

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2020

HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES ONE HUNDRED SIXTEENTH CONGRESS FIRST SESSION

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AND RELATED AGENCIES

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PART 6

	Page
National Aeronautics and Space Administration	1
National Oceanic and Atmospheric Administration	55
Department of Commerce	83
Federal Bureau of Investigation	101
Department of Justice	127
Oversight of the 2020 Census Preparation	203
Outside Witness Testimony	251



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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2020

WEDNESDAY, MARCH 27, 2019.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESS

JAMES BRIDENSTINE, ADMINISTRATOR, NASA

Mr. SERRANO. The subcommittee shall come to order. I would like to welcome NASA administrator James Bridenstine to the subcommittee. Welcome, my friend. It has been a while since I have seen you at the other place.

Mr. BRIDENSTINE. Yes, sir.

Mr. SERRANO. It is nice to see you here.

Mr. BRIDENSTINE. Thank you, Mr. Chairman.

Mr. SERRANO. The other place is the House, you know.

Mr. BRIDENSTINE. The locker room downstairs, where we used to have—

Mr. SERRANO. Are you going to clean it out one of these days?

Mr. BRIDENSTINE. You used to be right next to me.

Mr. SERRANO. I didn't want to say that. Yes. The locker was right next to mine and he hasn't cleaned it out yet.

Mr. BRIDENSTINE. It is on the agenda.

Mr. SERRANO. Did you know something because you had a NASA t-shirt, I noticed.

Mr. BRIDENSTINE. Can you imagine?

Mr. SERRANO. NASA is a great agency that has accomplished much over the last 60 years. A milestone in space flight occurred on July 20, 1969, 50 years ago, when American commander Neil Armstrong and Lunar Module pilot, Buzz Aldrin, landed the Apollo Lunar Module Eagle on the moon at 4:17 p.m. Eastern Standard Time. Armstrong became the first man to step onto the lunar surface, an inspiring accomplishment.

NASA continues its missions by being responsible for civilian space activities, science, and aeronautics research. NASA plays a key role in fostering innovation and opportunity. As most of you know, I am a strong supporter of NASA and believe that its missions help keep the United States at the forefront of space exploration and scientific research.

The President's budget request for fiscal year 2020 includes \$21 billion for NASA, which is nearly \$500 million decrease from 2019 enacted level. While NASA provides funding for a number of science and exploration activities, this budget proposal reduces

funding for a number of important areas. I am particularly concerned that the President's budget request proposes a \$602 million cut to NASA's science mission directorate.

From the fiscal year 2019 enacted level, this again zeroes out funding for three longstanding programs with NASA's Office of STEM Engagement which help inspire the next generation of scientists, it is very naive for NASA to propose, once again, to cut these investments after Congress spoke very clearly a little over two months ago when the omnibus was signed into law. It is my intention, as chairman of this subcommittee, to provide robust funding for these programs that are so important for the future of our youth and our country.

President Trump's budget request also proposes cutting funding for earth science, which is reduced by 151.2 million below last year. The research funded in this account is critical to understanding the impact of climate change on our planet. Our future literally depends on it, which makes these proposals so troubling.

In addition, I am extremely concerned by the intent to eliminate the Wide Field InfraRed Survey Telescope, WFIRST. This project received \$312 million. In fiscal year 2019, it was ranked as the highest scientific priority space astrophysics mission by the 2010 Decadal Survey.

I also have to express my strong reservations with a proposal to procure commercial rockets for a mission prior to the planned Exploration Mission 1, EM-1, in June 2020 instead of January 2021, at an additional cost estimated to be nearly \$1 billion. These significant amounts of money can be better utilized for other programs that NASA wants to cancel and that are greatly needed.

Lastly, as you very well know, I am also a strong supporter of the Arecibo Observatory in Puerto Rico. NASA's fiscal year 2020 budget request includes funding for NASA activities at the observatory and I would like to hear more about this work. Thank you once again, Administrator, for joining us today. I look forward to hearing your testimony. Now, I would like to turn to my colleague and friend, Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman, for yielding and I want to join you in welcoming the NASA Administrator, Jim Bridenstine, to the subcommittee this afternoon. And Administrator, we appreciate you being here to discuss the fiscal year 2020 budget. And I know, of course you served in the House, but I think this is your first time before this subcommittee—

Mr. BRIDENSTINE. Yes, sir.

Mr. ADERHOLT [continuing]. In this capacity. And so we welcome you to be here today and thank you for your service.

For nearly 60 years, we have relied on the National Aeronautics and Space Administration to ensure that the United States remained a world leader in space exploration. Through NASA's scientific research, technological developments, and missions, we have furthered our understanding of Aeronautics, the Earth, and the Moon, distant planets, and even far off galaxies.

I am honored to serve on this subcommittee since my home state of Alabama has a long and proud tradition of supporting our nation's space program. Since 1960, the Marshall Space Flight Center in Huntsville has been NASA's lead center for rocket propulsion.

Marshall has also been the lead center, or played major roles in lander work, as well as major science programs including designing the Hubble telescope to be service accessible.

I think many of us had prepared remarks and questions, which suddenly took a little bit of a turn and took a new meaning yesterday. I believe the vice president made one of the most important space policy speeches since President Kennedy laid out the challenge to land on the moon back in the 1960s.

There are several themes to draw on from that speech, but two which stand out to me as being urgent and being accountable. To look to the future, I think we can learn from a glance at the past. The Apollo program was an urgent mission. Government and private sector had to find new ways to work together, and both had to be willing to undergo internal shakeups and to know when to hit the reset button and to surge ahead.

After Sputnik flew over America, the completion of the task in our own program occurred much faster. SLS is in the spotlight. The vice president at the National Space Council meeting yesterday, as you know, called on us to all rise to a higher level of excellence. I expect the NASA's contractor partner, Boeing, to rise to the occasion of this new urgency and redouble their efforts to get SLS ready to fly in 2020.

NASA as a manager has the duty to rise to the occasion, examine their internal process from top to bottom, to clear out bureaucracy, to make this an agency priority, and make better, faster decisions which allow Boeing to finish the project. NASA must access the next steps and move forward quickly, and not get caught up on the paralysis of analysis, as the vice president said.

I believe this call to excellence, however, extends to more programs than just the SLS core stage. We need to finish the Orion capsule. We need to complete the ground operations. We need to complete the James Webb telescope. And we need to review the centers' operational budgets to ensure that they are sufficient to fulfill their mission.

With great respect to the administration, we also need to move ahead with the Exploration Upper Stage or what is referred to as the EUS. This upper stage will allow flights for both astronauts and very large cargo elements on the same flight. To use that, we much also push ahead with a mobile launch platform design for the block 1B SLS, instead of continuing to modify a platform originally made for a much smaller Aries 1 rocket.

The EUS stage will allow us to meet the challenge to safe—of safely landing astronauts on the moon in 2024. Mr. Chairman, I would—I want to also speak up for excellence in the planetary exploration program.

Congress has directed that NASA use the SLS for the Europa mission. The proposed change to a commercial rocket means we lose the mission plan advantages of the unparallel faring size and the tremendous speed made possible by the EUS. The change would add years of waiting to the data from the mission. I would expect NASA to abide by the provisions in the previous bill language.

Likewise, the vice president called for moving ahead with innovation of nuclear propulsion, low and rich uranium, and the thermal

propulsion which offers a safe and speedy way to transport humans and thereby avoid much of the dangerous radiation exposure.

We must start work now to be ready when the planetary orbits once again create a favorable time to launch to Mars.

And finally, Mr. Chairman, it is time that NASA officials make a serious results driven examination of the contracting and other aspects of commercial programs. It is not enough to promise savings and speed, and then serve up hardware delays, schedule delays, and cost overruns. It is most certainly too early to exclude SLS from delivering gateway elements and landers.

The same excellence we are going to demand of SLS program, must be required of these programs as well. And I will close by saying, Mr. Chairman, that I share your concerns about cuts to STEM Engagement. With a looming wave of retiring engineers from both the government sector and the private sector, now is not the time to stop encouraging our young people to major in these areas. NASA is revered by the public and has unique abilities to inspire youth.

And with that, Mr. Chairman, I yield back and look forward to hearing the testimony of the administrator today. Thank you very much.

Mr. SERRANO. Do you know the drill? You keep it to 5 minutes and we include your whole statement in the record.

Mr. BRIDENSTINE. Yes, sir.

Mr. SERRANO. Thank you.

Mr. BRIDENSTINE. Chairman Serrano, Ranking Member Aderholt, and members of the committee, it is great to be back in the House of Representatives, seeing your smiling faces. I hope they stay that way for the rest of the hearing. It is good to be back in the House.

I will tell you that the budget request is strong for NASA. I heard your language about maybe it is a little smaller than what got passed in February, but it is a good budget request that helps us accomplish the objectives of Space Policy Directive-1. Science is still strong, and of course, we have got ongoing missions that we are sustaining in the best interest of our country.

I think the big thing that we have underway right now is a return to the moon. This time, we are doing it differently than we did it during the Apollo era, and we are doing it differently than has ever been prescribed by previous administrations. This time when we go to the moon, we are going sustainably. What does that mean?

That means this time when we go to the moon, we are going to stay. Does that mean we are going to have a permanent human presence on the surface of the moon? No, but what it means is that we are going to have robots, landers, rovers, and humans, all going back and forth to the moon for a sustainable duration to get more resources than ever before.

The President's Space Policy Directive-1 says, "Go to the moon. Go sustainably. Utilize the resources of the Moon." In 2008 and in 2009, we made discoveries. We now know that there is hundreds of millions of tons of water ice at the poles of the moon. Water ice represents life support. It is air to breathe. It is water to drink. It is hydrogen and oxygen, which is rocket fuel and it is available in hundreds of millions of tons at the poles of the Moon.

That is a game changer for the future. Those resources, we intend to utilize those resources. The other benefit of the Moon is it is a proving ground. That ultimately at the end of the day, we can learn to live and work on another world, and then take those capabilities and as much as possible, replicate them for a journey to Mars, which is still high on the agenda.

The President's budget request has sufficient funds to do these activities, but we are not missing the fact that at the end of the day, the goal is Mars. The Science Mission Directorate is continuing to focus on Mars. In fact, for the first time, we are going to be funding the Mars Sample Return mission. We have all seen what we have gotten already from the Mars missions that we have done.

We now know that Mars at one time had a magnetosphere that protected it from the radiation of deep space. It had two-thirds of its northern hemisphere covered by an ocean at Mars. It had a thick atmosphere. In other words, Mars was at one time habitable. We are not saying it was inhabited, but it was capable. It was habitable at one point in its history.

At some point, it all changed. The magnetosphere went away. The oceans dried up. The atmosphere became very thin. It is not carbon dioxide rather than potentially water vapor or other things.

All of this conspires to say, what can we learn about Mars to inform us about our own planet and how it is changing. That is one of the reasons it is important to do Planetary Science so we can also apply that to Earth Science. The Earth Science budget is strong. We are still sensing the Earth across large parts of the electromagnetic spectrum, and we are using that data to make critically important decisions about how our own climate here is changing. It is true that this is the only planet we know to host life. Therefore, it is the planet that I care about the most, as well as all of us should care about the most.

When we think about ultimately the other parts of the Science Mission Directorate, we talk about heliophysics, the study of the Sun. We have the Parker Solar Probe right now orbiting the Sun, and in fact doing missions that will take it through the Sun's atmosphere, if you can imagine that, the corona. That is the solar corona, I should say.

This is an amazing mission. It has proven to be very successful already. We are going to continue it. It is going to help us be able to predict solar flares. It is going to help us predict coronal mass ejections potentially. That could be very damaging to astronauts in deep space as we return to the Moon and eventually go on to Mars. We need to be able to predict those to protect human life into the future.

Of course, astrophysics is critically important. The James Webb Space Telescope, we are getting that back on track, it had some schedule problems. Of course, because of the support of this committee, we are moving forward and anticipate launching that in March of 2021. We have margin in the schedule to accomplish that objective.

The Science Mission Directorate is strong. The Human Exploration and Operations Mission Directorate is strong. The Aeronautics Mission Directorate, which sometimes gets missed. The

first A in NASA, is Aeronautics, and we really believe that can have a transformational impact for our country economically, as we work to make aviation more fuel efficient, more friendly for the environment, and certainly the idea that we could even fly across the United States in a way that would be supersonic and yet have a low boom.

In other words, in a way that we could actually fly across from New York, Mr. Chairman, to maybe even Huntsville, Alabama in a matter of 30 minutes because we can fly supersonic, rather than plowing through the atmosphere at .6 Mach as we have been doing for the last 60 years.

A lot of exciting things that we are doing. The budget is strong. I am happy to answer any of your questions, and of course, I am glad to be back in the House of Representatives with you.

[The information follows:]

HOLD FOR RELEASE
UNTIL PRESENTED
BY WITNESS
March 27, 2019

Statement of
James Bridenstine
Administrator
National Aeronautics and Space Administration

before the
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
U.S. House of Representatives

Overview

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to discuss NASA's FY 2020 budget request of \$21 billion. This budget represents a significant step in pursuit of the ambitious, long-term goals set for the Agency in legislation and in Space Policy Directive-1.

NASA is going forward to the Moon. We are building a sustainable, open architecture that returns humanity to our nearest neighbor as the next step in our long-term drive to send humans to the Moon and on to Mars. We are moving fast; we are incentivizing speed, and we are going to start taking "shots on goal" almost immediately. We look to land humans on the Moon within a decade. We are completing development of Orion, the spacecraft that will carry humans to lunar orbit, and the Space Launch System (SLS), the rocket that will launch Orion. We are pressing forward toward an uncrewed test flight of Orion around the Moon in 2020 and we are working to launch the Power Propulsion Element (PPE) in 2022, the first element of the Lunar Gateway, a spacecraft that will orbit the Moon and support future landings. Once habitation capability is added, the Gateway will serve as a reusable command module, supporting human missions to the surface of the Moon and giving us access to the entire lunar surface. Working with commercial partners and international partners, we seek to land humans on the surface of the Moon. We look forward to receiving industry proposals this July and moving forward on an ambitious schedule.

We are building for the long term, and this time are going to the Moon to stay. A sustainable exploration plan requires that we build within realistically available resources. We are designing an open, durable, reusable architecture that will support exploration for decades to come. Sustainability requires reusable systems and an openness to partnerships from across the commercial sector and around the world.

We are actively seeking partner contributions and participation. NASA is working to identify partnership opportunities that widen the pool of resources, enhance sustainability, and advance our most important exploration objectives.

Sustainability requires that we remain focused on the next goal beyond the Moon. Systems we develop for lunar exploration will be designed to contribute to a human exploration mission to Mars where feasible. Beyond developing, testing, and demonstrating the technology we need for the journey, we need

to understand the destination. Humans have, in fact, been exploring Mars for decades. We have moved from landers to small solar-powered rovers, and on to large nuclear-powered rovers. At the same time, we have invested in critical infrastructure in orbit around the planet. With the FY 2020 request, NASA will go beyond current capabilities to begin developing a Mars Sample Return mission, a high priority of the scientific community as well as an important precursor to human exploration.

This Exploration Campaign relies on seamless collaboration across the Agency, including human exploration and operations in low-Earth orbit (LEO) and beyond, technology development, and elements of science, as well as the rapidly advancing capabilities of our commercial partners. It draws upon decades of experience and data from our continuing efforts in LEO. NASA has played a pivotal role in enabling the ongoing and rapid expansion of commercial activity in LEO. Our commercial partners are set to make history – sending humans into space on commercially-developed, -owned, and -operated systems this year. This has been a long process, beginning with regular commercial cargo deliveries to the International Space Station (ISS); it will soon bring human spaceflight launches back to American soil. NASA is working to extend this success with commercial partners to the Moon and beyond.

The FY 2020 budget request supports our continuing efforts to improve the performance and safety of aircraft, crewed and uncrewed, here on Earth. NASA's Aeronautics research is returning to the X-plane business; our Low Boom Flight Demonstration Project (LBFD) is working toward a first flight of the X-59 QueSST supersonic flight demonstrator in FY 2021. We will push the sound barrier once again, this time with the goal of making practical commercial supersonic travel a reality, while again helping to foster economic activity.

Much of NASA's current infrastructure was built to support the Apollo Program. Sustainability also includes the ability of our infrastructure, capabilities, and facilities to effectively and efficiently support our missions, while including sufficient flexibility to meet future needs as we continue to explore. This budget includes significant new investments in NASA's mission support activities, to ensure that exploration in space is not limited by our capabilities on the ground.

NASA remains focused on exploring worlds that humans may never visit. NASA robotic missions have visited all the planets of the solar system, and the Parker Solar Probe is preparing to touch the Sun's atmosphere. While the long-lived Opportunity Rover has finally ceased functioning, the even longer-lived Voyager spacecraft has left the solar system. The search for life beyond Earth takes its next step with our planned mission to Europa. The unparalleled James Webb Space Telescope will open a new chapter in humanity's ongoing quest to explore and understand our universe.

NASA's focus on exploration also extends to the one planet known to support life. Exploring the Earth as a system from space, NASA is our leading source of information on how the planet works, how the climate is changing, and what the future holds. No planet is more important to explore than our own. With a fleet of spacecraft operating in orbit NASA will continue its world-leading role exploring the home planet.

With the James Webb Space Telescope poised to look out into the cosmos and back to the time when the first stars were forming, humans landing on the Moon, and constellations of spacecraft exploring the solar system, NASA's FY 2020 request supports what is truly a golden age of exploration.

Human Exploration and Operations

The FY 2020 budget request supports bold new steps in NASA's Exploration Campaign. The United States will lead the return of humans to the Moon for long-term exploration and utilization, followed by human missions to Mars and other destinations. The request provides the FY 2020 resources NASA

needs to develop the SLS rocket and Orion crew vehicle, as well as the other critical technologies and research needed to support a robust exploration program. The budget supports NASA's plan to use a commercial rocket to deliver to cislunar orbit the Power and Propulsion Element (PPE) as the foundation of a Lunar Gateway no earlier than 2022.

The FY 2020 request includes \$5,021.7 million for Deep Space Exploration Systems, and \$4,285.7 million for Low-Earth Orbit and Spaceflight Operations, including the ISS and Space Transportation – both commercial crew system development and ongoing crew and cargo transportation services that resupply the ISS.

NASA will continue its mission in LEO with the ISS to enable exploration, while continuing to perform research that benefits humanity, supporting National Laboratory research by private industry and other organizations, and working towards reducing operations and maintenance costs. NASA will create new opportunities for collaboration with industry on the ISS and develop public-private partnerships for exploration systems that will extend human presence into the solar system. NASA is working to transition our work in LEO, including our international partnerships, to be based on commercially-provided space station services that help enable deep space exploration and private sector expansion in LEO. To support this transition, the ISS will focus near-term activities on supporting commercial industry as well as meeting government requirements in LEO. In parallel, NASA is creating a focused effort aimed at long-term American operations in LEO independent of the ISS.

Under the auspices of the ISS National Laboratory, managed by the Center for the Advancement of Science In Space (CASIS), NASA and CASIS continue to expand research on the ISS sponsored by pharmaceutical, technology, consumer product, and other industries, as well as by other government agencies, such as the National Institutes of Health and the National Science Foundation. Through the joint efforts of NASA and CASIS, the ISS National Lab has reached full capacity for allocated crew time and upmass and downmass.

Space life and physical science research will continue to follow the guidance of the National Academies' decadal studies. NASA-sponsored researchers will be a major user of the ISS and an early user of new commercial platforms as they: enable exploration with research in fluid physics, combustion, microbiology, food production, and animal models; and produce knowledge for use on Earth in materials science, complex fluids, and fundamental cold atom physics. Space life and physical science research expertise will be shared with new Governmental, commercial, and academic researchers to accelerate their productive use of LEO for research and technology development and increase demand for LEO capability.

NASA's Human Research Program (HRP) will continue to conduct cutting-edge research on the effects of spaceflight on the human body, including experiments that require the microgravity environment of the ISS. HRP will support the development of deep space exploration habitat concepts to ensure crew health and performance risks are adequately addressed.

Maintaining the ISS requires service providers to sustain a regular supply line of both crew and cargo. Under the original Commercial Resupply Services (CRS) contracts, our two commercial cargo partners, Space Exploration Technologies (SpaceX) and Northrop Grumman, have provided cargo deliveries to the ISS. Using the launch vehicles developed in partnership with NASA, SpaceX has helped to bring some of the commercial satellite launch market back to the United States and has contributed to a reduction of launch costs. Northrop Grumman has begun to explore commercial markets by offering LEO missions for up to a year after their ISS cargo mission is completed. Under new CRS-2 contracts, SpaceX, Northrop Grumman, and Sierra Nevada Corporation will deliver critical science, research, and technology demonstrations to the ISS over five years from 2020 through 2024. The addition of Sierra Nevada will

add the unique capability to return cargo to various runways, enabling quicker return of cargo for ISS users.

NASA and its commercial partners, Boeing and SpaceX, will soon make history as they prepare to launch humans to the ISS. Before the companies can begin regularly flying long-duration missions to the orbiting laboratory, they first need to demonstrate their systems' capabilities through a series of flight tests. SpaceX's uncrewed Demo-1 launched on March 2, 2019, successfully docked to the ISS, re-entered Earth's atmosphere, and was recovered after splashing down in the Atlantic Ocean. Boeing is planning for an uncrewed launch in April. Through NASA's Commercial Crew Program, American astronauts will soon launch to orbit from American soil for the first time since the Space Shuttle retired in 2011. Further, for the first time in history, humans will travel to space on systems owned, built, tested, and operated by private companies. The recent flight of the Crew Dragon and upcoming flight of the CST-100 Starliner will demonstrate the enormous potential of commercial partnerships for the human exploration and development of space.

Through the Commercial LEO Development program, NASA will continue to leverage its resources and capabilities to enable the development of a commercial market in LEO. The program's first solicitation activity, which will go out in the next few months, will support the development of new commercial LEO platforms and capabilities. These partnerships will further accelerate the transition of human spaceflight operations in low-Earth orbit to commercial partners for NASA and non-NASA needs.

NASA is building a deep space launch and crew system – the Orion spacecraft, the heavy-lift SLS launch vehicle, and the supporting Exploration Ground Systems (EGS) – to support the Exploration Campaign. The SLS Block 1 cargo variant will be capable of delivering Orion to cislunar space in the early 2020s. While more powerful SLS configurations remain an important future capability, recent delays in SLS core stage manufacturing require that NASA concentrate in the near term on the successful completion of EM-1 and EM-2 rather than split attention between EM-1, EM-2, and developing an upgraded upper stage. As a result, SLS Block 1B final development efforts will be deferred. The Orion crew vehicle will carry up to four humans to the lunar vicinity for up to 21 days, and when combined with additional habitation can support longer-duration missions. The Orion will also be able to provide key initial life-support and abort capabilities to Gateway.

The budget request supports a planned SLS/Orion mission, Exploration Mission-1 (EM-1) that would send an uncrewed Orion spacecraft around the Moon. This would be followed by the first crewed SLS/Orion mission, Exploration Mission-2 (EM-2) and an annual launch cadence thereafter. The EM-1 and EM-2 launch dates are under review pending completion of independent assessments of core stage production and the integrated mission schedule. NASA is also assessing alternative architectures for EM-1 that could include the use of commercial launch vehicles. Our goal is to maintain our planned EM-1 schedule. NASA will keep the committee apprised of our findings as we analyze these options. NASA remains focused on the major risk areas associated with first-time production and testing of the SLS core stage, integrated assembly and test of the Orion crew and service module, and integrated operations at the Kennedy Space Center. The FY 2020 budget fully funds the Agency baseline commitment schedule for EM-2 and the Orion spacecraft and enables NASA to begin work on post-EM-2 missions. SLS, Orion, and EGS are critical capabilities for maintaining and extending U.S. human spaceflight leadership beyond LEO to the Moon, Mars, and beyond.

As a key part of the Exploration Campaign, NASA will establish the Lunar Gateway, a small way station that will orbit the Moon and enable human and robotic missions to the lunar surface. The Lunar Gateway will support exploration on and around the Moon, and sustainable human lunar surface exploration missions by supporting reusable human lunar landers. It will be a temporary home for astronauts and will foster growing domestic and international economic opportunities for commercial logistics and refueling

services, as well as providing robust communications with spacecraft in cislunar space and on the lunar surface.

The PPE is the first element of the Lunar Gateway which will be launched on a commercial rocket in 2022 and placed in orbit around the Moon. The PPE will demonstrate advanced high-power solar-electric propulsion (SEP) bus systems that will support both future NASA and commercial applications. The PPE will supply power and propulsion for elements and systems on the Lunar Gateway as well as communication to and from Earth, other spacecraft, and missions to the lunar surface. The Lunar Gateway is intended to be capable of supporting human-class lander deployments and operations. Once the PPE and minimal habitation capabilities have been delivered to cislunar space, a crew of four - launched on Orion - will be able to visit the Lunar Gateway on their way to the lunar surface.

The Lunar Gateway will be launched on competitively procured commercial launch vehicles and assembled in orbit around the Moon where it will be used immediately as a staging point for missions to the lunar surface. It can evolve depending on mission needs, and will support human-class reusable landers, landing a crew of up to four astronauts on the lunar surface and ultimately developing sustaining lunar operations on the Moon. This budget integrates the NASA Docking System (NDS) into the modules of the Lunar Gateway, reducing development cost and allowing NASA, international and commercial partners to easily dock with Lunar Gateway to support lunar landers (including reusable human), the Lunar Gateway itself and science objectives. Further, the early development of commercial docking and delivery capabilities will be essential for developing a sustainable and scalable lunar program. Delivery of Lunar Gateway and lunar lander elements, including refueling of these elements, will create a reusable hub for sustainable lunar activity and feed forward to Mars. The Gateway and lunar surface campaign will benefit from components being provided by International partners. The Gateway will be functional for lunar surface support with the addition of a utilization module planned as the next element after the PPE element.

NASA is supporting the development of commercial lunar exploration capabilities leading to a human lunar landing. NASA is focused on engaging U.S. industry partners using innovative approaches to combine lunar robotics, a cislunar presence, and lunar landing capabilities building up to a human-rated lander. NASA's lunar efforts will incorporate results from the following.

- The Lunar Cargo Transportation and Landing by Soft Touchdown (CATALYST) initiative, established in 2014, is encouraging the development of U.S. private-sector robotic lunar landers capable of successfully delivering payloads to the lunar surface using U.S. commercial launch capabilities.
- Through Commercial Lunar Payload Services (CLPS), NASA selected nine U.S. companies to bid on delivery services to the lunar surface. Lunar payloads from a variety of customers, including NASA, will fly on contracted missions starting in 2020, enabling critical technology demonstrations and scientific observations.
- The budget request supports commercial development of a large lunar lander that can initially carry cargo and later astronauts to the surface of the Moon. NASA issued a solicitation on February 7, 2019 to seek proposals from industry for human lander system studies, risk reduction, development, and spaceflight demonstrations. These Next Space Technologies for Exploration Partnerships (NextSTEP) will enable rapid development and flight demonstrations of human lunar landers by supporting critical studies and risk reduction activities, maturing requirements, tailoring applicable standards, and creating technology maturation plans.

- NASA and its industrial partners are also working on NextSTEP habitation systems to develop concepts for cislunar habitats and to conduct ground-based testing of prototype habitats to evaluate human factors, validate subsystem integration, and test standard interfaces. The knowledge gained from testing the NextSTEP habitats will reduce risk in the design of the Gateway.

Missions to the Moon and cislunar space will also serve as a stepping-stone, a training ground, and a platform to strengthen commercial and international partnerships and prepare for future human missions to Mars and other destinations.

The FY 2020 budget request provides for critical infrastructure indispensable to the Nation's access to and use of space, including those provided under the Space Communications and Navigation (SCaN) Program, the Communication Services Program, the Launch Services Program, Rocket Propulsion Testing, and Human Space Flight Operations.

Human missions to the Moon and Mars will require advanced space communications and navigation capabilities. SCaN's technology development effort invests in leading-edge communications technologies to enable, improve, and mature spacecraft communication and navigation technologies. NASA is conducting studies to identify future technologies under development that can be infused to support NASA exploration missions in the 2022-and-beyond timeframe. These studies include Requests for Information and funded Broad Area Announcements to leverage the creativity of industry partners through mechanisms such as public-private partnerships that will be central to NASA's future communications architecture. NASA is also initiating a Communications Services Program, based on our successful Launch Services Program, which will begin work towards matching future NASA missions with communications services furnished by commercial providers.

Exploration Technology

NASA's FY 2020 request includes \$1,014.3 million for Exploration Technology to accelerate technology development to enable human and robotic exploration of the Moon and Mars and foster commercial expansion in LEO and beyond. Technology drives exploration with investments spanning the Technology Readiness Level (TRL) spectrum, advancing early-stage concepts and maturing key technologies and systems that enable demonstrations in relevant environments.

Within Exploration Technology, NASA will accelerate development of lunar surface technologies through the Lunar Surface Innovation Initiative, driving new essential technologies required for humans to successfully operate on the lunar surface. Utilizing the five-year horizon, NASA will transition key technologies through the ground demonstration phase toward flight demonstrations. The Lunar Surface Innovation Initiative will include the technology areas highlighted below.

- NASA is developing the technologies to make use of resources available on the Moon, on Mars, and on other planetary bodies (*in situ* resources). This technology holds the potential to produce consumables, including oxygen, water, and hydrogen on the Moon, thus drastically reducing mission mass, cost, and risk for human exploration.
- In order to address power requirements for long-duration human missions to the lunar surface, NASA is continuing work on its Kilopower technology project to demonstrate a small, lightweight fission power system. The Kilopower project will transition into a demonstration mission in FY 2020 that would permit long-duration crewed missions on the surface of the Moon.

The Lunar Surface Innovation Initiative will bring together the full range of stakeholders, including entrepreneurs, academia, small businesses, industry, and the NASA workforce to catalyze technology and systems development.

Additionally, computer systems for spaceflight are exposed to a hostile radiation environment that can impact performance and reliability. NASA will address this challenge in FY 2020 by testing a powerful, radiation-hardened computer processor that will enable advanced precision landing, hazard avoidance, and autonomous operations.

NASA plans to launch two Exploration Technology demonstration missions in 2019: the Green Propellant Infusion Mission spacecraft, and the Deep Space Atomic Clock instrument will both be delivered to orbit as part of the U.S. Air Force Space Test Program-2 mission. The Green Propellant Infusion Mission demonstrates a propulsion system that could reduce spacecraft processing costs by replacing hydrazine propellant with a propellant that is less toxic and has approximately 40 percent higher performance by volume. The Deep Space Atomic Clock will demonstrate the potential of a 50-fold increase in clock accuracy for improved deep space navigation and improved gravity science measurements.

NASA is working to an August 2020 launch readiness date for its Laser Communications Relay Demonstration project. The project will demonstrate optical communications technology in an operational setting, providing data rates up to 100 times faster than today's radio-frequency-based communication systems.

In 2020, the Solar Electric Propulsion project will complete the Critical Design Review for the electric propulsion subsystem, and build qualification units to conduct qualification testing of the Solar Electric Propulsion engineering development units for the high-power electric propulsion string. The first demonstration of this system will be the 50-kilowatt-class PPE for NASA's Lunar Gateway spacecraft.

Other technology development that Exploration Technology supports includes critical technology for the Mars 2020 mission to be delivered this year; inflatable aerodynamic decelerator technology which could enable high mass Entry, Descent, and Landing on Mars; and In-Space Robotic Manufacturing and Assembly, with the potential to revolutionize exploration. These and many more technology efforts are enabling NASA's most challenging missions.

Science

NASA's Science Mission Directorate leverages space-, air-, and ground-based assets to answer fundamental questions about the Earth, the solar system and the universe, and our place in the cosmos. Our scientists, engineers, and technologists work with a global community of researchers to provide the scientific discoveries that advance critical understanding and inform decision-making. Whether through disaster response, natural resource management, planetary defense, or space weather monitoring, NASA provides tangible benefits that help protect and improve life on Earth. At the same time, NASA is leading the quest to answer some of most pressing human questions, among them how Earth and the universe evolved, how life emerged, and whether we are alone in the universe.

The FY 2020 budget requests \$6,303.7 million for NASA Science, including \$2,622.1 million for Planetary Science, \$844.8 million for Astrophysics, \$352.5 million for JWST \$704.5 million for Heliophysics, and \$1,779.8 million for Earth Science. The budget enables NASA to continue advancing national science and exploration goals while maintaining its global leadership position through a balanced and integrated science program. This year's budget request reflects a concerted effort to seek and execute new partnerships that will allow the Agency to leverage the innovation, resources, and know-how of the

full breadth of the global science enterprise, including other U.S. and foreign agencies, as well as commercial, academic, and other non-Governmental partners.

Science remains critical to the exploration goals of the Agency, contributing both capabilities and knowledge needed to advance human and robotic exploration of the Moon, Mars, and beyond. The Lunar Discovery and Exploration program advances an integrated strategy for exploration, not only through improved collaboration across the Agency but also by leveraging interagency, international, and commercial partnerships. In November 2018, NASA selected nine U.S. companies to bid on delivery services to the lunar surface through Commercial Lunar Payload Services (CLPS) contracts. Lunar payloads from a variety of customers, including NASA, will fly on contracted missions starting in 2020, enabling critical technology demonstrations and scientific observations; most recently, NASA selected 10 proposals for the Development and Advancement of Lunar Instrumentation (DALI) program, which will support instruments that will fly on future lunar missions. NASA's Lunar Reconnaissance Orbiter (LRO), which marks its tenth anniversary in 2019, continues to help scientists characterize the lunar surface, providing insights into lunar resource analysis that could support future human exploration.

NASA's Planetary Science Division develops and operates increasingly sophisticated missions to reveal new knowledge of our Solar System's content, origin, evolution, and the potential for life elsewhere. With spacecraft in place from the innermost planet to the very edge of the Sun's influence, this year's budget request reinvigorates robotic exploration of our Solar System, supporting the long-term scientific study of the Moon, Mars, and beyond.

NASA's robust Mars Exploration Program continues to achieve great things. In November 2018, the Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (InSight) lander reached the Martian surface, marking the Agency's eighth successful soft landing on the Red Planet. A robot geologist, InSight will yield new discoveries about the Martian interior, providing an unprecedented look at its core structure and heat flow. Cruising behind InSight were two experimental, briefcase-sized spacecraft named Mars Cube One (MarCO) – the first ever planetary CubeSats – which successfully relayed data back to Earth from the InSight lander during its descent to the Martian surface.

The budget request also supports continued progress of the Mars 2020 rover, which – after an intensive effort to identify the most promising landing site – will head to the Jezero Crater following a July 2020 launch. A precursor to human missions to Mars, Mars 2020 will continue to search for evidence of life on the Red Planet and collect a cache of core samples.

In 2020, NASA will commence studies and development of a Mars Sample Return mission – the highest priority strategic mission identified by the scientific community in the most recent planetary science decadal survey and endorsed in the 2018 midterm assessment – that would allow for the return of the Mars 2020 rover samples. Leveraging commercial and international partnerships, such as with the European Space Agency, this mission may launch as early as 2026.

Beyond Mars, NASA will continue development of the next Discovery missions, Lucy and Psyche, as well as the cutting-edge Europa Clipper strategic mission to fly by Jupiter's moon – a first step in exploring ocean worlds and their potential habitability. And just this year, NASA celebrated the first flyby of a Kuiper Belt object (MU69/Ultima Thule) with our New Horizons mission. The data collected from over four billion miles away from Earth will help answer basic questions about the surface properties, geology, and atmospheres of these primitive bodies.

In December 2018, NASA's first asteroid sampling mission, the Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer (OSIRIS-REx), entered orbit around Bennu, the smallest object a spacecraft has ever orbited. In 2020, OSIRIS-REx will have completed its mapping of

Bennu, informing selection of the most promising sample collection site. Its measurements of this potentially hazardous object (Bennu's orbit could bring it relatively close to Earth at the end of the next century), will not only shed light on the early history of our Solar System, but will also inform the design of future missions to mitigate possible asteroid impacts on Earth.

Built as a cohesive, international program for Near-Earth Object (NEO) detection and mitigation technology development, NASA's Planetary Defense Program will continue to fund the NEO Observations project and development of a space-based infrared instrument for detecting NEOs with this year's budget request. Meanwhile, the Double Asteroid Redirection Test (DART) to demonstrate the kinetic impact technique for asteroid deflection will continue to make progress towards its planned 2021 launch.

NASA's Astrophysics Division seeks to understand the universe and our place in it, probing how it works and peering into the origin and evolution of galaxies and stars. Through a coordinated program of research, space-based missions, and technology development, it also explores the formation of planetary systems and seeks to understand how habitable environments develop, a key aspect of the search for life in the universe.

In 2018, NASA bid farewell to the Kepler mission, after nine years of searching for planets outside our Solar System. Kepler discovered almost 2,700 new exoplanets, bringing the total from all sources to over 3,900 known exoplanets. Kepler's legacy serves as the foundation for NASA's next planet-hunting mission, the Transiting Exoplanet Survey Satellite (TESS), launched in April 2018. TESS has already found 12 new exoplanets, including four new multi-planet systems. During its two-year primary mission, TESS will observe nearly the whole sky, providing a rich catalog of worlds around nearby stars, including valuable targets for the James Webb Space Telescope to explore. The 2020 budget accommodates the funds needed to support the revised March 2021 launch date of the James Webb Space Telescope, the largest and most powerful space telescope to be developed to date. Webb will join NASA's family of observatories to examine the first stars and galaxies that formed, viewing the atmospheres of nearby planets outside our solar system and informing our understanding of the evolution of our own solar system.

The budget request also supports operations for the airborne Stratospheric Observatory for Infrared Astronomy (SOFIA), a partnership with the German Aerospace Center; SOFIA will complete its five-year prime mission in 2019. Flying into the stratosphere above 99 percent of Earth's infrared-blocking atmosphere, SOFIA allows astronomers to study the solar system and beyond in ways that are not possible with ground-based telescopes, from almost anywhere in the world.

In order to maintain a balanced science program that optimizes overall scientific return, the FY 2020 budget request again proposes termination of the Wide Field Infrared Survey Telescope (WFIRST), given its significant cost and higher priorities within NASA, including completing the delayed James Webb Space Telescope.

The budget also enables NASA to fully support competed Astrophysics missions and research, and follow the decadal- survey-recommended cadence of new Astrophysics Explorers missions. By the end of FY 2019, NASA plans to release Announcements of Opportunity for the next Astrophysics Small Explorer and Mission of Opportunity missions for an initial selection in 2020.

NASA's Heliophysics Division studies the nature of the Sun, how it affects Earth and other objects in the solar system, and the very nature of space itself. Understanding the Sun and its interactions with the space environment, including near-Earth space, helps scientists identify the causes and impacts of space

weather phenomena, which can threaten spacecraft and astronauts, and affect human technological infrastructure and activities, both on and around Earth, and beyond.

The Heliophysics Division adopts a holistic approach to the study of the Sun and its connection to Earth and other planets – venturing to the very edge of the Sun’s influence and beyond. In December 2018, Voyager 2 exited the heliosphere, the protective bubble of particles and magnetic fields created by the Sun, a milestone only achieved once before – by Voyager 1 in 2012. In over 40 years in space, Voyager 2 has traveled a staggering 18.5 billion miles and is NASA’s longest-running mission.

In 2018, several successful launches also expanded the Heliophysics System Observatory, including the January 2018 launch of the Global-scale Observations of the Limb and Disk (GOLD) instrument, and the August 2018 launch of the Parker Solar Probe, which completed its first of 24 planned orbits around the Sun in January 2019. Together with GOLD, the Ionospheric Connection Explorer (ICON) instrument launching in 2019 will provide the most comprehensive observations of the ionosphere – a region of charged particles in Earth’s upper atmosphere. In July 2018, NASA selected the Interstellar Mapping and Acceleration Probe (IMAP), identified as a priority in the most recent solar and space physics decadal survey, to launch in 2024 to study the boundary of the outer solar system where the solar wind ends. Also, in 2020, NASA will launch Solar Orbiter, a joint collaboration led by the European Space Agency, into orbit around the Sun in order to better understand the dynamics of the heliosphere.

NASA continues to work with its agency partners to reduce gaps between space weather research and operations. The budget initiates the Heliophysics Space Weather Science and Applications project to further strengthen the feedback between fundamental research and operational forecasting needs by improving the transition of science results into operational products. The budget also provides for a potential new Small Explorer-class space weather mission. This will lay the groundwork for a future Space Weather Mission line to focus on resolving fundamental science problems required to improve space weather prediction, and serve as a pathfinder for observation technology for the National Oceanic and Atmospheric Administration’s (NOAA’s) operational space weather missions.

NASA’s Earth Science Division develops and operates space-based and airborne missions that obtain revolutionary observations of our planet. NASA Earth Science works with the scientific community to coordinate and integrate measurements to improve quantitative understanding of our planet and accurately model Earth’s complex system of interacting processes. The program also teams with government and commercial partners in the U.S. and internationally to use the measurements and understanding to develop and demonstrate applications that will provide direct benefit to our Nation, and indeed all of humanity.

In 2018, NASA launched two strategic missions recommended by the 2007 Earth Science decadal survey: Gravity Recovery and Climate Experiment Follow-On (GRACE-FO); and Ice, Cloud and land, Elevation Satellite-2 (ICESat-2). The twin satellites of GRACE-FO are continuing the original GRACE mission’s 15-year legacy (2002-2017) of measuring the changing mass of ice sheets and glaciers and tracking Earth’s water movement across the planet. ICESat-2, the follow-on to NASA’s ICESat mission (2003-2009), is providing unprecedented data on the topography of ice, forests, and oceans. In November 2018, the Operation IceBridge 2018 Antarctic Field Campaign concluded successfully after flying under ICESat-2 orbits to validate and verify the new satellite’s measurements.

In addition, NASA Earth Science is collaborating with the Human Exploration and Operations Mission Directorate to utilize the ISS for Earth observations. NASA Earth Science launched two low-cost, competitively selected missions to the ISS in 2018. The ECOSystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) instrument is measuring agricultural water use, vegetation stress, and drought warning conditions. In December 2018, the similarly low-cost, competitively selected

Global Ecosystem Dynamics Investigation (GEDI) vegetation canopy lidar instrument was launched to the ISS and is now embarked on its science mission to make 3D maps of the world's forests.

Launching to the ISS in spring 2019, the Orbiting Carbon Observatory-3 (OCO-3) instrument will continue measurements of the complex dynamics of Earth's carbon cycle, increasing understanding of the regional sources and sinks of carbon dioxide. The FY 2020 budget request also funds continued progress of Landsat 9 for a launch as early as FY 2021. As part of the Sustained Land Imaging program architecture, Landsat 9 will enable continuity of the critical, long-term land imaging data record begun in 1972 with NASA's joint agency partner, the U.S. Geological Survey. Consistent with the FY 2019 budget request, the FY 2020 request proposes termination of the Plankton Aerosol Cloud ocean Ecosystem (PACE), and Climate Absolute Radiance and Refractivity Observatory Pathfinder (CLARREO-PF) missions.

NASA Earth Science continues to explore innovative partnerships and new approaches, including the acquisition of commercial data products from small satellite constellations. In September 2018, the Earth Science Division awarded contracts to three commercial data products providers. Through this pilot program, NASA-funded researchers will examine the scientific value of the data to help determine the utility of the private sector's constellation-based products for advancing NASA's science and applications development goals. The 2020 budget request continues support for the integration of NASA Earth Science efforts with non-Governmental partners through these and other activities, such as commercial hosting and new partnerships (such as the NASA-Conservation International collaboration announced in February 2018).

NASA Science leads the Nation on a journey of discovery through its nearly 100 missions. In every step, we share the adventure with the public and partner with others to substantially improve science, technology, engineering, and mathematics (STEM) literacy and understanding nationwide. In 2019, the National Academies will conduct an assessment of our Science Activation program, which since its establishment in 2016 has competitively selected over 25 awardees, enabling more than 200 partnerships that connect NASA science experts and content to learners of all ages in communities across the land.

Aeronautics

Aviation moves the world, and an efficient and safe air transportation system is fundamental to the future of the U.S. economy. NASA's cutting-edge aeronautics research is delivering new concepts and technologies which will change the face of aviation as we know it, boosting U.S. technological and economic leadership in this global industry and creating high quality American jobs. The FY 2020 budget requests \$667 million for NASA aeronautics research.

NASA is enabling quiet commercial supersonic flight through construction of the X-59 supersonic flight demonstrator, with a first flight planned for FY 2021. NASA will then conduct a first-of-its kind, multi-year flight research campaign over populated areas to gather data about community response to quiet supersonic flights, enabling domestic and international regulators to establish a new supersonic noise standard. This capability will position the U.S. aviation industry to supply global customers with future supersonic aircraft products.

NASA is collaborating with industry to investigate innovative technology for subsonic aircraft, including advanced wing design, transformative structures, propulsion-airframe integration, and small-core turbine engines. NASA also is leading research into new components, technologies, and powertrain architectures for electric or hybrid electric systems that can bring about revolutionary improvements in small and large transport aircraft. NASA's work on the X-57 Maxwell aircraft – an all-electric, general-aviation-size plane – is already delivering important lessons to the community about designing, building, and operating

an all-electric system. Ground tests this year and flight tests next year will provide valuable insights into the challenges and opportunities of electric aircraft.

Building on these activities, NASA has begun a multi-year effort to solve the technical challenges associated with a 1-Megawatt (MW) power electric aircraft propulsion system – enough energy to power 165 homes. NASA will refine concepts and technologies and validate new electric systems through ground and flight tests. Realizing a practical 1-MW electric aircraft propulsion system has never been accomplished and is an area of notable international competition. To support this work, NASA has commissioned the world-leading NASA Electric Aircraft Test Facility (NEAT) capable of conducting full-scale ground tests of high-power electric propulsion systems.

In addition to developing new vehicle technologies, NASA is conducting research to make design and manufacturing processes more efficient and reduce the time and cost to build aircraft. Next year, NASA will complete the Advanced Composites Project, a six-year focused effort in partnership with industry to significantly reduce the time needed to develop and certify new composite structures for aerospace applications.

In 2020, NASA will complete demonstrations of technologies to integrate operations of larger Unmanned Aircraft Systems (UAS) into the existing National Air Space (NAS) as well as manage smaller vehicles safely at lower altitudes. Those efforts are providing the foundation for another major transformation of the aviation sector being led by NASA – creation of an urban air mobility (UAM) system that is safe, economical, and environmentally friendly to move people and packages in population centers.

NASA will begin a new Advanced Air Mobility project in FY 2020 to enable the emergence of UAM. NASA is preparing a series of “Grand Challenges” that will provide a means to assess the maturity of key systems for UAM. Through these Grand Challenges, NASA will serve as a catalyst for companies to rapidly develop and demonstrate their capabilities, while setting the course for needed research and investment. Initial community response to NASA’s leadership in UAM has been strongly supportive.

NASA research is enabling a transformed airspace system that supports efficient operations of all vehicles across these different market segments, and gives citizens the confidence that every flight is safe and secure. NASA will complete a series of Airspace Technology Demonstrations (ATDs) with the Federal Aviation Administration (FAA), airlines, and airport operators to demonstrate new capabilities for managing efficient airline operations. A final high-fidelity demonstration of all integrated system capabilities will support delivery of the research and development results the FAA needs to advance NextGen capabilities and improvements to meet the FAA’s air traffic management needs. NASA then will turn its attention to new research to address the safety and efficiency challenges of a more complex airspace supporting a broad range of new users.

NASA continues its investment in unique specialized facilities and experts who conduct fundamental research to address key challenges in hypersonic flight. NASA coordinates closely with partners in the Department of Defense (DOD) to leverage DOD investment in ground and flight activities to develop and validate advanced physics-based computational models as building blocks towards a long-term vision for hypersonic flight. At the same time, the DOD benefits from NASA hypersonics expertise, analyses, testing capabilities and computational models.

NASA aeronautics research is conducted in partnership with the aviation community to transform aviation as we know it, and find solutions to aviation system needs that will provide benefits in mobility, environmental sustainability, and safety, while ensuring continued long-term U.S. aviation technology leadership in this rapidly expanding global industry. NASA investments are enabling the early stages of the future airspace system that will enable all users – from UAS to UAM to traditional airlines – to

seamlessly access the airspace and safely and efficiently, with great benefit to U.S. industry and passengers alike.

STEM Engagement

NASA's FY 2020 budget proposes the termination of NASA's Office of STEM Engagement and its portfolio of domestic assistance awards (grants and cooperative agreements), and instead prioritizes funding toward an innovative and inspirational program of exploration. While the FY 2020 budget no longer supports these programs, a common vision, mission and focus areas will drive NASA's future endeavors in science, technology, engineering, and mathematics (STEM) engagement. Through its mission directorates, NASA will focus on: creating unique opportunities for students to contribute to NASA's work in exploration and discovery; building a diverse future STEM workforce by engaging students in authentic learning experiences with NASA's people, content and facilities; and strengthening understanding by enabling powerful connections to NASA's mission and work. A small, focused functional office at NASA headquarters will be accountable for the strategic direction and coordination of the Agency's STEM engagement efforts.

NASA's mission successes will continue to inspire the next generation to pursue science, technology, engineering, and mathematics studies, join us on our journey of discovery, and become the diverse workforce we will need for tomorrow's critical aerospace careers. We will use every opportunity to engage learners in our work and to encourage educators, students, and the public to continue making their own discoveries.

Mission Support

In this budget, NASA will simultaneously implement multiple large development programs in order to return to the surface of the Moon by 2028. To be successful, NASA must have the institutional capabilities and facilities necessary to efficiently and effectively support these programs, which is why this budget proposes important new investment in Mission Support. NASA's mission support programs directly enable the Agency's portfolio of missions. The FY 2020 request prioritizes the capabilities, operations and equipment to safely operate and maintain NASA Centers and facilities, along with the independent technical authority required to reduce risk to life and program objectives for all NASA missions. With installations in 14 states, NASA collectively manages \$39 billion in assets with an inventory of over 5,000 buildings and structures. Over the past 60 years, NASA has leveraged unique test facilities to develop new and innovative vehicles and technology for space exploration. Now, commercial companies are also leveraging this unique infrastructure. Over 80 percent of NASA facilities are beyond their constructed design life, and NASA faces the challenge of a deferred maintenance backlog of ~\$2.3B. The 2020 budget includes additional funding critical to renewing our infrastructure while we continue to divest of unneeded, costly facilities.

In the area of information technology (IT) services, NASA continues to improve management and strengthen NASA's cybersecurity capabilities in order to safeguard critical systems and data. We have made significant progress over the past several years, raising NASA's score on the Federal IT Acquisition Reform Act (FITARA) from an "F" in 2015 to a B+ this past year. The 2020 budget provides critical resources to continue strengthening cyber security protections and funding to help modernize NASA's IT systems in support of future mission objectives. In FY20, the Agency will continue its efforts to implement and develop optimal solutions. Examples include IT consolidation, automated segmentation architecture and end user cloud migration. NASA continues to transition its IT to an enterprise governance and operating model.

Conclusion

NASA's FY 2020 budget request provides for the foundation of a national exploration campaign that will create an architecture that is open, sustainable and agile. The Space Launch System and Orion, critical components of our exploration architecture, will reach important milestones in construction and testing this year as the program works through significant development challenges, and our new lunar command module, the Gateway, will see international and commercial partnerships solidified and construction begin. We have called on American companies to help design and develop human lunar landers and reusable systems for surface activities. In LEO, our Commercial Crew program remains strong and will soon be delivering American astronauts, on American rockets, from American soil to the ISS for the first time since 2011.

With the FY 2020 request NASA will initiate the first round-trip mission to the Red Planet with a Mars sample return mission, and many of the technological advancements we achieve moving forward to the Moon will provide critical data and capabilities for future robotic and crewed Mars missions. We will continue to pursue transformative aeronautics technology as we develop the next generation of aircraft and make air travel safer and more efficient. We will increase our understanding of our home planet and move out on ambitious programs to study the far reaches of our solar system and beyond.

Mr. Chairman, I would be pleased to respond to your questions and those of other Members of the Committee.

Mr. SERRANO. Let me just say to begin, and before the questions maybe get a little hard and you stop smiling, that I can sense the excitement that you feel about leading this agency. I will tell you, that is how we feel in this committee and I think in the whole Congress. That is a very exciting thing.

So, I am encouraged by that. I am not encouraged by the fact that you say you are not going to leave humans on the Moon because Mr. Aderholt and I were making a list of people to send to the Moon.

Mr. BRIDENSTINE. I might have a list of my own, sir.

Mr. SERRANO. I hope we are not on it. Mr. Administrator, initially, the President's budget request does not include an extra one billion dollars to fund a launch in addition to the previously planned space launch system, EM-1. On March 13, you testified before the Senate that we should launch a mission around the Moon in June 2020 using a commercial, off the shelf rocket in lieu of the heavily invested Space Launch System.

Yesterday at the Marshall Space Flight Center, you said that none of the commercial solutions would work for a June 2020 launch and that accelerating SLS is the right answer. Then yesterday also at the same place, the Vice President appeared to pressure the folks at the Marshall Space Flight Center for a solution to meet a June 2020 date, which looks more and more like a political deadline. That is at least three different directions in only two weeks.

These major swings on flagship programs are expensive. We are the committee providing the funding for such programs. Bottom line, are these sudden program shifts being made in response to political pressure?

Mr. BRIDENSTINE. Mr. Chairman, not because of political pressure. A couple of things. The June 2020 date was set years ago and in fact maybe even in the last administration. I am not sure on that. It was certainly done before I got to NASA as the Administrator. That date has been there.

One of the challenges that we have had is slips in schedule without necessarily seeing a change in behavior. What I am trying to do is change that. If we tell Congress and we tell others that we are going to launch in June of 2020, it was my goal to make sure that we could launch in June of 2020.

I did make the statement before the Senate a few weeks ago that we need to look at all options in order to maintain schedule. Again, the investments are big and we need to do what we can to maintain schedule. We did look at those commercial options, as you identified. We came to a determination that while some of those options are feasible, none of those options, as you identified, are going to keep us within budget and on schedule.

The other thing to do is to figure out within the SLS and the Orion program, how do we accelerate the Space Launch System. We have got a 40-day study that is underway right now and it is our assessment that we can accelerate that. Will we meet a June of 2020 launch date? I don't think that is in the cards, but I do think we can accelerate significantly from where we were originally told that that launch date would occur, which could be a slip of almost a couple of years. I think we can accelerate well ahead of that

based on a number of things that we have already done to accelerate. I can get into those, sir, if you are interested.

Mr. SERRANO. I understand and in a friendly gesture, let me tell you that, as you well know, 75 percent of our profession is perception and the perception by many is that it is being accelerated so that it can come in and excite the country a few months before a November election, something that is going to happen in 2020. So understand that is out there for people to talk about.

Because our committee pays the bills, how much will this new effort cost to speed the delivery of the Space Launch System?

Mr. BRIDENSTINE. The cost would stay the same. We have got a 45-day study that is due in a couple of weeks. I say the cost would stay the same. We need to look at it. A 45-day study is not done yet, but there will be options. The intent is to stay within cost and increase the schedule.

As far as you mentioned political pressure and the perception, I just want to be really clear. There is nobody who has had a conversation with me about launching in early 2020 for any reasons other than the fact that we want to maintain schedule because it is important, I think, for the program and it is important for the support we have here in the House of Representatives to show that we are making progress in a meaningful way on the schedule that NASA committed to. That is the intent here.

Mr. SERRANO. One quick question before I go to Mr. Aderholt. Are there any planned astronaut-led missions? Because as I have told you many times, and I have told my committee many times, and they know it, in all my 29 years in the Congress, there is nothing more exciting than to see the faces of kids in a school when an astronaut visits.

Mr. BRIDENSTINE. Yes.

Mr. SERRANO. It is something really special. And the more opportunities we have to have folks who just came from space, the more that excitement and that interest in the science grows when they visit.

Mr. BRIDENSTINE. I agree completely, Mr. Chairman. I used to be the executive director of a non-profit Air and Space Museum in Tulsa, Oklahoma, and I can tell you firsthand that kind of interaction changes the lives of children. I have seen it firsthand. I may have experienced it myself when I was young, interacting with pilots, and working with wind tunnels at a summer camp when I was a child.

It is absolutely true that we need to accomplish these objectives, because it is in the interest of our country to inspire the next generation to get active in the STEM fields.

Mr. SERRANO. Thank you. Mr. Aderholt.

Mr. ADERHOLT. Mr. Chairman. As I mentioned in my opening remarks, the vice president's speech at the meeting at the National Space Council yesterday down in Alabama was a significant change in course from the proposed Exploration Mission-1 modification that we have been hearing about lately. And let me just say I am glad to hear that you have set aside the idea of using commercial rockets to perform EM-1.

Can you provide some insight into what procedure and management details you are reexamining to make sure that NASA meets the President's challenge to accelerate the Space Launch System?

Mr. BRIDENSTINE. I would be happy to. A couple of things. You mentioned management and what was the other thing? Procedures?

Mr. ADERHOLT. Yes.

Mr. BRIDENSTINE. We have the 45-day study, I am going to get ahead of it. The reality is in a few short weeks, we are going to have the results of that study and there are going to be options for acceleration in that study. I will tell you the things that we have already been looking at and some of the items that I think will help us accelerate.

In fact, we have already purchased hardware, tooling, that will help us integrate the Space Launch System horizontally rather than vertically. The challenge there has been, when you talk about the engine section of the SLS rocket, it has proven to be in the critical path. More complex and more challenging than we originally anticipated as an Agency. The challenge has been as long as they do vertical integration down at Michoud, on top of the engine section, the entire rocket is waiting for that engine section to be complete.

That means there are a whole host of other things that we need to be doing that we can't get to do because we are waiting for the engine section. What we are trying to do is move that engine section out of the critical path. How do we do that? Well, we have had to buy new tooling so we can horizontally integrate the oxygen tank, the hydrogen tank, the inner tank, horizontally integrate those proponents so that we can actually be working on the rest of the rocket while we are waiting on the engine section. That required an investment in tooling and we have now made that investment in response to meetings that you and I have had in the past, in response to making sure that we are meeting our commitments.

That is one thing that we have done. The key is in as many places as possible. When we talk about the production of a rocket, how do we make it instead of in series? How do we put it in parallel? How do we get things at the same time rather than doing things in series? There is an example and we are looking at other things as well.

Some other things we are doing procedurally, when you think about the test of the rocket. Again, because of direction from Congress, we are using the space shuttle main engines, the RS-25s. These engines have flown hundreds of times, three engines on every shuttle launch. Of course, we did well over a hundred shuttle launches. These are well proven engines and they have been tested with millions of seconds of tests. Now we have digital controllers that are going to actually schedule fluids to these engines. What does that mean?

What that means is that this brand-new rocket, which we are testing in all kinds of computer models, that you really can't test it until you actually test it. We have the main engines that are thoroughly tested, and now digital controllers, when we talk about the scheduling of fluids to those engines, through those digital con-

trollers, we might be able to accept very high off nominal fluid flows. That is in the realm of what is possible based on the new technology that we are adding to the RS-25.

Which means, if we can test each engine independently, there is a chance. I have got professional rocket engineers who are looking at this right now, I am not saying that we are going to do this, but there is a chance that we could actually test those engines again in parallel rather than in series. We don't have to wait for a full development of a rocket in order to test those engines.

We can take those engines to Stennis, one at a time, four different engines, test them in high off nominal conditions, and then instead of building the rocket at Stennis, we can take the components as we test them in parallel, rather than in series, building the rocket and then rebuilding the rocket, we can actually move things to where we are integrating more of the rocket at the Cape rather than, again, doing things in series.

Those are some of the things that we are looking at. There is more. There is a lot more. It is also true going back to your other question about the management, Mr. Ranking Member, the management has got to change, and this is one of the things that we have been working on for a little bit of time now. We talk about Human Exploration and Operations.

There is a big difference between operations, which is when we talk about the International Space Station and resupplying the International Space Station, and flying crews to the International Space Station. These are all operational and development.

Development is very different. We are talking about brand new, never used before equipment, and we are doing that within the operations with commercial crew. Don't get me wrong, I am not suggesting we are not, but talking about brand-new capabilities at a scale that we haven't had in a very long time, if at all, ever.

What we are talking about is creating a new mission directorate at NASA and it is focused on development activities that are very large in scale. That mission directorate, we would call it Moon to Mars Mission Directorate because it is going to be focused on getting to the Moon and using those capabilities to go on to Mars.

On a management side, we are trying to separate operations from development so that we can get a better mix of the right people in the right places to accomplish these objectives.

Mr. ADERHOLT. Let me just follow up with one thing. It seems that continuing with the SLS green run test could take five to eight months. What details can you share with us as to whether NASA is reconsidering these tests, given such time constraints?

Mr. BRIDENSTINE. Another great question. The key is to test in a way that we know that we optimize the success of the first launch. That has got to be the goal.

When we talk about a green run test, we are talking about building the core stage of the rocket with all four engines, all at the same time, and then running the whole rocket, if you will, minus the boosters, the side boosters that are solids, running the whole rocket with four main engines for a period of eight minutes.

The question is, is that necessary and could we test each engine individually at very high off nominal kind of conditions to get cer-

tainty, to eliminate almost as much risk as we would if we ran the full green run.

You are absolutely right. That could save six months' of schedule, depending on how we do it.

Mr. ADERHOLT. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you. We will begin now our first round of questions by members—with the Chairman holding a soft gavel. Ms. Meng.

Ms. MENG. Thank you, Mr. Chairman, and thank you, Mr. Administrator, for being here today. As your classmate, I just want to again congratulate you.

Mr. BRIDENSTINE. Thank you. Great to be here.

Ms. MENG. As you know, March is Women's History Month where we celebrate the amazing accomplishments of all women. My eight-year-old niece, Marissa, wants to be the first woman on the Moon. And as much as I would love for her to be that woman, I hope you achieve it before then because she is only eight.

Mr. BRIDENSTINE. Okay. We hope so too.

Ms. MENG. But I wanted to talk about what was supposed to be the first all-female spacewalk at the International Space Station. Obviously, it's all over the news, but it would've been an amazing milestone for all women, and demonstrated to girls that nothing is impossible, even in space. And I know that the all-female spacewalk was not intentionally planned, but how could NASA not have realized earlier with the uniforms?

Mr. BRIDENSTINE. That is a great question, an important question. We are working every day to increase opportunities for women at NASA. It doesn't take long, either going to our centers or walking around headquarters, to see that women are under represented in the STEM fields. That is just the reality. We all recognize it and we are working to make changes to that.

We have had really good success on the Science side. Maybe not so much success on the engineering side, but we are working every day to address it with different programs and opportunities. On the spacewalk specifically, it should be noted that the spacesuits, think of them as little space ships, each one of them is designed specifically, not just for the astronaut, but also for the mission.

The challenge is we only have a certain number of spacesuits and the logistics of some are on the ground and being basically refurbished, and some are on the space station. We fully anticipated that we were going to be able to do the first all-female spacewalk. We were excited about it. We let people know about it and we encouraged people to watch.

We discovered during the first spacewalk that the spacesuit was going to need to be adjusted. If we were to make that adjustment, remember these spacesuits are designed for the mission, as well as the person, it is going to take time away from the crew, a period of at least 12 hours to modify the spacesuit, plus additional risk. We have two female astronauts on the International Space Station right now, three Americans, two of them are females. We are very proud of that as well. Our astronaut, Anne McClain, made the decision that she wanted to make sure that the interest of mission success and safety came first, and she decided that in the interest of safety and mission success, that it would be easier and more appro-

priate to switch the person doing the spacewalk, rather than try to modify the spacesuit.

She did the right thing and we are very proud that I run an Agency where people are making decisions for the best interest of the mission, even if it wasn't in the best interest of herself.

Ms. MENG. Thank you. And if we can be helpful in Congress to ensure that something like this doesn't happen again, please don't hesitate to work with us.

Mr. BRIDENSTINE. Yes.

Ms. MENG. I wanted to—I have a little bit of time left. The president's budget is asking for more than \$21 billion for 2020. However, just like last year's budget proposal, you've mentioned issues with STEM. No funding is requested for the Office of STEM Engagement. In the entire 807 pages long, the word "woman" is also only included one time. So you've addressed the problem about not enough women in the STEM fields, particularly engineering I think you mentioned.

Mr. BRIDENSTINE. Yes.

Ms. MENG. So how can we continue to engage and encourage participation, especially for women and minorities?

Mr. BRIDENSTINE. Great question. It is something we think about at NASA every day and we are making efforts to kind of change the direction. A couple of things.

We do 100 percent believe in STEM Engagement, and we have to be starting that next generation of scientists and engineers to accomplish the missions of the future. I can say, we actually do a lot of education outreach and STEM engagement through programs through the mission directorates.

For example, it is important to understand, we have got robots all over the solar system right now doing amazing things. All the way out in the Kuiper belt, which is beyond Pluto, and of course we have got robots on Mars, and around asteroids in deep space, Bennu, for example. So these are all exciting things.

The question is how do we inspire that next generation of robotic technician, that robotic engineer, that robotic scientist? We engage through the science mission directorate an organization called First Robotics. That gets young people. We are talking about high schoolers, building robots, competing in competitions, and inspiring that next generation.

I just went out to a robotics competition and had the opportunity to speak to a bunch of young kids. They are building things that are absolutely magnificent. They are reaching out to young girls and communities that are not represented well in the STEM fields. We support that effort in those areas, and we will absolutely continue to do that.

We work, of course, with the mission directorates on internships and those activities. All through the education process, we are trying to engage kids at all different levels.

Ms. MENG. Thank you. I yield back.

Mr. SERRANO. Ms. Roby.

Ms. ROBY. Well, thank you, Mr. Administrator. It is great to see you here today back in the House. And a couple of things, first of all, my son, George, who you have seen running around the halls

here for many years, his new favorite thing is to watch the Science Channel with his mother.

Mr. BRIDENSTINE. Good.

Ms. ROBY. So, I will be excited to tell him tonight about the conversations that we had with you today.

Mr. BRIDENSTINE. Awesome.

Ms. ROBY. Also, in an effort not to repeat too much of what my other colleague from Alabama said, I will try not to. If I do, I apologize. And you know this jumping up and down is constituents in the hallway, and lots of hearings going on, so I know you can certainly appreciate that.

Mr. BRIDENSTINE. I understand.

Ms. ROBY. And we are here to talk about NASA's budget. And Mr. Administrator, you can probably guess, being from Alabama, what my questions are about. Just in Alabama alone, Space Launch System, SLS, provides more than 13,000 jobs, 2.2 billion economic impact among NASA contractors and the supplier workforce. Of course, as mentioned by Mr. Aderholt during yesterday's Space Council meeting, you reaffirmed that SLS is the best launch vehicle for Orion for Exploration Mission-1, EM-1, and future missions. And you called for an acceleration of the Exploration Upper Stage to be ready by EM-3. And I appreciate your decision, again, to reaffirm the use of SLS for the EM-1 and beyond.

Can you highlight for us the key reasons SLS is the best approach for these missions, and what capabilities it provides that other alternatives cannot?

Mr. BRIDENSTINE. Great question. When we talk about going to the Moon, we need a number of things, but the key thing is, we need large upmass. We have to be able to launch massive things into space that can be capable of keeping humans alive, we are talking about large mass, and not just put it in orbit around the Earth, but get it all the way to the Moon.

If we are going to achieve that, SLS is the vehicle to do it. Are there others that can do it? Yes, there are others that could do it, barely. When I say barely, what I mean is they could perform a free return trajectory. A free return trajectory doesn't get us into orbit around the Moon, which is where you have to be if you want to get to the surface of the Moon.

What we have got to do is, we have got to have a big rocket. That is what SLS is. What the Exploration Upper Stage ultimately allows us to do is put even more mass into orbit around the Moon, and ultimately get to a day where we can co-manifest payloads. In other words, we can launch hardware that would include a lander, it would include habitation, and include the Orion crew capsule, and the European service module all at the same time.

If we want to accelerate to get to the Moon as soon as possible, the SLS is a critical piece of that, and so is the Exploration Upper Stage.

Ms. ROBY. So, talk to us, because SLS is the world's only human rated rocket in its class designed from the ground up to safely transport astronauts to the moon and deep space. How important is it that the U.S. be the leader in this capability with our international partners? And does SLS give the U.S. a tool to lead our international partners on these other missions?

Mr. BRIDENSTINE. Without question, I talk to our international partners all the time. I have met with the heads of all the space agencies around the world. Everybody is keen on partnering with us in going back to the Moon, this time sustainably. SLS is the key to that. There are other countries in the world that have ideas of having a super heavy lift capability similar to this. I would say that those countries, those capabilities are at this point on paper, great paper designs.

We are actually building a rocket that is very real and the closest way that we are going to be able to launch to the Moon, is with that rocket. I believe we are going to do our first trip around the Moon in 2020, which is next year.

Ms. ROBY. So in light of the vice president's comments yesterday, when do you expect to announce the astronauts that will launch on the SLS and Orion for EM-2?

Mr. BRIDENSTINE. That is a great question. Soon.

Ms. ROBY. Because I would assume they would need to be begin training soon.

Mr. BRIDENSTINE. Absolutely. The idea would be 2020 we would do the first launch of SLS uncrewed.

Ms. ROBY. Correct.

Mr. BRIDENSTINE. By the way, because it is uncrewed, that enables us to do things that we otherwise couldn't do, test envelopes, that kind of thing. Then the second launch of SLS with an Orion crew capsule would be crewed. We would be looking for that in 2022.

It is an aggressive agenda, but we can do that.

Ms. ROBY. Okay. Thank you so much. Thank you for your service to our country. And we appreciate, again, your time today. And Mr. Chairman, I yield back.

Mr. BRIDENSTINE. Thank you.

Mr. SERRANO. Thank you. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman, and Dr. James Bridenstine, Jim, great to have you back.

Mr. BRIDENSTINE. Thank you. Good to be here.

Mr. CARTWRIGHT. In case anybody missed it, Dr. Bridenstine was part of the greatest class ever elected to the United States Congress. Let the record reflect Congresswoman Meng is nodding in the affirmative.

So thanks for being here today. I commend you on the progress that you have made in your short term in your position in positioning our nation as the leader in commercial space, really, what is a revolution. And also the leadership you have shown in our efforts to return to the Moon and beyond.

Something that you and I have spoken of before, I am a little frustrated about the third consecutive year of proposed deep cuts to earth and climate science in NASA's budget. It clearly contradicts the priorities of both this subcommittee and of Congress. In recent years, we have seen a rapid increase in extreme weather events and tragically lost thousands of lives, many of them in the southeast United States.

Additionally, between 2005 and 2018, you may know that total federal funding for disaster assistance is almost half a trillion dol-

lars. So this is a big deal, focusing on the causes and the cures of climate change.

Just last month, we heard from your Earth Science Director, Dr. Michael Freilich, that the Earth Science Division in 2018 provided vital real time environmental data to agencies responding to wildfires in California, floods in the Midwest, and several hurricanes in the south. We learned that there are key scientific questions that NASA must continue working on to improve our understandings and our predictions of climate change and enable better resource management.

This proposed 7.8 percent cut to Earth Science, which is out of proportion to other cuts in different parts of the Agency, I just want you to know as we set your funding, we do not see that as something that we can afford to have happen. It would make it harder to understand earth's complex climate patterns. It would make it much more expensive to adapt to our new and changing planet.

I want to shift right over to the benefits of NASA innovations, if I might.

NASA's increasing collaboration with the private sector on new space technologies and planetary explorations is what I want to talk about, includes some very new aerospace accelerator programs, which will select 10 start-up companies to develop new technologies for space. Can you give us specific examples of where such NASA and private-sector collaborations have led to new innovations and spurred economic growth right here in the United States?

Mr. BRIDENSTINE. I think so. Specifically, regarding Earth Science, is that—

Mr. CARTWRIGHT. Any collaboration with the private sector.

Mr. BRIDENSTINE. Great. I have a couple of things I want to address because I want you to know that NASA is committed and I am committed to making sure that we are continuing to study the Earth and following the decadal surveys, and I have talked to you about my goal, to make sure that NASA remains apolitical, bipartisan. We love to have support from all sides.

I understand your concern. Know that we are committed to the Earth Science budget of NASA; in fact, right now, we have the highest Earth Science budget in the history of NASA, which is a good thing. It is on par with last year at the same time, so I guess we might have lost a little bit. Again, with bipartisan support in the House and the Senate and even support from the administration, and it is also true that this budget request, while a little bit less than we are currently enacted, it is still higher than 5 of the years that were enacted in the previous administration. This is a very strong Earth Science budget request and I just want to make sure that we are all in agreement.

You have my commitment that we are going to continue studying the Earth across large parts of the electromagnetic spectrum. We are going to continue to provide that critical information that I know that you are so keenly interested in. And I would love to work with you more if you have ideas on what we can do.

As far as public-private partnerships, we saw just a few weeks ago, you probably saw Crew Dragon docked to the International Space Station. That was a big investment by NASA, but it was a

big investment by the private sector at the same time, and it enabled us to locate and put a crew-capable vehicle docked to the International Space Station and come home safely. The idea being, when we do resupply to the International Space Station of equipment and food and other things, and when we send crew to the International Space Station, we want those activities, we want NASA, where there is a robust commercial marketplace, we want NASA to be one customer of many customers driving down to our costs and we want to have numerous providers that are competing on cost and innovation, which we have seen now. When commercial providers launched to the International Space Station, now we are seeing the re-use of rockets. Imagine flying an airplane from New York to LA and when you get to where you are going, you have to throw the airplane away. The cost would be so high, nobody would ever fly. That is what we have been doing with space launch for all these years.

NASA has made a commitment that instead of purchasing, owning and operating hardware, where there is a robust marketplace, we want to be a customer and let them compete, as long as we are doing it safely, which we are very keen on, as well. We are on the precipice of commercializing low-earth orbit for human capability and we want to continue to see that happen.

These public-private partnerships, of course, have been very successful on those activities, but also, even on earth science. We would like to see NASA buy data from commercial operators that are sensing the Earth in parts of the electromagnetic spectrum for purposes that NASA did not go out and seek their sensing. They are doing it for insurance companies. They are doing it for private, you know, weather kind of capabilities. They are doing it for agriculture companies. How can NASA tap into that? We want to buy that data, too, and become a customer there. We want to actually get more earth science data than ever before by taking advantage of those commercial capabilities.

Mr. CARTWRIGHT. Thank you. I yield back.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman.

Administrator Bridenstine, it is great to have you here today. I really enjoy hearing your knowledge on all subjects of NASA. It is fascinating. It is tremendous, and I think you are the right man or the right person for the job to serve as NASA's administrator.

Mr. BRIDENSTINE. Thank you.

Mr. PALAZZO. I would have a couple questions. One of them is the enhanced-use lease agreement that NASA has been able to use very effectively to drive down costs and utilize underused properties. It seems like every year that is expiring and it affects all of your space centers—and I know you are trying to do a lot with limited resources—so every penny, every dollar that we save is a dollar that we can put in the exploration and development and do the things the American people want us to do.

Can you tell me, do you support the EUL and why is it good for NASA?

Mr. BRIDENSTINE. Critically important for NASA. Enhanced-use lease enables us, as an Agency, to take property that might be underutilized and enable private companies to utilize it. It could be

land for housing. It could be a test stand for Stennis. It could be a building that we have at one of our centers that is not fully utilized. If we can have a tenant occupy that property and, pay to improve that property, make it relevant for today's era—when we talk about test stands, we talk about launch sites, those kinds of things—we benefit greatly going back to what Congressman Cartwright was talking about, commercial helping us and us helping commercial, it works out very well when we can take advantage of enhanced-use leasing because it takes that underutilized capability, makes it utilized, and, of course, it brings resources to NASA then 20 years from now, 30 years, 40 years, we are going to be able to have and/or use for other purposes. It is a really good program. We are very grateful to this committee and Congress, for making sure that is continued in the appropriations process.

Mr. PALAZZO. That's very good to hear. We are working on legislation to try to make the EUL longer, because as you know, I mean, with the exploration, it is almost a lot like flood insurance. People don't—you know, they want the certainty of the program being in place for a long time, but if it is expiring every six months, every year, every two years, I don't think we are fully utilizing the commerce, the industries, that would seek out NASA facilities and the joint ventures and the partnerships.

Mr. BRIDENSTINE. Then when there is a lapse in appropriations, everybody flees, and then we are back to where we started. You are exactly right, if we could make it permanent, it would be great.

Mr. PALAZZO. Right. I perfectly understand that. I know I came in a little late and I apologize, and there was some conversation on the Green Run. I know that is expected to be conducted at Stennis Space Center, so I would love, in the essence of time, if you would have one of your people come speak with us and just tell me some of the alternatives that you are talking about and what can we do to ensure that a Green Run is taking place.

I know when I was on the space subcommittee, we had a lot of astronauts and a lot of people who have flown on rockets. Many of them had flown to the Moon. They understand how important testing our rocket engines are and testing them correctly, because you only get one chance. You don't want to test a rocket when you are strapped into that rocket.

Mr. BRIDENSTINE. That's right.

Mr. PALAZZO. We can't afford that.

And they said one of the reasons of our successes was that we have tested the rockets and we did it well and we did it at Stennis Space Center. And I know they have an excellent record of making sure that when we send a man up to space, that man comes back—or woman or person—alive.

