from priority states that are most susceptible to tornadoes and severe weather.

13. ***Ocean Acidification***

Our fisheries are important sources for food, jobs, and a source of economic strength. Our oceans have increased in acidity by 30% over the last three decades. While ocean acidification is often discussed in relation to coral reefs, it can also have a significant impact on the health of our fisheries. One of the administration's three priorities for NOAA is "increasing sustainable economic contributions of U.S. fisheries and oceans." Your budget proposal seeks to reduce

funding to ocean acidification research by 23.4 percent. How do you feel this reduction will impact the sustainability and health of our fishing stock?

Answer:
The President's FY 2019 Budget prioritizes rebuilding the military and making critical investments in the nation's security. It also identifies savings and efficiencies including reductions to NOAA's extramural Ocean Acidification funding. NOAA understands the need for a better understanding of ocean acidification impacts, and will continue to execute this research internally and with external expertise and other academic stakeholders.

14. National Weather Service Staffing

The administration's budget request ostensibly recognizes that accurate "weather forecasts enables the Nation's leaders . . . to provide better warnings and advisories to the public" and that "getting this right reduces the catastrophic loss of human life and property and the damaging effects on the national economy."

d. Why does NOAA's budget request propose to eliminate 20% of its forecasters who issue these forecasts, warnings and advisories?

Answer:
The proposal in the President's FY 2019 Budget to reduce NWS forecast personnel draws upon three studies on the workforce at the NWS—by the Academies of Science, the National Association of Public Administration, and McKinsey—and all have concluded that the NWS can operate more efficiently by exploiting technology and using better business practices. The Budget proposed a reduction of $15 million attributable to workforce savings, which equates to 110 full-time equivalents (FTE), this is substantially less than 20 percent of the NWS forecasters.

e. NOAA has found that NWS's ability to protect lives during major events has been compromised due to inadequate staffing at forecast offices. Why does it propose to further reduce hours of operations at these offices?

Answer:
The reduced staffing at NWS forecast offices from previous levels is primarily a result of inefficient hiring process, not funding levels. However, NWS notes that it has been able to fully operate at lower staffing levels by taking advantage of improvements in technology and better business practices, and plans to continue to pursue staffing reductions through more deliberate and tested reforms.

15. National Weather Service Staffing

The NOAA budget concedes that "operation times at various offices will be reduced" as a result of the proposed elimination of 20% of forecaster positions, and that this will present a "potential risk to the public and partners." Communities affected by these closures will have to rely on "other NWS offices . . . during off hours." Last May the GAO concluded that due to vacancies, NWS employees are "unable . . . to perform key tasks." Why are you proposing to further reduce staffing and put communities at risk?

Answer:
The FY19 Congressional Justification states, "*not all forecast offices serve the same constituency. Some offices respond to and serve a wide population, while others serve more remote locations... with this in mind,* operation times at various offices will be reduced to address partner needs to the maximum extent possible" and "*To minimize* potential risk to the public and partners, offices will collaborate with other NWS offices for met watch and services during off hours."

NOAA believes model and forecast process improvements will reduce the overall workload needed to generate the routine forecasts, thereby not requiring as much time for forecasters to spend on creating a routine forecast, and thus reducing inefficiencies. Furthermore, as the Secretary stated in his Budget hearing before the House Appropriations Subcommittee on Commerce, Justice and Science on March 18, "...we are not going to layoff anybody or leave any positions unfilled if we think there is any material risk of reducing the accuracy and timeliness of the forecast."

16. National Weather Service Staffing
The budget claims that NOAA will attempt to "minimize potential risk" by "collaborating with other NWS offices . . . during off hours . . . similar to the backup practice used today when there is a system or communications failure of an office." How does reducing staff at one office—only to transfer the workload to a back-up office and require additional staff to complete extra, overtime work— increase efficiency or produce any cost-savings?

Answer:
NOAA believes model and forecast process improvements will reduce the overall workload needed to generate the routine forecasts, thereby not requiring as much time for forecasters to spend on creating a routine forecast, and thus reducing inefficiencies. Furthermore, as the Secretary stated in his Budget hearing before the House Appropriations Subcommittee on Commerce, Justice and Science on March 18, "...we are not going to layoff anybody or leave any positions unfilled if we think there is any material risk of reducing the accuracy and timeliness of the forecast."

17. ***El Nino Southern Oscillation (ENSO) Seasonal Predictions***
El Nino and La Nina have a significant impact on weather across the country, and that weather in turn has a significant economic impact on the nation. NOAA's budget proposes to reduce funding for the Tropical Atmosphere Ocean array, which will lead to delayed recognition of El Nino and La Nina events and will increase the uncertainty of seasonal weather forecasts not just in the US, but around the world. Given the major economic impact of El Nino and La Nina and their impacts on global temperatures, what negative effects can we expect to see as a result of decreased funding for the TAO array?

Answer:
The proposed reductions to TAO will save taxpayers $1.3 million while maintaining 80 percent availability for the network. NOAA expects the network will continue to provide data needed to enable NOAA to fulfill its mission to protect life and property from weather events. The reduction in funding to the TAO array may delay recognition of the onset of an El Niño and the Southern Oscillation (ENSO) phenomenon and increase the uncertainty of seasonal weather

forecasts issued around the world, in turn delaying the ability to mitigate impacts of drought or other conditions signaled by the ENSO phenomenon. Fewer TAO buoys also degrades the seasonal and sub-seasonal forecast capabilities.

18. ***VIRS Sensor***

While NOAA has been a responsible partner in the polar satellite mission, the DoD still has not decided how it will satisfy its polar weather satellite obligation. As it now stands, the civil space sector is essentially subsidizing national security space. It is looking doubtful that the DoD will include the Visible Infrared Imaging Radiometer Suite (VIIRS) in its future satellite. VIIRS includes capabilities that DoD originally asked for that satisfy their critical requirements.

f. *If the DoD chose VIIRS for their contribution to the polar weather satellite constellation, would their VIIRS satellite complement and benefit the entire polar weather satellite constellation?*

Answer:
If the DoD selected the Visible Infrared Imaging Radiometer Suite (VIIRS) for their contribution to the polar weather satellite constellation, it would be a contribution that would complement the constellation. NOAA cannot comment on DoD's plans and defers to DoD.

g. *Would there be commonalities that could make the constellation more effective and efficient than if DoD were to develop their own sensor from scratch? What cost-savings can we expect from using the existing VIRS sensor?*

Answer:
DoD is aware of the VIIRS capabilities and NOAA will continue to keep them informed and/or answer their questions. NOAA cannot comment on DoD's plans and defers to DoD.

h. *Question 3: Has NOAA discussed with the Air Force the prospect that they utilize a satellite with VIIRS, rather than develop their own sensor? If not, why not?*

Answer:
NOAA is in constant contact with the polar weather satellite user community, which includes the U.S. Air Force (USAF). NOAA continues to provide requested information to the USAF. However, NOAA cannot comment on USAF's plans and defers to USAF.

WEDNESDAY, APRIL 18, 2018.

OVERSIGHT OF THE 2020 CENSUS

WITNESSES

RON S. JARMIN, ACTING DIRECTOR, U.S. CENSUS BUREAU
ROBERT GOLDENKOFF, DIRECTOR OF STRATEGIC ISSUES, GOVERNMENT ACCOUNTABILITY OFFICE
DAVID POWNER, DIRECTOR OF INFORMATION TECHNOLOGY, GOVERNMENT ACCOUNTABILITY OFFICE

Mr. CULBERSON. The Commerce, Justice, Science Appropriation Subcommittee will come to order. We are here today to receive testimony from the Census Bureau and the Government Accountability Office in preparation for the 2020 census, one of the things that the Constitution requires us to do, we want to make sure it is done correctly, frugally.

And the Census Bureau today is represented by Ron Jarmin. We are glad to have you with us. He is the acting director. And from the Government Accountability Office, we have Robert Goldenkoff and David Powner. Thank you very much for the work that you do on behalf of the taxpayers. And we welcome you to today's hearing and reiterate the importance of the job that you are doing.

We are having this oversight hearing to ensure that our constituents' very scarce, precious, and hard earned tax dollars are wisely spent, that the charge given to us by Article 1, Section 2 of the Constitution is fulfilled, that it goes off flawlessly, we hope, and accurately. We are required by the Constitution to conduct an actual enumeration of the population every 10 years. And ever since Thomas Jefferson ran the first census, we have met that goal, but we haven't always been within budget and that is a source of real concern.

Director Jarmin, we are entrusting you with our constituents' hard earned tax dollars and we are expecting you to be very frugal and careful in how they are spent. We have a big job ahead of us. Today I hope you will be able to convince the committee that the Census Bureau is working diligently to ensure an accurate enumeration that is on time and within budget. That is absolutely essential.

We have seen discouraging signs regarding cost, which are really distressing. Last May, your predecessor came before this committee to report a $300 million cost overrun. And by October, this had ballooned into a $3 billion overrun with the 2020 census estimated now to cost 15.6 billion. The overruns have just got to stop. We just can't function this way. And it has got to be done correctly.

The Commerce Department then asked the committee for a bailout and we just simply cannot repeat that episode under either yours or Secretary Ross' watch. I know that he is personally overseeing the operation of the census. I know there are a lot of very

capable career people that work under your direction, but this has just got to be done correctly, accurately, completely, and frugally, and within budget, and no more cost overruns.

Aside from cost, another major concern is cyber security. With all of the sensitive personal data that you have on Americans, the Census Bureau is a prime target for cyber criminals and hostile state actors. And like most Texans, I really treasure our privacy and am very wary of the federal government's overreach. When Americans give sensitive data to the federal government, we need to be confident that you can keep it safe.

It is a really important question. And as David, you and I visited about earlier, the fact that the IRS had a website crash yesterday is of real concern. I know that part of your oversight includes the IRS, so I want to be sure we talk about that today, about what happened with the IRS, if you—whatever you can tell us, and then to be absolutely certain that the census is secure, safe, and we are not looking at any similar problems.

One of the great things about this Committee on Appropriations is we all work arm in arm and I have really been pleased to have as our ranking member this year Joe Serrano of New York, who we worked together for many, many years as good friends. And this is the best subcommittee on appropriations. And delighted to have you back, my friend, to join us and happy to recognize you for any remarks you would like to make.

Mr. SERRANO. My remarks, as you can imagine, will be a little longer than yours, but I have been doing that since we began. That is why he did not hear me.

Thank you, Mr. Chairman. I would also like to welcome the acting director of the Census Bureau, Dr. Ron Jarmin, as well as Robert Goldenkoff, director of strategic issues, and David Powner, director of information technology. I apologize if I have mispronounced your names, but we can get into a conversation about what I have been called throughout the years. No one rolls their Rs anymore.

Mr. CULBERSON. When New Yorkers can mangle language like Texans. We can really mangle ours.

Mr. SERRANO. I started by saying that my statement would be a little longer than yours, but you understand.

Mr. CULBERSON. Of course.

Mr. SERRANO. The Census Bureau is now at a critical stage in preparation for the 2020 census. Final testing is underway in Providence. Staffing requirements are being finalized. Leases are being decided and rollout plans are happening now. Unfortunately, significant questions remain about the cost of the 2020 census and this administration's commitment to ensuring an accurate count.

Before I go further, I want to thank the Chairman for working with our side and the Senate to greatly increase Census Bureau funding in the fiscal year 2018 Appropriations Act. The $2.8 billion included in that bill will help ensure the Bureau can ramp up critical preparations to allow the decennial census to get back on track and to replicate the successful partnership program of 2010. However, the Bureau's costs will continue to increase as we get closer to 2020, and I am interested to hear how you are using the fiscal

year 2018 money and how your 2019 budget requirements are evolving.

However, with this administration, it often seems like we go one step forward and two steps back. No sooner does this subcommittee attempt to rectify significant funding problems and in a bipartisan fashion support the efforts of the Census Bureau, when we are forced to address another census crisis of the administration's own making. Of course, I am referring to the recent addition of a citizenship question to the 2020 census form.

The addition of a citizenship question to the decennial census without justification or testing is deeply troubling. It points to the politicization of what should be a non-partisan effort, a problem underlined by reports that this question was added over the objections of career officials at the Bureau.

The constitutional requirements to count all persons in our nation every 10 years allows the census to give us an important snapshot of how our communities are growing and changing. Unfortunately, with a citizenship question added to the form, many individuals will simply refuse to respond.

I represent a large immigrant community in the Bronx that feels targeted by this administration. This latest action will undermine efforts to build trust and participation in the census in my hometown and elsewhere, which in turn will undermine census accuracy, but also distort the important functions that we use this information for, like the distribution of federal formula funds. Ironically, this will greatly harm not just blue states but so-called red states too like Texas, Arizona, and Florida. All of those states could lose congressional seats and electoral votes that they would otherwise gain in an accurate census.

Aside from these important concerns, there is a significant literal cost to asking a citizenship question in the 2020 census. We know that Census Bureau experts and the Census Scientific Advisory Committee anticipated lower initial response to the 2020 census because of the inclusion of this question. Additionally, we know that lower response rates translate into higher costs for in-person follow up visits. Add to that the lack of testing of this subject matter, and we here at the Appropriations Committee will be left to foot the bill, a larger bill than anticipated without a clear understanding of what that will be.

That is, in part, why I hope to work with the Chairman and others to prevent these problems from occurring by precluding the Census Bureau from moving forward with this wrongheaded proposal. I know we all share the goal of an accurate and cost-effective decennial census. However, it is troubling that all this—at this late stage, we still have serious questions about the administration's commitment to the same. And I am looking forward to that discussion today.

Before I end, Mr. Chairman, let me just say that at these committee hearings, we always try to keep the issues on the issues, if you will, and not get into personal feelings. But I personally feel offended that part of that citizenship question asks the following: were you born in the United States? And then you answer yes or no or you skip it. That is what will happen with some people.

Then it asks where were you born, and it lists all of the territories, Puerto Rico, and so on. Now, the census form doesn't ask were you born in Texas, were you born in California, were you born in New York, but it does ask were you born in a territory? If I fill it out correctly and not boycott that question, I will become part of a group of people that wrong-minded people, or people who hate, or people who are not in tune with what should be, will say look, we have 5, 10 million people who were born in a territory, or we have X amount of people who were not born—they will be seen as not being born fully Americans, when in fact, I was born an American citizen in a territory.

Which then begs the question that I have been asking for years. Why not include the territories in the total count? In other words, what is the population of the United States? Is it the 50 states and then the territories, which is what we do now? No, the full population is everybody who lives under the American flag. And that should be counted as one number. So you don't have X amount of Hispanics, you have X amount plus Puerto Rico, plus the Virgin Islands, plus other places.

And so this question troubles me personally, and it offends me personally because it sets me apart. I grew up in New York since the age of 8. I served in the military. I am a Member of Congress. I have been blessed, and I can't be prouder of being an American. And to single me out, or to single my community out by saying were you born in a territory, the question asks itself. Why are we asking these questions? What is it that we hope to gain unless we are going to use it for something good?

If you tell me, were you born in a territory, and then you include it in the total population of the U.S., we can discuss that. But if you are just going to allow people to single it out, those—that small percentage of Americans who still can't get used to the fact that we exist or that Barack Obama was president, you know who I am talking about, they will get to use this information in their own way.

So I am sorry, Mr. Chairman, that I took extra time, but it has been a long time since a question or an issue bothered me personally more than this one. Thank you.

Mr. CULBERSON. Mr. Serrano, I absolutely understand. No problem. And we are glad to have you with us today to answer our questions. And Dr. Jarmin, you are recognized for your opening statement, which we would encourage you to summarize, and if there is no objection, we will enter your statement in its entirety into the record.

And I would ask each one of you to please keep your statements to five minutes. We will have additional time for questions. And you are recognized. Thank you very much.

Mr. JARMIN. Thank you, Mr. Chairman. Good morning, Chairman Culberson, Ranking Member Serrano, and members of the subcommittee. Before we begin, I want to express my appreciation for the appropriations bill passed by Congress three weeks ago. We are thankful not only for the financial resources but also for the flexibility that allows us to commit the resources required for the census when they are needed.

This year's appropriation helps to reduce overall risk to the 2020 census by enabling us to make critical investments beginning on October 1st. This appropriation and the way that it is structured underscores your commitment to the 2020 census and its success.

Today, we are actively testing systems and operations in the 2018 end to end test. This is our final major test before the 2020 census. We are validating the interfaces between 44 critical systems and their integration with 24 major operations. As we speak today, we are in peak data collection operations in Providence County, Rhode Island. And just an aside, we just spoke with a Boy Scout troop from Providence on the way in the door here this morning. And the Scout leader's father works as an enumerator, so I thought that was interesting.

So anyway, Providence is an ideal location choice for this because it presents many of the different situations and challenges that we will face across the country in 2020, and its demographics mirror those of the nation. The self-response phase of the test began with a series of mailings that were sent to housing units last month. I monitor self-response daily, as do many others at the Bureau and the department. Notably, we were receiving a high number of responses via the internet and the overall response rate is as anticipated. As of this morning, we are at 32 and a half percent.

All of the planned innovations for the 2020 census are coming together in the test. And the lessons learned will provide a firm foundation for success in 2020. We are looking closely at the data from the address canvassing operation to make sure that our blend of in office and in field address canvassing meets our standards. Our internet and telephone operations are being thoroughly tested as is our paper data capture operation. And we are continuing—or confirming our ability to make it easier for people to respond with a smart phone or a tablet.

In a few short weeks, our field staff will begin collecting information with handheld devices and we will leverage automation to manage their work efficiently. Finally, we will examine the use of administrative records to inform final determinations about our ability to improve the efficiency of the non-response follow up operation with information that people have already provided to the government.

During and after the tests, we will adjust our systems and operations based on what we have learned to make sure that both are ready for the 2020 census. As we enter peak operations for the test, 40 out of the 44 systems required for the test have been deployed. No system will be released without completing the necessary integration testings and security authorizations. And all 44 are on track to be fully integrated and deployed when they are needed to support test operations.

The Census Bureau has been working closely with the Government Accountability Office to ensure that we have consistent understanding of the status of systems readiness and we are closely monitoring the final development and testing of the remaining systems. We are working intently to ensure that the systems are secure and they are authorized to operate.

The ATO process is critical as it ensures that cybersecurity standards are addressed and risks are minimized for all of the sys-

tems. GAO is reviewing our progress to ensure that our processes and procedures are consistent with best practices, are well understood, and are followed.

We value the independent assessment of GAO and we are thankful for their continued engagement. We are also engaging with NIST, the Department of Homeland Security, other federal agencies, and with the private sector to address and reduce cybersecurity risk. We are working together to make sure that participating in the census is safe and secure, and that the information we collect is protected.

Finally, we have a well-developed process for conducting the scalability test on our systems during 2018 and we are eager to meet this critical milestone and fine tune our systems to scale to predicted loads in 2020. All of our preparations are aimed at achieving our objective of the complete and accurate 2020 census. This means that we must also encourage people to respond.

As in past decennial censuses, we will mount a robust communication and partnership program to encourage everyone to respond, including those who are traditionally hard to count. For 2020, we are compiling research and data that will serve as the foundation for our communications and partnership program that was stronger than in 2010. With the support of the recent appropriation, we are looking at accelerating communications activities and ramping up our partnership staff earlier than planned.

Seasoned partnership specialists with many decades of experience have been working since January 27 to help tribal, state, and local governments to develop complete count committees which bring leaders and government officials together to develop plans to support the 2020 census. As we ramp up to 1,000 partnership specialists in fiscal year 2019, our goal is to exceed the 248,000 community partners that we had in 2010.

Census partners help everyone know that responding to the census is safe and important. Thank you and I look forward to your questions.

PREPARED STATEMENT OF

RON JARMIN, PhD.
PERFORMING THE NON-EXCLUSIVE DUTIES OF THE DIRECTOR
U.S. CENSUS BUREAU

Before the Appropriations Committee,
Subcommittee on Commerce, Justice and Science

U.S. House of Representatives

18 April 2018

Good morning Chairman Culberson, Ranking Member Serrano, and Members of the Subcommittee. Before I begin this morning's testimony, I want to express appreciation for the appropriations bill passed by the Congress three weeks ago. We are thankful not only for the financial resources, but also for the flexibility that allows us to commit the resources required for the census when they are needed. This year's appropriation helps to reduce the overall risk to the 2020 Census by enabling us to make the critical investments in systems, operations and our Communications and Partnerships programs beginning on October 1 without having to worry about the prospect of a continuing resolution. This appropriation, and the way that it is structured, underscores your commitment to a successful 2020 Census.

2018 End-to-End Census Test

Today, we are in the midst of the 2018 End-to-End Census Test. This is our final major field test before the 2020 Census. We are testing the interfaces between 44 IT systems critical for the Census, and their integration with the 24 major operations that are part of the 2018 End-to-End Census.

The 2018 End-to-End Census Test began in August 2017 with the implementation of the address canvassing operation in three locations: Pierce County, Washington; the Bluefield-Beckley-Oak Hill, West Virginia area; and Providence County, Rhode Island. These locations allowed the Census Bureau to test systems in areas with and without Internet connectivity and to study critical address list development operations in a wide range of geographical situations with conditions similar to those in

many other areas throughout the country, including rural and mountainous areas. Importantly, in areas with low Internet connectivity, Census Bureau field staff were able to receive their assignments and submit their payroll and operational data at the beginning or end of their shifts, which were planned to occur in an area with Internet connectivity, but they did not require Internet access while they were actually conducting the listing operation. We were able to successfully integrate with the operational control system effectively in field conditions. We also integrated with the other decennial systems successfully, such as the system we are using to provide directional information to staff ensuring they complete their work in the most efficient manner possible. Additionally, we also tested the implementation of the independent quality control component, which ensures the proper disposition of cases in real time providing us with important information when cases fail to pass quality control.

The 2017 Address Canvassing effort also revealed areas where our systems and operations need to improve, especially with regard to training. Some of these areas are being addressed as we continue to refine our training modules. Address listing is a complicated process, and we have identified ways to improve technical training. In addition, the West Virginia site, in particular, experienced connectivity issues. The challenge of unreliable wireless signals is one of the reasons that site was chosen. Because of connectivity issues, some of the employees hired to carry out the address listing operation had difficulty completing the self-paced online training at their homes. We continue to examine the experiences of our listers so that we can enhance this functionality and improve both systems and operations.

We are conducting the End-to-End test to learn how our systems and operations function in a near-census environment. Just as we learned a great deal from the Address Canvassing Operation, we are also learning from the operations we are conducting in Providence this year, and we will be making the necessary adjustments to our systems and operations in response to what we observe and experience during the 2018 End-to-End Census Test.

We are now in the midst of peak data collection operations for the 2018 End-to-End Census Test in Providence County, Rhode Island. Providence County was an ideal location choice because it presents many different situations and challenges that we will face across the country in 2020, and its demographics mirror those of the nation. Providence County has a population of over 600,000 and more than a quarter-million housing units, and the county's population includes historically hard-to-count

populations. Providence County provides us with the opportunity to test all of the systems and operations planned for the 2018 End-to-End Census Test. In urban areas of Providence County there are areas with high vacancy rates and where many of the neighborhoods and housing have undergone considerable conversion for many years, which provide the opportunity to validate our address canvassing operation (for example, identifying split or converted housing units), and there is a solid presence of Group Quarters, which are residences that contain multiple unrelated residents.

The self-response phase of the test began with a series of mailings that were sent to housing units beginning last month. So far, the response rate is higher than we anticipated, and we are receiving a high number of responses via the Internet. Households are also responding via the telephone or returning the paper questionnaire by mail. However, consistent with our planned approach for the 2020 Census, the only households that received a questionnaire on the first mailing are those that either do not have strong Internet connectivity or are considered unlikely to use the Internet. Elderly households often fall into this latter category. Regardless, every nonresponding household that has not responded after three mailings will receive a paper questionnaire on the fourth mailing.

There are three additional phases in the peak operations in Providence, Rhode Island. First, the Group Quarters operation is designed to enumerate people who live in places such as college dormitories, skilled nursing facilities, and prisons. Second, the Update Leave operation is designed for areas that do not have what we call "city-style" addresses, which are addresses like 100 Main Street where the address and the geographic location of the housing units are linked. Areas without city-style addresses are most common in rural areas where mailing addresses are grouped together (e.g. multiple mail boxes grouped together at the end of a rural road) and not tied to the geographic location of the actual housing unit. During Update Leave, field staff will update our address list and leave a questionnaire packet at each household in this area. Those that do not respond are included in the next phase, the Nonresponse Followup (NRFU) operation, which is the third operation. In NRFU, we collect the information by sending a census enumerator to interview the household.

All of the planned innovations for the 2020 Census are coming together in the 2018 End-to-End Census Test, and the lessons learned will provide a firm foundation for success in 2020. We are looking closely at data from the Address Canvassing operation to make sure that our blend of in-office and in-field

Address Canvassing meets our standards for an accurate and comprehensive address list. Our Internet and telephone operations are being thoroughly tested, as is our paper data capture operation, and we are confirming our commitment to making it easier for people to respond in real time with a smart phone or a tablet. In a few short weeks, our field staff will be collecting information with hand-held devices, and we will leverage automation to manage their work efficiently and effectively. Finally, we will examine the use of administrative records to inform final determinations about our ability to improve the efficiency of the NRFU operation with information that people have already provided to the government. During and after the test, we will adjust the systems and operations based on what we learned to help us make sure that both the systems and operations are ready for the 2020 Census.

Systems Readiness

We developed a comprehensive schedule for developing and integrating the key systems for the 2018 End-to-End Census Test. Each system has its own well-defined scope, requirements, schedule, and costs, and each is overseen by experienced project management teams. As we enter the peak operations of the test, 40 out of the 44 systems supporting the test have been deployed. No system will be released without completing the necessary integration testing and security authorizations, and all 44 are on track to be fully integrated and deployed when they are needed to support operations in the test.

The Census Bureau has been working closely with the Government Accountability Office (GAO) to ensure that we both have a consistent understanding of the status of systems readiness, and we are monitoring final development and testing of the remaining systems needed for the 2018 End-to-End Test. All of our systems for the 2020 Census are being integrated through a contracted solution that we refer to as the "technical integrator."

The Census Bureau's Office of Information Security, under the guidance of the Department of Commerce's Chief Information Officer, is working with the technical integrator to ensure that the systems are secure and are authorized to operate (ATO) before going live. The ATO process is critical because it ensures that cybersecurity standards are addressed and risks are minimized for all systems based on federal policies and procedures. GAO is reviewing our progress to ensure that our processes and procedures within our Systems Engineering and Integration framework are consistent with GAO's

best practices. We value the independent assessment of GAO and are thankful for their continued assessment and support in regards to systems readiness.

With respect to the 2018 End-to-End Test and looking forward to the 2020 Census, the Census Bureau is maintaining a well-defined schedule and framework for releasing systems for the remainder of the test and then for the 2020 Census. Lessons learned from the 2018 End-to-End Census Test will be incorporated to enhance and improve the systems. We also have a well-developed process for conducting the scalability tests on our systems during 2018. The technical integrator is enabling the scalability test using infrastructure in the cloud and the data center. Conducting the scalability tests is a major milestone this year, and we are eager to meet this milestone and fine tune our systems to scale to predicted peak loads in 2020.

Finally, we are engaging with the Federal government intelligence community in the area of cyber security with the goal of working together to make sure the information we are collecting is protected, and that we can withstand the threat of cyber attacks.

2020 Operations Already Underway

It is important to note that even as we are in the midst of the 2018 End-to-End test, key operations for the 2020 Census are already up and running. We met an important legal milestone when we delivered the questions for the 2020 Census and the American Community Survey on March 29, 2018.

The Local Update of Census Addresses (LUCA) program, which began last year, is currently underway. LUCA provides tribal, state, and local governments an opportunity to review and comment on the Census Bureau's address list, while following the requirements of Title 13. More than eleven thousand governmental units have registered for the 2020 Census LUCA program. The Census Bureau has begun sending these governments their address packages so that they can conduct their review. For the 2020 Census LUCA program, 45 states, the District of Columbia, and the Commonwealth of Puerto Rico, as well as major counties and cities, and tribal governments, have chosen to participate. In fact, while the current LUCA registrations exceed the registrations for the 2010 Census program, we are even more pleased that these participating governments cover more than 98 percent of both the housing units and the population across the country. This is unprecedented relative to 2010 or 2000, when LUCA began. The

success of this program is a testament to the strong relationships our Geography Division has continuously been building with state and local governments.

Our "In-Office Address Canvassing Operation" also continues. This is one of the important innovations in the 2020 Census. Since 2015, staff have been updating the most recent Census Bureau address list with new information from the United States Postal Service (USPS) and data from tribal, state, and local governments and third parties (i.e., commercial vendors). They review satellite imagery to determine where changes in addresses are occurring, and based on these changes, the Census Bureau will develop a plan for capturing those changes. This plan will include In-Field Address Canvassing where address updates cannot be obtained or verified or in areas undergoing rapid change. The number of addresses requiring In-Field Canvassing is expected to be approximately 30 percent of the total number of addresses, which is a far cry from 2010, when we conducted In-Field Canvassing across the entire country.

Enumerating Traditionally Undercounted Populations

Ultimately, the objective of the Census Bureau -- the objective to which all of the systems development and the implementation of the operations is directed -- is to ensure a complete and accurate census. This means we must also encourage people to respond. As in past decennial censuses, we will mount a robust Communications and Partnership Program to encourage everyone to respond, including those who are traditionally hard to count. People may be hard to count for different reasons, such as being highly mobile, homeless, living in remote areas, or living in gated communities. Others may be reluctant to respond because they are suspicious of the government or have low levels of community engagement. Finally, others may be willing to participate in a census but may find it difficult to respond due to language barriers, low literacy, or lack of phone or Internet access.

For 2020, we are building a research foundation for our Communications and Partnership Program that is stronger than in 2010. We are currently conducting the Census Barriers, Attitudes and Motivators Survey (CBAMS), which consists of two components. First, a *quantitative* survey was mailed out to 50,000 households. We expect data from this survey in the summer, which will give us important information about the major population groups in the country. The second component consists of *qualitative* focus groups that will allow us to hone in on the attitudes and motivators of smaller population groups and

populations that cannot be well represented in the quantitative survey, including American Indians, Alaska Natives, and people who speak other languages and are not proficient in English.

The information we receive from CBAMS will be combined with other data at the Census Bureau that we are using to develop models projecting the likelihood of people to respond. Along with the information from CBAMS, this information will provide us with the strongest research foundation we have ever had. These research efforts will help us ensure that our messaging is as effective as possible, and that our advertising and partnership efforts are well-directed. Finally, with the support of the recent appropriation, we are looking at other important communications activities and ramping up our partnership staff earlier than planned.

We recognize that communications and partnership is at the heart of reaching traditionally hard to count populations. Extensive advertising in the form of media consumed by specific populations is critical. In addition to traditional media, we will be active in digital media and on the web. Our advertising and partnership support materials will be in multiple languages, and we will develop and implement a Statistics in Schools program that will help young people understand the importance of responding to the census so that they can take the message home to their families. We also plan to strengthen our national and local partnerships.

We are currently reaching out to major corporations and national organizations, two years ahead of Census Day, so that they can build support for the 2020 Census into their business plans. This is the earliest we have ever started this effort. In addition, seasoned partnership specialists, many with decades of experience, have been working since January 2017 to help tribal, state and local governments develop "Complete Count Committees," which bring leaders and government officials together to develop plans to support the 2020 Census. As we ramp up to 1,000 partnership specialists in FY 2019, our goal is to exceed the 248,000 community partners we had in 2010. Our partners are the trusted voices in communities across the country. They include schools, hospitals, clinics, legal aid centers, faith-based organizations, and businesses large and small. Census partners help everyone know that responding to the census is safe and important, and that their responses are confidential and protected by law.

Our efforts to reach traditionally undercounted populations do not stop with communications and partnership. Through our language program, in addition to English we will make it possible to respond to the Census in 12 languages covering nearly 99 percent of the population, or 87 percent of those with limited English proficiency. We also will provide language support materials in a total of 59 languages, and we are developing templates to help our partners carry our messaging in the languages and dialects spoken by small population groups throughout the country.

Precisely in order to reach people who live in different places and situations, the communication and partnership program based on research will be the most tailored in our history. In fact, most of the operations I have mentioned —from our field operations, to our communication and partnership efforts, to our language—are tailored to reach people who live in different places or situations. We tailor our operations for rural areas and for areas that have experienced natural disasters. With that in mind, I would also like to share that we recently made the decision to extend the Update Leave operation that I described earlier across the entire Commonwealth of Puerto Rico. This will help us ensure that our address list is correct, and that we are adapting to any changes caused by Hurricane Maria. We will make similar changes to other areas as necessary, including the Gulf States impacted by flooding, and those parts of the Western states that experienced wild fires. In addition, as mentioned earlier, our Group Quarters operations make sure that we reach people in group homes, college dormitories and prisons, as well those experiencing homelessness. We also conduct a specific operation in remote Alaska that actually starts in January of 2020 before the tundra thaws and many people leave their towns and villages. These are only some of the many other examples of the steps we take to adapt our operations to the unique places where people live.

Finally, we are asking federal, state, and local leaders to encourage their constituents to stand up and be counted. We ask that leaders remind the public that the answers they provide on a census form are confidential and protected by law. It is important that community leaders ensure the public knows that census answers may not be used for law enforcement or any other purpose that would reveal a person's identity or how an individual responded to a question. Anyone who handles Census data swears an oath to keep those data confidential for life. Under Title 13, using these personal data for any other reason than to produce population statistics is punishable by fines and up to five years in prison. Public encouragement and reassurance would help achieve our goal of

a complete and accurate census. We go to great lengths to include people living in every situation, because in the decennial census it does not matter how hard it is to reach someone, what matters is that we reach everyone.

Activities Supported by the FY 2019 President's Budget

The FY 2019 President's Budget requests $3.8 billion for the Census Bureau. Within this total, the Budget requests $3.5 billion for the Bureau's Periodic Census and Programs account, of which $3.1 billion supports the 2020 Decennial Census. As noted above, the Census Bureau appreciates this Committee's support for the decennial census and the inclusion of an additional $1.1 billion beyond the program's estimate for 2018 (including contingency funds) in the 2018 Omnibus appropriations act. These funds will help to provide financial certainty to the program as we transition from FY 2018 to FY 2019, and represent a down payment on the $3.1 billion requested in 2019 to continue all preparatory activities and existing field operations.

As we move into 2019, we will be undertaking a wide range of simultaneous activities designed to finalize preparations for the 2020 Census as outlined in the President's budget. Key activities for the 2020 Census will take place in 2019. We will be making final refinements for all systems to ensure they meet all requirements, are secured, tested, and are seamlessly integrated. The field offices and other field infrastructure must be stood up nationwide in 2019, with the first 40 Areas Census Offices (ACO) offices opening between January and March of 2019, and the remaining 208 offices opening in the summer of 2019. The ACOs will house the managers, staff, materials, and equipment needed to support the hundreds of thousands of Census Bureau employees conducting local census operations.

We will also be increasing the number of Partnership Specialists to our planned level of 1,000. This staff will work throughout 2019 to build the network of more than 300,000 census partners who will be the trusted voices to encourage communities across the nation to respond to the 2020 Census. In October 2018, we will also begin the full-scale development and implementation of all aspects of the Communications Program, including the establishment of the media spend plans, the messaging, and the creative treatments of the advertising campaign. This work lays the foundation for our first advertising buys for the 2020 Census in May 2019.

In 2019, we will conduct the first major field operation: In-Field Address Canvassing, which I mentioned earlier. In this operation we send listers out to areas that are the most difficult to canvass and cannot be updated in the In-Office Address Canvassing Operation. Approximately 76,000 field listers and supervisors will be trained and sent into the field to complete this difficult and important work from mid-August to early October of 2019. Recruitment for this operation will take place in the spring of 2019, with training beginning in summer 2019. The operation itself will begin in late summer and stretch to early fall.

The 2020 Census questionnaire and materials must be finalized by early 2019 so the physical printing of the majority of the paper materials for the 2020 Census can begin in June. We will also finalize and secure all of the operations and systems related to the use of administrative records and third-party data and ensure they are working together in preparation for use in the 2020 Census.

Finally, I would be remiss if I did not mention the other programs supported by the President's budget. The Current Economic Statistics programs provide monthly, quarterly, and annual data on the Nation's economy that move markets and drive economic growth. The FY 2019 request supports continued collection, processing, and dissemination of data used to calculate measures of GDP and other principal economic indicators. We also will be doing important work on the Economic Census, which is the cornerstone of the Nation's economic data, providing the foundation for GDP and other economic indicators and benchmarks for the current economic surveys. In 2019, work that has been deferred related to data collection will finish, including follow-up, telephone contacts, and updating the business register.

The request also supports the Current Demographic Statistics Programs, which provide social and economic information on a monthly, quarterly, and annual basis that are used to create the official measures of employment, unemployment, and poverty. These programs also produce widely used measures of income and health insurance coverage. Each year, these programs enable the Census Bureau to release updated estimates of the population of the U.S, states, counties, cities, and townships.

Additionally, the President's request supports the American Community Survey (ACS). The collection of ACS data from 3.5 million households per year is a massive logistical undertaking, covering everything from the initial mailing of forms to households and the processing of mail and Internet responses, to collection of data from non-responding households through personal interviewing, to processing and releasing the data in ways that make these valuable data available to users and protects the confidentiality of respondents. The data that the ACS collects are critical for communities nationwide—the ACS is the only source of many of these topics for rural areas and small populations. In addition to federal government agencies, businesses benefit from ACS data as do state, local, and tribal governments.

All of the censuses and surveys we conduct at the Census Bureau are important, and we appreciate the support of the Congress for the wide range of work we do each year. With two years until Census Day, though, I think the Congress is appropriately focused on the 2020 Census, and as you can see, we are now heading full speed ahead. We have a lot of work to do, but we are well underway. I look forward to answering your questions.

Mr. CULBERSON. Thank you very much, Director Jarmin. We look forward to hearing from you, Mr. Goldenkoff. Thank you very much.

Mr. GOLDENKOFF. Thank you. Chairman Culberson, Ranking Member Serrano, and members of the subcommittee, GAO is pleased to be here today to discuss the Census Bureau's readiness for the 2020 head count.

As you know, in recent years, we have identified a number of operational, IT, and other challenges that raise serious concerns about the Bureau's ability to conduct a cost effective enumeration. And in February 2017, we added the 2020 census to our list of high risk government programs. My remarks today will focus on two such challenges: implementing design innovations aimed at controlling costs and developing reliable cost estimates that better account for risks and inform annual budget requests.

My colleague, Dave Powner, will then discuss the challenges the Bureau faces in implementing and securing critical IT systems. The bottom line is that while the Bureau has made important progress toward mitigating some of the risks facing the census, and we are encouraged by the top level oversight being applied by the Department of Commerce, the census is now projected to cost $15.6 billion, a $3 billion increase over the Bureau's original estimate, and what's more, significant uncertainties lie ahead.

For example, with respect to design innovations, to help control costs while maintaining accuracy, the Bureau will use new procedures and technology for 2020 including greater use of automated data collection methods, administrative records in place of data collected by enumerators, verifying addresses using aerial imagery and other in office procedures rather than by going door to door, and allowing households the option of responding to the census via the internet.

While all these new methods show promise for controlling cost, they also introduce new risks in part because they have not been used to a great extent in prior decennials, if at all. So to help ensure that key systems and procedures will function as planned, since 2012 the Bureau has held a series of tests at various sites across the country. However, citing funding uncertainties, the Bureau has curtailed recent testing efforts.

As one example, the Bureau is currently conducting, as was mentioned, the 2018 end to end test. Essentially, it is a dress rehearsal for the actual enumeration. And the 2018 test is critical because it is the Bureau's final opportunity to demonstrate that essential census taking activities will perform under operational conditions.

While the Bureau originally planned to conduct the 2018 test in three locations, two sites, areas of Washington State and West Virginia, were eliminated from a full test because of budgetary concerns. And a complete dress rehearsal will now only be held in Providence, Rhode Island. Without sufficient testing across a range of geographic locations, housing types, and demographic groups, operational problems can go undiscovered and the opportunity to refine procedures and systems will be lost.

Another risk factor is the Bureau's 2020 life cycle cost estimate. We found that the October 2015 version of its estimate fell short in our four best practices, only partially meeting the characteristics

of comprehensiveness and accuracy, and minimally meeting characteristics for being well documented and credible.

In December 2017, the Bureau provided us with the documentation used to update its cost estimate. And based on our preliminary analysis, we have found that the Bureau has improved its cost estimation process in each of those four best practices.

So in short, while the Bureau and Department of Commerce have taken important steps to keep preparations for the decennial on track, a number of challenges and uncertainties remain. Going forward, continued leadership attention and congressional oversight will be needed to help ensure key components and systems are fully tested and will function as required, preparations stay on schedule, management functions follow leading practices, and any further cost growth is capped.

This concludes my prepared remarks. I will now turn it over to my colleague, Dave Powner.

Mr. CULBERSON. Thank you, Mr. Powner, you are recognized.

Mr. POWNER. Chairman Culberson, Ranking Member Serrano, and members of the subcommittee, thank you for inviting us to testify on the Bureau's efforts to deliver and secure technologies for the 2020 census.

Since the last time we appeared before this subcommittee, the Bureau has announced a $3 billion increase to the overall cost of the decennial. About half of this increase or 1.5 billion is associated with IT. On a positive note, since Secretary Ross announced this cost increase, we have seen strengthened governance at both the Department of Commerce and at the Bureau. This includes the Bureau meeting monthly with Secretary Ross and weekly with the undersecretary for economic affairs.

Although positive, we still see room for improvements to the executive level reports that go to commerce on systems and security readiness. Your congressional oversight is essential to this transparency and I would encourage Congress to request these status reports to ensure that progress continues and risks are mitigated.

This morning I will briefly summarize the status of systems development and testing as well as security readiness. Starting with systems readiness, the Bureau has made progress having completely development on 30 of the 44 systems. I would like to note that that number differs a little bit than what—the 40 that was mentioned by Director Jarmin and perhaps we could talk about that during the Q and A. Key systems that need to be completed are the operational control system, the enumeration application, and the fraud detection system.

Despite delays, the Bureau has plans to have the operational control system and the enumeration application fully deployed by July so that it can be included as part of the end to end test. The fraud detection system has been delayed eight months. It is not planned to be ready now until October of this year.

Most of the systems that have been developed still need to undergo key integration testing to ensure that they interface or interact appropriately with other systems. My written statement shows that all but 8 of the 44 systems still need to undergo some sort of testing. And the 14 systems that must be delivered require significant

testing, meaning that they must undergo systems as well as integration testing.

Mr. CULBERSON. Could you say that again please? All but eight?

Mr. POWNER. Yes. All but eight of the systems need—so even though some systems are developed, there is still key integration testing that needs to occur. So what you do is you test them to make sure the system alone works. But the integration testing to make sure that they interact effectively is very important. And you want that done before it goes to the end to end test so that you test as much as this—as they operate as a unit of systems. OK?

It is important to note that since the—once the end to end test is completed, there will be additional development and testing that needs to occur in 2019 to address new functionality, additional scaling and performance issues, as well as defects that are found during the end to end test. In addition to the 44 systems, the Bureau needs to ensure that key infrastructure is in place and secure. This includes cloud solutions as well as the network and security operations.

Regarding cybersecurity, the Bureau, like other agencies, is constantly under attack. Recent incidents involved unauthorized access, phishing, and malware. The Bureau is working diligently to assess security controls, fix known deficiencies, and to have the proper sign off by both the chief information officer and the head of the decennial office to ensure that each system is ready for operations. 6 of the 44 systems have this sign off. 32 need to be reassessed given changes to the systems. And another 6 need to be completed, including the fraud detection system.

These reviews are important to ensure that cyber risks are at acceptable levels, especially since 39 of the 44 systems contain personally identifiable information. We remain concerned that the late delivery of several systems will not leave ample time to complete the reviews and approvals.

I would like to conclude with three recommendations regarding IT for the decennial. Number one, executives at both the department and Bureau need to stay engaged on the delivery and status of the systems and closely monitor the key risks. This includes the timely delivery of software to the technical integration for the integration testing that we just discussed, Mr. Chairman.

Second, the Bureau needs to have rigorous oversight of its contractors both during the end to end test and after as we lead up to the decennial.

And third, they need to aggressively manage cybersecurity risks of the systems and the infrastructure given the threats and vulnerabilities confronting the Bureau. Mr. Chairman, this concludes my statement.

United States Government Accountability Office



Testimony

Before the Subcommittee on Commerce, Justice, Science, and Related Agencies, Committee on Appropriations, House of Representatives

For Release on Delivery
Expected at 10:30 a.m. ET
Wednesday, April 18, 2018

2020 CENSUS

Continued Management Attention Needed to Mitigate Key Risks Jeopardizing a Cost-Effective and Secure Enumeration

Statement of Robert Goldenkoff, Director, Strategic Issues

and

David A. Powner, Director, Information Technology

GAO-18-416T

GAO Highlights

Highlights of GAO-18-416T, a testimony before the Subcommittee on Commerce, Justice, Science, and Related Agencies, Committee on Appropriations, House of Representatives

Why GAO Did This Study

One of the Bureau's most important functions is to conduct a complete and accurate decennial census of the U.S. population. The decennial census is mandated by the Constitution and provides vital data for the nation. A complete count of the nation's population is an enormous undertaking as the Bureau seeks to control the cost of the census, implement operational innovations, and use new and modified IT systems. In recent years, GAO has identified challenges that raise serious concerns about the Bureau's ability to conduct a cost-effective count. For these reasons, GAO added the 2020 Census to its high-risk list in February 2017.

GAO was asked to testify about the Bureau's progress in preparing for the 2020 Census. To do so, GAO summarized its prior work regarding the Bureau's planning efforts for the 2020 Census. GAO also included preliminary observations from its ongoing work examining the 2018 End-to-End Test. This information is related to, among other things, progress on key systems to be used for the 2018 End-to-End Test, including the status of IT security assessments, and efforts to update the life-cycle cost estimate.

What GAO Recommends

Over the past decade, GAO has made 84 recommendations specific to the 2020 Census to address the issues raised in this and other testimonies. The Bureau generally has agreed with the recommendations. As of April 2018, 30 recommendations had not been fully implemented.

View GAO-18-416T. For more information, contact Robert Goldenkoff at (202) 512-2757 or goldenkoffr@gao.gov or David A. Powner at (202) 512-9286 or pownerd@gao.gov.

April 18, 2018

2020 CENSUS

Continued Management Attention Needed to Mitigate Key Risks Jeopardizing a Cost-Effective and Secure Enumeration

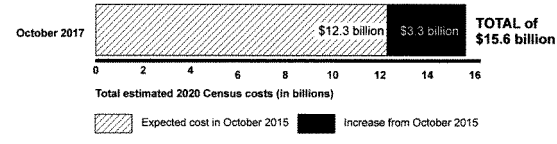
What GAO Found

The Census Bureau (Bureau) is planning several innovations for the 2020 Decennial Census, including re-engineering field operations by relying more on automation, using administrative records to supplement census data, verifying addresses in-office using on-screen imagery, and allowing the public to respond using the Internet. These innovations show promise for controlling costs, but they also introduce new risks, in part, because they have not been used extensively in earlier enumerations, if at all. As a result, robust testing is needed to ensure that key systems and operations will function as planned. However, citing budgetary uncertainties, the Bureau canceled its 2017 field test and then scaled back its 2018 End-to End Test. Without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost, as key census-taking activities will not be tested across a range of geographic locations, housing types, and demographic groups.

The Bureau continues to face challenges in managing and overseeing the information technology (IT) programs, systems, and contracts supporting the 2020 Census. For example, GAO's ongoing work has determined that the schedule for developing IT systems to support the 2018 End-to-End Test has experienced several delays. Further, the Bureau has not addressed several security risks and challenges to secure its systems and data, including making certain that security assessments are completed in a timely manner, and that risks are at an acceptable level. Given that operations for the 2018 End-to-End Test began in August 2017, it is important that the Bureau quickly address these challenges.

In addition, the Bureau needs to control any further cost growth and develop cost estimates that reflect best practices. In October 2017, the Department of Commerce announced that it had updated its October 2015 life-cycle cost estimate and now projects the life-cycle cost of the 2020 Census will be $15.6 billion, a more than $3 billion (27 percent) increase over its earlier estimate (see figure). The higher estimated life-cycle cost is due, in part, to the Bureau's earlier failure to meet best practices for a quality cost estimate. The Bureau provided GAO with the documentation used to develop the $15.6 billion cost estimate. Based on its preliminary analysis, GAO has found that the Bureau has made improvements in its cost estimation process across the best practices.

Increases to the 2020 Census Life-Cycle Costs Estimated by the Census Bureau



Source: GAO analysis of Census Bureau data. | GAO-18-416T

Chairman Culberson, Ranking Member Serrano, and Members of the Subcommittee:

We are pleased to be here today to discuss the U.S. Census Bureau's (Bureau) progress in preparing for the 2020 Decennial Census. Conducting the decennial census of the U.S. population is mandated by the Constitution and provides vital data for the nation. The information that the census collects is used to apportion the seats of the House of Representatives; redraw congressional districts; allocate billions of dollars each year in federal financial assistance; and provide a social, demographic, and economic profile of the nation's people to guide policy decisions at each level of government. Further, businesses use census data to market new services and products and to tailor existing ones to demographic changes.

For 2020, a complete count of the nation's population is an enormous undertaking. The Bureau, a component of the Department of Commerce (Commerce), is seeking to control the cost of the census while it implements several innovations and manages the processes of acquiring and developing information technology (IT) systems. In recent years, we have identified challenges that raise serious concerns about the Bureau's ability to conduct a cost-effective count of the nation, including issues with the agency's research, testing, planning, scheduling, cost estimation, systems development, and IT security practices.

Over the past decade, we have made 84 recommendations specific to the 2020 Census to help address these and other issues. Commerce has generally agreed with those recommendations and has made progress in implementing them. However, 30 of our recommendations had not been fully implemented as of April 2018, although the Bureau had taken initial steps to implement many of them.

We also added the 2020 Decennial Census to GAO's high-risk list in February 2017.[1] As preparations for the next census ramp up, fully implementing our recommendations to address the risks jeopardizing the 2020 Census is more critical than ever.

[1]GAO, *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, GAO-17-317 (Washington, D.C.: Feb. 15, 2017). GAO maintains a high-risk program to focus attention on government operations that it identifies as high risk due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement or the need for transformation to address economy, efficiency, or effectiveness challenges.

Currently, the Bureau is conducting the 2018 End-to-End Test, which began in August 2017 and runs through April 2019. This effort is the Bureau's final opportunity to test all key systems and operations to ensure readiness for the 2020 Census.

Our testimony today will describe (1) why we added the decennial census to our high risk list, including challenges in implementing and securing IT systems; and (2) the steps that Commerce and the Bureau need to take going forward to mitigate the risks jeopardizing a cost-effective census.

The information in this statement is based primarily on prior work regarding the Bureau's planning efforts for 2020.[2] For that body of work, we reviewed, among other things, relevant Bureau documentation, including the 2020 Census Operational Plan; recent decisions on preparations for the 2020 Census; and outcomes of key IT milestone reviews. We also discussed the status of our recommendations with Commerce and Bureau staff. Other details on the scope and methodology for our prior work are provided in each published report on which this testimony is based.

In addition, we included information in this statement from our ongoing work on the readiness of the Bureau's IT systems for the 2018 End-to-End Test. Specifically, we collected and reviewed documentation on the status and plans for system development, testing, and security assessments for the 2018 End-to-End Test. This includes the Bureau's integration and implementation plan, solution architecture, and

[2]For example, GAO, *2020 Census: Actions Needed to Mitigate Key Risks Jeopardizing a Cost-Effective Enumeration*, GAO-18-215T (Washington, D.C.: Oct. 31, 2017); *2020 Census: Continued Management Attention Needed to Oversee Innovations, Develop and Secure IT Systems, and Improve Cost Estimation*, GAO-18-141T (Washington, D.C.: Oct. 12, 2017); *2020 Census: Bureau Is Taking Steps to Address Limitations of Administrative Records*, GAO-17-664 (Washington, D.C.: July 26, 2017); *2020 Census: Bureau Needs to Better Leverage Information to Achieve Goals of Reengineered Address Canvassing*, GAO-17-622 (Washington, D.C.: July 20, 2017); *2020 Census: Sustained Attention to Innovations, IT Systems, and Cost Estimation Is Needed*, GAO-17-584T (Washington, D.C.: May 3, 2017); *2020 Census: Additional Actions Could Strengthen Field Data Collection Efforts*, GAO-17-191 (Washington, D.C.: Jan. 26, 2017); *Information Technology: Better Management of Interdependencies between Programs Supporting 2020 Census Is Needed*, GAO-16-623 (Washington, D.C.: Aug. 9, 2016); *2020 Census: Census Bureau Needs to Improve Its Life-Cycle Cost Estimating Process*, GAO-16-628 (Washington, D.C.: June 30, 2016); and *2020 Census: Additional Actions Would Help the Bureau Realize Potential Administrative Records Cost Savings*, GAO-16-48 (Washington, D.C.: Oct. 20, 2015).

memorandums documenting outcomes of security assessments. We also interviewed relevant agency officials.

We provided a copy of the new information that we are reporting in this testimony to the Bureau for comment on April 4, 2018. The Bureau provided technical comments, which we addressed as appropriate.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

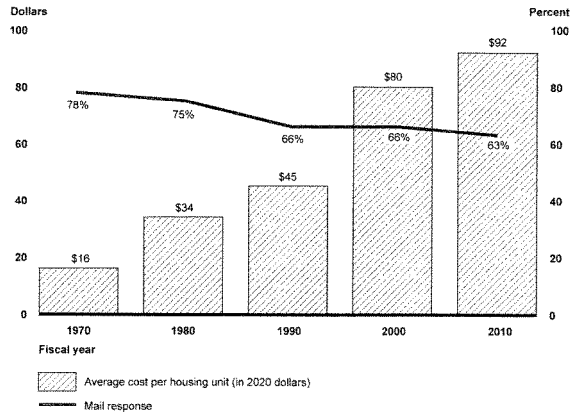
The cost of counting the nation's population has been escalating with each decade. The 2010 Census was the most expensive in U.S. history at about $12.3 billion, and was about 31 percent more costly than the $9.4 billion 2000 Census (in 2020 dollars).[3] According to the Bureau, the total cost of the 2020 Census is now estimated to be approximately $15.6 billion, more than $3 billion higher than previously estimated by the Bureau.

Moreover, as shown in figure 1, the average cost for counting a housing unit increased from about $16 in 1970 to around $92 in 2010 (in 2020 dollars). At the same time, the return of census questionnaires by mail (the primary mode of data collection) declined over this period from 78 percent in 1970 to 63 percent in 2010. Declining mail response rates has led to higher costs because the Bureau sends temporary workers to each non-responding household to obtain census data.

Achieving a complete and accurate census has become an increasingly daunting task, in part, because the population is growing larger, more diverse, and more reluctant to participate in the enumeration. In many ways, the Bureau has had to invest substantially more resources each decade to conduct the enumeration.

[3]According to the Bureau, these figures rely on fiscal year 2020 constant dollar factors derived from the Chained Price Index from "Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2020" table from the Fiscal Year 2016 Budget of the United States Government.

Figure 1: The Average Cost of Counting Each Housing Unit (in 2020 Dollars) Has Escalated Each Decade, While the Percentage of Mail Response Rates Has Declined



Source: GAO analysis of Census Bureau data. | GAO-18-416T

In addition to these external societal challenges that make achieving a complete count a daunting task, the Bureau also faces a number of internal management challenges that affect its capacity and readiness to conduct a cost-effective enumeration. Some of these issues—such as acquiring and developing IT systems and preparing reliable cost estimates—are long-standing in nature.

At the same time, as the Bureau looks toward 2020, it also faces newly emerging and evolving uncertainties. For example, on March 26, 2018, the Secretary of Commerce announced his decision to add a question to the decennial census on citizenship status. In our prior work we have noted the risks associated with late changes of any nature to the design of the census if the Bureau is unable to fully test those changes under operational conditions.

The Bureau also faced budgetary uncertainties that, according to the Bureau, led to the curtailment of testing in 2017 and 2018. However, the

Consolidated Appropriations Act, 2018 appropriated for the Periodic Censuses and Programs account $2.544 billion, which more than doubles the Bureau's request in the President's Fiscal Year 2018 Budget of $1.251 billion.[4] According to the explanatory statement accompanying the act, the appropriation, which is available through fiscal year 2020, is provided to ensure the Bureau has the necessary resources to immediately address any issues discovered during the 2018 End-to-End Test, and to provide a smoother transition between fiscal year 2018 and fiscal year 2019.[5] Moreover, according to Bureau officials, this level of funding helps the Bureau to complete testing and carry out other activities as planned.

The Bureau Plans to Rely Heavily on IT for the 2018 End-to-End Test and the 2020 Census

The Bureau plans to rely heavily on both new and legacy IT systems and infrastructure to support the 2018 End-to-End Test and the 2020 Census operations. For example, the Bureau plans to deploy and use 44 systems in the 2018 End-to-End Test.[6] Eleven of these systems are currently being developed or modified as part of an enterprise-wide initiative called Census Enterprise Data Collection and Processing (CEDCaP).[7] This initiative is a large and complex modernization program intended to deliver a system-of-systems to support all of the Bureau's survey data collection and processing functions, rather than continuing to rely on unique, survey-specific systems with redundant capabilities.[8]

[4]Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, Division B, Title I (Mar. 23, 2018).

[5]Joint explanatory statement of conference, 164 Cong. Rec. H2045, H2084 (daily ed. Mar. 22, 2018) (statement of Chairman Frelinghuysen), specifically referenced in section 4 of the Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, § 4 (Mar. 23, 2018).

[6]In October 2017, we reported that the Bureau planned to use 43 systems in the 2018 End-to-End Test. Since that time, the Bureau has added 3 systems to the system list for the 2018 End-to-End Test and removed 2 systems. As of March 2018, the Bureau plans to use 52 systems during 2020 Census operations.

[7]The Bureau is pursuing enterprise-wide technology solutions intended to support other major surveys the Bureau conducts as well, such as the American Community Survey and the Economic Census.

[8]As a result of the Bureau's challenges in implementing key IT internal controls and its rapidly approaching deadline for conducting the decennial census, we identified CEDCaP as an IT investment in need of attention in both our February 2015 and February 2017 high-risk reports.

To support the 2018 End-to-End Test, the Bureau plans to incrementally deploy and use the 44 systems from December 2016 through the end of the test in April 2019. These systems are to be used to support the operations involved in the test, including address canvassing,[9] self-response (i.e., Internet, phone, or paper), field enumeration, and tabulation and dissemination.

Key Risks Are Jeopardizing a Cost-Effective Enumeration

We added the 2020 Census to our list of high-risk programs in February 2017 because (1) innovations never before used in prior enumerations are not expected to be fully tested, (2) the Bureau continues to face challenges in implementing and securing IT systems, and (3) the Bureau's October 2015 cost estimate was unreliable.[10] If not sufficiently addressed, these risks could adversely impact the cost and quality of the enumeration. Moreover, the risks are compounded by other factors that contribute to the challenge of conducting a successful census, such as the nation's increasingly diverse population and concerns over personal privacy.

Key Risk #1: The Bureau Has Redesigned the Census with the Intent to Control Costs, but Has Scaled Back Critical Tests

The basic design of the enumeration—mail out and mail back of the census questionnaire with in-person follow-up for non-respondents—has been in use since 1970. However, a lesson learned from the 2010 Census and earlier enumerations is that this traditional design is no longer capable of cost-effectively counting the population.

In response to its own assessments, our recommendations, and studies by other organizations, the Bureau has fundamentally re-examined its approach for conducting the 2020 Census. Specifically, its plan for 2020 includes four broad innovation areas: re-engineering field operations, using administrative records, verifying addresses in-office, and developing an Internet self-response option (see table 1).

If they function as planned, the Bureau initially estimated that these innovations could result in savings of over $5 billion (in 2020 dollars) when compared to its estimates of the cost for conducting the census with traditional methods. However, in June 2016, we reported that the

[9]The purpose of address canvassing is to deliver a complete and accurate address list and maps for enumeration purposes.

[10]GAO-17-317.

Bureau's initial life-cycle cost estimate developed in October 2015 was not reliable and did not adequately account for risk.[11] As discussed earlier in this statement, the Bureau has updated its estimate from $12.3 billion and now estimates a life-cycle cost of $15.6 billion, which would result in a smaller potential savings from the innovative design than the Bureau originally estimated.[12]

Table 1: The Census Bureau (Bureau) Is Introducing Four Innovation Areas for the 2020 Census

Innovation area	Description
Re-engineered field operations	The Bureau intends to automate data collection methods, including its case management system.
Administrative records	In certain instances, the Bureau plans to reduce enumerator collection of data by using administrative records (information already provided to federal and state governments as they administer other programs).
Verifying addresses in-office	To ensure the accuracy of its address list, the Bureau intends to use "in-office" procedures and on-screen imagery to verify addresses and reduce street-by-street field canvassing.
Internet self-response option	The Bureau plans to offer households the option of responding to the survey through the Internet. The Bureau has not previously offered such an option on a large scale.

Source: GAO analysis of Census Bureau data. | GAO-18-416T

While the planned innovations could help control costs, they also introduce new risks, in part, because they include new procedures and technology that have not been used extensively in earlier decennials, if at all. Our prior work has shown the importance of the Bureau conducting a robust testing program, including the 2018 End-to-End Test.[13] Rigorous

[11]GAO-16-628.

[12]The historical life-cycle cost figures for prior decennials as well as the initial estimate for 2020 provided by Commerce in October 2017 differ slightly from those reported by the Bureau previously. According to Commerce documents, the more recently reported figures are "inflated to the current 2020 Census time frame (fiscal years 2012 to 2023)," rather than to constant 2020 dollars as the earlier figures had been. Specifically, since October 2017, Commerce and the Bureau have reported the October 2015 estimate for the 2020 Census as $12.3 billion; this is slightly different than the $12.5 billion the Bureau had initially reported.

[13]GAO-17-622.

testing is a critical risk mitigation strategy because it provides information on the feasibility and performance of individual census-taking activities, their potential for achieving desired results, and the extent to which they are able to function together under full operational conditions. To address some of these challenges we have made numerous recommendations aimed at improving reengineered field operations, using administrative records, verifying the accuracy of the address list, and securing census responses via the Internet.

The Bureau has held a series of operational tests since 2012, but according to the Bureau, it has scaled back recent tests because of funding uncertainties. For example, the Bureau canceled the field components of the 2017 Census Test including non-response follow-up, a key census operation.[14] In November 2016, we reported that the cancelation of the 2017 Census Test was a lost opportunity to test, refine, and integrate operations and systems, and that it put more pressure on the 2018 End-to-End Test to demonstrate that enumeration activities will function under census-like conditions as needed for 2020.

However, in May 2017, the Bureau scaled back the operational scope of the 2018 End-to-End Test and, of the three planned test sites, only the Rhode Island site would fully implement the 2018 End-to-End Test. The Washington and West Virginia sites would test just one field operation. In addition, due to budgetary concerns, the Bureau decided to remove three coverage measurement operations (and the technology that supports them) from the scope of the test.[15]

Without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost, in part because the 2018 End-to-End Test is the last opportunity to demonstrate census technology and procedures across a range of geographic locations, housing types, and demographic groups. We plan to issue a report in the spring of 2018 on address canvassing at the three test sites.

[14]In non-response follow-up, if a household does not respond to the census by a certain date, the Bureau will conduct an in-person visit by an enumerator to collect census data using a mobile device provided by the Bureau.

[15]Coverage measurement evaluates the quality of the census data by estimating the census coverage based on a post-enumeration survey.

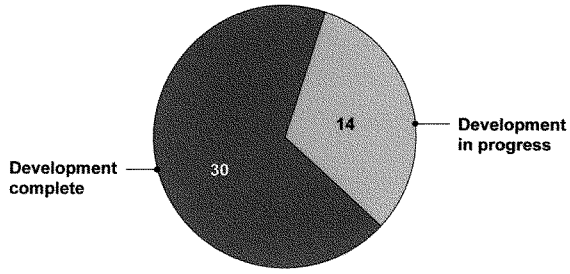
Key Risk #2: The Bureau Continues to Face Challenges in Implementing and Securing IT Systems

We have previously reported that the Bureau faces challenges in managing and overseeing IT programs, systems, and contractors supporting the 2020 Census. Specifically, we have noted challenges in its efforts to manage the schedules, contracts, costs, governance and internal coordination, and security for its systems. As a result of these challenges, the Bureau is at risk of being unable to fully implement the systems necessary to support the 2020 Census and conduct a cost-effective enumeration. We previously recommended that the Bureau take action to improve its implementation and management of IT in areas such as governance and internal coordination.[16]

Schedule management

Our ongoing work has determined that the Bureau faces significant challenges in managing its schedule for developing and testing systems for the 2018 End-to-End Test that began in August 2017. As of April 2018, 30 of the 44 systems in the test had completed all development activities, while the remaining 14 were in the process of completing these activities. Figure 2 summarizes the development status for the 44 systems planned for the 2018 End-to-End Test, as of April 2018.

Figure 2: Development Status for the 44 Systems in the 2018 End-to-End Test, as of April 2018

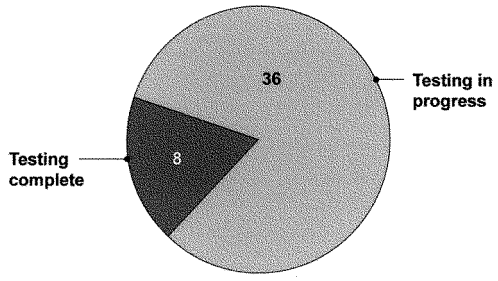


Source: GAO analysis of Census Bureau data. | GAO-18-416T

[16]GAO-16-823.

In addition, as of April 2018, 8 of the 44 systems had completed all testing activities (e.g., system and integration testing) for the 2018 End-to-End Test, while the remaining 36 were in the process of completing these activities. Figure 3 summarizes the status of testing for the 44 systems in the 2018 End-to-End Test. In addition, appendix I includes additional details about the status of development and testing for these systems.

Figure 3: Testing Status for the 44 Systems in the 2018 End-to-End Test, as of April 2018



Source: GAO analysis of Census Bureau data. | GAO-18-416T

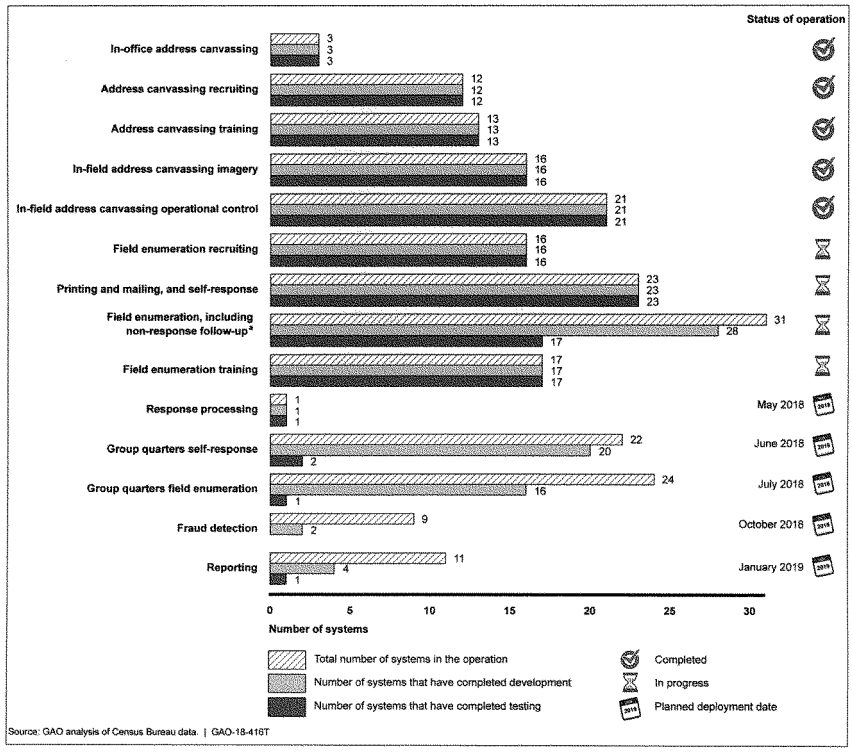
Nevertheless, significant development and testing work remains to be completed. As stated previously, the 44 systems in the test are to be deployed multiple times in a series of operations (such as field enumeration). As of April 2018, 40 of the 44 systems had deployed at least a portion of functionality to support operations that have already occurred. The remaining system development and testing work is needed to support the 2018 End-to-End Test operations that are in process or planned.

Specifically, as of April 2018, the Bureau had completed the development and testing for all of the systems supporting 9 of the 14 operations in the 2018 End-to-End Test, such as in-field address canvassing and response processing. However, the agency was in the process of completing system development and testing to support the remaining 5 operations. These 5 operations include 1 that is in progress—field enumeration—and

4 others that are planned for the future, including group quarters[17] enumeration and fraud detection. Figure 4 depicts the total number of systems supporting each operation, the number of systems that have completed development and testing, and the status of the operation.

[17]Group quarters refer to college dormitories, nursing homes, and other facilities typically owned or managed by an entity providing housing, services, or both for the residents.

Figure 4: Development and Testing Status for System Operations in the 2018 End-to-End Test, as of April 2018



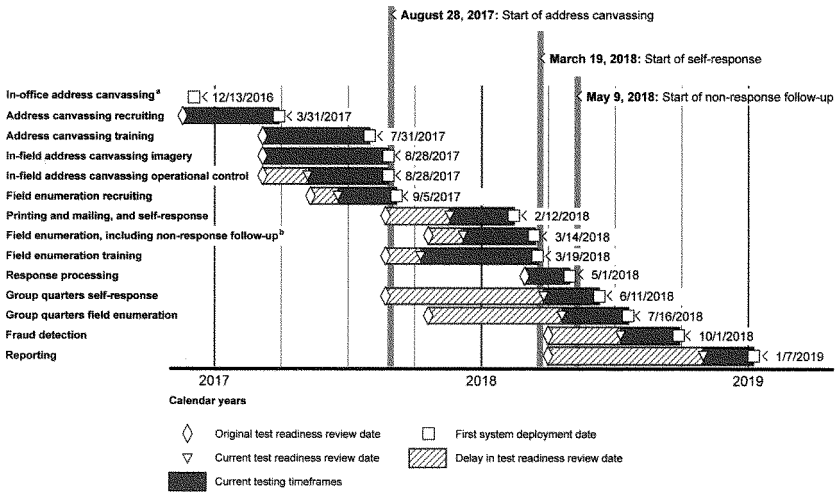
Source: GAO analysis of Census Bureau data. | GAO-18-416T

[a]In addition to non-response follow-up, field enumeration also includes operations such as update/leave and coverage improvement. In update/leave, listers update a housing unit's address and leave a questionnaire to allow the household to self-respond. The goal of coverage improvement is to resolve erroneous enumerations (such as people counted in the wrong place or more than once) and omissions.

However, due in part to challenges experienced during systems development, the Bureau has delayed by several months key IT milestone dates (e.g., dates to begin integration testing) for 9 of the 14 operations in the 2018 End-to-End Test. For example, the Bureau has moved the test readiness review date for the fraud detection operation from April 2018 to July 2018–a delay of 3 months—and the test readiness review of the group quarters field enumeration operation from October 2017 to April 2018—a delay of 6 months. Figure 5 depicts the delays in the key IT milestone dates for the operations in the 2018 End-to-End Test, as of April 2018. In total, since August 2017, the Bureau has delayed the final deployment date for 19 systems supporting the 14 operations.[18] Appendix I includes additional details about the delays in deployment dates since August 2017 for the 44 systems in the 2018 End-to-End Test.

[18]According to officials within the Bureau's 2020 Census Systems Engineering and Integration office, the delays in the final deployment date for these systems are due to changes in the timing of the operations that the systems are supporting for the 2018 End-to-End Test.

Figure 5: Delays in Key Information Technology Milestone Dates for System Operations in the 2018 End-to-End Test, as of April 2018



Source: GAO analysis of Census Bureau data. | GAO-18-416T

[a]The systems that supported the in-office address canvassing operation were legacy systems that required no further development. Thus, these systems did not require additional testing before being deployed.

[b]In addition to non-response follow-up, field enumeration also includes operations such as update/leave and coverage improvement. In update/leave, listers update a housing unit's address and leave a questionnaire to allow the household to self-respond. The goal of coverage improvement is to resolve erroneous enumerations (such as people counted in the wrong place or more than once) and omissions.

We previously testified in May 2017 that the Bureau had faced similar challenges leading up to the 2017 Census Test, including experiencing delays in system development that led to compressed time frames for security reviews and approvals.[19] Specifically, we noted that the Bureau

[19]GAO-17-584T.

did not have time to thoroughly assess the low-impact components of one system and complete penetration testing[20] for another system prior to the test. Nonetheless, the Bureau's Chief Information Officer (CIO) accepted the security risks and uncertainty due to compressed time frames before the planned deployment. We stressed that, for the 2018 End-to-End Test, it is important that these security assessments be completed in a timely manner and that risks be at an acceptable level before the systems are deployed.

As a result of the delays in system development and testing, the Bureau has had (and likely will continue to have) reduced time available to conduct the security reviews and approvals for the systems being used in the 2018 End-to-End Test. Officials in the Bureau's Office of Information Security stated that the original plan was to have at least 6 to 8 weeks to perform security assessments for each system.

However, given the compressed time frames, Bureau officials informed us that, in some instances, they have had 5 to 8 days to complete certain assessments. As a result, the security of all system components may not be assessed before deployment. According to the Bureau's Chief Information Security Officer, components that do not have all controls assessed are to be tracked until the assessments are completed, even if it is after the system deploys.

If the Bureau continues to experience delays in meeting development and testing milestones for the 2018 End-to-End Test, it may not be able to fully test production-level systems and operations in a census-like environment prior to the 2020 Census. As stated earlier, without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost.

Additional System Development and Testing Planned After the 2018 End-to-End Test

After the 2018 End-to-End Test, the Bureau still has additional system development and testing activities planned leading up to the 2020

[20]The National Institute of Standards and Technology defines penetration testing as security testing in which evaluators mimic real-world attacks in an attempt to identify ways to circumvent the security features of an application, system, or network. Penetration testing often involves issuing real attacks on real systems and data, using the same tools and techniques used by actual attackers.

Census. The Bureau plans to use a total of 52 systems in 2020 Census operations, including the 44 systems that are planned to be used in the 2018 End-to-End Test, and 8 additional systems that were not included in the test.[21] The Bureau expects that the systems used in the 2018 End-to-End Test will need additional development and testing due to, among other things, new functionality to be added, the need to scale system performance for the number of respondents expected during the 2020 Census, or to address system defects identified during the 2018 End-to-End Test.

Following the 2018 End-to-End Test, the Bureau plans to develop, test, and deploy the 52 systems for the 2020 Census in four groups, or operational releases: (1) recruiting and hiring; (2) address canvassing; (3) self-response, non-response follow-up, and fraud detection; and (4) reporting and coverage measurement.[22] The systems are generally grouped by the operation(s) they support in the 2020 Census. For example, the third operational release—which includes the most systems—has 47 systems to be used for self-response (including via the Internet), non-response follow-up, and fraud detection. These systems are expected to be deployed in November 2019 so that they will be ready for the Internet self-response operation, which begins in March 2020. Table 2 identifies the key dates for the operational releases for systems in the 2020 Census.