Mr. BRIDENSTINE. Right.

Mr. PALAZZO. So, really quick—I have a little bit of time—I was going to ask about our Russian and China partnerships and the technological gap, but something that I have always been curious on from my previous committee is space debris. Is it getting worse? How are we going to address that? Because I do know that can affect not only our space stations, our satellites. Do we have any type of law in place that prevents other countries from say, detonating or exploding or polluting our space?

Mr. BRIDENSTINE. Great—all important points—great question. The answer is, yes, space debris is getting worse, not better. It is true that in low-earth orbit, debris does get removed just by the drag from the upper atmosphere, but a lot of what we do is beyond, you know, that lowest of low-earth orbits and that debris stays for a long time.

It is important to note that NASA is a part of what's called the Interagency Space Debris Coordination Committee. That committee has basically, all the Space Agencies from around the world that do, you know, big activities in space. They have assessed, and NASA is a part of it, that every 5 to 9 years, we are going to have a collision in orbit, similar to the Iridium-Cosmos collision that occurred, I think it was back in 2009.

In other words, in every 5 to 9 years, we are going to have a collision that results in thousands of pieces of orbital debris that are trackable, which means that there are thousands of more pieces that are not trackable at this point. We need to do a number of things. We need to improve space-situational awareness. I know that the Air Force has been working on get the space fence online, so that is going to be an improvement, but that is just going to show us a lot more debris. Then we have to be able to characterize that debris and get better at assessing conjunctions and increasing the probabilistic, or I should say, the probabilities of those conjunctions occurring.

When I say increasing the probability, I guess, increasing—you know, every piece of debris that has a bubble around it based on uncertainty. We need to get that bubble a lot smaller, in other words, reduce the uncertainty, so that while we see more debris, at the same time, we have more certainty that debris is not going to be impacting any of our missions and/or people we have on the International Space Station.

Space-situational awareness and Space-traffic management is the next step after better space-situational awareness, and then mitigation—don't let it happen to begin with. Do space-situational awareness to make sure you understand it; space-traffic management to make sure you can control around it; and then eventually remediation, which is very costly, but getting it out of orbit. That is the next big thing. The European Space Agency is very keen on that right now. They want us to join them in that effort. We are looking at it.

We do have some missions that are heading in that direction, but it ends up being very expensive and we need to make sure that we are doing all the necessary things. Here's the thing—important point—debris ends up being there for a long time. If we wreck space, we are not getting it back, and it is also important to note that creating debris fields intentionally is wrong. That is an important point, because some people like to test anti-satellite capabilities intentionally and create orbital debris fields that we, today, are still dealing with, and those same countries come to us for space-situational awareness because of the debris fields that they, themselves created, and that is being provided by the American taxpayer, not just to them, but to the entire world for free.

The entire world has to step up and say, If you are going to do this, you are going to pay a consequence, and right now that consequence is not being paid.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman.

And, Administrator Bridenstine, thank you for being here today. It is a pleasure to have you with us.

Mr. BRIDENSTINE. Thank you.

Mr. CRIST. Despite the administration's rhetoric about leading in space and the announcement from the vice president yesterday to return humans to the surface of the moon by 2024, the fiscal year 2020 budget request proposes to reduce NASA's funding by almost half a billion dollars. This includes significant cuts to NASA's new exploration systems, the space-launch system, Orion crew capsule, and exploration ground systems. I am particularly concerned that these cuts would disproportionately impact my state of Florida. I am told that at least 250 million in cuts would directly impact infrastructure at the Kennedy Space Center and additional cuts would impact Florida's NASA supplier companies, many of which are located within my district.

This budget proposal also potentially undermines human exploration of deep space by deferring funding for the exploration upper stage of the Space Launch System and eliminating funding for a second mobile launcher, the latter of which could threaten hundreds of new jobs in Florida starting this year. I do agree that the exploration, upper stage, and second mobile launcher are critical to NASA's leadership in space and our ability to explore the Moon, Mars, and other deep-space destinations.

Mr. BRIDENSTINE. Absolutely. I agree with that 100 percent.

Mr. CRIST. With the proposed cuts in this budget, can we meet the vice president's goal of returning to the Moon by 2024?

Mr. BRIDENSTINE. We are going to—if we are going to have boots on the Moon in 2024, as the vice president indicated yesterday, which I believe we can achieve, we are going to need SLS. We are going to need to accelerate it and get as many of those as soon as possible. We are going to need exploration upper stage as soon as possible. 2024 is a very aggressive schedule and there is nothing that we can do to accelerate that in a more meaningful way to get boots on the Moon in 2024 than having exploration upper stage, you know, the Orion crew capsule, the European Service Module, and the Space Launch System. With the exploration upper stage, we need that second mobile launcher.

Mr. CRIST. So, I assume—pardon me, I am sorry.

Mr. BRIDENSTINE. That is all—you are absolutely accurate.

Mr. CRIST. So, I assume that all means that we would need more funding in order to accomplish those goals?

Mr. BRIDENSTINE. Yes.

Mr. CRIST. What about getting humans to Mars by 2033?

Mr. BRIDENSTINE. That is—you know, I want to make that happen. I want to be really clear.

Mr. CRIST. That would be great.

Mr. BRIDENSTINE. It is more challenging. There is a lot of technologies that have to be developed. I heard people talking earlier about nuclear thermal propulsion to—you know, that kind of capa-

bility. We talk about deep space, we talk about radiation affecting the human condition.

What does that mean? We have got to get to Mars quicker. A 7-month journey is going to be very harmful to the human condition, so we have to go faster and nuclear thermal is a part of that. We also need to figure out how do we shield from the radiation. We need to figure out how to live and work on another world.

When you go to Mars, we are only lined up with Mars on the same side of the Sun once every 26 months. What does that mean? That means when we go to Mars, we are going to have to be able to live there for a couple of years before we can come home. We have to figure out how to, basically, what we call in-situ resource utilization. In this budget request, Congressman, we do have resources for in situ resource utilization for the first time and the President has given us a direction to actually utilize the resources of the Moon, which has never been done before.

The reason we do that, the reason the Moon matters here, is because it is a proving ground. It is a proving ground for all of the capabilities that we need to test all of the capabilities where we need to learn. It is a 3-day journey home, which means things can go wrong and we can actually come home safely. We proved that with Apollo 13. We don't want to relive Apollo 13, but if things go wrong, the Moon—it is a better place—if that happened on the way to Mars, the astronauts would not have made it.

The Moon is the best path to prove all these capabilities, technologies, and so, 2033 is, I think, aggressive, but the only way we can make that happen is to utilize the Moon as the proving ground.

Mr. CRIST. Yes, sir. Thank you very much.

Mr. BRIDENSTINE. Thank you.

Mr. CRIST. Thank you, Mr. Chairman. I yield.

Mr. BRIDENSTINE. That is again, we are only on the same side of the Sun every 26 months, so when we go, we have got to be prepared.

Mr. SERRANO. Well, they better take a lot of DVDs.

Mr. BRIDENSTINE. Yeah.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman.

Dr. Bridenstine, welcome back.

Mr. BRIDENSTINE. Thank you. By the way, Congressman Cartwright was teasing when he called me Doctor, so, just—

Ms. KAPTUR. Well, I am just trying to be a friendly source here.

Mr. BRIDENSTINE. All right.

Ms. KAPTUR. I wanted to ask you, your budget submission reflects some realignment of funding, moving money outside of the aeronautics line item. I am particularly interested in that line item. And could you please explain—and by the way, moving money out of aeronautics to me is quite a concerning move.

Mr. BRIDENSTINE. Yes.

Ms. KAPTUR. Could you please explain how decreasing in the aeronautics line will impact wind tunnels, specifically, at NASA's Glenn Research Facility in Brook Park, Ohio, which I represent, and I just wanted to place on the record that NASA's Glenn wind tunnels are critical for hypersonic testing. We are one of the only places in the world that can do this and I am concerned that there

may be something happening somewhere within the Agency that I want to get on the record here.

Could you please explain how and why you have decided to change this account for the wind tunnel budget in this way?

Mr. BRIDENSTINE. Yes, ma'am. Critically important question, and know that we are 100 percent committed to the wind tunnels. There will be no change in the capabilities or the technologies that are available at Glenn because of this. This is basically moving numbers from one budget, line item to another budget line item. The reason we do that is because before, you know, we have wind tunnels—and this is throughout the Agency—that is utilized by different parts of NASA.

We had the Science Mission Directorate paying a certain amount, and the Human Exploration and Operations Mission Directorate paying a certain amount, and the Aeronautics Mission Directorate paying a certain amount. It became difficult to track—who is paying what, who is using it most—and it became a challenge. What we have done now, is we have said we are going to take all of those resources that are being paid by the different mission directorates of NASA and instead, we are going to put them into one account and we are going to fund them from one account, so we can track it better and have better accounting on it.

The key here is to know that there will be no change in capability at all at Glenn and, in fact, it stabilizes the funding in a way that will make things more predictable and I think better for the future.

Ms. KAPTUR. All right. I just want to put on the record, you know, NASA Glenn Lewis Research Center is connected by an umbilical cord to the Plum Brook Research Center, where the Orion is being built right now—

Mr. BRIDENSTINE. Yes.

Ms. KAPTUR [continuing]. In an international consortium. So, the wind tunnel issue is expensive and it has been developed over a long period of time and I want to hear you correctly that, in fact, though you are funding something centrally, it will not affect the mission?

Mr. BRIDENSTINE. That's correct.

Ms. KAPTUR. It will not—so, can I ask, what criteria did NASA use to determine whether a facility is best managed and funded centrally, by staff, or directly by any one of the mission directorates?

Mr. BRIDENSTINE. What I'd like to do, if possible, this was a project that was run out of CFO's office. I would like to take that for the record and get back to you on the specifics that went into this process, if that is okay.

Ms. KAPTUR. OK. That would be very, very helpful to us.

Mr. BRIDENSTINE. OK.

Ms. KAPTUR. And I have a related question on another topic, but I just know that that is my top priority—

Mr. BRIDENSTINE. Yes.

Ms. KAPTUR [continuing]. And any other member up here representing a NASA center would do the same.

Mr. BRIDENSTINE. Yes.

Ms. KAPTUR. And we are—I said, how is it possible—just so you know my perspective—that a center named after John Glenn in a state that Neil Armstrong called home, could have the smallest NASA center in America?

Mr. BRIDENSTINE. And the Wright brothers.

Ms. KAPTUR. Well, that was a little before their time, but, yes, and the Wright brothers. So, I just sort of say, you know, I have got to defend my own and so we want to make sure that we don't compromise any asset that we have spent so long in perfecting.

Mr. BRIDENSTINE. Yes, ma'am.

Ms. KAPTUR. OK. Thank you for listening.

Mr. BRIDENSTINE. Thank you.

Ms. KAPTUR. My second question in my brief remaining time is in January 2019, NASA Glenn, Carnegie Mellon University, and the National Energy Laboratory built on work in partnership with Magnetics, a company in Pittsburgh, and was awarded a U.S. patent for a commercialization-ready technology. Will your fiscal year 2020 budget allow Glenn to continue this type of collaboration with universities and industry throughout the Midwest?

Mr. BRIDENSTINE. Yes, ma'am. We are—in fact, right now, as you mentioned, we have these programs. I think that is under kind of a community development line—

Ms. KAPTUR. Yes.

Mr. BRIDENSTINE [continuing]. And that is underway right now and I think it is around \$5 million and we have 10 different centers, of course, where that money is allocated to centers for distribution, but that activity is underway right now and it is in our interests.

Ms. KAPTUR. All right. Very good. Thank you so much.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you. The overall budget request is nearly \$500 million below last year's appropriated level. Some of the cuts carry heavy congressional and public interests such as Earth Science and Education. Does the administration see these as targets for the committee to fund from other resources; in other words, are these items that were left this way knowing that you have got friends over here who are going to—the agency has friends over here that are going to take care of it?

Mr. BRIDENSTINE. I don't think that was the intent at all, Mr. Chairman. I think, you know, any cuts that were there were based on priorities and the budget. We wanted to make sure that we were not duplicating efforts or doing things that were being done in other ways and, certainly, that was the effort here.

Mr. SERRANO. Okay. Just, again, perception, it would seem to some people that that is what happens every so often. Agencies know there is support for these programs so they don't include it and they submit better numbers, they think.

The University of Puerto Rico at Mayagüez and Río Piedras campuses, especially the Mayagüez campus, has provided many scientists to NASA. These campuses have been recipients of the National Space Grant College and Fellowship Programs. Last year, the administration cut the education requests to zero and the committee added funding back. This year, it was zeroed again. Does the administration not see the need for such programs?

Mr. BRIDENSTINE. A couple of things. As of right now, and I looked this up because—so everybody knows, Mr. Chairman, you cornered me years ago, long before I had this job, about how important this was when you learned that I was potentially on the docket for this position. I looked up our different grant programs that are going to the University of Puerto Rico because I know it was of interest to you long ago. We have about 13 different grants right now that are active and it is also true that our goal is to make sure that we are reaching the right folks at the right time in order to stimulate young folks in the STEM curriculum, especially in those sometimes underprivileged or underrepresented communities, and our goal is to do that.

We do that through the Science Mission Directorate, and through the Human Exploration and Operations Mission Directorate. We do it through the mission directorates, not always just through those grant programs that you mentioned. Again, what we are trying to do is make sure that we are allocating every dollar to the most effective possible way to accomplish the objective.

Mr. SERRANO. Well, I would hope that you continue to look at that because these grants are very important to these campuses and they have provided NASA with a lot of engineers, as you know, the Mayagüez campus. And—the fact that I was born in Mayagüez, by the way; it is just an aside.

Additionally, I have a keen interest in the continuation of the Arecibo Observatory in North Central Puerto Rico, that is partially funded by NASA. I trust funding will continue to be provided for Arecibo?

Mr. BRIDENSTINE. Yes, sir. We have right now, about \$4 and a half million dollars that we spend utilizing it on an annual basis and that is going to scale to about \$5 million by 2022.

Mr. SERRANO. By 20?

Mr. BRIDENSTINE. 2022.

Mr. SERRANO. OK. When NASA's FY 2020 budget proposes to eliminate funding for the Wide-field Infrared Survey Telescope, that will be a first. This telescope was designed to work in concert with the James Webb Telescope by using its wide field of view to find objects while the James Webb Telescope would have the ability to focus in on more fine objects referred by the WFIRST telescope. If one was built to work with the other, why is WFIRST considered for elimination?

Mr. BRIDENSTINE. This is an important question and I want to make sure that I get it just right. They are intended to work together. One is wide-field, one is going to be able to look even further. With James Webb, we are talking about looking back to what we call cosmic dawn, the very first light in the universe, basically, looking back in time, which is kind of crazy to think about.

Here, I think is the point. The James Webb Telescope is what we call a flagship mission. The WFIRST would be a flagship mission. One of the challenges, we have even right now within the Astrophysics Division of the Science Mission Directorate at NASA, is that the James Webb Space Telescope is well beyond its originally scheduled date. It is well over cost, and, of course, I have talked in Congress about this a lot recently.

We are now getting it back on track. Because they work together, it makes sense to do one before the other and if James Webb is not yet ready, preparing WFIRST right away is probably not the right approach. What we are working on as an Agency, is better portfolio management. We need those large flagship missions like WFIRST, like James Webb, but we also need a balanced portfolio that includes smaller missions, medium-class missions, and small missions, to ultimately, in other words, spread the risk. I guess, think of it as hedging on these kinds of missions.

The intent is to create a better balance of the portfolio in future years, but you are absolutely right. WFIRST is not funded in the budget requests because James Webb is not yet launched. We have that back on track to launch in March of 2021. WFIRST will be a critical mission when James Webb is on orbit.

Mr. SERRANO. So, the plan is to still have them work together?

Mr. BRIDENSTINE. Yes.

Mr. SERRANO. Okay. Mr. Aderholt.

Mr. ADERHOLT. Thank you. As you know, a frequent and regular tempo of launches to—fix costs of aspects of launch programs. So, one launch a year is probably not the best use of taxpayer dollars. What steps are you examining, especially in light of yesterday's speech, to make greater use of SLS and also its unique large capacity?

Mr. BRIDENSTINE. The key is to have missions for SLS, and given, as you said, what the vice president said yesterday, we are, in fact, going to have missions for SLS. What we need to do is we have to accelerate that first launch, get an uncrewed test of the Orion crew vehicle around the Moon, and then we need to get to the second launch of SLS EM-2 with crew, and from that point forward, we are going into an operations-kind of tempo.

I think we, as an Agency, can get to a point where we are surge, which is ultimately what we are going to need to do. We are going to need to surge SLS, surge Orion, and, in fact, surge the exploration of upper stage if we are going to put boots on the Moon in 2024. Getting a throughput, instead of once every year, getting a throughput of once every six months is what we are going to have to accomplish. If we do that, you are absolutely right, the costs per launch will be driven down.

Another thing to consider, we have what we call the SM-1, which is Science Mission 1, it is written in the law that we are going to launch that on an SLS. For example, it is a Europa mission. It is going all the way out to Europa to help us assess and characterize Europa, which is a Moon of Jupiter, and it is water world; it is covered in ice and it has got liquid water plumes coming out of it. The question is: Could there be life there? That is what we are trying to characterize.

One of the things that we need to consider, if the agenda is to get boots on the moon in 2024, do we want to use one of the very valuable and critical SLS launches to launch Europa, knowing that that is going to potentially take time? Could we, in essence, launch that on a different vehicle that would take a lot longer to get Europa—it could take an additional 3 years to get to Europa—but, at the same time, would not take away from the schedule to get boots on the Moon. I guess my point is, given the 2024 agenda, which

is what you identified earlier and how important that is, if that is the case, there is going to be no shortage of missions for SLS and there is going to be no shortage of a desire to surge and, of course, all of this is going to require resources that we are going to—I am more than happy to work with you to figure out how to get those.

Mr. ADERHOLT. OK. The exploration, upper stage, and the Mobile Launcher 2 are important Space Launch System upgrade elements which would allow future crewed missions to also bring along payloads like lunar landers, gateway elements and habitats to the Moon, and eventually to Mars. Can you comment on the unique capabilities of the EUS and how close NASA is to letting a contract for the Mobile Launcher 2?

Mr. BRIDENSTINE. Great question. In May we will be under contract for the second mobile launcher. The second mobile launcher is valuable because it enables us to launch an SLS with an exploration upper stage, which gives us more upmass, more ability to launch bigger objects and objects further; in other words, all the way to the Moon.

If we are going to land in 2024, we have got to have that second mobile launcher. We certainly need to have exploration upper stage, and all of these things need to be accelerated. The key is, when we talk about exploration upper stage, what it allows us to do is launch humans on the Orion crew capsule with the European Service Module and at the same time, launch hardware, big hardware with those humans. That big hardware could be habitation. It could be parts of the gateway. It could be landers that can get those humans to the surface of the Moon. The key, ultimately, is going to be larger upmass, which SLS is the key to doing that. Exploration upper stage helps us do that.

Mr. ADERHOLT. Well, SLS and Orion programs are key to the health of our national aerospace supplier base and it has really helped to really put in a new boost of energy to the suppliers in all of the 50 states following the retirement of the space shuttle.

And I am not aware of any other DOD program which has a broad supplier and workforce impact. The program supports NASA workforce, and infrastructure of Kennedy, Marshall, Stennis, and Michoud assembly facility.

Can you talk about the importance of our national space programs, such as the capabilities, the supplier base, the innovation of SLS, the Orion benefit on a broad range of aerospace industry users.

Mr. BRIDENSTINE. That is a great point. When we talk about these kind of capabilities, it is part of our national infrastructure. It is part of our industrial base that keeps America the number one place in the world when it comes to exploration. The vice president was very clear yesterday. We are to remain the preeminent space faring nation. That is on our agenda. We have got to have the industrial base to achieve that.

SLS and Orion are programs that keep that going. I can tell you as a former member of Congress from Oklahoma, we have a lot of suppliers to those programs in Oklahoma that are doing critically important work that actually spills over. We talk about the capability to launch a missile off of an airplane, for example, or the ability to do different types of design. All of these kind of capabili-

ties are back in my home state of Oklahoma because of this particular program.

Part of being part of the industrial base is, that is a big piece of what SLS is.

Mr. ADERHOLT. Thank you Mr. Chairman.

Mr. SERRANO. Thank you. Ms. Roby.

Ms. ROBY. Thank you, Mr. Chairman. And whereas this committee plays an important role of making sure we stay within our budget and on time. I would like to channel a little bit of the spirit of our former chairman, if I might, and just tell you this is really awesome. And it is really cool to be a part of this and to be able to ask you these questions, but to think about the role that we get to play as members of Congress and future space exploration. And so I am thrilled, as always, to be here.

I am concerned that NASA hasn't moved ahead with the procurement of the SLS core stage for EM-3 and beyond. Despite having already purchased the engine's boosters and Orion crew vehicles for those missions, in order to expedite the lunar missions the vice president highlighted. Will you move forward quickly with the contract to allow the SLS program to procure the long lead items from suppliers and begin work on core stage 3 and beyond?

Mr. BRIDENSTINE. We are going to need to. If we are going to achieve boots on the Moon, which is what the vice president called us to do yesterday by 2024, the answer is absolutely we need to move as quickly as possible, not just on EM-3, but EM-4, EM-5. There is a lot of work that has to be done very quickly. The answer is yes.

The vice president was very clear, and he was talking on behalf of the President. This goes right back to space policy directive-1, that was signed over a year ago by the President to go to the Moon sustainably with commercial partners, international partners, and utilize the resources of the moon. If we are going to do—if we are going to put the pieces in place to put those boots on the Moon in 2024, we are going to have to move very quickly on all these pieces.

Ms. ROBY. Thank you again for being here. Mr. Chairman, I yield back.

Mr. SERRANO. Mr. Administrator, the administration's goal is to privatize U.S. efforts at the International Space Station by 2025. Are you concerned about our partnerships if we don't continue U.S. presence in low Earth orbit after 2025 due to a lack of federal funding or a gap for a successor station?

Mr. BRIDENSTINE. It is a concern. We are in a position now, because of the International Space Station, we are commercializing low Earth orbit rapidly. This particular budget request does not specifically say that we are going to end direct funding for the ISS in 2025. It says we want to move to a new model of funding. In other words, how are we going to commercialize low Earth orbit in a more robust way? The goal being that if NASA can be one customer of many customers and we can have numerous providers competing on cost and innovation, not just for resupply of ISS, not just for commercial crew, getting crew to the ISS, but also habitation itself.

Industry is interested in the microgravity environment, whether it is pharmaceuticals, or manufacturing, and the health care indus-

try even larger. Right now, we have got experiments where we are using adult stem cells to print human organs in 3D and that could be transformational.

There is a lot of market opportunities, plus there is an entire, I guess, ecosystem of people that are interested in going to space for tourism, just commercially just for, I guess, fun, vacation. There is an opportunity there as well. What we want to do is utilize the International Space Station to prove out those capabilities and those technologies.

There are companies out there that are trying to develop their own commercial habitats. We want to encourage that. There is money in this budget to help them move along faster. Again, if we can commercialize and be a customer, then our costs go down, and then we can utilize our resources on activities for which there is not yet a commercial robust—a robust commercial marketplace, for example, returning to the Moon.

That is the agenda here. We want to make sure that in low Earth orbit we do everything possible to commercialize, drive down costs, use resources to go where there is no commercial market yet.

Mr. SERRANO. Mr. Aderholt is going to the Moon on vacation he told me. And he has got a question.

Mr. ADERHOLT. I am not going to Mars, though. It is too long of a trip. Over the last two fiscal years, Congress has provided over 175 million towards the development of a nuclear thermal propulsion. And therefore, we were a little disappointed to see the request did not include any of the funding for that purpose. How much of the 75 million that Congress provided in fiscal year 2018 for nuclear thermal propulsion activities has NASA spent towards demonstration preparation instead of, for example, multiple studies?

And my understanding is that other nuclear work as produced power elements limited to one megawatt. Can you respond to that?

Mr. BRIDENSTINE. You are right. I think it is nuclear thermal propulsion and related activities. I think under that related activities, we did spend money on, as you mentioned, kilowatt power for being able to provide, in essence, a lot of power for people to live and work on the surface of the Moon. The answer is we have spent money on studies. We are continuing to develop. We are in phase one. We are trying to get really smart on how we would utilize nuclear thermal and that kind of thing, but as you heard yesterday, the vice president is keenly aware of the importance for nuclear thermal in order to get to Mars faster. The DOD has an interest in nuclear thermal as well.

We want to make sure that we are doing that.

Mr. ADERHOLT. Given Congress' direction on that and, of course, the vice president's speech yesterday, can you commit to us to moving ahead with plans for an in space demonstration of the nuclear thermal propulsion in 2024?

Mr. BRIDENSTINE. As far as plans for a demonstration in 2024, I would have to get back to you specifically on where we are on that. I am not, off the top of my head, prepared to talk about where we are on that whole development.

Mr. ADERHOLT. Okay. If you could get back with us on that, that would be great.

Mr. BRIDENSTINE. Yes.

Mr. ADERHOLT. Thank you.

Mr. SERRANO. Thank you for your testimony today. Thank you for answering our questions. I hope you understand, and I think you do, that where we try to fill holes that may exist in the budget is because this chairman, and this ranking member, and the members of this subcommittee do have a lot of respect, understanding, and support for NASA. We think what you do is important for the future of our country. We want you to do more. And this is—I speak for Mr. Aderholt and Ms. Roby because I know they agree, do more with education and schools, you know, having your folks visit schools, visit children, visit students, visit colleges, let them know what is available at NASA and what NASA will bring to the next generation.

So thank you, good luck, and we will see you at the end of the process.

Mr. BRIDENSTINE. Thank you, Mr. Chairman.

Mr. SERRANO. And the hearing is adjourned.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

Questions for the record for NASA regarding the hearing: "NASA Budget hearing with Administrator Bridenstine"

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

1. The University of Puerto Rico at Mayaguez and Rio Piedras Campuses - especially the Mayaguez Campus - has provided many scientists to NASA. These campuses have been recipients of the National Space Grant College and Fellowship Programs. Last year the Administration cut the Education request to zero and the Committee added funding back. This year it was zeroed again. Does the Administration not see the need for such programs?
2. We were pleased to have Dr. Michael Freilich (Fry-lick) testify before the Subcommittee in our first hearing regarding the Earth's changing climate system, and the role of climate research. That was a very interesting and enlightening hearing. However, just a few weeks later, the Subcommittee received the request for the Earth Science budget that was reduced \$151.2 million from last year's Appropriated level. The science behind our changing climate is real. Why does the Administration's request shift away from climate research?
3. NASA's FY2020 budget proposes to eliminate funding for the Wide Field Infrared Survey Telescope (W-FIRST). This telescope was designed to work in concert with the James Webb telescope by using its wide field view to find objects, while the James Webb telescope would have the ability to focus in on farther, more finite objects referred by the W-FIRST telescope. If one was built to work with the other, why is W-FIRST considered for elimination?

The Honorable Robert Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

MOON LANDING BY 2024 AND THE SPACE LAUNCH SYSTEM (SLS), ORION, AND GROUND OPERATIONS PROGRAMS

1. How is NASA going to change its acquisition approach to achieve a 2024 human moon landing (especially as it relates to SLS, Orion, Lander and Supporting Systems)?
2. What is the schedule of major events to achieve a 2024 human moon landing?

3. In the wake of poor performance on the SLS core stage, what steps is NASA taking to ensure the success of the Exploration Upper Stage (EUS)?
4. Given the current lack of accountability at NASA HQ HEOMD, who is the one person in charge of ensuring NASA achieves a 2024 human moon landing? What is NASA doing to streamline authority and accountability?
5. Please describe the capabilities of the EUS – with a particular focus on the fairing – compared to other vehicles which currently exist (not vehicles which exist on paper).

The SLS with EUS could have launched the entire International Space Station in just four launches, compared to the 31 Space Shuttle and Russian launches that were needed for assembly.

6. Please describe the plan for the Moon landing by 2024 effort with the EUS, and the difficulties inherent in trying to do the mission without the EUS.
7. Notwithstanding the proposals already received, please comment on how much funding might be saved if an EUS stage were used for at least one component (perhaps free-standing) of a habitat/safe-space in orbit around the Moon, to facilitate the 2024 human moon landing.

Congress has provided no authority, appropriations, or support for flying Orion on alternative launch vehicles, and your recent commercial alternative study showed that no other launch vehicle has the performance that SLS can provide for these missions.

I am puzzled that the conversation did not end there. You have mentioned possibly using alternative plans in the future. From my understanding, an alternative plan could potentially cost the taxpayers more than half a billion dollars for modifications to vehicles the taxpayer does not own, in order to perform a very low-quality, high risk version of what NASA is already doing with SLS. And, SLS is a much higher quality version and the taxpayers have already invested in this plan.

8. What would be the point of such an alternative effort, especially since the commercial companies assure NASA and Congress there is a booming worldwide market with which they can make a profit *and pay for their own* modifications?

Such a large expenditure merits a discussion, after years of a flat NASA budget.

9. Can I have your assurance that no NASA funding will be spent on alternatives, whether directly or as in-kind services, unless such an activity is authorized and appropriated by Congress?

MOON WORK AND COMMERCIAL LAUNCH

I believe that the Vice President's call to land humans on the Moon by a deadline is the kind of call to a Mission, any exploration mission, which has been lacking for many years. The budget plan has an unbalanced emphasis on using commercial rockets for cis-lunar work – including rockets that have not even been fully designed nor built, much less flown. I am surprised that a rocket four years late and counting in fulfilling the STP-2 mission was given a very fast certification based on a maiden flight with only an automobile as a payload. The Department of Defense is currently studying that certification process.

If rockets are truly commercial, they should demonstrate flight capabilities on paid, commercial missions **before** receiving hundreds of millions of taxpayer dollars for development.

10. What contractor, self-funded demonstration flights will you require from commercial launch vehicles before providing any taxpayer dollars for “modifications” needed for government missions?
11. What is the current dollar value of Exploration Directorate and Science Technology Mission Directorate contracts which do not lead directly to landing humans on the Moon in 2024?

SPACE LAUNCH SYSTEM (SLS) – INTERNATIONAL COMPETITION

As I am sure you are aware, in February the Defense Intelligence Agency (DIA) released its “Challenges to U.S. Security in Space” report. The report notes that both China and Russia are in the early stages of developing super heavy-lift SLS-class launch vehicles for exploration and potentially other purposes.

12. How close are our competitors to fulfilling their work, and to what extent are our partner nations showing interest in working with Russia and China rather than the United States?

COMMERCIAL CREW

13. Can you provide the Committee with the latest cost estimates of the development of these programs? I believe I saw a figure of \$6.8 billion. Staff and Members were given a previous figure of \$5 billion.
14. What flight schedule do you now foresee for both providers this year?
15. What did you learn about flight systems, including life support systems, from the recent Demo-1 flight, including the temperatures and G forces experienced by the mannequin in the Demo-1 flight?

16. There are rumors that there may be a need for a second, uncrewed flight of the Dragon capsule, for safety's sake. Is that true?
17. Is the contractor paying for this flight?
18. If not, then explain why NASA approved a Demo-1 for a capsule which was not ready and what management changes you are considering.
19. Please note who, worldwide, has bought seats on the U.S. commercial crew systems, or paid for (in cash, not in-kind transactions) cargo space on our commercial cargo systems. If the answer to this is "none," I suggest the budget line "Space Transportation" should be renamed "ISS Cargo and Crew Transportation Costs."

Whereas the idea that reusability has led to reduced costs for customers, the evidence from NASA's contracts seems to show the opposite. NASA's Inspector General found last year that the agency is now paying significantly more for cargo services with reusable rockets and cargo capsules compared to the other provider that uses expendable rockets and vehicles.

As Space News noted in an April 26, 2018 article, the reusable contract includes a 50 percent increase in per-kilogram costs. If the CRS-1 contract resulted in an average cost of \$140 million per flight, then the new price would average \$210 million per flight. These are extraordinary numbers compared to sticker prices of around \$70 million.

20. What is happening to the supposed savings from reusability?
21. What contract restructuring and change in management are you proceeding with to get the United States a better deal on future contracts with commercial providers?

NASA NEWS SERVICES

I have the following inquiries about newsfeeds. This email address sends news updates to Congressional staff: hqnews-bounces@newsletters.nasa.gov.

22. Does Headquarters manage this content and is it sent out by personnel at NASA Headquarters?

Examining a 12-month set of emails, my staff found one story on Orion, and none on SLS.

23. What are the criteria for this news feed? Is it only for International Space Stations news or should there also be updates on Europa, SLS, Orion, and other tasks and programs?
24. Please describe your plan to overhaul this newsfeed and make it available to Members, Senators, Congressional staff, national news outlets, and what are your plans to ensure a balance of stories on work done across the spectrum of NASA work, particularly with budget elements in Exploration and Planetary Science.

LAUNCH PROVIDERS FOR U.S. PAYLOADS

My understanding is that in a hearing exchange between you and Senator Gardner, you made a commitment to launch U.S. payloads on U.S. providers.

It seems there is a two-part understanding of this at NASA. What I mean is that some believe that NASA is obligated to contract with a U.S. contractor, but that the contractor is not obligated to choose a U.S. launch vehicle. I want to see U.S. payloads launched on U.S. launch providers.

25. Does NASA have the legal authority to require that a U.S. launch vehicle be used?

The Honorable Matthew Cartwright Subcommittee on Commerce, Justice, Science, and Related Agencies Questions for the Record

1. The 2017 Decadal Survey for Earth Science and Applications from Space recommended two new competitive, cost capped, and Principal Investigator-led flight programs – or “Earth System Explorer” and “Designated” – so NASA could continue to lead the world in Earth science research at a time when this scientific understanding is more critical than ever. These medium sized missions could provide needed insight into the implications for our health and planet of sea level rise, changes to ozone concentrations, and the sources and sinks of carbon dioxide and methane. The competitive and cost capped approach to selecting missions ensures that NASA builds a workforce across the United States with experience in managing complex programs and also that only the best missions – ultimately funded by the American taxpayer – emerge from a competitive process involving diverse participants. It is also used by other parts of NASA with amazing results. The FY 2020 request does not include funding for the “Earth System Explorer” missions. What resources does NASA need to implement the scientific community’s recommended “Earth System Explorer” program?
2. Please clarify NASA’s intent to competitively select future “Designated” missions. Will NASA commit to competitively selecting – among NASA centers and universities – future missions in the Earth System Explorer program as well as the “Designated” program?
3. In the hearing on February 26, 2019, Dr. Freilich of the NASA Earth Sciences Division, identified several gaps in our earth observing capabilities, saying it would be useful to have more data on things like aerosols, vertical wind, and soil moisture to better predict weather and climate change, manage our resources, and understand climate change. Why does the Administration want to cut funding for programs such as CLARREO and PACE that would address these gaps when it’s clear more resources are needed to fulfill their missions?
4. What agreements does NASA have in place to ensure that the scientific community – which recommended the PACE and CLARREO missions in the 2017 decadal survey – will receive this data to advance the understanding of Earth?

5. The FY20 budget again proposes to eliminate NASA's Carbon Monitoring System, a system designed to improve our understanding of the carbon cycle and how it flows through land, water, and air. It has enhanced our understanding of agricultural productivity, forest management, and wildfire risk. It has also advanced our understanding of the carbon cycle and algae blooms in places like the Great Lakes and Gulf of Mexico. Given these demonstrated benefits, and the fact that NASA's Earth Science Research program is critical to the production of the National Climate Assessment – which is mandated by law – why would the Administration want to eliminate the Carbon Monitoring System?
6. If the Carbon Monitoring System is eliminated, what is NASA's plan to fill these critical data gaps.
7. The most recent GAO '[High Risk List](#)' found that the federal government has lost ground since 2017 on "limiting the federal government's fiscal exposure by better managing climate change risks." In particular, GAO notes we are behind on providing data and technical assistance to decisionmakers to build resilience to climate risks – including at the state and local level. Last Congress, I introduced the PREPARE Act, which establishes critical avenues of coordination for agencies to collaboratively prepare for and develop decision-ready data to help communities prepare for extreme weather events. Considering the GAO conclusion that we are behind on addressing the fiscal risks of climate change, what more can NASA do to confront extreme weather events with improved coordination, data, and decision tools?
8. What else can NASA do to support local decision makers in preparing for extreme weather through improved data and decision tools?
9. In 2018, NASA announced a new initiative to invest \$100 million in small spacecraft missions, including spacecraft making use of CubeSat and SmallSat designs. What are some of the inventions that these small spacecraft contribute to? Is the information provided by these helpful to other NASA programs?
10. What should NASA's role be in further developing small spacecraft technologies? Are there specific barriers that NASA is helping to overcome before this technology becomes fully commercial? And is there a timeline for how long such collaboration is necessary?
11. What challenges does the emergence of the many new private sector satellites create for NASA's existing activities in space? At some point, will there be over-crowding and will we need to regulate space traffic? If so, how?

The Honorable Marcy Kaptur
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Clarification of Budget Accounts

Background—FY2020's budget reflects some realignment of funding moving money outside of the Aeronautics line item.

1. *Could you please explain how decreases in the Aeronautics line will impact the wind tunnels at NASA Glenn. Your staff has indicated the shift in funding from Aeronautics for wind tunnels at NASA is not a decrease, but simply a bookkeeping exercise. Please explain how and why you have decided to account for the wind tunnel budget in this way?*

2. *Moving funds from the Aeronautics account to other NASA lines makes it particularly hard to track work at our wind tunnels. NASA Glenn's wind tunnels are critical to hypersonic testing and design. I am concerned that this transition is more than just accounting change, and will transition control of the wind tunnels away from the managers closest to the research to headquarters offices with little at stake in the research. I am also concerned that moving control away from Glenn will make it more difficult to collaborate with DOD. This committee needs a fuller explanation of this proposal, including documentation of the reasoning for this "book-keeping" shift. Please explain.*
3. *Please provide details about which line items and which facilities are impacted by this bookkeeping change?*
4. *If Congress approved this proposal, would NASA Glenn continue to have autonomy in approving and coordinating use of the tunnels?*
5. *The Administration is proposing to transfer funding for the Aerospace Evaluation and Test Capabilities (AETC) to the Strategic Capabilities Asset Program (SCAP). What criteria did NASA use to determine whether a facility is best managed and funded centrally by SCAP or directly by one of the mission directorates?*
6. *The wind tunnels at NASA are a high priority for me, and I am particularly concerned about the effect of the budget on management of Glenn's wind tunnel. Would the proposal centralize control away from Glenn? Operationally, what impact would this have on Glenn's wind tunnel?*

Regional Economic Development Program, Center at NASA Glenn.

Background—The FY 2019 appropriations bill contained the following—Regional economic development—The recommendation includes \$7,500,000 for NASA's regional economic development program which focuses on partnerships with State and regional economic development organizations as they expand space-related commercial opportunities designed to address NASA mission needs.

1. *In the FY 2019 appropriations bill, Congress approved \$5 million in funding for Regional Economic Development. The Committee rejected the proposed elimination of the Regional Economic Development program and supported NASA's outreach to local businesses and communities with technology transfer and technical support to spur job growth through the exploitation of technology developed at NASA's world-class facilities. Unfortunately, NASA has proposed the same elimination in FY 2020. Explain to the committee your reasoning behind eliminating a technology transfer program that helps transition home grown technologies in the community?*
2. *I am also concerned that despite the appropriated funding, NASA has delayed implementation of RED. Given that we are almost half-way through the fiscal year, how*

many FTE's have been allocated to RED for the remainder of the year? I would like your commitment that you will expeditiously allocate these funds and ensure that RED can do its job with technology transfer and outreach in FY 2019.

Electric Air Flight

Background—The FY 2019 bill included the following language which directly impacts NASA Glenn's work in electric air flight.

Language included- Electric air flight—The Committee encourages and supports strengthening collaborations between NASA and the Department of Energy national laboratories to overcome energy storage challenges for novel modes of mobility like electric air flight. While NASA has unprecedented aeronautics expertise, the Department of Energy national laboratories are leading efforts to develop next generation battery technologies for vehicle applications and enhancing modeling and simulation capabilities with advances in deep learning and machine learning. Therefore, the Committee encourages increased cooperation between NASA and the Department of Energy national laboratories to overcome technological barriers in demonstrating the capability of electrified aircraft, such as higher energy density batteries, development of new, lower-cost materials, and the establishment of testing methods and protocols.

1. *Please elaborate on your efforts to cooperate with the Department of Energy on electric air flight aircraft and low cost material development?*
2. *Tell the committee a bit about why electric air flight is so critical and how developments in this area could be used in a new generation of aircraft and battery technologies?*
3. *What other synergies could this electric air flight technology have across other research and development work at NASA?*

STEM Engagement

Background—NASA's FY2020 budget provides no funding for the Office of STEM Engagement, redirecting these monies to other priorities. It plans to continue supporting internships and fellowships within the Mission Directorates. Additionally, it will oversee agency-wide STEM engagement out of a functional office at NASA Headquarters.

1. *Please explain the process NASA used to determine which priorities took precedence over STEM engagement.*
2. *Since NASA plans to decentralize funding of its internships, fellowships, and student STEM engagement activities, how will each Mission Directorate determine how much money to invest in these important programs?*
3. *How will NASA – at the corporate level—ensure diversity in awarding fellowships and internships since the program is no longer centralized?*
4. *Do the Directorates have directives or goals in terms of the designating a portion of their budgets toward these programs?*

Background—In FY2019, NASA's budget authority for STEM engagement was \$110,000,000.

1. *The office of STEM engagement is hugely popular and serves an important public relations opportunity for inspiring the next generation of NASA scientists, to literally reach for the stars. What have been some of the benefits for this program?*

Background—Termination of the Office of STEM Engagement includes zeroing out funding for its portfolio of grants and cooperative agreements. One of these programs--the Minority Universe Research and Education Project (MUREP)—was established to increase NASA’s responsiveness to federal mandates related to Minority Serving Institutions and underrepresented and underserved communities. Glenn had the MUREP Aerospace Academy, which used a STEM curriculum meeting national standards aligned to NASA Mission Directorates and was targeted at K-12 students and their teachers.

1. *I represent NASA Glenn, one of the most important facilities in the NASA system. Glenn has many public and educational outreach programs. For example, it awarded a grant that enabled the International Museum of Surgical Science in Chicago provide low cost or free programs to local underserved and underrepresented students. How will NASA continue to engage students and inspire them to pursue STEM careers?*
2. *How will zeroing out the STEM engagement budget impact diversity in NASA’s workforce?*

Background—NASA Glenn has a robust outreach program with universities and companies in Ohio, Western Pennsylvania, Indiana, New York, and Michigan. For example, it partnered with Lake Erie region organizations to help the Cleveland Water Alliance with its Erie Hack Innovation Water Summit. This competition challenged teams throughout the Lake Erie region to solve the lake’s biggest problems.

1. *In January 2019, NASA Glenn, Carnegie Mellon University and the National Energy Laboratory built on work in partnership with Magnetics, a company in Pittsburgh, and was awarded a US patent for a commercialization-ready technology. Will the FY20 budget allow Glenn to continue this type of collaboration with universities and industry in the Midwest?*

Workforce

Background—Under planned achievements for 2020, the budget notes that NASA will continue to find efficiencies in workforce productivity. It plans to apply its civil service workforce to priority mission work, adjusting the mix of skills where appropriate. It noted plans to “continue to identify, recruit and retain a multi-generational workforce” possessing critical skills. The budget shows a slight reduction of 45 civilian FTE in 2020 (Glenn, loss of 5: FY19 1531 FTE; FY20 1525 FTE).

1. *Please tell me more about NASA’s plans for its workforce.*
2. *What are NASA’s plans to address “non-priority” mission work?*
3. *How will this impact career civil servants at Glenn and other NASA installations?*

4. With a slight decrease in proposed FTE across the agency, how will you ensure that NASA has a multi-generational workforce?

Background—The budget mentions the possibility of targeted buyouts in selected surplus skills areas.

1. How will NASA determine what occupational categories are considered surplus?
2. How many employees do you anticipate being offered buyouts and at what locations?

Outsourcing Mission

Background—NASA is trending toward outsourcing some of its space transportation mission. Since the end of the Shuttle program, NASA has been using commercial space companies to resupply the International Space Station. An 11 March 2019 press report indicated that NASA's budget sets aside \$363 million to help companies develop "a large lunar lander" to take cargo and astronauts to the moon's surface. In addition, nine companies are competing for up to \$2.6 million in lunar transportation contracts, an effort known as the Commercial Lunar Payload Services program.

1. Could you explain NASA's plans to outsource parts of its mission?
2. While there are positives in encouraging private industry to support elements of its mission, what are the potential downsides of possibly becoming dependent on private industry?
3. What categories of NASA's mission is categorized as "inherently government" in nature?

Nuclear Thermal Propulsion

1. NASA has been developing two separate nuclear activities over the last few years, both with a NASA Glenn Research Center connection. Nuclear thermal propulsion technology (NTP) and the Kilopower Reactor Using Stirling Technology (KRUSTY) experiment. What has NASA learned in developing these technologies and how are you leveraging both of them for future missions, including in-space propulsion and lunar surface power needs?
2. Additionally, while there is naturally some overlap with the Department of Energy and the National Laboratories, what is NASA doing to ensure that these programs are moving beyond R&D and working with private industry partners to fully execute these critical technologies? The timescale you have set for getting back to the Moon and eventually Mars is quite ambitious and will require industrial partners. Which industrial partners are working on NTP and KRUSTY and what do you see as the continuing role for them?

The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Topic: Combating airplane noise

Background: Combating airplane noise has been an important constituent issue for Members of Congress who represent people who reside near airports. Government agencies, like NASA, play an important role in supporting research and development that leads to reductions in airplane noise. Last year, NASA's Landing Gear Noise Reduction effort achieved a significant breakthrough in reducing airplane noise by 30 percent, and that this work will continue via simulation of large civil transports.

Questions:

1. When will NASA reach out to industry to share this breakthrough?
 2. In addition to conducting research into new airframe designs, what else is NASA doing to combat airplane noise through its research?
-

Topic: U.S.-Israel space cooperation

Background: Last year, NASA and the Israel Space Agency signed an agreement for commercial lunar cooperation. This innovative partnership leverages both countries' strengths to advance our understanding of the moon while ensuring future generations of researchers can gain a deeper understanding of it.

Question:

1. What other ways can NASA and the Israel Space Agency collaborate?
-

Topic: Supporting public-private partnerships

Background: NASA's efforts to advance public-private partnerships—with companies like SpaceX and Boeing—are making important strides that will eventually send American astronauts into space using an American vehicle. Earlier this month, NASA and SpaceX achieved a significant milestone of launching the unmanned Crew Dragon to the International Space Station. Should everything proceed correctly in the coming months, our own astronauts may soon test these American spacecrafts.

Questions:

1. What are some of the technical and financial challenges that could delay NASA from using one of SpaceX's or Boeing's spacecraft to send an astronaut into space?

2. How much money does NASA expect to save and redirect to other programs if these public-private partnerships are successful?

Topic: Understanding climate change

Background: Climate change poses a serious threat to our way of life, economy, and national security. Year after year, severe storms cause loss of life and damage, which is why understanding it is imperative. NASA's 2020 budget request would terminate two missions that seek to improve our understanding of climate change, the PACE and CLARREO missions.

Question:

1. If both missions are terminated, how would the lack of data affect the United States' ability to combat climate change?

WEDNESDAY, MARCH 27, 2019.

**NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION**

WITNESSES

NEIL JACOBS, ACTING ADMINISTRATOR, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Mr. SERRANO. The subcommittee will come to order.

Dr. Jacobs, NOAA's acting administrator, thank you for coming back for your second time.

As acting administrator, Dr. Jacobs oversees the agency's \$5.4 billion budget, which includes NOAA's sea, air, land, and space observing platforms, and the critical environmental data they provide. He also covers the wet side of NOAA in all of its work in fisheries and coastal management.

Now, the administration has requested \$4.46 billion for NOAA for fiscal year 2020. The agency's top three priorities include improving extreme weather prediction through the implementation of the Weather Act, expanding the Blue Economy, and further investments in space innovation. These are good steps but remain vastly overshadowed by the devastating cuts that President Trump has in store for NOAA.

The request represents an 18 percent decrease or nearly a \$1 billion cut from the 2019 enacted level. In terms of job cuts, this amounts to a reduction of 547 civilian positions within the agency, which is quite devastating. The massive cuts or outright elimination of vital environmental research remains wildly unrealistic and unworkable, just as they have for the past two fiscal years.

This proposal severely cuts funding for ocean exploration and observations, species recovery programs, the tsunami warning program, fisheries management, program grants to our academic and nonprofit research institutions that conduct research to further NOAA's goals and mission, just to name a few.

It, once again, proposes a complete elimination of funding for NOAA grant and education program. It deems as lower priority, including Sea Grants, Coastal Zone Management grants, Pacific coastal climate research, the Coastal Salmon Recovery Fund. These remain nonstarters with the subcommittee, we must tell you now.

I would like to remind the administration that investment in critical research in our universities protecting coastal habitats, where one half of the U.S. population resides, and the livelihoods of fishermen are not low priority. Not to this subcommittee. These grant programs employ thousands of scientists across the country and territories, protect local economies, and give us the tools to safeguard our communities against sea level rise and climate

change. The investments we make today will prepare us for the challenges we face tomorrow.

As our February hearing on NOAA climate research made very clear, we are starting to experience those challenges now. Therefore, I do not believe this budget, as presented to us today, allows NOAA to live up to its core mission, as the Administration would have us believe.

Dr. Jacobs, it is good to see you. Thank you for joining us to discuss NOAA's priorities and outlook for fiscal year 2020.

At this time, I recognize my friend, the ranking member, Mr. Aderholt.

Mr. ADERHOLT. Thank you for yielding, Mr. Chairman. And I look forward to having another productive day of hearings. I think we got a pretty full day today.

So good to have Dr. Jacobs here, and welcome back to the subcommittee, and we appreciate you taking the time to join us to discuss the National Oceanic and Atmospheric Administration, better known as NOAA, fiscal year 2020 budget.

Of course, as we see, the fiscal year 2020 budget request is \$4.5 billion. Of course, a reduction, \$968 million from fiscal year 2019 enacted level. I understand that formulating the fiscal year 2020 budget, you are required to make some tough choices, and you got to make some—put some programs above others. And while I have concerns that some potential programs impact and some of the things that would be impacted by this request, especially when it comes to key weather research programs, I am pleased to see that the—that your budget continues to—and NOAA continues to focus on identifying agency efficiencies, maximizing the economic contributions for our coastal and marine resources, and also reducing the impact of extreme weather.

Utilizing the information that we gather from the hearing today, this subcommittee will work hard over the coming months to carefully review the budget proposal to provide NOAA the resources that it needs for fiscal year 2020 to effectively carry out this mission.

So, Dr. Jacobs, again we look forward to your testimony, and continue to work together to better understand and predict the changes in our world's weather system and the bodies of water, and share that information to the public, and to conserve our coastal and marine resources.

So with that, I yield back.

Mr. SERRANO. Thank you.

Mr. Jacobs, you are recognized for 5 minutes. Try to keep it to five, but please understand that your whole statement will be inserted in the record.

Mr. JACOBS. Thank you, Mr. Chairman, ranking member, and members of the committee. Thank you for the opportunity to testify today. The President's fiscal year 2020 budget request for NOAA is \$111 million above the fiscal year 2019 request and emphasizes core programs while making targeted investments which we believe will produce a substantial return for the American taxpayer.

Accelerating advancements in the global modeling program is a top priority. While there have been many achievements in 2018, problems exist with the current structure of weather research to

operations. The internal and external strategy is fractured, and the computing procurement process is cumbersome and the funding process disincentivizes collaboration.

The fiscal year 2020 request addresses many of these challenges through the creation of the Earth Prediction Innovation Center, or EPIC. Based on the Weather Research and Forecast Innovation Act of 2017 and the recently authorized National Integrated Drought Information System Reauthorization Act of 2018, EPIC will serve as the hub for building and maintaining a true community model.

EPIC's innovative structure will link scientists and software engineers in academia, private industry, and partner agencies with research development and operational activities inside of NOAA. EPIC will significantly enhance our ability to access external expertise, reestablishing preeminence of U.S. forecast model skill, and improving our ability to provide accurate watches and warnings.

The NOAA Satellite Observing System Architecture study, or NSOSA, which was completed in 2017, analyzed various approaches to better meet mission requirements with greater flexibility and responsiveness and incorporating involving technologies. Congress recognized the importance of NSOSA codifying the program in the NIDIS Reauthorization Act of 2018.

This budget initiates NSOSA implementation and invests to evaluate innovative space-based solutions and partnerships, including \$12.3 million for joint venture partnerships and hosted payloads on geostationary and polar orbits. It also continues the importance of commercial weather data pilot program, as well as \$5 million for the option to purchase data after successful testing.

This budget makes necessary investments for strong coastal communities and economies. It includes an increase of \$2.3 million for regional fishery management councils to analyze and remove outdated or ineffective regulations. To help level the playing field for U.S. commercial fishermen in a global seafood marketplace, an additional \$1.6 million is requested to enforce Seafood Import Monitoring Program and prevent the importation of seafood caught using illegal fishing practices.

Finally, the budget includes an increase of \$3.6 million to support aquaculture by assisting an industry with the regulatory compliance and conducting research to ensure the American farmed fish are safe and sustainable.

Executive Order 13840 established the National Ocean Policy focused on providing tools to coastal communities to sustainably manage their offshore waters. The budget includes an additional \$4 million of ocean data platforms, building on innovative tools developed by NOAA to improve siting and offshore activities.

NOAA has made great strides in the past 2 years to reduce the amount of time needed for environmental review, the time to complete formal and informal Endangered Species Act consultations so it is reduced by over 22 and 65 percent, respectively. Incidental harassment authorizations under the Marine Mammal Protection Act have been reduced by 25 percent. The fiscal year 2020 budget builds on this success by providing an additional \$3 million to further reduce the timeline of consultations and permits.

Other sectors in the Blue Economy that this budget addresses include marine transportation through additional precision navigation data, efforts to reduce marine debris, accelerate economic benefit of new and expanded marine sanctuaries, and reducing the backlog of Natural Resource Damage Assessment cases.

Finally, this budget includes \$5 million for the National Oceanographic Partnership Program. We intend to use these funds to leverage investments from other Federal agencies, private industry, and philanthropic organizations that have shared interest in advancing ocean research. These funds can be used for a variety of partnerships, ranging from ocean exploration to new technology to detect and protect marine mammals.

NOAA services touch every America every day. I believe this budget request meets NOAA's core mission by protecting lives and property, while also positioning the agency to be more efficient and effective moving forward.

Thank you again for the opportunity to testify today. I would be pleased to answer any questions you may have.

[The information follows:]

**WRITTEN STATEMENT OF
DR. NEIL JACOBS, PH.D.
ASSISTANT SECRETARY OF COMMERCE FOR ENVIRONMENTAL
OBSERVATION AND PREDICTION,
PERFORMING THE DUTIES OF UNDER SECRETARY OF COMMERCE FOR
OCEANS AND ATMOSPHERE**

**ON THE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S
FY 2020 BUDGET REQUEST**

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

March 27, 2019

Chairman Serrano, Ranking Member Aderholt, and Members of the Committee, thank you for the opportunity to testify today regarding the President's FY 2020 budget request. The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) appreciates the continued support of Congress, the Administration, and our broad and diverse base of stakeholders. The President's FY 2020 budget request continues to emphasize core programs while making targeted investments to innovate across NOAA's line offices. We continue to monitor major milestones and accomplishments of our programs and activities to evaluate progress and demonstrate success.

FY 2020 BUDGET REQUEST

NOAA's FY 2020 budget request of approximately \$4.5 billion is focused on supporting NOAA's mission and advancing NOAA's highest priorities, which are: 1) To reduce the impacts of extreme weather and water events to save lives and protect property by implementing the Weather Research and Forecasting Innovation Act, 2) To maximize the economic contributions of ocean and coastal resources, and 3) To advance space innovation.

Reduce the Impacts of Extreme Weather and Water Events

The President's FY 2020 budget request will accelerate the advancements in the U.S. global weather modeling program, which is a top priority for the Administration, the Department of

Commerce, and NOAA. In 2018, NOAA exceeded its target of transitioning research and development products, moving 24 products to application or operations. However, despite these advancements, significant impediments exist within the current structure of weather research to operations. The internal and external strategy is fractured, the procurement process for high-performance computing capacity is cumbersome, and the funding process disincentivizes collaboration, and does not support innovation, sustained computing capacity, and competition. The FY 2020 request addresses many of these challenges with an increase \$12.3 million for a total of \$15.0 million for the Earth Prediction Innovation Center (EPIC).

Building on the tenets of the *Weather Research and Forecasting Innovation Act of 2017* (P.L. 115-25 and recently authorized in the *National Integrated Drought Information System Reauthorization Act of 2018* (P.L. 115-423), EPIC is a virtual center that will serve as the core research-to-operations-to-research hub for building and maintaining a community modeling framework. EPIC's innovative structure will link world-class scientists and software engineers in academia, the private sector, and partner agencies with the research, development, and operational activities inside the agency. EPIC will significantly amplify NOAA's ability to access expertise on a national scale, reestablishing preeminence of the U.S. operational forecast skill and enhancing its ability to provide accurate warnings of weather-based threats.

Maximizing the Economic Contributions of Ocean and Coastal Resources

Our nation's blue economy—comprised of fishing, shipping, tourism, energy development, and other industries tied to the ocean—is a critical contributor to the nation's overall economy. Thus, maximizing the economic contributions of ocean and coastal resources is a high priority for NOAA and the FY 2020 budget makes the necessary investments for strong coastal communities and economies. This Administration's Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States (Executive Order 13840), established a National Ocean Policy focused on making available data so that states, coastal communities, and industry can make informed decisions to sustainably manage their offshore waters. The budget includes an additional \$4 million for regional ocean data portals, building on innovative tools being developed by NOAA's National Ocean Service to improve siting for offshore activities such as aquaculture, fishing, and energy development.

The FY2020 budget also makes investments in our fishermen and seafood production. The budget includes an investment for regional fishery management councils to analyze and remove outdated, unnecessary or ineffective regulations. To further help level the playing field for U.S. commercial fishermen in the global seafood marketplace, the budget includes an additional \$1.6 million to enforce the Seafood Import Monitoring Program and prevent the importation of seafood caught using fishing practices that are illegal in the United States. Finally, the budget includes an investment to support aquaculture production by assisting industry with regulatory

compliance and conducting priority research to ensure that American farmed seafood is healthy, safe and sustainable.

In addition, NOAA has made great strides in the past two years to reduce the amount of time needed for our environmental reviews. In comparison to pre-2018, the time to complete informal Endangered Species Act (ESA) consultations was reduced by over 65 percent; formal ESA consultations by 22 percent; incidental harassment authorizations under the Marine Mammal Protection Act (MMPA) by 25 percent; and the time to get a research permit for ESA-listed species by 29 percent. The FY 2020 budget builds on this success by investing to reduce the timeline for consultations and permits under the ESA and the MMPA.

Other sectors in the blue economy aided by increases in this budget include marine transportation through a centralized portal for data that can inform non-Federal development of precision navigation tools and products; unmanned systems, increased efforts to reduce marine debris; accelerating the economic benefits of new and expanded marine sanctuaries; and reducing the backlog of Natural Resource Damage Assessment cases.

Finally, this budget includes \$5 million for the National Oceanographic Partnership Program. We intend to use these funds to leverage other internal NOAA funds as well as leverage investments from other federal agencies, private industry, and philanthropic organizations that have shared interest in advancing the highest priority ocean research. These funds can be used for a wide variety of partnerships including ranging from ocean exploration to new technology development to detect and protect marine mammals.

Space Innovation

The FY 2020 request also supports the Department of Commerce and NOAA's Space Innovation priority and begins the multi-year process of innovating the architecture of NOAA's space based earth observations. Since the launch of the first operational satellite in 1970, satellite observations have been central to meeting NOAA's mission to understand and predict changes in climate, weather, oceans and coasts. Today, NOAA relies on satellites to monitor and forecast changes in terrestrial and space weather, the state of the oceans and coastlines, and the regional and global climate. Evolving to a more mission-effective, integrated, adaptable, agile, and affordable architecture of NOAA's space based earth observations will allow NOAA to respond to changing technology, emerging partnerships, and evolving observation requirements. The NOAA Satellite Observing System and Architecture Study (NSOSA) analyzes various innovative approaches to better meet NOAA's mission requirements, with greater flexibility and responsiveness to evolving technologies, and leveraging new business relationships with the private sector. Congress recognized the importance of NSOSA, codifying the program in the *National Integrated Drought Information System Reauthorization Act of 2018*.

The President's FY 2020 budget supports the implementation of NSOSA by proposing to restructure NOAA's satellite budget organized around observation portfolios rather than individual missions, an approach that will better leverage partnerships, be more agile to user needs, and manage risks across portfolios to lower risks and ultimately reduce costs. The FY 2020 Budget also proposes investments to test and evaluate innovative space based solutions and partnerships in the polar and geostationary orbits (\$12.3 million). The FY 2020 budget request continues the important Commercial Weather Data Pilot program (\$3 million), as well as requesting funds to purchase data after successful testing (\$5 million). It is critical to begin now to design a more affordable and more effective data acquisition strategy and to minimize risk of potential observation shortfalls after the currently planned polar and geostationary satellite fleets. For the United States to remain a world leader, NOAA must be innovative, leverage new technology, and develop broader partnerships, while demonstrating organizational agility to adjust to changing needs, risks, and opportunities. To address this, NOAA's initial steps are focused on implementing NSOSA through greater use of new technologies, smaller satellites, and partnerships to meet its mission requirements.

CONCLUSION

NOAA's FY 2020 budget request reflects the commitment Secretary of Commerce Wilbur L. Ross Jr. and I have made to the President 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, wildfires, hurricanes, and severe weather threaten our communities. The growing maritime industry looks to NOAA data to safely and efficiently maximize the value of United States. 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, it is clear to me that we have the most competent and committed people across the entire Federal Government. This FY 2020 budget request includes the core infrastructure and capabilities that these superior professionals at NOAA need to provide the critical services that the American people require.

NOAA's services touch every American, every day. I believe this budget request meets NOAA's core mission, while also positioning the agency to be more efficient and effective moving forward.

Thank you for the opportunity to present NOAA's FY 2020 budget request. I look forward to working with the members of this Committee and our partners and constituents to achieve our Weather & Water, Blue Economy, and Space Innovation goals. I am happy to respond to any questions.

Mr. SERRANO. Thank you for your testimony, sir.

Dr. Jacobs, and I say this with all due respect, I am having a hard time taking this budget proposal seriously. It includes an 18 percent top line cut along with wholesale elimination of nearly all of the grant programs. It proposes terminating 547 NOAA employees and upending the lives of so many students and post-docs whose funding would be pulled from Sea Grant, the cooperative institutes, and the other external research funding.

Do you know how many students exactly would lose the funding they depend on to continue their studies? Is it dozens, hundreds, thousands maybe?

Mr. JACOBS. I don't know the exact number of students that would be impacted.

Mr. SERRANO. Does anybody know at NOAA that could tell us at a sooner rather than later date?

Mr. JACOBS. I will look into that and see if I can find a number.

Mr. SERRANO. So this budget would, in my opinion, halt the early careers of possibly thousands of young scientists. Has NOAA ever discussed that ramification with the department and OMB?

Mr. JACOBS. We have. But in the situation where we had to make some tough choices and balancing administration priorities, we really focused on our core mission of protecting life and property.

Mr. SERRANO. Let me go back a second to my initial question. You say you don't know how many people it would affect. In the discussions with OMB, did it come up the possibility that Congress would ask you how many people it would affect? We tend to do that a lot.

Mr. JACOBS. Well, as far as the impact to our ability to maintain our core mission, we still have what we need to do that. As far as the outreach into the educational aspect of it, I don't have that number.

Mr. SERRANO. Continuing with education. I am extremely disappointed to once again see severe cuts to NOAA's Office of Education. In particular, the budget proposes to eliminate a program I helped create over 20 years ago, the Educational Partnership Program, with Minority-Serving Institutions.

Do you know what some of the accomplishments of this program are, for example, that the partner institutions have produced over 2,300 degrees in the NOAA sciences since 2002?

Mr. JACOBS. Oh, it is a very valuable program. I would point out that we are a million dollars above the previous year's President's budget in this program. As far as STEM goes, there is actually quite a few aspects of this throughout NOAA. We have K-12 programs at the forecast offices. We have a lot of different outreach that we still do. In fact, moving the community model development program outside of NOAA and putting a lot of our data on external web portals gives the universities and students and PIs and post-docs access to a tremendous amount of information.

So my hope is that a lot of this data, while we may not explicit be funding their research, we will be giving them access to more information and data to do research.

Mr. SERRANO. Well, one of the things that troubles me with this whole presentation is that NOAA doesn't seem to know just how

successful they have been. I mean, that the cuts are coming in without fully understanding that these programs mean a lot to a lot of people and produce for the future of our country.

Are you also aware that over 50 percent of our Nation's Black Ph.D. Graduates in the marine and atmospheric sciences benefited from these programs? You do?

Mr. JACOBS. Again, it is—in the budget situation we are in, we had to make tough choices and focus on our——

Mr. SERRANO. What is the budget situation you are in? Is it—I mean, because we have been around here long enough to also know that there is another way of presenting budgets, and that is you leave holes that are easy for anybody to see and then Congress will take care of it. Is this what is happening here, that you are all hoping that Congress will fill in these holes in negotiations with the House and the Senate?

Mr. JACOBS. We made a conscious decision to focus on our core mission of maintaining full-time employees and protecting life and property.

Mr. SERRANO. Let me just ask you one more question. This budget proposes to cut an additional 248 employees from the National Weather Service, despite regular reports, including one from GAO of understaffing and subsequent negative impacts on the quality of forecast produced.

How many hours have weather forecasters worked without pay covering vacant operational shifts because they have hit the overtime premium pay cap imposed by law? What efforts, if any, has the Weather Service taken to avoid requiring its forecasters to work shifts for which they will not be paid?

Mr. JACOBS. As far as I know, we are doing a tremendous amount of work in actually backfilling and hiring new forecasters. In fiscal year 2018, it was the first time since 2011 that our actual hiring had outpaced attrition. And, granted, we had a setback during the shutdown because of typical retirements happening at the end of the year. We are staffed at roughly 91½ percent right now. And once we actually get to the point where we are fully staffed, we won't have to have people, you know, working overtime unless they want to.

Mr. SERRANO. Mr. Aderholt.

Mr. ADERHOLT. National Water Center, it plays a key role, as you know, in strengthening our Nation's water forecast capabilities for floods and droughts and improving preparedness for water-related disasters. My question to you, Dr. Jacobs, would be, can you speak to the importance of the work that is being done at the National Water Center? Especially, I would be interested in speaking—if you could speak in light of the recent flooding events in Nebraska and the fact that NOAA's spring outlook indicated that two-thirds of the lower 48 States face an elevated risk of flooding through May.

Mr. JACOBS. The work being done in the National Water Center is extremely critical. It is a little known fact that water actually is responsible for the most deaths, over a hundred a year, and about half of those are in cars. It is a critical component of our integrated modeling system where we are working on forecasting pre-

cipitation, and integrating that with the national water model, which forecasts stream flow with the help of USGS gauges.

The downstream effects of this are not just related to the protection of life and property, although that is the primary concern; it is actually hugely important to the economy, because the Mississippi River is a huge port, and the water flow, particularly now with the amount of volume going through there, is slowing down the shipping. So there is a tremendous amount of value that the Water Center provides, and it is an integral part of what we are doing.

I would like to add that in fiscal year 2019, we will be including Hawaii in the scope of the National Water Center's coverage, and in fiscal year 2020, we will be including Puerto Rico.

Mr. ADERHOLT. As you know, the committee provided funds to expedite hiring within the Water Prediction Operation Division of the National Water Center. Is NOAA committed to maintaining those staffing levels for fiscal year 2020?

Mr. JACOBS. Absolutely. So right now, we have 68 staff at the Water Center. Our goal is to increase the staff by 25 percent by the end of fiscal year 2019.

Mr. ADERHOLT. Would additional resources in staff help improve the Center's work that they do there? Is that—

Mr. JACOBS. We have the resources. We have \$1.5 million provided by Congress. It is largely a timing and hiring issue, but we are on pace to hit the 25 percent.

Mr. ADERHOLT. Okay. As you are aware, the southeast experienced some of the most destructive and deadly tornadoes in the country. Just earlier this month, I pointed out yesterday in a hearing, that 23 people lost their lives when an EF4 tornado tore through east Alabama, and that is why my constituents and so many in Alabama, and even other parts of the southeast, really value the research programs like the VORTEX Southeast. It brings Federal agencies together to help better understand how environmental factors in the region affect tornado formation intensity and paths.

Yesterday, Dr. Cordova was here with the NSF, and I spoke with her about the role in and our commitment to VORTEX Southeast as well.

Can you take a moment to explain the role that NOAA plays in the VORTEX Southeast?

Mr. JACOBS. So the research and the ability to both observe and detect and predict tornadoes is right on the cutting edge of what we are doing. Typically, I refer to a tornado or a convective cell as sub-grid scale in the forecasting. And while we can observe tornadoes with radar, what we really want to do is understand the dynamics in thunderstorms and be able to try to predict them. And we are just now at the cutting edge of being able to predict rotation and thunderstorm cells. We can't actually predict tornadoes yet, but we can predict tornadic potential.

So the outcome of this project VORTEX, as well as what we are going to be doing with the EPIC, we will be looking at convective resolving models, convective ensembles, and probabilistic forecasting. And eventually, my hope is to get to a point where we can improve what we call our warn on forecast capability, and that is

actually issuing tornado warnings based on forecasted rotation and cells, instead of actually waiting to observe the rotation on radar imaging.

Mr. ADERHOLT. Well, given that NOAA has put such high priority on improving weather forecast models to save lives and protect property, what was the rationale in terminating this program?

Mr. JACOBS. So a lot of the research that is being done in that program, particularly when it comes to convective allowing models, is going to be done on the academic community side through the Earth Prediction Innovation Center. So while we are streamlining our unified forecasting systems, so there has been a lot of talk about the FV3 in the global model, but we are also going to an FV3-based convective-allowing model, which will be the next generation of our high-resolution convective forecast, which will obviously be the key model in predicting tornadic potential.

Mr. ADERHOLT. So this research would be carried out in a different area of NOAA?

Mr. JACOBS. There will be several different parts, both in the Weather Service, U.S. Weather Research Program, as well as other parts of OAR that we will be doing convective research as well as tornadic research.

Mr. ADERHOLT. You mentioned about the fact that it is—that you cannot really predict when a tornado will occur. What do you think it will take for us to develop a real accurate advanced tornado warning system?

Mr. JACOBS. Really, it will be probably parallel paths working on the convective-allowing models and probabilistic forecast, as well as looking into social sciences and the human response to tornado warnings and how they are issued. Originally, we thought that more lead time would provide better response, but how that is messaged is really a social science issue. So we are really looking at this from a social science angle to get the public to better respond to our warnings.

Mr. ADERHOLT. Thank you. Thank you, Mr. Chairman.

Mr. SERRANO. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. And thank you, Dr. Jacobs, for coming back. We had you not too long ago.

As you might recall from our last hearing, I am very interested in what NOAA is doing to address climate change. Significantly, I am interested in preventing damage to the American economy, and also, obviously, improving the science.

As stated in the fourth National Climate Assessment, which NOAA helped produce, the impacts of climate change are already being felt in communities across the country. The increasing frequency and intensity of weather-related disasters, some of which Mr. Aderholt just referred to in the southeast, is having a real economic impact, not to mention lives lost.

Between 2005 and 2018 alone, total Federal funding for disaster assistance in the United States has approached half a trillion dollars, half a trillion dollars in 13 years. Just last month, we heard from you that NOAA provides vital realtime weather and climate data to help communities prepare for severe weather events. We also learned there are key scientific questions that NOAA has to

continue working on to improve the accuracy and reliability of the short- and long-term weather forecasts and climate models.

Now, this proposed 18 percent cut to NOAA's budget decreases funding for weather research and modeling, surface ocean and upper air observations, and regional climate labs. It also eliminates competitive climate research funds and the Arctic Research Program. These are cuts that make it harder to improve forecasts for floods, hurricanes, wildfires, let alone trying to figure out how to predict tornadoes.

I have some questions. In our last hearing, you confirmed that the National Climate Assessment is based on facts and sound science. Is that still your position?

Mr. JACOBS. It is—the National Climate Assessment basically took the RCP scenarios and extrapolated those to generate potential weather and climate forecast impacts, and the results based on those scenarios are grounded in science.

Mr. CARTWRIGHT. So just so we are on the same page, this means you agree with the NCA finding that human activities, especially emissions of greenhouse gases from fossil fuel combustion, deforestation, and land use change, are primarily responsible for the climate changes observed over the last six decades. Correct?

Mr. JACOBS. Well, in absence of any other natural force in human production of CO₂ as well as the removal of the CO₂ sinks is certainly a dominant factor.

Mr. CARTWRIGHT. Do you agree with the NCA finding that we are already seeing the impacts of climate change, and that in the future, we will likely experience increased frequency and intensity of extreme weather events?

Mr. JACOBS. Well, so the impacts of climate change that we have been seeing now, like as far as sea level rise and such, are fairly well-documented. The scenarios of what the actual future weather impacts would be are still being debated. There is some frequency—

Mr. CARTWRIGHT. Let me stop you there. You signed off on the National Climate Assessment, and that is in there.

Mr. JACOBS. Well, those are predictions based on predictions. If you believe the assumptions on the first set of predictions, then, yes. The discussion as far as—

Mr. CARTWRIGHT. I don't mean to interrupt you, but we have limited time. You believe it and that is why you signed off on it, right, Dr. Jacobs?

Mr. JACOBS. Well, those are peer-reviewed papers. But, you know, we would have to wait a hundred years to see if they verify.

Mr. CARTWRIGHT. Of course. Do you also agree with the NCA finding that without substantial and sustained reductions in global greenhouse gas emissions, the continued warming is expected to cause substantial net damage to the United States economy throughout this century?

Mr. JACOBS. Well, there is also a discussion of improved agricultural capabilities—

Mr. CARTWRIGHT. It is a yes or no question, and then you can explain. Do you agree with that? It is in the NCA finding that you signed off on.

Mr. JACOBS. I don't disagree with anything in the NCA.

Mr. CARTWRIGHT. Okay. And you can explain, I don't mean to cut you off.

Mr. JACOBS. Well, I mean, there is—there could be positive potential impacts as well, and some of these are natural and some of them are human induced; it doesn't change the fact that we should be prepared to deal with them.

Mr. CARTWRIGHT. Exactly. Mr. Jacobs, have you communicated your views on the soundness of the NCA to the White House, who believe that climate change is a hoax?

Mr. JACOBS. I have had numerous discussions with Dr. Droege-meier, who is the advisor to the White House on all things related to science.

Mr. CARTWRIGHT. Well, do you think it is responsible leadership on the part of the Administration knowingly to ignore the advice of its foremost scientists, like you, Dr. Jacobs, on an issue that will cause significant harm to the United States economy and loss of lives?

Mr. JACOBS. I don't have any evidence that they are ignoring what they are being told.

Mr. CARTWRIGHT. Thank you, Doctor.

I yield back.

Mr. SERRANO. Mr. Case.

Mr. CASE. Thank you.

I understand—I think all we have at this point is your budget and brief. I don't think we have your congressional justifications of your budget yet. Is that correct?

Mr. JACOBS. I don't believe so.

Mr. CASE. Okay. And is there any reason for a delay in getting that to us?

Mr. JACOBS. I suspect part of it is related to the shutdown and just delaying our ability to get it out.

Mr. CASE. Any expectation about when we can get a more detailed explanation of your budget?

Mr. JACOBS. We can certainly get you one—I can get you one as soon as I can. I am hoping later this week, but not completely sure on that.

Mr. CASE. Okay. First of all, I just want to associate myself fully with my chair's remarks. I just find it unbelievable the cuts that were suggested in NOAA, and this comes from somebody that has believed in NOAA for a long, long time. I think many of us do. I think we believe in your mission. I think we believe it is critical, not just to the safety of folks and property around the world, but in a whole range of issues, really critical to our overall mission, scientific advancement, certainly our atmospheres as they are entering a critical phase and our oceans that are entering a critical phase. So I don't get the reductions and I don't get where those came from.

I cannot believe that anybody in NOAA that believes in the mission of NOAA supports these cuts, and so I have to assume that somebody somewhere told you, hey, cut it. So is it correct that this was a top-down directive to reduce by that much in NOAA or was this some bottom-up judgment about priorities within NOAA?

Mr. JACOBS. Our primary mission was just to focus on dealing with some tough choices, and we really chose to prioritize our core mission and essential functions over a lot of the external grants.

Mr. CASE. Okay. Well, let me give you an example in your budget, as I understand it. I was born and raised in Hilo. Hilo, Hawaii. Hilo, Hawaii, has had two devastating tsunamis in recent history, 1946 and 1960. I actually was there in 1960, I was a young boy. Our family routinely evacuated every time there was an earthquake anywhere in the Pacific rim. There was an earthquake in the danger zone, we didn't know if a tsunami was coming or not, we got out. And we would do that about once a year. We lived down by the ocean, we were in the danger zone. My school was in the danger zone.

One day in 1960, the siren came on, we evacuated and we went to high ground. I went to sleep, I woke up, my town was devastated. There were 61 dead. And that was true throughout the Pacific rim. There was incredible damage in Chile; Japan, loss of life; California, loss of life, throughout the Pacific rim from a tsunami that was generated. And that was really the genesis for the tsunami warning systems that are so perfected today.

The problem of why people died in Hilo in 1960 was that they didn't believe a tsunami was coming. They had no independent verification. They had an evacuation warning once a year, and they got into the lull of thinking, well, it is not going to happen this time around.

And so when I see that you have proposed in this budget to cut the Pacific warning center, which seems to—you know, which may be a small amount in the big picture, but it is really, really critical to assure people of when a tsunami is and isn't coming, which still happens. Once a year, we have an earthquake somewhere in the Pacific rim. I don't get it. You know, that is a budget cutter up above you somewhere saying, well, let's just cut that. We don't understand the importance. And I am sitting here telling you, I lived through it. And that is very, very important to people.

So can you elucidate a little bit on that one subject, why the tsunami warning function in the Pacific is being cut?

Mr. JACOBS. So the function itself is not. We are looking at consolidating the warning centers. Right now, we have two. We were looking at consolidating it to one. The actual DART array, as well as—we are actually exploring some other potential capabilities, so I will get into those in a second. But the DART array is fully funded. That is not going to decrease. It is the consolidation of the warning centers.

There is actually the potential for us—we have a plus of \$2.2 million for commercial data buys off ships, and there is some new interesting tsunami detection capability on several commercial ships. And now that they are installing SACCOM on these ships, there might be a way that we can actually enhance our tsunami-detection capability through this data.

Mr. CASE. Will your scientists come before Congress and tell us that this replacement array facility capability that you suggest is going to be equally safe or safer from a tsunami prediction perspective than what we have now? Or is this simply about cutting budgets?

Mr. JACOBS. It won't be less safe. We haven't seen the data yet, so until we actually see the data and run the tests, it is going to be hard to quantify how much of an improvement it will add.

Mr. CASE. OK. Well, I would suggest to you that that is putting the cart before the horse, because you are proposing to cut out that whole warning center before you have demonstrated and said with assurance that it is going to be safer. So I don't know why you are sitting here cutting it right now when you don't have the conclusions yet. But, anyway, we can move on.

I am going to move on. Thank you.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. And Administrator Jacobs, thanks for coming back.

This is going to seem a lot like *deja vu*, same questions, same issues, parochial to, not just my State, but to the Gulf of Mexico States, and probably the United States. I would like to jump in and discuss marine aquaculture.

As you know, marine aquaculture produces healthy, sustainable, and affordable seafood, yet the United States ranks 16th in the world in terms of aquaculture production. We owe it to our citizens to do better, which is why I am reintroducing the bipartisan AQUAA Act this year, to provide a clear path for permitting aquaculture in U.S. waters.

Given that reducing the seafood deficit is one of NOAA's top priorities, why does this budget proposal zero out Sea Grant programs which provides important aquaculture research that drives economic development?

Mr. JACOBS. When it comes to Sea Grants, we had to make some tough budget decisions and some choices, and really decided to focus on our core capability and mission.

I would like to add that there is an additional \$13 million directed at aquaculture. The funding would enhance coordination with aquaculture siting and research, permitting agencies to simplify the process and streamline it in Federal waters.

Mr. PALAZZO. What can we in Congress do to help with that permitting process? In fact, that is what the AQUAA Act is designed to do. And I know my Senate colleagues are trying to perfect it right now, as well as my House colleagues, and we are working very closely with your team. So what can we do?

Mr. JACOBS. I think what you are doing with the AQUAA Act is perfectly in line with what we have in mind for aquaculture.

Mr. PALAZZO. Why is aquaculture one of NOAA's top priorities? Why should we be invested in aquaculture?

Mr. JACOBS. Well, there is roughly a \$16 billion seafood trade deficit, and that is one of the things that we are trying to mitigate. Right now, almost all of the farmed fish is imports, and there is really no reason why we shouldn't be doing that in our own waters.

Mr. PALAZZO. All right. I know my colleague, Congressman DeLauro, would agree with you that we need to rely more on our domestic fisheries than foreign imports.

So again, the AQUAA bill is very much a bipartisan bill, and I hope to be sharing that with everyone on this committee in the near future.

OK. Moving on, let's talk about hypoxia. When you were here last month, we discussed the importance of hypoxia research in stopping the growth of harmful algae blooms. This year, we are forecasting unusually high flooding levels across the country. Thirty-two States, again, drain into the Mississippi River basin, two Canadian provinces, and much of the nutrients of freshwater that cause hypoxia make their way into the Gulf of Mexico. More flooding means a growing dead zone in the Gulf. And right now, we have some record flooding happening all across the Mississippi River basin.

And I know the EPA spearheads the Mississippi River, the Gulf of Mexico Hypoxia Task Force. But how does NOAA also help stop the growth of hypoxia? And anything you would like to add to what NOAA is doing to help us understand it and hopefully research it and, you know, shrink it or prevent it from further growing.

Mr. JACOBS. So actually, preventing the events is beyond the scope of our mission, but what we can do is we can help predict them. So this is where we really need to focus on, not just integrating our precipitation forecast models with the national water model at the Natural Water Center, but also integrate the runoff that the national water model produces through areas that would be prone to take nutrients into waters that would trigger harmful algal blooms.

It is typically when these algae bloom that they trigger a hypoxia event. So this is all sort of traced back to, largely, inland water flow exiting in through the estuaries out into the ocean. So improving and integrating the modeling system, not just on the national water model side, but also on the harmful algal bloom side, having the coupled hydrological, ecological, biological models is going to be critical in this.

Mr. PALAZZO. And I guess last October, we were talking to Rear Admiral Silah, who testified before the Senate committee about the NOAA fleet recapitalization. And I believe he stated that we are decommissioning more ships than we are commissioning. Can you tell us about your plans on the recapitalization of the NOAA research survey ships?

Mr. JACOBS. So at the end of fiscal year 2019, we had a deferred maintenance backlog of roughly \$12.6 million in ORF and 11.4 in PAC. One of the things that we are looking at is the Hi'ialakai. There is \$3 million invested in that, but it is not for actual repairs. It is actually to determine the critical missions that it does; you know, how can we offload those onto other vessels, whether we contract or charter or actually try to divide up the current hours that we use across the other fleet.

Mr. PALAZZO. I yield back. Thank you.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman. Thank you, Dr. Jacobs, for being here today.

Taking a look at this budget request, it appears that you will be cutting as much as 75 percent of the total funding NOAA provides for addressing harmful algae blooms. And as I am sure you can agree, algae bloom events have significant negative impacts on the communities that are affected by them.

Following the devastating red tide bloom off the coast of Florida this past year, the Tampa Bay Regional Planning Council performed a business damage assessment survey to gain a broad understanding of the economic impact of the algae bloom. That survey estimated that the total physical and economic damages between August and December of last year for the 12 most impacted counties in Florida was just over \$130 million. So 12 counties out of our 67, 5 months' time period, \$130 million lost, which is a significant number.

And unfortunately, the funding levels to support algae bloom research monitoring and response are already disproportionately low compared to the economic impact. So I was very disappointed to see that this budget request proposes to cut them even further.

Considering the significant economic impact of harmful algae bloom events, how can you justify cutting that part of the budget in particular even more?

Mr. JACOBS. So, again, this is a tough budget decision. We made a conscious decision to retain. So out of that it was a cut of roughly \$23.7 million. We are retaining \$8.8 million for key personnel, particularly related to the forecasting of harmful algal blooms, hypoxia, pathogen research, and forecasting for habitat and species and the science related to that. So the actual forecast tools will remain, so the HABs prediction and hypoxia predictions will continue, but a lot of the research will be cut.

Mr. CRIST. I think I heard you say that the cut is \$23 million?

Mr. JACOBS. Well, we actually do harmful algal bloom research in a lot of different areas, but we are retaining—

Mr. CRIST. That is not what I asked you. I thought you just said—you cited a couple of numbers.

Mr. JACOBS. So for the end cost program, it is minus 23.7, but we are retaining 8.8. There will be potentially 94 positions that, you know, will look at early retirement and such.

Mr. CRIST. Well, you know, I studied a little math in school. So we are cutting 23 and we are keeping 8. So does that mean before it was \$31 million total and is being reduced to 8?

Mr. JACOBS. We are going to retain 8.8 for this program, but there is actually—the work that we do for harmful algal blooms is not—there is a lot of different work that we do in different areas.

Mr. CRIST. What is the total that you allocate for algae bloom research and effecting it?

Mr. JACOBS. I don't have the exact number for the total. It would—I mean, it would extend, some could argue, all the way back to our forecast models because of the water runoff at the National Water Center being a key component of this.

Mr. CRIST. Let me ask it another way. Do you think that this budget request to us with these reductions of approximately 75 percent is appropriate in order for you to continue to meet your mission and help us avoid these kind of problems going forward, and be able to research and learn from them?

Mr. JACOBS. Well, it will obviously, you know, slow some of the research, but we will be able to maintain our core forecast capabilities at—certainly at their current standards.

Mr. CRIST. So what did you do with the \$23 million dollars if you could do it without it?

Mr. JACOBS. Well, that was dedicated at looking at how we could improve future capabilities.

Mr. CRIST. That would be a pretty important mission, would it not? It is to Florida, and I am sure Mississippi and other places that are affected, to Alabama.

Mr. JACOBS. It is definitely important, but, you know, we had to make some tough decisions and chose to just retain the core essential functions.

Mr. CRIST. This is not a part of your core essential function?

Mr. JACOBS. Oh, providing the harmful algal bloom forecast, that is part of our core essential function.

Mr. CRIST. Which part is not? The research?

Mr. JACOBS. The external grants and research that would help us further improve our mission in the future.

Mr. CRIST. Thank you. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Jacobs, the administration is proposing the elimination of the National Centers for Coastal Ocean, NCCOS. Let's discuss this proposal. First, your budget says that you will continue some of the highest priority work, but you failed to provide any information about how you will implement this plan. Can you shed some light on it?

Mr. JACOBS. I believe you are talking about the end cost, the minus 23.7.

Mr. SERRANO. Yes.

Mr. JACOBS. So, again, we are retaining \$8.8 million of that to maintain our core functions and the tools that we provide to the public for just—not just the harmful algal bloom and hypoxia that we were just discussing, but pathogen research and prevention. But, you know, the additional research that is being done is not part of that retention of core capability.

Mr. SERRANO. But you still didn't tell us exactly how you are going to implement the plan, though.

Mr. JACOBS. Well, implement the—the 8.8 will not be implementing anything new; it will just be retaining the core capabilities that we already do.

Mr. SERRANO. You know, I am having difficulty with this hearing, because a lot of these things that are coming up look like they were not thought through completely. And as my colleague, Mr. Case, said, there has got to be people at NOAA who take this seriously, I mean, and I know you do. And it is clear to me that this did not come from you folks. You might have been told, here it is, and maybe you can comment on it, but this sounds like a policy that comes from some other place. But we will have to deal with that as time goes on.

The budget also cuts a program in the Arctic that models and protects sea ice. Given that Russia is rapidly expanding its activities in the Arctic, our knowledge and understanding of sea ice is critical to our national security. How do you reconcile the elimination of NCCOS with the administration's broader national security efforts?

Mr. JACOBS. So a lot of the research that we do as it pertains to climate in the Arctic is being cut. But I would like to add that we are doing some enhanced work and development on forecasting

and analyzing sea ice and sea ice flow as it pertains to both our dynamical weather model and our general circulation climate models. And this is something that we are working very closely with the Navy on.

Mr. SERRANO. You are working with the Navy, and you feel that then this will make up for any deficiency that I might have pointed out?

Mr. JACOBS. It is yet to be determined if it would make up for the deficiencies. I think that the scope of it is a little bit different. It is more, how do we manage dealing with the sea ice and the analysis in the next couple of years versus very long range.

Mr. SERRANO. NCCOS has been performing the work of evaluating the impact of rising sea levels on our coastal military installations, as Congress has repeatedly directed in the National Defense Authorization Act. Can you explain the seeming contradiction between the department's claims of prioritizing national security and the elimination of a program which is critical to it?

Mr. JACOBS. We actually are doing a tremendous amount of work in research and getting our data out there through various ocean data portals. Two of the things that I would like to point out—well, one of them, the [marinecadastre.gov](https://www.marinecadastre.gov) website. This is where you can actually access a lot of the sea level rise data. This is made available to the public. We are increasing this by \$4 million to try to get the data out to the public.

You know, this is something that I think would be very useful, not just for our stakeholders, but possibly any other—whether it is private sector or other government agency doing planning when it comes to future mitigation of sea level rise.

Mr. SERRANO. Committee members will note that I am keeping to the 5-minute rules.

Mr. Aderholt.

Mr. ADERHOLT. Thank you.

Let me go back to tornadoes. I want to take a moment to discuss the fiscal year 2020 request for the National Mesonet Program. Despite the fact that the National Mesonet Program is a key component of NOAA's efforts to develop a weather-ready Nation, the 2020 budget request proposes to reduce the geographic scope of the program from all 50 States to prioritize States most susceptible to tornadoes and severe weather.

How important, in your opinion, is the Mesonet program improving weather predictions around the country?

Mr. JACOBS. The Mesonet program is very important because it is one of our only conduits to access data outside of the data that we actually collect ourselves. But it is beyond the typical Mesonet, which you would think is surface observations. There are other observing systems in there, such as atmospheric profilers and commercial aircraft data.

The vertical profiles that we obtain through the Mesonet program are extremely critical. The surface obs, you could divide the surface obs in criticality based two ways. One would be the quality of the instrumentation, and the other one being the geographical location. So there are certain areas where the surface obs and the Mesonet would provide more impact in the model skill than the other.

Mr. ADERHOLT. Well, I appreciate that the program was protected in the request, but how will scaling back the program impact areas of the country, especially rural areas which rely on the program to define rapidly deterring weather conditions that are not identified by other observation platforms?

Mr. JACOBS. Well, that is—I mean, that is going to be tough to fill in those gaps. A lot of these—a lot of these Mesonets tend to be coincident with agriculture. So you tend to see a lot of the Mesonets in rural areas versus urban areas, which is actually a good thing because, as you say, there is not a lot of deployment of other systems out there.

One of the only other ways that we can offset this is just through the better assimilation of satellite data, because in these rural areas where we don't have a lot of data, it is really hard to get information in the boundary layer.

One of the things that the Mesonet program does do is regional airlines, which is a little bit different than the data we collect from the wide-body long-haul flights, and the regional airlines fly into these smaller regional airports, and the vertical profiles that they provide are extremely critical.

Mr. ADERHOLT. The 2019 conference report included guidance for NOAA to continue to expand the Mesonet program. How does NOAA plan to implement this direction in the upcoming year, and how will expanding the program improve weather forecast warning?

Mr. JACOBS. Well, the National Mesonet Program, I would argue the term “national” could possibly be a misnomer. It would be an interesting way to actually acquire non-NOAA related data that go well beyond the Nation's borders. For example, information from, you know, commercial aircraft data profilers or other Mesonets possibly in areas outside of our country.

You know, when we really, over the next couple of years start to focus on high-resolution global modeling systems, the most valuable information might not actually be collected within our borders. It will most likely be collected to our west, whether it is over the Pacific Ocean or countries that we work with through the WMO and data-sharing agreements.

It is entirely possible that we will find ourself in a situation where we would be doing commercial data buys for data—in situ data from observing systems overseas, and I can envision the National Mesonet Program possibly being one of those ways of doing that.

Mr. ADERHOLT. Let me switch briefly to improving our ability regarding the Earth Prediction Innovation Center. I think improving our ability to predict the Earth's systems, including weather climate and extreme events, has the potential to add enormous value to our economy, advance national security, and protect the safety of our communities.

How will the Earth Prediction Innovation Center advance its capabilities?

Mr. JACOBS. So there is two primary hurdles that the EPIC tries to address. The first one is we really need access to expertise outside of NOAA, and these visiting scientists don't have security clearances to log into our machines. And it takes them—if they

apply, it takes them well over a year to get it. So the only way I can think of to solve this problem is to move our software development to compute resources external to NOAA.

The other thing is, per the Weather Research Innovation Act, we are required to develop a community model, and that doesn't necessarily just mean make the code community available; it means make the code accessible by the community on compute resources that the community has access to.

So EPIC will sort of be the virtual hub where we manage the code development in commercial cloud vendors' hardware. So this will be the compute that the community has access to, and we make the code available and manage it through EPIC. So we are essentially crowdsourcing model development with the academic community and private industry.

Mr. ADERHOLT. Okay. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

Well, Dr. Jacobs, in the oversight hearing last month, you and Dr. Freilich identified several gaps in our Earth-observing capabilities, saying that obviously it would be more—it would be useful to have more data on things like aerosols, vertical wind, and soil moisture, better to predict weather, manage our resources, and understand climate change.

Why does the Administration want to cut funding for research in these areas when it is clear more resources would make sense?

Mr. JACOBS. Well, some of the low hanging fruit that we are looking for in analyzing the satellite data, which is what we were discussing at that last hearing, is actually extracting more value from the data. So right now, with the existing capability that we have, we do not use roughly 80 percent of the data that we bring in, just because the file sizes are too large. So we only use about 10 percent of the data that we collect, as far as prediction capabilities, and only about 2 percent actually influences the initial conditions in the models.

So for a small amount of investment on the satellite data simulation side, if we can move that number from 2 or 3 percent to 5 or 6 percent, we could potentially have huge gains in forecast model skill, just using the current data that we have access to.

Mr. CARTWRIGHT. Well, I know you are trying to invest your limited resources wisely, but it has to be obvious that you can't possibly make up for the slashing of all of the following programs, and this is a mouthful, so bear with me. And it is not a complete list of the programs this budget proposes to reduce or eliminate.

The VORTEX Southeast, taking out \$5 million, that is something that improves tornado forecasts in the southeast U.S., including Alabama, which as we have heard, was hit by about 40 tornadoes in March that killed more people than all of 2018. And according to NOAA's website, the number of killer tornadoes in the southeastern U.S. is disproportionately large when compared to the overall number of tornadoes throughout the country.

It cuts out \$2.6 million from the Airborne Phased Array Radar, which improves detection and understanding of severe weather. It cuts out \$60 million from the climate competitive research activi-

ties, including NOAA's funding for the National Climate Assessment. It takes out \$3 million from the Antarctic ecosystem research program, Antarctic research. It takes out \$6 million from that to improve operational sea ice modeling and predictions. It slashes \$3.7 million from the regional climate centers, which help regions deal with emerging droughts and floods. It takes out \$4.8 million from the Air Resources Lab, which researches atmospheric dispersion of mercury and other pollutants harmful to human health.

My question is, have you informed the administration that cutting funding for weather and climate research makes it harder for NOAA to improve forecast precision, which is an important element for securing people and property and the American economy?

Mr. JACOBS. We have worked hand in hand with them in formulating this budget.

Mr. CARTWRIGHT. So, yes, you have informed them. Thank you for that.

So why is the administration ignoring the advice of its expert scientists on the importance of improving forecasts to secure lives and property and protect the American economy?

Mr. JACOBS. Well, we had to make some tough budget decisions and we were forced to essentially look at retaining our core missions for our current state of predictive capabilities.

Mr. CARTWRIGHT. Now, there is this ad hoc working group I want to ask you about. Did the White House ask NOAA for input into the formation of the White House's ad hoc working group to question climate science? And will NOAA's climate and science experts be any part of that?

Mr. JACOBS. I don't know that there is any ad hoc working group that has been formed.

Mr. CARTWRIGHT. OK. You are not a part of it if there is?

Mr. JACOBS. I have been in discussions with various folks about issues related to the climate change, that is primarily the OSTP's director's job, but I don't know of any ad hoc working group that has officially been formed.

Mr. CARTWRIGHT. Will you commit, Dr. Jacobs, to informing the administration that we know with certainty that humans are contributing to climate change and that NOAA can make available expert scientists to help explain it? And can you report back the results of these conversations?

Mr. JACOBS. We make available all of our data. Certainly, the administration is aware of the research that we do. I am happy to report that back. And within the potential scope of NCA-5, that will be the official report.

Mr. CARTWRIGHT. Last question. Are staff and scientists at NOAA ever discouraged from using terms such as "climate change" and "resilience"? And if you have heard of such instances, what would you do about it?

Mr. JACOBS. I am vehemently opposed to any type of academic censorship on this front. And transparency and openness is key to what our agency does. Our entire mission is based on providing open and transparent, robust defensible science.

Mr. CARTWRIGHT. Thank you, Doctor, I appreciate that.

I yield back.

Mr. SERRANO. Mr. Case.

Mr. CASE. Sorry, I am still on the overall budget cuts and trying to figure out what the message we are to take from the Administration is on the budget cuts. And I understand that you felt you were under, or perhaps I am putting words in your mouth, but felt you were under directions to do substantial reductions.

As I look at kind of where the reductions really fell the worst on, it just seems inescapable that the programs of NOAA that are focused on the oceans, and I don't mean on fisheries management, I mean on the conservation and health and welfare of our oceans overall, were the ones that took the biggest hit. I see the National Ocean Service, if my math is correct, 65 percent of fiscal year enacted. OAR, Ocean and Atmospheric Research, I don't know the division there, but 55 percent of prior enacted, whereas, really your atmospheric was reduced and your satellites were, for the most part, maintained.

Now, I have no—I made the same motion—I breathe the same air as everybody else in Hawaii, and we have the same use for the satellites, all of which is incredible research in contributions by NOAA. But if you look at the map above the chair over there, you will see that in Hawaii, we kind of live in the middle of a big ocean, so we are more focused on the ocean.

So was there some judgment within NOAA or somewhere else that somehow oceanic research was, you know, not pulling its weight or too many external grants, or is that a priority judgment I should take from this budget exercise?

Mr. JACOBS. So as far as the OAR research, we are funding climate at 88 million, oceans at 98, and weather at 110. But I would point out that a lot of the weather research we are doing benefits the climate research, so it is pretty linear across the board. Oceans are, you know, it is part of my life, I mean, surfing and fishing are my two favorite hobbies. One of the things that we are funding—

Mr. CASE. We have something in common, by the way.

Mr. JACOBS. I know. I have been to Hawaii multiple times, I love it there.

One of the things I would like to point out is our National Oceans Partnership Program. So we will be relying heavily on public-private partnerships with key stakeholders on this to do a lot of the work. You know, whether it is actual research or just outreach, I think that there is a lot of opportunities here, both on the oceanographic prediction side as well as the observing side, not just in the water chemistry, but also bathymetry.

Mr. CASE. Can I switch back? I just need to switch. I am not sure that I understand your answer. One part of your answer could be that we are going to essentially privatize a lot of the functions of NOAA and, as you say, lean on the private sector for that. And I am not sure that that is the right policy decision, but anyway, we can have that discussion further.

Can I switch back to the NOAA fleet and talk to you about the NOAA fleet, because your recapitalization program, which I fully agree with, called for replacement of NOAA ships overtime, but assumed that the Hi'ialakai, which is the NOAA ship home ported in Hawaii, would be continued in place for some period of time into the future. And as you and I know, the Hi'ialakai is no longer seaworthy. That came as a sudden surprise to many people. And so,

therefore, the functions that are carried out of Hawaii are discontinued from that perspective.

I think you mentioned—well, two questions. First of all, have you considered revising your recapitalization program to accelerate ship construction and to home port a replacement ship in Hawaii, number one? And then, number two, what is your plan in this budget for fulfilling the research needs of the Hawaii-based NOAA activities?

I think that if I look—I don't think you mentioned \$3 million in your answer to my colleague, but I am not sure, is that allocated to Hawaii replacement time or is it across the board? I see \$200,000 in here, but I don't know whether the \$3 million is in the materials that you gave us.

Mr. JACOBS. So the \$3 million is directed at trying to offset all of the work that the Hi'iialakai was doing. And so whether we can use that funding to do it on other NOAA ships or we have to charter other vessels or contract it out is to be determined based on the specific requirements. There are some type of requirements that are very specific to the type of vessel based on instrumentation and how the vessel is outfitted. So those could be limiting factors.

As we go through the revision of this plan, we would certainly love to work with you on this.

Mr. CASE. Appreciate that. So just to recap what you just said. The \$3 million would essentially buy replacement time for Hi'iialakai through the next fiscal year?

Mr. JACOBS. That is the plan.

Mr. CASE. Okay. And what about my question on revising the recapitalization plan to account for the Hi'iialakai's departure?

Mr. JACOBS. We would definitely love to work with you on the development of that.

Mr. CASE. Thank you.

Mr. SERRANO. Mr. Aderholt, do you have any more questions?

Mr. ADERHOLT. Unless you have something, I could submit to the record. So whatever is good for you. If you want to continue on for another question or two or if you want to conclude, I can submit for the record.

Mr. SERRANO. Well, let me just ask one question and then you can finish up.

Mr. ADERHOLT. Okay. All right. I will finish up with one question as well.

Mr. SERRANO. Mr. Jacobs, Puerto Rico's coral reefs provide nearly \$1 billion in economic value to the island annually, supporting the tourism industry and protecting lives and infrastructure from storm surge by acting as a barrier. In September 2017, Hurricanes Irma and Maria caused extensive damage to the these valuable and slow growing reefs. Fortunately, NOAA's coral restoration work helped dramatically speed up the recovery.

How does the proposed 6 percent cut to the coral reef program reflect a need to restore Puerto Rico's damaged corals and coordinate with agencies like FEMA to conduct post-storm damage assessments?

Mr. JACOBS. So the coral reefs are incredibly important, and after the storm, one of the things that we did, in addition to working with the Marine Corps to install radars and get the basic ob-

serving system capabilities up there, was to go and revitalize and do a lot of the marine debris removal of the coral reefs.

One of the issues, not just with the damage to the reef, but actually the reef itself was damaged just from debris, as well as enhancing the coral reef. One of the great things about the reefs that surround Puerto Rico is that they actually are an integral part of dissipating the wave energy. So it is incredibly important to have them in place to, you know, to essentially protect the land from not just storm surge but waves.

Mr. SERRANO. So these cuts you think will affect that work in any way?

Mr. JACOBS. Well, a lot of this research just on the coral side is—it is a reduction of 1.6 from the enacted, but it retains \$26.1 million to continue on with that research. And so there is the opportunity to focus research on coral restoration as well as disease and such.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mr. ADERHOLT. Of course, every day, NOAA generates tens of terabytes of data from satellites, radar, ships, weather models, other sources. And, of course, NOAA makes that available to the public. What is the—tell us about the Big Data Project, and in what way is it different from what NOAA is already doing with the data?

Mr. JACOBS. So the Big Data Project is a great way to work with various cloud vendors in getting our data out to the public. So I know in the past I have discussed limitations with compute resources, but we also have limitation on storage, storing this data. We have well over 25, probably closer to 30 petabytes of data that the public actually can make use of, not just the research community, but private industry and other government agencies.

And so working with various cloud vendors, that they can set up a sort of interface where companies can actually download the data and generate value-add products from our data is enhancing, obviously, their business models, but it also benefits us. Because if we are driving industry to co-locate their operations adjacent to where we store our data on these cloud vendors, it is an incentive for them to work with us on negotiating a deal on storage because we are actually improving their revenue by generating business that wants access to the data that the taxpayers pay, and we produce and put on these data portals.

Mr. ADERHOLT. I know—and let me just change the subject, one thing about that, but it reminded me of it. I know growing up, I would listen to the NOAA weather radio reports and, of course, at that time, you didn't have weather available as quickly as we do nowadays with cellphones and apps and different things like that. Of course, you all still operate the weather radio program that has been in existence for—I am sure for decades.

What—is there—in the day and age of smartphones, is there a way to access that data without a weather radio, or is it—do you have to have a weather radio to access that today?

Mr. JACOBS. So the NOAA weather radio is a very unique and important program. It actually saved my life in 1997. I would have been hit by a tornado had I not been listening to it. There are other ways to access that information. We disseminate our warnings and

watches over various third-party vendor apps. There is also the capability of low Earth orbiting satellites that phone connectivity can get you access to this information, whether it is MRSAT or Iridium or another satellite data provider. But some of the, you know, the key core capabilities would still be part of the weather radio.

So we are always looking at ways to try to get our message out there. And with the help of a lot of these various third-party app developers, certainly smartphone devices are one way to do it, but that doesn't mean that it would ever be something that could possibly replace that.

Mr. ADERHOLT. Is what—of course, the information—if you have a weather radio that is, of course, you have free access to that information. Is there an app that the public has access to free of charge?

Mr. JACOBS. So we don't develop apps ourself. One of the things that we made a conscious decision on, because if you look at the National Academies' fair weather report, it basically defines swimlanes of what the weather service would do versus what private industry would do. And private industry has done a tremendous job in developing these apps. Some are free, some are for cost. And we would—essentially, if we tried to develop a competitive app, would not only be competing with a product that is probably better than what we can do, we would rather rely on them as a key partner.

So as part of the Weather-Ready Nation, we have ambassadors which are, you know, essentially private sector, what we call value-add industry, that we rely on to disseminate our warnings and watches deeper into the public.

Mr. ADERHOLT. And you access the information from the weather radio. If you don't have a weather radio, can you access it off the internet?

Mr. JACOBS. I don't know that you can access it in the exact same format. The weather radio essentially just reads a lot of these transcribed pieces of information.

Mr. ADERHOLT. So, in essence, you have to have a weather radio in order to get the—

Mr. JACOBS. The weather—the feed that goes out encoded for the weather radio is specifically designed to be heard over the weather radio.

Mr. ADERHOLT. And there is really no other way you can get that, at this point?

Mr. JACOBS. At this point, not that I know of. There might be a third-party app that could transcribe it into something on the internet. Technically, it is possible. It would essentially just be doing what the weather radio does except, you know, voiceover IT or something.

Mr. ADERHOLT. So you all made the conscious decision not to have, through the internet or through an app, where it would just read off the message that you get on the weather radio?

Mr. JACOBS. Well, the text—the text is just the warnings. Those are issued over the internet, they are issued over smartphone devices.

Mr. ADERHOLT. But verbally?

Mr. JACOBS. Verbally, I don't know. You would have to have some software that would actually read the text off a web browser out loud.

Mr. ADERHOLT. All right. Thank you very much.

Mr. SERRANO. Let me just say on that point that we are big fans of NOAA here, and I suspect you could do a better job than private industry in putting together an app that could give us information. In fact, I will probably get a lot of letters on this—or some. But I bet you when they were putting together their apps, they were working off of a lot of information that you guys have been gathering for years. And NOAA—don't undersell yourself.

Thank you for your testimony today. I am not making excuses, but if at times the questioning was probing, it is because we are big fans of NOAA here, and we want NOAA to succeed and to continue to succeed. And when we see a budget proposal like this one, it worries us.

And I think, in this case, you know, when it comes to spending money, we always have differences on different sides of the aisle. But I can honestly speak for Mr. Aderholt to say that we are fans of NOAA, and we want NOAA to do the right job and to be prepared and supported by Congress in doing the right job. So that is why we ask the questions the way we did.

Thank you, Mr. Jacobs, and hope to see you again.

Mr. JACOBS. Thank you for your support.

Mr. ADERHOLT. Thank you.

Mr. SERRANO. The hearing is adjourned.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

WEDNESDAY, APRIL 3, 2019.

DEPARTMENT OF COMMERCE

WITNESS

HON. WILBUR ROSS, SECRETARY, U.S. DEPARTMENT OF COMMERCE

Mr. SERRANO. The subcommittee will come to order.

We have an unusual situation today. We invited the Secretary of Commerce to come to testify before us this afternoon about his department's budget request, as Secretaries of Commerce have done consistently for many decades. After agreeing, he then communicated to us via or others at the Department that he was backing out and wanted to send his Deputy in his place. But Secretary Ross had no schedule conflicts to speak of and no other excuse, other than the fact that he simply didn't want to appear before this subcommittee and be held personally accountable.

This is the second time the subcommittee has experienced this problem during this administration; the first was 2 years ago, when former Attorney General Jeff Sessions became worried about the Russian investigation; the second is today.

I think that the Secretary's actions today show a stunning disrespect for the mechanisms of our democracy and the Article I powers of the Congress, as if we needed any reminding that the President and his staff couldn't care less about our institutions of democracy. We see a clear manifestation of that problem this afternoon.

I understand that Deputy Secretary Karen Dunn Kelley has offered to testify; that will not be happening. This subcommittee invited Secretary Ross to testify and he is the only one who will be allowed to testify at this hearing. Neither the Deputy Secretary, nor any other Department officials, will be recognized to give a statement or to answer questions.

I strongly believe in transparency and accountability, and that starts at the top of every government agency, including the Commerce Department. The Secretary has a lot of questions that he should answer directly. This is particularly true with regard to the Census where at this hearing last year the Secretary appeared to lie in response to questions about—from myself and Congresswoman Meng regarding the addition of a citizenship question to the 2020 Census.

It is also true for the overall Commerce Department budget, which shows a shocking disregard for the American people. The Commerce Department budget process eliminating programs that specifically help rural and under-served communities like the Economic Development Administration and the Manufacturing Extension Partnership Program; it undermines community safety and climate change research by proposing an 18-percent cut to NOAA, in-

cluding the elimination of several dozen important grant, research, and educational programs.

The budget, once again, under-funds the Census Bureau, even for the critical census taking place in the year 2020. It proposes to eliminate funding for Minority Business Development Centers.

The Secretary should be here to justify these harmful proposals rather than ducking our questions.

Congress, through this committee, controls the power of the purse, as specified in Article I, Section 9 of our Constitution. Perhaps the Secretary has forgotten this and needs a reminder.

At this time, I will recognize members of this subcommittee for any statements that they may want to make, starting with my friend and ranking member, Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman, and thank you for yielding. And of course thank you for scheduling these hearings that are important for us to learn more about the budget of our different departments.

I think all of us would prefer to be able to visit with the Secretary today, but the absence of the Secretary, I believe, stems around the concern that this hearing might focus more on political or legal issues than the budget itself. Some have even speculated it might turn into a debate over the 2020 Census.

But this hearing is much bigger than that. It is an important budget hearing, covering an agency with a dozen major bureaus and a budget request of over \$12 billion. This is the Appropriations Committee, as you well know, and I expect that we can and will tackle some significant issues here. There is no doubt about that, and I believe that there is time and a place for discussing all the matters important to this subcommittee.

I will even say that I personally believe certain matters involving the Census, matters that are subject to ongoing litigation, are best not debated in Congress while the case is pending. And I have spoken with the Secretary and he feels very strongly about that as well.

I do regret this missed opportunity to discuss the resources needed for the Commerce Secretary, but I wholeheartedly support the Department's efforts to promote job creation, economic competitiveness, and to protect our Nation's innovators and manufacturers, and ensure fair trade.

I also support the 2020 Census, and the efforts to improve the quality and efficiency of the Census and other important surveys. Yet, while I take a very positive view of the work of the Department of Commerce, exchanges with Cabinet-level officials are always critical to the appropriations process.

I do want to make note that there are several here from the Department of Commerce that has joined us here today. Dr. Steven Dillingham, the Director of the Census Bureau; Dr. Neil Jacobs, Assistant Secretary for Commerce and Environmental Observation, dealing with NOAA; John Fleming, Assistant Secretary of Commerce for Economic Development; Henry Childes, National Director of Minority Business Development Administration; Gil Kaplan, Undersecretary of Commerce for International Trade; Walter Copan, Undersecretary of Commerce for Standards and Technology; and Michael Platt, Assistant Secretary for Intergovernmental Legisla-

tive Affairs. So, I understand they are available and would be happy to answer any questions.

And, furthermore, I understand from talking with the Secretary that at a later date of when we could mutually get an agreement, when this Census issue is more settled at the Supreme Court, that he is more than happy to come and testify before our subcommittee.

So, with that, I want to say again, thank you for yielding, and I yield back.

Mr. SERRANO. Thank you.

I would like to now recognize the chair of the full committee, Mrs. Lowey from New York.

Mrs. LOWEY. Thank you, Mr. Chairman. And I am truly disappointed that Secretary Ross believes publicly justifying his budget request is an optional exercise.

This administration clearly needs to take a course in constitutional law. The power of the purse rests in Congress and in particular in the Appropriations Committee. Given his lack of interest, I can't imagine he is listening to this, but if he were here I would tell him how unacceptable his budget request is, from eliminating Economic Development Administration grants, which provide funding and technical assistance to economically-distressed communities, to seriously under-funding the Census. This request is clearly out of touch with the needs of our constituents.

It is really disappointing that Secretary Ross is not here; he should be here, and his absence disrespects this committee and the appropriation process as a whole.

I yield back.

Mr. SERRANO. Thank you.

Any other members who—the next in line would be Mrs. Roby.

Mrs. ROBY. I think Mr. Crist was here before me.

Mr. SERRANO. Yes, he was.

Mrs. ROBY. Well, I thank the chairman for yielding. To the nine agency department heads here, thank you for your time to be here this afternoon.

The fact that we are addressing an empty chair with nine agency department heads here is unsettling, because we have people here that can answer our questions about the budget, which is the whole point of the hearing today. I wish we had an opportunity to ask those very important questions from an oversight perspective.

And, as we all know, the census required by the Constitution has very high stakes. Population numbers are used to determine how many U.S. Representatives a state receives and, the more people in the state, the more representation in Congress, but the data is also used to draw congressional and state legislative districts, and for the distribution of federal funds.

So there are a lot of important questions and we have people here that are experts, and I appreciate you being here and your willingness to answer our questions.

With that, I yield back.

Mr. SERRANO. Thank you.

Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

Mr. Chairman, the Secretary of Commerce's duty is to the people, first and foremost, and I want to say on behalf of the people of the United States we need to hear from the Secretary of Commerce. We have some serious questions to ask him on behalf of the people, we want to find out.

Why does he want to terminate the Manufacturing Extension Program, which creates so many American manufacturing jobs? Why does he want to eliminate the Economic Development Administration, which again is formed for the purpose of creating good American jobs?

Why does he want to reduce this budget in a way that will hurt the formation of American jobs?

In fact, why does he refuse to come and testify about his own financial disclosures, which are very much an issue these days?

When we talk about the Manufacturing Extension Partnership, the MEP is critical to keeping American manufacturing jobs in the United States, and helping small manufacturing companies expand and grow. In 2017 alone, MEP centers interacted with 26,313 manufacturers, who created 110,000 new jobs, added \$12.6 billion to our domestic economy.

MEP generates a 14.5-to-1 return on investment. Why would anyone in their right mind want to cut that program out? We need to know why the administration wants to do this; Mr. Ross is not here to tell us.

We deserve to hear from him about the administration's budget proposal to eliminate the Economic Development Administration. For 50 years, this agency has provided economic opportunities to distressed communities across the country, including those in my home state of Pennsylvania. The EDA assists historic coal and manufacturing communities that are struggling with unemployment; it creates 25,000 jobs annually.

And, finally, we do deserve to hear about Secretary Ross' own behavior. The Office of Government Ethics has rejected his financial disclosure because it was dishonest, in their view, and he has not submitted an updated disclosure.

Moreover, he has made public misrepresentations not once, but twice about divesting from his own banking stock, held stock in companies that were tied to Putin's inner circle; he has been accused of insider trading by European lawmakers. He paid a confidential settlement last year over alleged fraudulent theft.

These are legitimate questions that we have for Secretary Ross that should be asked here today and the silence that we are getting from that chair this afternoon, Mr. Chairman, is deafening. This hearing was supposed to be about accountability and how we can support small businesses, manufacturers, expand our economy; instead, we get nothing.

So, Chairman, I look forward to working with you on crafting a CJS bill that does those things, invests in manufacturing, invests in small business, and invests in our great American economy.

I yield back.

Mr. SERRANO. Thank you.

Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman.

I am not sure which I am more frustrated with at this point. I mean, I think about what is the goal of appropriations. The purpose of our committee is oversight and accountability, we have heard that here today, but I am not sure that is what the intent is of today's hearing.

I hear that Mr. Cartwright would rather—he would ask some questions about the appropriations process, but wants to put Mr. Ross on trial today for something he has no information on or evidence of. There are other avenues and venues for that.

But if this committee is really about asking the first questions Mr. Cartwright had about the elimination of programs, cutting of programs, and you have qualified, expert, Senate-confirmed individuals in this room who have been offered to answer those questions, why would you turn that down? Unless that is not the intent of today's hearing. Maybe it was something different, but you have people here ready to answer the questions.

The Senate seemed to find their answers sufficient and the ability for them to answer the questions sufficient, but yet today's hearing has to be about an empty chair. So maybe it is a little bit more theater today and less about really accountability and transparency.

Mr. Chairman, I think you used the term he needed to be held personally accountable. For what? Personally accountable—what has he done that he needs to be held personally accountable for today?

Is there maybe some questions about the budget request and the proposal put before us? Absolutely, but those questions can be answered by the qualified individuals and the experts that are here, who probably were more involved in that compilation of the actual budget document anyhow.

But I will bring us back to something that a couple of years ago, Mr. Chairman, you and I were on the same committee and still are today, and Mr. Aderholt was—I mean Mr. Ander Crenshaw was chairman, and I was chairman next and you were on the committee. I think you might have been ranking member when Mr. Crenshaw was chairman. We wanted Richard Cordray to come before our committee; denied every time, but I don't recall any outrage then. We wanted transparency and accountability then, we wanted to ask about the budget then, we wanted to ask about how were they really providing consumer protection through that bureau, but not once would he ever show up.

So it is ironic that today seems to be the day that you choose to bring an empty chair. When I was chairman, I never did that. Instead, we found ways to accommodate and get the answer to the questions, and do it in a way that was fulfilling of our duty, as these subcommittees are on this, bringing accountability and oversight.

So, if the purpose of Appropriations is that oversight and accountability in funding, then we have experts and individuals here that can answer those questions. If today is more about theater, I guess we will have to wait until another day in the future.

Thank you, Mr. Chairman. I yield back.

Mr. SERRANO. Thank you.

Ms. Meng.

Ms. MENG. Thank you, Mr. Chairman, for arranging this hearing. I too am utterly disappointed and angry at Secretary Ross' irresponsible decision to not appear today. His failure to testify on the Commerce Department's fiscal year 2020 budget request is undoubtedly an abandonment of his responsibilities as the Secretary of Commerce. It is an assault and an attack on transparency and trust.

A major component of the Commerce Department's 2020 budget involves the funding for the 2020 Census, the largest ticket item of the Department. By my estimate, the President's budget request underestimated the necessary funding for the 2020 Census and dangerously shortchanged the Department of Commerce and, by extension, the American people.

Respectfully, to our Ranking Member Aderholt's comments, this is not political. The American people deserve an open and transparent debate on the census, because the census funding affects both Republican and Democratic districts in every single part of the country.

There is—let me remind everyone, there is no do-over with the decennial census and a mistake will last for 10 years, at minimum.

Even with esteemed agency heads in the room today, and I appreciate you all being here, we want to find out political motivations that have been demonstrated by communications with the Secretary himself and agency heads may not be able to adequately respond to those types of questions.

And so this year he is a no-show. He is a public official who should be held accountable for his dereliction of duty.

Mr. Chairman, I do want to thank you again, and thank all the subcommittee staff members for all the preparation that went into arranging today's hearing.

Thank you, and I yield back.

Mr. SERRANO. Thank you.

Mr. Palazzo.

Mr. PALAZZO. I will pass. Thank you.

Mr. SERRANO. Mrs. Lawrence.

Mrs. LAWRENCE. Thank you, Mr. Chair.

The Department of Commerce exercises a broad range of activities that are critical to our beloved country; a few are conducting a cost-effective and accurate census, working with distressed communities to support economic development, enforcing trade laws. Few departments have the potential to directly impact the strength and sustainability of our communities and local businesses back home.

Wilbur Ross, as a private citizen, stepped up and accepted a job, and stood publicly and took an oath to serve and perform the duties of the job he accepted. And, because of this, I am deeply disappointed that Secretary Ross declined to appear before us as part of his job. We are not some outside entity, we are part of the government, performing our task as allocated on this committee. He declined to—declined, ladies and gentlemen—to appear before us to defend, explain, and support the Commerce Department's budget in the amount of \$12.2 billion, \$12.2 billion.

Where is Wilbur? What is his reason for declining to do his job? I hope he is well, but I don't know this.

I want you to know that article I, section 9 of the Constitution designates the Congress with the power of the purse. As members of Congress and this committee, we have a responsibility to carry out our work in a timely fashion.

Again, I want to express my frustration to why the Secretary is not with us today to explain the rationale for drastic cuts to critical programs, these programs that are not partisan. Ladies and gentlemen, the programs and the funding is across the board. My colleagues on the other side know that this budget affects them as well.

Now, I understand the Supreme Court this month will hear arguments over Trump's administration decision to add his citizenship question to the 2020 questionnaire, and at this time we have already seen two federal judges separately block the decision by Secretary Wilbur Ross to add the citizenship question.

This is deeply concerning, because the 2020 Census will help guide the allocation of more than \$880 billion in federal funds for the next decade. Every American citizen pays taxes and we are held accountable to ensure that these dollars are being spent, and the whole basis and foundation of us doing our job is based on an accurate census. We have the responsibility to ask those questions.

In my home state of Michigan, around \$30 billion is dependent upon an accurate, complete, and reliable census.

With all these priorities I just mentioned, I want to know exactly where is Secretary Wilbur Ross and why he is not here today.

Mr. Chairman, this is not a game; this is not a decision that you can make once you take that oath of office. There are some hearings I would love not to sit through, but I show up here and I do my job, because I took the oath and I am part of this government. And whether it is the Republicans in charge or the Democrats, that does not stop me from doing my job.

I yield back.

Mr. SERRANO. Thank you.

Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. And, you know, I am kind of just disappointed that we are not able to hear from the ladies and gentlemen that the Secretary did send over here to answer our questions. We do have an oversight function and I have a lot of questions on the budget.

I know many of the agencies and related agencies, they do extremely great work. A lot of things are parochial to the Mississippi Gulf Coast, but I think the people that they sent in lieu of the Secretary are sometimes best situated to answer our more direct questions, because when you are the Secretary you have a huge umbrella of agencies underneath you, tens of thousands employees, numerous issues, so sometimes it is best to get into those sub-departments and get the answers that we need.

So I don't, you know, really blame the Secretary for not being here. I think him sending ten of his best and brightest to answer our questions would satisfy. So, you know, I feel like my colleagues are wasting a great opportunity to get the answers to our questions that we have, and I guess we will submit those for the record.

And at this time I would like to yield the balance of my time to my friend Congressman Graves.

Mr. GRAVES. Thank you, Mr. Palazzo.

And, Mr. Chairman, I would just like to point out, my understanding is, is that the Secretary has offered to return to this subcommittee at a time in the future. That when the request was sent out, he offered to send experts in lieu of his place now, eight of which are Senate-confirmed, Senate-confirmed, and yet we won't hear their responses. Is there a question that you don't think they can answer here today?

Mr. SERRANO. No. The question is that we are elected to do a job as appropriations. Not everybody is in the Constitution, our job is in the Constitution. So it is for the Secretary to come in and not hide because he thinks it is going to get political.

The fact of life is that if every appropriations discussion stuck only to numbers, we would have a whole new Congress and a whole new day. There are other questions that are answered. And if he has got nothing to worry about, then he has nothing to worry about in showing up before us, because we may ask hard questions, but we never disrespect anybody.

Mr. GRAVES. Well, in reclaiming—

Mr. SERRANO. And by not showing up—

Mr. GRAVES [continuing]. I understand—

Mr. SERRANO [continuing]. It is disrespectful.

Mr. GRAVES.—reclaiming my time. I don't think he is shying away from anything and I don't think you are calling him a coward in any way. I think the Secretary said he would be happy to address this committee at a day in the future, it just didn't happen to comport to the calendar that the new majority wants right now.

But might I bring everybody back—and, Mrs. Lawrence, I hope you all know—that Richard Cordray never would appear before this committee. This is an individual that could not be terminated, this is an individual that had zero oversight, this is an individual that had basically an unlimited budget, zero oversight by Congress at all, and we tried and tried again. We would offer amendments to help get it done. We offered invitations, public, private, what would it take, and every time he refused to sit before an elected body, constitutionally constituted, in defiance, in essence, of Congress.

So we have seen it in the past. I just wish there had been equal outrage at that time, Mr. Chairman, because we had an opportunity to really bring forward accountability and transparency at that point. But, unfortunately, we heard the outcry that, no, no, no, he can't come before this committee, it just can't happen, and yet here we are today with an empty chair. If only we knew these tactics would be used today, maybe we should have done that then.

And I will be happy to yield back to Mr. Palazzo.

Mr. SERRANO. Thank you.

Mr. Palazzo.

Mr. PALAZZO. I yield back.

Mr. SERRANO. Mr. Case.

Mr. CASE. Thank you. I yield 30 seconds to my colleague Mrs. Lawrence.

Mrs. LAWRENCE. I just—we are supposed to direct our comments to the chair. So, Mr. Chair, I just want to know, so often we refer to what happened in the past, the past isn't always the right thing.

We have before us now a situation that should not be evaluated through history, but evaluated through the urgency of the moment of now. I respect what you said, I was not involved in it.

And I yield back. Thank you.

Mr. CASE. Thank you very much.

And I want to fully associate myself with the remarks of my majority colleagues. The remarks that hit me most directly were my full committee chair's reference to the Constitution and to our obligations in Congress to be the appropriators, to provide oversight, and recalling also that appropriations start in the House.

And so, although both the Senate and the House have had their oversight committees, have had their budget committees, we now start in a process that is our responsibility to start here today in this subcommittee and that is critical to our work. And so I share the concerns that the Secretary would not appear here today to help us to start that process.

To my colleague Mr. Graves' comments in a couple of different areas. You asked about accountability, where is the personal accountability. Mr. Ross is the Secretary of this Department and he is accountable for the decisions that were made and are made in putting that budget together and we are entitled to ask him along those lines. So, yes, there is accountability at the Secretary level. You have offered up a different level.

And actually I have sat in these hearings with many of the good people here to my left testifying, we have asked them about how budgets are policies and priorities, budgets reflect policies and priorities. This is not politics, it is policies—what policies do you support and not support, what priorities do you prioritize and not prioritize. And several of the persons that you have offered up to testify here today have basically said, hey, look, the decision was made above my head.

Now, presumably the Secretary is aware that those decisions were made, since he is in charge of the Department and presumably he knows how he balanced everything across all of those departments.

So I think it is entirely appropriate for us here to expect that that level be before this committee when we start this appropriations process. Yes, of course, we have experts, they are all good advocates for their divisions, but they are not the priority-setters; they are in their divisions, but not in the big picture. If somehow the Secretary does not have that role, then perhaps he should not be Secretary, but I say that just because I think this is a failure of accountability.

So, you know, I share the concerns of my colleagues on areas that I wanted to ask about. I wanted to ask about EDA cuts, I wanted to ask about cuts, significant cuts to NOAA that have already been referenced here today. The capable NOAA administrator testified just a few weeks ago that those cuts were handed down—and I am putting words in his mouth, so with apologies—were handed down from the top. So I wanted to know, okay, well, how was that judgment made against something else? He is not capable of doing that, he won't do it, but the Secretary is responsible for it. So that is the reason here.

I think I definitely wanted to ask about the 75-percent cut to the Minority Business Development Agency, which is so critical to minority-owned businesses across our country. I could give you a whole range of examples of minority-owned businesses, 11 million minority-owned businesses that are responsible and are benefitted from this program. Is it a policy of this administration that they do not support minority-owned businesses? Because that is exactly what is reflected in a 75-percent cut to a budget. Maybe there is a reason, maybe there is a judgment that it is done some other way that has not been answered.

So there are a lot of questions that can only be answered at the Secretary level and, furthermore, should be answered at that level as a matter of us discharging our constitutional responsibilities.

Mr. SERRANO. Thank you.

Let me just briefly say in closing that to infer, as the Department has, that coming here would detract from the work of the Commerce Department is just the opposite, in my opinion. Not showing up makes our markup, makes our writing of the bill much more difficult.

Secondly, repetition of what I said before, if anybody thinks that you can have a hearing with an agency as large, a department as large as the Commerce Department and not discuss other issues that are before us and that are pending, then you have never been on the Appropriations Committee. And I am not suggesting anyone said that, but that is part of what was said in the letter that the Secretary sent to us.

So we are going to recess the committee, subject to the call of the chair, with the hope that the Secretary understands that this is not about making his life miserable. This is about making sure we have a good department, we have good programs that all the agencies within that department are taking care of, and, yes, that there is a fair and accurate census count.

And so with that we will recess, subject to the call of the chair.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

Questions for the record for Secretary Wilbur Ross, Department of Commerce regarding the hearing: "Department of Commerce Budget Request for FY 2020"

**The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

1. Last year, Secretary Ross testified before the House Appropriations Commerce, Justice, Science and Related Agencies subcommittee in response to the motivation behind adding citizenship to the 2020 Decennial Census that Commerce was “responding solely to [the] Department of Justice’s request”. However, since that time, numerous Commerce communications have been released that clearly show the Secretary was directly engaged in the status of having this question added throughout the spring and summer of 2017, conveying confusion as to why nothing had been done with [his] request and finally engaging directly with Attorney General Sessions to have the question added through a request prior to the Department of Justice’s request letter submitted in December 2017. Would you like to clarify the statements you made last year to the Committee about the timeline and intent of including the citizenship question on the 2020 Census?
2. Despite claims that the American Community Survey was deemed insufficient by the Department of Justice for Voting Rights Act enforcement purposes the current Assistant Attorney General for the Civil Rights Division within the Department of Justice—the very division charged with enforcing the Voting Rights Act-- testified that he was not even familiar with the American Community Survey. It appears that Justice is not as informed as the Census Bureau on what type of data set would be best for their purposes. What is the formal process for outside agencies to request data from the Census Bureau?
3. In testimony to the Oversight & Reform Committee, Secretary Ross testified that as much as 30 percent of responses to the ACS from non-citizens are inaccurate. How can Commerce claim that including the citizenship question in 2020 would create a more “accurate” census?
4. How does Commerce intend to use the data provided by DHS for its Decennial operation?
5. Recognizing the Census Bureau may intend to use the data as administrative records toward identifying non-citizens locations at the block level – wouldn’t this exercise eliminate altogether the need for a citizenship question on the 2020 Census form?

The Honorable Robert B. Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

International Trade Administration

1. To what extent does a shortage of International Trade Administration (ITA) case analysts prolong injury to domestic industries from unfair competition, and how will the requested increase of \$3 million for the ITA contract workforce that examines exclusion requests in connection with Section 232 tariffs on imported steel and aluminum projects address the backlog of exclusion requests?
2. Are any changes being made to the steel and aluminum exclusion request process given the volume of requests and annual refilings?
3. It has been reported that the approval rate for 232 steel and aluminum tariff exclusion requests listing China as the country of export is relatively high compared to other countries, could you explain this trend and whether it is likely that it will continue?
4. To what degree has the rebuttal process within the exclusion process helped domestic steel and aluminum manufacturers realize the demonstrated needs currently being filled by imports, and are these domestic manufacturers beginning to expand their production to regain market share?
5. With the requested funding reduction of \$43.897 million for export promotion and trade analysis and given the low percentage of U.S. businesses engaged in export activity, how will these reductions be implemented to ensure this rescaled taxpayer investment is best utilized in promoting U.S. business growth in global markets?

CFIUS

6. With the implementation of the Foreign Investment Risk Review Modernization Act substantially increasing the caseload of Industry & Analysis (I&A) experts, increased demand for I&A sectoral and analytical capabilities to support trade negotiations, and responsibility to execute Sections 232 and 301 demands in expected timeframes, how will these priorities be balanced to meet growing mandatory requirements in the event of additional executive action or should caseload growth exceed estimates?

7. From current sectoral analyses provided by I&A in support of the interagency Committee on Foreign Investment in the United States (CFIUS) group, what are the sectors that have seen the greatest incidence of covered transactions which present a national security risk and how has this trend developed over time?
8. Are there additional steps which should be taken to protect cutting-edge technologies under development by domestic firms under contract from the U.S. government and allied customers?

Office of Space Commerce

The FY 2020 request for the Office of Space Commerce would reallocate \$3.6 million and 11 positions from NOAA Operations, Research and Facilities, and would request \$6.4 million in new appropriations which would be spent on services from non-Federal sources.

9. What are the specific NOAA offices that will have their position reallocated to this new office?
10. What are the U.S. commercial space industry services for which this \$6.4 million appropriation is requested?
11. Is this an advisory office or do you view it as having authority to review applications by private sector entities for authorized space activity?

5G Spectrum Auction

12. I recently sent the FCC a letter along with two fellow Appropriations Subcommittee Chairs regarding the auction of spectrum that could interfere with NOAA's weather satellites and could have negative impacts to weather forecasting. Were NOAA's concerns communicated to FCC prior to the auction?
13. Was the normal interagency process respected? Was there consensus among government agencies on the correct level of protection for government assets?
14. Will you commit to releasing the joint NOAA-NASA study on this issue so that all stakeholders can appreciate the weather forecasting concerns?

The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Topic: Census Contingency Fund

Background: The President's Budget Request for fiscal year 2020 does not include a contingency fund for the 2020 Census. The Commerce Department previously recommended a 10 percent contingency fund to meet any unforeseen challenges that may disrupt the census operation. These challenges include disruptions due to natural disasters and extreme weather, projected reduction in self-response due to possible addition of a new citizenship question, and possible threats of cyber-attacks.

Questions:

1. Why was a contingency fund not included in the President's budget request?
 2. Does the Commerce Department stand by the original recommendation for a 10 percent contingency fund?
 3. Does the Commerce Department agree that a contingency fund is especially vital for the 2020 census given the challenges we may be facing?
 4. The 2020 Census will be the first decennial census ever to be available to be completed online. The federal government has a troubling record of data breaches, and the 2020 Census is a likely target. Without a contingency fund and in the event of a cyber-attack to disrupt the 2020 Census, what contingency plan is in place to ensure that an accurate count is taken?
-

Topic: Discrepancy Between 2020 Lifecycle Cost Estimate and Budget Request

Background: The most recent 2020 Lifecycle Cost Estimate released in December 2017 estimated that \$7.363 billion would be need in FY 2020 to conduct the 2020 Census. Yet, the Department's request for the 2020 Census is only \$5.3 billion (or, \$6.3 billion when combined with unspent appropriations from previous fiscal years).

Questions:

1. The Census Bureau's primary mission is conducting the U.S. Census every ten years. Given the discrepancy between this cost estimate and the amount requested, how is the Census Bureau equipped to carry out its constitutional duties for the 2020 Census?

The Honorable Marcy Kaptur
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Economic Development Administration

2. I am deeply concerned by the drastic elimination of the EDA, an agency which is critical to increase economic development in distressed communities. In Northern Ohio, the Lordstown auto plant has closed down leaving an entire community reeling from the looming economic devastation. This budget is letting down these working Americans that can leverage EDA dollars to lessen the pain and plan for a brighter future. How do you explain the elimination of the EDA to the hard-working families of Lordstown, many of whom may have supported the President?

3. Assistance to communities affected by nuclear power plant closures—I am concerned that this budget cut would have detrimental effects on my constituents affected by the closure of the Davis-Besse nuclear plant closure. EDA is working with the communities of Ottawa, Sandusky, Huron and Seneca Counties to apply for grants to soften the devastating blow of plant closure. How does your budget propose to provide assistance to these communities that have devastated by free market forces against their own control?
4. I am proposing the creation of a new account under EDA to provide assistance to such communities affected by nuclear power plant closure. How would EDA administer such an account given that Congress will reject the proposal to eliminate the program?

U.S. Census

5. I understand that the 2020 Census will allow participants to respond through online portals. I would like to stress that many congressional districts on both sides of the aisle, including my own, have limited access to broadband and the internet. We must ensure that no one is left uncounted. What processes does the Census Bureau have in place to ensure nonresponse follow-up for U.S. residents who do not have access to the internet?
6. I would like to work with the Census to facilitate partnerships between the Bureau and local organizations to ensure that no constituent is left uncounted. How can Congressional offices work to strengthen outreach in our districts across the nation? 6) I am concerned that including a citizen question on the census is a political ploy to cater to the President's right-wing base. We must not politicize the Census, which is a critical pillar to our democracy. Can the Department clarify why this question is included, and how such a question would not be considered threatening to undocumented people and workers across our nation?

International Trade Administration

7. I am concerned that the President's trade agenda has failed to deliver for the working people in Ohio, including the tragic closure of the Lordstown auto plant in Ohio. The negotiation of the USMCA is more of the same as NAFTA. Can the Department point to any success to fight for better trade outcomes?
8. It is deeply troubling that the President has targeted our own close allies in his trade war including the European Union. What measures does the Administration take to protect diplomatic relations of our allies?

NOAA

9. NOAA's budget proposes elimination of or significant decreases in research and other programs on climate science. How will NOAA address climate change and ensure

- American communities are prepared for the impacts increasingly extreme weather and rising sea levels if Congress approves the budget cuts in your budget?
10. Could you please detail NOAA's efforts to advance the technology/capabilities of our data collection, modeling, and satellites to improve forecasting?
 11. According to NOAA's website, 34 states currently participate in the Coastal Zone Management Grant program. These matching grant programs help communities with managing storm water runoff, restoring and protecting coastal habitat, and protecting coastal water quality. How will communities address these issues without NOAA's vital assistance?
 12. The Great Lakes region—which includes my District—has been adversely impacted by harmful algal blooms. In Toledo, residents were warned not to drink their tap water for several days in 2014 due to microcystin contamination. NOAA has provided critical assistance with competitive research grants that give better forecasting of when and where harmful blooms will occur. Could you please explain how proposed decreases in funding coastal science and other accounts will impact NOAA's ability to continue supporting research into HABs?
 13. Eliminating research HAB research grants, as proposed in the budget request is extremely concerning to communities facing an increasing prevalence of harmful algal blooms in areas such as the Great Lakes. NOAA must give priority to research that strives to determine and mitigate the impact of HABs on human health and well-being, as authorized by the Harmful Algal Bloom and Hypoxia Research and Control Act.
 14. The National Sea Grant College Program supports the health and resilience of the nation's coastal communities while providing funding for STEM students and researchers who will lead our economy in the 21st century. Why does NOAA designate this as a "lower priority" and what measures will NOAA take to ensure that we will have scientists with expertise in these issues as rising sea levels and extreme weather take a greater toll on our coastlines
 15. The Administration has proposed eliminating NCCOS which helps to determine suitable sites for various offshore activities, including offshore wind. How does that fit with an energy dominance policy of this administration?

NOAA Great Lakes Observing System

16. What is NOAA's capacity for year-round observing in the Great Lakes?
17. What major monitoring and data gaps exist in the Great Lakes within the Great Lakes Observing System?
18. How much funding would be needed to address these monitoring gaps in the Great Lakes Observing System?

19. Why are the Great Lakes apportioned the least among other IOOS regions, despite our unique reliance on our water for drinking?

THURSDAY, APRIL 4, 2019.

FEDERAL BUREAU OF INVESTIGATION

WITNESS

CHRISTOPHER WRAY, DIRECTOR, FEDERAL BUREAU OF INVESTIGATION

Mr. SERRANO. The subcommittee will come to order.

Good morning, everyone, and welcome to a hearing to which the appropriate official shows up. An inside joke.

This morning, we welcome the Director of the Federal Bureau of Investigation, Christopher Wray, in his first appearance before the subcommittee to discuss the FBI's fiscal 2020 budget request and related issues.

Much of your budget falls on the defense side of the ledger, but the President's efforts to increase defense spending do not seem to include your critical agency. Your fiscal year 2020 salaries and expenses request is only \$65 million above last year and includes some targeted investments, such as an additional \$70 million for cyber threats, \$18.3 million for counterintelligence operations, and \$4.2 million for the NICS; however, this increase is not enough to cover your new and continuing program course without some significant efficiencies in cost-cutting. We hope to learn how you plan to make ends meet.

Director, you have testified before Congress on unprecedented threats from abroad and within, from cyber threats, espionage, and terrorism. The work of the FBI is extremely important in addressing these dangers, as well as white collar crime, foreign election interference, civil rights violations, including voting rights, and color of law violations, and much, much more. You also run our Nation's background check system, a vital oversight mechanism to ensure guns do not fall in the wrong hands.

We also want to hear how the FBI is applying lessons from the financial crisis 10 years ago to target the type of white collar and institutional criminal activity that led to that economic disaster, and help keep history from repeating itself.

And at a time when many communities suffer from rifts in trust with their law enforcement institutions, we would like to know how the FBI is taking steps, both in its own culture and operations, and in working with law enforcement partners nationwide to help bridge such gaps.

It is extremely important that you have the resources necessary to enforce the law in all of these diverse areas without having to choose one at the expense of another.

I have long been concerned about our overemphasis on pursuing so-called "Islamic terrorism" at the expense of important FBI missions like civil rights investigations and white collar crime. My con-

cerns have grown along with the rise of white nationalist extremism. White supremacist terror attacks in Pittsburgh, Charlottesville, and Charleston have made headlines, and statistics show such attacks are on the rise; yet your budget request does not mention them. I realize the President minimizes this threat, but you should not, and I hope you can tell us more today about your work on areas outside of international terrorism.

Speaking of the President, I do not think that we can hold this hearing without addressing Mr. Trump's persistent attacks on your agency. The FBI has not faced this level of political threat since Watergate. No one on this committee confuses honesty—and I mean no one on this committee confuses honest criticism of your agency, which is healthy and necessary, with insidious attacks on the reputation of the FBI workforce. These are poorly disguised efforts to undercut the legitimacy of an agency that must be free to enforce the law and the Constitution fairly, and without regard to politics of persons. It is deeply worrisome with the variety of important missions you have the President continues to focus on settling personal scores.

To add injury to insult, the FBI faced its longest lapse in appropriations in history, compelling you to tell your 36,000 employees that you were, quote, “about as angry as I have been in a long time,” end of quote. I can assure you, Director, every member of this committee on both sides shares your feelings.

I hope to hear today how the shutdown affected your operations and why the FBI and our whole criminal justice system should not be held hostage again.

Mr. SERRANO. With that, let me turn to my ranking member, Mr. Aderholt, for his opening comments.

Mr. ADERHOLT. Thank you, Mr. Chairman. And I too would like to welcome Director Wray to the Commerce, Justice, Science Subcommittee today for testifying for the fiscal year 2020 budget request.

Director Wray, as you well know as the Nation's premier law enforcement and intelligence agency, you are charged with combating terrorism, transnational organized crime, gang violence, and the foreign adversaries targeting our military, technology, and economic institutions, just to name a few facets of your diverse mission. Yet while these threats are not new, the means by which criminal actors implement them are always changing.

Today, the FBI is increasingly fighting crime by leveraging big data analytics and employing data exploitation measures. This morning we look forward to hearing more about how the FBI is working to stay ahead of various developments in technology, as criminal actors abuse new technology to advance their lawless operations.

I appreciate your efforts to identify and close strategic gaps, and the multi-year planning approach outlined in your budget, as well as your efforts to leverage the reach, expertise, and resources of your numerous intelligence community and law enforcement partners in the midst of an ever-changing threat environment.

Finally, as always, central to the FBI's success are the superb individuals that support the agency and its mission. We are all very deeply grateful for the dedicated patriots of the FBI who persist in

their efforts to bravely respond to the domestic and the foreign threats facing the U.S., and who faithfully endeavor to preserve the civil liberties of all Americans while doing so.

So, Mr. Chairman, thank you for holding this hearing this morning. Thank you, Director, for being here. And I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

Mr. Director, it is your turn now. We wish you could keep it to 5 minutes, but we give you our word that your full statement will be included in the record, and the 5 minutes is so that these great people alongside of me can ask you questions.

Thank you.

Mr. WRAY. Thank you. Good morning, Mr. Chairman, Ranking Member Aderholt, members of the Subcommittee. I am honored to be here today representing the men and women of the FBI. It is our people, 37,000 of them, who are really the heart of the Bureau, and I am proud of their service, of their commitment to our mission. Every day I see them tackling their jobs with integrity, with perseverance, with professionalism.

And I should say that I have now had the chance to visit all 56 of our FBI field offices all over the country over my first year and a half on the job. That means I visited the home states of every member of this Subcommittee, not only meeting with FBI employees in all those places, but also talking in each instance with state and local law enforcement partners in those communities, and with other members of the community about the issues that matter most to them. And I am grateful for the support and insight of those partners as we work together to keep 325 million American people safe and to make our communities even stronger.

I want to thank this Subcommittee for the funding you have provided us in the past. The reality is, without your support, we wouldn't be able to do the important work we do. I have included details about our 2020 budget request in my written statement for the record and I am happy to address your questions about that request, of course, but I also want to touch, Mr. Chairman, on the wide array of threats that we face as Americans, including the terrorist threat from home-grown violent extremists, domestic terrorists, and foreign terrorist organizations; hostile foreign intelligence services actively seeking our state and military secrets, our trade secrets, our innovation, and our ideas; the scourge of gang violence and other violent crime, complex frauds, and transnational organized crime; crimes against children, human trafficking, and the opioid epidemic; and the list goes on and on.

And increasingly these threats and others are cyber-based, and the more we shift to the Internet as the conduit and the repository for everything that we use and share and manage, the more we need the best tools and the most creative ways to combat this cross-cutting and growing dimension of the threat, which leads me naturally to the problem that is known throughout the law enforcement community as going dark.

It is by now patently clear that those who would do all of us harm—criminals, terrorists, hackers, and spies—are exploiting encryption and other methods to hide their communications and their crimes. And, in a world of apps and smartphones, we continue

to face hurdles in getting evidence that we have the legal authority to get in a timely manner.

Let me be clear, we all recognize the important benefits of strong methods of encryption. Cyber security is, after all, an important part of our mission at the FBI, but it just cannot be an acceptable end state for companies to carve out, even unintentionally, an entire unfettered space for rogue actors, terrorists, and criminals to hide and do horrible things to innocent people.

This country is home to a world-class technology sector and I believe that sector can and should work with us in pressing forward together to find solutions.

We cannot afford to be complacent. We have got to stay ahead of the evolving terrorist, counterintelligence, and criminal threats, which includes things like enhancing our technical and analytical capabilities related to counter-terrorism vetting; enhancing our cyber and foreign intelligence capabilities; enhancing our targeting and disruption of the financial and Darknet networks used by transnational organized crime groups; increasing our capacity to perform criminal background checks; and improving our ability to render safe a weapon of mass destruction.

These threats are all ever changing and we have got to get even more agile and more predictive. We have got to keep pace with technology, we have got to help our law enforcement partners in your districts, all across the country, and partners all around the world, and we can't do any of that without your support.

The threats that we face as a nation have never been greater and the expectations on the men and women of the FBI have never been higher, but I see those men and women every day meeting and exceeding those expectations. So, thank you for this opportunity to discuss their work, and I look forward to answering your questions.

BUDGET SHORTFALL

Mr. SERRANO. Thank you. Five minutes, incredible. Thank you.

Let me first just make a comment. In our conversation prior to your appearance here, you told me that you had reinstituted or expanded on visits to different places, and conversations with new agents and current agents to remind them what happens when government does not treat its people fairly, its citizens fairly, and including visiting the Holocaust museum. So I want to commend you for that, because I think that that is something that shows what the FBI should be thinking about as it fights the fights that it has to fight and it can't be won at the expense of our rights; it has to be a combination and a balance, and so I appreciate that.

You are requesting a total of \$9.925 billion in salaries and expenses, which includes six program enhancements and additional positions. However, the \$65 million you requested over the fiscal year 2019 appropriations is not enough to cover the full costs of the requested enhancements, let alone cover necessary adjustments to base, and you propose to rescind an additional \$60 million in balances on top of that.

What kinds of efficiencies could the FBI achieve that would permit it to cover this current services shortfall you face?

Mr. WRAY. Well, Mr. Chairman, I appreciate the question. Certainly, we try to be careful stewards of the taxpayers' money in lots of ways and we are always looking for efficiencies.

I should say, which is an important clarification, that the fiscal year 2020 budget request was, as I understand it, assembled before the ultimate 2019 Appropriation that we received from the Congress, which means that it was not built off of the 2019 budget, but rather the 2019 CR, and that has the perverse effect of making it actually \$200 million short. So there is a gap there.

We are obviously very grateful for the 2019 Appropriation that this Subcommittee helped secure, which includes some very important increases for the FBI, and anything this Subcommittee could help us do to close the gap that I just referred to would be very much appreciated, and I can assure you we would put those resources to good use.

Mr. SERRANO. Thank you. And, without telling you anything I am not supposed to tell you at this point, you have people on both sides of this committee that want to be helpful and have you do the job that you need to do.

HATE CRIMES

The 2017 FBI hate crime statistics published last November showed that hate crime incidents increased 17 percent over 2016, a deplorable third straight year such crimes increased. This increase has been linked by some researchers, especially in late 2016, with the impact of Russian social media manipulation aimed at fomenting racial division in the U.S. While 2018 statistics have not been released, what is the FBI observing particularly in light of recent violent hate crimes in the past several years that have grown from isolated events to mass violence?

Mr. WRAY. Well, Mr. Chairman, like you, we are determined not to tolerate hate-fueled violence in our communities and we are going to aggressively investigate those cases. It is true that we have seen an increase in the reporting of hate crimes and the FBI's own number of hate crime cases have increased. It is not clear whether the increase is due to the number of agencies that are now reporting who weren't before. The FBI is doing a lot to raise awareness in the community, so that there will be more reporting. So I think it is a good thing that there is more reporting, but certainly we are concerned.

We have brought a number of hate crime cases recently, including just last week, actually. We secured the 29-count hate crime guilty plea from an individual connected with the Charlottesville incident, for example. And, not that long before that, we had eight defendants charged during the Rise Above movement with rioting charges for the violence that they had caused during various rallies.

So we have got quite a number of cases that we are pursuing at the moment. We are using every tool at our disposal, whether it is hate crimes charges, gun charges, explosives charges, or as in the example of the Rise Above movement charges we brought, we are trying to be creative in looking at other charges that might be available to us like the Federal rioting statute.

Mr. SERRANO. Thank you.

What resources does the FBI need to deal with these issues within the Civil Rights Division and your partners in state and local law enforcement in combating the increase in hate crimes?

Mr. WRAY. Well, certainly we are stretched thin, there is no question about it. We try to tackle this kind of activity both through our criminal programs in the Civil Rights side as hate crimes, and then in other instances we are also using our counter-terrorism resources, pursuing them through the JTTFs on the domestic terrorism side.

And so the more resources we have available to us in terms of agents and personnel and tools, because of the avalanche of data that Ranking Member Aderholt referred to, for example, the more effective we can be in fighting this problem.

Mr. SERRANO. Thank you.

I suspect we are going to have a vote sometime during this hearing, so I will move it along so that we can get in as many questions as possible from as many members as possible.

REGIONAL COMPUTER FORENSIC LAB

Mr. Aderholt.

Mr. ADERHOLT. Thank you.

I was very pleased to be involved in the probes process even in a small way as the Regional Computer Forensic Lab was created in Huntsville, Alabama, and excited to hear the FBI will be expanding its footprint in the Huntsville area with even more infrastructure for technology-focused training and other critical programs.

What I would want to pose to you is, could you tell us here this morning about the importance of the Regional Computer Forensic Lab and explain the benefits to the states and the localities?

Mr. WRAY. Thank you for the question, it is an important topic, increasingly important. The reality is that criminals of all shapes and sizes, virtually in every instance now, are using one, if not multiple electronic devices, which means that in basically every kind of case the FBI or our state and local law enforcement partners handle there is going to be digital evidence. And where the RCFLs, the Regional Computer Forensics Labs, fit in is it basically becomes one-stop shopping for state and local law enforcement working together with the FBI to be able to do forensic exploitation of that digital evidence through properly certified and trained personnel. So there is a training dimension, but more importantly there is an ability to get through and forensically exploit the evidence that is critical to pretty much solving every kind of crime there is out there.

And there was not—until the recent RCFL in Huntsville, there was not an RCFL in that region of the country. So it is not just good for Alabama, it is good for the whole region, and it is particularly helpful to our state and local partners who without it would be really high and dry.

Mr. ADERHOLT. What other activities are you planning as the FBI to relocate into that area?

Mr. WRAY. Well, we are focusing on expanding on the data analytics side and we are ultimately expecting it could be as many as about 3,000 FBI employees there at Redstone Arsenal.

We have of course been in Huntsville since back in the early '70s when we stood up our Hazardous Device School, which is the place that trains all state, local, and Federal civilian bomb techs all over the country. We then added in the last decade TEDAC, which is the place that forensically examines terrorist explosive devices. So when IEDs get picked up on the battlefield, they are exploited there at that lab.

We have added things like the Ballistics Research Facility. There is of course a thriving cleared defense contractor community down there. So we now have something called the National Defense Cyber Alliance, which is a place where we work with other cleared defense contractors and Intelligence Community partners to exploit cyber threat intelligence.

So I think we are really excited about the prospects and building on the momentum that, as I said, started in the early '70s, but is really kicking into high gear over the last year or so.

OPIOID EPIDEMIC

Mr. ADERHOLT. You highlighted in your written testimony that the FBI is doing some extraordinary work disrupting opioid trafficking networks on the dark net. What are some of the key investments you would make with an additional \$18 million you requested to enhance your transnational organized crime efforts, including the J-CODE initiative?