[21] Several of these systems are for the coverage measurement operation, which was cut from the scope of the 2018 End-to-End Test. As stated previously, coverage measurement evaluates the quality of the census data by estimating the census coverage based on a post-enumeration survey.

[22] Similar to the 2018 End-to-End Test, a system being used in the 2020 Census may be deployed multiple times (with additional or new functionality) if that system is needed for more than one of these operations.

Table 2: The Census Bureau's Planned Operational Releases for the 2020 Census, as of April 2018

Operational release name	Number of systems in the operational release	Expected completion date for system development	Expected completion date for integration and test	Expected deployment date
1. Recruiting and hiring	19	May 2018	July 2018	September 2018
2. Address canvassing	26	November 2018	March 2019	May 2019
3. Self-response, non-response follow-up, and fraud detection	47	February 2019	June 2019	November 2019
4. Reporting and coverage measurement	22	October 2019	February 2020	July 2020

Source: GAO analysis of Census Bureau data | GAO-18-416T

As planning for the 2020 Census continues, it will be important for the Bureau to provide adequate time for system development and testing activities. This will help ensure that the time available for security assessments is not reduced as it was in the 2017 Test, and as it has been, thus far, during the 2018 End-to-End Test. Without adequate time for completing these security assessments, the Bureau will be challenged in ensuring that risks are at an acceptable level before the systems are deployed for the 2020 Census.

Contract management

Our ongoing work has also determined that the Bureau faces challenges in managing its significant contractor support. The Bureau is relying on contractor support in many areas to prepare for the 2020 Census. For example, it is relying on contractors to develop a number of systems and components of the IT infrastructure. These activities include (1) developing the IT platform (as part of the CEDCaP program) that is intended to be used to collect data from households responding via the Internet and telephone, and for non-response follow-up activities; (2) procuring the mobile devices and cellular service to be used for non-response follow-up;[23] and (3) deploying the IT and telecommunications hardware in the field offices. According to Bureau officials, contractors are also providing support in areas such as fraud detection, cloud computing services, and disaster recovery.

[23]In non-response follow-up, if a household does not respond to the census by a certain date, the Bureau will send out employees to visit the home. The Bureau's plan is for these enumerators to use a census application, on a mobile device provided by the Bureau, to capture the information given to them by the in-person interviews.

In addition to the development of technology, the Bureau is relying on a technical integration contractor to integrate all of the key systems and infrastructure. The Bureau awarded a contract to integrate the 2020 Census systems and infrastructure in August 2016. The contractor's work was to include evaluating the systems and infrastructure and acquiring the infrastructure (e.g., cloud or data center) to meet the Bureau's scalability and performance needs. It was also to include integrating all of the systems, supporting technical testing activities, and developing plans for ensuring the continuity of operations. Since the contract was awarded, the Bureau has modified the scope to also include assisting with operational testing activities, conducting performance testing for two Internet self-response systems, and providing technical support for the implementation of the paper data capture system.

However, our ongoing work has determined that the Bureau is facing staffing challenges that could impact its ability to manage and oversee the technical integration contractor. Specifically, the Bureau is managing the integration contractor through a government program management office, but this office is still filling vacancies. As of February 2018, the Bureau reported that 34 of the office's 58 federal employee positions were vacant. As a result, this program management office may not be sufficiently staffed to provide adequate oversight of contractor cost, schedule, and performance.

The development and testing schedule delays during the 2017 Test and preparations for the 2018 End-to-End Test raise concerns about the Bureau's ability to effectively perform contractor management. As we reported in November 2016, a greater reliance on contractors for these components of the 2020 Census requires the Bureau to focus on sound management and oversight of the key contracts, projects, and systems.[24]

IT cost growth

The Bureau faces challenges in controlling IT cost growth. Specifically, the Bureau's October 2015 cost estimate included about $3.41 billion in total IT costs for fiscal years 2012 through 2023. These included costs for, among other things, system engineering, test and evaluation, and infrastructure, as well as for a portion of the CEDCaP program.[25]

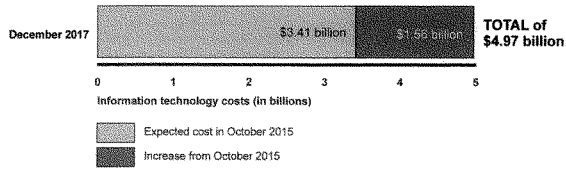
[24]GAO, *Information Technology: Uncertainty Remains about the Bureau's Readiness for a Key Decennial Census Test*, GAO-17-221T (Washington, D.C.: Nov. 16, 2016).

[25]The 2020 program pays for a portion of the costs for the CEDCaP program. According to the October 2015 estimate, the portion of CEDCaP costs associated with the 2020 Census was estimated at $328 million of the $548 million total program estimate.

However, in October 2017, we reported[26] that IT costs would likely be at least $4.8 billion due to increases in costs associated with the CEDCaP program[27] and certain IT contracts (including those associated with technical integration and mobile devices).

In December 2017, the Bureau reported that its estimated IT costs had grown from $3.41 billion to $4.97 billion—an increase of $1.56 billion. Figure 6 identifies the Bureau estimate of total IT costs associated with the 2020 program as of December 2017.

Figure 6: Total Information Technology Costs Estimated by the Census Bureau, as of December 2017



Source: GAO analysis of Census Bureau data. | GAO-18-416T

The cost increases were due, in large part, to the Bureau (1) updating the cost estimate for the CEDCaP program, (2) including an estimate for technical integration services, and (3) updating costs related to other major contracts (such as mobile device as a service).[28] Table 3 describes the IT costs that comprised the Bureau's cost estimate as of December 2017.

[26]GAO-18-215T.

[27]In May 2017, the Bureau reported that the CEDCaP program's cost estimate was increasing by about $400 million—from its original estimate of $548 million in 2013 to a revised estimate of $965 million in May 2017.

[28]As part of mobile device as a service, the Bureau plans to provide mobile devices (including mobile phones, tablets, and laptops) and cellular service to field staff to support operations such as address canvassing and non-response follow-up.

Table 3: Total 2020 Census Information Technology (IT) Costs Estimated by the Census Bureau, by Cost Category, as of December 2017

IT cost category	Expected cost (in millions)
Technical integration services	$1,492
Census questionnaire assistance	$817
Other IT services, such as day-to-day IT support	$808
Census Enterprise Data Collection and Processing (CEDCaP) costs related to the 2020 Census	$509a
Decennial device as a service	$489
Field IT deployment	$450
Other non-CEDCaP systems, such as recruitment and personnel systems	$401
Total	**$4,966**

Source: GAO analysis of Census Bureau data. | GAO-18-416T

[a]The 2020 program pays for a portion of the costs for the CEDCaP program. As of May 2017, the Census Bureau estimated that the entire cost of the CEDCaP program would be about $965 million.

IT cost information that is accurately reported and clearly communicated is necessary to help ensure that Congress and the public have confidence that taxpayer funds are being spent in an appropriate manner. However, the amount of cost growth since the October 2015 estimate raises questions as to whether the Bureau has a complete understanding of the IT costs associated with the 2020 program. In December 2017, the Bureau provided us with the documentation used to develop the updated cost-estimate, and we are reviewing these materials as part of our continuing body of work on the 2020 Census.

Governance and internal coordination

Effective governance can drive change, provide oversight, and ensure accountability for results. Further, effective IT governance was envisioned in the statutory provisions enacted in 2014 and referred to as the Federal Information Technology Acquisition Reform Act (FITARA),[29] which strengthened and reinforced the role of the departmental CIO. The component CIO (such as the Bureau's CIO) also plays a role in effective IT governance, as the component is subject to the oversight and policies of the parent department implementing FITARA.

[29]Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113-291, div. A, title VIII, subtitle D, 128 Stat. 3292, 3438-50 (Dec. 19, 2014).

Our ongoing work has determined that officials in Commerce's Office of the Secretary have increased their oversight of the Bureau's preparations for the 2020 Census by holding regular meetings to discuss contracts, expected costs, and risks, among other topics. For example, Bureau officials reported that they have recently begun meeting with the Secretary of Commerce on a monthly basis and with the Under Secretary of Commerce for Economic Affairs on a weekly basis to discuss 2020 Census issues. Moreover, the department's Acting CIO has also been involved in overseeing the Bureau's IT system readiness. The Bureau has also appointed two new assistant directors within the Decennial Directorate. Each of these individuals is responsible for overseeing aspects of the 2020 Census program, to include schedules, contracts, and system development.

In addition, to ensure executive-level oversight of the key systems and technology, the Bureau's CIO (or a designated representative) is to be a member of the governance boards that oversee all of the operations and technology for the 2020 Census. However, in August 2016 we reported on challenges that the Bureau has had with IT governance and internal coordination, including weaknesses in its ability to monitor and control IT project costs, schedules, and performance.[30] We made eight recommendations to the Secretary of Commerce to direct the Bureau to, among other things, better ensure that risks are adequately identified and schedules are aligned. The department agreed with our recommendations. As of April 2018, the Bureau had fully implemented five of the recommendations and had taken initial steps toward implementing the other three recommendations.

Further, given the schedule delays and cost increases previously mentioned, and the vast amount of development, testing, and security assessments left to be completed, we remain concerned about executive-level oversight of systems and security. Moving forward, it will be important that the CIO and other Bureau executives continue to use a collaborative governance approach to effectively manage risks and ensure that the IT solutions meet the needs of the agency within cost and schedule.

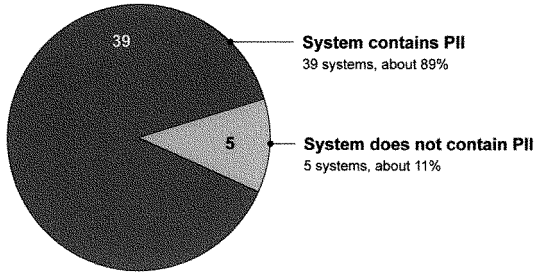
Information security

In November 2016, we described the significant challenges that the Bureau faced in securing systems and data for the 2020 Census, and we

[30]GAO-16-623.

noted that tight time frames could exacerbate these challenges.[31] Two such challenges were (1) ensuring that individuals gain only limited and appropriate access to the 2020 Census data, including personally identifiable information (PII), such as name, personal address, and date of birth; and (2) making certain that security assessments were completed in a timely manner and that risks were at an acceptable level.[32] Protecting PII, for example, is especially important because a majority of the 44 systems to be used in the 2018 End-to-End Test contain such information, as reflected in figure 7.[33]

Figure 7: Personally Identifiable Information (PII) in Census Bureau Systems Included in the 2018 End-to-End Test, as of February 2018



Source: GAO analysis of Census Bureau data. | GAO-18-416T

[31]GAO-17-584T.

[32]GAO-17-221T.

[33]According to officials in the Bureau's Office of Information Security, 26 systems contain data that is protected from disclosure under Title 13 of the U.S. Code. This law protects information provided by the public for the Bureau's censuses and surveys and requires that the Bureau keep it confidential. The Bureau may not disclose or publish any private information that identifies an individual or business, such as names, addresses, Social Security numbers, and telephone numbers. 13 U.S.C. § 9.

To address these and other challenges, federal law specifies requirements for protecting federal information and information systems, such as those systems to be used in the 2020 Census. Specifically, the Federal Information Security Management Act of 2002 and the Federal Information Security Modernization Act of 2014 (FISMA) require executive branch agencies to develop, document, and implement an agency-wide program to provide security for the information and information systems that support operations and assets of the agency.[34]

Accordingly, the National Institute of Standards and Technology (NIST) developed risk management framework guidance for agencies to follow in developing information security programs.[35] In addition, the Office of Management and Budget's (OMB) revised Circular A-130 on managing federal information resources required agencies to implement the NIST risk management framework to integrate information security and risk management activities into the system development life cycle.[36]

In accordance with FISMA, NIST guidance, and OMB guidance, the Bureau's Office of the CIO established a risk management framework. This framework requires system developers to ensure that each of the Bureau's systems undergoes a full security assessment, and that system developers remediate critical deficiencies. In addition, according to the framework, system developers are to ensure that each component of a system has its own system security plan that documents how the Bureau intends to implement security controls. As a result of this requirement, system developers for a single system might develop multiple system security plans which all have to be approved as part of the system's complete security documentation.

According to the Bureau's framework, each of the 44 systems in the 2018 End-to-End Test will need to have complete security documentation (such

[34]The Federal Information Security Modernization Act of 2014, Pub. L. No. 113-283, 128 Stat. 3073 (Dec. 18, 2014) largely superseded the Federal Information Security Management Act of 2002, enacted as Title III, E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899, 2946 (Dec. 17, 2002).

[35]NIST, *Guide for Applying the Risk Management Framework to Federal Information Systems: A Security Life Cycle Approach*, SP 800-37, Revision 1 (Gaithersburg, Md.: February 2010).

[36]OMB, *Revision of OMB Circular A-130, Managing Federal Information as a Strategic Resource* (Washington, D.C.: July 28, 2016).

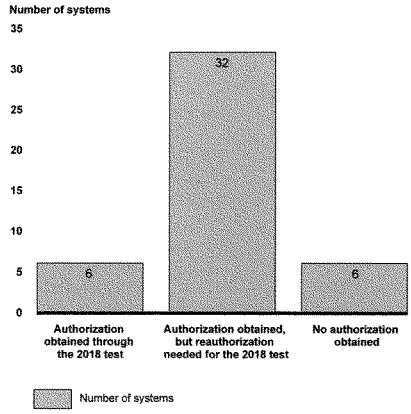
as system security plans) and an approved authorization to operate[37] prior to its use in the 2018 End-to-End Test. However, our ongoing work indicates that, while the Bureau is completing these steps for the 44 systems to be used in the 2018 End-to-End Test, significant work remains. Specifically:

- Six of the 44 systems are fully authorized to operate through the completion of the 2018 End-to-End Test.
- Thirty-two systems have a current authorization to operate, but the Bureau will need to reauthorize these systems before the completion of the 2018 End-to-End Test. Bureau officials in the CIO's Office of Information Security stated that these systems will need to be reauthorized because, among other things, they have additional development work planned that may require the systems to be reauthorized; are being moved to a different infrastructure environment (e.g., from a data center to a cloud-based environment); or have a current authorization that expires before the completion of the 2018 End-to-End Test.
- Six systems have not yet obtained an authorization to operate.

Figure 8 summarizes the authorization to operate status for the systems being used in the 2018 End-to-End Test, as reported by the Bureau.

[37]According to the Bureau's framework, systems are to obtain security authorization approval from the authorizing official in order to operate. Specifically, the authorizing official evaluates the security authorization package and provides system authorization if the overall risk level is acceptable. In addition, according to the Bureau's IT security program policy, the issuance of an authorization to operate for a system requires support of both the technical authorizing official (i.e., the CIO) and the business authorizing official responsible for funding and managing the system (i.e., the Associate Director for Decennial Census Programs). Further, according to the Bureau's framework, once a system obtains an authorization, it is transitioned to the continuous monitoring process where the authorizing official can provide implicit, continued authorization for system operation as long as the risk level remains acceptable.

Figure 8: Authorization to Operate Status for 44 Systems Being Used in the Census Bureau's 2018 End-to-End Test, as of April 2018



Source: GAO analysis of Census Bureau data. | GAO-18-416T

Because many of the systems that will be a part of the 2018 End-to-End Test are not yet fully developed, the Bureau has not finalized all of the security controls to be implemented; assessed those controls; developed plans to remediate control weaknesses; and determined whether there is time to fully remediate any deficiencies before the systems are needed for the test. In addition, as discussed earlier, the Bureau is facing system development and testing challenges that are delaying the completion of milestones and compressing the time available for security testing activities.

Further, while the large-scale technological changes (such as Internet self-response) increase the likelihood of efficiency and effectiveness gains, they also introduce many information security challenges. The 2018 End-to-End Test also involves collecting PII on hundreds of thousands of households across the country, which further increases the need to properly secure these systems. Thus, it will be important that the Bureau provides adequate time to perform these security assessments,

completes them in a timely manner, and ensures that risks are at an acceptable level before the systems are deployed.

Key Risk #3: The Bureau Will Need to Control Any Further Cost Growth and Develop Cost Estimates That Reflect Best Practices

In October 2017, Commerce announced that it had updated its October 2015 life-cycle cost estimate and now projects the life-cycle cost of the 2020 Census will be $15.6 billion, more than a $3 billion (27 percent) increase over the Bureau's earlier estimate. The higher estimated life-cycle cost is due, in part, as we reported in June 2016, to the Bureau's failure to meet best practices for a quality cost-estimate. Specifically, we reported that, although the Bureau had taken steps to improve its capacity to carry out an effective cost estimate, such as establishing an independent cost estimation office, its October 2015 version of the estimate for the 2020 Census only partially met two characteristics of a reliable cost estimate (comprehensive and accurate) and minimally met the other two (well-documented and credible). We also reported that risks were not properly accounted for in the cost estimate.[38]

We recommended that the Bureau take action to ensure its 2020 Census cost estimate meets all four characteristics of a reliable cost estimate, as well as properly account for risk to ensure there are appropriate levels for budgeted contingencies. The Bureau agreed with our recommendations. In response, Commerce reported that in May, 2017, a multidisciplinary team was created to evaluate the 2020 Census program and to produce an independent cost estimate.

Factors driving the increased cost estimate include changes to assumptions relating to self-response rates, wage levels for temporary census workers, as well as the fact that major contracts and IT scale-up plans and procedures were not effectively planned, managed, and executed. The new estimate also includes a contingency of 10 percent of estimated costs per year as insurance against "unknown-unknowns," such as a major cybersecurity event.

The Bureau has provided us with the documentation used to develop the $15.6 billion cost estimate. We are reviewing these documents to determine the reliability of the estimate using our cost guide.[39] In order for

[38]GAO-16-628.

[39]GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs (Supersedes* GAO-07-1134SP*)*, GAO-09-3SP (Washington, D.C.: Mar. 2, 2009).

the new estimate to be deemed high quality, and, thus, the basis for any 2020 Census annual budgetary figures, the new cost-estimate will need to address the following four characteristics:

- **Comprehensive.** To be comprehensive an estimate should have enough detail to ensure that cost elements are neither omitted nor double-counted, and all cost-influencing assumptions are detailed in the estimate's documentation, among other things, according to best practices.
- **Accurate.** Accurate estimates are unbiased and contain few mathematical mistakes.
- **Well-documented.** Cost estimates are considered valid if they are well-documented to the point they can be easily repeated or updated and can be traced to original sources through auditing, according to best practices.
- **Credible.** Credible cost estimates must clearly identify limitations due to uncertainty or bias surrounding the data or assumptions, according to best practices.

Based on our preliminary analysis, we have found that the Bureau has made improvements in its cost estimation process across the four characteristics. We plan to issue a report in the summer of 2018 on the revised estimate's reliability.

Continued Management Attention Needed to Keep Preparations on Track and Help Ensure a Cost-Effective Enumeration

2020 Challenges Are Symptomatic of Deeper Long-Term Organizational Issues

The difficulties facing the Bureau's preparation for the decennial census in such areas as planning and testing; managing and overseeing IT programs, systems, and contractors supporting the enumeration; developing reliable cost estimates; prioritizing decisions; managing schedules; and other challenges, are symptomatic of deeper organizational issues.

Following the 2010 Census, a key lesson learned for 2020 that we identified was ensuring that the Bureau's organizational culture and structure, as well as its approach to strategic planning, human capital management, internal collaboration, knowledge sharing, capital decision-making, risk and change management, and other internal functions are aligned toward delivering more cost-effective outcomes.[40]

The Bureau has made improvements over the last decade, and continued progress will depend in part on sustaining efforts to strengthen risk management activities, enhancing systems testing, bringing in experienced personnel to key positions, implementing our recommendations, and meeting regularly with officials from its parent agency, Commerce. Going forward, we have reported that the key elements needed to make progress in high-risk areas are top-level attention by the administration and agency officials to (1) leadership commitment, (2) ensuring capacity, (3) developing a corrective action plan, (4) regular monitoring, and (5) demonstrated progress. Although

[40]GAO, *2010 Census: Preliminary Lesson Learned Highlight the Need for Fundamental Reforms*, GAO-11-496T (Washington, D.C.: Apr. 6, 2011).

important steps have been taken in at least some of these areas, overall, far more work is needed.[41] We discuss three of five areas below.

The Secretary of Commerce has taken several actions towards demonstrating **leadership commitment**. For example, the previously noted multidisciplinary review team included members with Bureau leadership experience, as well as members with private sector technology management experience. Additional program evaluation and the independent cost estimate was produced by a team from the Commerce Secretary's Office of Acquisition Management that included a member detailed from OMB. We have met with the Under Secretary of Commerce for Economic Affairs at her invitation to discuss oversight priorities, Commerce's commitment to them, as well as the progress on high risk areas. Commerce reports that other senior officials are now also actively involved in the management and oversight of the decennial. Likewise, with respect to **monitoring progress**, the Commerce Secretary reports having weekly 2020 Census oversight reviews with senior Bureau staff and will require metric tracking and program execution status on a real-time basis.

On the other hand, demonstrating the **capacity** to address high risk concerns remains a challenge. For example, as stated earlier, the Bureau is facing staffing challenges that could impact its ability to manage and oversee the technical integration contractor. Specifically, the Bureau is managing the integration contractor through a government program management office, but this office is still filling vacancies. As previously discussed, the Bureau reported that 34 of 58, or almost 60 percent, of the office's federal employee positions were vacant as of February 2018. As a result, this program management office may not be able to provide adequate oversight of contractor cost, schedule, and performance.

In the months ahead, we will continue to monitor the Bureau's progress in addressing in each of the five elements essential for reducing the risk to a cost-effective enumeration.

Strong Bureau Leadership Will Be Critical for Keeping Efforts On-Track

At a time when strong Bureau management is needed, vacancies in the agency's two top positions—Director and Deputy Director—are not helpful for keeping 2020 preparations on-track. These vacancies are due to the

[41]GAO-17-317.

previous director's retirement on June 30, 2017, and the previous deputy director's appointment to be the Chief Statistician of the United States within OMB in January 2017. Although interim leadership has since been named, there are upcoming key decisions that would more effectively be made by permanent leadership. In our prior work we have noted how openings in the Bureau's top position makes it difficult to ensure accountability and continuity, as well as to develop and sustain efforts that foster change, produce results, mitigate risks, and control costs over the long term. For example, in September 2018 the Bureau is scheduled to decide what types of challenges it will allow state, tribal, or local governments to make to their official 2020 Census results.

The director of the Bureau is appointed by the President, by and with the advice and consent of the Senate, without regard to political affiliation. The director's term is a fixed 5-year term of office.[42] An individual may be reappointed but may not serve more than two full terms as director. The director's position was first filled this way beginning on January 1, 2012, and cycles every fifth year thereafter. Because the new term began on January 1, 2017, the time that elapses until a new director is confirmed counts against the 5-year term of office. As a result, the next director's first term will be less than 5 years.

Going forward, filling these top two positions should be an important priority. On the basis of our prior work, key attributes of a census director, in addition to the obvious ones of technical expertise and the ability to lead large, long-term and high risk programs, could include abilities in the following areas:

- **Strategic Vision.** The director needs to build a long-term vision for the Bureau that extends beyond the current decennial census. Strategic planning, human-capital succession planning, and life-cycle cost estimates for the Bureau all span the decade.
- **Sustaining Stakeholder Relationships.** The director needs to continually expand and develop working relationships and partnerships with governmental, political, and other professional officials in both the public and private sectors to obtain their input, support, and participation in the Bureau's activities.
- **Accountability.** The life-cycle cost for a decennial census spans a decade, and decisions made early in the decade about the next

[42] 13 U.S.C. § 21(a)-(b)(1).

decennial census guide the research, investments, and tests carried out throughout the decennial census. Institutionalizing accountability over an extended period may help long-term decennial initiatives provide meaningful and sustainable results.[43]

Further Actions Needed on Our Recommendations

Over the past several years we have issued numerous reports that underscored the fact that, if the Bureau was to successfully meet its cost savings goal for the 2020 Census, the Bureau needed to take significant actions to improve its research, testing, planning, scheduling, cost estimation, system development, and IT security practices. As previously stated, over the past decade, we have made 84 recommendations specific to the 2020 Census to help address these and other issues. The Bureau has generally agreed with those recommendations and has taken action to address them. However, 30 of the recommendations had not been fully implemented as of April 2018, although the Bureau had taken initial steps to implement many of them. We have designated 21 of these 84 recommendations as a priority for Commerce and 6 have been implemented. In August 2017, we sent the Secretary of Commerce a letter that identified our open priority recommendations at the department, 15 of which concern the 2020 Census.[44] We believe that attention to these recommendations is essential for a cost-effective enumeration. The recommendations included implementing reliable cost estimation and scheduling practices in order to establish better control over program costs, as well as taking steps to better position the Bureau to develop an Internet response option for the 2020 Census.

On October 3, 2017, in response to our August 2017 letter, the Commerce Secretary noted that he shared our concerns about the 2020 Census and acknowledged that some of the programs had not worked as planned, and are not delivering the savings that were promised. The Commerce Secretary also stated that he intends to improve the timeliness for implementing our recommendations.

We meet quarterly with Bureau officials to discuss the progress and status of open recommendations related to the 2020 Census, which has

[43]GAO, *2010 Census: Data Collection Operations Were Generally Completed as Planned, but Long-standing Challenges Suggest Need for Fundamental Reforms*, GAO-11-193 (Washington, D.C.: Dec. 14, 2010).

[44]The 15 priority recommendations for the 2020 Census cover the period from November 2009 to July 2017.

resulted in Bureau actions in recent months leading to closure of some recommendations. We are encouraged by this commitment by Commerce and the Bureau in addressing our recommendations. Implementing our recommendations in a complete and timely manner is important because it could improve the management of the 2020 Census and help to mitigate continued risks.

In conclusion, while the Bureau has made progress in revamping its approach to the census, it faces considerable challenges and uncertainties in (1) implementing key cost-saving innovations and ensuring they function under operational conditions; (2) managing the development and security of IT systems; and (3) developing a quality cost estimate for the 2020 Census and preventing further cost increases. Without timely and appropriate actions, these challenges could adversely affect the cost, accuracy, schedule, and security of the enumeration. For these reasons, the 2020 Census is a GAO high risk area.

Going forward, continued management attention and oversight will be vital for ensuring that risks are managed, preparations stay on-track, and the Bureau is held accountable for implementing the enumeration, as planned. We will continue to assess the Bureau's efforts to conduct a cost-effective and secure enumeration and look forward to keeping Congress informed of the Bureau's progress.

Chairman Culberson, Ranking Member Serrano, and Members of the Subcommittee, this completes our prepared statement. We would be pleased to respond to any questions that you may have.

Appendix I: Status of Development and Testing for Systems in the 2018 End-to-End Test, as of April 2018

As part of its 2018 End-to-End Test, the Census Bureau (Bureau) plans to deploy 44 systems incrementally to support key operations from December 2016 through the end of the test in April 2019. These operations include address canvassing, self-response (i.e., Internet, phone, or paper), field enumeration, and tabulation and dissemination. According to the Bureau, a single system may be deployed multiple times throughout the test (with additional or new functionality) if that system is needed for more than one of these operations.

Table 1 describes the status of development and testing, and describes if a portion of functionality has been deployed for each system in the 2018 End-to-End Test. The table also describes key system deployment dates and the delay in these dates since August 2017.

Table 1: Development, Testing, and Deployment Status for the 44 Systems in the Census Bureau's 2018 End-to-End Test, as of April 2018

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
1. Block Assessment, Review and Classification Application Interactive review tool that is designed to assist an analyst in assessing a set of geographic work units.	Complete	Complete	December 2016	n/a	Yes
2. OneForm Designer Plus Tool that creates paper forms including decennial questionnaires, letters, envelopes, notices of visit, language guides, and other Decennial field and public materials.	Complete	Complete	March 2017	n/a	Yes
3. Census Document System Web-based system for requesting forms design services, publications and graphics services, and printing services.	Complete	Complete	March 2017	September 2017	Yes
4. MOJO Recruiting Dashboard System that provides a dashboard to show recruiting metrics.	Complete	Complete	March 2017	June 2018	Yes
5. Matching and Geocoding Software System that allows for clerical matching and geocoding during Non-ID Processing.	Complete	Complete	February 2018	n/a	Yes

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
6. Real Time Non-ID Processing System that matches addresses in real-time, geocodes addresses in real-time, and geo-locates housing units using web map services.	Complete	Complete	February 2018	n/a	Yes
7. Enterprise Censuses and Surveys Enabling (ECaSE) – Internet Self Response (ISR) Tool that supports self-response data collection by the Internet for respondents and by call center agents on behalf of respondents.	Complete	Complete	March 2018 (1-month delay)	n/a	Yes
8. 2020 Website Website for the 2018 End-to-End Test, the scope encompasses the Test's internet presence needs.	Complete	Complete	June 2018	January 2019	Yes
9. Master Address File/Topologically Integrated Geographic Encoding and Referencing System Database that contains, manages, and controls a repository of spatial and non-spatial data used to provide extracts to define census operations, provide maps, and support Web applications.	Complete	In progress[b]	December 2016	October 2018	Yes
10. Census Hiring and Employment Check Administrative system that automates the clearance processing of all personnel at Census Bureau Headquarters, the Bureau of Economic Analysis, The Regional Offices, the National Processing Center, and two Computer Assisted Telephone Interview sites.	Complete	In progress[b]	March 2017	June 2018 (4-month delay)[c]	Yes
11. Census Human Resources Information System Web-based personal information tool providing personnel and payroll information on desktops.	Complete	In progress[b]	March 2017	July 2018	Yes
12. Commerce Business System System that collects and reports labor hours and costs for the activities that the National Processing Center performs.	Complete	In progress[b]	March 2017	July 2018	Yes

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
13. Decennial Applicant, Personnel and Payroll Systems System that supports personnel and payroll administration for temporary, intermittent Census Bureau employees participating in the 2018 End-to-End test.	Complete	In progress	March 2017	July 2018 (11-month delay)[c]	Yes
14. Decennial Service Center Suite of systems to handle all IT service requests initiated by field staff.	Complete	In progress	March 2017	July 2018	Yes
15. Desktop Services Suite of systems that includes chat.	Complete	In progress	March 2017	July 2018	Yes
16. Recruiting and Assessment Tool that provides capabilities for applicant recruiting and the applicant pre-selection assessment process.	Complete	In progress	March 2017	July 2018 (5-month delay)[c]	Yes
17. Identity Management System System used to ensure that the right individuals have access to the right resources at the right times for the right reasons.	Complete	In progress[b]	March 2017	January 2019	Yes
18. Listing and Mapping Application Single instrument that enables field users to capture and provide accurate listing and mapping updates to the Master Address File/Topologically Integrated Geographic Encoding and Referencing Database.	Complete	In progress	July 2017	April 2018 (1-month delay)	Yes
19. Mobile Case Management Tool that provides mobile device-level survey case management and dashboards, and manages data transmissions and other applications on the mobile device.	Complete	In progress	July 2017	April 2018 (1-month delay)	Yes
20. Geospatial Services Tool that provides vintage imagery service, internal current imagery service, public current imagery service, mapping services.	Complete	In progress[b]	July 2017	July 2018	Yes

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
21. Service Oriented Architecture Enterprise software architecture model used for designing and implementing communication between mutually interacting software applications in a service-oriented architecture.	Complete	In progress	July 2017	July 2018	Yes
22. MOJO Optimizer/Modeling Service to optimize the field workers' routes.	Complete	In progress	August 2017	April 2018 (1-month delay)	Yes
23. Integrated Logistics Management System System to manage logistics and resource planning.	Complete	In progress	August 2017	July 2018	Yes
24. National Processing Center Printing Service that provides printing services for low-volume forms and merges static form and variable data, such as printing a standard form with unique addresses.	Complete	In progress[b]	August 2017	July 2018	Yes
25. Automated Tracking and Control Tool that provides customer, employee, and workflow management by automating business and support activities. It provides outbound call tracking for Geographic Partnership Programs and material tracking and check-in.	Complete	In progress	February 2018	July 2018	Yes
26. Concurrent Analysis and Estimation System System that stores data and uses it to execute statistical models in support of survey flow processing, analysis, and control.	Complete	In progress[d]	March 2018	n/a	Yes
27. Census Questionnaire Assistance Provides call center capability for self-response and assists respondents with responding to and completing census questionnaires.	Complete	In progress	March 2018 (1-month delay)	April 2018 (1-month delay)	Yes

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
28. Decennial Physical Access System System that maintains the photo and other information relating to providing physical access control to facilities. It also is used to generate badges for certain employees, including enumerators, listers, and Census Field Supervisors.	Complete	In progress[b]	March 2018	June 2018	Yes
29. Census Image Retrieval Application Application that provides secure access to census data and digital images of the questionnaires from which the data were captured.	Complete	In progress[b]	March 2018 (1-month delay)	July 2018 (5-month delay)[c]	Yes
30. Integrated Computer Assisted Data Entry Tool that captures paper responses from questionnaires.	Complete	In progress	March 2018 (1-month delay)	July 2018	Yes
31. Unified Tracking System Data warehouse that combines data from a variety of Census systems, bringing the data to one place where the users can run or create reports to analyze survey and resource performance.	In progress	In progress	December 2016	October 2018 (7-month delay)[c]	Yes
32. ECaSE – Field Operational Control System System that manages field assignments with routing optimizer, reviews and approves field worker's time and expense, and tracks field worker's performance.	In progress	In progress	July 2017	July 2018 (4-month delay)[c]	Yes
33. ECaSE Operational Control System System that manages the data collection universe for all enumeration operations, maintains operational workloads, and provides alerts to management.	In progress	In progress	August 2017	July 2018 (4-month delay)[c]	Yes
34. Sampling, Matching, Reviewing, and Coding System System that supports quality control for field operations.	In progress	In progress	August 2017	October 2018 (7-month delay)[c]	Yes
35. Intelligent Postal Tracking Service Mail tracking system developed by the Census Bureau and the U.S. Postal Service system to trace individual mail pieces during transit.	In progress	In progress	February 2018	July 2018	Yes

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
36. Control and Response Data System System that provides a sample design and universe determination for the Decennial Census	In progress	In progress	February 2018	October 2018	Yes
37. Census Data Lake Repository for response data, supports data ingest, and storage, and provides data access to reporting and analytics applications.	In progress	In progress	February 2018	January 2019	Yes
38. Decennial Response Processing System System that performs data processing on the raw response data and stores the final processed response data for long term storage.	In progress	In progress	March 2018 (1-month delay)	January 2019	Yes
39. Production Environment for Administrative Records Staging, Integration and Storage Tool that manages Administrative Records and provide services associated with those records.	In progress	In progress	March 2018 (1-month delay)	January 2019 (10-month delay)[c]	Yes
40. ECaSE – Enumeration Tool that captures survey responses collected by door-to-door enumeration, records contact attempts, and collects employee availability and time and expenses.	In progress	In progress	March 2018 (1-month delay)	July 2018 (4-month delay)[c]	Yes
41. Centurion Tool that provides an external interface for the upload of group quarters electronic response data	In progress	In progress	July 2018 (4-month delay)	n/a	No
42. Fraud Detection System System that identifies fraudulent responses either in real-time or post data collection.	In progress	In progress	October 2018 (8-month delay)	n/a	No
43. Center for Enterprise Dissemination Services and Consumer Innovation Tool that will provide search and access to tabulated Census data.	In progress	In progress	January 2019	n/a	No

System name and description	Status of development	Status of testing	Expected/ actual first deployment date[a] (delay since August 2017)	Expected/ actual final deployment date[a] (delay since August 2017)	Has at least a portion of the system's functionality been deployed?
44. Tabulation Tool that receives post-processed response data and produces tabulated statistical data.	In progress	In progress	January 2019	n/a	No

Legend:
n/a = not applicable. These systems are only being deployed one time, so the first deployment date also represents the final deployment date.
Source: GAO analysis of Census Bureau data. | GAO-18-416T

[a]The dates listed for March 2018 or earlier should be considered actual dates.

[b]Bureau officials stated that testing for this system is complete; however, the Bureau has not yet provided documentation to support this assertion.

[c]According to officials within the Bureau's 2020 Census Systems Engineering and Integration office, the delay in the final deployment date for this system is due to a change in the timing of the operations it is supporting for the 2018 End-to-End Test.

[d]Although this system has deployed, one of its interfaces was still undergoing testing as of the end of March 2018

GAO Contact and Staff Acknowledgments

If you have any questions about this statement, please contact Robert Goldenkoff at (202) 512-2757 or by e-mail at goldenkoffr@gao.gov or David A. Powner at (202) 512-9286 or by e-mail at pownerd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Other key contributors to this testimony include Jon Ticehurst (Assistant Director); Ty Mitchell (Assistant Director); Lisa Pearson (Assistant Director); Kate Sharkey (Analyst in Charge); Jeffrey DeMarco; Hoyt Lacy; Kayla Robinson; Andrea Starosciak; and Umesh Thakkar.

Mr. CULBERSON. Thank you very much, Mr. Powner. I would like to start out asking you and Mr. Goldenkoff, what could be done in your opinion to improve accountability at the Census Bureau?

Mr. GOLDENKOFF. Well, you know, we are GAO. Accountability is quite literally our middle name.

Mr. CULBERSON. Right, right.

Mr. GOLDENKOFF. So anything that can be done to improve accountability, we are all for it. Are you talking about individual—accountability of individual employees or more organizational performance?

Mr. CULBERSON. Both.

Mr. GOLDENKOFF. Both? OK.

Mr. CULBERSON. Both, because if you were in the private sector, clearly you would be able to reward people for their good work with a raise or promotion. People that, you know, have habitual problems, you know, which is one of the great frustrations I think in the—one of our great frustrations I think as taxpayers is the inability to fire people——

Mr. GOLDENKOFF. Sure.

Mr. CULBERSON [continuing]. If they don't do their job. And why wouldn't we give, for example, the secretary who comes out of the private sector, a very successful businessman, the ability to frankly hire and fire people that aren't performing in the Census Bureau to——

Mr. GOLDENKOFF. Sure.

Mr. CULBERSON [continuing]. Increase accountability. Because ultimately, that is why the private sector obviously works so well. People know they are going to be rewarded for good work and they could be—lose their job if they are not performing.

And I will tell you, the overruns are just appalling. I mean, it is just unacceptable these $3 billion and we just can't have this anymore. And I am looking for some bold ideas.

Mr. GOLDENKOFF. Sure. First of all, you are absolutely right. If there is—if there are circumstances where there has been gross negligence and mismanagement, particularly at the top levels, we should be able to remove and terminate people who——

Mr. CULBERSON. You can't do that.

Mr. GOLDENKOFF [continuing]. Are not performing well.

Mr. CULBERSON. That can't be done today, right?

Mr. GOLDENKOFF. Well, and I think this is not an issue with the Census Bureau. It is a government-wide issue.

Mr. CULBERSON. It is. This is a great case study.

Mr. GOLDENKOFF. Exactly, and you know we have looked at this just from a government-wide perspective—we haven't looked at it for the Census Bureau, and so everything, it needs to be dealt with on a facts and circumstances basis. But speaking at a higher level, there are things that agencies can do and short of termination to hold top executives accountable.

One is making sure that you have a good performance management system and it is used, and a lot of agencies don't have that. What I mean by that is making sure that there is a line of sight between individual performance and organizational results. And that starts with your senior leaders. I would take a look at their

performance contracts, their SES contracts, and see what are they being held accountable for.

Mr. CULBERSON. And I appreciate that. I know David—Mr. Powner was talking about a moment ago how important it was. He recommended that the executives to commerce monitor, there be good oversight, that you are watching for, you know, cyber intrusions. I would just like you to think, both of you, outside the box for a minute. What would you recommend to this committee if we really wanted to be bold and ensure that the census does not—there is no more overruns, that things run efficiently, if we really wanted to make some bold, out of the box recommendations to the committee about using, again, this is a great case study—and we know there is a lot of—Mr. Jarmin, you have got a lot of superb, top notch, professional people there who are committed to do their job. But this is a constant source of frustration throughout the entire federal government.

I would just like you to think outside the box for a minute, what about creating some system where the secretary could absolutely decide that somebody needs to be fired in order to make sure that people are held accountable and we don't see any cost overruns if this works as it should. People know there are consequences if they—and rewards if they are doing a good job.

Mr. POWNER. So a couple of things. I mean, that is probably a longer term solution to get that addressed, right?

Mr. CULBERSON. It may be sooner than you think.

Mr. POWNER. One of the things I will say to the credit of the Bureau is they moved some individuals in terms of who is in charge and who is driving the ship because I think we have a $3 billion overrun. You said, well, what is going to change? You have improved governance from Secretary Ross, but are the same players still in? There have been changes. So they did move some of the parts and everything.

I think the thing that would really help that this committee could really help is there is nothing that drives performance like having an executive or Congress breathing down your neck, OK? And that is why I think the undersecretary and Secretary Ross having governance as well as——

Mr. CULBERSON. Right.

Mr. POWNER [continuing]. Director Jarmin, that drives performance if there is accurate status reports that go up on the delivery of systems, security of systems, the operations performing where it is—say at least quarterly from Congress.

Mr. CULBERSON. Right.

Mr. POWNER. If there was a quarterly status report came here that you could actually look at the progress that is being done and whether the progress is according to the plan. So for instance, you know, like in our report in the appendix, we have 44 systems and we say 19 of them were delayed.

OK. So we get into this back and forth with the Census Bureau. Well, it is not delayed because they claim that the operations were pushed back as part of the test. That is semantics. OK? If it is supposed to be done here and it is not done here, what are we doing to mitigate risks and ensure that it is successful. I don't really care

what word we use, but we need to make sure that this gets integrated, tested, and secured in time.

And I think your oversight, back to my opening paragraph and my oral statement, I think if you got those status reports at least on a quarterly basis and dogged the hell out of progress to ensure that they stay on schedule, that would be helpful along with what is being done with Director Jarmin and also at the Department of Congress.

Mr. CULBERSON. Yes, I like that a lot. Relentlessly bird dog this. Secretary Ross I know is personally involved. This subcommittee will be personally involved. I know Mr. Serrano and I, Mrs. Lowey, Chairman Frelinghuysen, we will all be working together to ensure that—we just can't have anymore of these $3 billion cost overruns. It is just unacceptable.

And this end to end census test began last month, but according to GAO's testimony, close to a third of the IT systems required for the test are still being developed. I mean, you have known about this test for years and I don't understand why all the IT systems aren't ready for tests. What is up with that?

Mr. JARMIN. Thank you, Mr. Chairman. The systems that Mr. Powner is referring to are actually being used right now. We have a phased approach to—there are different product releases and certain functionalities ready for when it is needed. And the systems have been reviewed by the director of the decennial census and the CIO to ensure that all the public facing systems have an ATO and that they are as secure as possible.

We often have findings and we do work on those to make sure that we have all of the documentation and that we have checked all of the boxes on that.

Mr. CULBERSON. But why, for example, isn't the fraud detection system ready in time?

Mr. JARMIN. The fraud detection system is actually something that we planned to use post-data collection and we didn't need it for while we were in the field for the end to end test. It is something that we can test later, so that was a resource issue. We decided to focus resources on the things that we needed to get up and running for the test.

Mr. CULBERSON. But one of the ones that you have got to get done is security system testing. What about the security testing for the systems?

Mr. JARMIN. That is ongoing all the time, and will remain ongoing until we are done with the census. We are constantly working on improving the systems, testing the systems, and ensuring they are secure. That will be an ongoing effort for——

Mr. CULBERSON. You know, are you, Director Jarmin, confident we are not going to see anymore increases in the cost of the census in fiscal year 2018? How confident are you that we are not going to see any more increases?

Mr. JARMIN. So as Mr. Goldenkoff noted that we worked closely with the Secretary and his team at the Department of Commerce last year to do a very deep dive into the 2020 Census, life cycle cost estimate. We brought in a team of folks that have been working on cost assessments for satellites at the Department. We had the best people available to work on that. We did a very deep dive and a

very thorough review of the program. And I think we are confident that the $15.6 billion will cover the cost of the census.

Mr. CULBERSON. So that is it?

Mr. JARMIN. We will be monitoring what happens in the test. I think there is sufficient contingency in there that even most kinds of fixes that we anticipate should be covered within the $15.6 billion. But if there is something that we need to come talk to you, you will hear from us right away.

Mr. CULBERSON. And I assure you we will be aggressively and rigorously conducting oversight of the way that you are proceedings. And obviously, we want to see people that do a good job rewarded, but those that are not, I mean, this subcommittee, we just can't tolerate any more of these cost overruns.

And there is a whole variety of financial tools available to us as a subcommittee that I will use, as needed, to ensure that you stay within those cost boundaries. I will do whatever I can to help Secretary Ross hold people accountable, reward those who do a good job, and hold other people accountable.

I am confident that with his background in the private sector, he could—he would do—if we gave him the tools that he had in the private sector, I am confident Secretary Ross would really be able to ride herd on the census and ensure that our tax dollars are not wasted and that the count would be accurate, and complete, and timely, and secure.

The private sector just doesn't have any problem with these things. It is maddening to us as taxpayers to see that the ease with which you can—whether it be ordering something online, transferring money in an account you can be in any state, any country, and move money easily and securely, and to see these problems with the federal government is just—it is maddening.

And that is why I encourage the Government Accountability Office to think outside the box. Bring us some bold new suggestions on what you think we could do to help give Secretary Ross the tools he needs to really hold people accountable to encourage that—to make sure that the census is accurate, complete, timely, secure, and frugal.

Mr. JARMIN. Yes. Thank you, Mr. Chairman. We are striving to do that and we have made a number of personnel changes over the last several months that I think are aimed at accomplishing just that. We have some very good people on the team, experienced with issues we have had in prior censuses that are able to aggressively manage the schedule and the cost of the census.

Mr. CULBERSON. Thank you, because this has to be done right.

Mr. JARMIN. Yes.

Mr. CULBERSON. Thank you very much. I understand Mrs. Lowey is on a tight schedule. So Mr. Serrano, with your gracious understanding and agreement, Mrs. Lowey, I am pleased to recognize you because I know your schedule is full today.

Mrs. LOWEY. Well, thank you very much, Mr. Chairman. And I want to thank my ranking member and friend. I know what a passionate advocate my friend, Mr. Serrano from New York, has been for an accurate census count. So thank you for giving me an opportunity. Unfortunately, there are all kinds of conflicts going on. So I appreciate it.

I have just a question I would like to ask. I strongly oppose this administration's decision to include a citizenship question on the 2020 census. A bipartisan group of six former directors of the Census Bureau wrote to Secretary Ross in January, urging him not to include this language. They wrote, and I quote, "We strongly believe that adding an untested question on citizenship status at this late point in the decennial planning process would put the accuracy of the enumeration and success of the census in all communities at grave risk."

Can you tell me, why does the Trump administration think it knows better than the bipartisan group of six former census directors?

Mr. JARMIN. Thanks for that question. As you know, title 13 of the U.S. Code delegates the responsibility for deciding which questions are on the census to the Secretary of Commerce. And when the request from the Department of Justice came in in December, he directed a three-pronged review: a legal, a policy, and a technical review.

The Census Bureau was responsible for the technical review. As part of that review, I think the census folks, as well as stakeholders outside, like the six former directors, noted that one of the main concerns that people have with the citizenship question is that there could be reduced response rates, especially in certain communities like the Hispanic community and the immigrant communities.

There is not a lot of direct evidence that that happened. What can we look at to make that assessment? The citizenship question has been on the American Community Survey since 2005 and it had been on the long form of the census since 1970. And so there is some—we could get some circumstantial evidence of what the differential response rates are, but it is not a large difference and it is hard to pinpoint it to the citizenship question.

The Census Bureau provided three options to the Secretary. One was to do nothing, to continue to provide the citizen voting age, population data from the American Community Survey as we have done. One was to put the question on the census. And the other was to use administrative records, primarily from the Social Security Administration, but also from CIS and from the State Department, which is—those are in negotiation.

The Census Bureau, suggested the best approach would be to use administrative records, but we noted that there were strengths and weaknesses in terms of providing high quality, block level, citizen voting age population data to meet the request that the DOJ had stated in their letter.

The Secretary reviewed that and with all of the other inputs that he had, including from the six former directors, opted for a hybrid approach of using—both the administrative records and the question on the 2020 questionnaire so that is how the Secretary made that assessment.

Mrs. LOWEY. I understand that. And I just want to be sure my facts are the same. In Secretary Ross' March 26 memo, he points out that prior decennial censuses asked citizenship questions up until 1950. And Census Bureau surveys of sample populations con-

tinue to ask a citizenship question to this day. The Secretary also asserted that the citizenship question has been well-tested.

But we don't really know what Secretary Ross means by this, and I am highly skeptical that this administration has thoroughly tested this question to see if it would allow for an accurate count. So I want to follow up, Dr. Jarmin. Given the significance of the 2020 census and how important it is that we count everyone accurately, can you review again for me what data or information did the census rely on to come up with this proposal? And given the fact that a citizenship question has simply not been well-tested or asked widely in nearly 70 years, it seems to me the Census Bureau must treat this matter very carefully and should only proceed if there are credible assurances that it will do no harm.

Can you tell me what assurances can we expect to receive, if any?

Mr. JARMIN. As you know, we are under litigation on this, so I can't comment in detail. I can summarize what was already in the Secretary's decision memo, which I did pretty thoroughly.

I think the question is being asked today. There are folks getting the American Community Survey, and that question is on that form. That question has been answered by the population on the American Community Survey and prior to that on the long form of the decennial census in 1970, 1980, 1990, and 2000. In 2005, is when we moved it to the American Community Survey, so it is the case that people understand and can answer the question.

What we don't know, and you are very perceptive, is that in the 2020 environment where the data will be used for reapportionment and redistricting and the allocation of federal funds, we don't necessarily know how people will behave in that environment. There really is, unfortunately, no way to test that, outside of doing it in the census. There is no other situation where the data are going to be used for those purposes, so we can't say definitively what that would be.

But there is some information that is being put together, the administrative record for these court cases, and when that becomes available, that is something that we will share with the subcommittee and that you will be able to review and understand the information that the Census Bureau reviewed and to provide to the Secretary.

Mrs. LOWEY. Now, what is the time frame?

Mr. JARMIN. I am not a lawyer, so I can't tell you the answer to that question, sorry. Soon, I hope.

Mrs. LOWEY. Thank you, Mr. Chairman.

Mr. CULBERSON. Thank you. Mr. Serrano.

Mr. SERRANO. Thank you. Just a comment before I ask my questions. There are some people who may react to this and apply pressure on themselves by not answering the question, and, therefore, there are even some groups who I don't support asking for a boycott of the census. And what I have told them is that we have worked today hard, all of us, to get people in certain communities to fill out the census form for it to now go back. You know, and this is being transmitted to the world, so then, you know, I am going to get a lot of comments about, you know, you should be part

of the boycott. Well, I don't believe in the boycott because we worked too hard to get people to believe in the census.

On the other hand, if the census brings pressure that this is going to take another route if this information goes out there, it begs the question, why would you ask it this time other than the way you have been asking it on the long form, which has not caused much problems, if any. So that is—you know, we keep harping on that, but it has to be.

Director Jarmin, it has been reported that Secretary Ross made the decision to add a question on citizenship to the 2020 Census over objections from senior career officials at the Census Bureau. Without putting you on the spot, is this true, and how heavily involved was the Census Bureau in this decision-making?

Mr. JARMIN. We were involved in the technical review that the Secretary had asked for. Again, we made the recommendation of using administrative records, but we noted, there were some strengths and weaknesses to that approach. There were some strengths and weaknesses to putting a question on the questionnaire and there are some strengths and weaknesses associated with not doing anything at all.

After that, it was up to the Secretary to use that information with other information that he gleaned from talking with legal staff and with talking to, for instance, the six former directors and a number of other stakeholders from around the country, on both sides of this question, when he made that decision. The Census Bureau is an apolitical professional organization and we will do our best to do a safe and secure and complete and accurate census that we are directed to do so, by the Department and by the Congress.

I do want to emphasize, though, that, nothing has changed in terms of the security and the culture that the Census Bureau brings to the table in terms of making sure that the data are kept confidential. The census will remain to be safe and secure. We will not share statistical information with other government agencies. This will not go to law enforcement.

We work hard also to make sure that everybody feels like participating in the census is an important part of their civic duty and we will continue to do so, whether the question is on the form or not.

Mr. SERRANO. Well, I just want you to remember something, and I don't expect you to, nor will I ask you to comment on this, unless you want to, because I don't want to bring you into waters that you should not be in, but it is clear to everybody that there is tension in this country between some minority groups and other people and the Justice Department and some of their comments and some of their views and how they handle certain things.

So if you are worried about that, and then you read or you hear that the Justice Department is asking the Department of Commerce, i.e., the Census Bureau, to put this question in, your immediate reaction is, This can't be good. Finding out whether I am a citizen or not, it is not a problem, but why are they asking this question?

And the belief on the street, if you will—and we get to hear the people on the street—is that it is done to keep people from signing up and not being counted and that helps in redirecting and so on—

who knows? But when fears start to grow, they are very hard to stop.

Just like I told you before, when you asked me where I was born and you don't ask Mr. Kilmer—and I am not picking on him, where he was born—you are actually drawing a line between us. You are saying that I am a citizen, but different than he, because I had to put down where I was born and he did not and that creates all kinds of mind games that we have been dealing with for a lot of years. We have made a lot of progress in this country, but we still have a lot of things to do.

Mr. Jarmin, as you know, numerous Members of Congress, including myself, have expressed serious concerns about the impact of the citizenship question. Dr. Jarmin, what is the latest point at which content changes could be made to the 2020 Census questions, without causing disruption to ensure that printed forms and information technology systems are still ready in time for Census Day? In other words, if my amendment—and I will have an amendment—wins, you know, then you guys will hate me because you will have to change the forms, what is the time?

Mr. JARMIN. Thank you for the question, Ranking Member. But let me tell you, we will never hate you, regardless of that. I used to work with his brother, so——

Mr. SERRANO. My brother did 30 years, right, with the Census Bureau?

Mr. JARMIN. Yes.

Mr. SERRANO. And I want you to know, Mr. Chairman, for the record, and for any reporter in the room, that he got that job before I came to Congress.

Mr. JARMIN. In our plans, I think we would like to have everything settled for the questionnaire this fall.

Mr. SERRANO. This fall?

Mr. JARMIN. Yes, that is in our plans. That reflects our inherent conservatism on these matters, so——

Mr. SERRANO. You are putting a lot of pressure on the chairman, you know, to accept my amendment.

Mr. JARMIN. But there is time after that. If it extends beyond say, next spring or early summer, you are getting into where changes are going to cost money. So, obviously, the Census Bureau would like this resolved very quickly.

Mr. SERRANO. Can I ask one more and then I will turn it over?

Mr. CULBERSON. Of course.

Mr. SERRANO. Secretary Ross's memo asserts that, quote, "No one provided evidence that they are residents who will respond accurately to the decennial census that did not contain a citizenship question, but would not respond if it did." However, at the very end of the secretary's memo, he announces, "To minimize any impact on the decennial census response rates, I am directing the Census Bureau to place the citizenship question last on the decennial census form."

Now, since the census suggests the Justice Department knows there will be a very real and negative impact associated with adding this question, if so, why isn't the Department testing the question as part of the 2018 end-to-end test currently being conducted in Rhode Island?

Mr. JARMIN. Thank you. I think there are two parts to that question. One was, whether or not there was—about the response rate. I think both the Census Bureau and other external folks highlighted that that was a concern to the Secretary. I think he recognizes that concern. There was not a lot of direct evidence to say that it would be, X percent of an increase in non-response, so he made a cost-benefit decision, using several criteria. I think that is how he came to that conclusion.

In terms of putting the question last, I think that is a mitigation thing, to make sure that if someone is going through the questionnaire and if they are put off by that question, that they complete as much of the questionnaire before that, as possible. We are also doing other things to mitigate possible negative impacts to the question.

We have right now a survey out in the field called the Census Barriers, Attitudes, and Motivators Survey. That is a survey to 50,000 people to ask their likelihood to participate in the census and what makes them more likely to participate or not to participate. Associated with that, we have focus groups from around the country. Enrique Llamas is heading to Puerto Rico this afternoon to participate in some of those.

Mr. SERRANO. There is a game tonight, you know, between the Indians and the Twins.

Mr. JARMIN. If we see him on Twitter or something that will—but—so we have instructed the folks that are sort of moderating those focus groups to add an inquiry about people's attitudes about the citizenship question. We will use this data to work with our advertising and our partnership specialists to try to come up with strategies to do, just like you said, to make people understand that participating in the census is important, that it is safe and secure, and that we need everybody to participate.

Mr. SERRANO. One closing comment. On my comment about, you know, the territories being counted differently—and, again, for any reporter listening to me, this is not a statement against non-citizens—but here is the truth. If you are living in New York and you are here legally, you will be counted in the census as part of the population of the United States. If you are living in Puerto Rico, and you are therefore for a citizen, you won't be counted in the population of the United States. Something is wrong with that picture, and I don't think when they wrote the Constitution, they necessarily closed the door on what interpretations we can give it.

I know they don't like me to say it is a moving document or evolving document, but it has been, and I would hope that the census continues to study the issue of, can you or will you include the territories in the total population of the United States, because we are cheating ourselves as a country. We actually have more people than we claim we have.

Mr. JARMIN. I am sure there is a lawyer who has an opinion on that, but we will definitely take that back and have some conversations.

Mr. SERRANO. I have an opinion on that.

Mr. JARMIN. Yes.

Mr. SERRANO. Thank you.

Mr. CULBERSON. We need to remember those people are a part of the United States and also the extra—the territorial—I mean, the exclusive economic zone of the United States is about—landwise, 50 percent larger than we realize because of the territories and all the underwater exclusive economic zone that we have as a result.

Mr. Kilmer, I want to thank you for your patience. I think it is important to let everybody have a chance to ask questions, so I am pleased to recognize the gentleman from Washington state, Mr. Kilmer.

Mr. KILMER. Thank you, Chairman, and thanks for being with us.

I want to echo the concerns of the ranking member. You know, I think there are real concerns that the inclusion of this citizenship question can add uncertainty and risk and cost. You know, folks in my region know all too well the history of politicizing the census. It is—history in World War II, as a tool to discriminate against and intimidate Japanese-Americans.

I have heard from—we just did a round of town hall meetings in my district and we heard from constituents who still remember that very well and I am worried that the citizenship questions hearkens back to that, not to mention the risk just from a science standpoint, the data needs to be accurate so that Congress can make informed decisions about where money goes.

So I guess I am—I would like to ask you, we have heard multiple experts who have suggested that this could impact response rates and the accuracy of the data. So has there been an estimate of what the non-response rate might be with and without the citizenship question and what the range of potential increases in non-response might be, due to the inclusion of that question?

Mr. JARMIN. Thanks for the question, Representative Kilmer, and good to see someone from my home state of Washington here.

I think, again, this is where the litigation probably limits what we can say right now. I think some of the numbers you have asked for are in some documents that were provided to the Secretary. If they become part of the administrative record and are made public, we will be glad to get those to you and then to have any conversations you might want to have to follow up from that.

Again, I can say that, from me being an economist and, running regressions and trying to understand causal impacts of things, there is not a clean analysis that we can do to really determine if differential response rates were due to the citizenship question or due to some other factors.

Mr. KILMER. You haven't seen that evidence in previous censuses?

Mr. JARMIN. Well, in the previous censuses, it was only long form, so that is one of the reasons why it is hard to tell what it would look like in this environment. I think we had some staff who made a good effort at this, but it is imperfect—it is not going to be a definitive answer.

Mr. KILMER. So a range was provided to the secretary that suggested some impact on response rates?

Mr. JARMIN. Yes. Not a large impact, but some impact.

Mr. KILMER. So what is the increase in costs for every increase in percent non-response?

Mr. JARMIN. If I recall, the last estimates we saw were in the fifty-million-dollar range for percent non-response, but what we are talking here, because this would impact a relatively small part of the population it would be felt among subgroups, and so for the overall cost, it would not be particularly large.

Mr. KILMER. Can you say a little bit more what you mean by that when you say that the—so I understand that there would be a differentiated non-response based on certain population, but——

Mr. JARMIN. Right. For many people, we don't expect that this would impact their response patterns, at all, citizens, largely, and that's the majority of the population, so it just wouldn't have a big impact on the overall response rate. It would be the response rates of subgroups that would matter.

Mr. KILMER. So there was a range that was provided to the secretary that suggests some percentage reduction and it is about $50 million per 1 percent?

Mr. JARMIN. Yes, but we don't expect a one-percent reduction in response——

Mr. KILMER. In the aggregate?

Mr. JARMIN. Right. Yes.

Mr. KILMER. OK. What are the risk mitigation steps that are being taken, just in case there is an increase in non-response?

Mr. JARMIN. That was some of the information that I provided to the ranking member. I think the current research that we are doing to have a more explicit focus on the citizenship question, that will be used with Y & R, our advertising partner, to come up with strategies to message to the communities that we think might be impacted by that.

Mr. KILMER. I see the red light of doom, so I will hold my other questions for—if we are holding another round, I am happy to stick around and ask them.

Mr. CULBERSON. To make sure I understood you to say you do not expect a one-percent decline in participation?

Mr. JARMIN. Total, no.

Mr. CULBERSON. Some significantly smaller amount may be minimal?

Mr. JARMIN. I think, let's wait until we can provide the information in a more robust way when the administration record comes out and then we would be really happy to come back and have a conversation with you about what we think the impacts would be. I think that is probably the best way to——

Mr. CULBERSON. Is it fair to say the impact would be minimal?

Mr. JARMIN. I think, you know, let's wait until we can provide the information in a more robust way when the administrative record comes out and then we would be really happy to come back and have a conversation with you about what we think the impacts would be. I think that is probably the best way to——

Mr. CULBERSON. Is it fair to say the impact would be minimal?

Mr. JARMIN. I wouldn't say minimal. I would say it could be—in some communities, it might be important, but it is not——

Mr. CULBERSON. It is not going to reach 1 percent?

Mr. JARMIN. No.

Mr. CULBERSON. Thank you. We are ready now for the gentleman from Alabama, Mr. Aderholt.

Mr. ADERHOLT. Thank you. It's good to be here. Thank you, Mr. Chairman.

I just wanted to follow up. You, in one of your first comments that you made and in your written statement, you talk about in the midst of the 2018 end to end census test, and I will admit I have not spent a lot of time on researching how, you know, you developed this over time and get ready for the census, but from a thirty-thousand-foot level, if you are going into a Rotary Club and speaking and you are asked about this 2018 end to end census, just make a little summary and explain it from a thirty-thousand-foot level, exactly what this does.

Mr. JARMIN. The 2018 end to end test is primarily meant to make sure that all of our systems and processes are ready for 2020. So, it is roughly a dress rehearsal. We are not testing everything. There is a bunch of post-data collection activities that we are not testing during the 2018 test, but it included an address-canvassing portion—that was last fall—that was done in West Virginia, Washington state, and in Providence.

Mr. ADERHOLT. The three areas that you mentioned?

Mr. JARMIN. Yes. And then we did peak operations in just Providence County, Rhode Island, that includes providing people the opportunity to respond on the internet, and that is what has been going on lately. You could respond via the telephone, which we have also been getting a good number of phone calls, and via paper.

And then in May, for the folks who haven't responded, just like we would in the actual census, we will be sending enumerators out with smartphones to collect the data from those who haven't been counted yet.

I was in Providence last week talking to a group there and sort of polled the folks to see if they had been filling out their 2018 census tests, and several of them actually had, so that was—a bit. So we have got about 31½–32½ percent response rate right now.

Mr. ADERHOLT. So you will have folks on the ground with smartphones——

Mr. JARMIN. Yes.

Mr. ADERHOLT [continuing]. Who will be taking a lot of this information. Will this be the first census taken with smartphones that have been on the grounds or was that——

Mr. JARMIN. Yes. Yes. Yes.

And that is one of the key innovations, not just that they are using a smartphone, but that we are assigning their work electronically, remotely. In prior censuses, it was a paper-based operation, and people would meet their crew leader in the morning, physically meet them and get their work assignments and go out and enumerate households and then have to process that paper back. This is a much more efficient way.

Like my colleagues, there is the added risk, we haven't done that before, so we are watching this, really carefully. I think we are in good shape so far. We will see what happens in May.

Mr. ADERHOLT. Can you explain to me a little bit about how you work with states and do you have—is there a Federal Census Bu-

reau assigned to each particular state to make sure that particular state is ready to go or how—explain to me how it works.

Mr. JARMIN. Our outreach in partnership activities include what we call complete-count committees. Many of those are done at the level of the governor, but they can be at any level. We have robust partnership programs working with all levels of state and local government around the country, tribal governments, as well. I think we have a very robust and diverse program of reaching out to all different parts of the community around the country to make sure that people can know that the census is safe and secure.

Mr. ADERHOLT. Do you have one particular person that is over each state?

Mr. JARMIN. I don't think we necessarily have one person over each state. We have multiple people in each state attacking different levels of the problem.

Mr. ADERHOLT. So what I was wondering is if, you know, if you have—because, obviously, you hit on a little bit earlier, it depends on a lot about how much federal help and, you know, it's significant. And just to make sure that someone is looking after that particular state; whereas, one state may be—and, you know, I am just throwing this out—Alabama might be very focused on it, whereas Georgia may, you know, say, This is important, but they are just not making it a focus. I just want to know if there is somebody there who is saying, you know, I am watching this state.

Mr. JARMIN. We have contacts with all of the governors' offices in all 50 states and in the territories, as well. We have a very robust, outreach.

Mr. ADERHOLT. But do you have one particular person, federal person, that's assigned to that?

Mr. JARMIN. We have headquarters people who are in charge of the overall partnership program——

Mr. ADERHOLT. In other words, if I wanted to ask about how Alabama is doing on there, is there a person that it will be the go-to person that can say, I am in charge of Alabama?

Mr. JARMIN. I can definitely get you someone who will get you the someone. I don't think we have someone who is in charge of Alabama, but we have people who are in charge of——

Mr. ADERHOLT. Regions?

Mr. JARMIN. Yes. We have, both at headquarters and in the regional offices, people that are working with different levels of state and local government and with private sector organizations and companies and churches and what have you. In 2010, we had 248,000 different partners. We expect to have close to 300,000 this time and all of the major governmental organizations below the federal government will be represented in that.

Mr. ADERHOLT. OK. I see my time is up. Thank you, Mr. Chairman.

Mr. CULBERSON. Thank you, Mr. Aderholt.

Ms. Meng.

Ms. MENG. Thank you, Mr. Chairman.

Dr. Jarmin, do you believe that immigrant populations are harder to count?

Mr. JARMIN. We have many groups that are in hard-to-count populations and immigrants are one of those subgroups, yes.

Ms. MENG. Do you believe that adding a last-minute question like the citizenship question will have a bigger impact on higher immigrant populations?

Mr. JARMIN. So this, hearkens back to some of the conversations that we had before. We do expect if there is a negative impact, it would be largely felt in various subgroups and immigrant populations, Hispanic populations would be where we would expect to find that if we did find it.

Ms. MENG. If you could clarify something you mentioned before about how this question will not affect most people, mainly, citizens.

Mr. JARMIN. The citizens won't have the same negative reaction to the question that we might expect non-citizens to have, but, again, there is not a lot of evidence in what we do in the American Community Survey that says that that impact is very large.

Ms. MENG. But you are acknowledging some sort of potential impact on response rates from people who might not be citizens or larger immigrant communities?

Mr. JARMIN. There could be some, yes.

Ms. MENG. I think that is reason enough to fear an inaccurate count, which is the main and sole purpose of the census, as required by the Constitution.

If you could also clarify something else that you said in your answer before about if someone wasn't comfortable filling out that citizenship question specifically on a census, that they would be able to not answer it.

Mr. JARMIN. So on all surveys, including the census, there is often items of non-response. And we process many surveys with incomplete responses. The census is certainly one of those in the past; it will be in the future.

If you don't fill out—you know, we encourage people to fill out the questionnaire completely and fully. If you don't, there is some probability that we may need to follow up with you at a later date, either on the phone or in person. So, obviously, we want people to fill out the survey as completely as possible.

But, it is the case, just generically, that in the survey world, some people don't fill out whichever questionnaire they are being provided; whether it is a business survey, a household survey, there are often many questions that are left blank.

Ms. MENG. So if someone were to fill out the survey almost completely, but not fill out the citizenship question, would their survey still be counted?

Mr. JARMIN. Yes.

Ms. MENG. Thank you.

Mr. JARMIN. We would definitely encourage people to fill it out as completely as possible.

Ms. MENG. A couple other communities like immigrant, diverse immigrant population, who we fear will be undercounted are rural Americans and children, particularly under the age of 5. Rural Americans are at a high-risk for an undercount, as you know; often, homes are spread far apart, hidden from the main road, may not have city-style addresses.

For the 2020 Census, the Census Bureau has chosen to focus its efforts on electronic responses which can also present challenges

for rural communities where access to reliable internet is already an issue. What steps are you taking to ensure that these communities are properly counted?

Mr. JARMIN. That is an excellent question. In the 2018 end to end test in the address-canvassing portion, we were in Beckley, West Virginia, which is a very limited internet access area testing our systems and our equipment and our processes in that type of environment. We need to count everybody, regardless of where they are.

I think that folks that are in a limited—we know from the American Community Survey which areas have limited internet access. We will be sending those folks paper forms on the first mailing. Obviously, our goal is to hire our enumerators from local areas who know the area, know the people. So we will use many of the same methods that we used before to reach folks in rural areas. But again, partnership and outreach activities are critical here. But we will be using a range of response options. Areas with limited internet access should have plenty of opportunity to respond by phone or through paper.

Ms. MENG. Thank you, I yield back.

Mr. CULBERSON. Thank you. The gentleman from Pennsylvania, Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Dr. Jarmin, with respect to the census, in a September 2017 memo census staff noted unprecedented fears about confidentiality from respondents. Both respondents and field representatives expressed concerns at the very highest rates ever seen before during a pretesting project. And you are familiar with that. Obviously these concerns have strong implications for the accuracy of our census. And the question is how concerned are you about that, about the fears about confidentiality and what are you doing about it?

Mr. JARMIN. Thanks for that question. I think there is a general unease in the public about how their data are used, both by the government and by private organizations. The Census Bureau, the data that we collect from American households and businesses is covered by Title 13 of the U.S. Code, that means it has to be kept confidential, is used for statistical purposes only. So, we will be using our communications and outreach program to try to communicate to the public that participating in the census is safe and secure and that their data will be used only for the purposes for which it was stated.

I think that trying to combat this problem is bigger than just the census. I think we are constantly—we know that when there is a data breach at a company that people have issues sometimes responding to some of our surveys because it is fresh in their mind. And so, it will be important for us to get out and to really drive home the point that the census is safe and secure and that regardless of what is happening in the community at the time, if there is a data breach, at another company or what have you that they know that participating in the census is something that is important and is safe.

Mr. CARTWRIGHT. Can you reassure me that this is a very high priority for you and it is not just, oh, we are going to throw that in the outreach information?

Mr. JARMIN. Oh, no, absolutely. So, we work with our colleagues from GAO and from other government agencies to make sure that the systems that we process, collect and process the data on are secure, that the data are secure when they are moving and when they are at rest. The protection of the data and the confidentiality of the responses are part of the Census Bureau culture. It is something we take very seriously that we know that we are not going to get the willing participation of American households and businesses for the surveys that we conduct if they know that the data are not safe. And so this is something that we take as one of the highest priorities of the agency.

Mr. CARTWRIGHT. And of course one of the biggest fears you are going to be facing is that the information will be transferred to another government agency, and specifically ICE, for example. Are you envisioning specific reassurances that you are going to give the respondents about not sharing their data with other government agencies?

Mr. JARMIN. Yes. We give those reassurances now and will continue to do so.

Mr. CARTWRIGHT. All right. Also, the 2020 census is going to implement a number of innovations aimed at increasing efficiency and decreasing costs. And one of them is using internet responses. I know Chairman Culberson touched on this, but I want to follow up. An October 2017 GAO report titled "2020 Census: Continued Management Attention Needed to Oversee Innovations, Develop and Secure IT Systems and Improve Cost Estimation" found that the Census Bureau has not yet addressed several security risks and challenges to secure its systems and data, including making certain that security assessments are completed in a timely manner and that risks are at an acceptable level. According to the most recent GAO report as of this month only 8 out of 44 IT systems have completed all testing for the 2018 end to end test. When will the remaining 36 IT systems be developed and tested for the 2018 end to end test and why is this process taking so long?

Mr. JARMIN. Many of those systems are currently in use right now. They have authority to operate. There is still some additional functionality that we plan to add to some of them that will require additional testing and security assessments. And that is something that we will be doing until we go live with the census. We will be constantly testing and improving and improving the security of our systems until the census. And that includes robust work with other government agencies and private sector organizations to be continually load testing, scalability testing and security testing these systems.

Mr. CARTWRIGHT. Is that a no problem answer?

Mr. JARMIN. No, it is not a no problem. It is a we are on this all the time answer.

Mr. CARTWRIGHT. Well, the most recent GAO report found "The Bureau plans to rely heavily on both new and legacy IT systems and infrastructure." Considering 85 percent of these IT systems are going to be dealing with sensitive information from respondents, are you going to be able to test all the IT systems?

Mr. JARMIN. Yes. In the schedule I think we are on track for completing all of that work. Again, this is something that we take

very seriously. The security of these systems is tantamount and we will be on top of this all the way.

Mr. CARTWRIGHT. Well, I thank you, Dr. Jarmin, and good luck to you.

Mr. JARMIN. Thank you.

Mr. CARTWRIGHT. Yield back.

Mr. CULBERSON. I am just double checking with the staff here, Mr. Cartwright. If the law as a result of the concerns with the Japanese Americans of World War II prohibits the Census Bureau from sharing individual data about individual Americans answering the survey with any other governmental entity, my staff tells me a felony.

Mr. JARMIN. Absolutely. It is 5 years in prison and $250,000 fine. And that law was passed in 1954 partly as a result of that regrettable incident in World War II.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

Mr. CULBERSON. One of our most sacred obligations is to ensure that every American, all of us, every person is treated——

Mr. JARMIN. Right.

Mr. CULBERSON [continuing]. Has equal protection and due process under the law no matter who you are.

Mr. JARMIN. And that, I will just say that this extends, you know, we use a lot of administrative data from other government agencies, from the IRS and Social Security Administration. The same protections are provided to all individually identifiable or company identifiable data that we get from—this is a part of how the Census Bureau operates. And so the culture of confidentiality is extremely strong at the Census Bureau.

Mr. CULBERSON. It is a good thing.

Mr. SERRANO. Can I?

Mr. CULBERSON. Yes, certainly.

Mr. SERRANO. This is something that is trouble——

Mr. CULBERSON. You are not on. Try it again. You good? OK, go.

Mr. SERRANO. This is something that has troubled elected officials for a while. So when I go to a church, as I have been doing a couple—for a few years now and saying please sign the form, fill it out, no information, nobody is going to pass this onto anyone else, I was telling them the truth?

Mr. JARMIN. Absolutely.

Mr. SERRANO. All right, thank you.

Mr. CULBERSON. It is important for people to know that. I am confident the census form probably says that too. So when you are filling it out it says——

Mr. JARMIN. It does say that.