Mr. WRAY. So, needless to say, the opioid epidemic is something that exceeds the bandwidth of any Federal agency and it is a problem that faces the entire country. We are trying to do our part and that is where our budget request and whatever resources Congress can send our way would be extremely helpful through our specific contribution.

So, first, the Darknet; increasingly there is opioid trafficking on the Darknet. We stood up an initiative a while ago called J-CODE, which focuses on elicit opioid trafficking and other kinds of trafficking on the Darknet. That was largely done with a very small investment and it is already having a very significant impact. And that is clearly where the threat is moving, so that would be a place where the personnel and technological investments that we have requested, those kinds of things could help drive it.

There is the transnational organized crime piece, which is also reflected in our budget request. The supply, right now we are targeting that through our Transnational Organized Crime West Program, which really deals with the cartels and others who are supplying that pernicious substance. We also have a prescription drug initiative, which is very focused on going after medical professionals, because of course the opioid epidemic is heavily fueled by over and abusive prescribing, you know, pill mills and things like that, and we have gotten very aggressive there. And that relies heavily on data analytics there too, because we are looking at things like over-prescribing patterns and there is an avalanche of data that comes there as well.

And then, last, our Safe Streets Task Forces all over the country focus on what I would call the distributors, the gangs, et cetera, that are pushing heroin and fentanyl-related substances in our streets.

Mr. ADERHOLT. I see my time is up and I know we have a lot to get to, so I will yield back. Thank you.

Mr. SERRANO. Thank you.

RESOURCE REQUIREMENT

Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

And, Director Wray, I would like to continue the line of questioning of Mr. Aderholt and I want to make sure I understand. You have asked for \$18 million additional, is that just for the Joint Criminal Opioid Dark Net Enforcement, or is it for all opioid, anti-opioid efforts?

Mr. WRAY. I think hang on a second, let me check with my CFO here.

It is a broad request, not just for the J-CODE initiative.

Mr. CARTWRIGHT. OK, fair enough. But you also just said "please send us whatever resources can be sent our way," and I was listening when you said that. What do you need? What do you guys need to do an effective job of addressing not only the dark net, but this horrible opioid crisis that is killing our young people and people of all ages in this country?

Mr. WRAY. Well, I think at the end of the day it comes down to people and technology and tools. Our budget request highlights some of the things that we thought were of the highest priority and highlights the nature of the problem. Certainly we, like Congress, try to balance the demands of our mission with trying to be good stewards of the taxpayers' resources.

Mr. CARTWRIGHT. All right. I also want to ask you about the fiscal year 2020 request for 33 positions, including three special agents, and \$70.5 million to enhance cyber information sharing abilities and increased cyber tools and capacities. It is the same question, Director Wray: is that enough or do you need more than that?

Mr. WRAY. Well, I can assure you, Congressman, that whatever resources you were to make available to us on the cyber mission could immediately be put to good use. The cyber threat has grown in its range of actors, from nation states to criminal hacktivist and global crime syndicates; the increase in range of attack methods, whether it's botnets, ransomware, DDoS attacks, et cetera; and the range of targets, from Fortune 100 companies down to startups out in Silicon Valley has increased exponentially.

So, make no mistake, it is a significant challenge and it exceeds the bandwidth that we have at the moment.

Mr. CARTWRIGHT. All right. So when I think about 33 new positions, I am thinking programmers and really tech-savvy people to attack the cyber threat, but I am also wondering, do you not outsource a good deal of that to companies that specialize in cyber threats?

Mr. WRAY. Well, I wouldn't say we outsource exactly. We do partner with the private sector and of the 33 positions that we have asked for, I think 25 of them would be data analysts, which gets back to this theme that we have already discussed a little bit here about the importance of data analytics. Let me just put a little con-

text around that, because I think it affects all the areas that we have asked about.

SIZE OF DIGITAL EVIDENCE

The Las Vegas attacks, so let's take that outside of cyber for a minute, the mass shooting in Las Vegas, that one case, a big case to be sure—a tragic, horrible case—one petabyte of data. Now, one petabyte of data, if you are like me and not like my kids, you think petabyte, I don't know what petabyte is, but—

Mr. CARTWRIGHT. More than a terabyte.

Mr. WRAY [continuing]. The entire digital library at the Library of Congress, the digital records of the entire Library of Congress has seven petabytes of data. So Las Vegas, one case, had about a sixth of the entire Library of Congress digital records. Just a few years ago, we were ingesting annually about half of what the Library of Congress digital records has annually. So, for us to keep up with it, we are having to do things right now, like in Las Vegas and in Boston, where we have had to take the digital evidence and fly it clear across the country to Quantico, whereas if we could have more of the resources that we are asking for it would enable us to be more forward-deployed in terms of marshaling some of this information. So that is an example.

UNIVERSAL BACKGROUND CHECKS

Mr. CARTWRIGHT. My final question is about HRA. We just passed a bill for universal background checks with a list of specific sensible exceptions. The question is, would a universal background check requirement be helpful to law enforcement in preventing and/or solving violent crime involving firearms?

Mr. WRAY. Well, certainly, the more information we have, the more effective we can be. There are other considerations. I would have to look closely at the legislation, which I have not done, to be able to review it and give you a more meaningful answer.

Mr. CARTWRIGHT. I would urge to do that and maybe we will work together.

Mr. WRAY. Thank you.

Mr. CARTWRIGHT. Thank you, Director.

And I yield back.

Mr. SERRANO. Thank you.

Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman.

Director, good to have you. Thank you for your work, thank you for the Bureau's work. I know it is a tremendous task each and every one of you deal with each day. And it is good to have Georgian with us as well today.

CYBER

Just following up on cyber, that is one of my main focuses and lanes that I stay in, and you have noted it is a big part of your testimony as well that the private sector faces ever-increasing threats each and every day.

So, while you are working with the private sector, is it safe to say that when you are investigating these cyber attacks you are en-

gaging the private sector and you are relying on them to cooperate with the investigation or to help gather information or to help with attribution, is the private sector involved in that way as well?

Mr. WRAY. Yes. I think in the cyber arena, probably more than maybe any other of the threat areas we contend with, the partnership that needs to exist and does exist between the FBI and the private sector is incredibly important. The reality is that the most effective defense against cyber threats is prevention and increasingly mitigation, right? In other words, as soon as there has been an intrusion, detecting it quickly and getting rid of it quickly, and that requires that collaboration.

There are a lot of things that we do in terms of providing so-called TTPs to the private sector, you know, providing information about different things that we are seeing, getting information from them about what they are seeing, forging relationships through a variety of programs, formal and informal, that we have so that we can have that bond. You know, there is a saying that the best time to patch the roof is when the sun is shining, and that is the approach we are trying to take with the private sector in that space.

Mr. GRAVES. You acknowledge that the FBI, you know, limited resources, you focus primarily on the high-level intrusions and state-sponsored attacks. So, the private sector that doesn't meet that threshold, what tools, what resources do they have to help stop and prevent attacks or address attacks, what do you recommend there? I feel like we are a little short.

Mr. WRAY. Well, there is a swath—I think you have picked up on a very important point, which is in some ways where some things like this RCFL that we were talking about with Congressman Aderholt is so important—there is a swath of cyber-enabled criminal activity that is affecting businesses that is essentially below the level of the most sophisticated stuff that the Feds typically take on, but above the level that currently is in the range of most state and local law enforcement. Where these RCFLs fit in, as just one of many tools that we have, is that it is providing resources and capabilities to state and local law enforcement to sort of move up market, if you will, in terms of the kinds of things they can reach. It is also—you know, the old saying about teach a man to fish, we are training them at the same time, which then makes them even more effective and they can train others in their departments.

So, in the long term, I think that will help us capture that gap that you are alluding to.

Mr. GRAVES. You may be aware, I have been promoting a concept of active cyber defense, allowing the private sector to engage outside of their network to prevent an attack. And, you know, the Cyber Fraud and Abuse Act hasn't been updated in decades and I feel like the private sector is limited in what they can do. I would love a commitment from you to be able just to work with your team, your staff, to walk through some of the challenges, maybe walk through the policy I have proposed and how we might be able to enable the private sector to have a few more tools at their disposal, instead of a passive approach and additional defenses, maybe being able to actively defend their network. If I could just work with your team on that a little bit, I would appreciate that.

Mr. WRAY. We would be happy to work with you and take a look at any ideas you have. I do think that over the next 10 years the partnership that is going to have to exist between law enforcement and the Intelligence Community and the private sector, in the cyber arena in particular, is going to be a significant paradigm shift, because otherwise we are not going to be able to stay ahead of the threat.

Mr. GRAVES. Right, ever-increasing threats and successful attempts every day.

FBI HEADQUARTERS

One final question, Mr. Chairman. As the Republican leader of the Financial Services Committee, there has been this issue developed over the years and a lot of controversy about the location of the FBI headquarters, can you bring a little clarity to us? We had a lot of debate with GSA just a few weeks ago about this, but our understanding is that the Bureau believes that the best approach to meeting the demands of the Bureau is to rebuild at the current location and site, is that correct?

Mr. WRAY. Yes. This is obviously an important issue to the men and women of the FBI, as well as to the American public.

A little context, you know, I worked in the FBI building a lot on 9/11 and in the years after 9/11. The building was in bad shape then, and I can assure you it hasn't gotten better since then. When I came into this job, the previous project had already been canceled, so I wasn't involved in that part of it. So I came into it with a blank slate and we took a very long, careful, thorough look, and it is the FBI's view that the best balance of equities for the men and women of the FBI is to be here downtown, ideally in our current location. Building a new building—not trying to renovate the old one, but building a new building in that location gives us the ability to both have a Level 5 security facility to significantly grow the number of people we can have there, but also—and this is incredibly important—also make sure that our folks are within close proximity for the hundreds and hundreds of meetings that they have every day with their partners all within about a mile and a half of our current location, starting with, of course, across the street at the main Justice building. And so the ability to do that is something that we think is important.

I think that is the best choice for the American people as well, thousands of whom visit the FBI building every day to see the FBI experience tour, and that is an important part of the transparency that I think needs to exist between the FBI and the taxpayer and the American public.

Mr. GRAVES. To be clear, the decision was based on what is best for the Bureau, the security of our country, and not because of political pressure?

Mr. WRAY. Correct.

Mr. GRAVES. Thank you.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman. Director, thank you for being with us today, it is a pleasure to have you here.

I am curious. You are under the Department of Justice, right?

Mr. WRAY. Yes, the FBI is part of the Justice Department.

MUELLER REPORT

Mr. CRIST. Great. Have you had an occasion to read the Mueller report?

Mr. WRAY. I have not.

FBI HEADQUARTERS

Mr. CRIST. Let me get back to a little bit of what my colleague was just asking you about, because I sit on another Appropriations subcommittee that has some overlap with regard to your headquarters at the FBI.

There was some consternation around exactly the GSA and the FBI had become—or had come, rather, to abandon a decade-old plan to build a suburban, centralized campus in favor of a more expensive plan, as you said, to knock down the current site and re-build a smaller building there on Pennsylvania Avenue.

Now, the GSA leader, Emily Murphy—you may know her, I don't know, but in her opening statement before the other committee she stated, "I want to be clear, the FBI made the decision to propose remaining at its current location. I wish the FBI were here with me today to explain their reasoning for having done so, but there was a new FBI Director," which I assume was you, "who joined the agency in August of 2017. And I don't find it at all surprising that a new leader coming into an agency would want to take a step back and look at the very best way to address the needs that he assessed for the agency." She is talking about you, I assume?

Mr. WRAY. I assume so as well.

Mr. CRIST. Great. You just addressed a little bit about, you know, what—was that ultimately your decision to abandon the prior idea of going to a campus location and stay downtown?

Mr. WRAY. It is absolutely the FBI's view, the FBI's choice, the FBI's preference to build a new building—a bigger building, not a smaller building—at our current location, which would allow us to, as I said, improve security, build a state-of-the-art facility, add the number of people in terms of consolidating our footprint, and be more accessible or remain accessible to all of our partners and to the public.

Mr. CRIST. Was it in fact contemplated that the campus location is something that had been embraced by your predecessors, or is that not the case?

Mr. WRAY. I can't speak for my predecessors. I know that when I came in and I asked the question, tell me why we are not building a building here in this location, it appeared to me that people had thought that that was not an option that was available to us. So I don't know that, given the choice, my predecessors wouldn't have made exactly the same choice that I am making.

Mr. CRIST. OK. Thank you, Director.

I yield back.

Mr. SERRANO. Mrs. Roby.

Mrs. ROBY. Thank you, Mr. Chairman. And thank you, Director Wray, for being here this morning.

CRIMES AGAINST CHILDREN

And I echo the sentiments of my colleague from Alabama about the ever-expanding footprint that the FBI has in Alabama, and so we are grateful for those efforts and want to continue to be a partner in that. But I want to spend my time talking about the almost two pages in your written testimony that are specific to crimes against children, child exploitation, and sex and human trafficking.

I have been working with the Department of Justice in my other role on the Judiciary Committee to look at ways that we can enhance our laws. Unfortunately, we had a package of bills that moved by voice vote here in the House and failed in the Senate at the end of the last Congress. And I was very disappointed in that, because I felt like this was providing you, law enforcement, with even greater tools to go after these horrible predators who are seeking to do harm against children.

So I wanted to give you an opportunity, since you only had 5 minutes to give us a summary of your testimony. Again, this is important to all of us on this committee, this is important to this legislative body to make sure that we are doing all that we can to eradicate modern-day slavery and particularly crimes against children. So I want to know as a policymaker, as an appropriator, as a member of the Judiciary Committee as well, number one, give us—it is in your testimony, I understand, but give us a recap on your efforts to work with law enforcement across this country to eradicate these horrific crimes, but also give us suggestions as to how we can be more helpful in assuring that you have every tool necessary to help eradicate this.

Mr. WRAY. Well, thank you for the question. This is a topic that is not only a high priority for the FBI, but it is something that is near and dear to my heart personally. One of the few pro bono projects that I was pushing in private practice at the time that I was nominated for this position was to try to look for ways, which I don't think has historically been done much in the private sector, to help the victims of human trafficking.

The FBI tackles this problem through multiple programs, multiple weapons that we bring to bear. We have our VCAC Program, our Violent Crimes Against Children Program, is the program that kind of manages the effort primarily. We have 81 Child Exploitation Task Forces around the country where we work with state and local law enforcement and other folks; we have 18 human trafficking task forces on top of those.

And it is important, I think, for people to understand that it is not just immigrant victims, you know, the majority of human trafficking victims in this country are actually U.S. citizens. And I think your use of the word slavery is spot-on. I mean, frankly, I struggle for words to capture how horrific this is. I mean, it is downright medieval in 2019 that activity like this can happen. And barely a week goes by where I am not hearing about our successes in taking down some sex trafficking, typically child sex trafficking network, where we are recovering—you know, I think the number of kids that we rescued and recovered last year I think was well over a hundred. And some of these kids are just horrifyingly young.

It is not something that the FBI does alone. We do it with Federal partners, we do it with state and local law enforcement. We rely heavily on our Victim Services Division, because there is obviously a huge victim impact dimension to this. So we try to work on how we can position these folks, especially the kids, to have at least some semblance of a normal life after this is all over and done with; we try to work with social services providers.

So I think it starts with the Congress and Members like yourself kind of raising awareness, and then using all the different tools that we have asked for in our 2020 request in some way end up touching on this. The data analytics piece, the transnational organized crime piece, all those things tie in, among other things, to the human trafficking piece as well.

Mrs. ROBY. From a resource/budgetary standpoint, do you feel as though you have the resources that you need in order to carry out these programs?

Mr. WRAY. Well, I would say I am very proud of the hard work that our folks are doing and the successes we are accomplishing with our partners, but there is also no question in my mind that if Congress were to send more resources our way to deal with this problem those people would be busy immediately.

Mrs. ROBY. OK. Thank you for your service to our country, and your family as well, we very much appreciate that.

Mr. Chairman, I yield back.

Mr. SERRANO. Thank you.

Ms. Meng.

HATE CRIMES DATA

Ms. MENG. Thank you, Mr. Chairman. And thank you, Director, for being here and for your service to our country.

I wanted to ask about the under-reporting by local law enforcement of hate crimes; it remains a major problem. According to ProPublica's Documenting Hate Project, thousands of local law enforcement agencies choose not to report hate crime stats to the FBI at all. And a separate investigation revealed that 120 Federal agencies have not complied with mandates to submit hate crime data to the FBI, and also reports that the FBI itself does not regularly submit hate crimes it investigates to its own database.

I just wanted to know what is the FBI doing to improve the situation, to bring not only local law enforcement agencies, but also Federal agencies and FBI itself, into compliance for reporting hate crimes.

Mr. WRAY. Well, first, I would say you are correct that there has historically been under-reporting of hate crimes throughout this country. That is the bad news. The good news is that there has been a very positive upward trend in terms of the number of agencies that are reporting. We are still not where we need to be in terms of getting our arms fully around the scope and extent of the problem, but it is definitely moving in the right direction, and I think the statistics reflect that.

We at the FBI are trying to do a number of things from a sort of outreach perspective, working with partners to try to raise awareness and help our partners understand why it is in everybody's interest for the information to be reported.

For the most part, crime statistics, whether it is hate crimes or other types of crimes, you know, our pitch to the law enforcement community is we are all better off if we have the actual data and the actual facts. Otherwise, what happens is people start trying to analyze the issue based only on media reporting, which is not necessarily reliable.

So, good or bad, we think it is in the best interests of the profession, and therefore the country, to have complete and accurate data, and so we are committed to trying to ensure that.

HATE CRIMES UNDERREPORTING

Ms. MENG. I appreciate efforts for increased outreach and raising awareness, I think that is great.

I also wanted to ask about under-reporting specifically by certain more marginalized or under-represented communities; immigrant communities, people with disabilities, Arab Americans, South Asian Americans, people who might not speak English proficiently, many of these communities don't report, they can't report, or they don't feel safe reporting. How is the FBI engaging or doing outreach with these communities? And we work together in my district to have seminars and workshops with the FBI, for example.

And also with the rise of immigration enforcement activities, how is the FBI countering the fear that some of these victims might have and still encouraging them to report their crimes?

Mr. WRAY. Well, certainly I believe very strongly, and I think most people in the FBI believe very strongly, that the better we know all of our communities and the better they know us, the better we can protect them and uphold the Constitution. And there are all shapes and sizes, some formal, some informal, of community engagement with all the communities we serve. And I say that now with the benefit of having been to all 56 field offices and in the vast majority of them met not just with state and local law enforcement partners, but also with community leaders.

So I have gotten feedback directly from community leaders from all different corners of the country, and the feedback I get there is that they appreciate the engagement that our offices are doing. We are always looking for new and better ways to do that, we are never satisfied, but I think we are moving in the right direction. And we are doing things like our FBI Citizens Academy, where we will often include people from a wide variety of backgrounds and communities within the broader community, and those folks then stay involved and then help recruit and bring more people in. And they get to understand the FBI and law enforcement in a way that is I think very helpful, increasing the likelihood that when they are the victim of a crime they are going to reach out and say so, because there is a greater level of trust. I think that is the goal.

Ms. MENG. Thank you.

I yield back.

Mr. SERRANO. Thank you.

I am going to start a second round now. The members know that there will be votes, the votes will take about an hour. So probably whatever we can do now will be the end of the hearing, but we will stay in touch with you along the way to make sure that we get things done.

VIOLENT EXTREMISM

So, with that in mind, let me not make my opening statement to this question and get to the question. How would you describe the danger to public safety that is posed by white supremacist extremism? Is it changing in its qualities or in the kinds of resources that the FBI and other law enforcement agencies need to respond?

And secondly, the second part to that question, your budget request does not mention white supremacist extremism at all. How much funding and how many employees are dedicated to investigating white nationalist and white supremacist extremists in your fiscal year 2020 budget?

So what is the danger to the country and what do you need to fight it?

Mr. WRAY. Well, the danger, I think, of white supremacist violent extremism, or any other kind of violent extremism, is of course significant. We assess that it is a persistent, pervasive threat. We tackle it both through our Joint Terrorism Task Forces on the domestic terrorism side, as well as through our Civil Rights program on the criminal side through hate crime enforcement.

I think as to whether I would see any significant difference or trend there, or whether it is changing, I think I would say in general domestic terrorism in this country has changed in the sense that it is less structured, less organized, fewer groups, more uncoordinated one-off individuals, as opposed to some structured hierarchy, and that presents its own share of challenges. But certainly we tackle it through agents, analysts, professional staff, and technology, because there is a lot of social media exploitation that comes with it.

So, again, it comes back to this theme of data analytics and the volume of data that we talked about before.

FBI RECRUITMENT

Mr. SERRANO. Let me just ask you about recruitment. The FBI has always attracted talented young persons to its national security and law enforcement missions, but it is now finding it more difficult to compete with industry, particularly when it comes to technology skills. As a result, the FBI, like many Federal agencies, is trying to train current employees to fill such positions.

What is the current skill gap the FBI faces in this regard, both in terms of categories of positions and numbers of such personnel, and what is the FBI doing to close it?

Mr. WRAY. Well, certainly we are trying to be more focused on recruiting employees with STEM backgrounds, for example. We have a variety of programs where we start reaching out to kids, you know, at a much younger age to get them interested in careers with the FBI. We have created positions like the data analyst and computer scientist positions.

But you are correct, Mr. Chairman, that we are focusing very heavily on training, because the reality is, in this economy, that the sort of cyber whiz-kids that are out there are in short supply. Even Silicon Valley can't recruit enough of them and they have something else to offer that we don't have as much of.

Mr. SERRANO. Right.

Mr. WRAY. We have mission and we think we can compete on mission with anybody. But we think, if we are ultimately going to be where we need to be for the future, we are going to have to not only recruit more people with those backgrounds, but, frankly, raise the proficiency level throughout the workforce, because it is no longer just a case of a Cyber Division. As I said in my opening remarks, pretty much every threat area we have talked about here today has a cyber dimension to it or a digital evidence dimension to it.

So we need to improve kind of the median proficiency throughout the FBI workforce, so that the really sophisticated nation state intrusions and things like that can be the focus of our sort of cyber black belts, if you will, and that is the approach we are taking.

Mr. SERRANO. Thank you, Mr. Director.

Mr. Aderholt.

SEXUAL ASSAULT KIT BACKLOG

Mr. ADERHOLT. Thank you, Mr. Chairman.

I want to ask about sexual assault kits. The effort to address the backlog of sexual assault kits nationwide has led to tens of thousands of long-shelf kits being tested over the last several years. And while the analysis of sexual assault evidence seems primarily a state or a local law enforcement matter, I understand the FBI actually played a role in helping to ensure that these kits not go—don't go untested.

My question would be is under what program is or was the FBI involved with the testing of these rape kits?

Mr. WRAY. So, Congressman, our FBI lab has been a very, very important partner with state and local law enforcement in trying to clear through this backlog of sexual assault kits, rape kits, and it is a very impressive operation. I have been down there and seen it firsthand, and I am very proud of their work. Not only is that clearing the backlog, but of course in many cases these are serial rapists who are out and about until the backlog was cleared.

So this is having a real impact in a positive way on the safety of people all across the country.

Mr. ADERHOLT. What has the testing of these volumes of these backlogged sexual assault kits have taught the FBI about—and other law enforcement about crime in general?

Mr. WRAY. Well, it certainly highlights something that we talk about all the time, which is the value of partnership between Federal, state and local law enforcement. It has also taught us a lot about the value of the forensic skill set that is required to address all of the criminal threats we have, and of course it has highlighted the importance of Rapid DNA in particular, which is a place that has become an indispensable tool in this country both for catching the guilty, but also for exonerating the innocent.

RAPID DNA

Mr. ADERHOLT. I want to—I will quickly just move on. Rapid DNA, it is a term that is used to describe the fully automated process developing DNA profile from a cheek swab without a human intervention. Can you talk about the goal of the FBI's rapid DNA initiative?

Mr. WRAY. We are very excited about rapid DNA. Essentially, as you say, rapid DNA would allow for much, much faster and more agile and nimble DNA testing for the same kinds of results I was referring to just a second ago. We are trying to be very thoughtful about how we build up to this. Right now, we are moving in a direction where we are starting to use it in booking stations, in the more stable platform that that provides. Ultimately—but that's the key word, ultimately, we are not there yet. We want to be in a position where it can be used at crime scenes, but that is not where we are yet and that has got to be done very carefully, because we know there will be court challenges and other things. And we want to make sure that this very exciting, very promising technology to protecting the American people and upholding the Constitution is preserved and doesn't take a stumble by us starting out of the starting gate too quickly. But I know that in talking to my state and local law enforcement partners that we are all very excited about what this could mean for the profession and the country.

Mr. ADERHOLT. Thank you.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

H.R. 1112 CHARLESTON LOOPHOLE

Director Wray, you and I briefly touched on H.R. 8, and thank you for agreeing to work with me as you go through it and think about the ramifications on what that means for your agency. I also wanted to ask you about H.R. 1112, which is the closing the Charleston loophole bill. Same question, have you had a chance to review that and think about the ramifications for the FBI?

Mr. WRAY. I am afraid I have not had a chance to review that particular piece of legislation, but I would be happy for us to do that—view it, review it, that is.

Mr. CARTWRIGHT. Let's go over that offline, shall we? But it struck me as odd. The Trump Administration has come out against both H.R. 8 and H.R. 1112, and obviously they did not ask you to review those things, otherwise you would have done it by today, I assume, with a view toward how that would affect FBI operations.

FBI MORALE

Mr. WRAY. Well, just to be clear, I am saying that I personally have not reviewed either of the pieces of legislation you are referring to. I don't know for sure whether somebody in the 37,000-person workforce that we have might have reviewed and provided an assessment of the operational impact.

Mr. CARTWRIGHT. Well, they are not terribly long bills. And I understand you are a graduate of the Yale Law School and I understand that is an accredited law school at this point.

Mr. WRAY. The last time I checked, yes.

Mr. CARTWRIGHT. Let's work together and maybe you can give some context yourself to the White House on whether it ought to be opposing those bills.

I also wanted to talk about FBI morale and the reputation of the FBI. The FBI has seen really more than its fair share of negative

press coverage over the past several years. The Administration has really gone to unprecedented lengths to criticize and undermine the FBI as an institution and several of its employees specifically. I am concerned about a potential political polarization of the FBI. We don't want to see that. The FBI works for all Americans and I know you understand that. And I know that the men and women of the FBI are resilient, professional, hard-working, and largely able to focus on their mission even while subjected to unfair criticism.

Here is my question. What is your sense of the morale right now of the FBI and its employees in light of what I think are unfair attacks?

Mr. WRAY. Well, as you say, the men and women of the FBI are resilient, and I could give you story after story having gone now to all 56 offices and met with all of our employees in all those places. I would tell you that, while there are plenty of opinions out there about the FBI, the opinions that I encounter from our partners, Federal, state and local law enforcement, from prosecutors, from judges, from community groups, from private sector organizations, from the workforce that we are recruiting, has, frankly, been uniformly positive, in fact in a way that I think is a good measure of morale. Do you know that since October, we have had more people applying to be special agents of the FBI than all of the prior fiscal years. So that says, I think, good things about the morale.

Mr. CARTWRIGHT. It would be a good leading indicator there. Well, good.

Well, tell me, do you believe that public confidence in an agency is impacted when an elected official relentlessly attacks an agency and its members, and tries to undermine its credibility, do you think there is any effect of those things?

FBI EXPERIENCE

Mr. WRAY. You know, I don't think it is really my place to be weighing in or commenting on political speech and social media; those things have their place, I am focused on us getting the work done. I think that is what most of our folks are doing and the results I see there are not only strong, but improving all the time.

Mr. CARTWRIGHT. I am certainly glad to hear that Director. And thank you for coming today and your testimony.

I yield back, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Graves—and, by the way, before I go to Mr. Graves, I am glad you keep saying 56 places that you went to, because it has been my mantra that there are more than 50 states of the American flag.

Thank you.

Mr. GRAVES. Director, thank you again. No question, just I really want to commend you and your team, and particularly the personal attention that Mr. Halley gave to myself and others earlier this year, including my family as we came to visit headquarters and enjoy the new, I guess, tour that is available. And I must say, it is inspiring. If there is one thing that may be assisting with the new recruits or attention to wanting to join the Bureau, maybe

that was it, because it was really inspiring as to the work and the history of the FBI and the challenges you face.

But I just wanted to thank you and your team, and Mr. Haley in particular, for their attention to us. Thanks for joining us today.

Mr. WRAY. Thank you.

Mr. GRAVES. I yield back.

Mr. SERRANO. Well, I guess it is me. We will use whatever time we have here for a second.

FBI DIVERSITY AGENT RECRUITMENT PROGRAM

The FBI has a Diversity Agent Recruitment Program; how does it work and what would you regard as a measure of success for that program?

Mr. WRAY. Well, Mr. Chairman, diversity is very important to me personally, and I think it is to the whole FBI. We view it as critical to our effectiveness, I think we make better decisions when we have a more diverse workforce; I think it is essential to our credibility. There have been a lot of questions today about the trust of the community and we need, in order to have that trust, to be credible with all the different communities we engage with, and I think it is about respect and treating everybody with respect.

Our Diversity Agent Recruitment Program has a number of dimensions. We do a lot of social media exposure of what it is like to work at the FBI and we sort of prominently feature diverse employees to try to encourage greater application from that standpoint. We have Diversity Agent Recruitment events all across the country. I have gone and spoken at well over, I think about a half dozen of them myself to set the tone. And where we bring in people from, you know, historically African-American colleges and things like that, community groups, et cetera, to try to get people interested in careers with the FBI, and there is a whole sort of job fair dimension to that.

Mr. SERRANO. Well, I wanted to ask you——

Mr. WRAY. And the results are actually quite encouraging. The last couple years, we have seen——

Mr. SERRANO. Excuse me, I wanted to ask you about that, because I want it to be clear that you do participate in job fairs the way so many other people do.

Mr. WRAY. Well, these are sort of our own——

Mr. SERRANO. Your own job fairs——

Mr. WRAY. Job fairs——

Mr. SERRANO. Right.

Mr. WRAY. Because we like to make sure people are completely focused on the FBI when we are doing them, as opposed to showing up in some of these other settings, but we probably do a little bit of that too.

I would say that the results are encouraging. The last few years of our entering classes have been up in terms of the diversity that they represent. Each of those years is also more as a percentage matter than the current percentage of our workforce. And, importantly, this year the percentage, the diversity of applications—I mentioned a minute ago how recruiting is up—within that, the percentage of diverse candidates is up quite significantly in terms of

the applications. So I think that is also a very promising sign for the future of the organization.

9/11 FUNDING

Mr. SERRANO. Very briefly, my last question. I was part of this committee right after 9/11 and we gave a lot of money to the FBI, and rightfully so, to do what had to be done after 9/11. And I started worrying then, and I still worry now, that maybe the focus on criminals, drug dealers, and others, the white collar crimes, if you will, would not be paid attention to with the same fervor as it was before. What can you tell us about that?

Mr. WRAY. Well, certainly 9/11 is very important to me personally, as I know it is to you. And as I mentioned to you when we spoke on the phone, I have actually now added a visit to the 9/11 Memorial for every new training class, along with the Holocaust Memorial and the MLK Memorial.

I would say that while counter-terrorism remains our top priority, if you looked at where are our resources are allocated in terms of just the sheer numbers of agents, analysts, and professional staff, our traditional criminal programs are still where the lion's share of the resources are allocated. So you might hear us talking more about counter-terrorism and it might get a little more attention in the leadership just because of the stakes, the mass-casualty stakes that are implicated by a terrorist attack, but in terms of just the day-to-day cadence of the organization, our criminal programs still represent the biggest program we have.

Mr. SERRANO. Mr. Aderholt.

MS-13 THREAT

Mr. ADERHOLT. Let me ask about some other gang and violent crime issues. Other than the opioid epidemic, violent crime and gangs seem to affect just about every part of our community. Can you talk about MS-13 a little bit and just talk about the current—is it still a threat, as we have, you know, seen a lot in the news over the past several months and years on that? And just talk a little bit about MS-13 in general.

Mr. WRAY. So, certainly MS-13 remains a threat, it remains an organization that we are tackling very aggressively. We have had significant MS-13 cases of course in Long Island, but not exclusively. I think in Queens and Long Island, for example, not that long ago we took down I think about 45 of the most dangerous MS-13 members. But what is important about the way we tackle the MS-13 threat is that it is not just here in the U.S. with our Safe Streets Task Forces, we also have what we call our TAGS, which are task forces that are in El Salvador, Guatemala, and Honduras, where we work with local law enforcement there to help them address more of the problem there as well.

And so those two kind of bookends help us tackle the threat in a more cross-border way and sort of not just kind of getting it when it is here inside our borders.

VIOLENCE AGAINST LAW ENFORCEMENT OFFICERS

Mr. ADERHOLT. Has there been an increase in violence against law enforcement officers that you have been aware of?

Mr. WRAY. Last year, 2018, there was an increase in the number of law enforcement officers in this country who were shot and killed in the line of duty. And I say that because I personally call every time that happens the chief or sheriff or commissioner involved to express my support and condolences. And so every single one of those instances I am seeing myself, the picture of the person who was killed, information about his or her family, how long they were on the job, and it was up last year. I don't have the percentage or the number off the top of my head, but it was up last year in a way that I find very alarming.

And I would also say, which is in some ways even more concerning, that the number of those deaths that were as a result of ambush was up last year as well, as a subset.

This year, it is not clear yet whether the number will be up this year but this is a time for, you know, considerable concern about the well-being and safety of the men and women of law enforcement who put themselves at great risk. And it takes a very, very, very special person to every day be willing to sacrifice your life for a complete stranger. There are not a lot of people willing to do that and we all as Americans owe those people a debt of gratitude, and my heart and the hearts of everybody in the FBI breaks whenever one of these things happens.

Mr. ADERHOLT. Thank you.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Graves.

Mr. GRAVES. No questions.

Mr. SERRANO. That is it.

We want to thank you, Mr. Director, for coming before us today. Your agency is one that has our respect. When we disagree with you, we tell you in a diplomatic way to make changes, throughout our history, my personal history on this committee and I know the other members. The FBI at times has had difficult relationships with different communities, it did so in Puerto Rico for many years, and Director Freeh opened up those files for people to see and then changes were made to make sure that that didn't happen again.

And so you can tell the members of your workforce, your agents, that we respect them and we will do whatever we need to do to make sure they do the right job and do it properly, but do it with the support of Congress, and that is very important. And we thank you for your testimony.

This meeting is adjourned.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

FBI Fiscal Year 2020 Budget Request

Foreign Influence Task Force

1. In November 2017 Director Wray announced the establishment of a Foreign Influence Task Force. **Please describe the activity of the task force, its makeup and staffing and funding included for its operations in fiscal years 2019 and 2020.**

Impact of Shutdown

2. The government shutdown took a big toll on the FBI and its operations, along with the rest of the Federal government and its contractor; so much so that the FBI was prepared to reprogram funds intended for essential security and investment priorities just to make payroll. **What was the shutdown's immediate impact on the FBI workforce and operations?**
3. **Did the shutdown result in measurable costs to the FBI, such as contract cancellation penalties, deferred maintenance and hiring, or cost impacts due to unplanned schedule changes that are not reflected in your budget request for fiscal year 2020 but that need to be addressed? If so, please describe and quantify such costs.**

FBI HQ and facilities

4. Director Wray testified that "It is absolutely...the FBI's preference to build a ...bigger building...at our current location, which would allow us to, as I said, improve security, build a state-of-the-art facility, add the number of people in terms of consolidating our footprint, and be more accessible or remain accessible to all of our partners and to the public." **Were this project to be completed, how many FBI headquarters personnel would remain at the current location? How many positions would be relocated, and to where?**
5. **Please provide the status of the FBI's "21st Century facilities" projects, and the projected milestones to be achieved through fiscal year 2020, and obligations by project element in fiscal years 2019 and 2020. Please also identify funding to be used for secure work environment requirements.**

Community Outreach

6. At a time when there are great tensions in communities with their law enforcement agencies, particularly in areas where trust and confidence has been weakened, the FBI can set an example. **How is the FBI's Community Relations Unit and its field specialists working to bridge gaps between law enforcement and minority and immigrant communities?**

Supply Chain Security

7. The Commerce, Justice, Science and Related Agencies (CJS) appropriations Act has a provision requiring that acquisition of certain technology by agencies funded under the Act undergo scrutiny to ensure such technology is not used to compromise our supply chain. **Is this process working well, in your view? Is it a model that might be used more widely, including in collaboration with the private sector – especially in technology-heavy fields?**

FBI and Puerto Rico

8. In February, the local Special Agent in Charge in Puerto Rico announced that he would have more agents and other personnel assigned to Puerto Rico and the U.S. Virgin Islands than ever before. **Could you describe the nature of the challenges the FBI is facing in the Commonwealth, and how additional personnel will help address them?**

FBI Vetting

9. The 2020 request includes a \$16,600,000 proposed increase for the National Vetting Center, which was established in 2018 to vet people who seek to enter or remain in the U.S. Your request indicates that the National Vetting Center has large and growing backlogs, ranging from 9 months to vet “Special Interest Aliens”, to between eight and nine years of backlog to vet non-immigrant visas and review State Department “Security Advisory Opinions”. **What is the current impact of such backlogs? Does it include the denial or delay of issuing visas or in approving visa waiver travel?**
10. **How will funding received in the fiscal year 2019 Omnibus Appropriation be used to address this problem?**

The Honorable Nita M. Lowey
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

FBI Fiscal Year 2020 Budget Request

1. Three years ago, Congress passed the Justice Against Sponsors of Terrorism Act (JASTA) to ensure that victims of terrorism and their families can bring legal suit against a foreign government which may have aided terrorist attacks on U.S. soil. The families of 9/11 victims are concerned the FBI could be withholding key evidence needed to pursue claims against Saudi Arabia. Just last year the Senate passed S. Res. 610 calling on the executive branch to declassify “to the greatest extent possible” all documents related to the event of 9/11. **What steps, to the extent possible by law, is the FBI taking to make information available for litigation under JASTA? If the FBI believes there is a national security reason for classifying certain information, could that reasoning be outlined in a declassified setting? If so, when will the FBI outline this reasoning?**
2. 9/11 victim families are concerned that their litigation is not being handled expeditiously. **What steps is the FBI taking to ensure that families have access to the documentation they need to get their fair day in American court?**

The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

FBI Fiscal Year 2020 Budget Request

Information Sharing – Domestic Terrorism

1. In the aftermath of the tragic New Zealand mosque shooting, Acting Chief of Staff Mick Mulvaney stated that, while the U.S. and close allies like New Zealand pool intelligence on groups such as al-Qaeda, “there’s no comparable arrangement for sharing intelligence about domestic terrorist organizations, including right-wing extremists.” From Charlottesville to Christchurch, we have seen a clear pattern of international online radicalization of right-wing extremist groups drawing inspiration from each other. **What steps is the FBI taking to ensure that we are pooling intelligence on domestic terrorism with our allies?**

Combatting Anti-Semitism

2. The number of hate crimes reported to the FBI in 2017 went up 17%. Hate crimes motivated by anti-Semitism continue to be the most common hate crime. In 2017, we saw a 37% increase in anti-Semitic hate crimes. This is a problem that, in New York City, we know all too well. There was a dramatic spike in hate crimes against Jews in 2018, and many of these crimes target victims are easily marked as members of traditionally orthodox communities. **To what do you attribute this dramatic rise in hate crimes against the Jewish community?**
3. **Will the resources allocated to combating hate crimes be commensurate with the rise in hate crimes?**
4. **Has the FBI made efforts to create incentives for state or local law enforcement to participate in the Hate Crime Statistics Act program?**
5. **Would you consider including in the rating and scoring criteria as applications for DOJ funding to be considered?**

TUESDAY, APRIL 9, 2019.

DEPARTMENT OF JUSTICE

WITNESSES

WILLIAM P. BARR, ATTORNEY GENERAL OF THE UNITED STATES

LEE J. LOFTHUS, ASSISTANT ATTORNEY GENERAL FOR ADMINISTRATION

Mr. SERRANO. Good morning. The subcommittee will come to order.

Today we welcome the new Attorney General, William Barr, before the subcommittee. As the Attorney General during the George H. W. Bush administration, he has testified before this committee in the past, but this is his first time in quite a while. Welcome and congratulations to your new and old position, sir.

We also welcome Assistant Attorney General for Administration Lee Lofthus. Because Attorney General Barr was not confirmed when this year's budget proposal was largely formulated, he has asked that the Assistant Attorney General be allowed to join him at the table to answer some of the nuts-and-bolts questions that we will ask regarding the budget.

This year we have held several hearings for components of the Department, including the FBI, the ATF, the Civil Rights Division, and the Executive Office for Immigration Review. I appreciate the willingness of the Department to come and testify, even though we may have different opinions on different issues.

Let me take a moment to describe some concerns prompted by those hearings. We have heard what appears to be a lack of commitment to the Department's traditional mission to defend civil rights, disability rights, and prevent discrimination. We have discussed what appears to be a clear animus towards policies that protect individuals' health care, voting rights, access to education, and much, much more.

We have discussed the need for additional resources to address gun violence in this country, while at the same time hearing ATF say that the budget request would result in staffing reductions. We have talked to the head of the Executive Office for Immigration Review about the need to protect due process and fairness in our immigration courts, and the many policy changes that make such goals more difficult to achieve. We have heard the FBI describe the threats our Nation faces, but also that their budget request will not fully fund their efforts to address those threats. As we discuss the Department today, we are faced with a budget request that fails to address many of these concerns and raises new problems.

And of course, Mr. Attorney General, we could not hold this hearing without mentioning the elephant in the room, and I am not referring to my colleagues on the other side. Two and a half weeks

ago, the Mueller report was completed. In extremely quick fashion, you turned a 300-plus-page report into a four-page letter that supposedly summarized the findings. Last week, the New York Times reported that the Special Counsel's office had already created summary documents that were ignored in your letter, and that some investigators within the Special Counsel's office felt that the summary understates the level of malfeasance by the President and several of his campaign and White House advisors.

The American people have been left with many unanswered questions; serious concerns about the process by which you formulated your letter; and uncertainty about when we can expect to see the full report. I believe the American people deserve to see the full report and to be trusted to make our own determinations on the merits based on what the Special Counsel has presented.

Mr. Attorney General, if there is one thing I would like to leave with you today, something you already know, but just my role to remind you, is that this Congress voted unanimously to see that report, that the Congress and the committees of jurisdiction want to see the report, and that the American people want to see the report. I think it would strike a serious blow to our system and, yes, to our democracy if that report is not fully seen. And when it comes to redactions, we would hope that you could tell us when something is redacted, if you feel it has to be, what area it covered. I just see a blackout, it doesn't tell us where it came from and why it might have been redacted.

We are not here today to be in a confrontational situation with you. We want to help you do your job and you need to help us do ours, but what cannot happen is that somebody higher than you tells you that you don't have to answer our questions or you don't have to deal with us at all; that is not who we are as a country, that is not who we are as a democracy, that is not who we are as an Appropriations committee.

So let me just say this. Since 2017, our Nation's Justice Department has too often failed to meet the needs of the American people. I hope that with your ascension to Attorney General we can work together to change that.

And, with that said, I would turn to my colleague and friend Mr. Aderholt.

Mr. ADERHOLT. Thank you for yielding, Mr. Chairman, and I too would like to welcome Attorney General Barr and Assistant Attorney General Lofthus to the Commerce, Justice, Science Subcommittee to testify regarding the fiscal year 2020 budget request.

Your stewardship of the Department of Justice is important to all our communities and your budget proposes key investments in what we can all agree on are critical criminal justice priorities, such as strengthening national security, reducing violent crime, enforcing our Nation's immigration laws, combating the opioid crisis, and reducing recidivism.

Attorney General Barr, we recognize that you have an incredibly demanding job. Your presence here this morning reveals how seriously you take the Department's fiscal year 2020 budget request, as well as the role of Congress and this committee in making the funding decisions. So, thank you for being here this morning. We want to work with you, as the chairman said, to ensure that the

programs you administer to help keep this country safe are as effective and efficient as possible.

I hope your testimony today will address many of the issues that affect our local communities. I am particularly interested in the Justice Department's efforts to help curb the deadly opioid epidemic; I hope to learn more about high-tech law enforcement initiatives you are using to disrupt the sophisticated transnational criminal organizations at the heart of this scourge, and how we can best support these efforts.

I am also interested in hearing about your perspective on the humanitarian and the security crisis that we now have on our Southern border that we are hearing so much about, and how it affects the workload at your Department.

I look forward to working with Chairman Serrano on these and many other issues with the appropriations process as we move forward for the fiscal year 2020 appropriations process.

So, with that, we look forward to your testimony this morning, and I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

Let me now turn to the chairwoman of the full committee, my colleague from New York, Mrs. Lowey.

Mrs. LOWEY. I would like to thank Chairman Serrano, Ranking Member Aderholt, for holding this hearing. And, Attorney General Barr, welcome, and thank you for appearing this morning.

Before getting into your budget request, I want to address a serious oversight matter: your unacceptable handing of Special Counsel Robert Mueller's report. It has been reported that the report is 300 to 400 pages. And I use the term "reported," because we have no idea how long it actually is. All we have is your four-page summary, which seems to cherry-pick from the report to draw the most favorable conclusion possible for the President. And, in many ways, your letter raises more questions than it answers.

I must say, it is extraordinary to evaluate hundreds of pages of evidence, legal documents, and findings based on a 22-month long inquiry and make definitive legal conclusions in less than 48 hours. Even for someone who has done this job before, I would argue it is more suspicious than impressive.

Your conclusion is something we have seen before. In fact, we have seen it in your own legal writing. In June 2018, you wrote a memo as a private citizen and a former Attorney General to the Department of Justice laying out the President's case against obstruction of justice. Your audition clearly went well.

I look forward to reviewing the Mueller report myself, and I know my constituents do as well. I understand that portions of it must be redacted as a matter of law, but my hope is that you will stop there and bring transparency to this process as soon as possible. The American people deserve the facts.

Now to your fiscal year 2020 budget request. The request provides a significant increase for immigration judges and a modest increase for most Federal law enforcement. However, it either eliminates or significantly cuts respected grant programs at the Department of Justice that really make a difference in our constituents' daily lives.

For example, your request significantly decreases essential programs, including the COPS program, which advances community policing on a state and a local level would be cut by \$205 million; the DNA Initiative program, which provides grants to reduce the rape kit backlog by ensuring evidence that could lead to meaningful convictions does not sit on forgotten shelves, and that would be cut by \$25 million; and the Juvenile Justice program, which helps prevent youth crime, violence, and reduce recidivism, which would be cut by \$48.5 million.

These are simply unacceptable reductions.

I look forward to a productive discussion today. I hope you can shed some light on how this budget request can adequately respond to the grave task the Department of Justice and its grant programs undertake daily.

Thank you again for appearing before us. I look forward to an open discussion, an honest discussion, and address the many challenges before us today.

Thank you very much.

Mr. SERRANO. Thank you.

And now, Attorney General Barr, you are recognized to give your opening statement. We ask you please to try to keep it to 5 minutes and your whole statement will be included in the record. Thank you.

Attorney General BARR. Thank you, Mr. Chairman, Madam Chair, and Ranking Member Aderholt.

I am pleased to be here today to present to you the President's fiscal year 2020 budget for the Department of Justice, and I am joined here today by the Department's Chief Financial Officer, Assistant Attorney General for Administration, Lee Lofthus. We look forward to discussing how our requested appropriations will help protect the safety and rights of our constituents and your constituents.

For two fiscal years in a row, the Department has broken records for prosecuting violent crime. The Department has also significantly increased prosecution of firearms offenses, and in fiscal year 2018 prosecuted more firearm defendants than ever before.

As prosecutions have gone up, crime has gone down, and in 2017, after 2 years of increases, violent crime and homicide rates went down nationwide.

The FBI's preliminary data for the first 6 months of 2018 show a 4.3 percent decline in violent crime overall and a 6.7 percent decline in murders, and a 12 percent decline in robbery and burglary compared to the first 6 months of 2017.

In order to continue this momentum, President Trump has requested an additional \$137 million for violent crime and transnational organized crime prosecutions, as well as an additional \$100 million for the Project Safe Neighborhood grants to state and local law enforcement. The Department also requests \$5.8 million to enhance violent crime and firearms prosecutions.

Over the first 2 years of the Trump administration, we have also gained ground against the opioid epidemic, which is by far the deadliest drug crisis that this country has ever faced. The Department increased the number of defendants charged with Federal opioid-related crimes by 28 percent from fiscal year 2017 to fiscal

year 2018. Prescriptions of the seven most frequently abused prescription opioids are down more than 23 percent since 2016, to the lowest level in at least a decade, and over the same period the DEA has lowered the legal limits on production of the active ingredients in these opioids by 47 percent.

More importantly, drug overdose deaths may have finally stopped rising. According to preliminary data from the CDC, overdose deaths decreased slightly from September 2017 to August 2018. But there is a lot more work to be done and that is why the President's budget provides for \$295 million to combat the opioid epidemic, including \$18.2 million for the FBI's Joint Criminal Opioid Darknet Enforcement initiative or J-CODE, which is a team of agents that work to disrupt and dismantle the sale of synthetic opioids on the darknet.

The President requests \$11.1 million for five new heroin enforcement groups that will be deployed to DEA field divisions that have identified heroin as the first or second-greatest threat in their area. The President also includes \$2 million in operational funds for the National Opioid Initiative of our OCADETF program.

The President's budget also proposes to permanently transfer \$254 million from the White House Office of National Drug Control Policy to the DEA for the HIDTA programs, the High Intensity Drug Trafficking Areas. This change will eliminate redundancies by placing this program under the agency that leads our drug enforcement efforts.

We know that most of the illicit drugs in this country came across our Southern border. In the fight against an unprecedented drug crisis, border security is imperative.

In fiscal year 2018, the Department charged more defendants with illegal entry into this country than in any year before. At the same time, the Department increased the number of felony illegal reentry prosecutions by more than 38 percent.

Our immigration courts, which are under the Department of Justice, have also become more productive under this Administration. Since the beginning of 2017, the Department has conducted an unprecedented surge in hiring immigration judges. The Department has hired more immigration judges under President Trump than in the previous 7 years combined. We now employ the largest number of immigration judges in history, with 46 percent more immigration judges than just 3 years ago. That is having an impact on immigration cases.

After 8 consecutive years of declining or stagnant productivity between fiscal year 2009 and fiscal year 2016, our immigration judges have increased case completions 2 years in a row. In fiscal year 2018, immigration judges completed the most cases in 7 years.

In order to continue this progress, the Department requests \$71 million for 100 new immigration judges and additional support staff in fiscal year 2020. This would bring the number of authorized immigration judges to 634, which would more than double the number of immigration judges on board in fiscal year 2016. Given the fact that these judges face a record-breaking 860,000 case backlog, this investment is more than warranted.

And with the crisis on our Southwest border, the Department requests \$6 million for our Southwest Border Rural Law Enforcement

Violent Crime Reduction Initiative, which will help law enforcement agencies serving rural areas along and near the border to fight rural crime.

The Department also plays a critical role in protecting our national security in combating terrorism and cyber crime, and that is why the President requests an additional \$70.5 million to enhance the FBI's cyber information-sharing abilities and cyber tools and capabilities, as well as \$16 million for our National Vetting Center.

The President requests an additional \$18 million for the FBI to address counterintelligence threats, particularly cyber attacks and threats from hostile foreign intelligence services.

Mr. Chairman, there are many other issues facing law enforcement that we could talk about today, but the bottom line is the more than 112,000 men and women at the Department of Justice are doing important work, and we ask for your support.

Thank you.

[The information follows:]

STATEMENT OF
WILLIAM P. BARR
ATTORNEY GENERAL

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE,
SCIENCE, AND RELATED AGENCIES

FOR A HEARING ON
THE FISCAL YEAR 2020
DEPARTMENT OF JUSTICE BUDGET REQUEST

PRESENTED

APRIL 9, 2019
9:30 am

**Statement of Attorney General William P. Barr
Before the Subcommittee on
Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States House of Representatives
April 9, 2019**

Good morning, Chairman Serrano, Ranking Member Aderholt, and other distinguished Members of the Subcommittee. I am honored to appear before you today to present the President's fiscal year (FY) 2020 budget for the Department of Justice. I am joined here by the Department's Chief Financial Officer: Assistant Attorney General for Administration Lee Lofthus. Let me start by thanking you for your strong support of the Department in the recently enacted FY 2019 Omnibus Appropriations Act.

President Trump's FY 2020 Budget proposal totals \$29.2 billion for the Department of Justice to support federal law enforcement and the public safety priorities of our state, local, and tribal law enforcement partners. The request reflects a commitment to the Department's priorities of reducing violent crime, enforcing the nation's immigration laws, combating the opioid epidemic, and addressing national security threats to this great nation.

First, the Department of Justice is working hard every day to combat violent crime. Federal Bureau of Investigation (FBI) statistics show that, in 2015 and 2016, the United States experienced the largest increases in violent crime in a quarter-century.¹ The Administration has prioritized reversing that trend. In 2017 and 2018, the Department revitalized federal efforts to fight violent crime, including the launch of the enhanced Project Safe Neighborhoods (PSN) initiative, which brings together all levels of law enforcement and the communities they serve to develop effective, locally based strategies to reduce violent crime. In FY 2018, the Department prosecuted the greatest number of violent criminals in at least 25 years, thanks to the necessary resources provided by this Committee and Congress. Since 2016, violent crime has decreased.

Of course, the Department's work is not done—crime is still far too high, especially in the most vulnerable neighborhoods. We need to build on our efforts in 2019 and beyond. To that end, the FY 2020 budget allocates an additional \$137.9 million to reduce violent crime and combat transnational criminal organizations (TCOs). These resources will enable the Department to dismantle the worst criminal organizations and target the most violent offenders.

Second, the Department remains committed to enforcing and improving our immigration laws. As I've stated before, in order to ensure that our immigration system works properly, we must secure our Nation's borders, and we must ensure that our laws allow us to process, hold, and remove those who violate our immigration laws. Through the FY 2020 President's budget, the Department will continue improving its ability to enforce our immigration laws and combat illegal immigration by expanding court capacity for immigration hearings, improving efficiency in the immigration process, and removing impediments to the timely administration of justice.

¹ U.S. Dep't of Justice, Fed. Bureau of Investigations, *Crime in the United States, 2016*: Table 1 & n.6, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-1>; for data years prior to 1995, see U.S. Dep't of Justice, Fed. Bureau of Investigation, *UCR Data Tool*, <https://www.ucrdatatool.gov/index.cfm>.

Specifically, the budget requests an additional \$72.1 million to enhance border security and immigration enforcement. To maintain the efficacy and efficiency of immigration enforcement and adjudication programs, the Department requests \$71.1 million for 100 new immigration judges and support staff for the Executive Office for Immigration Review (EOIR). This budget request supports the Department, along with our partners at the Department of Homeland Security, in our efforts to fix our immigration system.

Third, the Department is fighting hard against the scourge of illegal drugs, and in particular the opioid crisis. The United States is in the midst of the deadliest drug epidemic in American history. According to the Centers for Disease Control and Prevention (CDC), more than 70,200 Americans died from drug overdoses in 2017, a 10 percent increase from the previous year.² The President declared a National Public Health Emergency in October 2017, and the Department remains committed to doing its part to protect the American people from the impact of drugs and drug-related crimes nationwide. In 2018, the Department charged 7,000 defendants with offenses involving fentanyl, heroin, or opioids; that is a Department record, and we are on track to break it this year. But despite these record efforts, overdose deaths remain far too high.

The Department must redouble its efforts to combat this crisis. The budget includes \$295 million to enable the Department to target the organizations responsible for the opioid epidemic and drug-related violence in our communities. It also bolsters the capacity of Department agents to deny revenues to drug traffickers using the best cyber capabilities and technologies, enabling the Department to keep pace with these nefarious actors.

Fourth, the Department is pursuing several programs—both old and new—to protect national security. These include protecting American elections from foreign interference, combating and preventing cyber attacks, and fighting terrorism both at home and abroad. The budget dedicates \$132 million in program enhancements to address constantly evolving national security threats, including the areas of cyber, counterterrorism, and counterintelligence.

Our DOJ team, along with our federal, state, local, and tribal partners, has been working diligently to address these issues each and every day. The budget request supports many other key programs, for example, by prioritizing public safety at the state, local, and tribal levels through approximately \$4.3 billion in discretionary and mandatory funding and by securing funds to help the victims of crime. In line with the President's priorities and Congress's shared commitment to protecting the public fisc, our proposal also includes restructuring initiatives that are designed to reduce both bureaucracy and costs to the American taxpayer.

Let me say clearly, Mr. Chairman, you and this Committee have been strongly supportive. We are determined to use every dollar you have provided to us to achieve the maximum benefit in our efforts to fight crime and protect the American people. I would now like to tell you more about how our budget proposal furthers the priorities that I have just outlined.

² Hedegaard H. Drug Overdose Deaths in the United States, 1999-2017. NCHS Data Brief, no 329. Hyattsville, MD: National Center for Health Statistics. 2019. Available from: http://www.cdc.gov/nchs/data/databriefs/db329_tables-508.pdf.

Combating Violent Crime

Protecting the American people from violent crime is a top priority for the Department of Justice. In 2015 and 2016, violent crime increased by nearly 7 percent. Robberies, assaults, and rapes all increased, and murder increased by a shocking 20 percent.

As a result of the Department's efforts, violent crime has decreased nationwide since 2016.³ A key part of this success has been the revitalization of Project Safe Neighborhoods that I mentioned above. We are requesting a total of \$100 million for this important program. Under this program, grants are awarded to local law enforcement agencies, outreach and prevention service providers, and researchers to support activities implementing local PSN anti-violence strategies across the country.

The FY 2020 budget requests a total of \$137.9 million in program enhancements to reduce violent crime and combat TCOs. This includes funding for the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) National Integrated Ballistic Information Network (NIBIN). The funds will allow ATF to expand the National Correlation and Tracing Center (NNCTC) services to an additional five sites in FY 2020, support additional training, increase the capacity of ballistic imaging and correlation hardware and software, and provide necessary infrastructure for further expansion of services to NIBIN sites. This will bring NIBIN to approximately 200 sites by the end of FY 2020. The Department is also requesting \$4.2 million to enable the FBI to increase their capacity to perform Criminal Background Check System (NICS) background checks for firearms purchases.

To ensure this continued decrease in crime, the Department is requesting \$5.8 million to enhance violent crime and firearms prosecutions by United States Attorneys' Offices. This request will give our United States Attorneys the support they need to prosecute complex criminal cases.

The request also provides \$18.2 million for the FBI to counter the ever-evolving threat posed by TCOs. This enhancement will support the FBI's Joint Criminal Opioid Darknet Enforcement (J-CODE) initiative to disrupt and dismantle the Darknet illicit marketplaces facilitating the distribution of fentanyl and other opioids. This critical initiative brings together agents, analysts, federal, state, local, and tribal law enforcement with expertise in drugs, gangs, and health care fraud from across the U.S. Government to target the trafficking of fentanyl and other opioids on the Darknet.

Understanding the need to address violent crime at our borders with our state and local partners, the Department is requesting \$6 million for a new grant program in the Office of Justice Programs (OJP): the Southwest Border Rural Law Enforcement Violent Crime Reduction Initiative. This program will empower rural law enforcement agencies by providing training, technical assistance, and resources to interdict drug and human traffickers who are exploiting the corridors into our country.

³ U.S. Dep't of Justice, Fed. Bureau of Investigation, *Crime in the United States, 2016*: Table 1 & n.6, <https://ucr.fbi.gov/crime-in-the-u.s./2017/crime-in-the-u.s.-2017/topic-pages/violent-crime>

Enforcing Immigration Laws

Enforcement of the Nation's immigration laws also remains a vital mission of the Department. As I have said many times, the United States has some of the world's most liberal and expansive immigration laws, and we aim to admit visitors and immigrants equitably from all around the globe. But the integrity and fairness of our immigration system depends on robust enforcement against those who flout or circumvent our laws. To safeguard our borders and ensure due process, the Department is requesting an additional \$72.1 million for immigration enforcement.

This request includes funding for 100 new immigration judges, which will bring EOIR's authorized immigration judge level to 634 by the end of FY 2020 — a 31 percent increase since FY 2018. The Department believes that these new immigration judges are necessary to provide some relief from a critical backlog in the immigration courts. At the end of the first quarter of FY 2019, there were over 820,000 cases pending in immigration courts nationwide. That caseload is by far the largest-ever pending caseload before the Department, marking the 12th consecutive year of increased backlogs. The 100 new immigration judges will help us to reverse that trend—but it is important to note that the continued influx of cases originating from the border constrains our ability to manage the backlog of cases, and other reforms are necessary.

The request also includes an increase of roughly \$1 million for the Department's Environment and Natural Resources Division (ENRD) to support their Land Acquisition Section. The President has prioritized efforts to build and maintain physical barriers at the Southern Border. The Land Acquisition Section is responsible for assisting DHS and other federal partners in acquiring real property for border security projects. These funds will allow ENRD to commit 6 more attorneys to these efforts.

Combating the Opioid Epidemic

Overdose deaths—and in particular, deaths from opioid overdoses—remain a public health crisis, and trafficking of illegal drugs is closely tied to the ongoing problems of violent crime and border security. The Department of Justice has been working hard to fight drug trafficking and diversion, but much, much more remains to be done. That is why the Department is requesting an additional \$295 million to combat the opioid crisis and bolster drug enforcement efforts.

The Department's approach to combating the opioid epidemic includes a request for \$11.1 million to fund five new heroin enforcement groups that will be deployed to Drug Enforcement Administration (DEA) Field Divisions that have identified heroin as the first- or second-greatest threat to their area. These resources will also allow for more agents at DEA Field Divisions to target the Mexican TCOs that pose the greatest drug threat to the United States. An additional \$1.65 million will go to support DEA's flagship Sensitive Investigative Unit (SIU) Program to combat highly sophisticated TCOs known for supplying illicit substances to distributors and users in the United States. The Organized Crime Drug Enforcement Task Forces (OCDETF) Program has requested \$2 million in operational funds to support the ongoing and rapidly expanding National Opioid Initiative. This will support the hundreds of federal agents and prosecutors who are handling the expansion of opioid investigations.

Further, DEA manages or participates in Translation and Transcription Support Services, known as Judicial Wire Intercept Programs (JWIP), in approximately 20 countries. An additional \$10 million in funding will go to support the consolidation of nine core legacy judicial wire intercept systems into one new judicial wire intercept platform in Colombia. In addition, DEA requests \$11.7 million to invest in its cyber investigation capabilities. With these funds, DEA intends to place technical specialists in each of DEA's 23 field offices to assist agents in cyber-specific cases.

Finally, the President's Budget proposes to permanently transfer management of the \$254 million High Intensity Drug Trafficking Areas (HIDTA) Program from the Office of National Drug Control Policy (ONDCP) to DEA to facilitate stronger coordination with other drug enforcement assets. Transferring the HIDTA grants to DEA will enable the agency to focus on combating drug trafficking in areas where the threat is the greatest and where there is a coordinated law enforcement presence.

National Security

National Security remains among the Department's top priorities. Threats are constantly evolving, requiring additional investments to mitigate these threats. Therefore, the Department's FY 2020 budget includes a request of \$132 million in program enhancements focused on cyber, counterterrorism, and counterintelligence. It also reflects an increased role for the U.S. Marshals Service (USMS) in dignitary protection to promote government-wide efficiency.

Election security is a key issue for the Department. Working together with our partners in the federal government, I will build on the work already done by the Department in this area and ensure that the full might of our resources are brought to bear against foreign persons who unlawfully interfere in our elections. I believe that our country must respond to any foreign interference with the strongest measures, and we must work with partners at the state level to ensure that our election infrastructure is completely protected.

Similarly, we must protect Americans against cyber attacks, whether foreign or domestic. The Department requests an additional \$70.5 million to enhance the FBI's cyber information-sharing abilities and cyber tools and capabilities. The FBI's multi-pronged cyber enterprise strategy uses predictive means and investigative partnerships to impose consequences against cyber adversaries who target U.S. interests. Additionally, to protect high-value assets and information in the Department's data centers, DOJ must improve security monitoring at all levels. As such, the Department requests \$2 million to extend its detection and response capabilities beyond the on-premises network to the places where our data resides.

In our efforts to combat terrorism, the Department is requesting \$16.6 million for the National Vetting Center (NVC). This request will provide for the vetting of people seeking to enter or remain within the United States. The NVC will increase the government's ability to identify terrorists, criminals, and other nefarious actors. These resources will help enable the NVC to provide timely information regarding the risk an individual poses. Furthermore, the Department requests \$17.1 million to enhance the FBI's capability to respond to threats posed by

chemical, biological, radiological, or nuclear devices found within the United States and its territories.

In addition, the Department is requesting \$18.3 million for the FBI to address counterintelligence threats, particularly those from hostile foreign intelligence agencies and other non-state and criminal adversaries employing advanced cyber-based attacks. These resources will allow the Department to combat these growing and serious threats by bolstering cyber investigative and collaborative capabilities and capacities. The request will also assist the FBI in providing support to the Committee on Foreign Investment in the United States (CFIUS), which reviews foreign acquisitions of domestic entities that might affect national security. Additionally, the Department is requesting \$5 million to support efforts of the National Security Division (NSD) to prevent foreign intelligence services from accessing sensitive information and technology. The request will support NSD's review, mitigation, and monitoring of foreign investments in the United States for national security risks including filings on behalf of CFIUS. The Department also requests \$1.4 million to support NSD's growing mission of protecting national assets against cyber threats, including thwarting efforts by terrorists and nation states to infiltrate our critical infrastructure and combating economic espionage.

In an effort to improve services and to save taxpayer money in the long run, the Department is requesting \$1 million for the Protective Detail Consolidation evaluation. The USMS will evaluate protection requirements for civilian Cabinet and sub-Cabinet level officials in support of the President's 2018 Government Reform and Reorganization Plan. The USMS will coordinate with Executive Branch agencies to assess existing agency protective plans, develop standards and best practices for protective detail staffing and evaluation, and prepare a range of policy options to promote standardization and effective monitoring, assessment, and response to potential threats.

State, Local, and Tribal Assistance

The Department supports its partners in state, local, and tribal law enforcement, whose actions are crucial in the fight against violent crime and the opioid epidemic. The FY 2020 budget continues that commitment to state, local, and tribal public safety officials by investing approximately \$4.3 billion in discretionary and mandatory funding in programs to assist them. This includes \$405.2 million in total funding for the Edward Byrne Memorial Justice Assistance Grant Program (Byrne JAG). This funding is the primary source of flexible funding for state, local, and tribal jurisdictions across all components of the criminal justice system. Byrne JAG funding is used to address critical gaps in their criminal justice systems in order to increase public safety and prevent crime. In 2020, Byrne JAG will also fund other important officer safety programs serving state, local, and tribal law enforcement, including \$22.5 million for the Bulletproof Vest Program, \$22.5 million for the Body Worn Cameras Program, \$3.6 million for the National Missing and Unidentified Persons System (NamUs), and \$15 million for the Valor Initiative. Two additional set-asides include \$5 million for the Public Safety Partnership (PSP) Program, which leverages DOJ resources to reduce violence in cities with the highest violent crime rates, and \$6 million for the Southwest Border Law Enforcement Violent Crime Initiative, which I discussed previously. Finally, our budget request includes \$330 million for programs authorized by the Comprehensive Addiction and Recovery Act of 2016.

In December, Congress passed and the President signed the First Step Act of 2018, which seeks to reduce recidivism, refine sentencing laws, and eliminate disproportionate penalties for certain crimes. I intend to robustly fund and diligently implement this bill at the Department. The Act directs the National Institute of Justice (NIJ) to evaluate Second Chance Act programs no later than five years after its enactment. Therefore, the FY 2020 Budget requests \$1.5 million for NIJ to support the first phase of this evaluation, which will focus on identifying appropriate outcome measures for Second Chance Act programs. In addition, related to the First Step Act, the Federal Bureau of Prisons (BOP) is requesting \$14 million to incentivize the development of innovative pilot projects in reentry and recidivism-reduction approaches. BOP is also requesting \$1 million to expand the availability of medication-assisted treatment for inmates with opioid abuse disorders and to enable more inmates to get treatment.

We can never forget that crime statistics represent crime victims whose lives have been changed by criminal acts. In recognition of National Crime Victims' Rights Week, the Department renews its commitment to strive for justice and to connect these survivors with vital services as they heal. The President's budget includes \$2.3 billion from the Crime Victims Fund to assist victims and survivors of crime, to build capacity to enhance response to crime victims' needs, and to increase offender accountability. Of this total, \$115 million will be devoted to improving services and justice for tribal victims of crime, as the violent crime rate in Indian Country remains extraordinarily high.

In addition, the budget includes \$77 million in discretionary funding for grants to support human trafficking victims and those providing direct services for survivors and improving the community response to victims through outreach, training, and technical assistance.

Restructuring Initiatives

The Administration is committed to establishing a leaner, more productive federal government that reduces both bureaucracy and costs to the American taxpayer. Since 2017, the Department of Justice has undertaken efforts to refocus resources and return our efforts to our core mission. To support the President's Executive Order on Reorganizing the Executive Branch, the Department of Justice has begun taking steps to streamline and improve its good stewardship of taxpayers' dollars. As part of the FY 2020 President's Budget, the Department is proposing a number of initiatives to achieve savings, reduce the size of government, and maximize agency performance. Highlights of the restructuring initiatives include:

- The FY 2020 budget proposes legislation that will move the responsibilities related to alcohol and tobacco enforcement from ATF to the Department of Treasury's Alcohol and Tobacco Tax and Trade Bureau. ATF will retain its current enforcement responsibilities for firearms and explosives. The transfer of the alcohol and tobacco authorities will allow ATF to devote additional resources to its primary mission of combating violent crime through initiatives such as its highly effective NIBIN and Crime Gun Intelligence Centers.
- The Department proposes to improve our service to our state, local, and tribal partners and our grant programs in a variety of ways. The Department is developing one grants-management system to streamline and improve the grants process. The request also

consolidates the Office of Community Oriented Policing Services (COPS) within OJP. The budget also proposes to transfer activities of the National Institute of Corrections from the BOP to OJP. This will help to consolidate the Department's state and local corrections research and evaluation programs and better align efforts to assist state, local, and tribal corrections professionals with OJP grant programs.

- The budget also proposes to transfer the functions of the Community Relations Service to the Civil Rights Division, allowing to the Department to perform its community mediation work in a more centralized manner and at a greater savings to the taxpayer.
- As previously noted, the budget proposes to transfer the HIDTA grant program from ONDCP to DEA. This change will eliminate redundancies within federal organizations by moving this program, which supports states and communities fighting the scourge of illegal drugs, into the same agency leading the enforcement efforts in those communities.

Chairman Serrano and Ranking Member Aderholt, it is my pleasure to highlight our efforts to be good stewards of the resources and authorities bestowed on us as we strengthen the Department's ability to ensure safety, equality, and justice for all Americans. As Attorney General, I am committed to making the Department of Justice run as efficiently and effectively as possible, without adding to the burden on the American taxpayer. I thank you for your past support of the Department's financial needs, and for the opportunity to present our FY 2020 budget request. I look forward to working with you through the upcoming fiscal year to ensure that the Department of Justice remains on solid financial footing and can accomplish its multiple and varied missions effectively. I look forward to your questions. Thank you.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mr. SERRANO. Attorney General Barr, in your confirmation hearing you say you believed it very important that results of Special Counsel Mueller's investigation be shared with Congress and the public; we agree on that. FBI Director Wray, the Nation's top counterintelligence investigator, told us last week he had not read the Special Counsel's report.

My question is, with regard to your March 24 and 29 letters to the Judiciary Committees, did Special Counsel Mueller or anyone on his team have a role in drafting them or reviewing them in advance? Did you use any of the summary documents prepared by the Special Counsel in drafting these documents?

Attorney General BARR. The 24th and 29th. The letter of the 24th, Mr. Mueller's team did not play a role in drafting that document, although we offered him the opportunity to review it before we sent it out and he declined that.

The letter on the 29th, I don't believe that that was reviewed by Mr. Mueller or that they participated in drafting that letter.

But to go back to something you said in your opening statement about the availability of the report. As I said, as you pointed out, since my confirmation I do think it is important that the public have an opportunity to learn the results of the Special Counsel's work, and I said then that I would work diligently to make as much information public as I could and available to Congress as I could.

You will recognize that I am operating under a regulation that was put together during the Clinton administration and does not provide for the publication of the report, but I am relying on my discretion to make as much public as I can.

Now, in my letter of March 29, I identified four areas that I feel should be redacted, and I think most people would agree. The first is grand jury information, Rule 6(e); the second is information that the intelligence community believes would reveal intelligence sources and methods; the third is information in the report that could interfere with ongoing prosecutions. You will recall that the Special Counsel did spin off a number of cases that are still being pursued and we want to make sure that none of the information in the report would impinge upon either the ability of the prosecutors to prosecute the cases or the fairness to the defendants.

And, finally, we intend to redact information that implicates the privacy or reputational interests of peripheral players where there is a decision not to charge them.

Right now, the Special Counsel is working with us on identifying information in the reports that fall under those four categories. We will color code the excisions from the report and we will provide explanatory notes describing the basis for each redaction. So, for example, if a redaction is made because of a court order in a pending prosecution, we will state that and we will distinguish between the various categories. This process is going along very well and my original time table of being able to release this by mid-April stands.

And so I think that, from my standpoint, within a week I will be in a position to release the report to the public, and then I will

engage with the chairmen of both Judiciary Committees about that report and about any further requests that they have.

Mr. SERRANO. So let me just get one thing clear for the record. My concern during my opening statement that when you redact something we should know what area it falls under, that you say will happen?

Attorney General BARR. Yes, yes, sir.

Mr. SERRANO. Your March 24 letter indicated that some actions the Special Counsel investigated as potentially raising obstruction of justice concerns have not been publicly reported; will these actions be identified in the report sent to Congress?

Attorney General BARR. As things stand now, I don't think that they will be redacted. So they will be identifiable, yes.

Mr. SERRANO. All right, thank you.

Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman.

U.S. MEXICAN BORDER

Mr. Attorney General, as you know, there is a serious humanitarian crisis at the Southern Border, and in fact the previous Administration specifically noted that transnational organized crime in Mexico makes the U.S. border more vulnerable, because it creates and maintains illicit corridors of border crossings that can be employed by other secondary criminal or terrorist actors or organizations. Of course, your fiscal year 2020 budget proposes an additional \$18 million in resources to help advance the fight against organized crime.

Can you talk a bit about the Department of Justice and how it is addressing the smuggling networks that are endangering so many of the lives that are being smuggled and trafficked across the Southern Border, and particularly the children?

Attorney General BARR. Yes, sir. The problem we face on our Southern Border is really unprecedented, not just the volume and the makeup of the people coming across from an immigration policy standpoint, but by the strength of the criminal organizations in Mexico. One of the things that has changed a lot in the 30 years prior when I was Attorney General has been the strengthening of these criminal organizations in Mexico, these cartels, that are not only involved in multiple kinds of drugs and the transportation of those drugs and distribution in the United States, but also into human trafficking. So attacking those transnational criminal organizations is a high priority.

The fiscal year 2020 budget requests a total of \$3.2 billion that is targeted at dealings with these transnational organizations, and we are seeking an increase of \$109 million this year. We are also seeking \$29 million in programmatic enhancements, including \$18 million to strengthen the FBI's ability to monitor and target the transnational organizations; and \$10 million to strengthen DEA's ability to operate its Judicial Wire Intercept Program in Central America; and another \$1.7 million for DEA's Sensitive Intelligence Unit, which is targeting these groups and their illicit trafficking in narcotics.

I personally believe that an important part of securing the Southern Border is to have a barrier system on the border, and I

think that that will help not only in narcotics interdiction, but also in suppressing human trafficking, and it is an important part of our enforcement.

FISA

Mr. ADERHOLT. Let me switch gears just a minute. One of the most sacred rights, as you know, as Americans, is the right not to be spied on by the Government. A FISA order may only be issued based on a finding by the Foreign Intelligence Surveillance Court that probable cause exists to believe that the target of surveillance is an agent of a foreign power.

One of our colleagues, Representative Nunes, has referred eight persons to the FBI for investigation concerning alleged misconduct during the Russia investigation, including the leak of highly classified material, and alleged conspiracies to lie to Congress and the FISA Court in order to spy on then-candidate Trump and other persons. I would hope the Department of Justice will be giving these referrals appropriate and prompt consideration.

My question is, now that President Trump has been exonerated of Russia collusion, is the Justice Department investigating how it came to be that your agency used a salacious and unverified dossier as a predicate for a FISA order on a U.S. citizen?

Attorney General BARR. The Office of the Inspector General has a pending investigation of the FISA process in the Russia investigation and I expect that that will be complete in—probably in May or June, I am told. So, hopefully we will have some answers from Inspector General Horowitz on the issue of the FISA warrants.

More general—

Mr. ADERHOLT. Do you—go ahead.

Attorney General BARR. More generally, I am reviewing the conduct of the investigation and trying to get my arms around all the aspects of the counterintelligence investigation that was conducted during the summer of 2016.