Mr. CULBERSON [continuing]. Your information is private, it is not going to be shared.

Mr. JARMIN. Yes.

Mr. CULBERSON. No worries.

Mr. JARMIN. It also says your response is required by law.

Mr. CULBERSON. Yes. I want to be sure because when we get to full committee that we all understanding that the testimony you have had here today is that you don't expect the—that the presence of this question is going to have a less than 1 percent impact and probably far less than that.

Mr. JARMIN. I think it is hard to predict what that would be. I am not in the business of——

Mr. CULBERSON. Plus it is confidential anyway.

Mr. JARMIN [continuing]. Predicting the future, but it is confidential. And I think this is something that we need to, part of the way how we react and, people will follow what their leaders do. And I think this is something where if we assure people regardless of what questions are on the form that participating in the census is absolutely an essential thing to do——

Mr. CULBERSON. Yes.

Mr. JARMIN [continuing]. Then we will be in good shape.

Mr. CULBERSON. And it is confidential. Texans like that.

Mr. JARMIN. It is confidential.

Mr. CULBERSON. We all like that as Americans. We like the government out of our lives, out of our business, it is a good thing. I would like to ask the GAO, if I could, to talk to us a little bit about the—how accurate is the cost estimate that the—revised cost estimate that the Census has given us, how reliable and accurate is that?

Mr. GOLDENKOFF. Sure. Thank you for that question. We have not looked at the actual number. What we have looked at was the process that the Census Bureau used to develop the cost estimate. And as you know when we were here we have testified on this before and we have reported on it in the past, is that the Census Bureau did not follow our four best practices for a quality cost estimate. Those four best practices are it needs to be comprehensive, it needs to be well documented, it needs to be accurate, and it needs to be credible.

What we found when we looked at the 2015 cost estimate is it fell short in each of those categories. It minimally met the categories of well documented and credible and only partially met the categories of accurate and comprehensive. So for example, some of the things that we were looking for and weren't there, not all costs were accounted for, not all risks were accounted for, we couldn't independently verify the calculations. And it was discouraging because we first brought issues with the Census Bureau's cost estimates to the Bureau's attention back in 2008. So this has been a longstanding problem.

Mr. CULBERSON. Ten years ago.

Mr. GOLDENKOFF. Yes. So and the Census Bureau did make some changes. One of our recommendations was to bring in more experts on cost estimation. The Census Bureau did that. It was still an issue with the 2015 estimate in terms of the quality of it. But then the Census Bureau updated its cost estimate. We reviewed the documentation for that beginning in December 2017. It is still a work in progress. Our review is still a work in progress. The good news is that the quality is much improved. So at least preliminarily the Census Bureau now has substantially met the categories of accurate and credible and fully met the categories of being comprehensive. Where the Census Bureau still fell short is in the area of being well documented.

Mr. CULBERSON. And independently verifiable.

Mr. GOLDENKOFF. So there have been improvements. And so to the Census Bureau's credit and the Department of Commerce's

credit we know that, from the Secretary of Commerce all the way on down the Census Bureau has really been focusing on this. And so now what we will be looking for is additional documentation. Our report should be out in late spring, early summer. And what we will be looking for going forward is the extent to which the Census Bureau manages off the cost estimate, that this is not just a one time thing, you shouldn't be doing it just because GAO wants it, but it is something that you manage as conditions change, environmental conditions in the field. The circumstances, operational conditions are going to evolve over time and that is going to affect costs.

Mr. CULBERSON. Mr. Powner.

Mr. POWNER. Yes, I would like to reiterate a point too that Director Jarmin made. Your question earlier about whether the 15.6 is enough. There is a contingency in there and hopefully it is enough and the contingency covers it.

Mr. CULBERSON. Fifty million.

Mr. POWNER. 15.6 billion.

Mr. CULBERSON. Right. But I mean I think we——

Mr. POWNER. 15.6 billion, Yes.

Mr. CULBERSON [continuing]. Have got a contingency of—you have asked for in the 2018 bill a fund contingency of $50 million.

Mr. POWNER. 50 million. But that 15.6 has a larger contingency.

Mr. JARMIN. A much larger contingency in fiscal year 2019 and fiscal year 2020.

Mr. POWNER. And so that is the question. And we should know a lot more, to reiterate what Dr.—Director Jarmin mentioned, at the end of the—near the end of the end to end test how well the systems are performing, how well the security is, how well the operations are performing. We should have a pretty good indication by the end—this fall for instance, whether there is going to be additional work and whether that contingency will cover the additional work that will remain.

Mr. JARMIN. Right. We also will know a lot of parameters that are in the life cycle cost estimate. We will be able to get a more precise estimate of those, sort of buy down some risk there. We should know quite a bit more after the end of the test.

Mr. CULBERSON. I hope you will include in your report what—I mean why, if you were told about these problems back in 2008, this hasn't been addressed. I would really be interested in why this has been such a persistent problem in your opinion and what creative solutions you would recommend to the Congress to give the Secretary the authority that the Secretary needs to help resolve the problem.

And in the area of cyber, you know, the Census Bureau is going to be a prime target for cyber attacks. And could it—I see here that in 2016 the Australian census crashed when people tried to fill out their form. And Australia has five fewer million people than Texas. And we just saw what happened with the IRS yesterday. Mr. Powner, you alluded to this a little bit earlier. And I know part of your responsibilities include monitoring the IRS. What can you tell us about what happened with the IRS website yesterday and what steps are being taken to ensure that we don't have a crash like this from happening with the Census website.

Mr. POWNER. Yes. So regarding the IRS there is still some unknowns there. It appears that what happened with the IRS was the front end system, the modernized e-file system, not the backend system, which everyone looks at the individual master file, that's the 50-year-old system where our tax returns are processed, there are unknown questions there about what really happened. They reported it was a hardware issue. Obviously there is heavy traffic at this point in time, right, near tax day. IRS historically has done a really good job with performance and stress testing. So there is a question about was it a performance issue, was it a cyber incident, was it just a failure of the systems. And those are the questions that need to be asked. And we are going to sit down with their chief information officer real soon to find out exactly what happened and we will report back to you.

I think the important thing here is as it pertains to the census and what happened with the Australian census, that was a denial-of-service attack. When you have a denial-of-service attack, I mean, clearly all these security issues that we are dealing with, the authority to operate that Director Jarmin mentioned, it is very important that we have diligence in ensuring that the vulnerabilities are cleaned up and we have less holes in our systems. We are always somewhat vulnerable.

The other thing that is really important here is the performance testing that needs to occur. You want to stress test the heck out of these things because if everyone ends up hitting the internet response on certain dates or a certain timeframe that triggers that, and that could very well happen with advertising and the like, you want to make sure that the system can handle that irregardless of a denial of service. But what denial of service really does, what happened in Australia, is they planted, you know, certain malware and it populated itself throughout a network and it overloaded the system and then you couldn't access it for two days. So again, we have got security and performance testing that is really important. And they are working on it hard and they take this very serious.

Mr. CULBERSON. So you are satisfied with the level of testing that is being done?

Mr. POWNER. Well, their approach is rigorous and it follows best practice. I think what happens is there is a lot of work that still remains for additional testing. The changes to the systems that remain and the reassessing from a security point of view, that is what is important. They have already—many of these have already been assessed once. But what you don't want is you don't want to change to a system that creates a vulnerability. And you are only as good as your weakest link. So those reassessments are very important. And again, I think the Bureau takes this very serious.

It is also important to look at what they are going to do from a penetration testing point of view. We know that they have penetration tested the system. We have some outstanding questions about what the results of the penetration tests are and what is planned in the future. Because what you want to do, just when you think you are secure you have got to try to penetrate it as much as you can to make sure we are secure as possible. And again, they are working on that.

Mr. CULBERSON. Will the census be using any sort of an app for people to be able to log on and fill out the forms more quickly and easily?

Mr. JARMIN. It will basically just be an internet browser type. The internet response is just a website that they can go to.

Mr. CULBERSON. A website.

Mr. JARMIN. Yes.

Mr. CULBERSON. Because I know NASA and some other apps that have had problems with cyber security. When they send apps out there and they wound up getting hacked.

Mr. JARMIN. We will be monitoring this. Part of what we are doing that Mr. Powner referred, so we are doing penetration testing. We have put out bug bounties where we have invited people to come in and beat up the systems. We are also looking to use what is called red teams, which is basically a much slower longer term approach to try to find vulnerabilities in the systems. We are going to leave no stone unturned in trying to make sure that the systems are secure as possible because we do expect to be a big target in 2020 and we need to be able to do that.

An additional mitigation thing that we are using sort of vis-a-vis the lessons learned from the Australian experience, is that we will use a mailing strategy. People will get a postcard or a letter in the mail that says please go on the website and fill out your census. Here is your housing unit ID. We will sort of spread that out over a period of time so that people aren't getting those mailings all on the same day and then everybody is excited to go out and fill out the census hitting the site all at once. So there are some things that we are trying to do to take some lessons from our Australian counterparts.

Mr. CULBERSON. Thank you. Mr. Serrano.

Mr. SERRANO. Thank you, Mr. Chairman. I was going to apologize for all the questions we asked on one subject, but I think you came ready to answer those questions because you suspected that would be a question. Let me show you something. I told you before that I was personally upset, right. But some other people may be upset. This is the way it will appear. And I will share it with my colleagues. It says "Is this person a citizen of the United States?" And the first option is, "Yes, born in the United States."

That should be the end of it. Then it says the second option, "Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands or Northern Marianas." That makes it look to anyone like being born in one of these places makes you a citizen different than being born in the United States. That might have been true when you had territories that were not states yet and they were not incorporated and that whole issue, but the world has changed.

I mean, when we have a war, we send people from those territories, and they can't refuse to go, you know, and that is the line I always use, because that is a sign of who they are. This is really—opens the door for people to just say they are not like us, they are different. In fact, I wouldn't be surprised if I get an email after this, saying, so how did you get to be a member of Congress? Do you qualify? I say I may not qualify, but I certainly qualify citizenshipwise. So pin this up somewhere and look at it and see if you get the same feelings I get.

The Census Bureau's National Advisory Committee on Racial Ethnic and other Populations, which among other things advises the Census Bureau on issues affecting immigrant populations, did not request the addition of a question on citizenship; is that correct? And doesn't that also undermine the case for including the question?

Mr. JARMIN. So you are saying that they did not request the question?

Mr. SERRANO. Right.

Mr. JARMIN. The request came from the Department of Justice.

Mr. SERRANO. And did they comment on it, do you know, or the Committee on Racial and Ethnic and Other Populations?

Mr. JARMIN. We have not had a meeting of that group since the Secretary's decision.

Mr. SERRANO. I see. This is the scary part, you know, that I told you about before, the fact that it came from the Justice Department. And one has to wonder why would the Justice Department want to know that. That's the climate we are living in, you know.

Mr. JARMIN. Their letter stated that it was for enforcement of the Voting Rights Act.

Mr. SERRANO. Well, you enforce the Voting Rights Act by making sure that sheriffs don't stop people on their way to vote like they did in Florida when President Obama was running for office. You do other things. I can give you a list of things you do. You don't stop people from voting on that day. You make it easy for them to vote.

How finding out if a person is a citizen is going to protect the Voting Rights Act is beyond me, because, you know, let me tell you something I know about the undocumented. They are terrified of the way they live. They are not in your face telling you "I am here and I am undocumented." The last thing on their mind is to go register to vote and commit such a crime. That is the last thing on their mind. Would they like to vote? Yes. They are coming into a whole new place where there is democracy and freedoms for everyone. But trust me, this is not about the Voting Rights Act. And my problem is that I am embarrassed to say I haven't figured out what it is about.

Next question. Did anyone at the Census Bureau or the Commerce Department meet with officials from the Department of Justice or any outside group regarding the original request to add the citizenship question? Did anyone from the White House contact the Census Bureau or Commerce Department about this request? If so, will you please provide the names of those individuals and groups that met with Commerce Department officials?

Mr. JARMIN. I can't speak for Commerce Department officials. I can say for the Census Bureau that I do not believe we met with anyone from DoJ or the White House about this question.

Mr. SERRANO. Well, if you didn't meet—you say you don't believe, so could there be someone else that met from the Department?

Mr. JARMIN. No. I don't, no, I don't think so.

Mr. SERRANO. But you are pretty sure that no one met. The final 2018 Omnibus Appropriations Agreement directed the Census Bureau to ensure that its fiscal year 2018 partnership and communications activities in support of the census, the 2020 census, are

conducted at a level of effort and staffing no less than that conducted during fiscal year 2008 in preparation for the 2010 census. Please explain for us the ways in which the Census Bureau is working to abide by this directive of the Committee and ensure that the partnership and communications efforts are at least as strong this year as they were at this same point ten years ago.

Mr. JARMIN. Thank you, Ranking Member. I think first of all we started the partnership program earlier this time. We have 40 partnership specialists, seasoned specialists, in the field right now. We have had them since the beginning of 2017. We have a team at Census that is looking into both on the communication and the partnership program using those appropriations to accelerate both our planning for the communications campaign, hopefully so that we can get some ad buys done earlier and save some money, but also to start ramping up the partnership program this year.

In addition, the other main thing that we are looking at is also accelerating our scalability testing of our system so that we can get out ahead of that a little bit and sort of buy down some risk. But again, we have a team working on that right now. We are in conversations with both the Department and the OMB about how we plan to do that. Once we have those conversations we will be glad to come back and talk to you about what exactly we are going to do.

Mr. CULBERSON. Thank you. Mr. Kilmer.

Mr. KILMER. Thanks Chairman. I hate to come back to this, but I heard you say in response to the Chairman's question that you couldn't confirm that the impact on response rate would be less than one percent. But I kind of want to double click on this because I think it is important to acknowledge that even fractions of percent matter when it comes to the census. So I was messing around on your census website. Do you know what percentage of the U.S. population is the State of Vermont?

Mr. JARMIN. The State of Vermont.

Mr. KILMER. Yes.

Mr. JARMIN. Less than a percent.

Mr. KILMER. It is 0.2 percent. How about the State of North Dakota?

Mr. JARMIN. Even less than that.

Mr. KILMER. Yes.

Mr. JARMIN. Yes.

Mr. KILMER. You know, as far as I could tell there is well over a dozen states that are less than a percent of the U.S. population. So if there was a question under consideration that would risk counting—not counting the people of Vermont or the people in North Dakota, would the U.S. Census consider having that in the list of questions on the census?

Mr. JARMIN. So again, we want every resident in the country to fill out the census regardless of what questions are on the form. And that is what we are going to strive our best to do. We know that from past experience that we will fall short of that, and we will have lots of people out knocking on doors to do it the more expensive way. But, that is the goal of the Census Bureau, to get a complete and accurate count.

Mr. KILMER. Along those lines. So the district I represent is largely rural. We have a big city, Tacoma. We have got a, you know, Navy community Bremerton. We have got, you know, but we have got a large sort of geographic swath that is rural. We have 11 federally recognized tribes. And as you know, and I think part of the reason we are having this broader conversation around response rate is that a lot of federal funding is distributed for things like schools and hospitals and roads and public works and other vital programs. It is also used for things like the new market tax credit and the opportunity zone program, which is part of the tax bill. So I am hoping you can tell me how you plan to ensure that rural and tribal communities are accurately counted in the 2020 census.

Mr. JARMIN. Thanks for that question. There is a couple ways. First of all we make sure that they have all the opportunities to respond to the census. It is not just the internet. Folks who have limited internet connectivity will have the opportunity to respond by phone or by paper. In many of those communities where we know that internet connectivity is low, we are going to send out paper forms earlier than we do in other areas.

In very rural communities, we will use other operations, like update leave or update enumerate, although I don't think we do that in Washington State. Obviously, we work with tribal leaders, partnership activities with local folks in both big cities and small towns and in rural areas. So we will use a very tried and true method that we have used in the past to get to rural communities. And that is, just boots on the ground if needed, but also providing people with multiple modes to self-respond to the census.

Mr. KILMER. Now, kind of along those lines there is—and you mentioned you were from Washington State, so Seattle is cooking economically—there are parts of the district I represent that are certainly feeling left behind by that growth. And you are seeing just dramatic change in the nature of our economy and the impacts to the workforce. Two questions in that regard. One, what efforts are the Census Bureau undertaking to measure adoption and impacts of technologies, whether it be AI or robotics and other things, and the potential geographic disparity and the cost and benefits of that?

And then secondly to that end, in the late 1980s and early 1990s the Census had a standalone survey called the Survey of Manufacturing Technology. And I notice that you no longer run that survey. Is that something the Census Bureau would consider taking up again just to look at some of these differentiated impacts of economic change?

Mr. JARMIN. Thanks for asking about something on the economic side of the census, which is where I came from.

Mr. KILMER. I saw your Ph.D.

Mr. JARMIN. I actually have a little bit to do with some of this. This summer we will be fielding the first ever American Business Survey, which is an attempt to collapse several other surveys. And there is going to be a question on there about the use of some of these nascent technologies, machine learning, robotics and stuff like that. That will be asked of 850,000 firms around the country in multiple industries. So obviously we are concerned not just

about manufacturing, but retail and warehousing and what have you. That is going out this summer.

There will be a similar question added to the Annual Survey of Manufacturers next year. And we would be happy to come down and discuss whether something like the Survey of Manufacturing Technology—I would urge that we would think more broadly that manufacturing is probably a good place to the see impact of these technologies, but it is not the only place we should be looking.

Finally I think, we had the opportunity last January to meet with the American Economic Association's statistics committee during a lunch at the annual meetings and discussed some of these things. And I think one thing that we have got is some of those folks will be coming in and assisting us as, sort of special sworn employees, and using these new survey items to link to some of the other data that we have and try to get, to look at the impacts of these technologies on the workforce, on productivity growth, things that are critical to know how these technologies are impacting the economy.

Mr. KILMER. Cool. Thank you. I really appreciate it. And I yield back. Thank you, Chairman.

Mr. CULBERSON. One of the reasons I enjoy this subcommittee so much and we all work together so well is we have superb members who add great clarity to the subjects we are working on. And I really appreciate your questions. Because none of us would want the State of Vermont to disappear, you know.

Mr. JARMIN.——

Mr. CULBERSON. Correct. None of us. And the reason I think we wanted to mention the one percent is I heard you say that you expected if there is any impact at all it is going to be far less than one percent is where that came from. None of us want to see any diminishment at all of participation in the census or anybody to be undercounted. We all want to make sure it is accurate. I think I understood the testimony you gave us is that you don't know of any—you haven't seen any direct evidence—you haven't seen the evidence that inclusion of this question in censuses in the past caused any reduction in participation.

Mr. JARMIN. This is a difficult thing to measure with the data that we have at hand. And so I think that is why I sort of hedge on my answer of, predicting the future is because we——

Mr. CULBERSON. Correct. But you haven't seen—you have seen no evidence of it in the past.

Mr. JARMIN. Not large direct evidence, no.

Mr. CULBERSON. That was the concern. And Ms. Meng is next. And then Mr. Cartwright who is—Mr. Cartwright is a superb attorney and he is good at these things too, as is Ms. Meng. So Ms. Meng.

Ms. MENG. Thank you. Thank you, Mr. Chairman. I was just curious. I know we talked about the prohibition of sharing of individual information. To my knowledge during the Japanese interment situation in our country I believe that information was shared with block level data?

Mr. JARMIN. I think that is correct, yes.

Ms. MENG. And not individuals.

Mr. JARMIN. There was also I think some limited sharing of some data that was individual level, but most of it was just data that was shared with the Army I believe was at the block level.

Mr. CULBERSON. That is how the government found some of these folks and went out and rounded them up was through the census data?

Ms. MENG. From what I have read they shared block level data, not individual data, as you mentioned was prohibited.

Mr. JARMIN. Yes.

Ms. MENG. Since then, and just to acknowledge that there is a concern that something similar could happen again that would further lead to fear and reason for people to be afraid of filling out that question or the form in general.

Mr. JARMIN. We do rigorous disclosure avoidance procedures on all the data that we release. And we do release, block group level data right now from the American Community Survey, which is pretty low level geography. This is a constant tension between data users who want more accurate data at a more granular level and trying to protect the confidentiality of individual households. And so, this is—I think this is a more general conversation. Not just about the citizenship question, but a general conversation about what is the optimal amount of detail that would be released in statistical publications versus sort of the utility of that data.

Ms. MENG. Yes. I mean I just think that many communities, not just immigrants, but many communities want assurances and deserve assurances that something like that which happened to American citizens would not ever happen again. So thank you for that.

My other question, I wanted to—to ensure that the Census Bureau has a smooth transition between fiscal 2018 and 2019, the fiscal year 2018 omnibus provided half the funding that the Bureau needs in 2019 for the decennial census, as you know. And I wanted to get an idea of how the Bureau is planning to use these funds, what issues will the bill prioritize, and also the plan for communications, advertisements and working with local partnership groups?

Mr. JARMIN. One of the concerns that we have been expressing all along is the threat of a continuing resolution at the beginning of fiscal 2019 that would have slowed down our efforts on getting the communications program underway. And so a couple of things that we are prioritizing this year with the omnibus appropriation is to start the planning earlier for some of those communications activities so that when October 1st comes around that we are hitting the ground running. We are also ramping up, accelerating the hiring of some of our partnership specialists so that we can get partnership activities underway around the country. And then we are also accelerating some of the scalability testing.

So all of these things are things that we would have been doing anyway. But we want to move some of that into fiscal year 2018 so that we can buy down some risk and get things started sooner so that we can hopefully save some money on the advertising budget and those sorts of things. This is really important, and we appreciate what the subcommittee and Congress more generally have

done for us with this appropriation. I think that it is going to yield a lot of great benefits for us.

Ms. MENG. And we will have commitment from the Bureau that we will work with appropriate communications specialists, experts, and local partnership groups that will be most effective in reaching out to a lot of these communities that are hardest to reach?

Mr. JARMIN. Absolutely, that is the plan.

Ms. MENG. Thank you. I yield back.

Mr. CULBERSON. Thank you, Ms. Meng. And I want to reiterate as the Census Bureau has testified earlier, the form itself when people fill it out will say your data cannot and will not be shared with any other governmental entity. It is a felony for us to share your private information with anyone else, just to reassure people that they can answer the questions with confidence that their privacy will be protected and they are not going to be handed over to ICE or anybody else. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. So obviously and most of the questions you got here today, Dr. Jarmin, reflect our concerns that we don't waste our money, we don't waste American taxpayer money on an inaccurate census. And are people going to be undercounted because they are afraid to answer the questions? Are people going to be undercounted because they are hard to get to? Things like that. And I wanted to touch on that. Individuals living in rural areas are harder to get to, right?

Originally the Bureau planned to conduct end to end testing in tribal, rural, suburban, and urban areas and collect information from 700,000 homes. But due to under funding of this dress rehearsal end to end testing is only happening in Providence, Rhode Island. Am I correct in that?

[The information follows:]

To clarify, uncertainty about the timing and levels of final FY 2017 appropriations required the Census Bureau to reduce the number of sites for the End-to-End Census Test from three to one. This allowed the Census Bureau to stay on the critical path for conducting the "peak" operations of the test.

Mr. JARMIN. That is correct.

Mr. CARTWRIGHT. And that is for about 200,000 homes instead of 700,000, right?

Mr. JARMIN. That is correct. But we did conduct address canvassing operations in all those areas, including remote rural areas in West Virginia and some in Washington State.

Mr. CARTWRIGHT. But not the end to end dress rehearsal test.

Mr. JARMIN. Right.

Mr. CARTWRIGHT. OK. So what are the significant differences between suburban and urban Providence and the many rural and remote areas in the United States? What gaps in understanding of participation rates do you anticipate because you only tested in Providence?

Mr. JARMIN. I don't think we anticipate a lot of the methods that we will be using in rural areas are the same methods that we have used before. There will be multiple opportunities for people to self respond. If they can't use the internet they could use the telephone or the paper form, which is the same as they used before. We will have robust partnership and outreach activities in all those communities, especially in tribal areas. I am, fairly confident that we

will be able to address those areas the same as we have in the past.

Mr. CARTWRIGHT. Well, I get it that, you know, we did it this way before. But we want to get better at this as time goes on. In the last census, in the 2010 census, nearly a million children under the age of five in rural areas did not show up in the census. Unlike other age groups the count of young children appears to be increasingly less accurate. You are the expert at this, Doctor. What are the factors that make young children harder to count and what are the implications of under counting them?

Mr. JARMIN. This is a focus area for us in this census. For The Undersecretary, Acting Deputy Secretary, this is her personal issue. I was at an event in Providence last week that focused on the undercount of young children and African American, young African American men. I think there are a host of issues. I am actually not an expert on the undercount of young children, but I do follow the debate. There are a number of issues. I think often young children are in what are already hard to count households. So they are often in a situation where there is a single parent. They may be living in a complex living situation.

We will be working closely with our advertising folks and with local partnership and community organizations to try to make sure that we are reaching out to these folks where they are and sort of ensuring that they know that participating in the census is important not only for the adults in the household, but for the children in the household.

Mr. CARTWRIGHT. We on this subcommittee are also very interested in making sure we have accurate cost estimates for the census because it is so important to get an accurate census for allocating important government resources, like Medicaid, Social Security, housing grants, things like that. You understand. I know the end to end test is underway in Providence right now. What information have you garnered from the ongoing test that may call into question the cost estimate from 2017? Is there going to be time to update the budget for the census after that Providence end to end test and before the 2020 census is already underway?

Mr. JARMIN. Right. We haven't reviewed all the data yet from the Providence test. I can say I don't think there have been any showstoppers that have us, sort of scratching our heads thinking that things aren't working the way we expected them to. So that is a good thing. But, we haven't completed the test yet and we haven't reviewed all of the data. We will be updating the life cycle cost estimate with the 2020 budget submission, and we will be using the information from the test to inform that update of the life cycle cost estimate.

Mr. CARTWRIGHT. Are you going to be able to have enough time to make those assessments before 2020?

Mr. JARMIN. I believe so. That is, yes, that is the plan.

Mr. CARTWRIGHT. Thank you, Doctor. Mr. Chairman, I yield back.

Mr. CULBERSON. Thank you, Mr. Cartwright. Mr. Serrano, any further questions? We will submit those for the record. We will submit any further questions we have for the record. I want to

thank each and every one of you for your service to the country, your time and testimony here today.

This hearing is adjourned.

[Material submitted for inclusion in the record follows:]

An open letter from 51 economists to Congress urging robust funding of the 2020 census

April 2, 2018

The decennial census is a constitutionally mandated exercise that serves as a cornerstone of our democracy. The census plays a central role in allocating political representation and federal government resources across states and localities. The census and its companion, the American Community Survey, are also essential tools used by social scientists to improve our understanding of the country's economic and social reality.

We, the undersigned economists, are writing to express our strong support for robust funding of the 2020 census sufficient to ensure a fair and accurate count of the U.S. population. While we commend Congress for providing funding for fiscal year 2018 above the administration's request for the Census Bureau, we remain concerned about the cumulative effects on census readiness of underfunding (in comparison with the Census Bureau's funding requests) in all previous years in this census cycle, which started in fiscal year 2012. In concrete terms, the Census Bureau has two immediate needs: a significant increase in funding for fiscal year 2019 and the authority to spend at the necessary level in the absence of an appropriation.

The situation leaves the Census Bureau underprepared for the 2020 census and makes adequate funding in these last two years before 2020 all the more crucial.

In the short time that remains before the peak of census activities in April 2020, the Census Bureau faces two significant challenges.

First, the 2020 census will employ new technologies (including internet and telephone questionnaire options) that, if properly implemented, promise to increase the fairness and accuracy of the count and reduce the costs of future censuses. The implementation of these new technologies, however, will inevitably present start-up challenges, including the potential for cyber threats.

Second, a fair census requires that the Census Bureau connect with many hard-to-reach populations. These populations have traditionally included those living in low-income rural areas and low-income urban areas, frequent movers (especially military families, young adults, and migrant workers), the precariously housed, residents of Native American reservations, recent immigrants, and people with limited English-language skills. More recent issues include counting individuals with significant fears of government authorities, members of communities suffering from drug epidemics, and people without reliable access to the internet.

Both of these challenges are best addressed with long-term planning and adequate financing. Over the last decade, the Census Bureau has engaged in careful planning and spelled out the funding that would be required to implement those plans. Now is the time for Congress and the administration to provide the necessary financial support.

Signed,
(in alphabetical order, affiliation given for identification purposes only)

Henry Aaron, Brookings Institution

Katharine Abraham, University of Maryland

Gbenga Ajilore, University of Toledo

Eileen Appelbaum, Center for Economic and Policy Research

David Autor, Massachusetts Institute of Technology

Claude Barfield, American Enterprise Institute

Mark Bils, University of Rochester

Rebecca Blank, University of Wisconsin

Heather Boushey, Washington Center for Equitable Growth

Gary Burtless, Brookings Institution

Kathleen Cooper, Southern Methodist University

David Cutler, Harvard University

Sheldon Danziger, Russell Sage Foundation

William Darity, Jr., Duke University

*__Angus Deaton,__ Princeton University

*__Peter Diamond,__ Massachusetts Institute of Technology

Ronald Ehrenberg, Cornell University

Henry Farber, Princeton University

Richard Freeman, Harvard University

Claudia Goldin, Harvard University

Robert Gordon, Northwestern University

Erica Groshen, Cornell University

Robert Hall, Hoover Institution, Stanford University

Heidi Hartmann, Institute for Women's Policy Research and American University

Ron Haskins, Brookings Institution

Susan Helper, Case Western Reserve University

Harry J. Holzer, Georgetown University

Lawrence Katz, Harvard University

Alan Krueger, Princeton University

Adriana Kugler, Georgetown University

*__Eric Maskin,__ Harvard University

Bruce Meyer, University of Chicago

Thea Lee, Economic Policy Institute

Aparna Mathur, American Enterprise Institute

Sendhil Mullainathan, Harvard University

Manuel Pastor, University of Southern California

Adam Posen, Peterson Institute for International Economics

Lee Price, previously U.S. Department of Commerce

*__Alvin Roth,__ Stanford University

Jesse Rothstein, University of California, Berkeley

Jeffrey Sachs, Columbia University

Isabel Sawhill, Brookings Institution

Rhonda V. Sharpe, Women's Institute for Science, Equity and Race

Timothy Smeeding, University of Wisconsin

Betsey Stevenson, University of Michigan

Michael R. Strain, American Enterprise Institute

Lawrence Summers, Harvard University

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April 17, 2018

The Honorable John Culberson, Chairman
The Honorable Jose Serrano, Ranking Member
U.S. House of Representatives Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
H-305, The Capitol
Washington, DC 20515

Dear Chairman Culberson and Ranking Member Serrano:

We write to you regarding the hearing on "FY 2019 Bureau of the Census."[1] EPIC is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues. The Census implicates numerous privacy issues.[2] As the Subcommittee evaluates the 2020 Census, we ask you to consider the risks of Census data being used for illegitimate purposes.

The Census is an essential part of understanding the changing demographics in America. The census helps ensure evidence-based policy decisions and census data is the source of much political and economic planning in the United States. However, it is of the utmost importance the individual privacy is respected. Every effort must be taken to ensure that the personal information of individuals and that census data is not used improperly.

There has been greater concern about the confidentiality of 2020 census data than in previous decennial censuses. The Census Bureau conducted a study in 2017 that found respondents expressing new concerns including the "Muslim ban," the dissolution of DACA, and Immigration and Customs Enforcement.[3] The study found that these concerns were most pronounced among immigrant respondents.[4]

Secretary Ross's decision to add a citizenship question to the 2020 census raises concerns about improper uses of Census data. The U.S. has misused Census data to target minority groups before. During World War II, the Census Bureau provided information to the War Department that led to the internment of 120,000 innocent Japanese.[5] After 9-11, EPIC pursued a Freedom of

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[1] *FY 2019 Bureau of the Census*, 115th Cong. (2018), H.R. Comm. on Appropriations, Subcomm. on Commerce, Justice, Science, and Related Agencies, https://appropriations.house.gov/calendar/eventsingle.aspx?EventID=395239 (April 18, 2018).
[2] *The Census and Privacy*, EPIC, https://epic.org/privacy/census/.
[3] Center for Survey Measurement, MEMORANDUM FOR Associate Directorate for Research and Methodology (ADRM) Respondent Confidentiality Concerns (Sept. 20, 2017), https://www2.census.gov/cac/nac/meetings/2017-11/Memo-Regarding-Respondent-Confidentiality-Concerns.pdf.
[4] *Id.* at 1.
[5] W. Seltzer and M. Anderson, "Census Confidentiality under the Second War Powers Act (1942-1947)." Paper prepared for presentation at the annual meeting of the Population Association of America, New York,

Information Act request about the potential misuse of census data. Documents from the 2000 Census obtained by EPIC revealed that the Census Bureau had provided the Department of Homeland Security with data on individuals of Arab ancestry.[6] As we explained in 2004:

> EPIC obtained documents through the Freedom of Information Act last week revealing that the Census Bureau gave the Department of Homeland Security statistical information on people who identified themselves on the 2000 census as being of Arab ancestry. The special tabulations were prepared specifically for the law enforcement agency, and do not indicate that similar information about any other ethnic groups was requested. The tabulations apparently include information about United States citizens, as well as individuals of Arab descent whose families have lived in the United States for generations.
>
> One tabulation shows cities with populations of 10,000 or more and with 1,000 or more people who indicated they are of Arab ancestry. For each city, the tabulation provides total population, population of Arab ancestry, and percent of the total population which is of Arab ancestry.
>
> A second tabulation, more than a thousand pages in length, shows the number of census responses indicating Arab ancestry in zip codes throughout the country. The responses indicating Arab ancestry are subdivided into Egyptian, Iraqi, Jordanian, Lebanese, Moroccan, Palestinian, Syrian, Arab/Arabic, and Other Arab.
>
> The heavily redacted documents show that in April 2004, a Census Bureau analyst e-mailed a Department of Homeland Security official and said, "You got a file of Arab ancestry information by ZIP Code Tabulation Area from me last December (2003). My superiors are now asking questions about the usage of that data, given the sensitivity of different data requests we have received about the Arab population.[7]

EPIC's FOIA efforts led the Census Bureau to implement new procedures regarding the release of "potentially sensitive data to requesting law enforcement agencies and organizations or individuals."[8] EPIC supported those efforts but recognizes also the ongoing concerns about the potential misuse of data collected by government agencies. Amid rising fears that some minority groups may be targeted by law enforcement agencies, your committee should ensure that the data collected by the federal government is not misused.

March 29-31, 2007, *available at* http://studylib.net/doc/7742798/census-confidentiality-under-the-second-war-powers.

[6] *Department of Homeland Security Obtained Data on Arab Americans From Census Bureau*, EPIC, https://epic.org/privacy/census/foia/; Lynette Clemetson, *Homeland Security Given Data on Arab-Americans*, New York Times, Jul. 30, 2004, http://www.nytimes.com/2004/07/30/us/homeland-security-given-data-on-arab-americans.html.

[7] *EPIC Report: Homeland Security Given Census Data on Arab Americans*, EPIC Alert 11.15 (Aug. 4, 2005), https://epic.org/alert/EPIC_Alert_11.15.html

[8] Census Bureau News, "U.S. Census Bureau Announces Policy Regarding Sensitive Data," press release CB04-145, August 30, 2004; Lynette Clemetson, *Census Policy On Providing Sensitive Data Is Revised*, New York Times, Aug. 31, 2004, http://www.nytimes.com/2004/08/31/us/census-policy-on-providing-sensitive-data-is-revised.html.

EPIC looks forward to working with the Subcommittee to ensure that the census data provides the maximum benefit to the American public while minimizing the privacy risks.

We ask that this letter from EPIC be entered in the hearing record.

Sincerely,

/s/ *Marc Rotenberg*
Marc Rotenberg
EPIC President

/s/ *Caitriona Fitzgerald*
Caitriona Fitzgerald
EPIC Policy Director

/s/ *Christine Bannan*
Christine Bannan
EPIC Administrative Law and Policy Fellow

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, AFL-CIO

Joseph P. Flynn
National Secretary-Treasurer

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National President

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NVP for Women & Fair Practices

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April 18, 2018

The Honorable John Culberson
Chairman
Subcommittee on Commerce, Justice, and Science
House Committee on Appropriations
Washington, DC 20515

The Honorable José Serrano
Ranking Member
Subcommittee on Commerce, Justice, and Science
House Committee on Appropriations
Washington, DC 20515

Dear Chairman Culberson and Ranking Member Serrano:

On behalf of the American Federation of Government Employees, AFL-CIO (AFGE) which represents nearly 700,000 federal and DC government employees and 5,000 Census Bureau employees we represent across the country, we strongly urge you to fully fund the Census Bureau in the FY2019 Appropriations cycle. The Census Bureau performs the essential task of collecting, analyzing and distributing data about the American people to inform where resources are allocated. Census Bureau employees are statisticians, data analysts, IT specialists, and the federal employees who collect, analyze and distribute essential data about the American people. Their work informs where roads, bridges, hospitals, grocery stores, libraries and so many more essential resources are built in American towns and cities. Our Census Bureau employees' work is vital to American advancement and prosperity. The decennial census is a constitutionally mandated count of the American public every ten years. Unfortunately, the 2020 decennial census has not received the funding or staffing needed to perform a fair and accurate count of the American people.

A critical 2018 dress rehearsal called the End-to-End Census Test has been limited due to a lack of funding. The Census Bureau cancelled two major portions of the 2017 Census Test: on-site tests in Puerto Rico and on two Native American reservations in North and South Dakota and Washington State. These were opportunities to test new enumeration technologies in rural areas. There was only one test in Rhode Island. The specific geography does not necessarily reflect many other parts of the country. This significant lack of funding will impact the final Census count, specifically in rural and highly dense urban areas with hard-to-count populations. The Hagerstown, Maryland Census Bureau Call Center was shut down. These hurdles due to lack of resources make it significantly harder for the Census Bureau to perform the mission of the agency and collect fair and accurate data.

The Census Bureau conducts many surveys in addition to the Decennial Census. The Census Bureau has redirected funds, staffing and resources from other vital surveys to the decennial census. This hurts important Census Bureau surveys like the Economic Census and the American Community Survey (ACS). Every five years the Census Bureau conducts the Economic Census (EC), which is the U.S. Government's official measure of American business and the economy. The Census Bureau also conducts the ACS, an ongoing survey that provides essential information about the population. Data collected by the ACS determines how federal and state funds are distributed each year. The ACS data helps us analyze

trends in jobs and occupations, education, whether people own or rent their home, and other topics. ACS data helps to support school lunch programs, improve emergency services, and plan hospitals and schools. The attention and resources funneled into the decennial census have hurt the Economic Survey and American Community Survey (ACS)'s ability to succeed. The Census Bureau needs adequate staffing and funding to successfully execute all surveys. We strongly urge the Commerce, Justice, Science and Related Agencies Appropriations Subcommittee to fully fund the Census Bureau in the FY2019 Appropriations cycle.

AFGE wishes to thank the Committee for holding this important hearing and we look forward to working with you to address the important concerns raised in this letter. For questions or concerns please contact Fiona Kohrman at fiona.kohrman@afge.org.

Sincerely,

J. David Cox, Sr.
National President

Mr. CULBERSON. Yes. Without objection we are happy to submit those. Once again, thank you very much for joining us today.

Mr. JARMIN. Thank you.

Mr. CULBERSON. And we look forward to working with you in the months and years ahead. The hearing is adjourned. Thank you.

Questions for the Record

U.S. Census Bureau

Hearing

Oversight of the 2020 Census

April 18, 2018

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. The explanatory statement accompanying the final fiscal year 2018 Omnibus Appropriations Act directed the Census Bureau to ensure that its fiscal year 2018 partnership and communications activities in support of the 2020 Census are conducted at a level of effort and staffing no less than that conducted during fiscal year 2008 in preparation for the 2010 Census. Please explain the ways in which the Census Bureau is working to abide by this directive to ensure that the partnership and communications efforts are at least as strong this year as they were at this same point ten years ago.

Answer: The Census Bureau's FY 2018 approved spend plan increased the partnership program by $3.5 million with the goal of hiring 132 partnership specialists, which matches with the 132 partnership specialists that were in place at the end of FY 2008. The recruitment of these partnership specialists across the nation is ongoing and will continue to ensure positions are filled at the levels approved in the final spend plan.

The approved spend plan request also increased by $11.5 million the spending level in the planning tasks for the communications contract. The total amount of spending for the advertising contract for FY 2018 was already above the spending level in FY 2008. However, the Census Bureau in collaboration with the vendor has made the decision that operational and cost risk can be mitigated by moving planning activity originally planned for FY 2019 into FY 2018. Planning and overall strategy will be substantially complete before the purchase of advertising time in FY 2019.

2. Will the Census Bureau be relying on a large number of partnership ASSISTANTS to help increase the self-response rate to the 2020 Census, as it did during the run-up to the 2010 Decennial Census (in part due to the availability of Recovery Act funding at that time)?

Answer: The Census Bureau's approach to developing the Partnership Program staff is driven by its past experience. In the 2010 Census, the Bureau initially planned for a total of 680 partnership specialists. When the Bureau received funding from the American Reinvestment and Recovery Act (ARRA) an additional $120 million was invested in the Partnership Program. This additional investment was welcome, but was not part of the overall program's strategy. This unplanned additional investment was primarily used to increase partnership specialists to 786, and to add an additional 1,750 partnership assistants. These additional staff were added late in the process, and the Census Bureau's assessment is that the partnership assistants, in particular, were not as effective as the more seasoned partnership specialists. Because of this

experience, the Census Bureau will be hiring partnership specialists but not partnership assistants for the 2020 Census. The Census Bureau has increased the number of partnership specialists to 1,500, which is nearly double the number of specialists hired for the 2010 Census program.

3. The Bureau's evaluations of that effort in the 2010 Census indicated strong benefits (such as access to a workforce with much broader set of language skills) from relying on partnership assistants in addition to the partnership specialists the Bureau has been talking about for the 2020 Census. To what extent will the Bureau be repeating this effort from 2010, relying on the partnership assistants as well?

Answer: The Census Bureau is currently reviewing the staffing requirements for the Partnership Program. The significant increase in partnership specialists will allow for the hiring of staff with specific skill sets, including fluency in specific languages needed in particular regions of the country, experience in web development and digital outreach, and Congressional and media relations. This approach will build a Partnership Program that will be stronger and more robust than the program in place for the 2010 Census.

4. Please provide the number of Census Bureau decennial partnership and communications staff (including partnership specialists, partnership assistants, and others) currently on staff as of March 2018. How do these numbers compare to the comparable numbers of such decennial partnership and communications staff in March 2008?

Answer: At the end of March 2008 (the pay period ended March 29), the Census Bureau had 40 employees in the partnership specialist and partnership specialist manager roles. At the end of March 2018 (the pay period ended March 31), the Census Bureau had 36 employees in the partnership specialist and partnership specialist manager roles.

5. Please provide the number of Census Bureau decennial partnership and communications staff (including partnership specialists, partnership assistants, and others) that are planned to be on staff in September 2018. How do these numbers compare to the comparable numbers of such decennial partnership and communications staff in September 2008?

Answer: At the end of September 2008 (the pay period ended September 27), the Census Bureau had 132 employees in the partnership specialist and partnership specialist manager roles. At the end of September 2018, the Census Bureau plans to have on board 132 employees in the partnership specialist and partnership specialist manager roles.

6. Why wasn't the citizenship question included in the Department's March 2017 list of topics to be covered in the 2020 Census, even though the Department now plans on including such a question in the 2020 Census?

Answer: The Secretary of Commerce did not decide to reinstate the citizenship question on the 2020 Census until March 26, 2018.

7. Secretary Ross's March 26, 2018 memo on the Department's decision to add a question on citizenship to the 2020 Census asserts that "no one provided evidence that there are residents who would respond accurately to a decennial census that did not contain a citizenship question but would not respond if it did." However, at the very end of that same memo, the Secretary announces, "To minimize any impact on decennial census response rates, I am directing the Census Bureau to place the citizenship question last on the decennial census form." Doesn't this suggest that the Department does strongly suspect that there will be a very real and negative impact associated with adding the question on citizenship? If so, why isn't the Department testing the question as part of the 2018 end-to-end test currently being conducted in Rhode Island?

Answer:
In support of the Secretary's decision, the Census Bureau considered whether inclusion of the citizenship question would impact self-response, thereby increasing nonresponse follow-up workload, in which census takers, enumerators, contact non-responding households to complete the questionnaire. There was limited data to determine the potential impact to response rates, but the Census Bureau was able to evaluate information from the 2000 short and long form and the American Community Survey programs. Ultimately, the Census Bureau estimated that the nonresponse follow-up workload could potentially increase by approximately 630,000 households, or 0.5%

Because there has been public confusion of the difference between self-response and net undercount, I want to further elaborate. The Census Bureau did not supply any quantitative evidence that the addition of a question on citizenship would impact the net undercount of the 2020 Census.

The decision to reinstate the citizenship question for the 2020 Census was made after the 2018 End-to-End Census Test in Rhode Island (the test) was already underway. The systems had already been set up, and the paper questionnaires and other materials had already been printed. It is important to note that the critical priority for this and any other end-to-end test is to ensure that the key systems and operations are functioning effectively, not to test the content of questions. The citizenship question that will appear on the 2020 Census contains identical wording to the question that currently appears on the American Community Survey. The Census began using this question in 2005 and, through 2017, the Census Bureau has sent

the questionnaire to 42 million households and 2.5 million group quarters locations. The current citizenship question has been answered by 61 million respondents. In contrast, the 2015 National Census Content Test, which evaluated and compared different census questionnaire content, including the race and Hispanic origin questions, was sent to a far smaller sample of only 1.2 million households.

8. Who made the decision not to include the citizenship question on the 2018 end-to-end test, even though Secretary Ross made it clear that he had been considering adding this question ever since the Census Bureau received the Justice Department's December 2017 letter on this subject?

Answer: By the time the Secretary made a decision about the reinstatement of the question in late March 2017, all materials for the end-to-end test had been printed, including the questionnaires, and the Internet system was already developed. Making changes after the questionnaires were printed and the Internet system was developed would have increased risk and cost. Moreover, the primary goal of the test is to test the integration of the key operations and systems necessary to ensure a successful 2020 Census, and not to test the content of questions.

9. In March 2018, President Trump's campaign committee put out a fundraising e-mail that asked recipients whether they believe the 2020 Census should include a question on citizenship. The e-mail included a survey on the question that led to a page seeking contributions to the campaign. Shouldn't this give a reasonable person sufficient reason to be skeptical of the Trump Administration's true motives for adding a citizenship question to the 2020 Census, especially when the topic of citizenship status was not included in the list of decennial census topics sent to Congress in March 2017?

Answer: At a May 10, 2018, Senate Appropriations hearing, Secretary Ross stated that neither the Department of Commerce nor the Census Bureau had any interaction with the campaign committees. Secretary Ross took a hard look at the options available to meet the Department of Justice's request to provide block-level citizenship data. The Department of Commerce and the Census Bureau conducted a review of the request that involved looking at the legal, program, and policy considerations involved with the reinstatement of a citizenship question. The review prioritized the goal of obtaining complete and accurate data. After a thorough review of the legal, program, and policy considerations, as well as discussions with Census Bureau leadership and interested stakeholders, Secretary Ross determined that reinstatement of a citizenship question on the 2020 decennial census is necessary to provide complete and accurate data in response to the request from Department of Justice.

10. Regarding the inclusion in the 2020 Census of the question on citizenship, Secretary Ross's March 26, 2018 memo states, "neither the Census Bureau nor the concerned

stakeholders could document that the response rate would in fact decline materially." Given that this will be the first time since 1950 that every household in the country will be asked the question about citizenship, and given the very volatile political environment in the country in recent years, especially on the issue of immigration, shouldn't the Department and the Census Bureau carry the burden of proof in this instance? In other words, isn't it fair for Congress and other stakeholders to instead ask for assurances and evidence from the Department that the response rate will not decline as a result of the inclusion of a citizenship question sent to every household in the country?

Answer: To ensure thorough consideration of any potential impacts from the addition of a citizenship question, Secretary Ross consulted extensively with the Census Bureau and reached out to a number of different stakeholders during his review of the request from the Department of Justice. In addition to meetings with Census Bureau leadership, he had conversations about the citizenship question with over 24 diverse, well informed, and interested parties representing a broad range of views. He and his staff reviewed over 50 incoming letters from stakeholders, interest groups, Members of Congress, and state and local officials regarding the reinstatement of a citizenship question on the 2020 decennial census. After a thorough review of the legal, program, and policy considerations, as well as numerous discussions with the Census Bureau leadership and interested stakeholders, Secretary Ross determined that reinstatement of a citizenship question on the 2020 decennial census is necessary to provide complete and accurate data in response to the request from the Department of Justice.

11. While the Census Bureau has included a question on citizenship in the American Community Survey, it has not attempted to test the impact of including this question on the decennial census form sent to every household, and especially in the current post-2016 political climate, is that correct?

Answer: It is correct that this question will not be tested by sending it to every household, but it is important to note that no question is tested by sending it to every household. The Census Bureau's goal of testing a question and options for responses is to ensure that all populations can cognitively understand the concepts associated with the question and can accurately respond within the options provided. This goal of cognitive understanding and accurate response has been met through many years of use of this form of the question on the American Community Survey (ACS). In fact, as discussed earlier in the response to question 7, the decennial census questions on race and ethnicity were tested on a sample population of only 1.2 million households. In contrast, in addition to the testing that was conducted on the citizenship question before it was placed on the ACS, the citizenship question has been effectively tested on, and answered by, more than 61 million respondents since being added to the ACS in 2005.

12. A great many experts are predicting that the effect of a citizenship question will be to discourage participation in the 2020 Census among significant segments of the population. Wouldn't such an outcome ultimately have the opposite effect of what the Administration has stated as the reason for the question's inclusion, and actually undermine voting rights, by not effectively counting all persons for purposes of legislative representation?

Answer: There is no reason any person should be afraid to answer the decennial census. The law is clear—the answers a person provides on a census form may not be used for law enforcement or any purpose that would reveal their identity or how an individual responded to a question. Anyone who handles Census data swears an oath to keep those data confidential for life. Under Title 13 of the United States Code, using census responses for any reason other than to produce population statistics is punishable by fines and up to five years in prison. The Census Bureau, the Department and the Administration are asking federal, state, and local leaders to reassure the public of these facts. Such public encouragement and reassurance would help achieve the goals that we share and are working very hard to achieve: a complete and accurate census. By encouraging non-citizens, their friends, and their families to respond to the census, Members of Congress can help the Census Bureau conduct a complete and accurate count. This would in turn provide the anonymous enumeration of all persons. Better citizenship data will allow stronger enforcement of the Voting Rights Act to protect minorities, and accurate numbers will help governments and civic organizations provide better services to all.

13. Secretary Ross's March 26, 2018 memo on the citizenship question asserts, "even if there is some impact on responses, the value of more complete and accurate data derived from surveying the entire population outweighs such concerns." However, the very same memo noted that a Census Bureau analysis of the American Community Survey (ACS) found that when non-citizens responded to ACS questions on citizenship, they inaccurately marked "citizen" about 30 percent of the time. Given this finding of inaccuracy, how can the Bureau be confident that citizenship data received via the 2020 Census will be reliable, even for those who do respond to the census?

Answer: Secretary Ross evaluated a number of options presented to him by the Census Bureau to provide the data requested by the Department of Justice in its December 12, 2017 letter. After evaluating the options, Secretary Ross asked a series of questions and then directed the Census Bureau to present a fourth option consisting of a hybrid approach that combined the reinstatement of the question with the use of administrative records. Secretary Ross ultimately decided to direct the Census Bureau to adopt that hybrid approach under which the ACS citizenship question would be asked on the decennial census and the Census Bureau would use the two years remaining until the 2020 decennial census to further enhance its administrative record data sets, protocols and statistical models to provide more complete and accurate data. Accordingly, at the Secretary's direction the Census Bureau is working to obtain

as many additional federal and state administrative records as possible to provide more comprehensive information for the population.

Secretary Ross believes that this approach will provide DOJ with the most complete and accurate Citizen Voting Age Population (CVAP) data in response to their request. Asking the citizenship question of 100 percent of the population gives each respondent the opportunity to provide an answer. Placing the question on the decennial census and directing the Census Bureau to determine the best means to compare the decennial census responses with administrative records will permit the Census Bureau to determine the inaccurate response rate for citizens and non-citizens alike using the entire population. This will enable the Census Bureau to establish, to the best of its ability, the accurate ratio of citizen to non-citizen responses to impute for that small percentage of cases where it is necessary to do so.

14. Did anyone at the Census Bureau or Commerce Department meet with officials or staff from the Department of Justice (DOJ) or any outside group regarding the original request from DOJ to add a citizenship question to the 2020 Census? Did anyone from the White House contact the Census Bureau or Commerce Department about this request? If so, please provide the names of those individuals and groups that met with Census Bureau and Commerce Department officials and staff regarding the citizenship question.

Answer: The documents containing information about Secretary Ross's decision-making process in connection with his decision to the reinstate the citizenship question on the 2020 decennial census can be found here:

http://www.osec.doc.gov/opog/FOIA/FOIA_elibrary.html

15. GAO has reported that the Census Bureau is facing staffing challenges that could impact its ability to effectively manage and oversee the 2020 Census technical integration contractor. As of February 2018, the government program management office in charge of this oversight was mostly vacant, with 34 of its 58 positions vacant. What is the current status of the staffing of this office? Have vacancies been filled, and how many positions remain vacant? Please explain the ways in which the Bureau is currently providing oversight of contractor cost, schedule, and performance as well as how the Bureau intends to continue exercising this oversight in the future.

Answer: The Technical Integrator Government Program Management Office is currently staffed by 26 government employees. Contractor oversight is performed by current Census Bureau staff, including technical directive leads and technical monitors. The office also has staff assigned to it from other Census organizations, such as the Information Technology Directorate's Chief Technology Office and the Decennial Directorate's Contracts Business

Management Office. We will fill vacancies through the hiring process over the summer and into the next fiscal year, and will continue to use contracts to support current Census Bureau staff, which include technical subject matter experts and program management support for risk, change, and asset management activities.

16. Does the Census Bureau plan on reserving the option of hiring non-U.S. citizens to work on the decennial census, particularly to bolster the Census Bureau's partnership, communications, and enumeration efforts among language minority communities?

Answer: The Census Bureau is confident that it will be able to hire the workforce it needs while continuing to comply with all applicable laws. Appropriations law specifically allows the Census Bureau to hire non-citizens for certain translation functions.

17. Will the Census Bureau count households and persons who respond to the decennial census even if the census forms are not completely filled out?

Answer: As with past censuses, we understand there will be blank answers on some forms. A complete and accurate census is important to local communities, so we urge everyone to answer every question on the decennial census. The Census Bureau is taking numerous steps to ensure a complete and accurate count, including how it will use administrative records to address item non-response. We will also take measures to support complete self-response including increased outreach and partnership activities and robust planning for non-response follow-up visits.

The Honorable Derek Kilmer
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. I'd like to continue to state my concern with the inclusion of a question asking about the citizenship status of respondents, hereafter referred to as the "citizenship question":

    a. What is the estimate for the range (minimum and maximum values) of potential increases in non-response rate with the citizenship question as compared to without the citizenship questions?

    b. How does that estimated range of potential increases in non-response rate with the citizenship question vary with respect to race, ethnicity, geography, and other Census demographics?

    c. What is the increase in cost of performing the Census for every increase in percent non-response rate?

    d. How does that increase in cost of performing the Census for every increase in percent non-response rate vary with respect to race, ethnicity, geography, and other Census demographics?

    e. What are the risk mitigation steps being taken in case there is an increase in non-response rate due to the citizenship question or other factors?

Answer: The Census Bureau estimated that the reinstatement of the citizenship question could potentially increase non-response follow up costs by up to 0.5 percent, which would equate to a potential cost increase of up to $27.5 million. However, as discussed in the Secretary's decision memorandum, this increased cost is well within the scope of the contingency funding included in the October 2017 Lifecycle Cost Estimate provided to Congress. While the Census Bureau in 2017 predicted a self-response rate of 60.5%, the Lifecycle Cost Estimate included contingency funding to accommodate for several possible variables, including a reduction in self-response rate to 55%. So even though the current Lifecycle Cost Estimate was prepared before the reinstatement of the citizenship question and therefore could not have included its impact in the self-response assumption, the Lifecycle Cost Estimate adopted by Congress in the FY 2018 Omnibus provides more than sufficient funding to address the potential drop-off in self-response that the Census Bureau predicted could result from reinstating the question. The Census Bureau has not done a specific analysis of the impact of a question on citizenship on response rates across specific race and ethnic populations. However, in preparation for the 2020 decennial census, the Census Bureau has

been planning a robust communications and partnership program working with trusted leaders in communities across the nation, with a particular focus on hard-to-count populations. Partners will include national organizations, local businesses, churches and other faith-based organizations, health clinics, legal aid centers, and other support organizations. The Census Bureau is also taking steps to make it easier for people to respond through the Internet, by phone and by mail. For the 2020 decennial census, the Census Bureau plans to provide the Internet Self-Response Instrument and will accept phone calls in 12 non-English languages. These 12 languages cover more than 87 percent of all households with limited English proficiency. When we add English, we cover more than 99 percent of all households in the United States. The paper questionnaire and mailing materials will all be in English and Spanish. There will be additional support materials in 59 non-English languages. The advertising and partnership programs will include materials and messaging in multiple languages, as well. Specifically, the $480 million advertising contract will be in multiple languages and reassure respondents that it is safe to respond to the decennial census.

The structure of the FY 2018 Omnibus allows us the flexibility and funding we need to hit the ground running in FY 2019. The Omnibus provided $1.056 billion for FY 2019 activity in FY 2018. We are accelerating some activity from FY 2019 to FY 2018 to reduce overall risk to the program. The Committee has approved the first set of activities we plan to accelerate, including partnership and communications. These funds have brought more partnership specialists on board faster and accelerated the planning for the communications campaign so we can hit the ground running in FY 2019 with implementation of the communications strategies. A high-quality 2020 decennial census depends on reaching all segments of our population to motivate self-response and convincing people to open their door and engage when an enumerator follows up. Motivation to respond is enhanced through an effective paid advertising campaign and trusted voices in communities. The Census Bureau anticipates a message that responding to the 2020 decennial census is safe and beneficial to individual communities. An informative and appealing campaign will help the Bureau reach its self-response goals and make follow up with households that don't chose self-response easier thereby reducing cost and operational risk. We have developed plans to accelerate other activity planned for FY 2019 to reduce overall risk to the program, using the funds provided by this year's appropriation, and have communicated those plans to the Appropriations Committees.

Also, we are incorporating the decision to reinstate the citizenship question in our efforts to promote response. The question has been included in the recent Census Barriers, Attitudes, and Motivators Survey (CBAMS) focus groups, and what we learn from those efforts will be used to craft the messaging in our advertising and partnership efforts to maximize self-response.

f. If specific answers to the above questions cannot be legally disclosed at this point, will you commit to updating myself and the committee with answers as soon as you are able to do so?

Answer: At my direction, the Department is being fully transparent in providing the public access to the administrative record supporting my decision to reinstate the citizenship question. Those documents can be found at http://www.osec.doc.gov/opog/FOIA/FOIA_elibrary.html.

2. In the wake of numerous data breaches at the state and federal level, including the recent incidents at OPM, many Americans are already concerned about the security of the information they provide to the federal government. It is vital that the government earn that trust back. Congress recently included $3.2 billion in the FY 2018 omnibus for the Census Bureau to prepare for the 2020 Census.

    a. How much of the FY18 funding is going towards investments to protect census data from the threat of cyber-attacks?

Answer: The Census Bureau understands the importance of protecting census data and its technology and processes from cybersecurity threats. In FY 2018 the Census Bureau funded cybersecurity operations at $39 million to identify, detect, protect, respond and recover from potential cyber incidents. Funded activities included the security operations centers, incident response teams, security assessments, continuous monitoring compliance and oversight, training, as well as implementation of security tools.

    b. What is needed in FY 2019 to ensure we're on track to achieving a meaningful level of cybersecurity?

Answer: The Census Bureau has submitted an FY 2019 budget request of $42 million that continues to fund cybersecurity operations similar to FY 2018. In FY 2019, the Census Bureau will also begin its 2020 communications campaign, which will incorporate messaging to raise cybersecurity awareness.

3. The District I represent is largely rural, and it's also home to eleven federally recognized tribes. I know Census testing is being done in my district in Pierce County but I am still deeply concerned that the Census Bureau doesn't have the resources or the outreach strategy to ensure an accurate count in these communities. As you know, this data determines how more than $675 billion in annual federal funding is distributed for things like schools, hospitals, roads, public works and other vital programs. This data also helps to determine which communities qualify for economic incentives like the New Market Tax Credit and the newly established 'Opportunity Zone' designation. How do you plan to

ensure that the rural and tribal communities I represent will be accurately counted in the 2020 census?

Answer: We recognize the importance of counting every person, including people in rural areas and tribal communities. We are aware of the unique challenges of reaching people in rural areas and tribal communities, and also recognize that the Internet response option is not feasible or acceptable to the entire population. As a result, several alternative modes will be provided for respondents to complete their 2020 Census questionnaire, in addition to the paper methods used in the past. Our self-response contact strategies include invitation letters, postcards, and questionnaires mailed to households. Although our objective is for a majority of respondents to complete their census questionnaire online, in areas with low Internet connectivity and other characteristics that make it less likely that respondents will complete the census questionnaire online, we offer an Internet Choice contact strategy where a paper questionnaire is provided on the first contact, in addition to information about how to respond online or by phone.

A second step we take to ensure an accurate count in rural areas and tribal communities involves an operation we call "Update/Leave." This operation is designed to update the address frame in areas where the majority of housing units either do not have mail delivered to the physical location of the housing unit, or the mail delivery information for the housing unit cannot be verified. The purpose of the operation is to update the address and feature data for the area assigned, and to leave a 2020 Census Internet Choice Questionnaire Package at every housing unit identified to allow the household to self-respond. The choice questionnaire package will offer occupants two different ways to respond to the census: through the Internet or by mailing back a completed paper questionnaire. A household could also choose to respond by phone. Households that do not respond will be included in the Non-response Follow-up operation.

Our Partnership and Communications Program also will include organizations that are focused on rural areas and tribal communities and feature advertising and promotion targeted to these populations.

Our efforts to enumerate tribal areas recognize their special character. The Census Bureau announced on July 1, 2015, that it would seek input from tribal leaders for the 2020 Census. The Census Bureau conducted 18 tribal consultation meetings that started two years earlier than those conducted for the 2010 Census. These meetings requested input on topics like geography, data collection operations, and tribal enrollment. Connectivity issues were discussed in these meetings, and the Census Bureau continues to explore ways to ensure that it has measures in place to address them. As we move closer to the 2020 decennial census we are working with leaders from each tribe to determine the best way to conduct census

operations in their areas. Where appropriate, the Census Bureau will use the Update Leave Operation.

4. According to the GAO's testimony, the cost of the decennial census has increased from $9.4 billion in 2000, to $12.3 billion in 2010, and now the estimates are $15.6 billion for the 2020. It seems like every 10 years, we start over rather than building upon the technology, systems, and organizations we already have.

    a. What steps is the Census Bureau taking to prepare now ensure 2030 Census doesn't set yet another record for most expensive Census on record?

Answer: The challenges associated with conducting a complete and accurate census of the population increase each decade, and much of this drives up cost. Some of the things we need to take into account are:

- Declining response rates – Response rates for surveys and censuses in general have declined as people are overloaded with requests for information and have become increasingly concerned about sharing information. Although the decennial census is important, many people view it as just one more request for information – another intrusion into their lives. For the decennial census - where we have to count people once, only once, and in the right place - we need to combat that attitude and motivate people to respond.

- Complex living arrangements – We have to plan for the increasingly complex living arrangements and population. Households are becoming more diverse and dynamic, making it a challenge to associate an identified person to a single location. For example, blended families may include children who have two primary residences. Additionally, some households include multiple relationships and generations.

- A very mobile population – About 15 percent of this country's population moves in a given year, making for a highly mobile population. We do not just count everyone in the decennial census, we also have to correctly locate everyone geographically. With a population as mobile as ours is, this is a challenge. It is the combination of data on the characteristics of the population with their geographic location that make the decennial census data so valuable to communities, governments, and businesses.

- Technology – Technology is infused throughout decennial census operations, and the changes each decade that we must keep pace with are dramatic. Each decade brings new ideas, efficiencies and increases in quality, but with it come challenges as well. We design each decennial census based on current technology, but each decade

technology evolves significantly. Our ability to adapt effectively to, and adopt, new technology has to be balanced against rigid timelines and the requirement that we implement this technology on a massive scale.

Despite these challenges, we are doing all we can to find ways to leverage technology across all of the censuses and surveys that the Census Bureau conducts throughout the decade, and we are hopeful that this can contribute to cost containment. In previous decades, the Census Bureau built single-purpose systems designed to manage and control the decennial Census, retiring those systems shortly after the completion of each decennial census. Since the 2010 decennial census, our approach to system development has evolved to enable shared services and long-term application lifecycles usable across the entire Census Bureau enterprise. This approach is evident in the Census Enterprise Data Collection and Processing (CEDCaP) and the Center for Enterprise Dissemination Services and Customer Innovation (CEDSCI) programs. This "build once - use many times" approach means that applications initially built for the 2020 Census will provide the platform upon which demographic and economic surveys will function during the rest of the coming decade. Ongoing use and the inevitable modernization and enhancement of these enterprise platforms throughout the decade will help ensure that they are up to date as preparations for the 2030 decennial census commence.

Additionally, the Census Bureau has embraced a cloud-first approach for the 2020 decennial census, partnering with leading industry providers. These relationships will continue through the coming decade and into the future, ensuring that our computing infrastructure will be maintained and evolve on pace with the latest capabilities and innovations available in the private sector.

After the 2020 decennial census is complete we will be closely analyzing the costs and efficiencies resulting from the increased technological and operational innovations implemented across decennial census operations utilize the lessons learned to minimize costs in the 2030 decennial census and beyond.

5. I often think about the Future of Work, and the impact that AI, robotics and other technologies will have on our economy and workforce. I am thinking about how we create more opportunities for more people in more places. Places beyond the shadow of the Space Needle – communities feeling left behind by the growth in Seattle and San Francisco. Places like the communities I represent – Grays Harbor and where I grew up, Port Angeles.

    a. What efforts is the Census Bureau undertaking and what measures could the Census Bureau undertake to measure adoption and impacts of these technologies and the potential geographic disparity in costs and benefits?

Answer: Partly as a response to the call within the National Academy of Science report to develop a wide range of strategies and research to study the impact of advanced technologies on the work force and related Congressional inquiries, the Census Bureau has focused on three efforts to help understand the impact of robotics, artificial intelligence (AI), and other technologies. First, we have partnered with external experts to develop research intended to address some aspects of the impact of these technologies on labor as well as businesses. Second, building upon these discussions, we have initiated the collection of survey items on multiple survey instruments. Third, we have begun research into alternative existing sources of information (administrative, commercial, and others) to complement survey information.

As part of its strategy to continuously improve data products, the Census Bureau partners with external stakeholders, data users, and academic experts through a variety of mechanisms. Reports by the National Academy of Sciences, like the one referenced above, are one such mechanism. The Census Bureau also receives formal guidance through various advisory committees, such as the Federal Economic Statistics Advisory Committee. The Census Bureau also leverages outside expertise through work in the Federal Statistical Research Data Centers (FSRDC). Through the FSRDC system, qualified researchers on approved projects produce research using Census micro-level data; to be approved, research projects must provide a benefit to the Census Bureau and to the Nation. Another mechanism is when academics and other external experts conduct research on their own that provides insights into our data collection.

Three Census Bureau collections that specifically ask about technology adoption are the Annual Business Survey, the Annual Capital Expenditures Survey, and the Annual Survey of Manufacturers. Each is described below. Finally, we are in the early stages of determining content for a potential Management and Organizational Practices Survey for 2020. The sponsoring researchers have expressed interest in combining technology adoption questions with management questions.

- Annual Business Survey (ABS). The ABS is conducted in partnership with the National Science Foundation's National Center for Science and Engineering Statistics.

    - The 2017 ABS includes three questions related to advanced technologies and automation. Two of these technology questions ask the extent to which businesses are using digitized data and cloud services (which may provide an indication of how "AI-ready" these businesses are). The third question lists specific technologies and asks the degree to which they are being used by businesses; we hope this will not only provide initial industry and possibly geographic estimates for these technologies but will also help inform future content and sampling needs.

- For the 2018 ABS, the Bureau has developed a draft module of questions covering four technologies (robotics, AI, specialized software, and dedicated machinery), the businesses' motivation for adoption, and the impact of these technologies on the amount of labor used by the business as well as the skill mix at the business.

- Annual Survey of Manufacturing (ASM). The 2018 ASM plans to include a Special Inquiry at the end of the survey instrument that asks about the capital expenditures on industrial robotics, as well as a count of industrial robots used at the plant and a count purchased that year.

- Annual Capital Expenditures Survey (ACES). We are also in the process of developing content for the 2018 ACES and may collect capital expenditures for industrial as well as service robotics.

The Census Bureau also conducts research to determine if information products can be developed that rely upon non-survey methods of collection. Some of these sources include administrative data and commercial data. Some of the impact of technology on workers comes from the development of platforms that have enabled the rise of the gig economy. Census Bureau researchers working with academic partners are comparing the results from survey questions on gig economy work with administrative data on gig economy work.

An area for future research concerns whether we could use data from suppliers of advance technologies to measure differences in the geographic adoption of these technologies. We could use data from company websites to develop firm technology profiles (e.g. data, analytics, robotics, AI). Further, there has been some discussion of whether we could use web-scraping of employment advertisements and machine learning to determine where these skills are used.

b. To that end, in the late 1980s and early 1990s, the Census had a standalone survey called Survey of Manufacturing Technology. You no longer run this survey. Would you ever consider such a survey again?

Answer: The Census Bureau has conducted two specific or supplemental surveys on technology: the Survey of Manufacturing Technology (collected in 1988, 1991, and 1993) and the Information and Technology Communication Survey (collected as a supplement to the Annual Capital Expenditures Survey in 2003-2013). Both technology surveys were discontinued under prior Administrations due to a lack of funding.

6. Are there ways for Census Bureau to modernize the collection and distribution of data? For example, have you considered using apps to collect data on the population of individuals, or using web scraping or other digital technology to collect data on business activity?

Answer: The Census Bureau is actively researching and developing ways to modernize data collection and dissemination. For collection, we offer Internet self-response applications across Census Bureau surveys. We are also exploring web-scraping technologies and have developed a prototype tool that scrapes data from state and local government websites to support our public-sector data collection efforts. Because of the privacy concerns surrounding these new methods, publicly available data provided by state and local governments has been our initial starting point. We continue to explore privacy and policy implications as we further develop these tools for use in other Census Bureau collections.

The Census Bureau has embarked upon a multiyear, innovative effort to transform and expand the dissemination of Census content. This effort empowers data users to find, to access, to connect, and to use data in ways that better the data users' lives and communities, as well as stimulate economic invention and growth. To manage this effort, the Census Bureau has formed a new, collaborative Center for Enterprise Dissemination Services and Consumer Information (CEDSCI) with representation from multiple directorates. CEDSCI will set a course to reuse, re-engineer, and redeploy Census Bureau legacy dissemination systems into an integrated, shared-services platform. Program areas will deliver content to a single system that will deliver services for customers that include mapping, visualizations, and data mash-ups enabled across all data sets, including the American Community Survey (ACS), the economic censuses, and the decennial censuses.

The Honorable Matt Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. THE CITIZENSHIP QUESTION

The DOJ's request for a citizenship question will almost assuredly lower the **response rate** for the 2020 Census among U.S. population groups that were hard to count in past censuses. We do not want a climate of fear to lead to a biased undercount and a **less accurate** census.

This year, **six** former Census Bureau directors and two former Secretaries of Commerce expressed their concerns about the effect a citizenship question would have on the **accuracy** and integrity of the census. The former directors found that even small changes in survey question order, wording, and instructions can have significant, and often unexpected, consequences for the rate, quality, and truthfulness of responses.

In Secretary Ross' October 2017 testimony, he stated: "One of the problems with adding questions is it reduces response rates...the more things you ask in those forms, the less likely you are to get them in."

a) If small changes or added questions impact response rates, would it not stand to reason a hugely controversial and untested change might dramatically affect response rates?

b) *If he brings up the ACS or Neilson Consumer Survey - Follow-Up*: How is it scientifically appropriate to draw assumptions about responses to the citizenship question from how a different audience answered different questions in the very different American Community Survey or Nielsen Consumer Survey?

c) What gaps in information is the Bureau dealing with because the citizenship question was not included on the end-to-end test in Providence?

    a. Aren't you essentially going in blind because you have never tested this question for the entire population in the modern era? When, if ever, has the census included a question that was not on the end-to-end test?

        i. *If it has happened before*: What were the results? Was this question as controversial and impactful as the citizenship question? What mistakes were made and what did your agency learn to ensure it does not repeat the same mistakes in the 2020 Census?

ii. *If it has not happened before*: So, you're telling me that the Bureau has never before included an untested question on the census, correct? That means we have no idea how it will affect response rate or what the consequences will be. It is unconscionable that your agency is being so cavalier about something that will fundamentally shape our nation for the decade to come.

Answer: In support of the Secretary's decision, the Census Bureau considered whether inclusion of the citizenship question would impact self-response, thereby increasing nonresponse follow-up workload, in which census takers, enumerators, contact non-responding households to complete the questionnaire. There was limited data to determine the potential impact to response rates, but the Census Bureau was able to evaluate information from the 2000 short and long form and the American Community Survey programs. Ultimately, the Census Bureau estimated that the nonresponse follow-up workload could potentially increase by approximately 630,000 households, or 0.5%

Because there has been public confusion of the difference between self-response and net undercount, I want to further elaborate. The Census Bureau did not supply any quantitative evidence that the addition of a question on citizenship would impact the net undercount of the 2020 Census.

The decision to reinstate the citizenship question for the 2020 Census was made after the 2018 End-to-End Census Test in Rhode Island (the test) was already underway. The systems had already been set up, and the paper questionnaires and other materials had already been printed. It is important to note that the critical priority for this and any other end-to-end test is to ensure that the key systems and operations are functioning effectively, not to test the content of questions. The citizenship question that will appear on the 2020 Census contains identical wording to the question that currently appears on the American Community Survey. The Census began using this question in 2005 and, through 2017, the Census Bureau has sent the questionnaire to 42 million households and 2.5 million group quarters locations. The current citizenship question has been answered by 61 million respondents. In contrast, the 2015 National Census Content Test, which evaluated and compared different census questionnaire content, including the race and Hispanic origin questions, was sent to a far smaller sample of only 1.2 million households.

d) According to the GAO "non-response follow-up is the Bureau's largest and most costly field operation." The non-response rate for the citizenship question on the ACS is between 5 and 14%. If the full census has the same non-response rate that means between 15 and 45 million additional people may need to be contacted for follow-up compared to the 2010 Census. It seems that adding citizenship questions will require

greater nonresponse follow-up with apprehensive U.S. residents. Does the Census Bureau have a recent cost estimate for how much this additional follow-up would cost?

a. Does the current cost-estimate reflect the addition of the citizenship question?