Mr. ADERHOLT. Are you investigating who leaked the existence of the FISA order against Carter Page?

Attorney General BARR. Who what?

Mr. ADERHOLT. Are you investigating who leaked the existence of a FISA order against Carter Page?

Attorney General BARR. I haven't seen the referrals yet from Congressman Nunes, but obviously, if there is a predicate for an investigation, it will be conducted.

Mr. ADERHOLT. Thank you.

Thank you, Mr. Chairman.

Mr. SERRANO. Mrs. Lowey.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mrs. LOWEY. Attorney General Barr, reports suggest that Special Counsel Mueller's report is anywhere between 300 and 400 pages long. I would be interested in knowing, how many discussions did you have with the Deputy Attorney General and other staff between receiving the report and releasing the memo? Was there discussion or debate about the evidence and conclusions? How many

staffers assisted you in digesting so many pages of complex information in such a short period of time?

Let me tell you what I'm getting at that I find quite extraordinary. You received a very serious, detailed report, hundreds of pages of high-level information, weighed the factors and conclusions at length, outlined, prepared, edited, and released your memos in less than 48 hours. To me, to do this, it seems your mind must have been already made up. How did you do it?

Attorney General BARR. The thinking of the Special Counsel was not a mystery to the people at the Department of Justice prior to his submission of the report. He had been interacting, he and his people had been interacting with the Deputy Attorney General and lawyers supporting the Deputy Attorney General in his supervision of the Special Counsel, and in that context there had been discussions. So there was some inkling as to some of the thinking of the Special Counsel.

Furthermore, on March 5th, I believe, the Deputy and I met with Special Counsel Mueller and his team, and had a preliminary discussion about the report. So we had an inkling as to what was coming in our direction, and so even more thinking within the Department was done about that over that time; that was a matter of weeks. And then, when the report came, and it came approximately midday on Friday, the Deputy Attorney General and I and our staffs worked closely for the balance of that day, Saturday, and Sunday.

Mrs. LOWEY. I didn't want to interrupt you.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Attorney General BARR. That is——

Mrs. LOWEY. Did the White House see the report before you released your summary letter? Has the White House seen it since then? Have they been briefed on the contents beyond what was in your summarizing letter to the Judiciary Committee?

Attorney General BARR. I have said what I am going to say about the report today; I have issued three letters about it. And I was willing to discuss the historic information of how the report came to me and my decision on Sunday, but I have already laid out the process that is going forward to release these reports, hopefully within a week, and I am not going to say anything more about it until the report is out and everyone has a chance to look at it.

Mrs. LOWEY. I think there are some relevant questions that I do hope you could answer today, sir.

On the question of obstruction of justice, your memo stated, quote, "While this report does not conclude that the President committed a crime, it also does not exonerate him." Yet President Trump has publicly stated that this report is a complete and total exoneration.

Can you tell us who is factually accurate? And will the released report include details on the obstruction issue and why, as you noted, the President is not exonerated, or will that information be redacted?

Attorney General BARR. I have already explained the information that is going to be redacted from the report, the four categories, that is what is going to govern the redactions, and in fact the Spe-

cial Counsel and his staff are helping us select the information in the report that falls into those four categories. But, again, the report—I will be in a position, as I said, within a week to release the report, people can then read the report.

I have already promised the Judiciary Committees that I would appear as soon as they are able to schedule a hearing after the report is released, so I am not going to discuss it any further until after the report is out.

Mrs. LOWEY. Could you just explain for us—I understand that you are going to appear before the Judiciary Committee, but in that short period of time, it is very puzzling to me that the 400 pages could have been reviewed, and the President states that this report is a complete and total exoneration; who is factually accurate?

Attorney General BARR. As I say, it is hard to have that discussion without the contents of the report, isn't it? And that is why I am suggesting that we wait until the report is out and I am glad to talk to people about it after then, and I am already scheduled to testify about that.

Mrs. LOWEY. I appreciate that. In closing, I just hope that we, as members of Congress, are going to have the complete report and have discussions with you as to the accuracy of some of the statements.

Thank you for appearing before us today. And we will—in closing, we will have the complete report, or are you going to be selective as to what you give Members of Congress?

Attorney General BARR. You mean the un-redacted report?

Mrs. LOWEY. Yes.

Attorney General BARR. No, the first pass at this is going to produce a report that makes these redactions based on these four categories, and that is something that I am hoping will be available to the public. As I said, I am glad to talk to Chairman Nadler and Chairman Graham as to whether they feel they need more information and see if there is a way we could accommodate that.

Mrs. LOWEY. Well, I do hope you can accommodate Members of Congress who feel it is our responsibility to see the complete report, and I look forward to continuing the discussion.

Thank you again for appearing.

Attorney General BARR. Thank you.

Mr. SERRANO. Thank you.

Mrs. Roby.

SEX AND HUMAN TRAFFICKING

Mrs. ROBY. Attorney General Barr and Assistant Attorney General Lofthus, thank you so much for appearing before this committee today to discuss the President's fiscal year 2020 budget request.

I would like to focus on the Department's efforts as it relates to sex and human trafficking. In the fiscal year 2018, the Justice Department initiated a total of 230 human trafficking prosecutions, charging 386 defendants and convicting a record 526 defendants. The Department continued its successfully Anti-Trafficking Coordination Team Initiative, working with partners in the Department of Homeland Security and the Department of Labor.

In 2018, these ACT teams saw significant prosecution results, including increases of 10 percent, 75 percent, and 106 percent in cases filed, defendants charged, and defendants convicted.

I wear another hat sitting on the Judiciary Committee and, through that committee's efforts in the last Congress, we passed several pieces of legislation working with the Department specifically to close loopholes in the criminal code and make it easier for the Department to go after these folks that are exploiting children and trafficking human beings.

This is modern-day slavery. It is important for me as a member of this committee and I suspect every member of this committee, I think I can say that, we all want to see sex and human trafficking eradicated in this country and want to make sure that your Department has the tools that you need to do so.

Director Wray was here recently, I directed some questions specific to this issue as well and would like for you to address for the benefit of all of us as we put pen to paper in our appropriations bills, we know the successes, but where are the deficiencies and how can we on this subcommittee be helpful in making sure you have every tool that you need?

Attorney General BARR. Thank you, Congresswoman.

Human trafficking is one of our highest priorities now in the Department and we have brought in an exceptional prosecutor as an Associate Deputy Attorney General in the Deputy's office, with a portfolio of coordinating the Department's efforts directed at human trafficking and are setting up task forces around the country that she works with.

I met with this team within the last month, received a full briefing on their current activities, and I have asked them to come back to me with a plan of action that could take it to the next level. And that could include shifting some resources within the Department, as well as seeking some additional legislative provisions that would help our prosecutors.

So rest assured that I am very focused on this and will be back to the committee and the Judiciary Committee with proposals as to how we could accelerate our efforts.

Mrs. ROBY. I certainly appreciate that. And I of course was extremely disappointed that we were able to get a package of bills through the House by voice vote only to see them fail in the United States Senate, which I know each of those pieces of legislation would have made law enforcement's job much easier, I guess. And I do appreciate too all of the work that you do with local law enforcement to make sure that they have the tools and the resources that they need in order to combat sex and human trafficking and child exploitation.

INTERNET CRIMES AGAINST CHILDREN

Most children now have access to the Internet and the Internet technology affords children access to vast amounts of valuable information and endless sources of entertainment; however, it also exposes children to certain dangers. Most worrisome, children may encounter, and oftentimes do, actual predators that use the Internet to identify and lure victims through chat rooms, instant messaging, and social networking sites.

So, if you could with the short amount of time that I have left—and I can revisit this if there is a second round, but what does this DOJ's budget request bill do to safeguard our children from these predators specifically on the Internet?

Attorney General BARR. Well, we are requesting \$81 million for OJP's Missing and Exploited Children Program. We have \$30 million for NCMEC; we have \$30 million for the ICAC task forces, which are now operating in states—we have 81 of them operating throughout the country; and then the activities of the Child Exploitation and Obscenity Section in the Department of Justice. So those are sort of the three pillars of our effort and all together it is approximately \$90 million.

Mrs. ROBY. Thank you.

I yield back. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Cartwright.

AFFORDABLE CARE ACT (ACA)

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Thank you, Mr. Attorney General, for appearing before us today.

I have understood for quite some time now that there are those in this country whose favorite pastime is attacking health care, but your decision as our new Attorney General to throw the weight of the United States Department of Justice behind an effort to get the Federal courts entirely to invalidate the Patient Protection and Affordable Care Act as unconstitutional is breathtaking; it is unbelievable. It stands out, your decision does, for its breadth, its scope, its recklessness, and its lack of legal justification to invalidate the Patient Protection and Affordable Care Act.

If your efforts are successful, millions of Americans would lose their health care, tens of millions of Americans would see the premiums for their coverage skyrocket. One of our Republican colleagues in the Senate, Senator Collins, put it best when she wrote to you last week, her letter was dated April 1st—did you get her letter?

Attorney General BARR. Yes.

Mr. CARTWRIGHT. Okay. Then you saw that she wrote, “Your decision to pursue this course of action in the Federal courts puts at risk not only critical consumer protections, such as those protecting individuals suffering from preexisting conditions, but also other important provisions of that law such as the Medicaid expansion, dependent coverage for young adults to age 26, coverage for preventative services, and the regulatory pathway for FDA approval of biosimilar drugs,” unquote.

The Department of Justice's refusal to defend our law, the Patient Protection and Affordable Care Act, is distressing because of the harm that it poses to the physical and financial well-being of millions of Americans, and also because DOJ's refusal appears to be driven by political considerations rather than health care policy discussions or sound legal arguments.

Attorney General Barr, you are not a health care policy expert, but your Department is taking the lead on attempting a massive overhaul of our American health care system. So I want to make

sure we agree on a few of the top-line facts and let's go through a couple of quick yes-or-no questions at the outset.

Number one, have you conducted or reviewed an analysis to evaluate the effects of DOJ's litigation position to overturn the ACA, the effects on consumer costs and coverage, have you done that analysis or have you reviewed one?

Attorney General BARR. Well, when we are faced with a legal question, we try to base our answer on the law.

Mr. CARTWRIGHT. On the law. So the answer is no.

And here is the thing: I can't imagine that you would take that kind of dramatic, drastic action without even trying to evaluate the consequences for the American consumers, the people using the health care, the people for whom these premiums are paid, but let's start the process of going through that——

Attorney General BARR. Well, do you mean——

Mr. CARTWRIGHT [continuing]. If we may.

Attorney General BARR [continuing]. In the event that the law is struck down?

Mr. CARTWRIGHT. If you are successful in this lawsuit that you are supporting and the entire Patient Protection and Affordable Care Act is struck down, millions of Americans who currently receive health insurance coverage under the law are at risk of losing that coverage; am I correct in that?

AFFORDABLE CARE ACT (ACA)

Attorney General BARR. I think the President has made clear that he favors not only protections for preexisting conditions, but would like action on a broad health plan. So he is proposing a substitute for ObamaCare.

Mr. CARTWRIGHT. The one that is going to come after the next election, you mean?

Attorney General BARR. The one that will come down if and when ObamaCare is struck down.

Mr. CARTWRIGHT. Well, let me be the one to inform, should the law be struck down, millions of people who get their coverage through the ACA marketplace would lose their coverage, and tens of millions more would see their premiums skyrocket.

In addition, if you are successful, 12 million people nationally and 750,000 people in my home state of Pennsylvania who have coverage under the Medicaid expansion would also likely lose that coverage; am I correct in that, sir?

Attorney General BARR. Do you think it is likely we are going to prevail?

Mr. CARTWRIGHT. If you prevail—well, you are devoting scarce resources of your department toward that effort; are you not, Attorney General?

Attorney General BARR. We are in litigation, we have to take a position——

Mr. CARTWRIGHT. The answer is yes——

Attorney General BARR [continuing]. We take a position——

Mr. CARTWRIGHT [continuing]. You are trying to get it——

Attorney General BARR [continuing]. In litigation——

Mr. CARTWRIGHT [continuing]. Invalidated and, if you succeed, that many people will lose their coverage nationally for Medicaid and 750,000 from Pennsylvania alone; right?

Attorney General BARR. I am just saying that, if you think it is such an outrageous position, you have nothing to worry about. Let the courts do their job.

Mr. CARTWRIGHT. If you—well, my time is out. We will come back to this.

I yield back, Mr. Chairman.

Mr. SERRANO. Mr. Palazzo.

VIOLENT CRIME

Mr. PALAZZO. Well, thank you, Mr. Chairman. And, Mr. Attorney General, thank you for being here today.

For a couple of years at the end of the Obama administration, violent crime in America started to tick up, that means more robberies, more murders, and more assaults. I am encouraged to see that the FBI's preliminary crime statistics that were released in late February show this alarming trend is being reversed.

Can you tell me, what is the Department doing that is working and does your new budget add resources for fighting violent crime?

Attorney General BARR. Thank you, sir. Reducing violent crime, as I said in my statement, is one of our priorities, and making sure we don't see a resurgence of violent crime. Our base amount in the budget is \$4.3 billion and we are seeking \$138 million enhancement to that; \$120 million would go toward reducing violent crime in communities and \$18 million would be to step up our efforts against these transnational criminal organizations.

The flagship, one of the flagships in our fight against violent crime is our Project Safe Neighborhoods. This is really a concept that has been around for a while under various guises, but fundamentally what it is, it is a strategy to focus on high-crime areas that brings together the local community; the law enforcement, including Federal and state; and also the various social programs and social agencies that run and fund programs that are meant to prevent crimes from occurring. And they have had a tremendous record, there have been studies showing how it has suppressed crime where it has been deployed. We are seeking \$100 million to increase—go from \$20 million to \$100 million to extend the Project Safe Neighborhoods program.

We also are seeking \$10.7 million to expand ATF's NIBIN program, which has proved to be a tremendous tool in the fight against violent crime. This helps us identify firearms when they are used in a crime and trace it back to particular individuals.

So those are some of the main initiatives we have underway to grapple with violent crime and so far it looks as if they are successful.

Mr. PALAZZO. I definitely agree. Our local police chiefs and sheriffs really support the Project Safe Neighborhoods, and it is a great program with a high return on investment for helping reduce gun and violent crime in our communities.

HUMAN TRAFFICKING

Also important to the State of Mississippi is addressing human trafficking. I know the state legislature has been working really hard on it and I know my colleague Mrs. Roby has asked you some questions. And I want to just talk a little bit about, I know the DOJ undertook a U.S.-Mexico Bilateral Human Trafficking Enforcement Initiative to combat trans-border trafficking. Can you speak on this initiative; specifically, how effective has it been in stopping trafficking across the border?

Attorney General BARR. I am going to have to get back to you on that, Congressman. I really would have to talk to people to see whether it is having an impact at this point.

SOUTHERN BORDER

Mr. PALAZZO. Okay. With my limited time, I will jump over to address some of the issues with the crisis that we have on our Southern Border.

I know we have an immigration case backlog. There are over 820,000 immigration cases pending nationwide, with the past 12 consecutive years seen an increase in the number of cases. This years budget request includes an additional \$72 million to hire a hundred new immigration judges.

In your testimony, you mentioned that additional reforms are necessary to manage the backlog of cases. What reforms does the Department of Justice need to manage the case backlog and what can Congress to help you better manage the backlog?

Attorney General BARR. On inauguration day, there were 306 immigration judges, today we have 424. One of the problems we had was the long lead time of hiring these judges, which we have now cut from 2 years to 6 months. So it only takes 6 months to onboard a judge. Currently, there at 534 slots authorized and we are asking for a hundred more slots. So we will be going up to 634, if that is approved.

The backlog, however, we are not making progress right now against the backlog. Our productivity is increasing, so that, for example, in the first quarter of this year, 19,000 cases were completed; however, during that same time 26,000 new cases emerged. So we actually lost ground in the first quarter. As we bring on more judges, we are hoping that we are actually going to start working down that backlog. But until we can get some control of the inflow, we are not going to be able to work down that backlog.

And the inflow is a function of a number of factors. The problems with the asylum laws and applying the asylum laws is one of the chief factors, the fact that they can be gained, and when people are then released—the catch-and-release situation, so when people are released into the country and never show up again, that prospect is what is drawing people up from Central America, and also the fact that so many children are now included in that population.

So we need to have reform, as the President has said repeatedly, we need to have reform of the immigration laws, and we need to do all we can to discourage people from making the journey up to the United States by mechanisms such as a border barrier system.

Mr. SERRANO. Ms. Meng.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Ms. MENG. Thank you, Mr. Attorney General, and thank you, Assistant Attorney General Lofthus, for being here today and for your service to our country.

I don't have a question about the substance or redactions of the report, but I do want to know, was the President or anyone at the White House alerted in advance of your letter's release?

Attorney General BARR. The March 24th letter, I don't believe so. But as I said, once the report is out, I will be testifying and I will be glad to discuss all aspects of the process, and also explain the decisions I have made.

Ms. MENG. Did you or anyone on your team consult with anyone in the White House in the crafting of that letter?

Attorney General BARR. Are you talking about the March 24th letter?

Ms. MENG. Yes.

Attorney General BARR. The answer to that is no, but as I say, I am not going to discuss this further until after the report is out.

Ms. MENG. Okay. So they did not have to approve for you to release the letter, the White House?

Attorney General BARR. No.

Ms. MENG. Thank you.

VOTING RIGHTS ACT

I do want to ask my second question and if you could answer yes or no, just in the interest of time, running out of time, does the DOJ under the Trump administration consider enforcement of the Voting Rights Act a priority?

Chief Roberts himself has stated that voting discrimination still exists; no one doubts that.

Attorney General BARR. Yes, we do, we consider voting rights a priority.

Ms. MENG. Has the DOJ, the Civil Rights Division, brought any cases under the Trump administration to enforce Section 2 of the VRA?

Attorney General BARR. No, but I would point out that during the first 4 years of the Obama administration one case was brought. So—

Ms. MENG. Well, according to your website, the Department of Justice under Obama, both President Bushes, and President Clinton have brought at least over 30 cases in enforcement of Section 2 of the Voting Rights Act.

CENSUS CITIZENSHIP QUESTION

Secretary Ross credits the Department of Justice's need to enforce Section 2 of the Voting Rights Act for the reason why a citizenship question is needed on the census. The DOJ has been enforcing the Voting Rights Act for over 50 years without the need for a citizenship question. What are your thoughts on that?

Attorney General BARR. My thoughts are that it is being litigated right now and I think oral argument is on April 23rd, so I am not going to discuss it.

ZERO TOLERANCE POLICY

Ms. MENG. Okay. I wanted to also ask about zero tolerance policy. Do you agree with your predecessor's zero tolerance policy memorandum issued last year, April 2018?

Attorney General BARR. Well, there is a lot of misunderstanding about the zero tolerance policy. The zero tolerance policy is that the Department would prosecute cases that are referred to the Department and the thing that caused family separation was the referral of cases to the Department that involved families with children. The Administration—the President has put out an executive order, I believe, saying that we are not going—that DHS is not going to follow that policy and, as far as I know, we are not getting referrals of that type. But the general proposition that the Department will prosecute cases that are referred to it stands.

Ms. MENG. Well, according to an article in the New York Times yesterday, President Trump has been pushing to restart this practice of separating parents from their children. The term “binary choice policy” has certainly been getting traction; is that something that you support?

Attorney General BARR. I haven't heard that.

Ms. MENG. You haven't heard that?

Attorney General BARR. No.

Ms. MENG. OK. We can submit articles to your office.

Are you aware of research showing that separation, from initial stages to ongoing and long-term, is devastating and detrimental to children's health and development?

Attorney General BARR. I'm sorry, could you repeat that?

Ms. MENG. Are you aware of any research that shows separation of families and children are detrimental to their health?

Attorney General BARR. I mean, I haven't reviewed that research, but as I said, the President has already put out an order stopping the separation of families.

Ms. MENG. So would you enforce and put forth policies of new discussions that have been happening about President Trump wanting to restart this separate practice?

Attorney General BARR. All I can say, I personally, sitting here, am not familiar with those discussions.

Ms. MENG. Would you support continuation of separation of families?

Attorney General BARR. I support the President's policy, which is we are not going to separate families.

Ms. MENG. So you support that we will not separate families anymore?

Attorney General BARR. Yes.

Ms. MENG. Thank you. I yield back.

Mr. SERRANO. Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman. Attorney General, thanks for being with us.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

I will just remind the committee, we have heard a lot about the Mueller report today. Twenty-two months of investigation, 2,800 subpoenas, \$25 million from taxpayers, 500 witness interviews, 19

lawyers, 40 FBI agents and who knows how many warrants, and the conclusions were simple: no collusion, no obstruction.

I remember when the summary letter was released there were a lot of complaints then, Attorney General, that you weren't releasing the summary soon enough, and then here today I hear it was too hasty, too quick.

So now you have had time to review, and your team has had time to review, you have indicated within the next week we will get the report. So, for the committee, is there anything new you have seen in the review of the entirety of the report that would change your conclusions?

Attorney General BARR. No, Congressman. As I have explained, my March 24th letter was meant to state the bottom line conclusions of the report, not summarize the report, and I tried to use as much of the Special Counsel's own language as I could, but they were just stating the bottom line conclusions and there is nothing to suggest to me that, you know, that those weren't—

Mr. GRAVES. No collusion, no obstruction—

Attorney General BARR [continuing]. A fair statement of the conclusions.

Mr. GRAVES. It is over, it is done—it is over.

Attorney General BARR. Well, the letter speaks for itself.

Mr. GRAVES. I thought it did too. Well, I will shift for a second, because Members of Congress have said they intend to ignore the public redactions and leak the full report; would that give you pause if that were to occur?

Attorney General BARR. Someone is going to leak the full report?

Mr. GRAVES. That is what—

Attorney General BARR. Well, that would be—

Mr. GRAVES [continuing]. That is what—

Attorney General BARR [continuing]. Unfortunate.

Mr. GRAVES [continuing]. Members of Congress have been saying.

Attorney General BARR. Well, that would be unfortunate, because, you know, there is grand jury information in there that under the law has to be redacted.

Mr. GRAVES. We have heard members of this committee today say that the American people deserve to see the full report, and so even members of this committee have indicated that. The Chairman of the Judiciary just this weekend said that—this is Chairman Nadler—certainly some of it would not leak publicly, that he has discretion, and his committee has a very good record of protecting information which it decides to protect.

So, General Barr, under Federal law, does a Member of Congress have the power to arbitrarily decide what portions of the Special Counsel's report they might release, redacted or not?

Attorney General BARR. Well, not if it violates the law, and we believe Rule 6(e) does apply to Members of Congress.

So, you know, I—it is interesting, because this whole mechanism for the Special Counsel, as I said, was established during the Clinton administration in the wake of Ken Starr's report and that is why the current rule says that the report should be kept confidential, because there was a lot of reaction against the publication of Ken Starr's report, and many of the people who are right now call-

ing for release of this report were basically castigating Ken Starr and others for releasing the Starr report.

I have already said that I think the situation here requires me to exercise my discretion to get as much information out as I can and I think these categories, I think most fair-minded people would agree are things that have to be redacted.

Mr. GRAVES. Right. Just thinking about the Chairman of Judiciary, if he were to release or any Member of Congress were to release the full report or redacted portions of the report, are they in compliance with the law or in violation of the law, and how do you deal with that?

Attorney General BARR. I don't want to speculate about all the circumstances that would be involved. I don't intend at this stage to send the full, un-redacted report to the committee, so I am not sure where he would get it.

Mr. GRAVES. OK. And then just——

Attorney General BARR. If you get it directly from the Special Counsel, that would be unfortunate; I doubt that would happen.

Mr. GRAVES. And a quick question about the subpoena. I am not on the Judiciary Committee; my understanding is, though, they have issued a subpoena to you to release the full report. Would that put you in violation of Federal law if you were to comply with——

Attorney General BARR. In the current situation, I don't think I have the latitude to release Rule 6(e) material. As to the other categories, as I said, I am willing to discuss those with the Judiciary Committees. I want to try to accommodate and satisfy their interests, but at the same time uphold the law. And right now—and there has been a recent case decided in the U.S. Court of Appeals for the District of Columbia Circuit just I think within the last week on this—the Rule 6(e) material is not releaseable.

Mr. GRAVES. Well, thank you for the fashion in which you have handled this. I think you have been upright, you have been an example of integrity, and I know that you are going to abide by the law and my hope is that all Members of Congress would follow in like manner.

So, thank you, Attorney General, for your good work.

Attorney General BARR. Yes, sir.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman. Thank you, Attorney General Barr, for being with us today.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

On the question of obstruction of justice, you stated in your March 24th letter that the Mueller report does not exonerate the President. Can you elaborate on what is meant by "does not exonerate the President" ?

Attorney General BARR. I think that is the language from the report.

Mr. CRIST. Right, I understand that.

Attorney General BARR. That is a statement made by the Special Counsel——

Mr. CRIST. Right.

Attorney General BARR [continuing]. Which I reported as one of his bottom line conclusions. So I am not in a position to discuss that further until the report is all out and then what is meant by exonerate is really a question that I can't answer, what he meant by that.

Mr. CRIST. But, as you sit here today, you can't opine, after having read the report, why it reaches that conclusion that it does not exonerate the President?

Attorney General BARR. That is right.

MARCH 24TH LETTER

Mr. CRIST. Okay. Reports have emerged recently, General, that members of the Special Counsel's team are frustrated at some level with the limited information included in your March 24th letter, that it does not adequately or accurately necessary portray the report's findings; do you know what they are referencing with that?

Attorney General BARR. No, I don't. I think—I suspect that they probably wanted, you know, more put out, but in my view I was not interested in putting out summaries or trying to summarize, because I think any summary, regardless of who prepares it, not only runs the risk of, you know, being under-inclusive or over-inclusive, but also, you know, would trigger a lot of discussion and analysis that really should await everything coming out at once.

So I was not interested in a summary of the report, and in fact at the time I put out my March 24th letter there was nothing from the Special Counsel that wasn't marked as potentially containing Rule 6(e) material and I had no material that had been sanitized of Rule 6(e) material. So I felt that I should state the bottom line conclusions and I tried to use Special Counsel Mueller's own language in doing that.

Mr. CRIST. I am curious, did you feel that there was an obligation upon you or your office to prepare this four-letter overview, if you will, rather than summary, rather than having the Special Counsel's team do it themselves? Why did that happen, I guess is what I'm trying to find out.

Attorney General BARR. It happened because the Special Counsel was providing the report to the Attorney General and I was making the decision as to whether to make it public or any part of it public. And, in my judgment, it was important for people to know the bottom line conclusions of the report while we worked on the necessary redactions to make the whole thing available.

Mr. CRIST. Let me ask then——

Attorney General BARR. Unfortunately, you know, that is a matter of weeks and I don't think that the public would have tolerated and Congress would not have tolerated at least knowing the bottom line. And, as you know from your own experience, from a prosecutor's standpoint, the bottom line is binary, which is charges or no charges.

Mr. CRIST. Indeed. Did you contemplate having the Special Counsel's office help you with the preparation of your March 24th letter, or did you?

Attorney General BARR. We offered to have Bob review it before putting it out and he declined.

Mr. CRIST. I didn't ask you about reviewing. I asked if you thought about having them help prepare the March 24th letter. I mean, they did——

Attorney General BARR. No, I didn't think about it——

Mr. CRIST [continuing]. The report after all.

Attorney General BARR [continuing]. No, I didn't think about it.

Mr. CRIST. Why not?

Attorney General BARR. Because it was my letter.

Mr. CRIST. You said that the Special Counsel and his team were not shown—or did not review the March 24th letter, right? You offered to let him review it?

Attorney General BARR. Yes.

Mr. CRIST. Did you offer to anyone else to let other people review it besides the Special Counsel?

Attorney General BARR. Not that I recall. You mean outside the Department?

Mr. CRIST. Anywhere. Yes, outside the Department, let's start there.

Attorney General BARR. Well, the answer, I am pretty sure, is no, but——

Mr. CRIST. You are not sure?

Attorney General BARR. I am sure.

Mr. CRIST. OK. I think I will yield. I only have 15 seconds. Thank you, General.

Mr. SERRANO. Mr. Case.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mr. CASE. Thank you, Mr. Attorney General. I would love to talk to you about your 2020 budget, but what is far more critical at present and has much far-more-reaching consequences to the credibility of our government is the prompt and full disclosure of the Mueller report.

The current non-disclosure of that report has only worsened the pervasive distrust of government generally and of Mr. Mueller's investigation, and your Department's response to it specifically. This really started very early on in the investigation with excessive secrecy about exactly what we were taking a look at. Here is the supplemental memo from the Deputy Acting Attorney General, and this is what drives the public crazy when they see something like this. This is what we have to try to avoid when we get into this.

In your March 24th, three-and-a-half-page summary of the report, you stated that you are, quote, "mindful of the public interest in this matter," and that you intend to release, quote, "as much of the report as you can, consistent with applicable law, regulations, and Department policies."

You know, of course, that on March 14th the House resolved unanimously, 420-to-zero, all Members of this committee and House voting, that the full report be released publicly, except where prohibited by law, and be released to Congress unconditionally.

Do you appreciate the importance of a full disclosure of this report, both personally and on behalf of your department?

Attorney General BARR. I appreciate the importance of releasing as much of the information in the report as I can consistent with the law.

Mr. CASE. OK. Well, let's get into that then. What specific laws, regulations, and Department policies, as you cited in your letter, do you claim require or justify you to withhold portions of the report? You have already talked about 6(e); what else?

Attorney General BARR. Well, as I said, there are four categories of information that are being redacted.

Mr. CASE. I understand that, sir.

Attorney General BARR. Okay, first—

Mr. CASE. And one of those categories—

Attorney General BARR [continuing]. You asked what else. The other one is we have asked the intelligence community to identify any information that could reveal intelligence sources and methods. The third—

Mr. CASE. Yes, but what authority do you have to state that you have discretion to withhold—I get the grand jury cite, that is 6(e). And, by the way, you know as well as I do that 6(e) also encompasses an intelligence committee exception. So I assume you are going to say that that falls under that category, that there can be some release or withholding of intelligence-specific information under your 6(e) category. What about the other two categories? What justifies you in claiming the discretion to withhold that information?

Attorney General BARR. Well, are you talking about the intelligence information?

Mr. CASE. No, I am talking about the other two categories. I am talking about ongoing prosecutions, but I am particularly focused on privacy and reputational interests, because it seems to me that that is an exception that you can just drive a truck through.

So, I mean, you are the one that says you have the discretion to do that and, I am asking you, where does your discretion lie; where is your authority?

Attorney General BARR. Regulation, because the regulation that sets up the Special Counsel and also provides for his report to the Attorney General, and also what the Attorney General can release, specifies that it has to be consistent with the Department's long-standing policies. And the Department's long-standing policy and practice is that, if we are not going to charge someone, we don't go out and discuss the bad or derogatory information about them. That is what got everyone outraged at what FBI Director Comey did in the case of Hillary Clinton.

Mr. CASE. Okay. So the regulation, back to long-standing policy, is what justifies that exception, right, in your view?

Attorney General BARR. The regulation that says that any release has to be consistent with that.

EXECUTIVE PRIVILEGE

Mr. CASE. Okay, good. Let's go to 6(e) here for a second—well, before I get to 6(e), are you maintaining or will you maintain any right to withhold any of the information in that report based on a so-called claim of executive privilege?

Attorney General BARR. Am I what?

Mr. CASE. Are you going to claim that you have a right to withhold any of that report based on a so-called claim of executive privilege?

Attorney General BARR. Any claim of executive privilege would have to be asserted by the President.

Mr. CASE. And he, the President—

Attorney General BARR. As I said in my letter, which sort of speaks for itself, he has said that he is leaving the decisions up to me.

Mr. CASE. Okay. Are you going to claim executive privilege to keep any of that report back?

Attorney General BARR. As I said, there is no plan, I have no plan to do that.

Mr. CASE. Okay. Do you believe that executive privilege applies to any broader range of communications and specific direct communications from the President?

Attorney General BARR. You know, I would have to review the latest opinions from OLC about the precise scope of it, but it is not relevant to me right now.

Mr. CASE. And, as far as you know, does it apply to any communications by the President before he was President?

Attorney General BARR. As I say, I am not sure what the learning is in the Department of Justice on that.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mr. CASE. You are aware that some of the—that there are exceptions under 6(e) under which you can in fact disclose grand jury material; some of those are within your discretion, but many of those are subject to a ruling of a court, correct?

Attorney General BARR. What are they?

Mr. CASE. Well, there is 6(e), there are five exceptions in 6(e) that allow you to go to court to ask the court for permission to release those. It is up to the court to decide whether to release.

Are you intending to go to court to ask for guidance and/or direction and/or an order where you are uncertain whether you can in fact release or should in fact release materials?

Attorney General BARR. I mean, the Chairman of the Judiciary Committee is free to go to court if he feels one of those exceptions is applicable.

Mr. CASE. The right is yours to ask for these exceptions.

Attorney General BARR. Well, why do you say the right is mine?

Mr. CASE. Because you are the exercising authority under 6(e).

Attorney General BARR. Yeah, but I think if the chairman believes that he is entitled to receive it, he can move the court forward.

Mr. CASE. Well, I will come back to this. It is your right to ask, so I am asking, what is your intention?

Attorney General BARR. My intention is not to ask for it at this stage. I mean, if the chairman has a good explanation of why 6(e) does not apply and his need for the information, I am willing to listen to that.

As I say, my first agenda item here is to get the public report out, what can be gotten out publicly, that is going to be within a week. So I—

Mr. CASE. My time is up——

Attorney General BARR [continuing]. Will discuss——

Mr. CASE [continuing]. I will come back.

Attorney General BARR [continuing]. I will discuss these issues in greater detail after that occurs.

Mr. SERRANO. Mrs. Lawrence.

Mrs. LAWRENCE. Thank you, Mr. Chair.

CIVIL RIGHTS

Attorney General, according to recent reporting, the Trump administration is pursuing far fewer civil rights cases, including hate crimes, police bias, and disability right cases than the Obama or Bush administrations. The DOJ's Civil Rights Department has started 60 percent fewer cases against potential violations during the first 2 years of the Trump administration than during the President Obama administration and 50 percent fewer than under the George Bush administration.

Can you please provide me why that is happening and what are you planning to do to address that?

Attorney General BARR. I would have to see those figures and how they are broken down. I haven't seen those figures before. The areas that I am familiar with, such as hate crimes, it is simply not true. We have an enviable record of prosecuting hate crimes at the same or higher rate than previous administrations, as far as I am aware. I would have to see what else you are talking about.

Mrs. LAWRENCE. Are you familiar with the data of what the percentage have they increased under the Trump administration——

Attorney General BARR. I think there——

Mrs. LAWRENCE [continuing]. There are indications they have?

Attorney General BARR. Have they increased?

Mrs. LAWRENCE. Yes.

Attorney General BARR. Whether hate crimes versus the prosecution of hate crimes has?

Mrs. LAWRENCE. Hate crimes, have they increased under this administration.

Attorney General BARR. I haven't seen any data, you know, going from 2017——

Mrs. LAWRENCE. So is it a priority? You haven't looked at the data, you are not aware of it.

Attorney General BARR. No, as I said in my confirmation hearings, I am very concerned about hate crimes and intend to vigorously pursue them. The data that I have seen have showed an increase going back to 2013. So, I agree with you that they have been increasing, but I have seen no data to say that it is different under the Trump administration.

Mrs. LAWRENCE. Attorney General, I want you to—we use the word “stay woke” sometime in community activism where you are in tune with what is happening on the ground. I appreciate your tenure or your length of time that you have been Attorney General, but I can tell you that this is something that is very important and I expect for you to be informed and aware of what is happening in this area.

AFFORDABLE CARE ACT (ACA)

I wanted to follow up on a question that my colleague Cartwright asked, because I really need to ask this question. I watched the deliberate intent of your answers when who do you report to, the President of the United States or to the people of America. You, during your confirmation, without duress, said you report to the people, but you just said when it came to the ACA ruling that you gave that the President was very clear that he opposed it and so let it work out in legislation. I want you to be very——

Attorney General BARR. I didn't say——

Mrs. LAWRENCE [continuing]. I want you to be very——

Attorney General BARR [continuing]. I didn't say——

Mrs. LAWRENCE [continuing]. Let me finish my question, because that is what I heard, maybe you need to clarify it—I want you to explain to me, do you understand your role, when you issue a statement abolishing the Affordable Care Act that you, as the Attorney General of the people of the United States, have a responsibility to understand and support that decision not based on the policy of a President of the United States. It was clearly laid out the impact it will have and I want you to respond to that, because that is what I heard, sir.

Attorney General BARR. Well, if you did listen to my confirmation——

Mrs. LAWRENCE. I did, sir.

Attorney General BARR [continuing]. Okay, I distinguished between three different roles the Attorney General plays; one is in enforcement, another is in a policy role, and the third is in providing legal advice. And what I said then is that the Attorney General has the responsibility to provide straight-from-the-shoulder legal advice as to what the Attorney General thinks is the right view of the law.

Mrs. LAWRENCE. So in this case of ACA you felt it was the right decision under the law to issue that you support abolishing——

Attorney General BARR. Well——

Mrs. LAWRENCE [continuing]. The Affordable Care Act, that is your legal opinion.

Attorney General BARR [continuing]. No. You didn't let me finish, which is that the first obligation is to provide your best view of the law. If the President or the executive branch agencies that you are representing and are stakeholders in the issue disagree with that advice and want to pursue a different position, then the Attorney General litigating on behalf of the United States should take that position, if it is reasonable and a defensible legal position——

Mrs. LAWRENCE. So——

Attorney General BARR [continuing]. Even if it is not the position that the Attorney General would take if the Attorney General was a judge. That is the position I stated at my confirmation hearing.

Mrs. LAWRENCE. So——

Attorney General BARR. Also, I did not——

Mrs. LAWRENCE [continuing]. That we can be clear, sir, what you are saying is that, if you disagree with the President, if your legal experience and your expertise doesn't agree and your President says something different, you are obligated to agree and enforce

what the President says, is that what you are telling me as the Attorney General of the United States of America?

Attorney General BARR. Well, it is——

Mrs. LAWRENCE. Is that your statement, sir?

Attorney General BARR. Well, it is the same as when we represent and are defending a law of Congress, sometimes we don't think the law as an original matter actually——

Mrs. LAWRENCE. Sir, we pass laws; the President of the United States does not pass laws.

Attorney General BARR. Right, but I am saying that—but I feel that if there is a reasonable and defensible argument that could be made to defend a statute, we frequently do that.

Mrs. LAWRENCE. Sir——

Attorney General BARR. So the——

Mrs. LAWRENCE [continuing]. I am very concerned at this point. I am over my time and I will come back at my second one, but I am very concerned with your statement.

Thank you.

VIOLENT EXTREMISM

Mr. SERRANO. So, Attorney General, in your testimony you said violent crime has declined since 2016, but as we learned from the FBI, home-grown violent extremism has grown over the same time. What priority and resources have you included in the 2020 budget to counter such violent extremism?

Attorney General BARR. I don't think we break out—maybe you can help me, Lee—I don't think we break out the budget targeting that particular category of offense.

Mr. LOFTHUS. We do not have a separate category for violent extremism, but we do pursue all matters of violent crime together. And we have \$138 million and 135 new positions for our violent crime efforts. In the FBI, we are adding 47 new FBI agents to the FBI for a variety of new initiatives, and among them is the FBI's work on violent extremism.

Mr. SERRANO. OK. It is important for this committee to know at a certain point how many folks will be assigned to this or how many dollars will be assigned to it, because it is an issue that concerns all Americans, I believe, and we need to deal with it in a proper way.

Attorney General BARR. Yes, Mr. Chairman, but, you know, the people who are on the watch for this kind of thing, whether they be FBI agents or U.S. Attorneys pursuing potential cases, are the very same people that would also be looking at other forms of terrorism potentially. So it is hard to allocate exactly the dollars by that category, but, you know, obviously it is a serious issue and it is one that the FBI devotes a lot of effort to.

Mr. SERRANO. Well, as long as we know that the Department, the agency is looking at it, is dealing with it, is taking it seriously, we can then work together on it; that is the easier part.

Mr. LOFTHUS. Mr. Chairman, if I can add a bit more? We do have in the FBI's budget this year, we have the \$16 million for the FBI's participation in the National Vetting Center with other Federal entities, and that helps the FBI look closely at individuals who may

be coming to the United States. So we have that vetting money in the FBI.

We also have \$4 million in the Office of Justice programs on grants that go towards looking at extremism and domestic terrorism.

ATF BUDGET

Mr. SERRANO. Good. A few weeks ago, the ATF Director Brandon told us that the Department's fiscal year 2020 budget request would result in ATF being forced to let go more than 300 staff due to increasing investigatory costs. As we seek to address rising gun violence in this Nation, how can the Department justify a proposal that would result in fewer resources dedicated to that goal?

Attorney General BARR. Let me just say first that I am a huge fan of ATF, I think they are an outstanding agency and I would—you know, any money spent on the ATF is well worth it. One of the common themes I hear from U.S. Attorneys is how valuable the ATF agents are and their technology is just outstanding in helping to deal with gun violence and violent crime.

Now, I am told that the statement made by Mr. Brandon was actually based on faulty information and we don't think that it would lead to—we are asking for more money for ATF and we don't think it would result in fewer agents, but, you know, maybe Lee could help me with that.

Mr. LOFTHUS. Sure. So I think very highly of the ATF chief. I have known him for years, we have worked together very, very closely; we took a hard look at his budget. This year's budget will increase ATF by 3.9 percent—actually, just about 4 percent, it does have increases for ATF. If you look back over the last 3 years, we have given an 8.7 percent increase to ATF. So we do think ATF is important, we are trying to support ATF.

I know the ATF chief is very concerned about his agency. His budget is susceptible to absorbing inflationary increases and if the pay raise isn't funded, or if his rents or contracts go up, he is very concerned about that, and he is worried that it will translate into a loss of staff.

I can tell you that we have looked at this year's budget, though, and at the 4 percent increase we are asking for, we don't think that translates into loss of hundreds of staff. And our commitment is that we want to work closely with ATF, make sure they have what they need. As the Attorney General says, "Any resources ATF receives, I think will be put to very good use." But we are committed to working closely with the ATF folks to make sure they make it through the year.

And again, a 4 percent increase on this budget, we think is a strong request for ATF, strong request for their NIBIN system, the \$11 million for that. There is \$4 million for their Spartan Case Management System. So we are trying to stand behind ATF in this budget.

Mr. SERRANO. Well, I would hope that you can get this issue resolved in terms of letting us know what really is going on because as we put together the bill, and that will happen pretty soon, you know, I need to be able to go to this young woman on my right and tell her I need more money for certain agencies. And we can't do

this if they are saying they are going to lose over 300 folks and you all say they are not, or that it is not—we need that picture cleared up. Thank you.

Mr. LOFTHUS. Absolutely. And we will help you.

Mr. SERRANO. Thank you. Mr. Aderholt?

Mr. ADERHOLT. Thank you, Mr. Chairman. And of course, the Department of Justice has submitted almost \$30 billion, taxpayer dollars to use and I want to remind my colleagues that that is what this—the purpose of the Attorney General being here today is to talk about how that \$30 billion of taxpayer dollars is going to be used. And unfortunately, I see so many of the questions here this morning have gone toward a grassy knoll conspiracy theory regarding the Mueller report.

DNA FORENSICS

So I hope we can focus on the questions of having the Attorney General giving up his time this morning to be here to answer these questions regarding the budget. As you know, General Barr, DNA forensic science can speed the prosecution of the guilty, protect the innocent from wrongful prosecution, and exonerate the wrongfully convicted.

Mr. Lofthus, as in prior years, the DOJ is proposing to use the fund available under the Debbie Smith program for DNA analysis and capacity enhancement, along with, “Other local, state, and federal forensic activities.” So long as sexual assault kit backlogs persist, I believe it is important that this funding be focused on DNA analysis and capacity enhancement.

What are some of the, “Other local, state, and federal forensic activities,” that are funded under this authority?

Mr. LOFTHUS. The National Institute of Justice, which is inside OJP funds a program that strengthens the medical examiner and coroner systems within our country in a variety of ways, supporting forensic pathologists. And there is an alarming shortage of pathologists across the country. Opioid crisis has created an additional strain due to overdose deaths.

So one of the focuses of our grant money today is on medical examiners and coroners. We also provide grants directly to forensic laboratories to encourage their research. And the focus of the grant is to make sure that they have all the tools they need to have effective forensic testing. And that has a real impact on the DNA backlogs across the country. If we can help them with their technology, we can really reduce the backlog. So that is one of our key things we are focused on.

We have \$105 million in this budget for DNA related programs. And we have \$47 and a half million to work on the backlog of the National Sexual Assault Kit Initiative. And we want to make sure that that money is funded in the budget because it is very important to help the states and localities with the sexual assault examinations, and the kits, and make sure that is taken care of.

So we believe we have a good, solid budget in this area that continue to work on both the DNA and the sexual assault kit areas.

OPIOID EPIDEMIC

Mr. ADERHOLT. Let me switch over just a minute to opioids. Of course, that epidemic continues to ravage communities in my home state of Alabama. And I know you realize that fentanyl is 50 times more potent than heroin and overdose deaths are on the rise with fentanyl. The President has called this a national health crisis. It is impacting families and the future of this country.

What would you say are some of the most significant actions that the Department of Justice has taken to curb the deadly opioid epidemic that is plaguing the country currently?

Attorney General BARR. Just fentanyl or the whole opioid epidemic?

Mr. ADERHOLT. Well, you know, both, or either one that you want to address.

Attorney General BARR. Fentanyl, there has recently been a development, as you know, most of the fentanyl and fentanyl analogues come from China. And the Chinese have agreed to schedule all fentanyl or fentanyl analogues, which would make enforcement much easier in China. And we would like to see a comparable action taken here in the United States to allow us to schedule fentanyl, keep fentanyl on the schedule, and all analogues of fentanyl. That is a very important step.

Now, whether the Chinese action—they actually deliver on it from an enforcement standpoint remains to be seen, but it is something we have been asking them to do and we are very pleased that they have done it.

But generally speaking, in the opioid arena, as you know, there—one of the main problems, and essentially the sort of the groundwork for this epidemic was set by the abuse of prescription drugs and the diversion of licit drugs. And a lot of our efforts are devoted toward going after healthcare providers and companies and others that contributed to this by over-prescription or permitting diversion.

And so there are a lot of civil and criminal actions around the country that are going after these bad actors and there are task forces around the country focused on that aspect of it.

And so the first effort is to contract the pool of people who are addicted by licit drugs. On the illicit drug front, we basically have a two-prong strategy of going after the TOCs, the transnational criminal organizations, primarily in Mexico, that are responsible for most of these drugs coming into the United States, and also the local distribution networks.

And we have the FBI, the DEA, and a substantial portion of our U.S. Attorney's Offices focused on dealing with these local distribution networks. And so that is basically the strategy.

Mr. ADERHOLT. Thank you. I yield back.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Attorney General BARR. Excuse me, Mr. Chairman. I think it was Congressman Crist was asking me about the letters and whether anyone was involved in the letters, other than people at Justice. And I checked with my staff and was told that just before the letters went out, after they were finalized and just before they

went out, we did advise the White House Counsel's Office that the letters were being sent. But they were not allowed or even asked to make any changes to the letters. But we notified them before we issued them.

Mr. SERRANO. Mr. Crist I'm sure would have asked you, did they get to see the letter, however?

Attorney General BARR. I think it may have been read to them. They did not get to see the letter.

Mr. SERRANO. Thank you. Mrs. Lowey.

BACKGROUND CHECKS

Mrs. LOWEY. Mr. Attorney General, I want to get to some other items in the budget today because under current law, background checks must be done within three days or the transaction is allowed to proceed, regardless of whether a person is lawfully permitted to buy a gun. My judgment, it is vitally important that background checks are done thoroughly, as we know the results of incomplete information can be fatal. For example, we know that the shooter who perpetrated the Charleston shooting had passed the background check, despite information that should have disqualified him.

The House passed Enhanced Background Checks Act substantially increases the amount of time allowed for a NICS background check to ensure that we close these loopholes. I am concerned that until this bill moves through the Senate and on to the President's desk, that three days is not often enough time to evaluate a background check with questionable information.

In your judgment, would fewer prohibited individuals be able to purchase firearms if this time period was extended?

Attorney General BARR. The data that I have heard is that there are about 6,000 of these delayed responses, where these default sales occur after the expiration of the 3 days. And that when you go back and look at those 6,000, approximately 2,000 of those, about a third, are people that would have flunked the background check and ATF goes out and gets the weapon, retrieves the weapon.

I think it is fairly rare that—well, I think the Aurora shooter may have been someone who got that default sale, that it was sold to them after the 3 day period. So it does occasionally happen.

Mrs. LOWEY. Occasionally? Didn't you mention 2,000, 6,000.

Attorney General BARR. Well, they are not all shooters. In other words, it does sometimes happen that somebody does—

Mrs. LOWEY. Do you support extending the time period? I have had an interaction with so many people in law enforcement and in many cases, 3 days is just not enough. Do you support extending the time period?

Attorney General BARR. No. I think that puts a burden on a lot of people.

Mrs. LOWEY. Maybe buying a gun that shouldn't have a gun; is that what you are saying? When you are saying it puts a burden on a lot of people—

Attorney General BARR. I think we are—

Mrs. LOWEY. I would rather put a burden on those who are doing the investigation than the potential shooter.

Attorney General BARR. I would put the emphasis on getting accurate records put into the system and make sure that we are getting all of the records into this system. I think a far bigger problem is the problem of mental health. That is another elephant in the room. That is where all these school shootings are arising from. And we have to figure out a way of upgrading the NICS system so it actually helps us to detect people with mental illness that should not have guns. And I think we should be investing in NICS, the accuracy of the records, the obligations of states to put those records into the system, and make that a stronger system, one that we can rely on. That is where I would put the effort.

Mrs. LOWEY. I am not sure what you mean by a stronger system. In other words, if one of your colleagues was doing a study and looking at a background check and said, "I need 3 more days," do you feel that person should have 3 more days, 2 more days, 6 more days? Isn't it more important to get a good, thorough background check than limiting the office to 3 days?

Attorney General BARR. No. What I was saying is that the better job we do of getting the records into the system, that we won't have those 3 days—the level of a 3 day default sale.

I mean, you mentioned sometimes federal agencies are not putting the appropriate records in, as we saw with the Air Force situation. Sometimes state agencies are not putting the records in. So there are gaps in the records and that is a far more important thing to address.

VAWA

Mrs. LOWEY. Let me go on to the next question. Let me go on to the next question. I do hope we can continue this conversation another time. You have referred to the Violence Against Women Act as a bad idea and not a legitimate interest of the Federal Government. These are investments that fund services for victims of domestic abuse and sexual assault that many of my constituents, including those trapped in cycles of domestic violence, and looking for a way out rely on.

Under Republican leadership in the previous Congress, maybe I will just wait a minute.

Attorney General BARR. I am sorry.

Mrs. LOWEY. The authorization of the Violence Against Women Act was allowed to expire despite bipartisan support. Thankfully, last week, the reauthorization passed the House, again with bipartisan support. During your confirmation hearing, you changed your position and supported VAWA's programs, pledging to familiarize yourself with the office's work and its program. I was delighted to hear that.

So I would be interested in knowing whether you support the reauthorization of VAWA and do you support the House passed reauthorization bill?

Attorney General BARR. I do support the reauthorization of Violence Against Women Act. I am not sure about the House bill and what is in it, but I do support the reauthorization of that provision. Let me just say that to the extent I said something against the Violence Against Women Statute, I believe that that was in the context of when it originally came up 2 and a half decades ago, or 30

years ago, somewhere in that range, and what I said was that at that point, it was a substantive law relating to the—federalizing certain acts of violence against women. And that was eventually struck down as not having a sufficient commerce clause basis.

I think that is what my concern with the Violence Against Women Act was many, many years ago. It was a different kind of Act. I fully support what we are doing right now on Violence Against Women.

Mrs. LOWEY. Thank you very much and I am delighted that you support the current actions. And I am glad to know that there was good bipartisan support for the bill. Thank you, sir.

Mr. SERRANO. Mrs. Roby.

STATE AND LOCAL LAW ENFORCEMENT GRANTS

Mrs. ROBY. Attorney General Barr, I mentioned earlier in my questions about sex and human trafficking about the coordination between state and local law enforcement and how important that is in combating a number of different areas of crime. And I wanted you to address, if you would, the overall reduction of state and local law enforcement activities, grant programs by the amount of \$583 million.

Attorney General BARR. Right. Well, I think part of that, a big chunk of that is the reduction in the COPS grant program, which was in the \$300 millions and we are putting it down to \$99 million. But the \$99 million does cover the hiring part of the COPS grant program. So that translates into continued hiring of state and local law enforcement officers.

The rationale for not funding the rest of COPS is that that is really, we feel, addressed in the funding that goes to the federal opioid task forces and other task forces that the states can participate in and get paid by the Federal Government, but they are part of a federal state cooperative task force.

So it is really reorienting the spending toward those joint task forces versus funding purely state task forces. Lee, I don't know if you have something to add on it about the other grant money.

Mr. LOTHUS. All right, on the other grant money, the apparent reductions in the 2020 request, one reason the grant dollars look smaller is that the Office of Violence Against Women is proposed to be moved into a mandatory funding account, where we think it can ensure that there is available money for Violence Against Women programs. The \$493 million we have for Violence Against Women programs.

There is also an adjustment to the crime victims money. The obligation limit there goes down by about a billion dollars. But over the last two years, that is an area that has received \$8 billion and it has received \$10 billion over the last 3 years. So overall, we still have over \$4.3 billion in grant programs proposed in this budget.

The Attorney General talked about the impact on COPS, but \$4.3 billion is what we are looking for your help on in supporting this year's budget.

ELDER FRAUD

Mrs. ROBY. Okay. Thank you. The area that I represent is home to a large number of retirees. I am increasingly concerned about

the elderly being taken advantage of by scammers and con men, especially given the rise of technology and social media. So I am sure you are aware of this problem, but the question is what are you doing about it and again, as always, what deficiencies may exist that you need more resources to help?

Attorney General BARR. Right. You know, in the area of fraud, it is such a vast area of law enforcement that I have always felt it is important to focus on the sleeping giants. And when I was attorney general last time, it was healthcare fraud, and that was, in fact, the sleeping giant. This time, I am trying to focus on elder fraud, which suddenly awoken into a major area of criminality.

It arises because of a concatenation of events, including the baby boomers, a larger elder population, and the internet, new technologies, and some of the increased loneliness that many elderly people, unfortunately, experience later in life.

And this has mushroomed, as I think anyone whose phone rings over the weekend with these scammers knows, more and more of these scams are coming along. We have a major effort in this area. We have one person in the department in the deputy's office focused on elder care enforcement and the task forces that are being set up to deal with that.

In March, we had a big national sweep where we indicted 200 defendants involved in these various scams. A lot of these scams are perpetrated wholly within the United States, but increasingly, they are actually operated by international criminal organizations. A lot of them come out of India. There are signs that organized crime, not La Cosa Nostra, but other kinds of global organized crime are getting into these areas. They are so lucrative. And the losses are substantial. And people—this is a population that doesn't have a runway to recover when they lose their life's savings.

So we are ratcheting up the effort. We have had two annual sweeps with tremendous results, but I have set up a strike force to go after the large organized criminal organizations that we think are behind this.

Mrs. ROBY. Thank you. And thank you again for being here. And Mr. Chairman, I yield back.

Mr. SERRANO. Mr. Cartwright.

AFFORDABLE CARE ACT (ACA)

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Attorney General Barr, I would like to finish up our discussion of the healthcare law. Our Republican colleagues in the Senate, and in particular Senator McConnell, have made it clear that they have no intention of introducing, let alone passing, a new healthcare law, a new healthcare plan for at least the next two years. And apparently, that view has been prevailed upon the White House and the President has accepted it.

My question is we have already discussed the devastating effects if this lawsuit wins and repeals the Patient Protection and Affordable Care Act. Given the position of the Senate Republicans and the President himself opposing any progress on healthcare for the next two years, if the Supreme Court of the United States were to grant credence to your position and sweep away the healthcare law, either in part or in entirety, would the Department of Justice

support a stay of the effect of that ruling until Congress, the President, this Nation can formulate a plan properly to supplant the Patient Protection and Affordable Care Act?

Attorney General BARR. Well, you are asking me to speculate whether or not we are going to—the administration's position is going to prevail in court. And beyond that, whether if it does prevail in court, when that is. And also whether or not there will be a legislative response, if in fact we prevail.

Mr. CARTWRIGHT. That is absolutely true. I am asking you to speculate on those and "if" questions are proper in this room, Attorney General. If you win the case, will you agree that we ought to stay the effect of that until a new plan can go in place, rather than strand all of the people with preexisting conditions, and all the people that—whose healthcare will lapse because of that ruling?

Attorney General BARR. Well, from my experience, the Supreme Court would likely deal with that in their opinion and provide some kind of period to wind it down.

Mr. CARTWRIGHT. You want them to do it *sua sponte*, on their own motion with no prompting from the Justice Department; is that it?

Attorney General BARR. I didn't say that. I would say whatever the administration's position is at that point, we will carry out from a legal standpoint.

Mr. CARTWRIGHT. Well, I am dismayed to hear that you are willing to drive our healthcare system off the cliff with no plan for replacing it.

Attorney General BARR. Well, I think your premise that the Justice Department makes healthcare policy is simply wrong. We take legal positions in cases.

Mr. CARTWRIGHT. Well, let me—I am going to follow that up. Numerous reports have indicated that you, the chief lawyer for the Federal Government and Secretary Azar, who is the lead on healthcare policy for our Federal Government, strongly argued against supporting the complete repeal of the Patient Protection and Affordable Care Act. However, reports indicate you and Secretary Azar were overruled by Acting Chief of Staff Mick Mulvaney and the President himself. Now, at any point, did you convey either to Mr. Mulvaney or the President any concerns about either the effects of this lawsuit prevailing, if it does, or concerns about the dubious legal arguments in this lawsuit? And did Secretary Azar communicate concerns about the effects on our American healthcare system?

Attorney General BARR. Well, I am not going to get into, you know, the internal deliberations of the administration on this point. I had ample opportunity to present my views and I believe that the final decision reached is a legally defensible and reasonable legal position. It is a position that prevailed in the district court. And it is a position taken by the 4 dissenting Justices in the NFIB case, which is that once you do away with the mandate, the rest of the statute cannot stand.

Mr. CARTWRIGHT. Are you citing executive privilege by declining to tell me about the discussions between you, Mr. Azar, Mr. Mulvaney?

Attorney General BARR. Call it what you wish, I am not discussing it.

Mr. CARTWRIGHT. You are refusing to discuss it. All right. Well, it is a decision that makes more extreme, and in fact even contradicts, the decision to go forward with this position contradicts the DOJ's June 2018 position on the case, which was so controversial then that 3 of the 4 career attorneys representing the government refused to sign onto the briefs and actually removed themselves from the case. The American people deserve to understand if you and Secretary Azar support this lawsuit based on sound rationale, or if it was just bald politics talking—

Attorney General BARR. I said it was—

Mr. CARTWRIGHT.—we are requesting that you submit this assertion of executive privilege in writing to this committee if that is what you are doing. Don't ask us to call it what it is. I am asking you if you are exercising executive privilege, we need to know it, and we need to know it in writing. I yield back, Mr. Chairman.

Mr. SERRANO. Mr. Palazzo.

CYBERSECURITY

Mr. PALAZZO. Well, thank you, Mr. Chairman and Attorney General Barr. In your testimony, you mentioned cybersecurity. And being that the FBI is the lead federal agency for investigating cyber attacks by criminals, overseas adversaries, and terrorists, the threat is incredibly serious and growing. Cyber intrusion is more commonplace, more dangerous, and more sophisticated.

Targets include critical infrastructure, trade secrets, cutting edge R and D, identity theft, and as well as online predators and et cetera. While my colleagues on the left are chasing shiny objects, I believe the American people want us to address the real physical and financial threats that exist in the real world. Can you elaborate on the growing threat, and maybe provide some scenarios that we should be concerned with, call out some of these foreign overseas adversaries? And what is the FBI doing to transform itself and protect Americans?

Attorney General BARR. You are correct that the cyber threat is a serious and growing threat, obviously. And it is a threat to our intellectual capital, our trade secrets, and therefore our economic health. It is a threat to our national security. It exposes some of our fundamental infrastructure to disruption. We all have heard about the attempt to penetrate into election infrastructure and the results of that could be devastating.

The FBI is receiving in this budget \$70 million to upgrade and enhance their cyber tools and capabilities to deal with these threats. A total of \$72 million is in the budget.

In terms of emerging threats, as you know, we have a China initiative in the department because China, we think, poses a very serious threat to the United States in terms of economic espionage, as well as classical espionage. And a lot of that does use cyber tools and threats—involves cyber threats to the United States. And we are very focused on that, as well as not just the industrial espionage, but also the use of non-traditional collectors that the Chinese are able to marshal within the United States by coopting Chinese

nationals who may be working in universities, or laboratories, and so forth.

So it is a broad gauge threat and probably our highest priority at this point in terms of dealing with counter espionage.

Mr. LOFTHUS. If I can add one thing. We have over \$750 million overall in our budget. The Attorney General mentions the \$72 million increase. \$70 million is the FBI. The smaller piece, though, it worth mentioning. It is only \$2 million, but it is really going to have a lot of bang for its buck. It is money put into the Justice Security Operations Center. That allows us to protect our own networks from intrusions and malware. So it is really important that the agencies protect their own networks.

Mr. PALAZZO. We definitely appreciate the FBI's work on this. I mean, when our universities are coming up with cutting edge research and development and technologies, just to see them stolen by our adversaries. They didn't invest any money in it. They didn't work hard to create it. And they take it from us, that is—we are wasting taxpayer dollars.

When I first came to Congress, I was on the Armed Services Committee and many of the generals and admirals said in one of their—they have several threats that they are concerned with that keep them up at night. There is never just one. But one of them that was recurring was our cyber threats, knocking out our power grids, crippling us, our financial markets. And that would just create massive amounts of chaos.

And so these are extremely important. This is why I think the American people are interested in having this conversation, and making sure the FBI is using their resources in the protection and security of America.

And to know now that that technological gap between some of us and our overseas adversaries, where it was 25, 30, 40 years, just 8 years ago now we are neck and neck. That is a true threat to our economy, as well as our national security. So Attorney General, thank you. And thank your team at the FBI for taking care and keeping America safe. Thank you.

Mr. SERRANO. Ms. Meng.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Ms. MENG. Thank you. And Attorney General, I want to thank you for clarifying the answers to my questions. And I just want to confirm in relation to communication with the White House or any of its team, you are answering that for both the March 24 and the March 29 letters, correct?

Attorney General BARR. Yes. Yes.

ELDER FRAUD

Ms. MENG. Thank you. You brought up a really important topic in my district, and I am sure in many of my colleagues' districts, about elder fraud. Last year, I had a piece of legislation signed into law by President Trump, supported by Congressman Barton and Lance at the time. And basically targeting and allowing the United States to prosecute those calls that you mentioned that were actually coming from outside of the United States.

We were very happy to have the legislation signed. However, our local law enforcement, in our case, the NYPD, is having a difficult time in terms of actually catching and figuring out who these perpetrators are. I don't know if you have any further ideas on how we can approach this, and just in general in the future, I would love to work with your office on this.

Attorney General BARR. Yes, I would like to do that, Congresswoman. That is exactly why I set up the strike force to be able—I think we need to get ourselves to a higher level of sophistication in pursuing these crimes because although they might appear to the victim to be sort of not very sophisticated, they are, in fact, very sophisticated and we have to get back to the people behind the scam. And we have to use all of our tools, our treaty tools, our cooperative agreements with the enforcement authorities in other countries to get the information we need.

CIVIL DIVISION

Mr. LOFTHUS. You can help us in our budget on this. We have \$611,000 in the Civil Division's budget in the consumer protection branch. They do a lot of elder fraud work and we sure could use that money in this year's budget to help the civil division continue its work in the elder fraud area.

Ms. MENG. Thank you. My second question—

Attorney General BARR. One other thing I could say is that I have asked to put together a number of additional legislative proposals that would give us more tools in this area, as well as more effective penalties. And I think that is being done and I will be proposing them. So I would like to provide them to you once we are done.

SANCTUARY CITIES

Ms. MENG. Sure. Thank you. I just wanted to ask about sanctuary jurisdictions. As you know, last November, Judge Ramos of the Southern District of New York said the Trump administration cannot compel states and cities to cooperate with federal immigration authorities as a condition for receiving law enforcement funds, such as Byrne JAG. In other words, Judge Ramos ordered the administration to award fiscal year 2017 funds without condition, and became the fourth federal judge to rule against the administration on this issue.

The Department of Justice's 2018, 2022 strategic plan states that you still intend to end sanctuary jurisdictions. What is the plan? How do you intend to continue with these conditions for the fiscal year 2019 grants?

Attorney General BARR. Well, you are right that we have lost in a number of district courts, but that is why we have appellate courts. So we are appealing those decisions.

Ms. MENG. So you still intend to continue then. Okay.

Attorney General BARR. Yes.

Ms. MENG. Thank you. I yield back.

Mr. SERRANO. Mr. Graves.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mr. GRAVES. Thank you, Mr. Chairman. General, I am just trying to close things out. Oftentimes when an individual or folks are in denial, closure helps. And there are a lot of unanswered questions. We have heard some here today. I want to just read a few quotes to you and then let's go through a series of questions.

Presidential candidate Eric Swalwell, who is a member of the House Intelligence Committee, said, "In our investigation, we saw strong evidence of collusion." He declared President Trump an agent, "working on behalf of the Russians." Judiciary Chairman Nadler claimed, "It is clear that the campaign colluded. And there is a lot of evidence of that." Senator Blumenthal, who is a member of the Judiciary Committee, assured us last year that, "The evidence is pretty clear that there was collusion between the Trump campaign and the Russians."

Now, assuming they are speaking from a position of truth and not attempting to mislead anyone, do they have access to any evidence that the investigators did not have access to?

Attorney General BARR. Not to my knowledge, but I don't know what access they had. I would be in a better position to address that once the report is out.

Mr. GRAVES. To your knowledge, are they withholding any evidence from the investigators?

Attorney General BARR. Not to my knowledge.

Mr. GRAVES. And if they did knowingly withhold any evidence from the investigators, is that akin to obstruction or something similar?

Attorney General BARR. I don't want to speculate about that.

MARCH 24TH LETTER

Mr. GRAVES. You also stated earlier that as you were preparing the March 24th letter, you offered the Mueller team the opportunity to assist in that, yet they declined; is that correct?

Attorney General BARR. Not to assist. We——

Mr. GRAVES. Or to review. What was your term?

Attorney General BARR. To review it.

Mr. GRAVES. To review. And yet reports indicate that there were a few disgruntled investigators on the team who since then, without names, under a shroud of secrecy themselves, have expressed that they are upset with your findings. But your findings basically just restated the report; is that correct?

Attorney General BARR. That is what I tried to do.

Mr. GRAVES. So in essence——

Attorney General BARR. They weren't my findings. I was just trying to state the principal conclusions of the report.

Mr. GRAVES. So the letter just basically restated what was found in the report as it was given to you.

Attorney General BARR. As I say, the bottom line conclusions.

Mr. GRAVES. And so, in essence, they are just upset with their own findings.

Attorney General BARR. I don't know whether they are upset.

Mr. GRAVES. Have you heard from any of the disgruntled Mueller investigators?

Attorney General BARR. I think the article says something like associates, is sourced to associates of—

Mr. GRAVES. Third person, too, if I might add.

Attorney General BARR. Some of the people who worked on the Mueller report. I am not sure who it refers to. I haven't—

Mr. GRAVES. Were the investigators, or anyone assisting the Mueller team, did they have security clearances?

Attorney General BARR. Yes. I would think so, yes. At least many of them did, I am sure.

Mr. GRAVES. So it is possible that some of this information that is being leaked or potentially going to be leaked is in violation of security clearances as well?

Attorney General BARR. Well, only if it were classified information. I haven't seen any classified information leaked from—that I would attribute to the special counsel's office.

Mr. GRAVES. Right, so this information—I think as you stated it, is multiple levels removed from the source, it seems, so I would hope no one on this committee and no member of Congress would take that information as fact.

CYBERSECURITY

Shifting to cybersecurity, first let me thank you. You have done a great job today answering our questions. We did meet with Director Wray last week and he is doing a fantastic job as well. Cybersecurity is something that I have a passion for. I have been very aggressive in advocating for a policy that allows for active cyber defense, allowing one the ability to defend his or her network outside of that network, and not requiring he or she wait in a passive posture until he or she has actually been impacted.

Your department has broad purview over a lot of this and I would like the opportunity to work with you and your team to see how we might better advance policy. The Cyber Fraud and Abuse Act hasn't been updated in decades. It deserves a good review and an aggressive stance. Again, I would like to work with you, your team, or whoever you might designate as we look ahead. Thank you again for your testimony today, for taking time to join us, and for your good work. Mr. Chairman, thank you.

Mr. SERRANO. Mr. Crist.

AFFORDABLE CARE ACT (ACA)

Mr. CRIST. Thank you, Mr. Chairman. Mr. Barr, during the heat of the 2018 midterm election, President Trump pledged to protect coverage for Americans with preexisting conditions. Are you aware of that or were you aware of that?

Attorney General BARR. Yes.

Mr. CRIST. Are you aware that prior to the Affordable Care Act, up to 130 million Americans had some type of preexisting condition that insurance companies could use to deny coverage, delay treatment, or limit access?

Attorney General BARR. I didn't know that number, but it sounds reasonable. Yes, sir.

Mr. CRIST. Are you aware that the Affordable Care Act made discrimination against preexisting conditions against the law?

Attorney General BARR. Yes.

Mr. CRIST. Do you agree that the Texas Affordable Care Act ruling, if affirmed by the Supreme Court, would eliminate the law in its entirety, which would necessarily include eliminating protections for preexisting conditions?

Attorney General BARR. Yes. And the President has made clear that he supports protection of preexisting conditions.

Mr. CRIST. But pursuing this case would remove them if it is successful.

Attorney General BARR. Is that a reason to take a legal position?

Mr. CRIST. I don't know.

Attorney General BARR. You know, I hear members of the committee basically saying, you know, you have taken this legal position that can have bad consequences, bad policy consequences.

Mr. CRIST. Yes.

Attorney General BARR. But as you know, as an Attorney General, you take positions based on the law, and you litigate them in court, and the court makes the decision.

Mr. CRIST. That is true.

Attorney General BARR. So if this was such a hokey position to take, what are you worried about?

Mr. CRIST. What am I worried about?

Attorney General BARR. Yes. You are acting like—you say that the administration's position is hokey. And then you say the sky is falling.

Mr. CRIST. I didn't say that.

Attorney General BARR. Well.

Mr. CRIST. Those are your words, sir.

Attorney General BARR. OK. So if it is not hokey, then—

Mr. CRIST. What am I worried about? I am worried about millions of Americans—

Attorney General BARR. I am just saying, I am a lawyer. You know, I am not in charge of healthcare. I litigate on behalf of the United States.

Mr. CRIST. I will try not to interrupt you. I would expect the same. What I am worried about are the people I work for, the American people, and the people you work for, sir. And it is our duty around here to look out for their best interest as public servants. And that is what I am worried about.

Attorney General BARR. We are very worried about them. And the President has made clear that he wants a strong healthcare legislation and he wants to protect preexisting conditions in the event that the court accepts the legal arguments that we have presented.

Mr. CRIST. Worries about it so much so that you are pursuing a case that would take it away from them. The irony of that is rich.

Attorney General BARR. Well, as I say, we—

Mr. CRIST. I yield my time. Thank you.

Mr. SERRANO. Mr. Case.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Mr. CASE. Thank you. When you offered Mr. Mueller the opportunity to review or edit, I am not exactly sure what your characterization was—your 3 and a half page summary of his report, and he declined, did he give you a reason why he declined?

Attorney General BARR. I didn't talk to him directly.

Mr. CASE. Were you provided with a reason why the Mueller team did not want to participate?

Attorney General BARR. I don't recall whether I was—whether a reason was given.

Mr. CASE. So somebody offered to them that they could review your summary, make comments.

Attorney General BARR. It wasn't a summary. It was a statement of the principal conclusions. It wasn't a summary of the report.

Mr. CASE. Okay. Your 3 and a half page letter, did you take it that there was no reason given back for their declining to do so?

Attorney General BARR. Did I what?

Mr. CASE. Did you take it that there was no reason for them to do so? In other words, did they not tell you, in any way, shape, or form why they declined to participate in reviewing your 3 and a half page letter?

Attorney General BARR. As I say, I don't recall whether that was relayed to me. My sense was that he understood that this was the function of the Attorney General. I am the person to whom the report is given.

Mr. CASE. Okay. You know, I am listening to you on the Mueller report and here is my problem. You say in your March 24th letter that you are mindful of the public interest on this matter and that you will release as much of the report as you can, consistent with applicable law, regulations, and department policies.

You follow up with a letter of a few days later outlining four categories in which you are evaluating redactions. One of those categories is Grand Jury related to Federal Rule of Criminal Procedure 6(e). The other three are intelligence, ongoing prosecutions, and privacy reputational interests. And I ask you what is the authority for that. And you track it back to department policies, which do not have the force of law.

Attorney General BARR. They do when they are embodied in regulation.

Mr. CASE. The regulation triggers back to department policies which—

Attorney General BARR. Right. The regulation states that any disclosure has to be in accord with those policies. It is a regulatory mandate.

Mr. CASE. Do you consider that you have the discretion as to how you apply those department policies?

Attorney General BARR. I have discretion.

Mr. CASE. Okay. And so we are sitting here, from my perspective, with virtually unlimited discretion for you to redact from that document. And maybe if I trusted my government more, I would be comfortable with that. But since I don't, I am not comfortable with that. And I am looking for some way in which your judgment, which is going to be the arbiter as I understand it, of what the public sees, the arbiter, it is you ultimately, can be overseen.

I have suggested to you that under 6(e), there are procedures under which you can go to court to ask the court to give you guidance, direction, or an order. I am not sure whether you will do that or not. I am—

Attorney General BARR. Well, the court is limited to the grounds stated in 6(e).

Mr. CASE. This is correct. But you do have quite a bit of discretion to go to court under 6(e) if you review it. So that is one category. The other category, obviously, is that there would be some function for Congress to exercise in its oversight responsibility under the Constitution, but I am not clear as I sit here today whether you envision a role for Congress in that oversight.

SPECIAL COUNSEL MUELLER'S INVESTIGATION

Attorney General BARR. Well, I think I sort of addressed that. I identified the four categories. And the team that includes the special counsel office lawyers are implementing that. So they are the ones redacting what is Rule 6(e). They are the ones who conducted the investigation. They know what is Rule 6(e) and what is not Rule 6(e). That is why I am dependent on the special counsel to identify Rule 6(e) material.

And the intelligence community will identify the intelligence stuff. And the lawyers who were prosecuting the cases in the special counsel's office can identify whether there is going to be a conflict between releasing any information and a court order or an ongoing prosecution.

And the special counsel's office knows who the peripheral players are that they have said shouldn't be charged. So those are the categories.

Mr. CASE. Does Congress have a role in overseeing your decision as to what is and isn't taken out of the Mueller report? Is there any circumstances under which any member of Congress would have full access to all of the Mueller report, period, maybe under conditions. But is there any circumstance you can envision, sir, where Congress with whatever protective procedures may be in place, would have access to the full report to review it?

Attorney General BARR. Yes. I did say here that once that report is ready for release, I would not only give it to the chairmen of the judiciary committees, but I would talk to them and engage with them about what additional information they feel they require and whether there is a way of accommodating that. As you, I am sure—

Mr. CASE. They have to give you a reason? What if they just want to see the report to satisfy themselves of your exercise of discretion?

Attorney General BARR. Well, it depends. Take classified information. I can envision—

Mr. CASE. You have an intelligence committee for that.

Attorney General BARR. Well, if you let me finish. I was saying I can envision a situation where under appropriate safeguards that information would be shared. I also think there may be under appropriate safeguards a way of people verifying that these categories were not abused and that the information is bonafide privacy related information and so forth. And I am willing to work with the judiciary committees on that.

But I will have to say that until someone shows me a provision in Rule 6(e) that permits its release, Congress doesn't get 6(e), unless there is a provision that permits it.

Mr. CASE. There is plenty of discretion in 6(e) for you to make that judgment.

Attorney General BARR. Where would you find that?

Mr. CASE. Judicial proceedings, akin to judicial proceedings, if you want to go there. I am sorry. I am really out of time. But there are a number of interpretations you can make of 6(e) that would give you some pretty good discretion to come up to Congress under limited circumstances possibly to be able to satisfy somebody in Congress who gets to see the entire report, and who gets to oversee you.

Mr. SERRANO. Ms. Lawrence.

Ms. LAWRENCE. Thank you. I want to publicly thank you, Attorney General, for your support of Violence Against Women Act. It is long overdue and I do look forward to your support of that law.

Also, I look forward to your release of the report next week, for it to be timely, and I look forward to the things that you are saying.

HATE CRIMES

I just wanted to follow up to the previous question and let you know that under the Hate Crime Statistics Act of 1990, the FBI is required to collect and report hate crimes from state, local, and federal offices. In 2017, the most recent data available, the FBI reported a 17 percent increase in hate crimes on race, religion, and sexual orientation. And I do encourage you to look at those numbers.

Attorney General BARR. Can I say something?

Ms. LAWRENCE. Yes.

Attorney General BARR. You know, I am very concerned about hate crimes and one of the priorities we have is to make sure that those numbers are not understating the level of hate crime. As you probably know, local jurisdictions are very spotty in the extent to which they report hate crimes. There are some major U.S. cities, major cities, that say there are zero hate crimes.

So as you may know, the FBI is engaged in a major initiative to try to—

Ms. LAWRENCE. Yes.

Attorney General BARR. [continuing]. Make sure that these jurisdictions are accurately reporting and are converting their crime reporting system into a new system that actually will have a field in the system for hate crimes. So we are hopeful—one of the things we have to do is get a better handle on the actual level of this, where it is, and so forth, and that depends on reporting and we are trying to improve that.

Ms. LAWRENCE. And taking those who committed to trial.

Attorney General BARR. Yes.

COPS GRANTS

Ms. LAWRENCE. I thank you. That is a lot better answer than before. I wanted to talk to you, I was previously a mayor before becoming to Congress and COPS grants, which I used as a mayor, was just really an amazing support that we have in our cities across the country. Unfortunately, there is cities who are being told they are no longer eligible. This is creating, we know after the eco-

conomic downfall, a number of cities reduced their number of police officers. And although they are not back at the regular—at the amount they were before, they were able to increase that deficit with COPS.

Can you tell me what was the thinking, and what is happening with the COPS grant? And you are going to hear more about this because this is a critical funding to cities.

Attorney General BARR. Right. So as I understand it, the COPS grants had two components: one was the hiring of police officers, and that was running at \$99 million, and that is what we are asking for in this budget, which is to continue that program.

The other money related to the funding of state and local task forces. And I think the thinking behind not asking for that money was that we would rather—support joint federal, state, and local task forces, where the money does benefit the state and locals because when they participate in the joint federal state task forces, they are paid. But the idea was let's put our effort on these joint task forces rather than putting the dollars—

CIVIL RIGHTS/CRS

Ms. LAWRENCE. I ask that you look at that because that is critical. And those joint task forces, human trafficking and drug trafficking has been extremely beneficial in cities.

The other question I want to ask is about the decision of the President's budget to transfer the Community Relations Service to the civil rights department. And that activity, the proposal requests minimum funding and staff to be dedicated to the functions of community relations.

Attorney General, you know so many of the issues that we have had, and riots, and civil unrest, we have deliberately infused money into the community relations. In doing this, in consolidating, there are going to be reductions in staffing of the civil rights community relations initiative. How do you ensure that the Civil Rights Act is fully enforced with these cuts to the budget?

Attorney General BARR. Right. This, I think, is the second year in a row this is being proposed. My understanding of the rationale is that currently the CRS has I think maybe 50 positions, and they are spread in small offices around the country, sometimes just one or two people in whole areas of the country.

And I think the idea is that given what they are actually involved in, it would be more efficient to have them co-housed with the civil rights division and have a reservoir of people, essentially, I think 15 slots of people who could be deployed when there is a situation that needs their services, rather than maintaining this whole nationwide structure with very small offices. That is the rationale for it.

Ms. LAWRENCE. Yes. I really need you to do a deep dive in that because this proposed move undermines the express terms of Title 10 of the Civil Rights Act by inserting the civil—I mean, the community relations into a division that you are not supposed to have in a division that litigates and investigates.

And so to me, I see this combining is a direct attack on Title 10 and it is also—it is not in compliance with combining those two together. And so this is an area that I will be looking at very closely

and the funding of doing that is not something I would support. Thank you.

Attorney General BARR. Thank you.

Mr. SERRANO. Mr. Attorney General, before I close, I am just going to make a very personal statement. Like so many people in this House, I grew up politically in the 1960s. That is where I developed a lot of my feelings about things in our great country. And we were a group of people trying to make the country even better than it was, knowing that it was great at all times. It is still great.

Whenever things got rough with segregated housing, or education issues, or civil rights issues, or voting rights issues, we knew there was always a Justice Department we could turn to. We always knew that that Justice Department would defend the law and therefore defend the people, and somehow come through for us.

It is very troublesome to see a Justice Department against the law of the land when there are many people who if not liking the whole law, certainly like the preexisting conditions provision, the ability to keep their child on their plan until that person is 26. And so I hope that if you take something from here today, since we took a lot from you in information, is to maybe look around and realize, or pay more attention to the fact that we lean on you to come through for this country. And when we see you taking sides against the law of the land, or taking sides that we may not think is in the best interest of the American people, it troubles us.

Nevertheless, we want to thank you for your testimony today, for your patience with the time, and I think—I want to thank my committee members on both sides. Mr. Aderholt, it was a great hearing, great attendance, and I am sure your picture is somewhere in the files today. Thank you so much, Mr. Attorney General.

Attorney General BARR. Thank you, Mr. Chairman. Thank you.

Mr. SERRANO. The meeting is adjourned.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Department of Justice Fiscal Year 2020 Budget Request

Homegrown Violent Extremism

1. At the hearing you testified that the Department does “not have a separate category for violent extremism.” It is noteworthy that on April 4th the FBI Director told the Subcommittee that the FBI has seen an increase in the number hate crimes, and that “the danger...of white supremacists, violent extremism or another kind of extremism is of course significant...a persistent, pervasive threat. We tackle it both through our joint terrorism task forces on the domestic terrorism side as well as through our civil rights program on the civil side through hate crime enforcement.” The Director has also publicly stated that of about 5,000 terrorism cases under investigation, 1,000 are homegrown violent extremists, in all 50 States. **While it is not a regular budget category, could you please provide a rough estimate of the resources the Department is devoting to investigations and prosecution of domestic violent extremism – whether under the category of terrorism, violent crime, or hate crimes?**

Southwest border law enforcement

2. Southwest Border county crime rates are lower, in all categories, than in the rest of the country. Furthermore, U.S. Customs and Border Protection has recorded significantly lower arrests of individuals with criminal histories each year from fiscal year 2016 to the present. On the other hand, the Justice Department has been shortchanging important work to pursue its so-called “zero tolerance” policy. For example, a USA Today study released in October 2018 found that Federal drug trafficking prosecutions along the border had declined 30 percent because resources were diverted to prosecute minor immigration violations. **How many personnel – in the U.S. Attorneys offices, U.S. Marshals, Bureau of Prisons, and other DOJ agencies – were employed in the ramped-up immigration enforcement efforts, and how much funding was used for such purposes in fiscal year 2018?**
3. **How many fewer drug trafficking cases were filed in judicial districts along our southern border since the ‘zero tolerance’ policy was implemented?**
4. **What are the comparable estimates for personnel and funding to implement zero tolerance policies in fiscal years 2019 and 2020?**

Executive Office for Immigration Review (EOIR)

5. In March Executive Office for Immigration Review Director McHenry testified before the Subcommittee. The night before the hearing, he sent a memo to staff saying that, despite a significant 2019 funding increase, a budgetary shortfall for interpreter costs would require

the immigration court system to cut back judge hiring, cancel trainings, and delay IT improvements. This is deeply troubling, both from a due process perspective, and a budgetary one. **Why was this committee not told about these problems?**

6. What impact has this funding shortfall had on the caseload backlog?

Border Wall/Eminent Domain

7. To support the Administration's proposed hardening and expansion of border walls on the Southwest border, the Department has been taking legal action to gain access to or acquire private land. This entails legal workload and years of litigation. **How many cases, including those seeking to acquire land through assertion of eminent domain, did the Department handle in fiscal year 2018, and how many do you expect to pursue in fiscal years 2019 and 2020 to force owners to sell or grant access to land?**
8. **For those years, how many landowners were or will be forced to sell their land or have it seized via eminent domain?**
9. **How much funding and full-time equivalent staff effort did the Department expend in fiscal year 2018 to pursue such actions – broken out by the U.S. Attorneys' offices, the Environment and Natural Resources Division, and the Civil Division – and how much does it plan to use for such purposes in fiscal years 2019 and 2020?**

Civil Rights Division – Alabama State Prisons

10. The 8th Amendment to the Constitution prohibits "cruel and unusual punishment..." On April 2, the Civil Rights Division and the U.S. Attorney for Alabama **released the results of its investigation of Alabama prisons and reported its findings. How will the Department ensure immediate relief from the unacceptable conditions now present in the prison system?**
11. **One way to ensure corrections in such cases has been through a judicially enforced consent decree. Former Attorney General Sessions said such decrees interfere with States' rights and placed restrictions on them. Will the Department seek or consider seeking a consent decree in this case?**
12. **What is the Department doing to ensure all States and territories are protecting the human and constitutional rights of persons in their custody? Is there a process to monitor facilities and ensure such deplorable conditions described in the April 2 report are not permitted anywhere in this country?**

Community Relations Service Termination

13. The fiscal year 2020 Budget proposes to eliminate the Community Relations Service and fold its functions into the Civil Rights Division, with no additional funding or positions assigned to this purpose. Historically, the Community Relations Service plays a key role in helping

prevent and resolve community conflicts based on civil rights issues. The proposal threatens to undermine the confidentiality and neutrality essential to this critical mission. **How will you protect the independence and confidentiality of the mediation work if it is done within the division responsible for enforcement?**

- 14. How will the Civil Rights Division perform this additional responsibility with no new resources or personnel?**

Policing Reform

15. Under former Attorney General Sessions, the Department effectively changed course on police reform, abandoning efforts in cities such as Baltimore and Chicago. It also moved the focus away from the Collaborative Reform program in the COPS office, which sought to work with police departments to implement changes to improve police-community relationships and build trust. **What is the Department doing now to address ongoing distrust between minority communities and local law enforcement – a serious issue in urban communities across this nation? What resources are included in your 2020 budget for such purposes?**

Environment and Natural Resource Division

16. The Environment and Natural Resources Division (ENRD) has a broad portfolio. It prosecutes those who violate pollution control laws; defends the U.S. from environmental challenges and in its stewardship of public lands and resources; wildlife protection; and Indian rights and claims. It also leads on Federal acquisition of property through eminent domain – such as on the Rio Grande where the Administration yearns to build a wall. Your fiscal 2020 ENRD request for ENRD is flat -- \$110.5 million – the same as in fiscal 2018.

During the shutdown, we heard ENRD was suffering an “exodus” of its most experienced attorneys – on the cusp of a slew of major EPA cases. Your request indicates you expect to double the number of full-time permanent reimbursable positions from 41 to 82. **Is the Division facing a shortage of experienced staff, and is it trying to make up for that by using reimbursable positions?**

17. There is growing concern about the presence of so-called “PFAS” chemicals in groundwater and drinking water. These chemicals are in consumer products like Teflon and Scotchguard, and in firefighting foam used at military airfields and facilities around the country and world. They are associated with higher rates of cancer. **What do you expect, in terms of workload and budgetary impact on ENRD, from litigation to monitor and clean up water from PFAS contamination, to include supporting the Environmental Protection Agency and defending the Defense Department against lawsuits?**

Wildlife Protection

18. Wildlife protection and trafficking remains a significant environmental and economic crime, and a source of funding for organized crime and terrorist groups, particularly in developing countries. **How many Environment and Natural Resources Division personnel and how much funding were used to investigate and prosecute wildlife trafficking in fiscal year 2018? What is budgeted for this in fiscal years 2019 and 2020?**

Russian Influence and Espionage

19. The impetus for appointing a Special Counsel was to investigate alleged Russian efforts to influence the 2016 election. DOJ, along with the rest of the Intelligence Community, has made clear that Russia carried out significant influence and interference activities, and continues to target U.S. elections. Your budget proposes \$132 million in new funding for national security and cyber threats, including \$18 million and 35 FBI positions for counterintelligence. **Is this latter proposal adequate to meet the growing threat of Russian interference in our political and economic system?**

China Initiative

20. Last November former AG Sessions initiated a “China Initiative” against Chinese national security threats – to our commerce, industry, and critical infrastructure. This would target, quote: “economic espionage”, “malign economic aggression”, “foreign investments, corporate acquisitions, and cyber intrusions...[and acquiring] inside information.” This initiative was to include leadership by the National Security Division, the Criminal Division, the FBI, and a working group of five U.S. Attorneys. **What is the status of the China Initiative begun by your predecessor, and how is its work reflected in your 2020 request?**
21. **Please identify (or provide separately to the Subcommittee if such information is sensitive) elements of the request that support this initiative, as well as any areas where additional funding could enhance Department efforts.**

US Marshals and Federal Prisoner Detention

22. The Department has identified a fiscal year 2019 shortfall in the Federal Prisoner Detention (FPD) account, and an even larger one in its fiscal year 2020 budget. The Department has proposed short term relief by transferring balances from the Bureau of Prisons. **What is the cause of the shortfall? Assuming it is due to increased prosecution of immigration charges, including misdemeanor charges, how much is due to the impact of the “zero tolerance” policies embraced by former Attorney General Sessions?**
23. **What are the potential consequences of not providing the full request FPD funding request?**

24. **If the shortfall were to be addressed through a transfer from the Bureau of Prisons, what impact would that have on the Bureau's ability to reduce overcrowding, activate facilities such as USP Thomson, and implement the First Step Act?**

Election Fraud

25. Your request calls for \$153.2 million for the Civil Rights Division, part of which funds the Voting Section, which is charged with protecting citizens' *right to vote* and access to the ballot. The President recently again claimed that fundamental uncertainty exists about the reliability of U.S. elections – the recurrent charge of so-called widespread “voter fraud.” **Is such so-called *election fraud* investigation and prosecution a significant Justice Department priority? If so, which components, how many positions, and how much funding was used in fiscal year 2018 for such efforts, and how much funding and personnel do you anticipate committing to such activity in fiscal year 2019 and fiscal year 2020? How many of these personnel are being diverted from traditional voting rights protection litigation?**
26. With more money flowing into political campaigns, there seems to be a growing problem of so-called “SCAM PACs” – shell organizations posing as political fundraising organizations. Political groups are not bound by the same limits or oversight as charitable nonprofits, so phony fundraisers, including many who were previously caught by charity regulators, see masquerading as “PACs” to be a safe way to raise money posing as “charitable” causes – such as for animals, veterans, or medical research. **What is the size and scope of this problem? Is the Department acting to investigate and shut down such fraudsters?**

Emergency Funding – impact on Department

27. The emergency supplemental has not yet been enacted to address the damage and costs associated with major hurricanes and other natural emergencies in 2018. The Department sustained costs and damage to many facilities and had significant impact on Florida and Puerto Rico, among other places. **How is the Bureau of Prisons operating without the capacity of its Marianna, Florida facility?**
28. **What has been the impact on Puerto Rico, which had to move detainees to the 50 states? Is there a continuing need to help restore operations and facilities there? How urgent is the delayed emergency funding?**

TAX Division

29. The Tax Division was flat funded in fiscal years 2018 (\$107 million) and 2019 (\$105.9 million). The 2020 request would increase funding by about 8 percent to \$114.9 million. But this is shown as a “current services” increase – not program growth. **Is the Tax Division encountering significant new workload due to the impact of the 2017 tax law changes? If so, how is it coping, and will the proposed increase keep it from falling behind?**

Opioids and Counterdrug Programs

30. Deaths from drug poisoning, according to the Center for Disease Control (CDC), are at their highest recorded level – for over ten years exceeding deaths caused by guns, car crashes, suicide and homicide. The CDC also reports that overdoses killed 70,237 Americans in 2017 – 47,600 from opioids, with deaths 9.6 percent higher than in 2016. DOJ proposes \$34.6 million more funding for the Drug Enforcement Administration, including \$22.4 million in its diversion control programs to address prescription drug use. This would include funding five new heroin enforcement groups and enhancing cyber and analytical tools to counter increasingly sophisticated traffickers.

The opioid epidemic has been common knowledge for a decade, and we've suffered the tragedy of drug trafficking for generations. For every "El Chapo" who is taken off the street, ten more of his lieutenants take over. **How will you prioritize resources and policies under your leadership, to address the drug crisis in this country – focusing on the trafficking organizations and their enablers, while aiding victims and users who want to escape their addiction?**

Criminal Division -- Globalization of Crime/International Aid Programs

31. The Office of International Affairs in the Criminal Division plays a critical role in helping enforce U.S. law when it entails global cooperation with other countries and reciprocating with them as appropriate. It plays a key role, with the State Department, in helping support the development of effective criminal justice systems around the world. Mutual Legal Assistance Treaty requests have grown in number and complexity, and the Department of Justice request says the Department needs to be able to promptly execute requests to share evidence – and ensure we receive reciprocal treatment. Congress provided funding for MLAT request processing in the 2019 Omnibus. **How much is included in your request for handling MLAT workload? Is it enough to support the Department's mission, including combatting transnational organized crime?**
32. The President's threat to eliminate foreign assistance to El Salvador, Guatemala and Honduras would surely damage cooperation with law enforcement and judiciary in those countries, including in efforts to dismantle MS-13 and other violent criminal gangs. **What is the Department doing in those countries – through aid, law enforcement cooperation, and other efforts – and what would be lost if the U.S. walked away?**

The request makes the case for reliable funding for overhead and headquarters costs of DOJ's foreign assistance engagement, including in Afghanistan, as reported by the Special Inspector General for Afghanistan Reconstruction. **How much is needed in 2020 to support this function, and how much is included for this purpose in your request for the Criminal Division?**

Bankruptcy Trustees Funds

33. In fiscal year 2017, U.S. Bankruptcy code was amended in law to change how bankruptcy filing fees are collected, which could lead to a 2020 shortfall in fees needed to offset its operations. **How big a problem does this pose in fiscal 2020, and is the Department acting or proposing legislation to prevent a funding gap?**

Justice Reinvestment Initiative (JRI)

34. In your testimony to the Senate Judiciary Committee, you said you "...would seek to ensure that the Department effectively implements the programs Congress funds. I support the goals of the Justice Reinvestment Initiative as described and do not at this time have specific ideas for modifications." Yet your budget request says, "The Administration seeks to eliminate JRI and redirect these funds to develop effective data driven programs to address the significant increases of violent crime in many of the Nation's cities and towns." **What changed your position on JRI, and what specific programs would be funded instead of supporting continuation of JRI efforts?**

The Honorable Matthew Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Department of Justice Fiscal Year 2020 Budget Request

FCC Robocall Forfeiture Orders

1. At the Federal Communications Commission (FCC) Budget hearing on April 3rd, 2019, Jessica Rosenworcel, an FCC Commissioner, said that since 2015 the FCC has referred over \$200 million in unpaid robocall forfeiture orders to the Department of Justice (DOJ). However, the DOJ has collected less than \$7,000. An FCC spokesperson also told the Wall Street Journal that the FCC lacks the authority to enforce its forfeiture orders and that they fall to the DOJ to execute. **What is happening to all those referred forfeiture orders?**
2. **What plans does the DOJ have in place to coordinate with the FCC to retrieve both current uncollected and future robocall forfeiture orders?**

Disparate Sentencing

3. A 2016 Brookings study found that Black men on average received 20% longer prison sentences than White men for similar crimes. Racial disparities in law enforcement and prison sentencing have created a justice system that disproportionately targets minorities, especially Black and Latino communities. **What steps will the Department of Justice take to address these pernicious disparities?**
4. **Will the Attorney General reverse the Department of Justice's memorandum that pushed prosecutors to pursue mandatory minimum sentences, the legal mechanism behind mass incarceration?**

Fatal Police Encounters

5. A report published in the Journal of Epidemiology and Community Health observing data from 2015-2016 of fatal encounters with law enforcement in the U.S. stated that "people of colour comprised 38.5% of the population, but 51.5% of YLLs [years of life lost]." The report concluded that police violence disproportionately affects people of color. **What steps will the Department of Justice take to prevent disproportionate levels of violence by police towards people of color?**
6. According to data compiled by the Washington Post, there were 11 more fatal shootings by police in 2018 than in 2017, and data from the past 4 years suggests that fatal police shooting levels are staying the same or increasing. In 2018, 998 people were killed by police officers. **What steps will the Department of Justice take to reduce police lethal force levels?**

7. **What steps will the Department of Justice take to address and reduce shooting bias against people of color?**
8. The US has been shaken by tragedies like the killings of unarmed people, such as Freddie Gray, Sam Dubose, Philando Castile, Terence Crutcher, Alton Sterling, and sadly many others. **What steps will the Department of Justice take to address police killings of unarmed people?**
9. Many of the officers who killed these unarmed people received very light or no sentences. **What steps will the Department of Justice take to make sure that victims of racial violence committed by police see justice?**

Rape Kit Testing Backlogs

10. Across the US tens of thousands of rape kits remain untested creating massive backlogs across the US. This is an issue of justice and public safety. **What steps will the Department of Justice take to ameliorate rape kit backlogs?**
11. **What steps will the Department of Justice take to ensure that rape kits in local law enforcement are tested in a timely manner?**
12. **How will the Department of Justice support law enforcement offices that are overwhelmed by their number of untested rape kits?**

Diversity

13. Federal law enforcement agencies have critically low diversity and few women working in them. According to Politico, in 2017 the FBI was 80% white and 80% male, and only 5% of all Border Patrol agents were women. At the rate that women's representation is increasing in law enforcement will take 700 years before women's numbers reach parity with their male counterparts. **What steps will the Department of Justice take to recruit more diversity?**
14. **What steps will the Department of Justice take to encourage more women to join federal law enforcement?**
15. **What steps will the Department of Justice take to identify and ensure that law enforcement agencies' hiring practices are not influenced by perceived biases?**
16. In 2018, the Office of the Inspector General produced a survey on Gender Equity in the Department of Justice and found that only half (52%) of all respondents reported that their agency had a gender equitable culture. Special Agent and Deputy U.S. Marshal positions reported consistently low perceptions of equity and many reported experiences of differing treatment and discrimination. **What steps will the Department of Justice take to improve and promote a gender equitable culture across its agencies?**

17. The Office of the Inspector General found that “women held few headquarters executive leadership positions and those positions were usually leading administrative or support units rather than operational units. Further, [it] found that women did not hold many of the top leadership positions in field offices, divisions, and districts.” **What steps will the Department of Justice take to promote more women to leadership?**
18. The Office of the Inspector General found that their “analysis indicated ATF and DEA female Criminal Investigators were underrepresented in competitive promotions compared to their proportion of the population at the next lower grade level.” Concluding that their “analysis might indicate possible issues at ATF, DEA, and FBI for women advancing into supervisory positions.” **How will the Department of Justice address gender discrimination in promotions?**
19. According to the report, DOJ agencies are less likely to give women the kind of casework that would lead to recognition and promotion, particularly in terms of collateral duties. **What steps will the Department of Justice take to ensure that there is no gender discrimination in collateral duty assignment?**
20. The report found that women staff members were sometimes reassigned involuntarily to units that handled non-violent crime and had more traditional work hours after they had started a family—units also less likely for promotion. A male supervisory Deputy U.S. Marshal even called motherhood “a career hazard for women.” **What steps will the Department of Justice take to ensure that women law enforcement officers are able to start families, free of discrimination or involuntary work reassignment?**
21. **What steps will the Department of Justice take to support flexible work hours free of discrimination for women staff members who have children?**
22. According to the survey 45% of staff members reported that they would not or were unsure whether they would use the EEO process if they experienced discrimination. Thus, contributing to underreporting and permitting the continuance of such discrimination. **How does the Department of Justice plan on building more faith and more utilization of the EEO process when a staff member is harassed or discriminated against?**
23. The Office of the Inspector General’s report stated that “a lack of applicant and hiring data inhibits evaluation of recruitment efforts.” **What steps will the Department of Justice take to improve data collection on demographic specifics in applicant and hiring data?**
24. Gender bias in law enforcement hurts survivors of sexual assault, domestic abuse, and stalking. In 2015, the Department of Justice released a report on December 15th, 2015 on “Identifying and Preventing Gender Bias in Law Enforcement Response to Sexual Assault and Domestic Violence” that outlined a set of principles that law enforcement agencies and departments should follow. **What steps is the Department of Justice taking to help agencies and departments pursue those principles?**

Drug Enforcement Policies

25. The Trump Administration released its National Drug Control Strategy in January. In the Strategy, it outlined that the Administration was in support of programs that “divert[ed] individuals addicted to drugs directly to treatment in lieu of arrest,” pre-arrest diversion programs, and other law enforcement diversion and deflection models. It also said that the “Administration [...] will scale up support for State, Tribal, and local drug courts in order to provide offenders struggling with addiction access to evidence-based treatment as an alternative to or in conjunction with incarceration, or as a condition of supervised release.” **How does the Department plan on implementing these diversion programs in conjunction with their enforcement programs?**
26. This strategy suggests a pivot from the criminalization of drug addiction—and consequently offenses—to a more medicalized and holistic view of addiction. **How will the DOJ’s drug enforcement policies reflect this shift in enforcement strategy?**
27. **Will the Department of Justice pursue clemency for individuals charged with long sentences before drug addiction was viewed as a medical issue?**
28. **How will the Department of Justice coordinate and work with public health institutions to coordinate drug addiction responses?**
29. **How will the Department of Justice coordinate and work with private health institutions to coordinate drug addiction responses?**
30. **How will different drug schedules affect the Department of Justice’s response to different addiction situations?**
31. In Attorney General Barr’s confirmation hearing, he mentioned that he would not continue to pursue the Department of Justice’s memorandum on marijuana enforcement from January 4th, 2018, and instead respect the Cole Memorandum on cannabis enforcement. **Does the Department of Justice and the Attorney General plan to use the guidance set forth in the Cole Memorandum on cannabis enforcement?**
32. **How does the Department of Justice plan on addressing states that have legalized medical and/or recreational cannabis?**
33. American drug laws and enforcement have historically and contemporaneously targeted minority communities and people of color, even though according to a survey done in 2018 by the Substance Abuse and Mental Health Services Administration, white Americans statistically have larger incidences of drug addiction. **What steps will the Department of Justice take to rectify disparities in drug law enforcement on black communities and communities of color?**
34. According to a survey done in 2018 by the Substance Abuse and Mental Health Services Administration, Native Americans and Native Alaskans have the highest rate of substance

addiction. What steps will the Department of Justice take to work with Native American Leadership to combat this epidemic?

35. When Native Americans suffer the most from substance addiction, there should be a renewed focus on helping alleviate the situation. Nevertheless, in the proposed FY20 budget for the Department of Justice, the Tribal Assistance Program under the Comprehensive Addiction and Recovery Act (CARA) is proposed to be completely defunded. **How does the Department of Justice expect to combat substance addiction in Native American populations when they defund the Tribal Assistance Program associated with the Comprehensive Addiction and Recovery Act?**
36. **What steps will the Department of Justice take to support law enforcement agents' access to Naloxone?**

Human Trafficking

37. Human trafficking has had a larger spotlight put on it in recent years, with most of the attention focused on sex trafficking. Labor trafficking is statistically the largest incident of human trafficking in the US. **What steps will the Department of Justice take to coordinate with the Department of Labor to address labor trafficking?**
38. **What steps will the Department of Justice take to ensure that illegal immigrants suffering from human trafficking can report abuse without risk of deportation?**
39. **What steps will the Department of Justice take to guide Attorneys to avoid prosecuting adult victims of trafficking or adult victims of childhood sex trafficking who are arrested on charges of engaging in prostitution?**
40. **What steps will the Department of Justice take to guide Attorneys and law enforcement to prioritize procurers and pimps, rather than prostitutes, who statistically are most often victims of childhood sex trafficking and have been unable to escape trafficking/prostitution systems before coming of age?**

Law Enforcement Practices and Civil Rights

41. In 2018, the US Commission on Civil Rights released a report that highlighted several recommendations to help the Department of Justice foster better law enforcement practices. One of the highlighted recommendations in the report was recommending that the Department of Justice "return to vigorous enforcement of constitutional policing... [and] should robustly support local efforts to develop and institute constitutional policing practices." **What steps will the Department of Justice take to institute constitutional policing practices?**
42. In the 2018 report released by the US Commission on Civil Rights, the report stressed that the DOJ should "reinstat[e] the Office of Community Oriented Policing Services (COPS) and maintain the Community Relations Services office (CRS) to focus on building community

trust and reduce excessive uses of force in coordination with police departments.” **Why is the Department of Justice ignoring the suggestions of the US Commission on Civil Rights and attempting to dissolve the COPS program?**

43. In the 2018 report released by the US Commission on Civil Rights, the Commission recommended that the Department of Justice “use...consent decrees as necessary where constitutional policing standards are not being upheld.” Consent decrees are essential to protecting civilians’ civil rights and reducing racist policing. Nevertheless, on November 8th, 2018 the Department of Justice released a memorandum on Civil Consent Decrees and Settlement Agreements with State and Local Governmental Entities that curtailed the Department of Justice’s ability to obtain court-enforced agreements, which would help the Department curb civil rights abuses by local police departments. **Does the Department of Justice plan to continue to ignore the US Commission on Civil Rights and continue its policy of curtailed consent decrees?**
 44. **With curtailed power to obtain consent decrees, what steps will the Department of Justice take to stop civil rights abuses by local police departments?**
 45. Transgender Americans experience much higher levels of violence and assault than cisgender Americans. In the US Transgender Survey (2015), 30% of respondents reported being discriminatorily fired, denied a promotion, or mistreated at work. Moreover, 47% reported having been sexually assaulted at some point in their lives. Nevertheless, despite these sobering statistics, the DOJ withdrew protections provided by Title VII of the Civil Rights Act to transgender people. If transgender Americans are at a higher risk of being discriminated against and being victims of a crime, then the Justice Department should be putting more protections in place rather than taking them away. **Does the Department of Justice plan to continue its policy of denying transgender individuals protections from discrimination under Title VII of the Civil Rights Act of 1964?**
 46. **Does the Department of Justice plan to continue its policy of denying transgender individuals protections from discrimination under Title IX of the Education Amendments of 1972?**
 47. **What steps will the Department of Justice take to prevent violence and discrimination against transgender and gender non-conforming people?**
 48. **How do the Department of Justice’s current interpretations of Title IX of the Education Amendments of 1972 and Title VII of the Civil Rights Act of 1964 affect intersex people’s rights against discrimination based on gender-identity?**
 49. The US has struggled with low confidence in police for years now, reaching a nadir in 2015 according to a Gallup poll. **How will the Department of Justice inspire more trust in law enforcement when it proposes to dissolve the Community Relations Service, the Body Worn Camera Partnership Program, and the Community Trust Initiative?**
- Justice Reinvestment Initiative**

50. The Justice Reinvestment Initiative is a data-driven approach to improve public safety, reduce corrections and related criminal justice spending, and reinvest savings in strategies that can decrease crime and reduce recidivism. The Reinvestment Initiative has had dramatic results such as reducing Arkansas incarceration by 9% —1,783 less people—within the first year of its implementation. **The JRI is a cost-saving program, why would the Department of Justice get rid of it?**

51. **What plan does the Department of Justice have in place to help reduce recidivism?**

Youth Mentoring

52. Preventing crime should start at a young age—especially since young people are the most likely to commit a crime—however, the proposed FY 20 budget for the Department of Justice proposes drastic cuts to the Youth Mentoring and Delinquency Prevention Program. **Has the Department of Justice done any studies on the effects of such drastic cuts to these programs?**

Victim Services

53. The proposed FY 20 budget proposes cutting the Crime Victims Fund (CVF) by almost half. Moreover, it proposes to take even more funds out of the CVF by not giving the Office on Violence Against Women any discretionary appropriations and instead implementing a carve-out of the CVF. This sends a stark message to victims that the DOJ does not value them. **Does the Department of Justice have other plans to fund victim services in other ways?**

Prison Overcrowding

54. There is a huge prison overpopulation issue in the US. This was highlighted in the Department of Justice's "Notice Regarding Investigation of Alabama's State Prisons for Men," which stated that "violations are exacerbated by serious deficiencies in staffing and supervision and overcrowding." **What steps will the Department of Justice take to support state governments with overcrowding and understaffing prison issues?**
55. **How does the Department of Justice plan on helping prison overcrowding in the US when it is proposing to dissolve the National Institute of Corrections, which provides training, information, and technical services to federal, state, and local correctional agencies?**

Special Counsel Investigation

56. **Did the Attorney General prepare any portion of his report prior to reading the Mueller report?**
57. **Does the Mueller report have "executive findings" or other statements which summarize the key points of his investigation and report? Did the Attorney General**

base his summary report on Mueller's summary, and how did his summary differ from Mueller's?

- 58. Is it the Attorney General's understanding that Mueller's summaries were intended for quick public release?**
- 59. Beside the Deputy Attorney General and the Office of Legal Counsel, who else did the Attorney General consult with to make determinations on the Mueller report? What led him to believe—despite just having received the report—that he was able to make that determination so quickly?**
- 60. Did the Attorney General at any point discuss with the Special Counsel whether his factual findings on obstruction of justice should be made available to Congress? To the public at large?**
- 61. Did Mueller share with the Attorney General his expectation or opinion on whether his factual findings on obstruction that, according to the Attorney General, "do not exonerate" the President, should be shared with Congress? If yes, what did he say or can the DOJ characterize what his expectation was?**
- 62. On the issue of conspiring with the Russian government to interfere in the 2016 election, the Attorney General stated in his March 24th letter that the evidence does not meet the beyond a reasonable doubt standard of proving crimes. Does the evidence meet a clear and convincing standard or a preponderance of the evidence standard?**
- 63. Does the DOJ agree that foreign attacks or interference in our elections is a significant national security threat?**
- 64. Does the DOJ agree that Congress has a compelling legislative, appropriations, and oversight responsibility on the issue of election security and election interference?**
- 65. Will the special counsel's findings on Russia's efforts to influence the 2016 election help inform the discussion and ongoing efforts to secure our elections moving forward?**
- 66. Will the special counsel's findings on Russia's efforts to influence the 2016 election help inform the discussion and ongoing efforts to combat foreign cyber aggression?**
- 67. Given the grave national security threat posed by foreign actors interested in undermining our democracy, does the DOJ believe that it is important for Congress to receive all the Special Counsel's findings and underlying evidence on Russian election interference so that we can make well-informed and thoughtful legislative and appropriation decisions to prevent future foreign attacks?**

**The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

Department of Justice Fiscal Year 2020 Budget Request

Community-Based Violence Prevention Grants Programs (DOJ)

1. The Community-Based Violence Prevention Grants Program helps states and localities support a coordinated and multidisciplinary approach to gang and violence prevention, interventions, suppression, and reentry in targeted communities. **What is the rationale behind eliminating this program?**
2. **How has OJJDP evaluated this program? What is the evidence-based evaluation of this program?**

First Step Act and Menstrual Hygiene products

3. The First Step Act requires Bureau of Prisons to provide menstrual hygiene products to women and no cost and in accordance with the women's health needs. **What is the status of this requirement? Have you begun providing the menstrual hygiene products to incarcerated women?**

First Step Act and Primary Residence

4. Section 401 of the First Step Act requires that, whenever practicable, a person be housed closest to their primary residence, and within 500 driving miles of their family. **Is DOJ aware of how BOP plans to implement this provision, and how much it will cost?**
5. **What is DOJ's position on the timeline required to be in compliance with this provision of the law?**
6. **When do you anticipate beginning to fulfill the requirement that people be moved to within 500 driving miles of their release place?**
7. **What is the cost of those relocations?**

First Step Act and Independent Review Committee

8. The First Step Act required that an Independent Review Committee be established by the National Institute of Justice not later than 30 days after enactment, or by January 21, 2019. This date has passed, and the Independent Review Committee has not yet been established. **What steps has BOP taken toward establishment of the Independent Review Committee?**
9. **What organizations have you considered to house the Independent Review Committee? How will you make this decision?**

10. **By what date will the Independent Review Committee be established?**
11. **What additional resources, if any, does the Department need to establish the IRC?**

Crime in Rural Areas

12. The President's budget wants to carve out \$6 million of Byrne-JAG grants to "empower rural law enforcement agencies by providing training, technical assistance, and resources to interdict drug and human traffickers" – under the proposed Southwest Border Rural Law Enforcement Violence Crime Reduction Initiative. While this certainly plays into the Administration's narrative of the border crisis, there is also a more critical, very stark and very real situation of violent crimes being on a historic rise in rural areas.

Violent crime rate in rural areas has climbed above the national average for the first time in 10 years. In Iowa, for example, the overall violent crime rate rose by 3 percent between 2006 and 2016 but shot up by 50 percent in communities with fewer than 10,000 residents. **Why would the Department's funding only focus on rural areas in the Southwest and not all rural areas?**

13. **What will the Department do to help these rural communities that are dealing with increased drug use and associated crimes, like drug trafficking, theft, as well as domestic violence?**

"Red Flag Laws"

14. After the shooting in Parkland, the President convened a roundtable to discuss gun violence and gun safety solutions. The president himself acknowledged how important it was to take immediate action when someone is a risk to themselves or other, creating a process to make sure someone doesn't have access to firearms in that acute moment where they are putting themselves or their community at risk. The President's administration has continued to show its support for the concept of strong intervention, with the DOJ providing technical assistance and the School Safety Commission supporting them.

Most recently, during your testimony before the Senate Judiciary Committee, Mr. Barr, you said:

"I think the problem of our time is to get an effective system in place that can keep dangerous firearms out of hands of mentally ill people. That should be priority one and it will take hard work to get on top of the problem...."

"We need to push along Extreme Risk Protection Orders (ERPOs) so that we have these red flag laws to supplement the use of the background check to find out if someone has a mental disturbance. This is the single most important thing we can do in the gun control area to stop these mass shootings from happening in the first place."

I understand how important this life saving tool is to prevent mass shootings and suicide, and Senator Lindsey Graham has stated that he's committed to working on federal legislation to incentivize states to pass and implement Red Flag laws in their state as a first step. **Do you believe that we should be trying to implement a 50-state solution that doesn't leave any states behind when it comes to access to this critical tool?**

Death in Custody Reporting Act

15. The Death in Custody Reporting Act (DCRA) was enacted four years ago, on December 18, 2014. If properly implemented, DCRA could yield the most accurate federal numbers on deaths in custody, including fatal police shootings, disaggregated by race, ethnicity and other decedent demographics, to date. States should have begun compliance with DCRA on July 31, 2017. **What is the status of implementation of the Death in Custody Reporting Act?**
16. **When will DOJ issue final guidance around the implementation of the Death in Custody Reporting Act?**
17. **What percentage of states complied with the first reporting period by July 31, 2017?**
18. **Is the Bureau of Justice Assistance or another DOJ entity conducting open source review to ensure DCRA implementation and compliance?**

Militarization

19. On August 28, 2017, President Trump issued an executive order eliminating oversight and restrictions on the federally resourced military weapons and equipment provided to local law enforcement. The executive order may have disassembled an interagency working group that was headed by DOJ's Office of Justice Programs and included the Departments of Defense and Homeland Security — the primary federal providers of military weapons and equipment to law enforcement. At a minimum, the working group ensured that the agencies providing military-grade weapons were communicating with one another, which proves to be a critical need in light of a July 18, 2017, Government Accountability Office (GAO) report that found the federal government gave over \$1 million worth of military weapons to a fake federal law enforcement agency. **What is the status of the Interagency Working Group on Federal Equipment?**
20. **Does DOJ have any policies in place around its resourcing of military weapons to local law enforcement, whether through Byrne JAG or other grants, federal civil forfeiture funds, or other DOJ programs?**
21. **Has DOJ recently provided guidance to local law enforcement on how protests and other assemblies should be policed? If so, what is the guidance with respect to the use of military weapons and equipment?**

The Honorable Robert B. Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Department of Justice Fiscal Year 2020 Budget Request

CBD (Cannabidiol) Oil

1. In recent years, the Commerce, Justice, Science Appropriations Acts have been amended to include a general provision that prohibits the Department of Justice (DOJ) from using funds to interfere with state medical marijuana programs. It is my understanding that this provision is intended to limit DOJ's ability to take enforcement actions under the Controlled Substances Act. **Does this prohibition interfere with DOJ's ability to enforce other areas of the law beyond the Controlled Substances Act?**
2. **How might this provision inadvertently be impacting public health and safety?**

**The Honorable Tom Graves
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

Department of Justice Fiscal Year 2020 Budget Request

Wire Act

1. In January, the Department of Justice Office of Legislative Counsel released a memo in January that reinterpreted the Wire Act in such a way that has put all sales by traditional lotteries at risk of being considered in violation of the Wire Act, in part because of the lack of recognition of the fact that nearly all lottery transactions, including in store terminal-generated games and internet sales, use wire facilities to electronically route wagers across state lines.

Billions of dollars generated annually from lottery proceeds fund worthy causes. For example, the Commonwealth of Kentucky and the State of Georgia use lottery proceeds to fund college scholarships. Many other states, including Illinois, Michigan and New Hampshire, use lottery proceeds to fund public education.

The Supreme Court has recently indicated its agreement with two federal circuit courts of appeal that held the Wire Act applies to betting or wagering on sports events, and it further noted the importance of respecting the policy choices of citizens in each individual state.

Indeed, states must gain the support of their legislatures and voters before operating; must be authorized and regulated by state law; operated by the state or the state's statutory designee; and sell only to persons physically present within the state.

DOJ's extension of the enforcement moratorium on the memo in light of the suit filed by the New Hampshire Lottery Commission only provides temporary relief to the affected states and organizations. **To provide legal certainty, will DOJ explicitly exclude state lottery transactions from its interpretation of the Wire Act?**

TUESDAY, APRIL 30, 2019.

OVERSIGHT OF THE 2020 CENSUS PREPARATION

WITNESSES

STEVEN DILLINGHAM, DIRECTOR, U.S. CENSUS BUREAU

ROBERT GOLDENKOFF, DIRECTOR OF STRATEGIC ISSUES, GOVERNMENT ACCOUNTABILITY OFFICE

NICHOLAS MARINOS, DIRECTOR, INFORMATION TECHNOLOGY AND CYBERSECURITY, GOVERNMENT ACCOUNTABILITY OFFICE

KEVIN SMITH, CHIEF INFORMATION OFFICER, U.S. CENSUS BUREAU

Mr. SERRANO. The subcommittee will come to order. Good morning, everyone.

Today we welcome Dr. Steven Dillingham, Director of the Census Bureau; Kevin Smith, the Chief Innovation Officer of the Census Bureau; Robert Goldenkoff, Director of Strategic Issues, Government Accountability Office; and Nicholas Marinos, the Director of Information Technology and Cybersecurity at the Government Accountability Office.

You are all here to talk about the 2020 Census preparations, which are now in their final stages.

We are now in the critical stages of the rollout and administration of the 2020 Census. Unfortunately, as we discussed the funding needs for fiscal year 2020, we seem to have more uncertainty than I have ever seen at this point in a decennial cycle. That is almost entirely the result of the decision to try and add an untested citizenship question to the form.

While we wait for the Supreme Court to rule on the legality and constitutionality of that addition, I am deeply concerned that the Bureau remains unprepared for and unwilling to admit culpability in creating this situation. In particular, I am worried that the Bureau remains seriously unready to administer a census that includes a citizenship question. I have heard little of any plans to address community fears in immigrant communities about what this information is used for. You are only studying the impact of the question this summer when it will be too late to address outreach and communications, based on the results.

Your budget request of \$6.149 billion for the 2020 Census is inadequate and does not include funding for a contingency fund previously requested by Secretary Ross. I am not sure if these decisions are yours, Director Dillingham, but it is apparent that the White House and the Secretary have little interest in a fair or accurate census; in other words, the fix is in.

I realize, Director Dillingham, this mess is not entirely your fault. After all, you were not confirmed when the decision was made to add a citizenship question to the decennial form and you report to the Secretary of Commerce, who instigated this political farce in the first place. I have no doubt about your desire or the

desire of the thousands of Census Bureau employees to administer a census that accurately reflects how our country has grown and changed, but you have been dealt a very bad hand and you are being forced to administer this census at an extreme disadvantage.

Today, I hope we can hear about the Bureau's preparations for next year, what challenges remain, and how the Bureau will react when the Supreme Court rules on the validity of the Secretary's process for changing the decennial census form. This committee stands ready to help you in every way possible, and our questions today are designed to highlight our concerns and our communities' needs as you move forward. We hope you and your staff and paying close attention to these concerns.

This is, of course, something that is on everybody's mind in many communities throughout the country. I can tell you that in mine it is a big issue and it is everywhere, and it is on the mind of many people in Congress. So I hope that we all pay attention to today's hearings, both here and afar, because this issue still has to be resolved and we need a fair and accurate count.

And with that let me turn to my friend Ranking Member Aderholt for his remarks.

Mr. ADERHOLT. Thank you for yielding, Mr. Chairman, and I too want to welcome all of our witnesses that are here to the Commerce, Justice, Science subcommittee today to testify regarding the 2020 Census.

It is difficult to believe that we are just now 11 months out from Census Day, April 1st, 2020. As we all know, Census Day will represent the culmination of nearly a decade of research, design, integration, and testing of the Bureau's substantial efforts to modernize the census and make it easier for people to respond any time and anywhere.

I do appreciate the Bureau's commitment to assuring a full, fair, and accurate count of all Americans in 2020. The Bureau has a monumental task and it is a task that I know all four of you take very seriously.

For fiscal year 2020, the Department of Commerce has requested, as you know, \$2.3 billion in additional funding in order to support your efforts to meet the constitutional mandate for the 2020 Census. This subcommittee must examine, therefore, whether the funding requested for fiscal year 2020 is adequate to meet your needs, both anticipated and those arising under different contingencies.

The ambitious, but worthy effort of converting to an Internet-based enumeration has required much research, planning, and coordination, not to mention the scaling of complex systems to make sure they can handle the massive amount of data that comes with counting more than 300 million people.

I look forward to learning today as we have this hearing about the key indicators of your readiness, such as the 2018 End-to-End Test; the status and nature of your communications campaign; the on-boarding activities well underway this year; and, finally, I would like to say a few words about the topic I know that there is a lot of concern about by a good number of people. And let me just add, a lot of good people disagree on this issue, but I will say I do be-

lieve the Federal Government does has a compelling interest in collecting primary-source data on citizenship.

By law, the Census Bureau cannot disclose anyone's response or share data from which an individual can be identified, and that goes to even other Federal agencies. The law, in my opinion and what I understand, is very clear on this: a person's response that they are not a citizen does not provide the government with any reliable information about whether they are lawfully present in the United States.

There are some who would like to turn this into some kind of campaign of fear surrounding this question, but I really think this can be a situation about education.

I look forward to hearing about the census effort to mitigate the skepticism and the lack of awareness associated with every decennial census, and expect to hear that equal focus will be afforded to all segments of the so-called hard-to-count populations, including a lot who live in my home state of Alabama. Many of them lack broadband Internet service, a lot of them have rural addresses, and there are, of course, quite a few that distrust the Federal Government, and it might result in an undercount.

So, Mr. Chairman, thank you for holding this hearing, and I will yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

Now it is my pleasure to introduce my chairwoman, the Chairwoman of the Full Committee, Mrs. Lowey of New York, for her remarks.

Mrs. LOWEY. Welcome. Thank you, Chairman Serrano and Ranking Member Aderholt, for holding this important hearing.

While I frankly was very disappointed that Secretary Ross refused to testify before the subcommittee, and I am really puzzled about that, I have known the Secretary for a long time and I was looking forward to hearing from him today, but I am very pleased to have these esteemed witnesses with us and I thank you for appearing.

The 2020 Census is a serious constitutional obligation that must be adequately funded and free of partisan interference. The 2020 count will shape how federal dollars are shared nationwide for the next decade and that means it determines how much each community receives for schools, roads, health care, and other public services that our constituents rely on daily. Unfortunately, this Administration is playing football with this fundamental function of our government.

We know that certain hard-to-reach populations are much more difficult to count than others; those groups are vulnerable to underestimation. My home state of New York has a number of people who are frequently undercounted, such as African Americans, foreign-born residents, Latinos. Part of the beauty of New York is our diversity and we must do everything we can to ensure an accurate census count. Underfunding the census puts New York communities that need funding most at risk of losing more than \$73.3 billion.

On top of funding issues associated with the census, this Administration's decision to include the citizenship question is, frankly, highly offensive and, as multiple Federal courts have held, uncon-

stitutional. It is an unnecessary addition and a clear attack on immigrant and other minority communities; frankly, it must be stopped. Congress and this committee should work together with the Census Bureau to protect our most vulnerable communities, and I look forward to a productive discussion today that highlights ways we can preserve the sanctity of our democracy and best represent our constituents.

So I thank you very much, Mr. Chairman.

Mr. SERRANO. Thank you, Chairwoman Lowey.

Director Dillingham, you are now recognized for 5 minutes. Please try to keep it to 5 minutes and you have our word that every word you wrote will be on the record.

Mr. DILLINGHAM. Good morning, Chairman Serrano, Committee Chairwoman Lowey, Ranking Member Aderholt, and members of the subcommittee. Thank you for inviting me to be with you today. We appreciate your strong support for the Census Bureau and its work; we are deeply grateful to Congress for funding our programs. We are highly confident that the budget request for fiscal year 2020 supports the operation of a complete and accurate count of our Nation's population.

The budget request has \$7.2 billion in total resources, it includes \$1 billion in carried-over funds. The request represents a \$3.3 billion, 88-percent increase from fiscal year 2019. Of that, \$6.3 billion is for the 2020 Census, the rest is for other programs, including data processing and dissemination; data releases of the Economic Census, Census of Governments; and a collection of monthly, quarterly, and annual data, including the Principal Economic Indicators, the American Community Survey, and other economic, demographic, and geographic programs.

In fiscal year 2018, you provided advanced funding of nearly \$1 billion, allowing us to continue our 2020 Census work during the funding lapsing, and we thank you. Funding certainty will continue to be a vital need.

Presently, we are on schedule, on budget, on message, and on course to complete the biggest and best census ever. We and our partners are excited and committed. Our mission is to count every person once, only once, and in the right place, and with your support we will accomplish this mission.

We have made a number of major improvements, including better technologies for canvassing and enumerating; new options for responding—the Internet, the phone, as well as the paper—more language assistance; customer-assistance phone centers; more partners and partnership specialists; a sophisticated and expanded media campaign; and advanced IT safeguards and privacy protections.

These successes and time-tested operations increase our confidence that we can conduct a complete and accurate census within the budget.

During the 2018 End-to-End Test, which was our dress rehearsal, we successfully tested and deployed census operations and systems. The results, including the self-response rates, exceeded projections. The systems worked efficiently, enumerator productivity rose about 50 percent, and responded information was securely encrypted and processed.

Confidentiality is a core part of the Census Bureau's culture, it requires response data to be used only for statistical purposes. Those working with the data take a lifetime oath not to share confidential information, including with law enforcement. Unlawful disclosures subject violators to fines and imprisonment. The Bureau has decades of success in carrying out this responsibility.

IT security enhancements and preparations for 2020 are underway. In-Field Address Canvassing begins in August. Our communications contractor team includes leaders in advertising and multi-cultural subcontractors with experience in reaching everyone.

We are recruiting trusted voices from communities to motivate people to respond. We are hiring 1,500 local partnership specialists, almost double that from the last decennial census. We plan to establish a record 300,000 partnerships. Communications and partnerships encourage everyone, especially the hard-to-count, to respond to the census. We plan to reach under-counted children; areas with limited Internet access; rural and remote areas; hard-to-count groups; and households lacking English proficiency through online and phone assistance in English and 12 other languages covering more than 99 percent of all households, plus materials in 59 languages.

We are committed to reaching the hard-to-count populations, and have answered the committee's request as to how this might be expanded.

In closing, I am pleased to testify with the Government Accountability Office. We consult closely with GAO on key risks and steps to mitigate them; we have closed about two thirds of the GAO recommendations, we have action plans for the others. We value GAO input and engagement, and are encouraged by recent progress.

We thank this committee and Congress for communicating the shared message that the 2020 Census is easy, safe, and important. It is easy, because you can respond online, by phone, or on paper. This creates new efficiencies, it saves dollars, it relieves burdens, and it reassures people that assistance is but a phone call away. It is safe, because we have the latest and best technologies and practices to protect the data and confidentiality. And it is important, because it is used to apportion the House of Representatives; to allocate the billions of dollars, as was mentioned; and to guide decisions by individuals, communities, businesses, and government at all levels.

Finally, we commend the members of this subcommittee, and the full committee and the Congress, for your interest, support and valued partnership. We look forward to working together.

I will be happy to answer your questions.

[The information follows:]

**PREPARED STATEMENT OF
DR. STEVEN DILLINGHAM
DIRECTOR
U.S. CENSUS BUREAU
U.S. DEPARTMENT OF COMMERCE
Before the Appropriations Committee,
Subcommittee on Commerce, Justice and Science
U.S. House of Representatives
30 April 2019**

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee, thank you for inviting me to be with you today. I want to start with appreciation for your strong support of the work of Census Bureau. We are deeply grateful for the support of the Congress for the last two years in providing the budget for the 2020 Census. We—including the career leadership with whom I am privileged to serve—are highly confident our funding in place for Fiscal Year 2019 and the budget request for 2020 supports the operations for a complete and accurate count of all persons living in the United States of America.

The FY 2020 budget request totals of \$7.2 billion in total resources, including \$1 billion in funds carried over from prior years, an increase of \$3.3 billion (88 percent) over FY 2019. Highlights include:

- \$6.3 billion for the 2020 Census;
- \$83.3 million for the Census Enterprise Data Collection and Processing (CEDCaP) program, an integrated and standardized data collection and processing system;
- \$64.9 million to transform our data dissemination systems;
- \$139.6 million to continue implementation and begin data releases from the reengineered 2017 Economic Census and the 2017 Census of Governments; and
- \$561.0 million to continue collection of the monthly, quarterly, and annual data on our economy and society – including Principal Economic Indicators, data from the American Community Survey, and releases from dozens of other economic, demographic and geographic programs.

Of course, our top priority for FY 2020 is a complete and accurate decennial census count. One important thing the subcommittee addressed in our previous appropriations is the certainty of funding. In FY 2018, you provided advanced funding of \$1 billion. The advanced funding allowed us to continue our work on the decennial census during the funding lapse, and I thank you for that. The timing of funding is key to maintaining our schedule as we move into FY 2020. To remain on schedule, we must have certainty regarding the FY 2020 appropriation at the beginning of the fiscal year.

I am excited about where we are right now, less than a year from Census Day 2020. We are on schedule, on budget, on message, and on course to complete the biggest and best census ever. Our mission is to count every person living in the United States once, only once and in the right place. With your continued help, I am confident that we will accomplish our mission.

We continue to experience key successes, making us confident that our budget will support a complete and accurate 2020 Census. We have made a number of dramatic improvements and innovations since 2010, including:

- Better technologies and improved processes for canvassing neighborhoods to develop complete and updated address listings;
- New options for responding – by internet, phone, or paper;
- More language assistance than ever before;
- Expanded and efficient customer assistance phone centers;
- More partners and specialists to reach hard-to-count populations;
- Better technologies and efficient processes for census takers;
- Sophisticated, greatly expanded media campaign with new ways to reach people and communities, including hard-to-count populations; and
- Advanced IT security safeguards and privacy protections to ensure that the confidentiality is not compromised.

These successes and our time-tested operations have increased our confidence we can conduct a complete and accurate census within the budget request.

2018 End-to-End Test

I would like to go over highlights of our successful End-to-End Census Test in Providence County, Rhode Island, our last operational test before 2020 operations. In that dress rehearsal, we successfully tested and deployed the operations and systems necessary to support census operations. This was a significant accomplishment, and we learned a lot.

The productivity of census takers was 1.56 cases per hour, up by nearly 50 percent, from 1.05 cases per hour in 2010. This efficiency was higher than anticipated, and we are adjusting our assumptions accordingly. Another important learning from the Nonresponse Followup operation concerns the removal of vacant and nonexistent housing units using data already provided to the government, what we call administrative records. We discovered that a significant proportion of these housing units turned out to be occupied. So we have added an onsite visit to all of them prior to their removal from the NRFU workload in the 2020 Census. Census enumerators will examine each to ensure that no one is living there. If they appear to be occupied, they will be visited during the NRFU operation.

Self-response also exceeded our projections. More than half of all households, 52.3 percent, responded to the test on their own, surpassing the projected rate (49.3 percent) by 3 percentage points. It is important to note that this response rate came without the motivation of an advertising campaign, increasing our confidence that an estimated self-response rate of 60.5 percent in 2020 is a very realistic projection, as we will have a more robust communications effort than in 2010. We also noticed that during initial visits in the Nonresponse Followup Operation, self-response increased when enumerators left notices of visit. New technology introduced for the 2020 Census lets us immediately remove late self-responding households from the Nonresponse Followup workload for the first time. The result is reduction in unnecessary household visits, which are expensive for the Census Bureau and frustrating to households that have already responded.

All three modes of self-response were successfully deployed. Of those who self-responded, 61.2 percent chose the internet, 31.3 percent chose traditional paper forms, and 7.5 percent chose to

respond over the phone, in line with projections. The internet self-response and phone response are among the many innovations for 2020 compared to 2010 when we had a 100 percent paper-based operation, and this is consistent with our projections and experience in tests earlier in the decade.

We successfully automated the processes for recruiting, hiring, and training. Also, we automated daily payroll and expenses on a handheld instrument—saving time and money over the paper forms, manual processing, and in-person meetings necessary in 2010.

Our enumeration devices worked well. Enumerators were able to conduct interviews and have their work assigned remotely, eliminating the need for paper assignments delivered daily through in-person meetings. As households self-responded, they were removed from the master list automatically, reducing unnecessary visits. Our routing system helped enumerators achieve the higher productivity rate, another innovation over prior paper lists and maps used in 2010. Most importantly, information obtained in interviews was kept safe and securely encrypted at all stages.

On March 29, we completed the final step of the test by producing the prototype of the redistricting files based on the test enumeration of Providence County. We look forward to input from states and other stakeholders as we finalize the design of the 2020 redistricting files.

Privacy Protections

Confidentiality is a core part of the Census Bureau's culture, and privacy safeguards are reinforced across all of our statistical programs and activities. Title 13 of the U.S. Code is straightforward and provides strong protections proven over numerous decades. Title 13 requires responses to Census Bureau surveys and censuses to be confidential and used only for statistical purposes. All staff working with confidential information at the Census Bureau take a lifetime oath to protect the privacy and confidentiality of respondent information. We do not and will not share confidential information with law enforcement or any other agency. Unlawful disclosure is a federal crime punishable by a \$250,000 fine or five years in prison, or both.

We take every precaution to ensure that individual responses will not be released or revealed, and we are adopting cutting-edge methodologies to protect the 2020 Census. The Census Bureau has adopted disclosure avoidance methods that are the gold standard for modern privacy protection in computer science and cryptography. We are resolved to use modern technology and methods to protect the privacy and confidentiality of every respondent. All of the data and publications of the 2020 Census will be protected because it is imperative above all else that we ensure the trust of the American people.

We have a comprehensive approach to maintaining data security. To complete our mission, the American public must trust that we are able to protect the data they provide. We are working closely with the Department of Homeland Security, the tech industry, and the intelligence community to defend our systems. We test all systems for security well before they are deployed. We have layering and advanced tools to defend against threats. We encrypt the data at every stage—on our devices, in transit, and at rest in our system. Our security team continuously monitors our systems, scanning for more than 100,000 potential vulnerabilities each month, with more added as potential new threats emerge. We have plans and procedures in place to respond immediately to existing or perceived threats.

Focus in 2019: Preparation

This year, we are focusing on final preparations for the 2020 Census. In-Field Address Canvassing, the first field operation, will begin in August. We will send out staff to verify around 35 percent of the addresses in the country. Our in-field address canvassing activities are designed to discover hidden housing units and those units whose status could not be clearly determined from in-office satellite imagery. The rest have already been verified over the decade with in-office review of satellite imagery, data from the US Postal Service, and other data sources. We also had great input from local and state governments in the Local Update of Census Addresses (LUCA) program. Submissions to LUCA covered 95.5 percent of the population and 95.7 percent of the housing units. For 2010, LUCA covered only 93.5 percent of the population and 92.9 percent of the housing units. These updates will give us the most accurate and complete address list ever.

Also, this year we are focused on systems readiness. We know from the 2018 test that our systems worked well and integrated effectively. We are continuing to prepare the 52 systems necessary for 35 operations by performing robust testing for security and functionality. Along with the successful deployment in the 2018 test, we have successfully tested the internet self-response system to handle well beyond current projections of concurrent respondents we expect at any given time, and we have the ability to quickly scale up even further to prevent delays, if needed.

2020 Communications and Partnership Campaign

We have used extensive research to guide our communications and partnership planning. The Census Barriers, Attitudes and Motivators Study (CBAMS) survey, with a sample size of 50,000 and 42 focus groups, examined communication challenges. This is far more robust than the 4,000 telephone interviews that were conducted in the research phase of the 2010 Census. VMLY&R—the communications contractor for the 2020 Census—has assembled a diverse team of firms representing the worldwide leaders in advertising, media buying, opinion research, strategic communications, and multicultural subcontractors who are unrivaled leaders in reaching their audiences. They are now using the information from CBAMS to develop the messaging that will drive the campaign. Creative treatments and messaging are now being tested in focus groups and an online survey.

The team also produced and tested our tagline for the 2020 Census, “Shape your Future, Start Here.” It has been incorporated into our logo for the campaign, and this will help ensure a consistent look and feel across all components of the advertising and promotional work we are doing.

Partnership is a critical part of our outreach campaign. We are aggressively recruiting partners to be trusted voices in their communities and at a national level to help motivate people to respond. We are hiring 1,501 Partnership Specialists at the local levels, compared to 800 in 2010, and they will be establishing 300,000 partnerships at the local and regional level, focusing on diverse racial, ethnic, religious, and other communities. In the states, we have near full participation in our program to form state complete count committees, which has been a major focus for the 2020 Census, building on lessons learned about their effectiveness in 2010. We also got an earlier start on our National Partnership Program, securing more than 180 national partners and allies to date. Key organizations include the American Library Association, Boys and Girls Clubs of America, the Annie Casey Foundation, the National Association of Latino Elected Officials, the National Urban League, and the National Chambers of Commerce. Our integrated partnership team also includes a Census Open Innovation Labs team, looking at the best ways to connect technology, data, government, and local organizations to help communities reach a complete and accurate count.

Our advertising team is currently conducting 122 additional focus groups across the nation to finalize our advertising and messages for the robust advertising campaign. We are finalizing the planning for our media buys at the national and local level. The same expert multicultural agencies designing advertisements and messaging to motivate hard to count populations to self-respond to the Census are assisting with the media buy for their audiences. Everything about our communications campaign is rigorously researched and tested, and relies on feedback from the hard-to-count populations and audiences we need to reach.

Reaching the Hard-to-Count

Our comprehensive plans include specific efforts to reach hard-to-count populations. Our entire communications effort focuses on motivating everyone—especially the hard-to-count—to respond to the census.

Our research underlying the communications efforts are stronger than ever. For example, the Census Barriers and Motivators Study (CBAMS) included a sample of 50,000 with a 39 percent response rate and 42 focus groups, well beyond the scope of the 2010 research that only reached 4,000 respondents via telephone and included no focus groups. According to our research, people in hard-to-count communities may have questions about whether responding to the census will make a difference in their lives. Also, public knowledge about the scope and purpose of the census needs to be expanded. Some people have concerns about data confidentiality and privacy. Accordingly, our advertising team is developing messaging to emphasize the safety of answering the census and the tangible benefits for local communities. We will emphasize that we will not share responses with anyone, including law enforcement. Our message will connect participation in the census to support and resources for local communities and will educate the public on its purpose and process. It is very important for everyone living in the United States of America to know that responding to the 2020 Census is SAFE, EASY, and IMPORTANT.

We have made a number of improvements since 2010 to address past experiences in undercounting children, particularly children under the age of 5. Our outreach efforts will emphasize including young children. Messaging about the importance of including all children living in a household will be woven throughout the communications campaign, and the Census Bureau will partner with as many education and childcare-related organizations as possible to explore new opportunities to reach families, teachers, and more. The Statistics in Schools program will focus on improving statistical literacy, and will inform students, their families, teachers, and other members of the community about the 2020 Census.

Our sincere desire to reach hard to count populations goes far beyond what we say in our 2020 communications campaign. It goes into how we actually conduct 2020 Census operations. For example, to ensure we count young children, we will train our census takers to ask specific questions about children when conducting interviews. They will ask households to make sure that all children are included, and we will train them to cover foster children, children living with grandparents, and other living situations.

For rural and other hard-to-count areas, we have plans for areas that do not have adequate broadband access. Using data from the American Community Survey and the Federal Communications Commission, we identify areas with low Internet access, as well as households that are not likely to use the Internet (like the elderly), and we will include a paper questionnaire in our first mailing for these areas. Every non-responding household will receive another paper questionnaire on the fourth mailing. There is also a telephone option anyone can choose. In areas lacking access to or demand for

Internet services without well-established mailing addresses linked to locations (PO boxes, rural routes, etc.), we will hand deliver questionnaires and make sure we know where to follow up if the households do not respond.

For American Indian and Alaska Native communities, the Census Bureau conducted 17 tribal consultations with federal and state recognized tribal governments to discuss planning, operations, and communications for the 2020 Census. Also, we will hire locally to have enumerators who understand the community, and we have tribal partnership specialists working with tribal nations to appoint tribal government liaisons and to form tribal complete count committees.

We also have specific operations to count persons experiencing homelessness. We work with shelters, soup kitchens, and other organizations to count the people they serve, and we send enumerators to outdoor areas where people may be staying.

We have more language assistance than ever before. People can respond on the Internet and over the phone in English and 12 non-English languages, covering more than 99 percent of households and 87 percent of those with limited English proficiency. This is an increase from the five languages offered for paper response in 2010. Language guides and additional support materials will be provided in 59 languages. Bilingual, Spanish-English paper questionnaires will be mailed to areas with large numbers of Spanish speaking households. There will be advertising, partnership, and promotional materials in English and the 12 non-English languages at a minimum.

In areas affected by natural disasters, the Census Bureau converts its enumeration operations to “Update Leave,” where Census Bureau employees deliver questionnaire packages by hand. This enables residents to respond to the Census in any of our three modes—by Internet, by phone, or by mail. We update address locations and information and, for those who do not respond, follow up to collect data in our Non-Response Operation. The Update Leave operation will ensure a complete count in Puerto Rico, as well as areas most affected by the fires in California and by Hurricane Michael in Florida. If an area experiences a natural disaster between now and the 2020 Census, we will adapt our plans to make sure those areas are completely and accurately counted.

In addition, the 2020 Census has an entire operation called “Enumeration at Transitory Locations” to count individuals who do not have a usual home elsewhere and are living in transitory locations – hotels, motels, areas with FEMA trailers, and so on.

Finally, during our peak operations in 2020, we quickly will be able to allocate resources by tracking self-responses in real time and identifying wherever self-response rates may be falling below targets.

Closing

I’m also pleased to be testifying next to the Government Accountability Office. We have been working closely with GAO throughout the decade, and their contributions have been instrumental in our preparations for the 2020 Census. I met recently with Comptroller General Eugene Dodaro and his key staff, including those with us today, to discuss our placement on the High Risk list, which recognizes the scope, complexity, and importance of the 2020 Census. We talked through the Census Bureau’s commitment to GAO’s five key components of a healthy program, and the improvements we have made in areas of vulnerability cited by GAO: Lifecycle Cost Estimation, Operational Innovation, and Cyber Security/Systems Readiness. While there is still work to be done, we have closed 73 of the 97 recommendations made by GAO throughout the decade, and action plans are in

place for all recommendations. We appreciate the hard work that GAO continues to do to ensure a successful 2020 Census and believe that we have a strong and constructive relationship.

With all of this, we could use your help in sharing the message across America that the 2020 Census is safe, easy, and important. It is easy because for the first time, you can self-respond online, by phone, or on paper through the mail. These new options create new efficiencies, relieve burdens, and reassure people that assistance is but a phone call away. It is safe because we are using latest and best technologies and practices to protect data confidentiality. For the 2020 Census like all of our statistical programs, we will follow the strict federal law protecting the personal information of respondents. That is simply how we do business in the Census Bureau – no exceptions.

Success is a full, accurate, secure account of every person living in the United States. This is essential because the count is used to apportion the House of Representatives, to allocate hundreds of billions in federal, state, and local funding, and to guide critical decisions by communities, government at all levels, the business community, and many others.

Congress and this subcommittee are critical and valued partners to ensure we can accomplish the mission, and I look forward to our continued work together. Thank you, and I will be happy to answer your questions.

Mr. SERRANO. Thank you.

Director Goldenkoff, you are now recognized for 5 minutes. Same rules, same request, try to keep it to 5 minutes and we will include everything in the record for you.

Mr. GOLDENKOFF. Thank you.

Chairman Serrano, Chairwoman Lowey, Ranking Member Aderholt, 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, cybersecurity, and other challenges that raise serious concerns about the Bureau's ability to conduct a cost-effective enumeration. In February 2017, we added the 2020 Census to GAO's list of high-risk government programs and it remains on our high-risk list today.

My remarks this morning 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 Nick Marinis will then discuss the challenges the Bureau faces in implementing and securing critical IT systems.

The bottom line is that, as the countdown to Census Day grows short, the Bureau has made important progress toward mitigating some of the risks facing the Census, and we are encouraged by the Commerce Department and the Census Bureau's leadership commitment toward carrying out a cost-effective enumeration. Still, the Bureau estimates that the census may cost as much as \$15.6 billion, which is a \$3 billion increase over the Bureau's original estimate, and significant operational 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 most 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.

These innovations show promise for controlling costs, but they also introduce new risks, in part because they have not been used extensively, if at all, in early enumerations. As a result, testing is essential to ensure that key IT systems and operations will function as planned. However, citing budgetary uncertainties, the Bureau scaled back operational tests in 2017 and 2018. Without sufficient testing across a range of geographic locations, housing types, living arrangements, and demographic groups, operational problems can go undiscovered, and the opportunity to refine procedures and systems could be lost.

Another risk factor is the reliability of the Bureau's 2020 life cycle cost estimate. In August 2018, we found that, although the Bureau had taken steps to improve its cost-estimation process compared to prior iterations, it still needed to implement a system to track and record variances between actual and estimated cost elements. The Bureau plans to release an updated version of the cost estimate sometime this spring. To ensure that this and any future

versions reflect best practices, it will be important for the Bureau to implement our open recommendations.

In short, while the Bureau and the Department of Commerce have taken important steps to keep preparations for the decennial on track, additional steps are needed. For example, over the past decade GAO has made 97 recommendations to help address risks facing the 2020 Census. The Department of Commerce has generally agreed with these recommendations and has taken actions to address many of them. However, as of April 2019, 24 of the recommendations have not been fully implemented.

Going forward, to help ensure a cost-effective head count in the months ahead, continued leadership attention and strong congressional oversight will be needed to help ensure that the Bureau implements our open recommendation; that key components and systems work as required; that preparations stay on schedule; and that management functions follow leading practices.

This concludes my prepared remarks. I will now turn it over to my colleague Rick Marinós, who will discuss the risks facing the Bureau's IT and cyber efforts.

Mr. SERRANO. Thank you.

Director Marinós, you are recognized for 5 minutes.

Mr. MARINÓS. Thank you.

Chairman Serrano, Chairwoman Lowey, Ranking Member Aderholt, and members of the subcommittee, thank you for inviting GAO to discuss the Bureau's efforts to prepare for the 2020 Census.

As Robert mentioned, our most recent high-risk report highlighted a number of IT-related challenges, these included IT systems readiness and cybersecurity. To sum up where we stand today, significant work still remains for the Bureau to address these challenges prior to the 2020 Census.

Starting with systems readiness. The Bureau plans to rely heavily on IT for the 2020 Census, including through using over 50 systems across different stages of Census operations. Many of these systems will be deployed multiple times in order to add needed functionality over the course of 16 operational deliveries planned by the Bureau.

Last fall, the Bureau delivered the first group of systems to support early hiring and training, and the next 4 months will see key testing and production deadlines for many additional systems. However, our written statement notes that the Bureau is at risk of not meeting near-term system development and testing schedule milestones for two upcoming operational deliveries. These include deliveries that support address canvassing, which is intended to verify the location of housing units across the country, and Internet self-response, a new innovation that the Bureau intends to rely on for a significant portion of responses to the census. The Bureau needs to closely monitor the risks associated with the systems that support these two important census activities in order to ensure that they are all delivered on time.

Regarding cybersecurity, the Bureau has efforts underway to assess the security of its systems and identify weaknesses that need fixing. To the Bureau's credit, it has established a risk-management framework that requires it to conduct a security assessment

for each system expected to be used for the 2020 Census and to address any security vulnerabilities identified through the course of testing.

We are encouraged that, in addition to performing its own assessments, the Bureau is coordinating with the Department of Homeland Security on cybersecurity issues. Through assessments conducted over the last 2 years, DHS has made 17 recommendations aimed at improving the Bureau's cybersecurity posture and strengthening its ability to respond to potential cyber threats. These internal and external assessment activities and their findings are critical, especially since the majority of the Bureau's systems that will support the 2020 operations contain personally identifiable information. However, our written statement calls for significant management attention by Commerce and Bureau leadership in order to ensure that security deficiencies are not only identified, but corrected.

Specifically, we are making two recommendations today. The first calls for the Bureau to address its security to-do list in a timelier manner. Recent data indicates that the Bureau has been challenged in meeting its self-prescribed time frames for taking corrective actions for security weaknesses, including those it designates as high or very high risk. Resolving identified vulnerabilities within these time frames can help reduce the risk that unauthorized individuals may exploit weaknesses to gain access to sensitive information in systems.

The second recommendation calls for the Bureau to improve its process for tracking and completing corrective actions in response to DHS's assessments and recommendations. At the present time, the Bureau has yet to fully establish such a formal process.

The bottom line is that the security-assessment efforts conducted by DHS and the Bureau itself will only be as valuable as the security fixes that the Bureau fully implements.

In summary, we are running short on time before key census operations begin. Moving forward, it will be vital for the Bureau to devote enough time and effort to complete IT system development activities and address identified security weaknesses in a timely and prioritized way.

Mr. Chairman, this concludes my statement.

Mr. SERRANO. Thank you.

Director Dillingham, as I mentioned in my opening statement, there is a greater degree of uncertainty with regard to the administration of the 2020 Census than any decennial census I have dealt with. We are currently waiting for the Supreme Court to determine the legality and constitutionality of the addition of a citizenship question on the 2020 form, but the Bureau has had to continue preparing for the 2020 Census regardless.

My understanding is that you essentially have two versions of the 2020 Census ready to go for printing; however, what is less clear to me is whether your outreach, communications, and partnership activities also have two parallel paths.

Question: what is the Bureau doing to prepare for the Supreme Court's decision? You have different strategies for deployment depending on results and can you share those changes with us today?

Mr. DILLINGHAM. Thank you, Mr. Chairman. I would like to update you and I appreciate the concerns about uncertainties surrounding the decennial census in some quarters and in the media, et cetera.

I can assure you that—you asked if we had two different plans, for printing purposes in the beginning of July, we do. We have two systems ready to go as to which questionnaire will be printed, but after that we have a process in place and an execution plan that will proceed regardless.

Now, one of the issues, as you have pointed out and as Committee Chairwoman Lowey has pointed out, is what about there could be a question on citizenship in there and how might that impact. And we are conducting a study this summer, the results will be available in October, for just the purpose of operational needs. So as a result of doing a survey of 480,000 households, half with the question and half without, that will better inform us as to any particular needs for deploying our resources.

You mentioned how we are preparing for the census overall. We have an extensive campaign and I would be glad to brief you and other members of the committee, but one element that I want to bring to your attention is our communications plan and our integration with partnership.

We are going to deploy almost twice as many partnership specialists into the communities, particularly the hard-to-reach communities, and our targeting messages with the campaign will be to reach the hard-to-count populations. So we have a number of sub-contractors creating messages specifically for the hard-to-count populations.

Mr. SERRANO. But there seems to be, unless I heard it wrong, a contradiction here that Mr. Marinos, Director Marinos, tells us that he is concerned or his department is concerned that you are not moving fast enough to take care of some needs within the Bureau for the Census and then you tell me that you will be ready to deal with whatever decision the Supreme Court hands down; isn't there a contradiction there?

Mr. DILLINGHAM. We don't see a contradiction, Mr. Chairman, but an explanation. You know, the GAO has over time and for a number of years been monitoring and presenting progress reports, and we are very pleased that they have done that. We are also pleased with the Inspector General, with the Congress and others, and the Department leadership. We have a number of people looking over our shoulders as to where we are.

Now, most recently, in today's testimony the GAO has highlighted four specific areas which were mentioned in their comments, and that is the areas of innovations and some of the challenges there with implementing IT, with making sure we have the cybersecurity safeguards, and also in our cost estimates and cost-control measures.

The first—when we were placed on the high-risk list, which was deservedly so, this is one of the largest projects, one of the largest hirings of civilian employment since World War II and it happens every ten years, as you are well aware from prior censuses. This is a mammoth operation, it deserves special scrutiny, and it deserves the resources that are needed to get the job done.

So, yes, we are on the high-risk list, I expect we will be on there until we complete this census, and every census will probably be on the high-risk list. That being said, the five things, the areas of improvement the GAO previously pointed out with the leadership, with the capacity, with the action plans, with the monitoring, and with demonstrating results, they say that we have made substantial progress and on the leadership they said we have met those needs.

Now, today we are still focused on continuing needs. The four that I pointed out with the innovations, this will be the most innovative census by far; it is a sea change from prior censuses. We will be collecting most of the information during this census electronically, that is a major change. It has always been on paper, a substantial amount will still be on paper, but we are collecting information by the Internet, by phone, and our enumerators will have electronic devices.

So it will be more efficient and there will be challenges, and there are challenges, we are meeting those challenges. We have identified more than 26,000 tasks as a part of this census with tens of thousands of relationships. Nevertheless, we monitor on a weekly basis more than a hundred of those critical tasks and activities. And we do color-code it, as GAO points out, some are in yellow and actually we have sometimes some in red. So that is a process by which we look at all these important tasks. We give them a green or shades of green and, if it needs management attention, we put it in yellow. And if it is more than 9 days late—and this has been going on for several years—we put it in red to make sure we get the people and the resources assigned to that particular need.

So we are very pleased. We are going to be busy, we are going to be fulfilling these needs, we are going to continue to make progress up until the completion of the census, but there is a lot of work yet to be done, that is correct, Mr. Chairman.

Mr. SERRANO. Thank you. I want to stop here, because I want to let Mr. Aderholt ask his questions, so that we can move to our chairwoman, because I know she has got 12 committees to attend.

Mr. Aderholt.

Mr. ADERHOLT. I will defer to her if she needs to—I know she has got a lot of committees to go to, so I will defer.

Mrs. LOWEY. You are so gracious.

Mr. SERRANO. Bipartisanship at its best.

Mrs. LOWEY. Oh, my goodness.

[Laughter.]

Mrs. LOWEY. Thank you very much.

Mr. SERRANO. You realize you made me look very bad, right?

[Laughter.]

Mrs. LOWEY. I really do appreciate it. Thank you very much. Oh, you don't have a clock. I was saying I will make sure I stick to my time.

Thank you again to the panel for appearing before us, and this is really so important and very exciting to know what you will be doing electronically. I hope that a great percentage of the people can understand how to use the electronics you are offering.

I want to get back to the citizenship question again, because, as a career statistician and you are an expert, you must be concerned

that Census is asking the citizenship question, which has not been asked of the entire nation in nearly 70 years, are you worried? Are you worried that in the current political environment this question could have a very negative effect on the 2020 Census count, especially in places like New York where the chairman and I are very well aware of these challenges? Could you give us a straight answer about this?

Mr. DILLINGHAM. I certainly will, but let me first of all mention—you mentioned New York and I had the opportunity last week to visit areas of New York City and to visit four districts, including your own—both the chairman and your districts. I very much appreciated meeting with your staff there. We also visited other members of this committee and some not on this committee, we visited their districts.

What we looked at in those districts were the hard-to-count populations. As you pointed out, there are—you have a very diverse district—

Mrs. LOWEY. We sure do.

Mr. DILLINGHAM [continuing]. And you do have hard-to-count populations. Now, in your districts, your self-response rate is higher than the national average, and that is a good thing, but there are pockets, there are tracts within your district. And we track them, we have them on our website, and we during the census will have that in real time, you can look at these tracts and see how they are responding.

So, even though you are above average overall in your congressional district, some of those areas are less than half that. So what we are trying to do is get our resources and our partnership specialists and to work with your partners to make sure we reach those populations.

And I will say that I have seen the list of your partnering organizations. The chairman has, I must say, the longest list so far, but it is changing daily. And one Member who is not on this committee was so pleased with the length of her list that she said she may be speaking with you for a healthy competition, and we would welcome that.

But we cannot perform this census without these partnerships, without the people from your communities in New York and other jurisdictions, they are the key. So we are going to be partnering with them and partnering with them in many different ways.

On the citizenship question, part of that is really, the manifestation of concerns is, will it reduce the response rate and will we perhaps not be able to count everyone. We are designing some of the best media campaign, some of which are located in New York City, at least the national headquarters, who know those communities. We have some of these subcontractors that know the various communities. And we will have partnership specialists from those communities and, where English is not the primary language, they will be speaking those languages.

So, yes, we have a plan in place and, yes, we intend to carry it out. And we are focused, laser-focused on reaching those hard-to-count populations such as in your area. So, if a population feels particularly that the question causes them concern, we want to address it and we want to address it as soon as possible and right

out front, and we are going to do that and to a large extent through our media campaign.

We need everyone to understand that the census is easy to complete, that it is safe to complete. We do not release any information except aggregate data; we release numbers. So there should be no fear among individuals completing the census, because at the end of the day we have aggregate numbers for geographical areas.

Mrs. LOWEY. May I interrupt at that point—

Mr. SERRANO. Yes.

Mrs. LOWEY. [continuing]. Because I am really puzzled and this is a serious question.

Mr. DILLINGHAM. Yes.

Mrs. LOWEY. So if you have a building with 20 apartments in it and the person who is helping you, you said you are dealing with all kinds of people, know that in 50 percent of those apartments they are not citizens. OK, but they should be counted for the census, but they are not citizens. Is there going to be a process where someone says, look, OK, ten of these apartments, they are not citizens, who are they?

I am puzzled at how somebody could feel comfortable being interviewed if that material is going to this Administration with the citizenship question.

Mr. DILLINGHAM. Sure.

Mrs. LOWEY. And certainly, as Chairman Serrano and I know in New York, we depend—we give more money to Washington than we get from Washington, we need the money. So I just want to know how will the process work?

Now, many of these people may have access online, but if there are follow-ups, one of your assistants will say, huh, there are 20, whatever I said, 30 apartments in this building, half of them are not citizens, what is the next step? What is your responsibility?

Mr. DILLINGHAM. Chairwoman Lowey, when we met with your staff, we were lucky enough to meet with some of those partners and some of those local government officials. We went through the neighborhoods in your district, we found exactly those—we saw some of the New York City Housing Authority complexes. We were told that in some instances those people may not be citizens, we were told in some instances there will be more than one family per unit in those complexes. There are challenges and that is why we are going to devote all of our resources and talents, but more importantly working with the partners in your community to ensure that we understand that complex, that we know who the trusted voices are, and that we have—

Mrs. LOWEY. Excuse me for a minute, because I don't want to take advantage of your generosity in giving me the time. I know you are very kind and I know you are going to use all the partners. What is your responsibility regarding citizenship? You have a building, you have someone helping you who knows everyone in that building, they also know 50, 60 percent may not be citizens; what can you do, what do you do, what ought you to do with that information?

Mr. DILLINGHAM. Chairwoman, we are ordered to take a count and we are going to do everything that we can to ensure people self-respond—

Mrs. LOWEY. To take a count——

Mr. DILLINGHAM [continuing]. To take a count of those people——

Mrs. LOWEY. [continuing]. Not pass that information on to some other authority. Let's face it, that is the concern.

Mr. DILLINGHAM. Exactly. That would be a legal violation and, if I was to prove that, I would go to prison, and if anyone in the Census Bureau does it they are subject to fines and imprisonment.

Mrs. LOWEY. So let me repeat it, because I think this is the key question that we are worried about in many of our communities. You go to a building, and I am sure you have been to Port Chester, Tarrytown, several of those communities, you know or the person who is helping you know that 50 percent—I am just saying—of the people there are not citizens. You are just interested in the count of the number of people there, you are not directed, you have no order, you have no responsibility to report to anyone, Secretary Ross, how many people are citizens and how many are not; is that correct?

Mr. DILLINGHAM. That is exactly correct, except for the fact that we encourage everyone to complete all the questions on the form.

Mrs. LOWEY. I know that, but if a person is a non-citizen in a building, whether there are 50 percent, 30 percent, 20 percent—and there have been pickups by ICE in these communities—your responsibility is to count the numbers and you have no order or directive based on information you have gotten by responsible leaders to report to Secretary Ross how many people did not respond to the citizenship question and, based on your advice or assistance, 50 percent are not citizens, you have no directive to do that?

Mr. DILLINGHAM. You are exactly correct, Chairwoman.

Mrs. LOWEY. Thank you very much.

Mr. SERRANO. And before I go to Mr. Aderholt, please forgive me for this, but I can't pass this up.

So we know that you are not supposed to give information out by law, but there is a reason for putting that question there. On down the line, it will give us a lot of information about who we are as a people; what we look like, where we come from, how many of us were born overseas, how many were born here. Why do I fear that at some point you would also say X amount are not citizens and X amount are undocumented, which you are not supposed to do in the Constitution, regardless of what the court does now, they may have to rewrite that part of the Constitution to just count the people amongst the states, nothing else.

So you are telling her—and I want this on the record again and then I will close—that you have no instructions, the Census Bureau, to take citizenship question information and pass it on to the Administration or to someone else?

Mr. DILLINGHAM. Mr. Chairman, that is exactly correct.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mrs. LOWEY. Thank you. And thank you, Mr. Chairman.

Mr. ADERHOLT. Thank you.

Director Dillingham and Associate Director Smith, I will direct this question to you all. Unfortunately, about 80 percent of the 24 million American households don't have reliable, affordable, high-

speed Internet that live in rural areas, and it is easy for individuals who reside in cities and suburbs to overlook the fact that many of our rural communities, particularly in my home state of Alabama, still lack broadband Internet technology, whether it is to educate their children, expand their businesses, whatever the case may be, and not to mention respond to a census.

Can you talk a little bit about what you are doing to really concentrate on those rural areas where there is no Internet technology and how you can make sure that you can have those accurately counted?

Mr. DILLINGHAM. Ranking Member, thank you for that question, it is an excellent question. We do have special plans for rural areas and we consider them part and parcel with the hard-to-count areas. So if people, residential areas do not have much connectivity, we have a separate process by which we process the collection of the data, and that is that we have a process where in the first instance we have about five contacts we make with these people by mail, but we will send out in the first instance—if connectivity is low, we will send out a letter and instructions along with the census form.

So in the other areas, in the other 80 percent of the areas, we typically wait until the fourth contact, because we encourage people to go online or get on their phone and to answer the census, but we do it in those areas, those special areas where we provide the form up front and then again, on the fourth contact, we give them the form again. But, in addition to that, we also are educating the people and notifying in the correspondence and through our partnership specialists, as well as through our media, that they can make a phone call. And in many of those areas they have access to phones or they know people who do have access to phones, so they can answer the census by phone.

And then, finally, we have the non-response follow-up. So if we don't get responses by the Internet, if we don't get responses by phone, if we don't get the written responses, then ultimately we do send people out and they will knock on doors. So that is the more expensive way of getting the information and contacting them. So we expect that people with limited connectivity that we will reach—we will collect much of that information electronically regardless, but we will encourage and we will do the follow-up needed to make sure we reach them.

Mr. ADERHOLT. Well, all of us as Members, we talk to groups, you know, constantly, whether they be groups from our constituencies that are in Washington or back in our districts that are talking to different groups, what can we do to help in this regard? Not just in regard to those who do not have Internet, but just in general.

Mr. DILLINGHAM. Well, there are a couple of things. And one, as a Member of Congress, we will be distributing some kits to your offices on how congressional offices can particularly be of assistance and how they can work with the partnership groups more closely, but most importantly is really the public message that completing the census is easy. You have got three ways now, very easy; if you do have the Internet access, you can do it by phone, or you can do it in the traditional written form.

So that is the first time, this is the first time where most of the information that we will be collecting is going to be collected electronically, and stored and transmitted electronically, and protected electronically. But the easiness is a very important message.

The safety, particularly as the chairwoman and as the chairman here have pointed out, there is a concern about possible fears in the community, we want to make sure they understood the dialogue that we just had is that this information is protected, only for statistical purposes will it be used, it will not be shared with other agencies, and their identities, the confidentiality will be protected in a number of ways, and some ways are brand new ways with the latest technologies that we might discuss with you later. But it is easy, it is safe, and then it is important.

We also want to encourage, the theme of this year's campaign is "Shape your future, start here." So you will see that in the creative media commercials, you will see it in print, you will hear it on the radio, you will see it in the social media. "Shape your future, start here." So we are encouraging people to know and the stakeholder groups to understand how important these data are. We are going to need to reinforce that message that it is in their interest, it is in their community's interest, it is in their group interest, community interest, and many of the partners that we have are spreading that word.

We are working with the libraries across the Nation, they are going to be assisting, they are going to make their computers available. So in some of those areas that may be more remote, there is usually at least a library in those areas, and the libraries of America are going to be our partners.

So there are a number of ways we are going to reach those people and encourage. And the message that I would leave is, again, the simplification; easy, safe, and important. And that is kind of the theme that we are reinforcing.

Mr. ADERHOLT. You mentioned these kits that you will be distributing to Members of Congress—

Mr. DILLINGHAM. Yes.

Mr. ADERHOLT [continuing]. When will those be available?

Mr. DILLINGHAM. My understanding is within a matter of weeks, it could be a month or two, but I will be checking into that. I have asked that question and it will be in relatively short order, this summer you will—

Mr. ADERHOLT. And, again, these kits will help us do what now?

Mr. DILLINGHAM. They will help congressional districts to help organize, work with the partners; they will also tell you more about what we have online and on the website, how you can track your districts and you will know the tracts that are hard-to-count populations. So you can just go right online and see that in my district I have these tracts that where the self-response rate is lower than my district, and you can make special efforts in those areas. But our partnership specialists will be working with you on that and our media campaign will be devoting resources directly to that.

Mr. ADERHOLT. And I understand this is the first time that the questionnaires for the census will be electronic and not paper; is that correct?

Mr. DILLINGHAM. Well, you have the option, you have the options. You can certainly do it by paper, if that is what you would like to do——

Mr. ADERHOLT. But, historically, it has always been paper, right?

Mr. DILLINGHAM. That is correct, that is correct.

Mr. ADERHOLT. So this is the first time that it won't be——

Mr. DILLINGHAM. The first time the Internet and the phone will be used.

Mr. ADERHOLT. Has there been any discussion about backup on paper, so when this in the future is studied—when it is released—of course eventually, after how many years is it, that you can—70 years or——

Mr. DILLINGHAM. Seventy two years.

Mr. ADERHOLT [continuing]. Seventy two years, you know, obviously we are seeing results from 72 years ago now, but this will be very important to look back for historical reasons. Is there any—has there been any that this will be backed up on paper?

No paper copies are stored. The Census Bureau works with the National Archives and Records Administration to ensure records are stored in a format that is retrievable in the future.

Mr. DILLINGHAM. I could—I am not certain. Let me get back to you, but I don't know what the printed products might be with the actual data, but we have the electronic data. I haven't been briefed exactly if we are going to be storing that information in another form.

Mr. ADERHOLT. Yeah, the reason I ask that, in 72 years, I have a feeling the electronics they will use then will be different from what we use today.

Mr. DILLINGHAM. Exactly.

Mr. ADERHOLT. So, you know, I think it is—you know, I am thinking from a historical standpoint now, not from——

Mr. DILLINGHAM. I can assure you, the Census Bureau, as the Nation's largest collector of data and information, will have ways that people will be able to access and even the electronic data will be able to access. But let me ask our CIO if he may have some other insights on this.

Mr. ADERHOLT. Okay.

Mr. SMITH. Yes, good morning. I just wanted to add that within technology changes and backing up of electronic data, there are absolutely migration paths to use the more modern technology. So electronic records have been stored for long periods of time, 70 years, 90 years are some of the stipulations people have, and there are technology ways to move from old technology to new technology to keep that data electronically archived to the right period of time.

Mr. ADERHOLT. All right, thank you.

Mr. SERRANO. Thank you.

Mr. Case.

Mr. CASE. Good morning, Dr. Dillingham. Can I follow up, please, on my committee and subcommittee chairs' questions on citizenship, but not only citizenship, because you have assured us that information will not be shared and I take by that that you are referring to individual information; however, the census does report its results.

Mr. DILLINGHAM. That is correct.

Mr. CASE. And so, therefore, if you ask a citizenship question or any other question for that matter, ethnicity, income, there is a report, a public report of that information. So there will be a public report, I would assume, at some level if the citizenship question is on the census of where people are or are not citizens; correct?

Mr. DILLINGHAM. We will have aggregate data that sometimes will be geographic, that is correct.

Mr. CASE. Okay. And so my question then is, how granular is that aggregate data? Do you report down to the tract level or do you report lower than that?

And where I am obviously going with this is, okay, fine, you talk about the individual data not being available; however, at some level, there is a pretty good interpolation of the data reported to make inferences as to some level of specificity, and I am wondering how specific that is and what the policy judgments are behind that specificity, and the consequences.

Mr. DILLINGHAM. Congressman, that is an excellent question, and things are changing in that regard. There is an interest and there are some people, particularly researchers and other, that want the most granular data possible. And we collect data by the blocks, we aggregate blocks, and then we have tracts.

One of the new protections we are putting in place as a result of our research was that we do not want in the future people with great computer capabilities and with other data sets to try to match the data and try to figure out and identify individuals. So one of the tradeoffs that we have in protecting data, and we call this disclosure avoidance, is that we actually inject noise into the data at the lowest levels. So that that data at the lowest level, perhaps at a block level, will not be accurate at that level, but when you aggregate the data at a certain level it will have increased accuracy.

Mr. CASE. Okay, so let me just cut to the chase here. At what level do you actually report the results, is it at the tract level? So, in other words, X tract somewhere in Y state has 20 percent non-citizens in it, what level is that at?

Mr. DILLINGHAM. My understanding is that we are focused on the tract level, but exactly the format by which and in the units by which it will be tabulated I would have to get back to you. But it is a change from past practice and we do have some data users that have legitimate concerns that they will not have the granularity that they once had.

Mr. CASE. I do understand the tradeoff, so—and by the way, I am not making a policy judgment, at least in these questions, about citizenship or anything else, I am just trying to understand what is that tradeoff.

And, following up on that, have you considered with a question as controversial as citizenship—and there are two sides to that argument—have you considered injecting more noise at a higher level for a particular question that is a more sensitive question, so that it cannot be traced back with such granularity as, for example, I can look up the last census and identify with some specificity how many Japanese Americans are living in Y tract in downtown Honolulu. Have you considered elevating the noise to a higher level than

tract to address the concerns over the misuse of this data—public data, by the way?

Mr. DILLINGHAM. Congressman, we haven't made a determination yet as to the level. We are still continuing to study it with some of the best minds in the country and we can get back and advise you of where we are in that process, but as of yet we have not decided. We view it somewhat as a dial and you have to set the dial on a certain level of protection.

And the intent here and the reason we are doing this and employing the newest and best techniques from high-tech industry and from academics is just for that purpose of protecting people for any question identifying individual answers to those things, but we will have aggregate data for some geographical area that will reflect answers to the questions.

Mr. CASE. Okay, thank you.

Mr. SERRANO. Ms. Roby.

Mrs. ROBY. Thank you, Mr. Chairman.

Gentlemen, thank you for making time to be with us this morning and to speak before this committee. Of course, as been said I'm sure multiple times in my absence, we are almost exactly one year to the date from the next year's census. And I am sure you are aware Alabama is a state that has some concerns that we could potentially lose a congressional seat which has more than just the obvious implications. I mean, as you can see, you have already talked to my colleague from Alabama, you have two of us sitting up here this morning. And so I just want to highlight the census and its future outcome further.

In the 2010 Census, Alabama did not do as good of a job as we could for accounting for all of its people, especially our youngest population, children below the age of six, but particularly in rural communities. So we have to make sure that that is not the case again in next year's count.

And I know Mr. Aderholt already talked about the issue of rural Alabama, rural America, and my understanding is that there will be a strong focus on advertising and the use of social media platforms to get the word out regarding the census. But you need to know, rural America doesn't always have access to social media platforms, because they don't have access to broadband, which is going to be a challenge in order to make sure that folks are aware of what is going on.

So I just want to give you the opportunity to talk about what methods do you have to build in to make sure that these rural areas get the message and particularly those that may not have access to the Internet or to social media platforms, what is the plan?

Mr. DILLINGHAM. Thank you very much for that question, Congresswoman, and I do note there is a joinder of interest with the other member here in this area.

So, we had a previous discussion on the rural areas and some of the challenges. You correctly point out that the undercount of children is a major concern. That is a hard-to-reach population, and we are doing a number of things both, nationally and locally, and working with our partners.

I have meetings this afternoon, as a matter of fact, with The Annie E. Casey Foundation in Baltimore, who has been leading in

this area for making sure we remedy the undercount and potential undercount of children. We are working with partners everywhere, the medical community, the pediatrics associations. Just on Sunday morning, the deputy director was over in Baltimore at Pediatrics Association meeting and they are very interested in what they can do.

We have Statistics in Schools program where we are working with the educational communities. We are trying to educate from a variety of perspectives, particularly the importance of counting children in households. And it is using that population, it is very difficult. There are nontraditional family structures these days and sometimes, without any intention whatsoever, we are getting an undercount because the children may be with the grandmother or a trusted family friend and they may not consider them their children, so they don't count them.

So we are training our enumerators and we are training others to make sure we get a complete count, particularly with the undercount problem with children, up until age 5—that is a particular concern—but there are other communities and, certainly, the rural areas, as we mentioned, we are going to use all the media we can, the radio, et cetera, so even though the television coverage may be limited in some areas, we want to use the radio.

We do use the social media, but as you say, if the connectivity is low, we have to have other ways to reach them. We do that through our partnerships. So, we have an integrated campaign with our media and our partners. So, we have almost double the number of partnership specialists. We should have—we will have partners in every state and there will be partnerships, numerous partnerships reaching every congressional district. And when we send out the tool kits and stuff, it will explain this in greater detail.

Mrs. ROBY. And just lastly—and I appreciate your answer and I hope you will keep us posted on any additional developments there—but Alabama and other states across our country have been beaten with hurricanes and tornados and other powerful storms. There has been flooding throughout the Midwest and fires throughout California. So, what is the Census Bureau as it relates to make sure that those displaced from their homes as a result of a national disaster being included in next year's count?

Mr. DILLINGHAM. Again, Congresswoman, that is an excellent question. I know there is a particular interest with Puerto Rico and we have special procedures we are going to implement where we reach and we verify the address. Physically, someone will go to those residences, they will verify the address, and they will also leave information for completing the census, including the census form. So, we call that update leave. So, that is where we have people that actually go to every address.

There is such an area in Florida. There is one in California that was subject to the terrible fires in California. And should something else occur between now and during the collection of that information, we will have that resource available.

Mrs. ROBY. All right. Thank you.

Mr. Chairman, I yield back. Thank you, again, for being here.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman, and I thank the panel for being here today. I appreciate your cooperation.

Dr. Dillingham, do you agree that the key to an accurate and successful census is making sure every single person is, in fact, counted?

Mr. DILLINGHAM. Absolutely. That is our number one goal.

Mr. CRIST. And do you agree that minority, immigrant, low-income, and rural communities tend to be some of the most difficult to count, but that those communities often have the most at stake in the census since the data is used to distribute federal resources and support programs?

Mr. DILLINGHAM. Congressman Crist, we consider the hard-to-count population our number one priority and we are going to be working and targeting those populations. And one of the benefits, as just pointed out with our innovations, is now we can take the capacity to respond to the census directly into the community. They don't have to leave the community. They don't have to go up to a brick-and-mortar office somewhere else in the city or somewhere else in the area. We want to reach them directly and through their internet, through their telephones, et cetera, we hope they will be able to answer. We will encourage them to answer, working with our partners, from wherever they are, whenever they want to.

Mr. CRIST. Are you going to dedicate additional resources for that purpose?

Mr. DILLINGHAM. We have almost doubled our partnership specialists.

Mr. CRIST. I don't know what that means.

Mr. DILLINGHAM. Where we have a partnership—well, partnership specialists, we have almost doubled—but we are increasing our partnerships. We have national partners. As you are well aware in Florida, we have a state commission for a complete count. In the local areas, we have local complete-count committees, but apart from that, we also have national partners and we have local partners, and we envision more than 300,000 partners.

So, when I saw a list the other day when I was in New York City and we are looking at—I don't want to miss the number here—but there were at least 5 dozen partners already with the chairman's district where a list that we have, people working in his congressional district that are already partnering with us. So, the outreach through the partnerships are so valuable. I can't stress that enough. Without the partnerships, we would not be able to nearly as effectively reach those hard-to-count populations.

Mr. CRIST. Okay. Thank you. And you have stated that you are going to have an advertising campaign to try to make people aware to not be concerned or frightened or worried about the census and that it will be easy. I imagine you have a budget already dedicated for that; how much is that budget?

Mr. DILLINGHAM. Our immediate outreach budget is about a half billion dollars. It is the largest budget ever. I think the last decennial census, it was somewhere around \$350 million. So, it is a substantial investment and we think it will prove to be a very wise investment.

Mr. CRIST. Okay. Thank you. I appreciate that. I wanted to ask you, federal agencies rely on the census data to make decisions

about law enforcement, health care, equal employment opportunities, among other things, and that LGBTQ people have needs and experiences unique to their communities. LGBTQ advocates have long pushed for questions regarding sexual orientation, gender identity to be included on the census.

In 2017, the Census Bureau appeared to propose including those types of questions in the “Subjects Planned for the 2020 Census Report.” Then almost as quickly as the questions were added, they disappeared. I know this happened before your tenure began, but in response, the Census Bureau released a statement calling the LGBTQ inclusion, “a mistake.”

Do you consider including questions about a marginalized, vulnerable, and disenfranchised population a mistake, particularly, if it helps to direct needed resources to the appropriate locations?

Mr. DILLINGHAM. Congressman Crist, that is a topic that we work closely with those communities and we have representatives of those communities on our advisory board. They are also very prominent members of our stakeholders groups and they are partnering with us in many different ways.

The working of this decennial census has been decided. It was decided and approved by the Office of Management and Budget a few years ago, and so the wording will not change for this decennial census.

But our outreach to those communities will change. We are going to make sure that our trusted partners in all of those communities are working with us and ensuring that their communities know the importance, as you well pointed out, the importance of this data. So, the data is important in so many different ways—not just with government, but even in the private sector, even in individual decisions and community decisions. But the particular community, the LGBTQ community, that information is not collected in this decennial census.

But we do have some changes in the census. We do ask people about the sex of their spouse, and if it is a same-sex spouse, they can mark it on the census. But that doesn’t resolve the issues of the future about where might the wording go. I can tell you that we have a number of people that are studying this. We will continue to study this. We will continue to work with those groups and we will look at options and certainly consider in the future how those questions might be asked.

Mr. CRIST. Thank you, sir.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you. Ms. Lawrence.

Mrs. LAWRENCE. Director Dillingham, you were in Detroit recently and thank you—

Mr. DILLINGHAM. I very much appreciate that visit and I appreciate your attending that function.

Mrs. LAWRENCE. And I appreciate you being there because the concern that we have, as one of the hard-to-count communities, and as my colleague had said, being one of those communities that need it the most, during your visit, you were talking about the questionnaire assistance centers. I want to know—my question is, how many locations will there be? How many staff hours will be de-

voted? And do you have a plan yet to roll those out? And when can we expect to receive the plan?

Mr. DILLINGHAM. Congresswoman, first let me express my pleasure with the meeting in Detroit. I learned so much about Detroit. I learned so much about the hard-to-count areas. Saturday morning we went on tours of the hard-to-count areas in Detroit, along with the city officials and partners. We learned so much.

Detroit has unique residential needs. There is much being done in Detroit, particularly, the revitalization, but in those neighborhoods, Detroit, as you well know, is more than 140 square miles.

Mrs. LAWRENCE. Yes.

Mr. DILLINGHAM. It is lost more than a million in population. It has lost population every census since 1950. When the manufacturing that kind of dried up in Detroit, it created unique challenges in those neighborhoods and we saw those challenges. And we are very pleased to see the partners and appreciate them educating us to those challenges. Detroit is—you can argue that every city is unique—but Detroit, going through a bankruptcy, et cetera, is a very unique city situation.

Now, the hard-to-reach populations there—and this gets back to sort of if I have a theme here—is that we want to take the capacity directly into those communities. When I went through the districts, the relatively new districts in Detroit, we saw civic centers that were vibrant. We saw areas where people got together. There were still active churches and houses of worship in Detroit.

And we think we need to get the capacity directly to the people in those communities where they can complete the census. And we can do it with laptops. We can do it with phones. And we can do it with partners.

Mrs. LAWRENCE. So, those community centers will be officially the assistance centers?

Mr. DILLINGHAM. Well, let me explain that the Appropriations Committee has asked us to look at two options, to study two options.

Mrs. LAWRENCE. Okay.

Mr. DILLINGHAM. If we had enhanced resources, where would we recommend applying them and what's our assessment. When we looked at the questionnaire assistance centers, we recommended that we would not be taking action, that it was not feasible. That by the time you go through the process of getting the leases, et cetera, a year-long process—a year-and-a-half-long process, it really wasn't as cost-effective as we would have hoped.

Mrs. LAWRENCE. So, we are not going to do them?

Mr. DILLINGHAM. Well, we are going to do—every—we are going to have partnerships and we are going to have resources with every library. Libraries across the nation will be open for business in helping to explain and helping to assist, including internet use.

We are going to have other areas. We have partnership specialists in Detroit. We want to beef that up, and we have the multitude of partners—

Mrs. LAWRENCE. So, Director, I do want to put this concern.

Mr. DILLINGHAM. Okay.

Mrs. LAWRENCE. One of the things, using a library, a lot of our public libraries, especially in the poorer neighborhoods, have been

closed or have limited hours; they are only open so many days a week. It is important that we create that sense of energy in those communities.

Now, I didn't know you weren't going to do the assistance centers, but we need to plan. Because for us to be partners in those communities, we need to know where they are and how we support it, and I am concerned about the time. So, we are rapidly approaching, and so we can't be talking about this. They should be identified and then we, you know, as a member of Congress, I can monitor and engage and make sure that I am being supportive.

So, when will I know where you are a partner and where they are going to be?

Mr. DILLINGHAM. Congresswoman, we delivered a report to the committee yesterday. My understanding is that it was delivered yesterday in response to the Appropriations' request on how we could beef up partnerships if additional resources were added. So, there is a plan there.

But I can tell you we have an existing plan by almost doubling our partnership specialists in those communities, but we did submit to the record—it was requested by Appropriations that we present a plan on what we would do with partnerships. And that plan actually conceptually, I think, is very promising for the circumstances and issues you point out.

Mrs. LAWRENCE. Again, promising is one thing. I am very concerned about the presence in the community, I tell you, I want to see, once we do our work and the funds are approved, I expect a fast turnaround to identify these communities—places where you are going to be. And I can't tell you—this leads into my last point here—is that where are we in the timeline of being effective?

Because we are far behind the census. That, as a mayor of a city, I was far ahead—further ahead than I am now. So, I don't want excuses. I don't want, Well, you know, we don't have a plan yet, and then I get the pushback from the communities. I get calls every day that people are so concerned about us not being able to do a full count.

Mr. DILLINGHAM. Congresswoman, we do have a plan. What I was referring to was the committee asked us for an additional plan if other circumstances occurred. The plan—and I think it was a good evidence, the meeting we had—

Mrs. LAWRENCE. It was a good meeting.

Mr. DILLINGHAM. All the partners in the communities that want to work with us, the ones that took us through the city of Detroit and showed us those special areas, they are going to be our partners.

On our partnership-specialists hiring, I was informed this morning that we have over 900 that are either hired or in the process; they have accepted those jobs. So, out of the 1,501, we have more than 900 being hired.

That being said, what is important, as you well point out, is not just having the plan, but it is executing that plan.

Mrs. LAWRENCE. Yes.

Mr. DILLINGHAM. So, we want to work with all the partners in the Detroit area, as well as all areas, in carrying out that plan. And as I mentioned, the partners are absolutely essential, and to

the extent we can better coordinate and assist those partners, the better.

Mrs. LAWRENCE. Thank you.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman.

Welcome, Dr. Dillingham and your staff. Could you explain to me, why is the information from the U.S. Postal Service not sufficient to provide you with your base maps and where you send information on the census?

Mr. DILLINGHAM. Congresswoman, the information from the Postal Office is very helpful, very valuable, but we have to reach everyone and it actually is not quite sufficient. So, not only do we use the postal information, there are rural communities and other locations for which there may be mailboxes and other things that need to be coordinated. So, not all residences actually are on the mail list.

As I recall—I could be wrong on this—something like that 87 percent are accounted for by the postal mail addresses, but we need to—it may be higher—but we need to add to that and we do add to that. We do aerial surveillance. We do a lot of different ways to find out where people are living and sometimes we actually—this morning, someone was discussing with me in certain areas of the country where people are mobile where they are living. They are actually traveling in recreational vehicles and living out of those vehicles. So, we have to capture them, even where there isn't a mailing address.

Ms. KAPTUR. So, driver's licenses are important, perhaps?

Mr. DILLINGHAM. Title 13 tells us that we are to use administrative data to the maximum extent possible to help carry out our surveys and our censuses, and so we do that. We do various datasets and federal agencies share data with us, et cetera, so we can verify certain essentially information, including addresses.

Ms. KAPTUR. It is good to know, though, that it sounds like over 80 percent of the households you need to reach would be at addresses that the Postal Service has, they are very important.

Mr. DILLINGHAM. It may be higher than that.

Ms. KAPTUR. They are very, very important in your work.

In past census documents, there were, on the—not the short form, but the long form, the ability of a family to indicate its heritage if they chose to do that. Will that be on this year's census?

Mr. DILLINGHAM. The questions that we have on this year's census, we do have race and ethnicity—two separate questions—and we have—there is the ability for people to write in. So, we have an "other" category, and we also have where people can write in their answer.

Ms. KAPTUR. But you are not providing the list—

Mr. DILLINGHAM. No, we provide a list, a relatively comprehensive list—

Ms. KAPTUR. Okay.

Mr. DILLINGHAM [continuing]. But at the same time, actually—there are some anomalies in the historic research that sometimes, over time, people actually can change their race and ethnicity, as to how they report it.

Ms. KAPTUR. Thank you for that statement.

I was looking for—you had in your testimony, you—oh, here we go. On page 6, you talk about the various organizations you are partnering with—the Library Association, Boys & Girls Clubs, Latino Elected Officials. I represent a region where we have vast ethnic and racial diversity, so I am just going to tick off some groups and tell me if you think you would partner with some of these organizations: Albanian, Lebanese, Puerto Rican—we have many, many—maybe Congressman Serrano already went over this—I don't know—but as a result of the tragedies in Puerto Rico, we have many, many citizens moving to Ohio, literally, thousands, and so, that would be an important organizational category—Polish, Turkish, Arab-American, Hungarian. I can't speak for Congresswoman Beatty in Columbus, but there are several new immigrants from countries in Africa.

And so, I guess my question is, how are you linking to the national organizations or state organizations that these individuals belong to? How do you link to them?

Mr. DILLINGHAM. Congresswoman, we are doing it in many, many different ways. Just by way of example, when I was in Chicago, I went to a focus group where we were discussing the census with the Polish community in their language. This was a group, a focus group with people that did not speak English, but spoke Polish. And so, we have more than 100 focus groups across the nation where we are looking at these communities and talking with them.

And sometimes it is very important because in our instructions and in our outreach media, one word can matter. It can be that a translator would want to use this word, maybe with an academic background, but the community may have a different interpretation of that word. So, only in our materials in our outreach, but, particularly, in our partnerships, we invite all of those communities to partner with us.

So, if there are associations and groups, our partnership specialists actually will be hiring from those communities. We are making every effort that we hire people from those communities, as our enumerators, as well.

Ms. KAPTUR. Excuse me, and would you permit the members of the Ohio delegation, on a bipartisan basis, to give you a list of the groups they are aware of in Ohio?

Mr. DILLINGHAM. Absolutely.

Ms. KAPTUR. Okay.

Mr. DILLINGHAM. And we will give you further information how we have engaged in outreach to date, but we would be glad to work with those groups.

Ms. KAPTUR. All right. I thank you. Thank you very much.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Ms. MENG.

Ms. MENG. Thank you, Mr. Chairman.

And thank you, Director, and all of you for being here and your service, as well. I wanted to sort of piggyback off of what Congresswoman Kaptur was talking about in terms of partnering with local organizations, especially in these communities of color, immigrant communities. It remains imperative that the Federal Government take its responsibility seriously and continue to invest and engage

in these hard-to-count communities over the next year. I appreciate you going around the country. I know that you were in New York last week, as well, and I thank you for engaging.

I wanted to talk about the partnership plan and where the Census Bureau is in its hiring process for partnership staff and are you on track.

Mr. DILLINGHAM. Congresswoman, again, that is an excellent question. We did experience some delay in setting up the partnership specialists and bringing them onboard. Within a month, we will be back on track. We had very ambitious goals.

As I mentioned, this morning I was informed that we had more than 900 either hired or had accepted the positions. So, out of the 1,500, we have about two-thirds that will soon be operational.

But we do have already—and when I did do a tour of the areas of New York City, including your district, we did have partnership specialists in place in some of those areas. And as a matter of fact, I was in a van and we pulled over to the curb and I spoke for the New York region, which includes New York, all the way through Maine, I spoke to some 96 partnership specialists who were on the phone and I was encouraging them and commending them for the job they are doing.

So, that is a very important area, and we are looking at other ways to make sure that these partnership specialists are working with the partners. I was looking—I thought I might have the list from your district—but I did see a lengthy list of partners in your area and I am sure—and I am told that list is growing daily.

So, we appreciate the members of Congress that assisting and their staffs that are assisting with these partnership efforts. And it is a good way for both, the Congress to stay involved with what's going on in their districts, and for these people to express their opinions about the needs and the coordination, et cetera.

So, we think we know we devoted more resources to partnerships than ever before. We think nationally, when we combine all the partnerships at the national, state, and local government level, and the community level, that we will have more than 300,000, which will be a significant increase over the last decennial census.

But bringing on all those partners also creates work. So, we will need to coordinate that work and make sure that our partnership specialists are both, skilled at it and committed to it, and I think you will find that they are.

Ms. MENG. Thank you. I want to echo Congresswoman Kaptur's request in relation to New York. If we can be helpful in working with you on this growing list of partnership organizations.

But I also specifically wanted to find out about the seemingly lack of language support for native Hawaiians and Pacific Islanders, as well as Alaska natives and American Indians, outside of Navajo. We are told that the Census Bureau is not providing translated-language assistance guides, whether in print or video, for these communities.

Mr. DILLINGHAM. Well, we are in the process of ensuring—and some of the translation services, I am not sure they have completed this yet—but we will offer the census questionnaire in 13 languages, including English. And that reaches more than 99 percent of the nation's households. But in addition to that, we will have

translated materials in 59 supported languages. I am told that those materials will represent languages spoken by 2,000 or more limited-english-speaking households.

In addition to that, though, our partnership specialists are tasked with finding how to reach—if they find these communities, say it is 100 people in a community with a special language not covered by the materials and not covered by the questionnaires, then we will find trusted sources in that community. If it is sizable enough in some instances, particularly in tribal areas, we will hire partnership specialists from those communities. But in the event that we don't have a specialist that has that language, we will find someone with that language skill. And so, we have the ability to contract and hire on a temporary basis, people with those language skills, once we identify them, and that is part of the responsibility of the partnership specialists.

Ms. MENG. Thank you. And I will just quickly ask the last part of my questioning. Last year's hearing before the subcommittee, then Acting Director Jarmin confirmed two things; one, that unanswered survey questions were marked as "identity non-response" and, two, not answering some questions on the census survey would not negate the entire survey response, but responses to answered questions would still be tabulated.

About 2 months ago, Chairman Serrano and I sent a letter urgency you to publicly confirm that full consideration and count of household census survey responses will be conducted regardless of any potential unanswered questions in the form. We are still awaiting a response to this letter. Do you know why or what has the commerce secretary instructed officials of the Census Bureau in relation to this issue?

Mr. DILLINGHAM. Congresswoman, the deputy director's observations were correct. I apologize if the committee has not yet received our response. I had been advised that the response would be issued in short order recently, we will be getting you a response on that.

Ms. MENG. Okay. Do you know now, before the letter—and I appreciate your response.

Mr. DILLINGHAM. The deputy director had a correct answer to that question.

Ms. MENG. Okay. So, if the citizenship question is added to the 2020 Decennial Census and it happens to be left unanswered on the survey, would that survey still be counted?

Mr. DILLINGHAM. I can assure you that we encourage everyone to answer all questions.

Ms. MENG. Yes.

Mr. DILLINGHAM. But it is the historical practice of the Census Bureau in all censuses and surveys that we have varying rates at which questions are answered, and sometimes we can detect that some answers may not be fully accurate. So, we do accommodate that. We have some of the best and brightest that work on resolving that, but we will accept the information online, on the phone, or on paper that may have some areas that are not totally complete.

Ms. MENG. Thank you. I yield back.

Mr. SERRANO. Thank you.

Director, your budget request for the 2020 Census is \$6.149 billion, which is significantly less than your life-cycle cost estimate and does not include a contingency fund that the secretary had previously asked for. Given the uncertainty and controversy surrounding this census under this administration, how can you justify these proposed reductions?

Mr. DILLINGHAM. Mr. Chairman, let me thank you for asking that question, and let me thank the GAO who is always encouraging us and pointing out the wisdom in having a complete and accurate cost estimate. And we do go through the process and use the procedures prescribed by the GAO, very elaborate procedures, making sure that our cost estimates are well-documented, that they are accurate, they are credible, and they are comprehensive.

As you pointed out correctly, the earlier estimate for the total cost of the census about at about \$12.5 billion and that was in 2015. The secretary, when he came in, he wanted a re-examination of that and wanted to make sure that we have sufficient resources to get the job done.

As a result of that both, the Census Bureau and the Department of Congress, applied their best talents to that process and they developed and they reconciled an independent cost estimate. And that independent cost estimate was \$14.1 billion, and then the secretary subsequently, based on his business experience and business acumen, wanted even that re-examined and to see if there might be a need for additional funding. So, there was a \$15.6 billion life-cycle cost estimate that was developed.

And it really was an extension of the independent cost estimate with adding some additional contingencies and those contingencies were considered to be the unknowns. What if something that we can't project happens? An example might be a natural disaster, something of that magnitude. Would it be advisable to have funds built into the budget for such a purpose?

Well, the current budget request is built on the \$14.1 billion independent cost estimate that the Bureau and the Department has agreed to that followed the GAO guidance. Over time, built on successes and time-tested operations, some of the built-in contingencies that we had expected did not occur.

So, now we are at the stage of execution. So, now we are less than a year away. We haven't incurred those contingencies, yet we still have a little over a billion dollars in a contingency fund. So, if, as a result of our current research this summer or other factors, we have to shift some areas of responsibilities, some priorities, we do have, basically, a billion dollars in contingency funding and some of that comes from the carryover funds that this committee has approved for us.

So, we currently are very confident, based on our experience and considering the contingencies and rationale built into the independent cost estimate, that it can get the job done. So, we can get the job done. We are projecting getting the job done at \$14.1 billion, total life-cycle cost, built on the independent cost estimate, but it is at a total figure that was below what had been considered.

So, we haven't had those contingencies. We don't think we are going to experience those contingencies. We have a contingency budget that we think can accommodate some variations in the self-

response rate, which is one of the primary considerations, and that is why the current budget request is based on and consistent with the \$14.1 billion independent cost estimate.

Mr. SERRANO. Well, it is very important, Director, that the Bureau stay in touch with us and with our staff to let us know how things are going. Because what we don't want as legislators, staff doesn't want it, and you don't want is for people to say we short-changed the census after all the fuss we made about getting a fair and accurate count. So, please don't be—I can't believe I am saying this—don't be shy about asking, OK?

Mr. DILLINGHAM. Chairman, we appreciate that.

Mr. SERRANO. I didn't say that.

Director Dillingham, a critical component of adding a new question to the census is testing it. Unfortunately, a citizenship question will only be tested for the first time this summer with results that will come in too late to mitigate impacts. What is Commerce's plan if the results of this test conclude that self-response rates in 2020 will be far lower than what is currently assumed and budgeted for? For that matter, will the test be cancelled if the Supreme Court finds that the citizenship question should not be included in the census?

Mr. DILLINGHAM. Mr. Chairman, we think the test that we are doing this summer and the research and analytics associated with it are very prudent, because we want to see if something that we had not projected occurs in administering the census with the question, as well as without.

This test will be completed regardless. It is going to inform us to the future. It will provide very valuable information. But it is—it does have—it instigated for purposes of operational needs. If we see area in which we need to devote more resources, that is what we intend to do.

So, we think it is going to be very valuable to conduct that research, to use that research to see if we see a need, and then we have the one-billion-dollar contingency fund that we can, within certain parameters, accommodate those findings from that research. If there is some percentage-point drop in the self-response rate, we have a cushion built into the contingency funding that we can accommodate that. We are not expecting anything dramatic outside of those parameters, and so we think we are on course for doing a complete count.

Mr. SERRANO. Thank you.

Mr. Goldenkoff or Mr. Marinos, with respect to the 2019 census test, what will GAO be looking for in terms of how this test and its results can be utilized, given the results won't be available until October?

Mr. GOLDENKOFF. We are going to be looking at the rigor of the test. We have looked at it on its face, and so far, the methodology appears to have some face validity to it. As Dr. Dillingham already mentioned, the purpose of the test was to look to see what the citizenship question, how that might affect the non-response follow-up workload and some of the additional operational requirements that might be needed. So, it will be looking at the results and then we will see how the Census Bureau is reacting to the results of the

test; the extent to which they are incorporating the results of that test into their operations.

Mr. MARINOS. I would echo Mr. Goldenkoff. I think the one thing to articulate—and maybe stating the obvious here—is that the reality is any late changes to a process are going to introduce risk, so I think it just highlights those high-risk areas that we have articulated within this area recently.

Mr. SERRANO. Director, a question that is not on my list—my staff hates that when I do that, you know—

Mr. DILLINGHAM. My staff does, as well, Mr. Chairman.

Mr. SERRANO. People, at times, respond to people they know and they see and they follow. So, will you be, in your advertising campaign, or will be people that you hire for the advertising campaign, be willing to look at, you know, professional athletes, people in the Hollywood community, you know, Broadway people, just to say, Listen, I am so and so, and you should be counted.

Mr. DILLINGHAM. Mr. Chairman, we would like to brief you on that campaign, where we are, and especially as we have some of the products to share with you. I can say that a lot of thought is going into just that.

We do, particularly, with some of our subcontractors that are focused on hard-to-count groups and special groups, trying to determine who is the trusted voice for that community. And I am informed, in various instances, with some of those communities, they have identified people they think are trusted voices. Some might be from the—might have a background in athletics or similar types, that are well-known in those communities.

At the same time, we have to be very careful with doing that because sometimes a public persona, the image or activities can give rise to unknowns in that area. So, it is a trade-off. We are looking at trusted voices, but, particularly, in administering our campaign at the local level, we want local trusted voices as part of our partnership arrangements.

So, the mayors that I have visited with—and I will be going to the mayors' conference—they have, the ones that I have talked with, are all onboard for partnering with us. But the national figures and those associated with certain communities, we are examining that and I expect there will be some of that and, particularly, people recognizable in those communities. I don't want to get into any of those communities right now, because nothing has been finally settled on.

Mr. SERRANO. Okay. I can tell you, for instance, in the Latino community, Univision and Telemundo, last time, I don't know if they were subcontractors or what or if they took it on their own, but it was a huge campaign, where every 10 minutes, they were telling people, Count yourself, and explaining to them the importance of it and what it meant and the fact that that information could not be shared and so on.

Mr. DILLINGHAM. And I think you will be seeing that again in this decennial census.

Mr. SERRANO. Mr. Aderholt.

Mr. ADERHOLT. Thank you. Just going back to the budget question that the chairman asked about. Of course, the President's

budget proposed \$7.2 billion for the census for fiscal year 2020 if I am correct?

Mr. DILLINGHAM. That's right.

Mr. ADERHOLT. And that was a level that is below the secretary's estimate of funding needs as of last year. And as you know, outside census analysts have said it is too low for the Bureau to complete all its needs in the decade's final year.

Can you talk a little bit about is that and how you—I know you mentioned that a little bit earlier—but talk a little bit more about that in light of the fact that there were some that census analysts have said that it is too low.

Mr. DILLINGHAM. Ranking Member Aderholt, as I said, we are on course and we are on budget and we are on schedule and consistent with the President's budget and the \$14.1 billion. That is no guarantee about the future. Something totally unexpected and unknown could occur and that is what was built into that \$15.6 billion estimate. There were certain contingencies. It was called a "sensitivity analysis" that was included that looked at potential increases in wages, perhaps diminished productivity, and perhaps significantly diminished response rates. So, the sensitivity analysis, as well, is in the category that internally we called it the "unknown unknowns," and that was just, in my mind, a consider it sort of an insurance policy if the unexpected occurs.

We are down to the wire now. We are less than a year away. We are executing the plan and we haven't experienced the kinds of things that the unknowns as of yet, and we are very, very confident that we are on course to complete a full and accurate count at the \$14.1 billion life-cycle cost level.

So, that is kind of where we are, and we are working very hard. Again, we are on budget. Our operations is consistent with that budget. So, that is the budget that we are working under at the present.

Mr. ADERHOLT. And that includes for the 2020, as well? You include that in that, as well as—

Mr. DILLINGHAM. Yeah, the—that is correct. That was for the 2020 Census; that's correct.

Mr. ADERHOLT. But for the 2020 request for the—

Mr. DILLINGHAM. The 2020 request, I think we had a \$6.3 billion request and then we had a carryover of a billion dollars, so that made it the 7.2, 7.3 figure.

\$7.2 billion is the correct amount.

Mr. ADERHOLT. Okay. All right. The GAO, why don't you give me your thoughts on the budget adequacy request.

Mr. GOLDENKOFF. You know, we have looked at the budget. We have spoken to the Census Bureau officials. We think that it is good that there is a contingency fund, especially the unknown unknowns. Our focus, too, was on the justification for that budget with the life-cycle cost estimate; that has been an ongoing challenge for the Bureau to come up with a reliable cost estimate.

We have seen some improvements there, so, one of the things that we were looking for was the extent to which the budget was actually justified within the life-cycle cost estimate. And so, now, we have seen that \$14 billion that is baked into the cost estimate, so that is a good thing.

And then in subsequent conversations with Census Bureau officials, as we have heard today, the director feels that the amount of money is adequate to conduct a complete and accurate account.

Mr. ADERHOLT. Well, regarding the census, let me on my last question, how do you determine where a person should be counted if they are, you know, in a transitory location or they are a foreign citizen that is spending some time here in the United States for a period of time? How do you go about it in your calculation of trying to count them?

Mr. DILLINGHAM. Ranking Member, that is an excellent question, and there is an art to it and a science to it. In discussing some of those issues recently with the head of our decennial census, with many years of experience—and I must say that in conducting the census, we are very honored to have institutional knowledge, experience, and history, from which we are building. So, even though, as GAO points out, we have a number of innovations, we also have a history of what we have done and how we are doing it.

So, in that regard, the transitory populations, sometimes it may require a judgment call. But if we know people are here on a temporary basis, if they are visiting from another country, if they are a tourist or whatever, we don't count them; however, at some—you can change the information somewhat, and if they are staying here and want to stay here and the time in which they are leaving is indefinite and they have been here for 6 months or longer, then we are probably going to count them—where were you on April the 1st, because you are not giving us any information that you are leaving anytime soon.

So, a lot of it is a factual determination and we have guidance and criteria, but that is both, a challenge, and as I said, there is an art to it, that sometimes we have to seek out that information.

Mr. ADERHOLT. So, one of the determining factors is their intent to reside?

Mr. DILLINGHAM. Intent certainly is very important; that is correct. But if they have been here, you know—

Mr. ADERHOLT. Say someone is visiting from another country and are here and staying here for 6 months doing a research project and they are here on April 1st.

Mr. DILLINGHAM. If they are absolutely sure they are leaving and they have been here for—the 6 months bothers me a little bit because that is most of the year—but if it is absolutely certain they are leaving and they know—

Mr. ADERHOLT. Say they were only here for 7 months.

Mr. DILLINGHAM. Well, again, that is a—I would have to consult with our experts and see how they are doing that, but they do—

Mr. ADERHOLT. Say they are here just for the purpose of maybe conducting a study. They are from—and they are doing a study, but they obviously don't want to live in a hotel for 7 months.

Mr. DILLINGHAM. Sure. You know, one of the things about the census is we are counting the people that are living here. So, at some point, we draw lines. Those lines are not, to my understanding and the information I have, those are not solid lines, but they do sometimes require further inquiry as to the nature of their stay, the length of their stay, and what their intent is.

Mr. ADERHOLT. So, they could be counted, then?

Mr. DILLINGHAM. They could be counted if certain facts are that they have been living here for a significant period of time and it is indefinite and not sure when they are going back to wherever they are from.

Mr. ADERHOLT. So, would they ask that question about their intent to leave?

Mr. DILLINGHAM. In the non-response follow-up, our enumerators have a series of questions and they are trained to ask, professional, those questions, and then the information will be entered in accordance with their assessment of that individual's set of facts.

Mr. ADERHOLT. Yeah, a question like this makes your job hard. I mean—

Mr. DILLINGHAM. It does.

Mr. ADERHOLT [continuing]. Because you have people that may be here for a certain amount of time on April 1st and, you know, unless you really dig down deep into what they are doing here and how long they're going to be here and why they are here, and, you know, there is a lot of—

Mr. DILLINGHAM. There is a lot to it. And, particularly, when people are, for example, as you are well aware, we have special circumstances when people are in prison or in certain group quarters and we have different criteria for all that. And as I pointed out earlier, if someone is living out of their mobile home or recreational vehicle, not only do we need to count them, but we need to assign them a location. And so, there will be—judgments will be made based on the individual facts of that circumstance.

Mr. ADERHOLT. And I have one more question. You mentioned that you had been to Congressman Serrano's district and met with some folks in Congresswoman Lowey's district and Congresswoman Lawrence's district. What the chances that we will get you to Alabama?

Mr. DILLINGHAM. We are working on that, Congressman. We have made inquiries and not yet made a commitment as to, and check the schedules, but we have asked, and we will be—

Mr. ADERHOLT. Can we work with you on that to try to—

Mr. DILLINGHAM. Absolutely. We will be working with your office.

Mr. ADERHOLT. Okay. Perfect.

All right. I yield back.

Mr. SERRANO. I encourage you, as chairman of this committee, to go to Alabama.

But you know, the ranking member brings up an interesting question, though. People who know me know that it is very hard for me to do one hearing without mentioning Puerto Rico, Frank Sinatra, or baseball. So, there are baseball players who come here April 1st when the season starts. They stay here it will September. If they are lucky, they go into October, right? And some of them do that year after year after year.

Do they get counted here?

Mr. DILLINGHAM. If I understood—and I am not an expert on the baseball players and the time which they are in the country—but if they are here for an extended period of time and they are here on April 1st, I would imagine, especially if they are here for the majority of the year, they would probably be counted. But don't

hold me to that, because I don't know if—how hard they are to catch. You know, I don't know if we can——

Mr. SERRANO. That is a nice pun there. [Laughter.]

Mr. SERRANO. Some of them are very difficult at catching, yes. Well, anyway, they show up in February for spring training and they don't leave till the end of September and some stay till October. And if you have a good career, you do that single year, and then you have thousands in the minor leagues in the same situation.

Mr. DILLINGHAM. Sure.

Mr. SERRANO. Just a—not an important question, but a fun question.

Mr. DILLINGHAM. It is important——

Mr. SERRANO. Yes, right.

How does Commerce intend to use the data provided by DHS for its decennial operation?

Mr. DILLINGHAM. Mr. Chairman, as I mentioned, by law, Congress has provided that we will, to the maximum extent possible, use administrative data, particularly for, I call it “quality-assurance activities.” So, we receive data. We receive sensitive data. The Census Bureau has special statutory authorities and we use that data to make sure that our censuses and our surveys are accurate and complete.

So, the data comes in. The data does not go back. So, if DHS provides us with data, we will use that data for our purposes, but we do not send data back to those federal agencies.

Mr. SERRANO. But, you can see where this adds to the issue. I mean, certain bells go off when you say citizenship question and other bells go off when you hear DHS will be providing information to the census. This was going on in prior years by the census?

Mr. DILLINGHAM. I can't say historically how, but I can say there are other sensitive data sources where we have the same issue in this forum. But it is well-known, we have access to certain Social Security around IRS data for purposes of verifying our data. But it is a one-way street; that data comes to us and we use that data for I will call it “quality-assurance purposes” and the data does not flow out.

Mr. SERRANO. Okay. So, we don't know if it is been done before in other censuses?

The Census Bureau has not used microdata records from the Department of Homeland Security (or the predecessor Immigration and Naturalization Service) for enumeration in prior censuses. However, in the prior census the Census Bureau acquired aggregate data for use in evaluations of the census, including for the Demographic Analysis Program, which is an evaluation of census coverage.

However, as the Census Bureau has sought data from many federal agencies, we are seeking data from the USCIS and other DHS components for potential use in the 2020 Census. The Census Bureau acquires and protects data under Title 13, and does not return or otherwise share these data.

Mr. DILLINGHAM. With DHS, I would have to check to see when that started.

Mr. SERRANO. That is important because some people, if that gets published a lot—I know there are people here that are going to publish it right now.

Recognizing you may intend to use the data as administrative records toward identifying non-citizens' locations at the block level, wouldn't this exercise eliminate your need for a citizenship question on the 2020 Census form altogether?

Mr. DILLINGHAM. Mr. Chairman, the need and the decision to have the citizenship question is before the Supreme Court. And what we have to do as an agency and what I have to do as the director, is not to take a position on the inclusion of that question, and we are waiting for the Court to decide the question.

Mr. SERRANO. Let me just ask something—this will be my last question, Mr. Aderholt, if you have any questions—something I have asked for, for a long time and I have gotten various answers that all mean no, but if you are an American citizen living in Puerto Rico—which is almost redundant if you were born there, right—you would only get counted—you get counted in Puerto Rico, but you don't get counted in the final number as to what the population of the United States is. Now, at the expense of being written up as being anti-immigrant, which God and every reporter knows I am not, technically, you could be undocumented in one of the states and get counted in the final population number, which is correct, but if you are living in Puerto Rico, the Virgin Islands, Samoa, Guam, and the Northern Mariana Islands, and you won't get counted in the final number. So, when we say, for argument's sake, the United States has 350 people—not really; it is got closer to 356 or 57 because those folks don't get included.

Have you heard anything during your tenure there, as to Serrano's mantra on including everybody under the American flag?

Mr. DILLINGHAM. Mr. Chairman, I have heard—

Mr. SERRANO. Notice how I said it: Everybody under the American flag should be counted.

There are people in Europe, as you know, that are allowed to vote in our elections, because they are Americans living in Europe. I don't know what that arrangement is. I also understand that they get counted in the census, and yet, they are not living under the American flag.

Mr. DILLINGHAM. Mr. Chairman, I don't want to widen this line of inquiry, but I have been advised that you have expressed concerns with the wording of the question for people in Puerto Rico, how they report their information, and also, I am now apprised that you are concerned about the tabulation of it.

Now, on the wording of the question, the information I that I received was that the current wording of the question was developed by people that—the researchers that were studying it to improve the response and that, in fact, it has done that. That being said, with all our questions, we continuously revisit our questions to see if improvements can be made. And I would say the same holds true for the tabulation of our data.

I am not specifically aware, and would be glad to work with you and your staff, on your concerns with the tabulation, and whether there are ways that we might be able to be of assistance or even to reconsider some of those practices. So, we are very open. We are

very open with all of our questions. We are open with all of our tabulations for areas of improvement, and I would be glad to work with you and your staff in looking at that.

Mr. SERRANO. Well, I am glad to hear that you are open, but I think one of the answers we got throughout the years—and I probably shouldn't tell you this, but somebody will tell you—a lawyer will tell—was that the Constitution says count people amongst the states, which speaks to the citizenship question, right—people, not citizens.

But on the other hand, these are territories, but I am not sure that when that was written in the Constitution, there were people thinking ahead to the fact that someday you would have territories with citizens living in those territories, and people who are born, as I was, an American citizen. I was born no different than someone who was born in New York. And my son was born in New York.

Mr. DILLINGHAM. Mr. Chairman, again, we will work with you on that. I can't promise you that if something has constitutional underpinnings that I am in a position to change it, but we will look to see what we can do.

Mr. SERRANO. Mr. Aderholt.

Mr. ADERHOLT. I don't have anything else.

Mr. SERRANO. I want to thank you for coming here. As you know, we pay a lot of attention to the census. All Americans should. Sometimes I wonder why some folks in some states go out of their way to—the census and so on, when it actually helps them if everybody gets counted.

I also understand, unfortunately, that some people have problems, some people who are not here, documented—I don't understand it, really, but I understand those feelings that they have, you know, they have them and that is it; I have to deal with it—try to change their mind—but they, sometimes, forget that those folks get counted and that means dollars for their state. It means congressional districts for their state and it means other things.

And so, we take this very seriously. We want to help you in making the best and most accurate count. We are on your side. Notwithstanding a line of questioning or how we ask you about dollars and cents, we want this to work and we want it to work properly. So, we thank you for today.

Mr. DILLINGHAM. Thank you, Mr. Chairman.

Mr. SERRANO. And the hearing is adjourned.

[CLERK'S NOTE. The Department did not respond with answers to submitted questions in time for inclusion in the record.]

**Questions for the record for Dr. Steven Dillingham, Director, Bureau of the Census
regarding the hearing: "Oversight Hearing: 2020 Census Preparation"**

**The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

1. Assuming the citizenship question is ultimately included in the 2020 Census, will Census count individual(s) who self-respond, but elect to not answer the citizenship question on the 2020 Census form?
2. The Census Bureau last published a 2020 Census life cycle cost estimate in December 2017. Does the Bureau intend to submit an updated life cycle cost estimate or an update on where the cost variances are since your last estimate? If so, when might we expect that?
3. Does the Census FY 2020 budget request provide for a best or worst case scenario? In other words – is there sufficient cushion in the budget for things that might go wrong?
4. How does Commerce intend to use the data provided by the Department of Homeland Security (DHS) for its Decennial operation?
5. Doesn't gathering citizenship information from DHS eliminate Commerce's need for a citizenship question on the 2020 Census form altogether?
6. Have you engaged in previous partnerships with the Department of Homeland Security since January 2017? If so can you please detail them? Additionally, can you confirm in writing that information generated from the use of these records will not be shared with DHS or any other federal agency?
7. It appears as if Commerce is prioritizing Justice's request for block-level data over the Census Bureau's Constitutional responsibility to enumerate "all persons", despite Justice not illustrating a true issue with non-citizens showing up at the polls. What is Census doing to maximize participation within all minority groups, especially those who may have been undercounted in 2010?
8. What steps is the Bureau taking to ensure that the 2020 Census does not experience a high rate of non-interviews after its follow-up on non-responders is completed?
9. How prepared is the Census to face a tight labor market next year in 2020 when it needs to ramp up its hiring to hundreds of thousands of temporary workers? How are you changing your recruitment and hiring strategies to adapt from what Census did in 2010?
10. Is Census looking to expand its hiring to legal permanent residents? And does the U.S. Census currently hire LPRs who qualify for employment as specified under current law?
11. With all the different types of communities across the country, and with not everybody getting mail delivered to their house or having internet access, how can people be assured that in their neighborhood, the right 2020 Census strategy is being used, and how can they know that they won't be missed in the enumeration?
12. We understand that for the 2020 Census, the Bureau is working with the Department of Homeland Security, among other Federal and industry partners, on cybersecurity issues. How is the Bureau working to incorporate DHS recommendations for the cybersecurity

- of its 52 systems? Is the Bureau doing everything the Department is recommending or suggesting related to the 2020 Census cybersecurity efforts? What remains to be done between now and the Census day?
13. What is (are) the Bureau's contingency plan(s) if the systems have to be offline because of performance or scalability issues, data breaches, or natural disasters? Do these plans address how long a system can be down without affecting Census operations? What is the backup plan if the key technologies (internet and mobile devices, for example) do not work during the 2020 Census?
 14. Last August, GAO reported that the Bureau's timeframe to perform security assessments for systems, in some instances, went from at least 6-8 weeks to about 5-8 days during the 2018 End-to-End Test. According to the GAO report, this resulted in systems being deployed before the security of all systems components were assessed. Given that there will be a total of 52 systems, what is the Bureau's plan for completing security assessments for each system in a timely manner to successfully carry out the 2020 Census operations?
 15. GAO recently reported that the Bureau had identified nearly 1,100 system security weaknesses that needed to be addressed. What is the status of the Bureau's efforts to address these weaknesses? What steps is the Bureau taking to ensure that these are addressed in a timely manner?
 16. GAO has reported that the Bureau deployed systems during its 2018 End-to-End Test before the security of all system components were assessed. Given that the Bureau collects personal information on hundreds of millions of people in the United States, what concrete steps is the Bureau taking to ensure that these assessments are completed before systems are deployed, and that corrective actions are adequately addressed?
 17. What is the Bureau's approach to making sure that cybersecurity risks related to systems are at an acceptable level before they are deployed? Does the Bureau have a risk threshold for 2020 Census systems? If not, why not? How does the Bureau determine the security corrective actions (i.e. plans of actions and milestones or POAMs) that will be accepted rather than addressed? What is the reason (e.g., schedule, cost, etc.) that these risks are accepted rather than addressed?

The Honorable Charlie Crist
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Oversight Hearing: 2020 Census Preparation
 April 30, 2019

1. Since disability is not asked on the census form, how will the Census Bureau conduct its outreach efforts to people with disabilities? And will studies be conducted to ensure that people with disabilities are not undercounted in the 2020 Census?
2. Given the Administration's decision to include a question regarding citizenship in the 2020 Census, the ongoing Supreme Court case, and increasing concern from minority and immigrant populations about being compromised by participating in the Census process, how

much has the Census spent and how much does it plan to spend on media and outreach to educate and help further engage non-English speaking populations heading into the 2020 Census?

The Honorable Marcy Kaptur
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
2020 Census Preparation

1. Non-response follow-up—I am concerned that a shift in focus to online data collection will leave out lower income and elderly communities in urban areas with lack of access to internet services. In my own district, we send our constituent correspondence in paper form as we know this is the preferred means of communications for my constituents.

According to the GAO report, these new procedures and technologies have not been used extensively in earlier decennials and have not been fully tested. **What extra steps is the Census Bureau taking to ensure thorough non-response follow up among already marginalized communities?**

2. I am concerned that Census response rates have consecutively decreased from 78% in 1970 to 63% in 2010. Indeed, the U.S. populace is becoming larger and more diverse. Meanwhile people of low economic means are very transient and experience more difficult in being counted. Greater outreach is desperately needed.

a. How is the Census Bureau engaging Congressional offices to leverage their extensive relationships to increase Census turnout? How can Congressional offices assist in strengthening these efforts

3. Counting children—In my state of Ohio, 106,000 children live in an area the U.S. Census Bureau considers “hard to count.” Only nine other states have more young children at risk of being uncouned. **How steps with the Census Bureau take to count young children?**
4. Cybersecurity concerns—The Census is a vital democratic pillar, which allows Congress and the U.S. government to shape policies that fully reflect the population. According to the GAO report, the Census has not fully tested key IT platforms, and experiences delays in corrective actions associate with “high risk” and “very high-risk” vulnerabilities. I am troubled that foreign adversaries will use malicious disinformation tactics to undermine the population’s faith in the Census, as well as to suppress turnout.

- a. Similarly, I am troubled that malign actors would hack into Census databanks to steal the population's sensitive data. **What is the Census' plans to strengthen Cyber protections?**
 - b. **What are the current vulnerabilities in the system, and how do you plan on mitigating them?**
 - c. **Does the Census Bureau FY 20 budget provide sufficient funds to allow for a robust cybersecurity protections?**
5. In my own district, civil society organizations tell me that they are difficulty convincing people with Spanish-speaking abilities and of Hispanic heritage to apply for Census jobs. **If people don't trust the Census to apply for jobs, how can we expect them to take the Census?**

The Honorable Robert B. Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Address Canvassing Efforts

1. How are or were your address canvassing efforts aligned with the specific populations identified in the Response Outreach Area Mapper (ROAM) – i.e. remote, rural, low internet use areas?
2. What did your 2017 Address Canvassing operation reveal about your systems and operations needs?
3. How has the Census Bureau utilized the data from the ROAM with respect to its communication and partnership campaign? How has the data from the ROAM informed your estimates of field resource needs?

Preserving and Recouping the Substantial 2020 Census IT Investment

4. The United States' predominant investment in the 2020 Census is the massive integration effort associated with the modern, Internet-based enumeration. With the 2020 Census IT systems migrated to the Cloud, integrated, tested, scaled and secure for the 2020 Census, what are the Census Bureau's plans to preserve this investment to reduce the cost for the 2030 Census?

Cybersecurity (For the Census Bureau)

5. What are the greatest cyber security risks involved with the 2020 Census?

6. Will you describe your efforts to learn from the experience of social media companies about combatting the kinds of threats that could undermine participation and the accuracy of the count?
7. How will the Census Bureau maintain confidentiality with respect to the personal information of respondents?

Integrated Communications Contract

Under the Integrated Communications Contract, the prime contractor, Young and Rubicam, has partnered with six other firms and subcontracted with 10 additional vendors with expertise in reaching select audiences.

8. Which, if any, of these subcontractors has expertise in communicating with rural communities?
9. What is being done to ensure this and other Census efforts are free of political influence?

OUTSIDE WITNESS TESTIMONY

Testimony of Dr. Christopher Lawson
Chair, Coalition of EPSCoR/IDeA States and Executive Director, Alabama EPSCoR
Submitted to the House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
April 4, 2019

Chairman Serrano, Ranking Member Aderholt and Members of the Subcommittee, my name is Christopher Lawson and I am the Chair of the Coalition of EPSCoR/IDeA States and the Executive Director of Alabama EPSCoR, as well as, a Professor of Physics at the University of Alabama at Birmingham (UAB). Thank you for the opportunity to submit testimony regarding the National Science Foundation's (NSF) and the National Aeronautics and Space Administration's (NASA) Established Program to Stimulate Competitive Research (EPSCoR).

For Fiscal Year 2020, we respectfully request \$190 million for the NSF EPSCoR program and \$27 million for the NASA EPSCoR program. The requested funds will help the 28 EPSCoR jurisdictions contribute to innovative and competitive research initiatives, expand their states' research and technology capacity, and prepare new and future researchers in order to ensure that our nation's research base continues to be the world's leader in scientific and technological development and that all states share in the benefits of a strong research capacity and trained workforce.

Our national security and the success of our economy are intrinsically connected to the strength of research programs and the development of the talent needed to sustain our research efforts. It is imperative that we, as a country, do everything we can to support research and the preparation of the scientific workforce of the future. The university community provides the undergraduate research experiences and the graduate training that underlies our progress, without being beholden to a specific group or entity and offers the government the best return on its funding dollar. Furthermore, this community undertakes the basic research that many economic sectors rely on and enables the business community to build upon.

We know from many sources that the demand for those trained in the sciences will only grow. We know that talent and expertise must be developed throughout our nation, as fewer foreign students are studying in the U.S and those that do are often finding attractive employment in their own countries after graduation. While science will remain an internationally collaborative effort, we need to encourage our youth to pursue science, mathematics and engineering. We need to develop the country's research infrastructure and provide opportunities for students in all our states to become first-rate scientists and engineers. This is particularly true in our EPSCoR states, where we educate thousands of engineers each year and where we have a wealth of secondary school talent that has often scored quite well on standardized math tests.

For more than 60 years the NSF has provided academic research funding to colleges and universities around the nation. NSF now provides some 24 percent of total federal support for basic research in all science and engineering fields. This investment over the years has brought innumerable benefits to researchers, students and communities around the nation.

Yet, there is still a significant geographical imbalance in NSF research funding. Today, nearly half the states and three jurisdictions account for around 11 percent of all NSF funding. These states include: Alabama, Alaska, Arkansas, Delaware, Hawaii, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, Commonwealth of Puerto Rico, U.S. Virgin Islands, and Guam. These states contain more than 20 percent of the US population and of US scientists and engineers.

A strong research base is important to every state in order to provide sound education and research opportunities for its students, a trained workforce, and support for both existing and emerging businesses, especially in the high technology areas. Studies show that high technology businesses tend to cluster where they have a trained workforce and strong research capability and support. Others have also suggested that areas with a research university are better able to manage economic dislocations and downturns than areas without a research institution. Since the predominant driver of GDP growth over the past half-century has been scientific and technological advancement, it is imperative that we ensure opportunities throughout the nation.

Congress has recognized the importance of the NSF EPSCoR program numerous times, including a specific reauthorization in the American Innovation and Competitiveness Act, the successor to the America COMPETES legislation and in appropriations over the years. We appreciate the support of this Subcommittee and the Congress over the years to keep the program moving ahead. Without your help and continuing support, the program would have faltered.

The EPSCoR / IDeA states need your continuing assistance. For FY 2020, we are requesting an appropriation of \$190 million for NSF EPSCoR. This will allow continuation of the foundational research infrastructure improvement (RII) Track 1 awards. With two new states added to the program this year, there will be increased pressure for Track 1 awards. We also believe that additional funding can be effectively used for co-funding. Co-funding is a means of integrating the EPSCoR states into the regular NSF programs and NSF's Big Ideas. Only when the EPSCoR states are full participants in the principal NSF programs and initiatives will they be truly competitive. More can be accomplished with co-funding and it should be utilized across all the EPSCoR states. As advanced networking and computing continue a race into the future, it remains essential for the EPSCoR states to have access to state of the art capacity and expertise. Certainly, our states have made significant progress in this area, but in a rapidly changing IT environment, we continue to require support. Finally, support for additional researchers is a continuing challenge in our states. Research requires people and expertise, especially at the graduate and post-doctorate levels. And, educated and trained researchers cost money. But, without them, we will be unable to meet the research needs of many of our states and communities.

NSF EPSCoR is currently re-examining the eligibility criteria for the program. The EPSCoR/IDeA Coalition will work with NSF and this Subcommittee to ensure that any changes to the eligibility criteria for NSF EPSCoR is fair and equitable, and most importantly, does not fluctuate from year to year. Any criteria wherein states move in and out of the program from year to year is disruptive to EPSCoR state programs and hinders efforts to build a strong, stable research infrastructure in the states.

Now, let me turn to the impact of NSF EPSCoR funding in Alabama. Alabama EPSCoR is dedicated to the advancement of economic development via scientific and engineering research through a collaborative effort among state government and the State's research universities: UAB, University of Alabama (UA), University of Alabama in Huntsville (UAH), Alabama A&M University, Alabama State University, Auburn University, Tuskegee University, and the University of South Alabama. The primary goal of the consortium is to establish the infrastructure, capacity and capability needed to increase sustained national science and technology research competitiveness. NSF EPSCoR funding of Alabama EPSCoR researchers has generated revolutionary advancements in science and engineering that have led to promising new health care treatments, new business growth and high-paying jobs.

For example, UAB researchers are involved in three NSF EPSCoR funded studies: i) to better understand the initiation of brain seizures for improved epilepsy treatment options; ii) to control brain cells using light to grow our understanding of Alzheimer's disease, Parkinson's disease and anxiety; and iii) to use multi-photon microscopy to study brain neural activity and concurrent blood flow changes. NSF EPSCoR funded research of these types could lead to important future improvements in overall human brain health.

Other research at UA funded by NSF EPSCoR is developing next-generation soft material exoskeletons to impact assistive robotics, rehabilitation robotics, and elder care which could lead to enhanced, non-bed ridden, more mobile lifestyles and a reduction in paralysis, stroke or spinal cord rehabilitation costs. At UAH, NSF EPSCoR funded researchers are studying a new type of plasma generator for water purification that uses voltage pulses to ionize gas and produce useful hydroxyl radicals' byproducts which can purify water without the need for large plants using filters and chemicals with heavy maintenance requirements. This technology could lead to improved water quality for millions of people around the world.

Funding NSF EPSCoR at \$190 million will ensure that states such as Alabama continue to develop a robust research infrastructure so that they can compete for Federal research grants and continue to prepare a skilled, "high tech" workforce capable of delivering innovation in the future.

For NASA EPSCoR, in FY 2020 we are requesting an appropriation of \$28 million. Like the NSF EPSCoR program, NASA EPSCoR supports the development of needed infrastructure to help states better compete for funding. This program helps states and territories become more economically competitive, broaden the expertise base for NASA, and develop a skilled workforce capable of generating high-tech jobs in all states of the nation. Congress authorized this competitive program last Congress through the National Aeronautics and Space Administration Transition Authorization Act of 2017 (P.L. 114-10) because they recognize the benefits it confers on over half the states. Thank you for your continued support of this vital program and for all that you do to promote our space enterprise.

In Alabama, NASA EPSCoR funding has allowed Alabama EPSCoR researchers in the state to collaborate with Marshall Space Flight Center staff develop solutions for our nation's space program. EPSCoR researchers are developing shape alloys, a unique and revolutionary class of materials that can recover from structural overloads. These materials have the potential for future applications in higher temperature applications, such as those used in aerospace.

As another example, NASA EPSCoR research at UA on fluid dynamics has the potential to reduce airflow drag by 30%. A 1% reduction in drag can save an airline company \$100,000 to \$200,000 in fuel per year per aircraft. Thus, this research could ultimately reduce the nation's dependency on fossil fuels, CO2 emissions into the atmosphere, and costs.

At a time of economic challenges and tight budgets, programs like EPSCoR that seek a broader distribution of research funding make solid fiscal sense. Limiting these resources to a few states and institutions is self-defeating for our nation in the long run. NSF and NASA EPSCoR help all states to benefit from taxpayer investments in Federal research and development, and they generate long-term growth and a skilled workforce for the future, and limited Federal dollars are stretched further through state matching. If we are to remain globally competitive, instead of restricting ourselves to a few states and institutions, we need to be training and harnessing all of our nation's brainpower, and EPSCoR is working to achieve this goal.

Thank you for inviting me to testify before the subcommittee today.

Public Witness Testimony for the Record
on Fiscal Year 2020
to the
House Appropriations Commerce, Justice, and Science Subcommittee

Submitted by:
Dr. Megan Donahue
President, American Astronomical Society

On behalf of the over 7,000 members of the American Astronomical Society (AAS), thank you for the opportunity to submit public witness testimony for the record regarding our funding priorities for **NASA** and **NSF** in FY2020.

Before I get to FY2020, I would like to express our sincere thanks for your strong support of the astronomical sciences in previous years. Our community of students, scientists, engineers, and educators recognizes and appreciates your steadfast support for key programs at NASA and the NSF enabling worldclass research in astronomy, planetary science, and heliophysics. These wise investments opened a completely new way of seeing the universe, through gravitational waves. They made possible dramatic discoveries, ranging from the composition of the surface of Mars to the formation of distant planets circling other stars, to the siren call of two black holes spiraling together to become one.

Regarding FY2020, we understand there are many competing priorities and budgetary pressures, so we are advocating elsewhere for both a new bipartisan agreement raising the non-defense discretionary budget caps and strong 302(b) allocations for your subcommittee. **Assuming that another budget deal is reached, the AAS asks that your FY2020 subcommittee bill include at least \$9.0 billion for NSF and at least \$22.6 billion for NASA.** I have included a more detailed summary table at the end of this testimony.

As you may know, our community sets its ranked priorities for new investment via a consensus-based "decadal survey" process, commissioned by the agencies and carried out independently by the National Academy of Sciences. AAS advocates for a balanced federal astronomical sciences portfolio that follows the guidance of the decadal surveys, associated midterm reports, and other scientific community inputs like senior, portfolio, and standing advisory committee reviews. These guiding inputs paired with strong support from Congress have allowed the U.S. to be the clear world leader in space science research since the U.S. astronomy community pioneered the decadal survey mechanism in the 1960s.

National Science Foundation (NSF)

The AAS joins the other 100+ organizations of the Coalition for National Science Funding (CNSF) to urge you to prioritize the NSF for what we recognize is an ambitious increase by providing a \$9.0B (+11%) investment in FY2020. The demand is real and far exceeds this requested ~\$1B

increase. The NSF must deny the equivalent of billions of dollars of support to excellent-rated, research and education grant proposals every year. The most recent NSF-wide solicitation of interest in mid-sized instrumentation identified \$3B in high impact projects in the \$20-70M range. Our national research and development enterprise depends on a strong NSF that is empowered to support bold, transformative science and prepare a highly-skilled and diverse technical workforce. The U.S. should rise to meet the challenge of an era of both immense scientific and technical potential and unprecedented global competition.

In the space sciences, NSF plays a key complementary role to NASA. NSF's Division of Astronomical Sciences (AST), in the Mathematical and Physical Sciences Directorate (MPS), is the federal steward of ground-based astronomy in the U.S., and the Division of Atmospheric and Geospace Science (AGS) in the Geosciences Directorate (GEO), supports complementary studies of our Sun and its interaction with Earth. GEO pioneered the innovative Cubesat program that supports training of students and support for researchers at many smaller institutions across the nation. Ever-increasing grant pressure and growing costs of building and operating the cutting-edge facilities befitting a global leader persist in both divisions. We risk missing potential paradigm-shifting scientific investigations from the widest possible research community and settling for diminished returns on U.S. taxpayer investment in both existing and future facilities.

The Astronomy and Geospace Portfolio Reviews acknowledged the important science made possible by existing facilities such as the Arecibo Observatory in Puerto Rico and the Green Bank Observatory in West Virginia, but the reviews still recommended divestment of these facilities because it was overly constrained by pessimistic budget forecasts. With exception of a welcome infusion of one-time funds in FY2018 (including Hurricane Maria emergency supplemental funds), the overall budget situation for NSF astronomy was, and remains, so dire as to risk future U.S. scientific leadership in ground-based astronomy. In tandem, the significant reductions in publicly-funded telescope time and data analysis deepens the divide within the astronomical community between the "haves" at elite institutions and the "have-nots," reducing broad, diverse access to the study of the universe.

The Daniel K. Inouye Solar Telescope and Large Synoptic Survey Telescope, soon to be completed, require operational support that, as currently planned, will be carved out of the competed research grant programs. Right now, the National Academies' Astronomy and Astrophysics Decadal Survey (Astro2020) is considering what the next generation of world-leading observatories should look like. These proposed world-leading observatories cannot be built, let alone operated, with the current NSF budget and approach to building and operating large facilities. The dramatic – not incremental – leap in capability and scientific understanding represented by these new machines, together with a generation of scientists and engineers and their technological achievements, stand to be lost without an ambitious recommitment to the nation's science foundation.

NSF is strongest when its research programs *and* education programs - housed within both the Research and Related Activities (R&RA) and Education and Human Resources (EHR) accounts –

are strong and able to engage a STEM workforce across diverse sectors and career stages. NSF education programs provide opportunities for both students and educators in a dedicated way that no other science agency does.

National Aeronautics and Space Administration (NASA)

At NASA, as in previous years, the AAS requests support for a balanced, world-leading scientific program guided by the decadal surveys, consistent with past Congressional appropriations and authorizations. While we do not specify a number for NASA's STEM Engagement office, we are totally opposed to the Administration's proposal to eliminate these important programs.

The divisions of NASA's Science Mission Directorate (SMD) engage in discovery research across size and distance scales, from using local laboratory measurements here on Earth to interpret information carried by photons and particles, to collecting those photons and particles with space-based telescopes and detectors on robotic vehicles. Scientific exploration of space can lay the intellectual and technical groundwork for the human exploration of space; the expansion of human knowledge of phenomena in space and the search for life's origin, evolution, distribution, and future in the universe are statutory objectives of the nation's civil space agency.

Astrophysics Division: We ask that you reject the Administration's proposed 30% budget reduction that would devastate our nation's efforts to understand how the universe works, how we got here, and whether we are alone. We request that your subcommittee continue to support a strong astrophysics portfolio that grows by a steady 5% per year. An additional appropriation of \$134M would also enable continued development of the next decade's Wide Field Infrared Survey Telescope, WFIRST (\$446M; +43%), which is building on the scientific legacy of the Hubble Space Telescope and learning from the hard development and budgeting challenges of the James Webb Space Telescope. New small and medium explorers will advance through their early development stages in FY2020, and the 2019 Astrophysics Senior Review and two SOFIA reviews will ensure efficient use and maximum scientific return from the fleet of existing astrophysics assets in FY2020 and a strong appropriation. The total Astrophysics Division request—including the planned increase for WFIRST development on top of a 5% increase for the rest of the program to ensure balance—is \$1.37B (+15%).

Heliophysics Division: Consistent with past support from your subcommittees, we ask that you provide continued robust funding in support of the top-priority Heliophysics DRIVE initiative, to provide critical support for early career scientists and for the development of new technologies in anticipation of an increased cadence for Explorer missions. Also, consistent with the provisions of the Senate's space weather program, invest in space weather observations and forecasting that advance research-to-operations and operations-to-research efforts.

Planetary Science Division: Thanks to Congress' strong commitment to exploring the worlds of our Solar System, FY2020 is poised to include the launch of the first stage of Mars Sample

Return, the Mars2020 Rover, and also reveal the rich scientific return of recent planetary encounters – like New Horizons’ flyby of MU69, OSIRIS-REx’s study of the asteroid Bennu, and InSight’s examination of the Martian interior. Now is not the time to undermine that progress, but rather embolden it with steady growth in concert with the other scientific divisions.

We request that funding for Planetary Science programs and missions beyond the recommendations of the decadal survey continues – as Congress did in FY2019 – to be added above and beyond full support of the rest of the work of the division (i.e., above and beyond our request here) only if and when they are prioritized as part of a balanced program in a future decadal survey. This list includes the Lunar Exploration, Planetary Defense, and Europa Lander (recommended by the Planetary Science midterm assessment to be reprioritized in the next Planetary Decadal Survey).

JWST: The AAS community appreciates and welcomes rigorous Congressional oversight over the JWST project. We share Congress’ “profound disappointment,” as expressed in the FY2019 final appropriations committee report, and we too lament the opportunity cost to other NASA activities. We nevertheless hold not only that the science of JWST will be worth the wait and cost when it starts operating after its March 2021 launch, but also that NASA has our confidence for mission success, given the findings and responses to the recent Independent Review Board (IRB).

Space Technology Mission Directorate (STMD): Finally, we are concerned about the policy and accounting implications of the Administration’s Moon-Mars initiative for the critical role that the STMD plays in projects across all the science divisions. Of immediate concern is the apparent disappearance of STMD’s significant promised contribution to the coronagraph development for the WFIRST mission.

Summary Table

Agency/Program (\$B)	2019 Enacted	2020 Pres Bud	2020 AAS Ask	Ask - 2019 (\$)	Ask - 2019 (%)
NSF	8.08	7.07	9.00	+0.92	+11%
EPSCoR	0.18	0.15	0.20	+0.02	+11%
NASA	21.50	21.02	22.58	+1.08	+5%
Science	6.91	6.30	7.50	+0.59	+8%
Astrophysics	1.19	0.84	1.37	+0.18	+15%
JWST	0.30	0.35	0.35	+0.05	+17%
Planetary	2.76	2.62	2.90	+0.14	+5%
Heliophysics	0.72	0.70	0.76	+0.04	+5%
Space Technology	0.93	1.01	0.97	+0.04	+6%

TESTIMONY OF BOB CARLSON, PRESIDENT, AMERICAN BAR ASSOCIATION
in support of the
LEGAL SERVICES CORPORATION
APRIL 4, 2019

U.S. HOUSE APPROPRIATIONS SUBCOMM. ON COMMERCE, JUSTICE, SCIENCE

REQUEST: Chairman Serrano, Ranking Member Aderholt, and Subcommittee Members, I am Bob Carlson, President of the American Bar Association (ABA) and a shareholder with the Butte, Montana, law firm of Corette Black Carlson & Mickelson, P.C. I submit this statement today on behalf of approximately 400,000 members of the ABA. The ABA has long been committed to “Equal Justice Under Law” in our country, establishing our Standing Committee on Legal Aid and Indigent Defendants in 1920. U.S. Supreme Court Justice Lewis F. Powell, while serving as ABA President in 1964, understood the need for equal justice and became a key, early supporter of federal legal aid before President Nixon signed the Legal Services Corporation (LSC) Act into law in 1974. The LSC has requested \$593 million for FY 2020 funding and the ABA fully supports that request. LSC intends to allocate this increased funding amount entirely to basic field grants so that LSC’s grantees can assist with 55% more civil legal problems than they currently serve.

2017 JUSTICE GAP STUDY: The basis for the \$593 million request is the 2017 Justice Gap Report. If approved, this requested budget would put the LSC on a better trajectory to achieve the pledge of justice for all.

In June 2017, the University of Chicago’s NORC provided analysis regarding the unmet civil legal needs of indigent Americans. The survey of more than 2,000 adults living in low-income households (at or below 125% of the Federal Poverty Level) updated two previous reports. The report states, “Eighty-six percent of the civil legal problems faced by low-income Americans in a given year receive inadequate or no legal help.” Specifically, LSC Board Chair John G. Levi pointed out: “Low-income seniors, for example, received inadequate or no professional help for 87% of their civil legal problems. For low-income rural residents, the number was 86%, while for low-income veterans or other military personnel, the number was 88%.”

DISASTER FUNDING REQUEST: The ABA also supports LSC’s supplemental disaster appropriations requests. The \$15 million provided in H.R. 268 is much appreciated. LSC has now requested additional funding of \$500,000 above the \$15 million appropriation due to subsequent disasters. **We hope the committee will keep a close eye on 2019 disasters and will provide needed supplemental funds for LSC disaster legal services again this year.**

Additionally, we appreciate the subcommittee’s removal of funding restrictions for the disaster money. This removal will enable more direct, immediate aid to those suffering from disasters.

LSC DISASTER TASK FORCE: On March 13, 2018, at a Capitol Hill briefing, LSC Board Chair John Levi announced a Disaster Task Force comprising LSC grantees, business leaders, emergency management experts and other stakeholders to take a more comprehensive approach to its disaster work to increase its impact nationwide. The task force aims to provide a report with recommendations, a grantee’s guide for continuity of operations planning (COOP), and a toolkit for grantees that builds on the disaster preparedness and response work of LSC’s Midwest

Legal Disaster Coordination Project. The toolkit will include: 1. templates for education materials about civil legal aid assisting disaster survivors; 2. training materials specifically for volunteer attorneys that cover the most common legal issues faced by disaster survivors; 3. instructions for creating a disaster relief and response hotline and online application; 4. access to preparedness go-kit checklists for the user to fill out ahead of a disaster; and 5. a guide for developing mobile-optimized disaster websites.

STAFFORD ACT & FEMA's NATIONAL RESPONSE FRAMEWORK: The federal government is integrally involved in Presidentially-declared disasters and has a crucial role in federal justice for all—which should not be passed on to the states, tribes, and localities as an unfunded mandate.

When the President declares a national disaster, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5143(b), Public Law 93-288, as amended (Stafford Act), creates the mandate to “assist local citizens and public officials in promptly obtaining assistance to which they are entitled.” Furthermore, the Stafford Act, 42 U.S.C. § 5143(b) states:

Whenever the President determines that low-income individuals are unable to secure legal services adequate to meet their needs as a consequence of a major disaster, consistent with the goals of the programs authorized by this Act, the President shall ensure that such programs are conducted with the advice and assistance of appropriate Federal agencies and State and local bar associations.

The Federal Emergency Management Agency (FEMA) organizes disaster response and recovery efforts through the National Response Framework (NRF). The NRF is a guide that describes specific authorities and best practices for managing incidents and outlines several coordinating structures—the most pertinent to legal aid providers are the Emergency Support Functions (ESFs). The federal ESFs are the primary federal coordinating structures for building, sustaining, and delivering the response core capabilities. There are 15 ESFs in total.

Pages 2, 8, 11, and 18 of ESF #6: Mass Care, Emergency Assistance, Temporary Housing, and Human Services (https://www.fema.gov/media-library-data/1470149820826-7bcf80b5dbabe158953058a6b5108e98/ESF_6_MassCare_20160705_508.pdf) direct the provision of civil legal services.

ABA & LSC IN THE NATIONAL RESPONSE FRAMEWORK: ESF #6 indicates on page 18 that this federal mandate to provide disaster legal services is carried out through the ABA's Young Lawyers Division (YLD):

American Bar Association (ABA) Through the ABA's Young Lawyers Program, provides free disaster legal services for low-income individuals who, before or because of the disaster, are unable to secure legal services adequate to meet their disaster-related needs.

To this end, FEMA and the ABA originally executed a memorandum of agreement (MOA) in December 1972 and renewed it in 2007. The YLD's Disaster Legal Services (DLS) Program

fulfills this MOA during disasters. The DLS Program coordinates the pro-bono legal efforts of multiple state and local bar associations when activated by FEMA following a natural disaster. LSC grantees working in the impacted disaster area typically manage these efforts.

LSC maintains regular communication with the American Red Cross and FEMA to coordinate a response, convening regular national Legal Aid Disaster Network calls, and sponsoring the National Disaster Legal Aid website, www.disasterlegalaid.org. LSC grantees thus provide critical resources to manage disaster response efforts effectively and efficiently in accordance with the terms of the FEMA/ABA YLD agreement and the Stafford Act's federal mandate. Funding for this federal mandate cannot be passed onto states, tribes, and localities.

DISASTER LEGAL WORK: Disasters have a severe and disproportionate impact on the poor, resulting in a sharp increase in the need for legal help. The ABA statistic on disaster declarations in each congressional district can be found on the infographics on the ABA website at https://www.americanbar.org/content/dam/aba/uncategorized/GAO/LSC%20Infographic_House.pdf. LSC describes the disaster work of their grantees in these districts as follows:

In the immediate wake of a disaster or crisis, disaster-related legal issues follow a common pattern. Survivors often need help obtaining copies of important documents such as birth certificates, driver's licenses, and Social Security cards to apply for or restore benefits and supports. The need for adequate housing is generally a major issue for survivors of most disasters. In addition, low-income and other vulnerable people who need housing after an emergency are more susceptible to scams and price gouging. With families experiencing even more stressors than before, there is also an increase in the need for more legal information on core areas of practice for legal aid, such as public benefits, domestic violence prevention, consumer law, and fraud prevention.

OPIOIDS: In addition to LSC's new Disaster Task Force, on April 10, 2018, at LSC's quarterly board of directors meeting, LSC Chair John Levi announced a new LSC Opioid Task Force, co-chaired by LSC Board Members Victor Maddox and former ABA President Robert Grey, and comprising LSC leaders, grantees, healthcare and social services experts, and stakeholders.

The task force addresses and educates the public about the legal issues raised by the opioid crisis in areas such as healthcare, family law, domestic violence, child and elder abuse, and housing.

In Harrison County, West Virginia, for example, an advocate reports that she primarily sees grandparents raising grandchildren, who are often informally placed in their care due to neglect by the addicted parents. "Grandparents aren't really aware of the kinds of benefits that can come from establishing formal legal custody in court," Courtney Crowder told the Exponent Telegram. "Medical treatment and school enrollment are two barriers that come with not having legal custody of a child. As well, grandparents can receive benefits through the Department of Health and Human Resources. That can be really helpful for grandparents, especially those who are living on a fixed income and probably didn't plan on raising three extra kids," Crowder said.

The ABA developed a statistic on opioid deaths in each congressional district that can be found on the infographics on the ABA website at

https://www.americanbar.org/content/dam/aba/uncategorized/GAO/LSC%20Infographic_House.pdf. With the opioid crisis placing heavy new burdens on legal aid, a funding increase is critical.

ADDITIONAL CONSIDERATIONS: Beyond federal responsibilities regarding the costs that natural disasters and the opioid crisis impose upon LSC grantees, four other points should be considered for LSC funding: 1. The cuts in LSC funding vis-à-vis historic levels; 2. The demonstrated cost-benefit value of legal aid; 3. The role of legal aid referrals from federal constituent services representatives; and 4. The popularity of legal aid in America.

1. **FUNDING FOR LSC IS DOWN 43% SINCE THE 1980s:** I want to thank this subcommittee for the partial restoration of funding for LSC in FY 2019. That money will permit LSC to serve more needy clients. Nevertheless, the FY 2019 LSC appropriation of \$415 million is still 18% lower than it was in FY 2010. The FY 2010 appropriation would be \$489.5 million in 2019 dollars. The FY 2019 funding is down 43% from LSC's average appropriation of \$728,107,080 in 2019 dollars during the 1980s. At the same time, the number of people qualifying for assistance is over 10% higher than it was in 2007. LSC funding needs restoration in these good economic times when unemployment is low, and the stock market is high. The ABA fully supports LSC's request to restore its funding to \$593 million in FY 2020, although that still will not meet the total need.
2. **COST-BENEFIT:** The American Bar Association collects dozens of statewide studies of the cost-benefit impact of legal aid. All studies show a big positive impact: https://www.americanbar.org/groups/legal_aid_indigent_defendants/resource_center_for_access_to_justice/atj-commissions/atj_commission_self-assessment_materials1/studies/.

For example, Community Services Analysis LLC published a 2018 report regarding the return on investment of civil legal aid services in the State of Louisiana. The report reveals that, "For every \$1 invested in Louisiana Legal Aid during the year 2018, the citizens of Louisiana receive \$9.13 of immediate and long-term financial benefits."
3. **CONSTITUENT SERVICE:** Civil legal aid is a constituent service performed in every state and congressional district in the country, complementary to and often by referral from your own constituent services staff. Key beneficiaries of legal aid services include: 1. Veterans; 2. Older Americans; 3. Rural Americans; 4. Domestic violence survivors; 5. Women, constituting 71.5% of clients; 6. Opioid victims, and 7. Natural-disaster victims.
4. **POLLING:** 82% of those surveyed believe it is important to ensure everyone has access to civil legal help or representation, according to polling by Voices for Civil Justice: <https://voicesforciviljustice.org/wp-content/uploads/Lake-Tarrance-Expanding-civil-legal-aid-2013.pptx3.pdf>.

CONCLUSION: As the economy recovers, LSC funding should also recover. Down 43% from the 1980s average appropriation, down 18% from FY 2010 (in 2019 dollars), and with over 10% more people qualifying for legal aid, the ABA fully supports the LSC funding request for restoration to \$593 million. Given LSC's excellent benefit/cost ratio and 82% of its funding supporting access to civil legal help, we encourage you to heed constituents' views and support access to equal justice under law.

**Felice J. Levine, PhD, Executive Director
American Educational Research Association
Written Testimony
U.S. House of Representatives, Committee on Appropriations Subcommittee on
Commerce, Justice, Science and Related Agencies
Fiscal Year 2020 Appropriations for the
National Science Foundation: Education and Human Resources and Social,
Behavioral and Economic Sciences Directorates and
U.S. Census Bureau
April 4, 2019**

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee; thank you for the opportunity to submit written testimony on behalf of the American Educational Research Association (AERA). I want to begin by recognizing your longstanding support for the National Science Foundation and thank you and your staff for your strong commitment to maintaining agency flexibility to fund cutting edge science. AERA recommends that the National Science Foundation (NSF) receive \$9 billion in fiscal year 2020. This recommendation is consistent with that of the Coalition for National Science Funding (CNSF), in which AERA is a long-term active member. Furthermore, this request aligns with the bipartisan dear colleague letter led by Representatives Butterfield and McKinley. AERA also recommends funding the Census Bureau at \$8.45 billion, including at least \$7.581 billion in direct funding for 2020 Decennial Census operations, consistent with the recommendation of The Census Project.

AERA is the major national scientific association of 25,000 faculty, researchers, graduate students, and other distinguished professionals dedicated to advancing knowledge about education, encouraging scholarly inquiry related to education, and promoting the use of research to serve public good. Many of our members are engaged in science, technology, engineering, and mathematics (STEM) education research. Our members work in a range of settings from universities and other academic institutions to research institutes, federal and state agencies, school systems, testing companies, and nonprofit organizations engaged in conducting research in all areas of education and learning from early childhood through the workforce. Given the expertise of the AERA membership, my testimony will focus on the importance of the Education and Human Resources (EHR) and the Social, Behavioral and Economic (SBE) Sciences Directorates. Many of our members depend on an accurate Census count and data available from the American Community Survey to do their work.

The EHR and SBE Directorates are central to the mission of the National Science Foundation (NSF) to advance fundamental knowledge and scientific breakthroughs and to ensure significant continuing advances across science, engineering, and education. Research and science supported by these directorates are intertwined with science and research of the other Directorates (for example, Computer and Information Science and Engineering). Furthermore, the EHR and SBE directorates are vital not just to producing essential knowledge and innovative methodologies but also to preparing our students and citizens to use new technologies and harness knowledge to enhance productivity, safety, security, and social economic well-being.

As indicated in the agency's budget request for FY 2020, 95 percent of appropriated funds directly supported research and science, technology, engineering, and mathematics (STEM)

education through grants and contracts in FY 2018, with 77 percent of funding supporting research at colleges and universities. In addition, nearly 200,000 K-12 students benefitted from programs that directly engage them in STEM experiences within and outside the classroom.

Education and Human Resources Directorate

The EHR Directorate at NSF is responsible for providing the research foundation necessary to achieve excellence in U.S. STEM education. EHR accomplishes this goal by supporting the development of a scientifically-literate citizenry as well as a STEM-skilled workforce. As stated in the NSF Strategic Plan 2018-2022: “NSF’s investments in basic research on how peoples learn, in the traditional period stretching from pre-kindergarten to college as well as continually throughout life, will be crucial to the advances in U.S. education needed to ensure that the Nation thrives in a rapidly evolving 21st century world.”

The EHR Directorate supports STEM education and education research from early childhood learning to doctoral work and beyond and promotes evidence-based innovations in teaching practices, instructional tools, and programs that advance STEM education and prepare the next generation of STEM professionals. EHR funded researchers are asking key questions, for example, about how to spark students’ interest in math and science and keep them engaged, or about why so many students lose interest and confidence and about what can be done to keep them engaged. Understanding these and many other questions will help the United States build a well-educated and technology-literate workforce necessary for a prosperous economic future.

Social, Behavioral and Economic Sciences Directorate

In addition to the significant investments in education sciences provided by EHR, AERA values the important role the SBE Directorate in funding important education research and in social, family, and peer contexts connected to learning. The SBE Directorate also houses the National Center for Science and Engineering Statistics (NCSES).

The SBE Directorate supports research to better understand people and reveals basic aspects of human behavior in the context of education and learning. SBE funded research adds fundamental knowledge essential to promoting the Nation’s economy, security, and global leadership. Understanding social organizations and how social, economic, and cultural forces influence the lives of students is key to improving teaching and learning and advancing STEM education.

The budget for SBE is not even 4 percent of the NSF budget, yet it provided approximately 62 percent of the federal funding for basic research in the social, behavioral, and economic sciences at academic institutions in FY 2018.

National Center for Science and Engineering Statistics (NCSES)

In addition, AERA has a strong interest in the National Center for Science and Engineering Statistics (NCSES) within SBE. As one of the federal principal statistical agencies, NCSES provides invaluable statistical information about the science and engineering infrastructure and workforce in the U.S. and around the world. NCSES collects and analyzes data on the progress of STEM education and the research and development, providing valuable information on the trajectories of STEM graduates both in STEM and non-STEM careers. Adequate funding in FY 2020 for NCSES would support critical activities to develop new data techniques building on

administrative data and enhance data tools, techniques, and visualizations to facilitate access to statistical resources.

As you know, the public strongly supports a federal investment in science. According to a report issued by the American Academy of Arts & Sciences, 71 percent of U.S. adults said that government investments in basic scientific research pay off in the long run. When asked about priorities for scientific research, 56 percent of respondents consider improving education and how our children learn to be an urgent priority. (American Academy of Arts and Science, *Perceptions of Science in America* 2018.)

On behalf of AERA, I thank both the Chairman and the Ranking Member for your ongoing recognition of the importance of providing NSF with the flexibility to determine directorate funding levels within the Research and Related Activities Account. AERA shares the opinion of Director Córdova, that this flexibility enables NSF to best “build a portfolio of the most exciting research across all fields.”

In addition to my attention in this testimony to the National Science Foundation, I also wish to emphasize the importance of adequate support for the Census Bureau, especially critical with the ramp up to the administration of the 2020 Decennial Census. AERA recommends funding the Census Bureau at \$8.45 billion, including at least \$7.581 billion in direct funding for 2020 Decennial Census operations. Even with the much-needed resources provided in the final fiscal year 2019 appropriations bill to plan for the 2020 Census, funding for the Bureau remains below the levels required to appropriately prepare for the decennial census. Adequate support for the Census Bureau will enable the necessary technology, methodologies, and staff for the rollout of the decennial census to ensure an accurate count of the U.S. population. The recommended funding support will also allow the Census Bureau to continue to conduct the American Community Survey and the Current Population Survey.

Thank you for the opportunity to submit written testimony in support of \$9 billion for the National Science Foundation and sharing our particular interest in the Education and Human Resources Directorate and the Directorate for Social, Behavioral, and Economic Sciences in fiscal year 2020. AERA would welcome the opportunity to work with you and your subcommittee to best further the crucial advances of the National Science Foundation. Please do not hesitate to contact me if AERA can provide additional information regarding this budget proposal or the significant science made possible through NSF support.

Daniel T. Crocker
Vice President, Commercial Service
American Foreign Service Association (AFSA)

A Strong Commercial Service Contributes to Economic Security for America.

Who We Are. The American Foreign Service Association (AFSA), established in 1924, is both professional association and exclusive representative for the U.S. Foreign Service. Nearly 80 percent of active-duty members of the Foreign Service choose to join AFSA, the voice of the Foreign Service. AFSA's members are career professionals who volunteer to live and work abroad for roughly two-thirds of their careers—usually serving abroad with their families, but sometimes unable to—representing America to the people and leaders of other countries.

AFSA Supports a Strong Commercial Service. The U.S. Commercial Service (aka Global Markets) is part of the Commerce Department's International Trade Administration. As a Foreign Affairs Agency with a worldwide network of trade and investment professionals it is uniquely positioned to help U.S. companies succeed overseas. Its workforce carries the credibility of the U.S. Government worldwide. Its Foreign Commercial Service Officers are embedded in Embassies and Consulates on the Ambassadors' country teams.

How the Commercial Service Contributes to U.S. Economic Security. It works with all relevant U.S. Government agencies at post to knock down trade barriers so that U.S. companies can compete. It helps U.S. companies gain access to key contacts and market intelligence. And it tackles regulatory complexity, intellectual property rights infringement, and unfair trade practices. Its Advocacy Center coordinates all U.S. Government assistance for U.S. exporters bidding on foreign public-sector contracts. The casework has grown 300% in the last 6 years and resulted in **\$76 billion in U.S. export sales to foreign governments last year**. Its SelectUSA program coordinates all U.S. Government work to attract foreign direct investment into the U.S. In FY18 it helped over 6,800 investment clients from 90 countries, resulting in **\$20 billion of job-creating investment**.

The Commercial Service Delivered Concrete Results in FY18.

- **\$392 in U.S. exports and inward investment for every \$1 of appropriations.**
- 33,000 U.S. companies assisted – 80% are small/medium-sized businesses.
- 6,850 investment clients assisted from around the globe.
- **\$104 billion in U.S. exports and \$20 billion in inward investment.**
- Supported over 570,000 American jobs.

The Commercial Service's Current Footprint – Down by Over 30% in Last 10 Years.

- 230 Trade Specialists in 106 U.S. cities.
- 200 Policy and Support Personnel in Commerce HQ.
- 235 Foreign Service Officers and 675 local professionals in 76 countries.

But the Commercial Service Will Close Posts in FY20 Unless Funding is Increased.

Commerce Has Been Shrinking the Commercial Service in the Last 10 Years.

Commerce is not allowing the Commercial Service to hire. Critical offices are being hollowed out. And Commerce plans to start closing posts this year. The U.S. field has lost 100 positions in the last 10 years, shrinking by 33%. The overseas field shrunk by 30% over the last 10 years. In the last year alone, 10% of Commerce's Foreign Service Officers resigned. And Commerce has not offered an assessment for new Foreign Service Officers in over 4 years.

But Commerce continues to ask Congress for cuts of \$44 million to shut down 35 overseas offices and 18 U.S. field offices. Concerned about backlash, Commerce has refused to clarify which offices it plans to close – even though it has asked Congress for the authority to do so for 3 years in a row.

AFSA believes that if Congress wants Commerce to fight for fair trade, then it needs to be clear about the importance of maintaining a strong Commercial Service. Congress should tell Commerce to **maintain staffing through a line-item appropriation to the Commercial Service** and explicit language within the appropriations bill itself. Congress should insist that Commerce fill these critical field vacancies now so that the Commercial Service can continue to support and create U.S. jobs.

In the last two budget cycles, Congress has pushed back against proposed cuts and has kept the Commercial Service's funding level flat. But rising obligatory costs, driven in large part by mandated wage increases and administrative bills from GSA and the State Department's expanded scope for its Capital Security Cost Sharing Program, mean that the **Commercial Service is now spending 99% of its money on staffing.** Unless funding is increased, **Commerce will need to close offices.** And since it has been asking to close dozens of offices in the field for three years now anyway, its move to do so will be consistent with its stated priorities.

AFSA believes that shrinking the Commercial Service does not serve U.S. national interests, as articulated in the National Security Strategy. The work that the Commercial Service does to help U.S. companies win overseas, and to **counter Chinese, Russian, and other countries engaged in mercantilism to further geopolitical aims, is essential.** Its work to support NATO ally **purchases of military equipment, the Indo-Pacific Strategy, Prosper Africa, and as a field-forward force to make the new International Development Finance Corporation (formerly OPIC) can't be sustained with adequate resources.** And the Commercial Service's work to increase U.S. exports clearly supports the Administration's goal of **reducing trade deficits.** Finally, the fact that last year alone the Commercial Service's export assistance with 33,000 companies supported over **570,000 jobs – higher paying export-related jobs – means that they contribute to a strong economy with low unemployment in America.**

For these reasons, **AFSA calls for Congress to increase funding to the Commercial Service in FY20 by \$50 million, increasing the agency's appropriations from \$320 million to \$370 million.**

With this level of funding, the Commercial Service can hire back into hollowed out offices, renew its commitment to the Foreign Service by hiring up to its authorized level, and **open 21 new posts overseas in U.S. embassies** and consulates where American companies have the best opportunities.

The Commercial Service needs to take a leading role in the field to defend U.S. companies against unfair trade practices. They need to challenge Chinese, Russian, and Brazilian use of aggressive tactics to win business. That work can only be done in the field.

Let's send a signal to China and Russia – **the U.S. is serious about fair trade and level playing fields for our companies overseas. Fair trade grows jobs in America.**



Testimony of the American Geophysical Union
Prepared by Lexi Shultz, Vice President, Public Affairs

Prepared on 4 April 2019 for the
U.S. House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies

The American Geophysical Union (AGU), a non-profit, non-partisan scientific society whose mission is to promote discovery in the Earth and space sciences for the benefit of humanity., appreciates the opportunity to submit testimony regarding the Fiscal Year (FY) 2020 budget request for the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF). **The AGU, on behalf of its 60,000 Earth and space scientist members, respectfully requests that the 116th Congress appropriate:**

- **\$22.575 billion overall for NASA, including:**
 - **\$7.5 billion for the Science Mission Directorate,**
 - **\$2.097 billion for Earth Science,**
 - **\$2.995 billion for Planetary Science,**
 - **\$782 million for Heliophysics;**
- **at least \$6.2 billion overall for NOAA; and**
- **\$9 billion for NSF.**

National Aeronautics & Space Administration

AGU requests that Congress appropriate \$22.575 billion for NASA in FY2020 - a 5% increase above the amount provided in FY2019. This increase will ensure that NASA is able to continue its work and preserve U.S. leadership in Earth and space science and exploration. Additionally, AGU requests that Congress appropriate \$7.5 billion for NASA's Science Mission Directorate, an 8.6% increase over FY2019. A request of \$7.5 billion will allow NASA's Science Mission Directorate to advance the Administration's plans and the agency's current program of record and make critical progress towards achieving the scientific goals outlined in the National Research Council Decadal Surveys.

Our requests for NASA's Earth Science, Planetary Science, and Heliophysics missions mirror the requested 8.6% increase for the Science Mission Directorate.

Earth Science and Planetary Science Divisions

AGU requests that Congress appropriate \$2.1 billion for Earth Science in FY2020. More than a third of the U.S. economy is affected by climate, weather, and natural hazards. Missions within NASA's Earth Science Division give us greater insight into how our Earth is changing on daily and long-term scales in terms of weather, climate, air quality, water availability, soil nutrients, and other resources. NASA Earth Science produces critical information and data that public and private sector decision-makers, such as farmers, the military, retailers, and emergency managers, can use to mitigate the risks and understand the opportunities of the Earth's changes.

A particularly crucial source of Earth science data is our current fleet of Earth observation satellites. Robust funding for Earth Science will allow for the continuation of the Plankton, Aerosol, Cloud, and Ecosystem (PACE) and the Climate Absolute Radiance and Refractivity Observatory Pathfinder (CLARREO Pathfinder) missions, and for the implementation of the 2017 Earth Science Decadal Survey recommendation to competitively select future missions that address Designated and Earth System Explorer target observables. Competitively selected missions will help to constrain costs and resources, while simultaneously helping to leverage the talents of a broad array of scientists and universities. The Earth System Explorer missions will provide needed insight into sea level rise, changes to ozone concentrations, and the sources and sinks of CO₂ and methane, among other research areas.

AGU requests that Congress appropriate \$2.995 billion for Planetary Science in FY2020. NASA's Planetary Science Division is helping to expand our understanding of the universe, approximately 90% of which is still not well understood – even our own solar system. The awe-inspiring missions and discoveries of the Planetary Science Division inspire future generations of scientists and STEM professionals to choose science as a career. With appropriate funding, NASA can stay on schedule to launch the next Mars rover and a Europa mission in the 2020s, furthering our understanding of the conditions needed to sustain life. Additionally, robust funding for Planetary Science will allow NASA to pursue the Administration's Moon to Mars program without sacrificing other decadal priorities, including a balanced portfolio of missions and exploration targets in our solar system.,

Earth and planetary sciences are complementary and integrally related to one another. From picking the perfect day to launch a satellite to ensuring that our understanding of other planets is accurate, our knowledge of Earth informs our understanding of other worlds in the solar system. In turn, our exploration of other worlds advances our knowledge of Earth's evolution and processes.

Heliophysics Science Division

AGU requests that Congress appropriate \$782 million for Heliophysics in FY2020. Increased funding for NASA's Heliophysics Division will further our understanding of the Sun, helping to mitigate the hazards that solar activity poses to the ground and space-based platforms that strengthen our national security, as well as our economic and scientific competitiveness.

Increased funding will support the new early career investigator program (ECIP), which is critical to creating the next generation of heliophysics scientists. This program is part of the Diversify, Realize, Integrate, Venture, Educate (DRIVE) initiative, the top priority of the Decadal Survey. Increased investment in DRIVE will enable novel technologies for next generation missions, help to create DRIVE Science Centers, and provide researchers with the necessary tools and platforms to conduct cutting-edge multidisciplinary research.

Robust funding for NASA's Heliophysics division will also advance implementation of the agency's two-year cadence of small and mid-size missions, which often accomplish scientific goals for a fraction of the cost of a flagship mission and allow heliophysics researchers to participate and respond rapidly. These missions accelerate scientific understanding while simultaneously developing the scientific workforce through increased research opportunities for students and faculty.

NASA's Heliophysics Division advances our understanding of the threat of space weather, as directed by the 2016 *National Space Weather Action Plan*. The Division carries out activities related to basic research into solar radiation and forecasting and studies ways to mitigate the effects of big space weather events, which have can damage our space- and ground-based national security assets, aviation systems, power grid, and electric rail systems. Additional funding for space weather research will support innovation in observational capabilities and continue development of the Space Weather Science Applications Project that advances research-to-operations, operations-to-research, and computational aspects of space weather mitigation.

National Oceanic & Atmospheric Administration

AGU requests that Congress appropriate at least \$6.2 billion for NOAA in FY20, a 14.3% increase over the FY19 appropriated level for NOAA. Investing in NOAA not only keeps communities around the nation resilient in the face of natural hazards, but also provides superior economic and national security services by enabling businesses and governments to better manage risk.

The forecasts, infrastructure, and research provided by NOAA save lives in time-sensitive emergencies. Flooding occurs in every county in the U.S., and NOAA predicts that an estimated 200 million people are at risk for flooding in their communities this spring, in addition to the record flooding that has already occurred in Nebraska, Minnesota and Iowa. Strong support for NOAA will allow the agency to continue creating detailed flooding forecasts and developing monitoring systems for the millions of Americans who do not currently have them; maintain the NEXRAD radar system used for 85% of all tornado and severe storm warnings; and continue the satellite rescue program that has saved over 43,000 lives by locating aviators, mariners, and land-based users in distress. In addition, continued and predictable support for both geostationary and polar orbiting satellites such as the GOES series and JPSS will ensure that we are equipped to collect data that is high quality and reliable. Finally, the continuation of uninterrupted data through programs such as the Polar Follow On, which serves as the next phase for the JPSS satellites, plays a critical role in keeping American families safe by ensuring that forecasters and decision makers have the best available data to assess risk.

NOAA is also essential to our nation's economic stability. From coast to coast, one third of U.S. GDP is affected by weather and the environment. In 2018 alone, the U.S. saw 12 major weather and climate disaster events that resulted in \$91 billion in damages. For example, losses from weather-related aviation delays alone are estimated at more than \$1 billion per year, and NOAA drought forecasts are worth up to \$8 billion per year to the farming, transportation, tourism, and energy sectors. From large corporations to small businesses, the decision-based forecasts provided by NOAA save vital time, money, and resources.

NOAA also plays a unique and vital role in supporting homeland security and national defense. The Pentagon reports that flooding, drought, and wildfires driven by climate change pose a threat to two-thirds of the U.S. military's installations and expects climate change worldwide to cause more extreme weather, food scarcity, and mass migration, which leads to instability. The Pentagon classifies climate change as threat multiplier, and in order to combat these issues, we need the best science available. Without robust funding, we risk losing the data needed to make informed and proactive decisions, and our national security will be left in a dangerously vulnerable position.

National Science Foundation

AGU requests that Congress appropriate \$9 billion for NSF in FY20, an almost 11.5% increase over the FY19 appropriated level for NSF. Ambitious and robust funding for NSF is critical if the U.S. hopes to maintain its leadership in science and technology and reap the economic and national security benefits of that leadership. According to the most recent OCED report, China will surpass the United States in total R&D funding from all sources in 2019. NSF accounts for only 4% of federal R&D spending but supports nearly 60% of the nonmedical basic research at our colleges and universities. Research and education programs supported by NSF help increase and develop the knowledge base needed to push the frontiers of science, mathematics, and engineering disciplines, contribute to the development of the future science and technology workforce, underpin new fields of inquiry, and promote interdisciplinary research and education.

Increased funding for NSF will allow the agency to pursue its Ten Big Ideas, including growing Convergence Research and the Inclusion Across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) program. These two programs will promote transformational science, the first by creating a platform for the integration of multiple science and engineering disciplines to address extremely challenging and complex scientific questions and pressing societal needs; and the second by creating a capable and innovative workforce that reflects the diversity of our nation.

**Public Witness Testimony of
Kathi Kromer, Associate Executive Director of the American Library Association
On the FY 2020 Request for the Department of Commerce, Bureau of the Census
Before the House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
April 4, 2019**

On behalf of the American Library Association (ALA), I write to respectfully request adequate funding for the U.S. Census Bureau to conduct the 2020 Census, including funding for Integrated Partnership and Communications activities and for Questionnaire Assistance Centers.

Census experts have raised concerns that the President's budget proposal for Fiscal Year (FY) 2020 will be inadequate for the Census Bureau to carry out its Constitutional obligation to count every person residing in the United States.

If the Census Bureau does not have the resources necessary to do its job, then states and communities across the country will lose funding, representation, and information crucial to decision-making. That loss of funding and representation will last for a decade – and the loss of information will last forever.

Integrated Partnership and Communications activities

We urge the Subcommittee to provide adequate funding for Integrated Partnership and Communications activities, which are essential to achieving an efficient and accurate Census.

As the Census Bureau notes, in the upcoming fiscal year, “The formation of key national partnerships and the cultivation of hundreds of thousands of other local relationships necessary to ensure the Census Bureau can maximize self-response across all localities and population groups will occur at peak levels of intensity.”¹

ALA and libraries across the country will be among those partners working to provide information to the public about responding to the 2020 Census. As a demonstration of this commitment, on April 1, 2019, the president of the American Library Association spoke at the Census Bureau's press briefing marking one year to Census Day.² Adequate funding for Integrated Partnership and Communications activities ensures that partners will have the messages and materials to support their communities in achieving a complete count.

Questionnaire Assistance Centers

Similarly, it will be critical to provide sufficient funding for Questionnaire Assistance Centers. In the FY 2019 conference report, Congress directed the Census Bureau to “devote funding to ...

¹ U.S. Census Bureau, “U.S. Census Bureau's Budget Fiscal Year 2020,” March 2019, at CEN-95, *available at* https://www.commerce.gov/sites/default/files/2019-03/fy2020_census_congressional_budget_justification_0.pdf.

² U.S. Census Bureau, “Census Bureau Press Briefing Marks One Year Out From Census Day,” April 1, 2019, *available at* <https://www.census.gov/newsroom/press-releases/2019/one-year-out.html>.

open local questionnaire assistance centers in hard-to-count communities” in the 2020 Census.³ However, the Census Bureau’s FY 2020 budget submission does not describe how the Bureau will implement that direction or what additional resources are needed in order to do so.

On March 19, 2019, ALA joined 90 stakeholder organizations in a letter to the Census Bureau, expressing our view that “a robust program of Questionnaire Assistance Centers is crucial to provide an effective on-the-ground presence for the 2020 Census in local communities in order to raise public awareness, deliver trustworthy information, and provide options for self-respondents to receive questionnaire assistance.”⁴

With the reduced number of regional and area census offices in the 2020 Census, we expect that many people will turn to their local public library for information about the Census. While libraries are preparing in order to address the public’s questions about the Census, they cannot do so alone, and they should not have to. In fact, libraries hosted more than 6,000 Questionnaire Assistance Centers and Be Counted sites in the 2010 Census.⁵ We believe that libraries are ready to do so again, if Congress and the Census Bureau commit the funding to operate those sites.

Conclusion

Thank you for the opportunity to submit this testimony regarding appropriations for the U.S. Census Bureau in FY 2020. We ask for the Subcommittee’s support in providing adequate funding, including for Integrated Partnership and Communications activities and for Questionnaire Assistance Centers.

Sincerely,

Kathi Kromer
Associate Executive Director, Public Policy and Advocacy
American Library Association

The American Library Association (“ALA”) is the foremost national organization providing resources to inspire library and information professionals to transform their communities through essential programs and services. For more than 140 years, the ALA has been the trusted voice for academic, public, school, government and special libraries, advocating for the profession and the library’s role in enhancing learning and ensuring access to information for all.

³ H. Rept. 116-9 (2019), at 611.

⁴ Letter from 90 stakeholder organizations to Census Bureau Director Dillingham, “Questionnaire Assistance Centers for the 2020 Census – Stakeholder Recommendations,” March 19, 2019, available at <http://www.ala.org/advocacy/sites/ala.org/advocacy/files/content/govinfo/Sign-ons/Questionnaire%20Assistance%20Center%20recommendations%20031919%20%281%29.pdf>.

⁵ Geoff Jackson, Keith Wechter, and Susanna Winder, “2010 Census Be Counted and Questionnaire Assistance Centers Assessment,” U.S. Census Bureau (May 22, 2012), at 27, available at <https://www2.census.gov/programs-surveys/decennial/2010/program-management/5-review/cpex/2010-memo-194.pdf>.

Testimony submitted on behalf of the American Physiological Society, Rebecca Osthus, Ph.D., Associate Director for Government Affairs and Science Policy.

The American Physiological Society (APS) thanks you for your sustained support of science at the NSF and NASA. In this statement we offer our recommendations for FY 2020 funding levels for these two agencies.

- **The APS urges you to fund the FY 2020 NSF budget at a level of at least \$9 billion to prevent further erosion of program capacity and allow researchers to take advantage of scientific opportunities.**
- **The APS urges you to restore cuts to NASA's life sciences research budgets and to increase funding for the Human Research Program.**

NSF and NASA support scientific research and technology development programs essential to the future technological excellence and economic stability of the United States. Federal investment in this research is critically important because breakthroughs in basic and translational research provide the foundation for new technologies to fuel our economy and make it possible for the United States to remain a global leader in science, technology and engineering. According to the 2018 Science and Engineering Indicators, other countries including China continue to increase basic research funding at a rate that outpaces the growth of U.S. investments.¹

NSF funds outstanding research and education programs

NSF provides support for 25% of all federally funded basic science and engineering as well as 69% of the support for non-medical research in biology. NSF invests in basic biological research across a broad spectrum of sub-disciplines along with as the equipment and other infrastructure scientists need for their work. Time and time again we have seen that knowledge gained through basic biological research provides foundation for more applied studies that sustain the health of animals, humans and ecosystems. Moreover, NSF-funded research has led to countless new and unexpected discoveries that could not have been envisioned when the research began. These unforeseen applications have had enormous impacts on science, health and the world's economy.

The majority of the NSF funding is awarded in the form of grants selected through competitive, merit-based peer review. Merit review ensures that the best possible science is supported. Both the scientific reviewers and NSF program staff consider not only the intellectual merit of each research proposal, they also consider its broader impacts. NSF's criteria for these broader impacts address the potential for the research to benefit society or to achieve specific outcomes. NSF has an exemplary record of funding research with far-reaching potential. Since its inception in 1950, NSF has supported the work of 236 Nobel Laureates, including the 2018 winners of the Chemistry, Physics and Economics prizes.

Biological research is just one part of the NSF portfolio. The APS believes that each of the NSF directorates support research that is critical to NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." Collaboration among scientific disciplines is increasingly recognized as the best and most

efficient way to advance science. This will only be possible with strong support for all disciplines of research.

In addition to funding innovative research in labs around the country, the NSF education programs foster the next generation of scientists. The APS is proud to have partnered with NSF in programs to provide training opportunities and career development activities to enhance the participation of underrepresented minorities in science. We believe that NSF is uniquely suited to foster science education programs of the highest quality, and we recommend that Congress continue to provide federal funds for science education through the NSF.

The APS joins the Federation of American Societies for Experimental Biology (FASEB) in recommending that the NSF be funded at a level of at least \$9 billion in FY 2020. The NSF budget has been flat in real terms for approximately the last 15 years. When NSF Director Dr. France Cordova testified before the House Appropriations Subcommittee on Commerce, Justice and Science on March 26, 2019, she stated that *each year* the NSF receives approximately \$4 billion worth of well-rated proposals that the agency is unable to fund within its current budget. Providing the agency with a significant budget increase would allow the NSF to support approximately 1,000 additional research grants. The NSF is poised to address major challenges facing our nation and our world in the 21st Century, but it needs adequate resources to continue to carry out its mission.

Support for Life Sciences Research should be increased at NASA

NASA sponsors research across a broad range of the basic and applied life sciences, including gravitational biology, biomedical research and the Human Research Program (HRP). The gravitational biology and biomedical research programs explore fundamental scientific questions through research carried out both on Earth and aboard the International Space Station, which provides an environment for the conduct of experiments in space. NASA's HRP conducts focused research and develops countermeasures with the goal of enabling safe and productive human space exploration. The program funds more than 300 research grants that go to academic researchers in more than 30 states around the country.

During prolonged space flight, the physiological changes that occur due to weightlessness, increased exposure to radiation, confined living quarters, and alterations in eating and sleeping patterns can lead to debilitating conditions and reduced ability to perform tasks. Scientists are actively engaged in research that explores the physiological basis of these problems with the goal of contributing to the identification of therapeutic targets and development of novel countermeasures. One of the most well-known studies of these physiological changes is the NASA Twin Study which compared identical twins and fellow astronauts Mark and Scott Kelly to see what changes occurred following Scott Kelly's one year mission aboard the International Space Station.² The knowledge gained from this research is not only relevant to humans traveling in space, but is also directly applicable to human health on Earth. For example, some of the muscle and bone changes observed in astronauts after prolonged space flight are similar to those seen in patients confined to bed rest during periods of critical illness as well as during the process of aging.

NASA is the only agency whose mission addresses the biomedical challenges of human space exploration. Over the past several years, the amount of money available for conducting this kind of research at NASA has dwindled. In the past, appropriations legislation specified funding levels for biomedical research and gravitational biology, but ongoing internal reorganizations at NASA have made it difficult to understand how much money is being spent on these programs from year to year. The APS recommends that funding streams for these important fundamental research programs be clearly identified and tracked within the NASA budget. The APS also recommends restoration of cuts to peer-reviewed life sciences research to allow NASA-funded scientists to conduct research that will be critical in not only supporting the success of future long-range manned space exploration but also leading to innovative discoveries that can be applied to Earth-based medicine. As highlighted above, investment in the basic sciences is critical to our nation's technological and economic future. This innovative engine of research fuels our world leadership and our economy. The APS urges you to make every effort to provide these agencies with increased funding for FY 2020.

The APS is a nonprofit devoted to fostering education, scientific research and dissemination of information in the physiological sciences. The Society was founded in 1887 with 28 members and now has over 10,000 members, most of whom hold doctoral degrees in physiology, medicine and/or other health professions.

¹<https://www.nsf.gov/statistics/2018/nsb20181/report/sections/overview/introduction>

²<https://www.nasa.gov/feature/nasa-twins-study-confirms-preliminary-findings>



**Official Written Testimony in Support of Fiscal Year 2020 National Science Foundation and
National Aeronautics and Space Administration Funding**

Submitted to the House Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States House of Representatives
April 4, 2019

Submitted by: Stephanie Farrell, Ph.D., President, American Society for Engineering Education
Norman Fortenberry, Sc.D., Executive Director, American Society for Engineering Education

Summary: This written testimony is submitted on behalf of the American Society for Engineering Education (ASEE) to the House Subcommittee on Commerce, Justice, Science, and Related Agencies for the official record. ASEE appreciates the Committee's support for the National Science Foundation (NSF) in fiscal year (FY) 2019 and asks you to robustly fund the agency in FY 2020, including the Research and Related Activities and the Education and Human Resources accounts. ASEE joins the academic and scientific community in requesting support of at least \$9 billion for NSF in FY 2020 to help alleviate impacts of historical underinvestment at NSF and advance both core research and education activities and NSF's Big Ideas for Future Investment. Additionally, ASEE supports continuation of funding at the National Aeronautics and Space Administration (NASA) dedicated to the Space Technology Mission Directorate (STMD), which supports engineers and scientists in developing technology to advance science and space missions in the national interest, and the Office of STEM Engagement, which supports and coordinates NASA educational efforts in engineering and STEM.

Written Testimony: The American Society for Engineering Education (ASEE) is dedicated to advancing engineering and engineering technology education and research, and is the only society representing the country's schools and colleges of engineering and engineering technology. Membership includes over 12,000 individuals hailing from all disciplines of engineering and engineering technology and including educators, researchers, and students as well as industry and government representatives. The **U.S. college-educated engineering workforce numbered 1.7 million** people in 2015,¹ the most jobs of any STEM discipline, and the demand for engineering professionals continues to grow. As the pre-eminent authority on the education of engineering professionals, ASEE works to develop the future engineering and technology workforce, expand technological literacy, and convene academic and corporate stakeholders to advance innovation and sound policy.

¹National Science Board. 2018. Science and Engineering Indicators 2018. NSB-2018-1. Alexandria, VA: National Science Foundation.

National Science Foundation

Engineering shapes our Nation and powers our innovation ecosystem. **National Science Foundation (NSF) basic research**, conducted in engineering schools and colleges around the country, **catalyzes new industries and revolutionary advances**. A workforce of well-trained engineers in industry and government takes those discoveries and develops innovative new technologies to improve our future. This system is **essential to growth and innovation across our economy**, and is helping to solve challenges in health, energy, and national security. **NSF is an essential partner, funding basic engineering and engineering education research at universities and supporting students to enable access to engineering education.**

ASEE would like to commend you for your commitment to funding NSF and for providing critical increases in fiscal years (FY) 2018 and 2019. Prior to these funding boosts, NSF received flat funding for several years, challenging the agency's ability to spur innovative discoveries and research, particularly as the buying power decreased. Due to budget limitations, NSF rejected about \$3.92 billion in cutting edge research proposals rated "very good or higher" according to the agency's merit criteria in FY 2017. Tremendous amounts of additional research and development could be undertaken, leading to novel and transformative discoveries, if more funding were available. Increasing NSF funding would help the U.S. stay the global innovation leader, as other countries have been accelerating research funding. The National Science Board predicted that in 2018 China surpassed U.S. investments in research and development. ASEE is also concerned that the shutdown significantly set back NSF research and education efforts. Increased support is needed for the agency to catch up on crucial initiatives put on hold.

ASEE joins the research and higher education community in requesting that the Committee fund NSF at \$9 billion in FY 2020 to continue the momentum from increased funding in FY 2019 to drive advances in research and education and ensure the U.S. retains global competitiveness and scientific leadership.

Investments in engineering education and research from NSF are essential for having a workforce trained and ready to contribute to industry, government, and academia. NSF is a major supporter of engineering research and workforce initiatives funding 36 percent of engineering and 85 percent of computer science academic fundamental research. NSF-funded advancements touch every corner of our lives and economy, from wireless systems to advanced manufacturing, and from new tools to combat brain diseases to technologies to ensure our cybersecurity. NSF supports engineering education at all levels, ensuring the next generation of the U.S. engineering workforce is appropriately prepared to contribute and innovate and that domestic students are attracted to careers in engineering and engineering technology.

ASEE strongly supports NSF's **Big Ideas for Future Investment** that dramatically propel engineering research and education forward while revolutionizing the human-technology frontier, medicine, quantum communications, and other areas. We urge continued investment in INCLUDES² to move the needle nationally on broadening participation. NSF needs additional

² Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science

investment to adequately pursue these exciting, new interdisciplinary and transformative ideas while investing in core research activities that power our research ecosystem. These core programs have stagnated for several years, threatening research innovation.

NSF-funded research catalyzes fundamental advances that are utilized for national security applications while engineers trained with NSF funding become key components of the national security workforce and industrial base. Our national security ecosystem depends on healthy NSF research and workforce support. NSF is also tackling major national security challenges through the *Navigating the New Arctic* and other Big Ideas.

The NSF **Directorate for Engineering (ENG)** provides critical support for engineering education and research across the breadth of the discipline. These investments have dual outcomes of training future engineers that will discover tomorrow's innovations, all while furthering today's cutting-edge research. Engineering investments at NSF provide critical advancements in areas such as resilient infrastructure, advanced materials and manufacturing, and bioengineering, in addition to equipping students with the skills they need to be the next generation of technological leaders. Divisions such as Engineering Education and Centers (EEC) support university research and Engineering Research Centers. ENG grantees have robust partnerships with industry and provide experiential opportunities fundamental to engineering education.

The NSF **Directorate for Computer and Information Science and Engineering** also plays a key role supporting engineering education and research, particularly within the Division of Information & Intelligent Systems, which supports efforts at the frontiers of information technology, data science, artificial intelligence, among other areas. These investments are critical as we move into a world even more reliant on human-technology interactions.

ASEE strongly supports NSF **Education and Human Resources (EHR)** funding to foster inclusive and effective learning and learning environments, though growth to this crucial NSF directorate has been neglected for several years. The STEM workforce, particularly engineers, technologists, and computer scientists, drives our innovation and economic development. We need to fully develop all of our nation's human talent in order to tackle pressing problems. Access to STEM experiences and skills are a critical aspect of developing well-rounded citizens, technological literacy, and the future STEM workforce. ASEE supports EHR programs including *Improving Undergraduate STEM Education (IUSE)*, which is critical for preparing professional engineers and enhancing engineering educational experiences to broaden participation and retention in engineering and engineering technology programs, and *Innovations in Graduate Education (IGE)* to revolutionize graduate studies to best prepare students for STEM careers.

NSF plays a key role ensuring the development of new tools for teaching engineering design and analysis skills, which are under-taught in today's K-12 classrooms. As noted in the 2009 National Academies report *Engineering in K-12 Education*, engineering education has received little attention yet has the potential to improve student learning and achievement in other areas of STEM, increase awareness of engineering careers, and increase technological literacy. Engineering's focus on design and analysis enhances problem solving, teaches students new

ways to approach challenges, and encourages students to connect science and math topics to real-world applications— all skills critical to the future technical workforce. ASEE supports programs to fill workforce needs including Advanced Technical Education (ATE) that prepares advanced technicians for America's high-skills workforce and graduate fellowships to create a pipeline of students knowledgeable and excited about engineering.

National Aeronautics and Space Administration

ASEE is concerned with the Administration's proposal to consolidate the **Space Technology Mission Directorate (STMD)** of the **National Aeronautics and Space Administration (NASA)** and redirect its activities solely towards human exploration. Of importance to ASEE, STMD activities support the workforce development pipeline of future space engineers and technologists by engaging directly with the academic community through early career faculty programs, early stage research grants, and university-led multidisciplinary research institutes. STMD's broad portfolio of activities helps to meet NASA's science objectives, establishes new commercial and academic partnerships, and stimulates the growth of the nation's technology sector. STMD programs fill significant capability gaps for NASA and better position the agency to meet its long-term strategic goals in areas across all its directorates ranging from propulsion and power generation to materials science and high-performance computing. **ASEE urges the Committee to block the Administration's proposal** and protect STMD's ability to focus on a broad array of NASA technology challenges, continue its engagement with the academic and private sectors, and keep its long-term focus beyond specific near-term mission goals. **ASEE joins the research community in requesting \$973 million for STMD in FY 2020.**

ASEE is also concerned with the Administration's proposed elimination of **NASA's Office of STEM Engagement**, renamed from the NASA Office of Education, and asks that the Committee sustain funding for this office in FY 2020 and beyond. NASA STEM Engagement programs inspire students to pursue engineering, science, and technology careers, and this office plays a vital role coordinating STEM education programs throughout the agency, including those at NASA centers. ASEE supports the continuation of the *National Space Grant College and Fellowship Program* (Space Grant), which supports university consortia in all 50 states, funding fellowships for engineering and other STEM students, while also offering important resources for faculty professional development and strengthening curricula. ASEE is also supportive of initiatives at the NASA Office of STEM Engagement to broaden participation in STEM and to bring engineering design and analysis experiences to K-12 students.

Conclusion: NSF education and research investments have truly transformed our world through engineering breakthroughs such as the internet, fiber-optics, and medical imaging technology. These investments keep our communities safe, lower healthcare costs, and spur our economy. Today, engineering research is opening possibilities through advances in areas such as artificial intelligence, biosensors, and advanced materials. We ask that you robustly fund NSF at \$9 billion to support critical education and research programs. In addition, we urge you to continue both STMD and the Office of STEM Outreach at NASA in FY 2020. Thank you for the opportunity to submit this testimony.



American Society of Plant Biologists

Cultivating a better future through plant biology research

Official Written Testimony in support of the National Science Foundation's Fiscal Year 2020 Budget

Submitted to the Subcommittee on Commerce, Justice and Science, and
Related Agencies

Committee on Appropriations
United States House of Representatives
April 4, 2019

On behalf of the American Society of Plant Biologists (ASPB), I submit this testimony for the official record to support \$9 billion for the National Science Foundation (NSF) for fiscal year (FY) 2020. ASPB recognizes the difficult fiscal environment our nation faces, but we believe that sustained investments in scientific research will be a critical step toward economic recovery and continued global competitiveness for our nation.

ASPB would like to thank the Subcommittee for its consideration of this testimony and for its strong support for the research mission of NSF.

ASPB is an organization of professional plant biology researchers, educators, graduate students, and postdoctoral scientists with members across the nation and throughout the world. A strong voice for the global plant science community, our mission—achieved through work in the realms of research, education, and public policy—is to promote the growth and development of plant biology, to encourage and communicate research in plant biology, and to promote the interests and growth of plant scientists in general.

Food, Fuel, Environment, and Health: Plant Biology Research and America's Future

Plants are vital to our very existence. They harvest sunlight, converting it to chemical energy for food and feed; they absorb carbon dioxide and produce oxygen; and they are the primary producers on which most life depends. Indeed, plant biology research is making many fundamental contributions in the areas of energy security and environmental stewardship; the continued and sustainable development of better foods, fabrics, and building materials; and in the understanding of biological principles that underpin improvements in the health and nutrition of all Americans.

Plant science has become that backbone of agricultural innovation, and a thriving agricultural sector has become a cornerstone for American economic success. Agriculture and agriculture related industries comprise 5.5 percent of the U.S. GDP, contributing nearly \$1 trillion and 21

million jobs to the economy.¹ In fact, despite persistent U.S. trade deficits, there has been a surplus in agricultural trade since 1960, and agricultural exports are projected to grow at a rate of 2.8 percent annually for the next 10 years.² To maintain and increase agricultural productivity, critical investments in basic biological sciences, such as plant biology, are needed.

In particular, plant biology is at the interface of numerous scientific breakthroughs. For example, with high throughput experimental approaches facilitating extraordinary syntheses of information that are NSF-supported, plant biologists are using computer science applications to make tremendous strides in our understanding of complex biological systems, ranging from single cells to entire ecosystems. Understanding how plants function ultimately will result in better and more productive crops, new sources of fuel, and the development of better medicines to treat diseases like cancer.

Despite the significant positive impact plants have on our nation's economy and in addressing some of our most urgent challenges, including food and energy security, federal investments in fundamental plant biology research are modest. Still scientists have maximized and leveraged this funding in order to understand the basic function and mechanisms of plants, providing a foundation for vital advances in practical applications in agriculture, health, energy, and the environment.

To address future societal challenges that might be mitigated through investments in plant biology research and to prioritize community research efforts, ASPB organized a two-phase Plant Science Research Summit with funding from NSF, the U.S. Department of Agriculture, the Department of Energy, and the Howard Hughes Medical Institute that resulted in the development of a community agenda document: *Unleashing a Decade of Innovation in Plant Science: A Vision for 2015-2025*

(plantsummit.files.wordpress.com/2013/07/plantsciencedecadalvision10-18-13.pdf). The report, part of an ongoing and iterative process, puts forth a ten-year consensus agenda to fill critical gaps in our understanding of plant biology in order to address the grand challenges we face. As a research community, our vision is to create plant systems that are flexible and adaptable to new and existing challenges by increasing the predictive and synthetic abilities of plant biology. In achieving these goals, the plant science research community will make significant contributions to:

- exploring, conserving and utilizing our natural resources;
- protecting, maintaining and improving crop productivity; and
- creating new plant-inspired industries.

Since the report's release, the community has launched the Plant Science Research Network to work on the next iteration and begun working on the development of specific recommendations in the areas of cyberinfrastructure, training, and broadening participation.

Robust Funding for the National Science Foundation

¹ <https://www.ers.usda.gov/webdocs/publications/85463/ap-078.pdf?v=43025>

² <https://www.ers.usda.gov/webdocs/publications/87459/oce-2018-1.pdf?v=43146>

ASPB encourages strong support for the Directorate of Biological Sciences (BIO) and proportional funding increases across all of the scientific disciplines NSF supports. As scientific research becomes increasingly interdisciplinary with permeable boundaries, a diverse portfolio at NSF is needed to maintain transformational research and innovation.

NSF funding for plant biology specifically enables the scientific community to address cross-cutting research questions that could ultimately solve grand challenges related to a sustainable food supply, energy security, and improved health and nutrition. This notion is reflected in the National Research Council's report *A New Biology for the 21st Century*.

NSF BIO is a critical source of funding for scientific research, providing the majority of the federal support for non-medical basic life sciences research at U.S. academic institutions and beyond. BIO supports research ranging from the molecular and cellular levels to the organismal, ecosystem, and even biosphere levels. These investments continue to have significant pay offs, both in terms of the knowledge directly generated and in deepening collaborations and fostering innovation among communities of scientists. This increase is needed as BIO received only a two percent increase since FY 2014, which when adjusted for inflation, actually represents a loss in purchasing power.

The Biological Sciences Directorate's Plant Genome Research Program (PGRP) is an excellent example of a high impact program that has laid a strong scientific research foundation for understanding plant genomics as it relates to energy (biofuels), health (nutrition and functional foods), agriculture (impact of changing climates on agronomic ecosystems), and the environment (plants' roles as primary producers in ecosystems). ***ASPB asks that the PGRP be funded at the highest possible level and have sustained funding growth to address 21st century challenges.*** Furthermore, in light of the need to create cyberinfrastructure across a wide range of scientific disciplines, ASPB supports efforts to homogenize metadata formats and enhance data sharing.

ASPB also supports the *Understanding the Rules of Life: Predicting Phenotype* initiative, part of NSF's 10 big ideas for future investment. The proposed initiative focuses on expanding current knowledge of plant genetics, the environment, and phenotypes, or an organism's observable characteristics. *Understanding the Rules of Life* takes a multidisciplinary approach to understanding plant genetics, incorporating computer science, biology, mathematics, engineering, and behavioral science to conduct foundational research in genotype to phenotype studies, plant science, microbiome, and synthetic biology. Research supported by *Rules of Life* will encourage using quantitative approaches to advance biological research, increasing the use of innovative new methods and interdisciplinary approaches to complex research questions.

Without significant and increased support for BIO and NSF as a whole, promising fundamental research discoveries will be delayed and vital collaborations around the edges of scientific disciplines will be postponed, thus limiting the ability to respond to the pressing scientific problems that exist today and the new challenges on the horizon. Addressing these scientific priorities also helps improve the competitive position of the United States in a global marketplace.

Continued Support for NSF Education and Workforce Development Programs

The National Science Foundation is a major source of funding for the education and training of the American scientific workforce and for understanding how educational innovations can be most effectively implemented. NSF's education portfolio impacts students at all levels, including K–12, undergraduate, graduate, and postgraduate, as well as the general public.

ASPB urges the Subcommittee to support expanding NSF's fellowship and career development programs—such as the Postdoctoral Research Fellowships in Biology, the Graduate Research Fellowship (GRF) and the Faculty Early Career Development (CAREER) programs—thereby providing continuity in funding opportunities for the country's most promising early career scientists.

Furthermore, the nearly seven-year median for a life-science PhD in the United States contrasts with other nations where students specialize earlier, thus entering doctoral programs with more uniform and advanced scientific foundations. To focus more attention on new types of skills, such as private-sector experience and data-science training, NSF may wish to consider encouraging universities to tailor undergraduate curricula to allow committed students to enter PhD programs without needing a significant amount of textbook-style coursework. One way to do so would be to offer a seamless, seven-year curriculum that combines bachelor's and doctoral education, thereby making the career path more attractive and reducing costs to investigators, institutions, and funding bodies. NSF may wish to fund exploration and development of this kind of program or curriculum.

ASPB urges support for NSF to further develop programs aimed at increasing the diversity of the scientific workforce by leveraging professional scientific societies' commitment to provide a professional home for scientists throughout their education and careers and to help promote and sustain broad participation in the sciences. Discrete focused training and infrastructure support programs for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities remain vitally important, because they foster a scientific workforce that reflects the U.S. population.

ASPB urges support for education research that enhances our understanding of how educational innovations can be sustainably and most effectively implemented in a variety of settings. NSF Education and Human Resources programs provide opportunities to expand NSF's research and evaluation efforts to address scale-up and sustainability. ***ASPB encourages continued support for education research programs within NSF's Education and Human Resources portfolio with a focus on understanding how previous investments in educational strategies can be made most effective.***

Grand research challenges will not be resolved in a year, an administration, or a generation, but will take continued attention and investment at federal research agencies, such as the National Science Foundation, over decades.

Thank you for your consideration of ASPB's testimony. For more information about ASPB, please visit us at www.aspb.org.



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TESTIMONY TO THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES FOR FY2020

Submitted by Nancy Blaney, Director, Government Affairs

April 4, 2019

Thank you for the opportunity to submit testimony on Fiscal Year 2020 funding priorities for the U.S. Department of Commerce (DOC), and the U.S. Department of Justice (DOJ).

DEPARTMENT OF COMMERCE

John H. Prescott Marine Mammal Rescue Assistance Grant Program

\$4 million

The John H. Prescott Marine Mammal Rescue Assistance Grant Program (Prescott Grant Program), a program under the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), provides competitive grants to marine mammal stranding network organizations to do the following: (1) rescue and rehabilitate sick, injured, or distressed live marine mammals, and (2) investigate the events surrounding and determine the cause of death or injury to marine mammals. Over the past 18 years, the Prescott Grant Program has been vital to protecting and recovering marine mammals across the country while also generating critical information regarding marine mammals and their environment. As the sole source of federal funding for the National Marine Mammal Stranding Network, which is comprised of over 90 member organizations within 23 states, robust funding is required for the Prescott Grant Program to enable it to continue its vital work.

ESA and MMPA Permitting Capacity

\$2.5 million

The NOAA FY2020 budget proposes to reduce the funding allocated to these efforts by \$2.599 million. As the agency acknowledges, this will decrease the resources available to NMFS' consultation and permitting capacity, which supports requirements under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). This comes at the same time that the agency is projecting an improved response for ESA Section 7 consultations, from 50 days in FY2019 to 47 days in FY2020. It is hard to see how that reduction in time can be accomplished with reduced resources.

North Atlantic Right Whale-Related Research and Development

\$5 million

With as few as 420 remaining right whales, NMFS' priority to "investigate and develop measures to mitigate threats to the recovery of North Atlantic right whales" deserves our full

support.¹ However, the Administration's FY20 budget request eliminating the \$1 million appropriated in FY19 for right whale research and development directly contradicts and undermines that priority.

The greatest threats to the survival of right whales are fishing gear entanglements and vessel strikes. Right whales are extremely vulnerable to being caught in the vertical buoy lines used in lobster and crab trapping gear. Entanglement can lead to drowning, reduced mobility, and, in some cases, a long, painful death from starvation. Ships also collide with right whales, causing deaths or serious injuries, such as blunt force trauma, propeller cuts, and broken bones. With this in mind, we respectfully request that you appropriate \$5 million to NMFS for North Atlantic right whale-related research and development for FY20 in order to facilitate effective and immediate conservation action.

Unusual Mortality Event Fund

\$4 million

Marine mammals are important indicator species of ocean health. Monitoring the health of marine mammals, especially during an Unusual Mortality Event (UME), can reveal emerging threats, potential impacts of human activities, and the effectiveness of management actions. A UME is defined as "a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response." NMFS currently oversees nine active UMEs (Northeast pinnipeds, Southwest Florida bottlenose dolphins, Atlantic minke whales, North Atlantic right whales, Atlantic humpback whales, Guadalupe fur seals, Florida manatees, California sea lions, and Texas bottlenose dolphins). Although Congress created this fund in 1992, it allocated monies to the fund only in 2005; any funding for UMEs has been through voluntary contributions. In light of the growing number of UMEs, we request an appropriation in the amount of \$4 million.

Alaska Marine Mammal Observer Program (AMMOP)

\$4 million

Mandated by the MMPA, NMFS must measure and report the effects of commercial fisheries on marine mammal stocks. One way in which NMFS complies with this law is through the Observer program. These programs provide vital independent third-party data; the NMFS website states, "NOAA Fisheries has determined that observer programs are the best means of obtaining accurate and objective data for determining rates of marine mammal takes in fisheries."²

Alaska produces more than half of the fish caught in waters off the coast of the United States; it is therefore troubling that NMFS is not operating the AMMOP "due to a lack of available resources to fund additional observations of the southeast Alaska salmon drift gillnet fishery."³ To remedy this shortfall in funding, and to restore the essential operations of AMMOP,

¹ U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (2019). NOAA Fisheries Priorities and Annual Guidance 2019. Retrieved from <https://www.fisheries.noaa.gov/resource/document/noaa-fisheries-priorities-and-annual-guidance-2019>

² U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. Alaska Marine Mammal Observer Program. Retrieved from <https://www.fisheries.noaa.gov/alaska/fisheries-observers/alaska-marine-mammal-observer-program>

³ U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. Alaska Marine Mammal Observer Program. Retrieved from <https://www.fisheries.noaa.gov/alaska/fisheries-observers/alaska-marine-mammal-observer-program>

we ask for \$4 million to the program, the same amount the Administration requests for the North Pacific Fishery Observer Fund for FY20.

Seafood Import Monitoring Program (SIMP)

\$3 million

It is promising to note that for FY20, the Administration has added nine new positions to the SIMP program and requested \$1.593 million in funds, an increase from the \$1.2 million in FY2019 that was used for SIMP program implementation. Given the scope and difficulty of tracking fraud; preventing illegal, unreported, and unregulated (IUU) fishing; and keeping the resulting seafood products from entering U.S. commerce, additional funding is essential. The program initially oversaw imports of 11 species, including sharks and sea cucumbers, two marine species that are increasingly threatened by IUU fishing. In 2019, two additional species, shrimp and abalone, entered SIMP, thereby doubling the volume of imported products covered by SIMP. Though the Administration's proposal is a welcome start, we request an increase to \$3 million in order to ensure full enforcement of SIMP.

Marine Mammal Commission (MMC)

\$5.25 million

The Marine Mammal Commission (MMC) is an independent federal agency established by Congress in 1972 under the MMPA. Responsible for overseeing the proper implementation of the MMPA, the MMC provides comprehensive, independent, science-based oversight of all federal and international policy and management actions affecting marine mammals. The MMC's work is crucial for maintaining healthy populations of marine mammals, including whales, manatees, dolphins, seals, sea otters, walruses, and polar bears, and ensuring their survival for generations to come. Additionally, the MMC seeks to ensure that Alaska Natives can meet their subsistence needs through hunting of marine mammals.

Unwisely, the Administration seeks to eliminate the Commission. Not only do we strongly oppose such a move, but we also recommend increasing MMC funding. Since FY 2015, the MMC has been funded at a flat level of \$3.43 million – this level of funding translates to about one penny per American per yer. However, since that time, the MMC has absorbed significant fixed costs, leading to reduced discretionary funding for its core functions by roughly 53 percent (\$1.82 million). In order to restore the Commission to the discretionary funding level it had in FY 2015, \$5.25 million is needed. This level of funding will better enable the MMC to fulfill its significant obligations as outlined in the MMPA.

Cooperative Enforcement Program

\$18.279 million

The NOAA Fisheries Cooperative Enforcement Program is aimed at increasing living marine resource conservation, endangered species protection, and critical habitat enforcement. The program is based on Cooperative Enforcement Agreements, which authorize state and U.S. territorial marine conservation law enforcement officers to enforce federal laws and regulations, and on