Answer: The Census Bureau estimated that the reinstatement of the citizenship question could potentially increase non-response follow up costs by up to 0.5 percent, which would equate to a potential cost increase of up to $27.5 million. However, as discussed in the Secretary's decision memorandum, this increased cost is well within the scope of the contingency funding included in the October 2017 Lifecycle Cost Estimate provided to Congress. While the Census Bureau is managing to a self-response rate of 60.5%, the 2017 Lifecycle Cost Estimate included contingency funding to accommodate for several possible variables, including a reduction in self-response rate to 55%. So even though the current Lifecycle Cost Estimate was prepared before the reinstatement of the citizenship question and therefore could not have included its impact in the self-response assumption, the Lifecycle Cost Estimate adopted by Congress in the FY 2018 Omnibus provides more than sufficient funding to address the potential drop-off in self-response that the Census Bureau predicted could result from reinstating the question.

b. How will the budget request need to change to account for this last-minute addition? This Committee will need to review a comprehensive cost-estimate that includes the effects of the citizenship question when making our allocation decisions.

Answer: The Department of Commerce and the Census Bureau will review all the assumptions that drive the cost of the 2020 decennial census prior to the FY 2020 budget submission. This process was both planned and is considered a best practice by GAO. Assumptions will be updated to reflect all known changes to the program, but most importantly the assumptions will be adjusted to reflect what the Census Bureau has learned from the 2018 End-to-End Census Test, as well as any changes required to the self-response rate using an evidence-based methodology.

c. Targeted messaging will be more important than ever to break through to households not convinced by a general communications campaign. In 2010, the Bureau's massive advertising campaign increased participation rates and saved $85 million in follow-up costs with nonresponding households. How will the Bureau shape its message and advertising to offset the financial burden the citizenship question will cause in follow-up costs? What additional resources will the Bureau devote to offset the burdens imposed by the new citizenship question?

Answer: Counting everyone in a country as large and diverse as the United States is a significant challenge. To do the job well requires reaching everyone and persuading them to answer the census; counting everyone once, and in the right place. Reaching those populations that are typically less likely to participate in the census is a key priority for the Census Bureau.

Designing an effective communications program begins with foundational research. The Census Bureau is currently analyzing data from the Census Barriers, Attitudes and Motivators Study (CBAMS). CBAMS measures public knowledge, awareness, and perceptions about the decennial census as well as behaviors and attitudes related to participating in the decennial census. This research complements previous iterations of surveys designed to gauge public knowledge, attitudes, and behavior regarding the decennial censuses, as well as inform the strategic direction of the 2020 decennial census Integrated Partnership and Communications (IPC) Program. CBAMS is providing insights necessary to create a communications campaign with messages and media plans developed for specific audience segments with unique response behaviors, attitudes, and demographics. Targeted messages and the selection of the unique channels that these specific audiences consume will provide the visibility this campaign needs among target audiences.

While digital outreach is an effective tool for reaching many audiences, not all people can or prefer to be reached online, and some audiences with a strong online presence may not be willing to respond to the census online. Traditional forms of advertising outreach—through print, outdoor, and broadcast media and through partners and influencers, for example—will continue to be important, not only to reach some hard to count populations but also to reach those who prefer traditional forms of media or who are less likely to trust communications delivered digitally. The strong support of partners—who serve as "trusted voices" that influence individuals from diverse groups and can promote participation during events and through their own communication channels—is perhaps more important than ever before. Partners will underscore and support the Census Bureau's message that participation in the decennial census is important and safe.

The Census Bureau, working with its communications contractor and subcontractors, will continue to analyze research into the attitudes of various audiences toward different communications modes, as well as attitudes toward the government and media. This will help identify the most effective messaging to encourage participation, as well as inform the most optimal outreach strategies and advertising plans. Additionally, we will expand our use of social media, evaluating each property that exists at the time we plan to be in the market advertising and promoting the 2020 decennial census.

The Census Bureau will expend the resources necessary to reach the hard-to-count populations using both traditional and digital media, as well as the use of ethnic and local

media. However, final decisions on how much to allocate to each of these efforts have not been made pending results of the aforementioned research efforts.

e) In a September 2017 memo Census staff noted **unprecedented** fears about confidentiality from respondents. Both respondents and field representatives expressed concerns at the highest rates ever seen before during a pretesting project. These concerns have **strong** implications for nonresponses in the 2020 census.

   a. PRIVACY: Under what circumstances, if any, might the Bureau release citizenship data on individuals to another U.S. government agency, particularly Immigration and Customs Enforcement?

Answer: There are no circumstances where the Census Bureau will release responses to a citizenship question on the decennial census (or the ACS or any other survey by the Census Bureau) to another government agency. As set forth in sections 8 and 9 of title 13, United States Code, the Secretary, the Department and the Census Bureau are prohibited from disclosing individual census responses to anyone other than the respondent and prohibited from sharing census responses with any government agency. No one should be afraid to answer the decennial census. The law is clear – the answers a person provides on a census form may not be used for law enforcement or any purpose that would reveal their identity or how an individual responded to a question. Anyone who handles Census data swears an oath to keep those data confidential for life. Under Title 13, using census responses for any other reason than to produce population statistics is punishable by fines and up to five years in prison.

f) The ACS is our country's only source for comparable (across geography), consistent (across time), timely (updated annually) and quality demographic and socio-economic data for all communities, down to the neighborhood and census tracts.

   a. American Community Survey: The ACS gathers detailed social, demographic, economic, and housing data over time to produce yearly and five-year estimates. These estimates are intended to be representative of the larger population. Does the reinstatement of the citizenship question on the 2020 decennial census suggest that the ACS sample size should be increased to compensate for flawed data? If so, by how much?

Answer: No. The ACS is an ongoing national survey that samples approximately 3.5 million addresses annually, about 290,000 addresses per month. These data are collected continuously throughout the year, to produce detailed population and housing estimates annually. The ACS is designed to produce critical information that was previously collected in

the decennial census. Our estimates, covering more than 35 topics, support more than 300 known federal uses and countless nonfederal uses.

The ACS sample is sufficient to produce estimates for small geographic areas, such as neighborhoods and sparsely-populated rural counties. As is done with long-form census data, ACS estimates are published down to the block group level, the smallest geographic unit for which the Census Bureau tabulates sample data. The Department of Justice requested citizen voting age population data at the block level, which is a more granular level than the ACS sampling method is able to provide.

The Census Bureau is continually investigating ways to improve ACS data quality, create a more positive customer experience, and ensure the survey is operating in an efficient and cost-effective manner. In an effort to improve data quality and reduce the amount of information we request from our respondents, the Census Bureau is charting a course to incorporate administrative records in our data gathering and processing efforts. Administrative data are being considered to fill-in-the-blanks during data editing and imputation, replace census and survey questions, and to provide additional information to enrich the information currently published from the ACS. In the case of the citizenship question, the Census Bureau comparison of ACS citizenship responses with administrative records that was provided to the Secretary during his consideration of whether to reinstate a citizenship question on the decennial census revealed that approximately one third of non-citizens who answered the citizenship question on the ACS provided an incorrect response. Providing more accurate information to impute responses and collecting data to address this inaccurate response rate were two of the factors the Secretary cited in his decision memo reinstating a citizenship question on the decennial census to provide complete and accurate information on citizen voting age populations to the Department of Justice.

g) In addition to individuals not filling out the census at all, some may simply decline to answer the citizenship question but otherwise fully complete the census. They deserve to be counted too. In light of the fact that – according to the most recent GAO report -- "because of funding uncertainties [...] the Bureau canceled the field components of the 2017 Census Test including non-response follow-up, a key census operation"

    a. Non-Response Follow Up: What is the Bureau's planned response when somebody fills out all but the citizenship question on the census? How is that response counted and will there be follow up for that individual?

    b. Non-Response Follow Up: Does the Bureau need to conduct outreach to get that question answered in order to record the other responses and "count" that individual?

c. Non-Response Follow Up: Is there a way for the Census Bureau to extrapolate or "fill in" the missing information without conducting individualized follow-up? How much money could that potentially save, while still ensuring accurate data collection?

Answer: The Census Bureau relies on individuals to respond to all of the questions on the decennial census. When individuals answer all the questions they are asked, the Census Bureau can produce the data that are necessary for important federal functions, including the allocation of federal funds. In addition, responses to all questions on the census are mandatory under Title 13 of the U.S. Code, Sections 141 and 193.

We understand there will be blank answers on some forms. To have the best data possible, we urge everyone to answer every question on the 2020 decennial census. The Census Bureau is actively considering steps it will take to ensure a complete and accurate count. This includes follow-up visits and the use of administrative records to address item nonresponse. But the quickest and easiest way for respondents to minimize interaction with the Census Bureau is to self-respond and answer all questions.

The Census Bureau has used administrative records for decades to impute information for invalid, inconsistent, or missing responses. An example of prior administrative record use would be when respondents failed to indicate a response about race in the 2010 Census, the Census Bureau attempted to impute a value from an earlier Census response. For the 2020 Census, the Census Bureau will expand this usage for other questions including age, sex, relationship, and tenure (owner/renter).

2. ADMINISTRATIVE RECORDS

The Census Bureau plans to use administrative records to compensate for lacking data from non-responsive households. However, these records lack the information to accurately record vulnerable and hard-to-count populations. This use of administrative records may lead to misrepresentations in the overall data collected. The Bureau intends to save money by using records and eliminating follow-up field visits, but this method could end up costing more if further non-response follow-up is needed when the records do not provide enough information.

a) Has the Census Bureau tested the use of administrative records to support quality control during non-response follow-up?

Answer: Throughout the decade, the Census Bureau has been planning and testing the use of administrative records for the identification of vacant housing units and the enumeration of occupied nonresponding households. Administrative records include data from the IRS, the Social Security Administration (SSA), Medicare and Medicaid, the Indian Health Service, and other data sources. Administrative records also include data from prior decennial censuses

and the American Community Survey (ACS). In addition, the Census Bureau uses state, local and private sector data for well-defined operational purposes, such as establishing census block boundaries and supporting address list compilation.

In the case of households that do not respond after our repeated efforts to encourage them to respond by mail, telephone, or the Internet, the Census Bureau expects to be able to enumerate up to six million households in the 2020 decennial census entirely with federal administrative records. This will be done only when the Census Bureau has a high level of confidence that the federal administrative records are of high quality, because the Bureau can corroborate the same information across several federal administrative record sources, and that the information can be accurately applied to the addresses and persons in question. One type of household that could be enumerated using administrative records, for example, is that of an elderly couple who have lived at the same address for many years, who file their taxes regularly, and who have signed up for Medicare.

Where the Census Bureau does not have federal administrative records that provide high quality and high confidence in the data, such as when the data in the federal administrative records is inconsistent or missing, the household will become part of the Census Bureau's Non-response Follow-up operation (NRFU) for a direct follow up by census enumerators. Moreover, to ensure the success of the NRFU Operation, the Census Bureau intends to support this operation through the Integrated Partnerships and Communications Program to reach those who do not self-respond and cannot be enumerated through federal administrative records.

b) Last week, Secretary Wilbur Ross ordered the Census Bureau to engage in a costly and burdensome cross-checking of administrative records to find data about citizenship status that can be matched accurately to each 2020 Census form. Secretary Ross left the choice of whether to use other government records to fill in the blanks or correct census responses up to the Bureau. Dr. Jarmin, wouldn't it be more cost-effective to invest in higher response rates for the 2020 Census than to use more of the Bureau's resources to continue digging through administrative records looking for citizenship data?

Answer: The Census Bureau already has in place plans for a robust Partnership and Communications effort designed to drive the response rate up as high as possible. The comparison of administrative records with ACS and decennial census long form responses the Census Bureau conducted in order to evaluate the use of administrative records to respond to the Department of Justice request was neither costly nor burdensome. The Census Bureau already has access to and has acquired a broad range of federal administrative record sources. Following the 2010 Census, the Census Bureau conducted research into the quality of these records and its ability to match administrative records sources to persons in the 2010 Census. The Census Bureau was able to assign match 88.6 percent of all census persons to the

administrative records. The Census Bureau built off its prior research to conduct an analysis for the Secretary comparing the administrative records with the ACS and the 2000 Census long form to develop the three options. After evaluating three options, Secretary Ross asked a series of questions and then directed the Census Bureau to present a fourth option consisting of a hybrid approach that combined the reinstatement of the question with the use of administrative records. Secretary Ross ultimately decided to direct the Census Bureau to adopt that hybrid approach under which the ACS citizenship question would be asked on the decennial census and the Census Bureau would use the two years remaining until the 2020 decennial census to further enhance its administrative record data sets, protocols and statistical models to provide more complete and accurate data. This approach would maximize the Census Bureau's ability to match the decennial census responses with administrative records. Accordingly, at the Secretary's direction the Census Bureau is working to obtain as many additional Federal and state administrative records as possible to provide credible data on the remaining 11.4 percent of the population for which the Census Bureau does not yet have such data.

Secretary Ross believes that this approach will provide the Department of Justice with the most complete and accurate citizen voting age population data in response to their request. Asking the citizenship question of 100 percent of the population gives each respondent the opportunity to provide an answer. Placing the question on the decennial census and directing the Census Bureau to determine the best means to compare the decennial census responses with administrative records will permit the Census Bureau to determine the inaccurate response rate for citizens and non-citizens alike using the entire population. This will enable the Census Bureau to establish, to the best of its ability, the accurate ratio of citizen to non-citizen responses to impute for that small percentage of cases where it is necessary to do so.

3. CENSUS AND RESPONDENT PRIVACY

The census is the most inclusive federal database on Americans. The information it contains is protected under law from disclosure and misuse, but emerging technologies make many of our traditional legal protections inadequate. The most recent GAO report ruled that "While the planned innovations could help control costs, they also introduce new risks, in part, because they include new procedures and technology that have not been used extensively in earlier decennials, if at all."

a) The Census Bureau is introducing impressive new technology to decrease costs associated with the census. However these new tools could exacerbate fears about data privacy and could lower the response rate. Moreover, these tools could make our private information vulnerable to hacking. What concrete steps will the bureau take to ensure that our personal data is protected and used solely for statistical purposes?

Answer: The Census Bureau has intentionally designed systems and processes with many layers and levels of separation to enable us to identify areas of concern, protect systems and data, detect and contain cyber threats and data manipulation, as well as, if necessary, respond and recover from an incident. All self-responses are subject to a battery of automated checks that use data, matching, and security alert information to identify suspect individual responses and cumulative trends. Responses identified by automated checks are sent to analysts for further investigation. Cumulative trends are monitored by senior analysts for assessment of credible threats, and all work to investigate suspect cases is coordinated with IT security.

Moreover, the law is clear – the answers a person provides on a census form may not be used for law enforcement or any purpose that would reveal their identity or how an individual responded to a question. As set forth in sections 8 and 9 of title 13, United States Code, the Secretary, the Department and the Census Bureau are prohibited from disclosing individual census responses to anyone other than the respondent or sharing census responses with any government agency. Anyone who handles Census data swears an oath to keep those data confidential for life. Under Title 13, using census responses for any reason other than to produce population statistics is punishable by fines and up to five years in prison.

b) In 2000, the "Social Security Number, Privacy Attitudes, and Notification (SPAN) Experiment" was developed to understand the public's attitude on privacy issues linked to administrative records and Social Security numbers. Has the Bureau followed up on its recommendations to 1) conduct research with targeted populations that demonstrate lower response rates and willingness to provide personal information? Or 2) subsequently addressed the concerns of these targeted populations?

Answer: The Social Security, Privacy Attitudes, and Notification (SPAN) Experiment was specifically designed to determine if Social Security Number (SSN) requests and administrative record use notification affected census response, form completeness among census forms returned, and response to a Social Security Number item on the decennial census. The Census Bureau conducted this experiment during 2000 decennial census as part of its effort to understand whether it was possible to potentially increase completeness of measurement by reducing respondent burden with shorter questionnaires and improve data quality by eliminating memory/respondent errors through linking census responses to administrative records data. However, as indicated in the experiment, requesting SSN, for all household members or the first person on the form caused small but significant drops in response. These findings were informative and the Census Bureau did not include an SSN request in the 2010 decennial census and has no plans to include a request for the 2020 decennial census.

4. INTERNET RESPONSES AND CYBERSECURITY

The 2020 Census will implement a number of innovations aimed at increasing efficacy and decreasing costs. One of these innovations is allowing the public, for the first time, to respond

using the Internet. The collection and transfer of this information poses a cyber security threat. Needless to say, we should take every precaution possible to ensure the personal information shared with us through the census remains private.

a) What percentage of total respondents does the Census Bureau expect will complete internet responses?

Answer: We expect that about 45 percent of households will respond via the Internet.

a. What measures has the Census Bureau already taken to ensure that the data of these respondents will not be hacked or manipulated?

Answer: The Census Bureau has intentionally designed systems and processes with many layers and levels of separation to enable us to identify areas of concern, protect systems and data, detect and contain cyber threats and data manipulation, as well as, if necessary, respond and recover from an incident. All self-responses are subject to a battery of automated checks that use data, matching, and security alert information to identify suspect individual responses and cumulative trends. Responses identified by automated checks are sent to analysts for further investigation. Cumulative trends are monitored by senior analysts for assessment of credible threats, and all work to investigate suspect cases is coordinated with IT security.

b. A system as extensive as the Census' internet response system requires robust testing to guarantee that information will be collected properly and securely. What tests have been completed to assess the security weaknesses of the internet response system?

Answer: The Authority to Operate (ATO) process is quality control for cybersecurity. It is completed for all systems to continually reduce information technology security risks to an acceptable level. The Census Bureau grants the ATO after completing a robust security assessment according to a risk-based framework. Before ATO is granted, there are typically findings that must be addressed under strict timelines. Systems and data are secure when all high-risk findings have been addressed. Once a system is granted the ATO, a system is continuously monitored and annually reauthorized to ensure it maintains an acceptable cybersecurity posture.

Complementing these processes, the Census Bureau has worked with independent contractors and federal intelligence partners to conduct penetration testing of the public facing systems for Internet Self Response, with no weaknesses identified. The Census Bureau is now working with the Department of Homeland Security to conduct additional penetration testing this year to test additional components of our public facing systems.

b) An October 2017 GAO Report titled: *2020 CENSUS: Continued Management Attention Needed to Oversee Innovations, Develop and Secure IT Systems, and Improve Cost Estimation*, found that the Census "Bureau has not yet addressed several security risks and challenges to secure its systems and data, including making certain that security assessments are completed in a timely manner and that risks are at an acceptable level." According to the most recent GAO report, as of this month, only 8 out of 44 IT systems have completed all testing for the 2018 End-to-End test. When will the remaining 36 IT systems be developed and tested for the 2018 End-to-End test, and why is this process taking so long?

Answer: The Census Bureau has met the requirements of every operation completed to this point. As of July 2018 we have deployed 40 of the 44 systems in support of the 2018 End-to-End Census Test. Of the 40 systems, 35 have completed all of the development needed to support any of the relevant operations for the 2018 test. The remaining systems are on schedule, per the Integrated Master Schedule (IMS), to be deployed for the pending operations that are part of the 2018 test.

a. The most recent GAO report found "The Bureau plans to rely heavily on both new and legacy IT systems and infrastructure". Considering 75% of these IT systems are going to be dealing with sensitive information from respondents, will you be able to test all IT systems?

Answer: No system will be deployed to production without adequate and rigorous testing. We take information security very seriously. Since a majority of our systems will be dealing with sensitive information from respondents, every system will be subjected to rigorous testing and will receive an ATO certification from the CIO and Associate Director for Census Programs. No system will be deployed without an ATO. In some situations, for the 2018 End-to-End Census Test, GAO noted that we had to compress the schedule for obtaining ATOs, which we did by adding additional resources. We achieved security-related validation prior to using all systems in production.

c) This month the GAO reported that 9 of 14 key IT milestone dates have been delayed by several months. The GAO also concluded that "If the Bureau continues to experience delays in meeting development and testing milestones for the 2018 End-to-End Test, it may not be able to fully test production-level systems and operations in a census-like environment prior to the 2020 Census." Delays reduce the time available to conduct security reviews. How do you plan on meeting the cybersecurity needs of your internet response system if you can't reach the milestone dates to test them?

Answer: The Census Bureau has a very detailed risk management framework based on NIST SP 800-37r1 "Guide for Applying Risk Management Framework to Federal Information Systems."

Following that framework, the Census Bureau Office of Information Security (OIS) embeds a security engineer into major IT systems development to ensure security is addressed early on and throughout the lifecycle. The Census Bureau Internet Response System relies on the underlying infrastructure which undergoes its own security assessment and continuous monitoring. The Internet Response System relies on a number of those "inherited" infrastructure controls to provide security. The Internet Response System has been granted its initial ATO which meets FISMA requirements. The system will be under continuous monitoring and any changes to the system will require that the system go through a security impact analysis to determine if reauthorization of the ATO is required. If reauthorization is required, OIS will conduct the review and develop a Plans of Action and Milestones that will identify actions to reduce overall systems security risk. Based on this plan, the Census Bureau will prioritize action on the highest risk findings and reduce risk to an acceptable operating level.

d) If data was manipulated, what measures would the census bureau take to assess the severity of the manipulation?

Answer: The Census Bureau takes a multi-pronged approach to data integrity.
First, we have built a robust Fraud Detection System (FDS) that allows us to identify and rectify fraudulent data that may have come through secure channels. Through the security measures and fraud detection measures we are in a position to assess the severity of data manipulation. We have given a technical directive to industry experts to build a FDS and are testing the system as part of the 2018 End-to-End Census Test, as well as post 2018 test prior to the 2020 decennial census.

Secondly, we utilize our Census Security Operations Center to monitor our systems to identify and detect potential security related breaches. We have an active and robust cyber defense plan that includes coordination with federal and intelligence community partners to facilitate proactive protection against such security incidents from occurring.

Finally, we ensure that the systems that host sensitive data are secured effectively following the latest secure technologies and methodologies. This approach is to prevent data manipulation from happening in the first place.

a. Does one instance of data manipulation put the integrity of all data collected into question?

Answer: No. We have multiple modes of data collection and each one is independent of others. Within each mode we collect information that delineates information within a housing unit from other housing units.

b. What detection methods are you employing to ensure that you will detect a manipulation of the data? Given how many data breaches we have experienced over the past several years, how will we assure Americans that you have maintained data integrity and privacy throughout the process?

Answer: The Census Bureau has strict processes in place for handling all Title 13 and Title 26 data that may contain sensitive or personally identifiable information. The Census Bureau has also incorporated into its operations both fraud detection and cyber security tools and processes that help us to identify, detect, protect, respond and recover from internal or external threats related to entering, extraction, or manipulation of data. In addition, the Census Bureau is working with federal and intelligence community partners to keep abreast of potential threats and is prepared, if necessary, to address those threats.

e) The National Research Council of the National Academies expressed concerns that an internet response option may lead to the "establishment of a 'phishing' site appearing to be related to the Census". Phishing sites would lead to data theft and discourage respondent participation. What preventative measures has the Census taken to ensure that internet respondents don't fall pretty to phishing schemes?

Answer: Phishing attacks by entities purporting to be the Census Bureau are one example of the many cybersecurity threats that target consumers. To help identify and protect against these external threats, the Census Bureau will partner with industry and other federal agencies. The Census Bureau will use proactive public communications to educate and reinforce typical cybersecurity measures that respondents should be taking at home to protect their own data and increase their confidence that they are using the websites and tools from the Census Bureau intended for the secure collection of data for the 2020 decennial census. In addition, the Census Bureau will proactively monitor for fake websites and will not send emails directly to respondents. Coupled with robust public communications, this will limit the ability for others to impersonate the Census Bureau.

5. COST-ESTIMATE AND OPERATIONS

Both the Department of Commerce and Congress have come to markedly different conclusions than the Administration about the level of funding needed by the Census Bureau in the coming fiscal year. Congress provided more than $1 billion above the Administration's request for FY18 and the Secretary has admitted the FY 18 request was too low.

a) The Administration's FY19 request is still $437 million below the Commerce Department's revised FY19 cost-estimate of $3.45 billion as published on the Census website. Dr. Jarmin, why is the Administration's request significantly lower than that of Congress and the Department of Commerce? Are you just hoping that Congress does not take the administration's request seriously once again?

Answer: The Administration's FY 2019 budget request is aligned with the Department's lifecycle cost estimate for the 2020 decennial census. It fully funds all operational and systems development necessary to ensure a complete and accurate 2020 decennial census, including opening the remaining field offices and the first major 2020 decennial census field operation, the In-Field Address Canvassing operation. Importantly, the FY 2019 budget request also contains all contingency funding determined by the Department's independent cost estimate. The difference you cited reflects additional contingency funding above the confidence level recommended by GAO best practices in cost estimation. While there exists uncertainty in the need for additional contingency funding above the independent cost estimate at this time, should it become necessary as the lifecycle cost is informed and refined with the results of the 2018 End-to-End Census Test, the Administration will work closely with Congress to reconsider.

The Census Bureau would like to express appreciation for the Consolidated Appropriations Act of 2018. We are thankful not only for the financial resources, but also for the flexibility that allows the Bureau to commit the resources required for the 2020 decennial census when they are needed. This year's appropriation helps to reduce the overall risk to the 2020 decennial census by enabling us to make the critical investments beginning on October 1. This appropriation, and the way that it is structured, underscores the Committee's commitment to a successful 2020 decennial census.

a. The most recent GAO report noted that "without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost." How is the Administration's funding request conducive to handling emerging challenges early in the census planning process?

Answer: The FY 2018 Omnibus included $50 million in contingency and the FY 2019 Request proposes nearly $300 million more in contingency. Given the preliminary successes of the FY 2018 End-to-End Census test, we anticipate the current contingency request will be sufficient to handle the emerging challenges in FY 2019.

b. Area Census Offices are critical to the planning and implementation of a successful "field footprint" to ensure to non-responses receive proper follow-up. Yet in many states, including Pennsylvania, the number of these offices were cut by 50% -- and by 80% in the case of Iowa. What was the rationale behind reducing the number of offices and how do you plan to address the increased follow-up costs as a result of fewer offices?

Answer: The Census Bureau will be opening a total of 248 Area Census Offices to support data collection and outreach efforts for the 2020 decennial census. These offices will be the

primary management centers for most field data collection activities on the 2020 decennial census. As you note, we opened more partnership offices in 2010. The efficiencies gained with automation and the reduction in paper-based activities over the last decade allows the Census Bureau to significantly reduce the brick and mortar footprint necessary to support the work of census enumerators. Enumerators no longer need paper maps, nor are they receiving and returning paper-based assignments and submitting paper-based payroll and administrative documents. All of these functions will be done electronically for the 2020 decennial census. The reduction in the number of offices does not reduce the ability of the Census Bureau to conduct a complete and accurate count. The Census Bureau still plans to hire staff locally and in sufficient numbers to ensure that everyone is counted. In addition, the Census Bureau will adopt the same approach to managing staff as it has done in the past. Census enumerators will work in the neighborhoods where they live, providing a critical element of local knowledge that increases cooperation and response. The direct supervision of these enumerators will be by Field Supervisors who also live in these communities and work from home.

b) How have the Census Bureau's operational plans for FY18 changed in light of the designation of additional appropriations?

Answer: The Census Bureau would like to express appreciation for the Consolidated Appropriations Act of 2018. We are thankful not only for the financial resources, but also for the flexibility that allows the Bureau to commit the resources required for the 2020 decennial census when they are needed. This year's appropriation helps to reduce the overall risk to the 2020 decennial census by enabling us to make the critical investments beginning on October 1. This appropriation, and the way that it is structured, underscores the Committee's commitment to a successful 2020 decennial census. The Census Bureau is already increasing its partnership and communication campaign in FY 2018. Given the flexibility provided in the Consolidated Appropriations Act, in August the Census Bureau sent a reprogramming request to the Committee that advances some activities originally planned in FY 2019 to FY 2018 and uses risk-based contingency to reduce to overall risk to the 2020 decennial census.

6. Rural, Tribal, and Remote Areas

Individuals living in rural areas and on tribal land are often undercounted in the census because of their remote locations. Originally, the Bureau planned to conduct end-to-end testing in tribal, rural, suburban, and urban areas and collect information from 700,000 homes. However, due to underfunding of this critical "dress rehearsal," end-to-end testing is only happening in Providence, Rhode Island for about 200,000 homes.

a) What are the significant differences between suburban and urban Providence and the many rural and remote areas and tribal lands within our nation? What gaps in understanding of participation rates do you anticipate because you only tested one fairly densely-populated area?

Answer: We conducted the early operations of the 2018 End-to-End Census Test in three locations that included the very rural areas of the Bluefield, Beckley, Oakhill region of West Virginia, and in Pierce County, Washington. We gained valuable experience in implementing census operations in areas with no Internet connectivity, and we are currently adjusting our systems and operations based on what we learned. The Census Bureau successfully implemented its management systems in these areas, and field staff were able to receive their assignments and submit their payroll and operational data at the beginning or end of their shifts when they could connect to the Internet, but they did not require Internet access while they were actually doing their work. This is important to the Commonwealth of Puerto Rico, which includes areas with sporadic Internet connectivity particularly in the aftermath of Hurricane Maria.

The primary goal of any end-to-end test is to ensure the effective integration of all of our systems and operations, and the Providence, Rhode Island site is ideal for that. Moreover, the operations we are implementing in rural areas, and on American Indian Reservations, are identical to those implemented in prior censuses, so they are well-established and have proven to be effective in the past.

We recognize the importance of counting people in rural areas and the unique challenges that represents. We do recognize that the Internet response option is not feasible or acceptable to the entire population; alternative modes will be provided for respondents to complete their 2020 decennial census questionnaire, such as the paper methods used in the past. Our self-response contact strategies include invitation letters, post-cards, and questionnaires mailed to households. Although our objective is for a majority of respondents to complete their census questionnaire online, in areas with low Internet connectivity and other characteristics that make it less likely that respondents will complete the census questionnaire online, we offer an Internet Choice contact strategy where a questionnaire is provided on the first contact, in addition to information about how to respond online or by phone.

A second step we take to ensure an accurate count in rural areas involves an operation we call "Update/Leave." This operation is designed to update the address frame in areas where the majority of housing units either do not have mail delivered to the physical location of the housing unit, or the mail delivery information for the housing unit cannot be verified. The purpose of the operation is to update the address and feature data for the area assigned, and to leave a 2020 Census Internet Choice Questionnaire Package at every housing unit (HU) identified to allow the household to self-respond. The choice questionnaire package will offer occupants two different ways to respond to the census: through the Internet or by mailing back a completed paper questionnaire. All households can also choose to respond by phone. Households that do not respond will be included in the Non-response Follow-up operation with correct geographic information.

Our Partnership and Communications Program also will include organizations that are focused on rural communities and advertising and promotion that will reach these areas as well.

Our efforts to enumerate tribal areas are equally strong. The Census Bureau announced on July 1, 2015, that it would seek input from tribal leaders for the 2020 Census. The Census Bureau conducted 18 tribal consultation meetings that started two years earlier than those conducted for the 2010 Census. These meetings requested input on topics like geography, data collection operations, and tribal enrollment. Connectivity issues were discussed in these meetings, and the Census Bureau continues to explore ways to ensure that it has measures in place to address them. As we move closer to the 2020 Census we are working with leaders from each tribe to determine the best way to conduct census operations in their areas. In many cases, the Census Bureau will use the Update Leave Operation in these areas as well.

We also are working closely with tribal leaders as we develop the Communications and Partnership program. Our contracting team, led by Young & Rubicam (Team Y&R) includes G+G Advertising. G+G Advertising has been a leader in American Indian and Alaska Natives (AIAN) advertising and outreach to AIAN audiences for more than 20 years. The firm also has extensive decennial experience, having participated in the 2000 and 2010 Census advertising campaigns. Team Y&R, G+G Advertising, and Census Bureau staff, both at the headquarters and local level, have been working on two key elements: research and partnerships. Working in conjunction with the Census Bureau, Team Y&R recently completed the Census Barriers Attitudes and Motivators Survey. CBAMS is a quantitative and qualitative research effort which includes a survey with a sample of 50,000 households and 42 focus groups in 14 cities across the United States. The American Indian and Alaska Native population was a significant focus of this study. In addition, the Census Bureau is implementing its Community Partnerships Engagement Program (CPEP). CPEP is an effort that focuses on building and engaging community or grassroots level partnerships throughout the United States.

a. If there are issues or gaps in participation in rural and tribal areas that you only discover after the 2020 Census is underway, how does the Bureau plan to respond to ensure an accurate count of everybody in the US, no matter where they live?

    i. It often costs significantly more to do follow-up outreach in sparsely populated areas. What is your plan if costs of follow-up are dramatically higher than currently anticipated?

Answer: The Census Bureau's lifecycle cost estimate includes the contingency funding necessary to expand Non-response Follow-up operation in tribal or rural areas as necessary.

b) Hurricane Maria wiped out virtually all of Puerto Rico's infrastructure. It will take many years to fully recover. How does the Census propose to access and interview individuals living in areas recovering from natural disasters?

    a. What challenges will you face in making sure you get an accurate count in areas like Puerto Rico and the Florida Keys, which were remote even before last year's devastating hurricanes?

Answer: In areas hit hard by natural disasters the Census Bureau converts operations to the Update/Leave operation because the on-the-ground listing effort close to Census Day ensures that shifting or evolving living situations are captured so that questionnaire packages are delivered effectively, and that they are accurately included in the Non-response Follow-up operation. We did this in the areas affected by Hurricanes Rita and Katrina prior to the 2010 Census, and we have made the decision to enumerate the entire Commonwealth of Puerto Rico with the Update/Leave operation for the 2020 decennial census. We are working closely with the Government of Puerto Rico and will make additional operational adjustments as necessary.

7. UNDERCOUNTING YOUNG CHILDREN

Considerable and deserved attention is focused on racial minorities, the foreign-born, and the poor –not mutually exclusive groups – who may be harder to count in the census. Less attention is focused on other hard-to-count groups such as children, particularly in rural areas. Nearly a million children under age five, for example, did not show up in the 2010 census. Unlike other age groups, the count of young children appears to be increasingly less accurate.

a) What factors make young children harder to count and what are the implications of undercounting them?

Answer: We recognize that the undercount of children has increased in recent decades and that this is a critical challenge in the 2020 decennial census. An undercount of young children on the census is not new or unique to the United States. The Decennial Census of the U.S. population and other censuses around the world have struggled with this issue for decades. Task forces at the Census Bureau have been examining this issue throughout the decade, and we know that we often miss children living in complex living situations such as staying with grandparents, other relatives or nonrelatives because they are less likely to be listed on the census questionnaire. In this, the relationship of the child to the householder is important. Unrelated children, grandchildren and other related children were most at risk of coverage error than biological or adopted children of the householder. We also know that we miss young mothers, and children who live in a household of recent immigrants or in a non-English or limited-English speaking home are likely to be undercounted as well.

As with other undercounted populations there are significant implications arising from undercounting children for the communities where they live. Young children, like all members of the population, contribute to the census counts that are used to apportion the House of Representatives. Many federal programs allocate funds according to census counts. Programs especially focused on children include Temporary Assistance for Needy Families, special education grants to states for providing education and services to children with disabilities, Head Start, and the National School Lunch Program. If census counts are too low in areas, school planning may be impacted when more children exist than are expected.

b) What exact provisions is the Census Bureau making to ensure all these groups are counted accurately in 2020?

Answer: We have taken a number of steps to address this issue. This included updating the language on our mailing to households to emphasize that "all adults, children and babies living or staying at this address" should be included (the 2010 form just said "everyone"); updating the wording of the undercount probe on the questionnaire to specifically mention "grandchildren" and "unrelated" children; and updating the help text on the Internet self-response instrument to provide additional guidance about counting children. In addition, our automated instruments will allow respondents to add these additional people in real time in response to our prompts, and we are incorporating messaging about including young children in the training for our field staff conducting the Non-response Follow-up operation.

We also know that the importance of counting young children must be woven into all of our communications messaging and partnership support materials, which is a principal focus of our communications contracting team. Our Partnership Program also will be building relationships with national organizations that support children, and local organizations like hospitals all across the country. Continuing to explore opportunities for addressing issue will be an important priority in the months ahead.

8. LGBTQ Community, Sexual Orientation, and Gender Identity

In 2016, 5 major federal agencies asked the Census Bureau to include questions on sexual orientation and gender identity on the American Community Survey (ACS). They were the Departments of Justice (DOJ), Health and Human Services (HHS), and Housing and Urban Development (HUD), Centers for Medicare and Medicaid Services, and the Environmental Protection Agency (EPA). In March of 2017, the Census Bureau communicated with the DOJ and removed the questions from the ACS.

a) Can you confirm that those five agencies made this request of the Census?

   a. Did you follow up in March 2017 with all agencies, or only with DOJ as has been reported?

b. Why was DOJ the primary agency the Census worked with regarding inclusion of a question on sexual orientation and gender identity? Why didn't you contact the other 4 agencies?

b) The Census is important for providing services to marginalized and underserved communities. Your Bureau said that there was "no federal data need" to ask about sexual orientation and gender identity. But this is a survey that is used to distribute more than $400 billion in federal funds to communities across the country. LGBTQ Americans will continue to be underserved because they are uncounted. This lack of service and funds will contribute to the increased rates of homelessness, poverty, and discrimination LGBTQ Americans face. Does the Bureau consider it unimportant to understand the LGBTQ community and serve these Americans? If there is "no federal data need" to ask about sexual orientation, then why do both forms of the census include questions on "same-sex" or "opposite-sex" partners?

a. By counting only LGBTQ individuals who are living together in same-sex partnerships the government is getting a woefully inadequate sample of the LGBTQ population. It completely erases the existence of single LGBTQ Americans and LGBTQ youth who face high rates of homelessness, transgender individuals who face intense discrimination and are at high risk for depression and suicide, and bisexuals whose orientation is not determined by whom they are in a relationship with. I believe every person in America deserves to be counted fully and accurately.

Answer: The Census Bureau remains committed to providing high quality data to ensure efficient and effective management of federal programs and services. The Census Bureau, working with the Office of Management and Budget and Interagency Council on Statistical Policy's Subcommittee on the ACS, has established criteria for determining content on the American Community Survey (ACS). These criteria ensure that the ACS asks only what is necessary, constraining the length and burden of the ACS on the American public.

It is incumbent upon federal agencies to identify their need for data and communicate this information to the Census Bureau. Requests for new or revised content for the ACS must demonstrate a statutory or regulatory need for data at small geographies or for small populations in order to be considered for the ACS.

The Census Bureau received four federal agency requests in 2016 to add sexual orientation and gender identity to the ACS. All four requests underwent legal, technical, and policy review. Three requests failed to meet the criteria for adding a subject. The fourth agency withdrew its

request. As a result, there are currently no requests to add sexual orientation and gender identity questions to the ACS that meet the criteria for inclusion.

The Census Bureau published two reports detailing the planned subjects and planned questions for the 2020 decennial census and ACS, which serve to notify Congress, federal agencies, and the public about the planned topics for the decennial census program. In addition, the Census Bureau publishes Federal Register Notices in compliance with the Paperwork Reduction Act, which provides an opportunity for the public and federal agencies to comment on the subjects and questions planned for the 2020 decennial census and ACS. Since there were no requests that met the criteria for adding a subject to the ACS, sexual orientation and gender identity were not included in the published reports or Federal Register Notices.

9. GAO Recommendation for an Updated Census Cost Estimate

According to the GAO, the Census Bureau released an updated cost estimate in October 2017. An accurate cost-estimate is necessary for the Bureau to plan and execute the Census. As we have discussed, it is an extremely important tool for determining both the make-up of this body and for allocating important government resources like Medicaid, Social Security, and housing grants.

a) I know the end-to-end test is underway in Providence. What information have you gathered that from the ongoing test that may call into question the cost-estimate from 2017? Will there be time to update the budget for Census after the end-to-end test and before the 2020 Census is underway?

Answer: The 2018 End-to-End Census Test is ongoing, and we will not complete our analysis of the data from the test until the Fall. Nothing at this stage, though, indicates that significant revisions to the Department's October 2017 Lifecycle Cost Estimate (LCCE) are required. We will be updating the LCCE later this year based on our ongoing review of all of the parameters and estimates it contains.

b) What contingencies have you explored if the current cost-estimates need to be dramatically increased as a result of the lessons learns during the Providence testing, while still ensuring the greatest levels of participation possible?

Answer: We believe that the funds provided in the 2018 Consolidated Appropriations Act enacted by the Congress are sufficient to cover any mitigations required by the results of the test.

Questions for the Record

Government Accountability Office

Hearing

Oversight of the 2020 Census

April 18, 2018

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. **The explanatory statement accompanying the final fiscal year 2018 Omnibus Appropriations Act directed the Census Bureau to ensure that its fiscal year 2018 partnership and communications activities in support of the 2020 Census are conducted at a level of effort and staffing no less than that conducted during fiscal year 2008 in preparation for the 2010 Census. Please explain the ways in which the Census Bureau is working to abide by this directive to ensure that the partnership and communications efforts are at least as strong this year as they were at this same point ten years ago.**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

2. **Will the Census Bureau be relying on a large number of partnership ASSISTANTS to help increase the self-response rate to the 2020 Census, as it did during the run-up to the 2010 Decennial Census (in part due to the availability of Recovery Act funding at that time)?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

3. **The Bureau's evaluations of that effort in the 2010 Census indicated strong benefits (such as access to a workforce with much broader set of language skills) from relying on partnership assistants in addition to the partnership specialists the Bureau has been talking about for the 2020 Census. To what extent will the Bureau be repeating this effort from 2010, relying on the partnership assistants as well?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

4. **Please provide the number of Census Bureau decennial partnership and communications staff (including partnership specialists, partnership assistants, and others) currently on staff as of March 2018. How do these numbers compare to the comparable numbers of such decennial partnership and communications staff in March 2008?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

5. **Please provide the number of Census Bureau decennial partnership and communications staff (including partnership specialists, partnership assistants, and others) that are planned to be on staff in September 2018. How do these numbers compare to the comparable numbers of such decennial partnership and communications staff in September 2008?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

6. **Why wasn't the citizenship question included in the Department's March 2017 list of topics to be covered in the 2020 Census, even though the Department now plans on including such a question in the 2020 Census?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

7. **Secretary Ross's March 26, 2018 memo on the Department's decision to add a question on citizenship to the 2020 Census asserts that "no one provided evidence that there are residents who would respond accurately to a decennial census that did not contain a citizenship question but would not respond if it did." However, at the very end of that same memo, the Secretary announces, "To minimize any impact on decennial census response rates, I am directing the Census Bureau to place the citizenship question last on the decennial census form." Doesn't this suggest that the Department does strongly suspect that there will be a very real and negative impact associated with adding the question on citizenship? If so, why isn't the Department testing the question as part of the 2018 end-to-end test currently being conducted in Rhode Island?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

8. **Who made the decision not to include the citizenship question on the 2018 end-to-end test, even though Secretary Ross made it clear that he had been considering adding this question ever since the Census Bureau received the Justice Department's December 2017 letter on this subject?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

9. **In March 2018, President Trump's campaign committee put out a fundraising e-mail that asked recipients whether they believe the 2020 Census should include a question on citizenship. The e-mail included a survey on the question that led to a**

page seeking contributions to the campaign. Shouldn't this give a reasonable person sufficient reason to be skeptical of the Trump Administration's true motives for adding a citizenship question to the 2020 Census, especially when the topic of citizenship status was not included in the list of decennial census topics sent to Congress in March 2017?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

10. **Regarding the inclusion in the 2020 Census of the question on citizenship, Secretary Ross's March 26, 2018 memo states, "neither the Census Bureau nor the concerned stakeholders could document that the response rate would in fact decline materially." Given that this will be the first time since 1950 that every household in the country will be asked the question about citizenship, and given the very volatile political environment in the country in recent years, especially on the issue of immigration, shouldn't the Department and the Census Bureau carry the burden of proof in this instance? In other words, isn't it fair for Congress and other stakeholders to instead ask for assurances and evidence from the Department that the response rate will not decline as a result of the inclusion of a citizenship question sent to every household in the country?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

11. **While the Census Bureau has included a question on citizenship in the American Community Survey, it has not attempted to test the impact of including this question on the decennial census form sent to every household, and especially in the current post-2016 political climate, is that correct?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

12. **A great many experts are predicting that the effect of a citizenship question will be to discourage participation in the 2020 Census among significant segments of the population. Wouldn't such an outcome ultimately have the opposite effect of what the Administration has stated as the reason for the question's inclusion, and actually undermine voting rights, by not effectively counting all persons for purposes of legislative representation?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

13. Secretary Ross's March 26, 2018 memo on the citizenship question asserts, "even if there is some impact on responses, the value of more complete and accurate data derived from surveying the entire population outweighs such concerns." However, the very same memo noted that a Census Bureau analysis of the American Community Survey (ACS) found that when non-citizens responded to ACS questions on citizenship, they inaccurately marked "citizen" about 30 percent of the time. Given this finding of inaccuracy, how can the Bureau be confident that citizenship data received via the 2020 Census will be reliable, even for those who do respond to the census?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

14. Did anyone at the Census Bureau or Commerce Department meet with officials or staff from the Department of Justice (DOJ) or any outside group regarding the original request from DOJ to add a citizenship question to the 2020 Census? Did anyone from the White House contact the Census Bureau or Commerce Department about this request? If so, please provide the names of those individuals and groups that met with Census Bureau and Commerce Department officials and staff regarding the citizenship question.

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

15. GAO has reported that the Census Bureau is facing staffing challenges that could impact its ability to effectively manage and oversee the 2020 Census technical integration contractor. As of February 2018, the government program management office in charge of this oversight was mostly vacant, with 34 of its 58 positions vacant. What is the current status of the staffing of this office? Have vacancies been filled, and how many positions remain vacant? Please explain the ways in which the Bureau is currently providing oversight of contractor cost, schedule, and performance as well as how the Bureau intends to continue exercising this oversight in the future.

As of June 2018, the Census Bureau's (Bureau) government program management office remained understaffed. Specifically, Bureau officials reported that 33 of the 58 positions responsible for overseeing the technical integration contractor were vacant, with only one prior vacancy being filled from February 2018 through May 2018. We recently reported that, as a result of these vacancies, the program management office may not be sufficiently staffed to provide adequate oversight of contractor cost, schedule, and performance.[1]

[1]GAO, *2020 Census: Actions Needed to Mitigate Key Risks Jeopardizing a Cost-Effective and Secure Enumeration*, GAO-18-543T (Washington, D.C.: May 8, 2018).

However, we noted in our May 2018 testimony that the Department of Commerce (Commerce) had increased its oversight of the Bureau's preparations for the 2020 Census.[2] Specifically, we noted that officials in Commerce's Office of the Secretary had increased their oversight of the Bureau's preparations for the 2020 Census by holding regular meetings to discuss contracts, expected costs, and risks, among other topics. Accordingly, Bureau officials reported that they had recently begun meeting with the Secretary of Commerce on a monthly basis and with the Under Secretary of Commerce for Economic Affairs on a weekly basis to discuss 2020 Census issues.

To facilitate oversight, the Bureau had also appointed two new assistant directors within the Decennial Directorate. As we reported, each of these individuals was responsible for overseeing aspects of the 2020 Census program, including schedules, contracts, and system development. In addition, we noted that, to ensure executive-level oversight of the key systems and technology, the Bureau's Chief Information Officer (CIO), or a designated representative, was a member of the governance boards that oversee all of the operations and technology for the 2020 Census.

Nevertheless, our May 2018 testimony pointed out that the Bureau had experienced schedule delays and cost increases in developing its information technology (IT) systems and that a vast amount of development, testing, and security assessments still needed to be completed. We concluded that, moving forward, it will be important that the CIO and other Bureau executives continue to use a collaborative governance approach to effectively manage contractor oversight and risks to ensure that the IT solutions for the 2020 Census meet the needs of the agency within cost and schedule.

16. Does the Census Bureau plan on reserving the option of hiring non-U.S. citizens to work on the decennial census, particularly to bolster the Census Bureau's partnership, communications, and enumeration efforts among language minority communities?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

17. Will the Census Bureau count households and persons who respond to the decennial census even if the census forms are not completely filled out?

The Bureau has procedures for counting households and persons who respond to the census even if the census form is not completely filled out. For the 2020 Census, the Bureau plans to use imputation to complete census information for both household and person-level items on the census form. Imputation is the process of replacing missing

[2]GAO-18-543T.

data with substituted values based on the characteristics of nearby housing units. The Bureau has relied on imputation for missing data since at least the 1970 Census.

Moreover, for the 2020 Census, the Bureau also plans to use administrative records in at least two ways to help with counts for non-responding households. First, for households the Bureau has determined in advance of non-response follow-up that administrative records for the household are sufficient, the Bureau plans to use administrative records to count the household after one unsuccessful attempt knocking on its door. Second, for households with "non-interviews" after all follow-up operations are completed, the Bureau plans to use administrative records to help improve imputation of three related types of data the Bureau fills in for these housing units.[3] These data fields include (1) whether or not a unit is occupied, (2) what the count of the unit might be, and (3) the demographic characteristics of the residents. The Bureau has not decided exactly how it will perform imputations for the 2020 Census or on what data its imputations will rely, but has said it will finalize these decisions in fall 2018.

[3]According to the Bureau, non-interviews are cases where no data or insufficient data were collected.

The Honorable Derek Kilmer
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. **I'd like to continue to state my concern with the inclusion of a question asking about the citizenship status of respondents, hereafter referred to as the "citizenship question":**
   a. **What is the estimate for the range (minimum and maximum values) of potential increases in non-response rate with the citizenship question as compared to without the citizenship questions?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   b. **How does that estimated range of potential increases in non-response rate with the citizenship question vary with respect to race, ethnicity, geography, and other Census demographics?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   c. **What is the increase in cost of performing the Census for every increase in percent non-response rate?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   d. **How does that increase in cost of performing the Census for every increase in percent non-response rate vary with respect to race, ethnicity, geography, and other Census demographics?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   e. **What are the risk mitigation steps being taken in case there is an increase in non-response rate due to the citizenship question or other factors?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

f. **If specific answers to the above questions cannot be legally disclosed at this point, will you commit to updating myself and the committee with answers as soon as you are able to do so?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

2. **In the wake of numerous data breaches at the state and federal level, including the recent incidents at OPM, many Americans are already concerned about the security of the information they provide to the federal government. It is vital that the government earn that trust back. Congress recently included $3.2 billion in the FY 2018 omnibus for the Census Bureau to prepare for the 2020 Census.**
   a. **How much of the FY18 is going towards investments to protect census data from the threat of cyber-attacks?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   b. **What is needed in FY 2019 to ensure we're on track to achieving a meaningful level of cybersecurity?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

3. **The District I represent is largely rural, and it's also home to eleven federally recognized tribes. I know Census testing is being done in my district in Pierce County but I still deeply concerned that the Census Bureau doesn't have the resources or the outreach strategy to ensure an accurate count in these communities. As you know, this data determines how more than $675 billion in annual federal funding is distributed for things like schools, hospitals, roads, public works and other vital programs. This data also helps to determine which communities qualify for economic incentives like the New Market Tax Credit and the newly established 'Opportunity Zone' designation. How do you plan to ensure that the rural and tribal communities I represent will be accurately counted in the 2020 census?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

4. **According to the GAO's testimony, the cost of the decennial Census has increased from $9.4 billion in 2000, to $12.3 billion in 2010, and now the estimates are $15.6**

billion for the 2020. It seems like every 10 years, we start over rather than building upon the technology, systems, and organizations we already have.

a. **What steps is the Census Bureau taking to prepare now ensure 2030 Census doesn't set yet another record for most expensive Census on record?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

5. **I often think about the Future of Work, and the impact that AI, robotics and other technologies will have on our economy and workforce. I am thinking about how we create more opportunities for more people in more places. Places beyond the shadow of the Space Needle – communities feeling left behind by the growth in Seattle and San Francisco. Places like the communities I represent – Grays Harbor and where I grew up, Port Angeles.**

a. **What efforts is the Census Bureau undertaking and what measures could the Census Bureau undertake to measure adoption and impacts of these technologies and the potential geographic disparity in costs and benefits?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b. **To that end, in the late 1980s and early 1990s, the Census had a standalone survey called Survey of Manufacturing Technology. You no longer run this survey. Would you ever consider such a survey again?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

6. **Are there ways for Census Bureau to modernize the collection and distribution of data? For example, have you considered using apps to collect data on the population of individuals, or using web scraping or other digital technology to collect data on business activity?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

The Honorable Matt Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Census Bureau FY 2019 Budget Request

1. THE CITIZENSHIP QUESTION

The DOJ's request for a citizenship question will almost assuredly lower the response rate for the 2020 Census among U.S. population groups that were hard to count in past censuses. We do not want a climate of fear to lead to a biased undercount and a less accurate census.

This year, six former Census Bureau directors and two former Secretaries of Commerce expressed their concerns about the effect a citizenship question would have on the accuracy and integrity of the census. The former directors found that even small changes in survey question order, wording, and instructions can have significant, and often unexpected, consequences for the rate, quality, and truthfulness of responses.

In Secretary Ross' October 2017 testimony, he stated: "One of the problems with adding questions is it reduces response rates...the more things you ask in those forms, the less likely you are to get them in."

a) **If small changes or added questions impact response rates, would it not stand to reason a hugely controversial and untested change might dramatically affect response rates?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) ***If he brings up the ACS or Neilson Consumer Survey - Follow-Up*:How is it scientifically appropriate to draw assumptions about responses to the citizenship question from how a different audience answered different questions in the very different American Community Survey or Nielsen Consumer Survey?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

c) **What gaps in information is the Bureau dealing with because the citizenship question was not included on the end-to-end test in Providence?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. **Aren't you essentially going in blind because you have never tested this question for the entire population in the modern era? When, if ever, has the census included a question that was not on the end-to-end test?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

i. ***If it has happened before*: What were the results? Was this question as controversial and impactful as the citizenship question? What mistakes were made and what did your agency learn to ensure it does not repeat the same mistakes in the 2020 Census?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

ii. ***If it has not happened before*: So, you're telling me that the Bureau has never before included an untested question on the census, correct? That means we have no idea how it will affect response rate or what the consequences will be. It is unconscionable that your agency is being so cavalier about something that will fundamentally shape our nation for the decade to come.**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

d) According to the GAO "non-response follow-up is the Bureau's largest and most costly field operation." The non-response rate for the citizenship question on the ACS is between 5 and 14%. If the full census has the same non-response rate that means between 15 and 45 million additional people may need to be contacted for follow-up compared to the 2010 Census. It seems that adding citizenship questions will require greater nonresponse follow-up with apprehensive U.S. residents. Does the Census Bureau have a recent cost estimate for how much this additional follow-up would cost?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. Does the current cost-estimate reflect the addition of the citizenship question?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b. How will the budget request need to change to account for this last-minute addition? This Committee will need to review a comprehensive cost-estimate that includes the effects of the citizenship question when making our allocation decisions.

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

c. Targeted messaging will be more important than ever to break through to households not convinced by a general communications campaign. In 2010, the Bureau's massive advertising campaign increased participation rates and saved $85 million in follow-up costs with nonresponding households. How will the Bureau shape its message and advertising to offset the financial burden the citizenship question will cause in follow-up costs? What additional resources will the Bureau devote to offset the burdens imposed by the new citizenship question?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

e) **In a September 2017 memo Census staff noted unprecedented fears about confidentiality from respondents. Both respondents and field representatives expressed concerns at the highest rates ever seen before during a pretesting project. These concerns have strong implications for nonresponses in the 2020 census.**

   a. **PRIVACY: Under what circumstances, if any, might the Bureau release citizenship data on individuals to another U.S. government agency, particularly Immigration and Customs Enforcement?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

f) **The ACS is our country's only source for comparable (across geography), consistent (across time), timely (updated annually) and quality demographic and socio-economic data for all communities, down to the neighborhood and census tracts.**

   a. **American Community Survey: The ACS gathers detailed social, demographic, economic, and housing data over time to produce yearly and five-year estimates. These estimates are intended to be representative of the larger population. Does the reinstatement of the citizenship question on the 2020 decennial census suggest that the ACS sample size should be increased to compensate for flawed data? If so, by how much?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

g) **In addition to individuals not filling out the census at all, some may simply decline to answer the citizenship question but otherwise fully complete the census. They deserve to be counted too. In light of the fact that – according to the most recent GAO report -- "because of funding uncertainties [...] the Bureau canceled the field components of the 2017 Census Test including non-response follow-up, a key census operation"**

a. **Non-Response Follow Up: What is the Bureau's planned response when somebody fills out all but the citizenship question on the census? How is that response counted and will there be follow up for that individual?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b. **Non-Response Follow Up: Does the Bureau need to conduct outreach to get that question answered in order to record the other responses and "count" that individual?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

c. **Non-Response Follow Up: Is there a way for the Census Bureau to extrapolate or "fill in" the missing information without conducting individualized follow-up? How much money could that potentially save, while still ensuring accurate data collection?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

2. ADMINISTRATIVE RECORDS

The Census Bureau plans to use administrative records to compensate for lacking data from non-responsive households. However, these records lack the information to accurately record vulnerable and hard-to-count populations. This use of administrative records may lead to misrepresentations in the overall data collected. The Bureau intends to save money by using records and eliminating follow-up field visits, but this method could end up costing more if further non-response follow-up is needed when the records do not provide enough information.

a) **Has the Census Bureau tested the use of administrative records to support quality control during non-response follow-up?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) **Last week, Secretary Wilbur Ross ordered the Census Bureau to engage in a costly and burdensome cross-checking of administrative records to find data about citizenship status that can be matched accurately to each 2020 Census form. Secretary Ross left the choice of whether to use other government records to fill in the blanks or correct census responses up to the Bureau. Dr. Jarmin, wouldn't it be more cost-effective to invest in higher response rates for the 2020 Census than to use more of the Bureau's resources to continue digging through administrative records looking for citizenship data?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

3. CENSUS AND RESPONDENT PRIVACY

The census is the most inclusive federal database on Americans. The information it contains is protected under law from disclosure and misuse, but emerging technologies make many of our traditional legal protections inadequate. The most recent GAO report ruled that "While the planned innovations could help control costs, they also introduce new risks, in part, because they include new procedures and technology that have not been used extensively in earlier decennials, if at all"

a) **The Census Bureau is introducing impressive new technology to decrease costs associated with the census. However these new tools could exacerbate fears about data privacy and could lower the response rate. Moreover, these tools could make our private information vulnerable to hacking. What concrete steps will the bureau take to ensure that our personal data is protected and used solely for statistical purposes?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) In 2000, the "Social Security Number, Privacy Attitudes, and Notification (SPAN) Experiment" was developed to understand the public's attitude on privacy issues linked to administrative records and Social Security numbers. Has the Bureau followed up on its recommendations to 1) conduct research with targeted populations that demonstrate lower response rates and willingness to provide personal information? Or 2) subsequently addressed the concerns of these targeted populations?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

4. INTERNET RESPONSES AND CYBERSECURITY

The 2020 Census will implement a number of innovations aimed at increasing efficacy and decreasing costs. One of these innovations is allowing the public, for the first time, to respond using the Internet. The collection and transfer of this information poses a cyber security threat. Needless to say, we should take every precaution possible to ensure the personal information shared with us through the census remains private.

a) What percentage of total respondents does the Census Bureau expect will complete internet responses?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. What measures has the Census Bureau already taken to ensure that the data of these respondents will not be hacked or manipulated?

The Bureau has taken initial steps to strengthen its cybersecurity efforts and secure its IT systems and respondent data for the 2020 Census. In this regard, the Bureau's Office of the CIO established a risk management framework that requires system developers to ensure that each IT system in the 2018 End-to-End Test and the 2020 Census undergoes a full security assessment, and that critical deficiencies are remediated. In addition, the Bureau's framework requires that each system have complete security documentation (such as system security plans) and a security authorization to operate prior to its use.

Nevertheless, significant work remains to ensure that all of the systems that are expected to be used during the 2018 End-to-End Test and the 2020 Census are authorized to operate. For example, in May 2018, we reported that the Bureau still

needed to authorize 6 systems for the 2018 End-to-End Test, and 32 systems that had been authorized needed to be reauthorized prior to the end of the test.[4]

In addition, as the Bureau continues to develop and test systems needed to support the 2020 Census, it will be critically important that the Bureau's CIO and its Chief Information Security Officer focus on addressing information security challenges, such as completing authorizations to operate in a timely manner and minimizing the threat of data breaches. In particular, timely approved authorizations to operate are critical because a majority of systems to be used in the test contain personally identifiable information[5] or data that is protected by federal law.[6]

b. A system as extensive as the Census' internet response system requires robust testing to guarantee that information will be collected properly and securely. What tests have been completed to assess the security weaknesses of the internet response system?

The Bureau has completed a security controls assessment and penetration testing for the Internet self-response system. According to the Bureau's risk management framework, the objectives of a security controls assessment include determining the extent to which security controls are implemented appropriately and operating as intended, as well as identifying weaknesses or deficiencies in security controls as vulnerabilities.[7]

In January 2018, after reviewing the security controls assessment results for the Internet self-response system, the Bureau's CIO issued the system an authorization to operate for the 2018 End-to-End Test. In addition, the Bureau conducted penetration testing[8] on the Internet self-response system through a private vendor. In June 2018,

[4] GAO-18-544.

[5]Personally identifiable information is information about an individual, including information that can be used to distinguish or trace an individual's identity, such as name, Social Security number, or mother's maiden name, and any other personal information that is linked or linkable to an individual.

[6]For example, 13 U.S.C. § 9 provides that all information collected from the public by the Bureau be maintained as confidential. The data may be seen only by persons sworn to uphold the confidentiality of the Bureau's information, and may be used only for statistical purposes. The Internal Revenue Service is required to keep tax return information confidential but the Bureau may access that data pursuant to an exception in 26 U.S.C. § 6103(j) that permits the Internal Revenue Service to share it with the Bureau for statistical purposes only. These data must be protected against unauthorized disclosure.

[7]According to the Bureau's framework, the results of the security controls assessment are documented in the security assessment report, which is a part of the security authorization package for the authorizing official. Further, systems are to obtain security authorization approval from the authorizing official in order to operate. Specifically, the authorizing official evaluates the security authorization package and provides system authorization if the overall risk level is acceptable.

[8]The National Institute of Standards and Technology defined "penetration testing" as security testing in which evaluators mimic real-world attacks in an attempt to identify ways to circumvent the security features of an application, system, or network. Penetration testing often involves issuing real attacks on real systems and data, using the same tools and techniques used by actual attackers.

the Bureau's CIO stated that no major or critical findings were identified during the penetration testing.

Further, following the 2018 End-to-End Test, the Bureau plans to conduct additional development and testing in preparation for the 2020 Census. As such, systems used in the test, including the Internet self-response system, are expected to need additional development and testing due to, among other things, new functionality to be added, the need to scale system performance for the number of respondents expected during the 2020 Census, and to address system defects identified during the 2018 End-to-End Test.

In addition, according to the Bureau's risk management framework, if there is a significant change to the Internet self-response system, then the system's security may need to be assessed before it is reauthorized for the 2020 Census. As we previously reported, it will be critically important that the Bureau provides adequate time to perform such security assessments, completes them in a timely manner, and ensures that risks are at an acceptable level before the systems are deployed.

b) An October 2017 GAO Report titled: *2020 CENSUS: Continued Management Attention Needed to Oversee Innovations, Develop and Secure IT Systems, and Improve Cost Estimation*, found that the Census "Bureau has not yet addressed several security risks and challenges to secure its systems and data, including making certain that security assessments are completed in a timely manner and that risks are at an acceptable level." According to the most recent GAO report, as of this month, only 8 out of 44 IT systems have completed all testing for the 2018 End-to-End test. When will the remaining 36 IT systems be developed and tested for the 2018 End-to-End test, and why is this process taking so long?

Our ongoing work has determined that, as of June 2018, all 44 IT systems to be used in the 2018 End-to-End Test are scheduled to finish development and testing by January 2019. Toward this end, the Bureau had completed all development activities for 36 of the 44 systems in the test, and was in the process of completing these activities for the remaining 8 systems. In addition, as of June 2018, the Bureau had completed all testing activities for 20 of the 44 systems, and was in the process of conducting these tests for the remaining 24 systems.

However, as we noted in May 2018, the Bureau has faced many challenges in managing and overseeing IT programs, systems, schedules, and contractors supporting the 2020 Census.[9] For example, due in part to challenges experienced during systems

[9]GAO-18-543T.

development, the Bureau delayed key IT milestone dates (e.g., dates to begin integration testing) by several months for systems supporting several of the operations in the 2018 End-to-End Test.

To ensure the timely completion and integration of the systems expected to be used during the 2018 End-to-End Test, we previously recommended (in August 2016), that the Bureau take eight actions to improve its implementation and management of IT in areas such as governance and internal coordination.[10] As of July 2018, the Bureau had implemented all but two of these recommendations.

a. The most recent GAO report found "The Bureau plans to rely heavily on both new and legacy IT systems and infrastructure". Considering 75% of these IT systems are going to be dealing with sensitive information from respondents, will you be able to test all IT systems?

The Bureau has stated that it plans to perform system and integration testing for all of the IT systems that are to be included in the 2018 End-to-End Test. However, we reported in May 2018 that the security of all system components may not be assessed before deployment because of delays in system development and testing.[11] Specifically, we noted that compressed time frames had shortened the time to conduct system security assessments from 6 to 8 weeks to, in some instances, 5 to 8 days. We concluded that, if the Bureau continues to experience delays in meeting development and testing milestones for the 2018 End-to-End Test, it may not be able to fully test production-level systems and operations in a census-like environment prior to the 2020 Census.

c) This month the GAO reported that 9 of 14 key IT milestone dates have been delayed by several months. The GAO also concluded that "If the Bureau continues to experience delays in meeting development and testing milestones for the 2018 End-to-End Test, it may not be able to fully test production-level systems and operations in a census-like environment prior to the 2020 Census." Delays reduce the time available to conduct security reviews. How do you plan on meeting the cybersecurity needs of your internet response system if you can't reach the milestone dates to test them?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

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[10]GAO, *Information Technology: Better Management of Interdependencies between Programs Supporting 2020 Census Is Needed*, GAO-16-623 (Washington, D.C.: Aug. 9, 2016).
[11]GAO-18-543T.

d) If data was manipulated, what measures would the census bureau take to assess the severity of the manipulation?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. Does one instance of data manipulation put the integrity of all data collected into question?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b. What detection methods are you employing to ensure that you will detect a manipulation of the data? Given how many data breaches we have experienced over the past several years, how will we assure Americans that you have maintained data integrity and privacy throughout the process?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

e) The National Research Council of the National Academies expressed concerns that an internet response option may lead to the "establishment of a 'phishing' site appearing to be related to the Census". Phishing sites would lead to data theft and discourage respondent participation. What preventative measures has the Census taken to ensure that internet respondents don't fall pretty to phishing schemes?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

5. COST-ESTIMATE AND OPERATIONS

Both the Department of Commerce and Congress have come to markedly different conclusions than the Administration about the level of funding needed by the Census Bureau in the coming fiscal year. Congress provided more than $1 billion above the

Administration's request for FY18 and the Secretary has admitted the FY 18 request was too low.

a) **The Administration's FY19 request is still $437 million below the Commerce Department's revised FY19 cost-estimate of $3.45 billion as published on the Census website. Dr. Jarmin, why is the Administration's request significantly lower than that of Congress and the Department of Commerce? Are you just hoping that Congress does not take the administration's request seriously once again?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. **The most recent GAO report noted that "without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost." How is the Administration's funding request conducive to handling emerging challenges early in the census planning process?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b. **Area Census Offices are critical to the planning and implementation of a successful "field footprint" to ensure to non-responses receive proper follow-up. Yet in many states, including Pennsylvania, the number of these offices were cut by 50% -- and by 80% in the case of Iowa. What was the rationale behind reducing the number of offices and how do you plan to address the increased follow-up costs as a result of fewer offices?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) **How have the Census Bureau's operational plans for FY18 changed in light of the designation of additional appropriations?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

6. Rural, Tribal, and Remote Areas

Individuals living in rural areas and on tribal land are often undercounted in the census because of their remote locations. Originally, the Bureau planned to conduct end-to-end testing in tribal, rural, suburban, and urban areas and collect information from 700,000 homes. However, due to underfunding of this critical "dress rehearsal," end-to-end testing is only happening in Providence, Rhode Island for about 200,000 homes.

a) **What are the significant differences between suburban and urban Providence and the many rural and remote areas and tribal lands within our nation? What gaps in understanding of participation rates do you anticipate because you only tested one fairly densely-populated area?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. **If there are issues or gaps in participation in rural and tribal areas that you only discover after the 2020 Census is underway, how does the Bureau plan to respond to ensure an accurate count of everybody in the US, no matter where they live?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

i. **It often costs significantly more to do follow-up outreach in sparsely populated areas. What is your plan if costs of follow-up are dramatically higher than currently anticipated?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) **Hurricane Maria wiped out virtually all of Puerto Rico's infrastructure. It will take many years to fully recover. How does the Census propose to access and interview individuals living in areas recovering from natural disasters?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. What challenges will you face in making sure you get an accurate count in areas like Puerto Rico and the Florida Keys, which were remote even before last year's devastating hurricanes?

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

7. UNDERCOUNTING YOUNG CHILDREN

Considerable and deserved attention is focused on racial minorities, the foreign-born, and the poor –not mutually exclusive groups – who may be harder to count in the census. Less attention is focused on other hard-to-count groups such as children, particularly in rural areas. Nearly a million children under age five, for example, did not show up in the 2010 census. Unlike other age groups, the count of young children appears to be increasingly less accurate.

a) What factors make young children harder to count and what are the implications of undercounting them?

The Bureau has reported that young children ages 4 and under have been undercounted in the census and in other surveys. In 2013, the Bureau created a taskforce to study these reported undercounts. As part of that effort, the Bureau has released a number of reports in recent years describing the multiple complex factors contributing to the undercount of young children.[12] For example, children in complex living situations—such as households with multiple generations or households that contain unrelated children, grandchildren or other related children face a higher risk of being left off the questionnaire response. The Bureau also found that young children may be missed along with their young mothers. Additional factors include potential confusion about whether or not to include their young children when completing the questionnaire or when being interviewed by census enumerators and that language barriers sometimes resulted in households leaving young children off their census or other survey questionnaire. Moreover, the Bureau taskforce found that households with young children may be missed altogether due to frequent moves between rental units.

[12]Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *The Undercount of Young Children*, (Washington, D.C.: February 2014); Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *Investigating the 2010 Undercount of Young Children – A New Look at 2010 Census Omissions by Age, Version 1.0* (Washington, D.C.: July 2016); and Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *Investigating the 2010 Undercount of Young Children – Analysis of Census Coverage Measurement Results, Version 1.0* (Washington, D.C.: January 2017)

As we have previously reported, as census data are used to apportion seats in Congress, redraw congressional districts, and allocate billions of dollars in federal assistance to states and local governments, improving coverage and reducing the differential undercount are critical.[13]

b) What exact provisions is the Census Bureau making to ensure all these groups are counted accurately in 2020?

The Bureau is taking or plans to take several steps to help improve participation in the census among hard-to-count groups, such as racial and ethnic minorities and young children, as well as the general population for the 2020 Census. For example, the Bureau plans to continue outreach initiatives to specific constituencies, such as to faith-based communities, and to recent immigrants, undocumented residents, refugees, and migrant and seasonal farm workers through its Foreign Born/Immigrant initiative. The Bureau also announced its plans to increase the number of non-English languages supported as part of the 2020 Census to help those limited-English-speaking households.[14]

Specifically related to improving the enumeration of young children, the Bureau revised the census questionnaire and instructions to census enumerators to more explicitly mention the inclusion of grandchildren and any non-relatives in household population counts. In addition, as we have previously reported, the Bureau plans to increase the use of administrative records to help address the undercount of children. For example, the Bureau created a database called "Kidlink" which merges several administrative sources to identify relationships between children and adults, for whom the Bureau is more likely to have unique personal identifiers. According to the Bureau, if it can link incomplete information it has obtained about a child to complete information it has about an adult in the household, such as a parent, it can be more confident in the list of people it has for the household.[15]

These are steps from among others that the Bureau is planning for the 2020 Census that may help improve enumeration of hard-to-count groups, such as young children. We have ongoing work looking at these and other plans, and expect to issue a report this summer. The Bureau's success in improving the counts of these and other groups in the 2020 Census depends on its completion of its planning and the successful execution of those plans.

8. LGBTQ Community, Sexual Orientation, and Gender Identity

In 2016, 5 major federal agencies asked the Census Bureau to include questions on sexual orientation and gender identity on the American Community Survey (ACS). They were the Departments of Justice (DOJ), Health and Human Services (HHS), and Housing and

[13]GAO, *2010 Census: Key Efforts to Include Hard-to-Count Populations Went Generally as Planned; Improvements Could Make the Efforts More Effective for Next Census*, GAO-11-45 (Washington, D.C.: December 14, 2010).
[14]Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *2020 Census Non-English Language Support*, 2020 Census Program Memorandum Series: 2018.06 (Washington, D.C.: February 27, 2018).
[15]GAO, *2020 Census: Bureau Is Taking Steps to Address Limitations of Administrative Records*, GAO-17-664 (Washington, D.C.: July 26, 2017).

Urban Development (HUD), Centers for Medicare and Medicaid Services, and the Environmental Protection Agency (EPA). In March of 2017, the Census Bureau communicated with the DOJ and removed the questions from the ACS.

a) **Can you confirm that those five agencies made this request of the Census?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   a. **Did you follow up in March 2017 with all agencies, or only with DOJ as has been reported?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

   b. **Why was DOJ the primary agency the Census worked with regarding inclusion of a question on sexual orientation and gender identity? Why didn't you contact the other 4 agencies?**

   Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) **The Census is important for providing services to marginalized and underserved communities. Your Bureau said that there was "no federal data need" to ask about sexual orientation and gender identity. But this is a survey that is used to distribute more than $400 billion in federal funds to communities across the country. LGBTQ Americans will continue to be underserved because they are uncounted. This lack of service and funds will contribute to the increased rates of homelessness, poverty, and discrimination LGBTQ Americans face. Does the Bureau consider it unimportant to understand the LGBTQ community and serve these Americans? If there is "no federal data need" to ask about sexual orientation, then why do both forms of the census include questions on "same-sex" or "opposite-sex" partners?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

a. **By counting only LGBTQ individuals who are living together in same-sex partnerships the government is getting a woefully inadequate sample of the LGBTQ population. It completely erases the existence of single LGBTQ Americans and LGBTQ youth who face high rates of homelessness, transgender individuals who face intense discrimination and are at high risk for depression and suicide, and bisexuals whose orientation is not determined by whom they are in a relationship with. I believe every person in America deserves to be counted fully and accurately.**

9. GAO Recommendation for an Updated Census Cost Estimate

According to the GAO, the Census Bureau released an updated cost estimate in October 2017. An accurate cost-estimate is necessary for the Bureau to plan and execute the Census. As we have discussed, it is an extremely important tool for determining both the make-up of this body and for allocating important government resources like Medicaid, Social Security, and housing grants.

a) **I know the end-to-end test is underway in Providence. What information have you gathered that from the ongoing test that may call into question the cost-estimate from 2017? Will there be time to update the budget for Census after the end-to-end test and before the 2020 Census is underway?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

b) **What contingencies have you explored if the current cost-estimates need to be dramatically increased as a result of the lessons learns during the Providence testing, while still ensuring the greatest levels of participation possible?**

Per discussion with the Committee staff, this question was determined to be most appropriately addressed by the Census Bureau.

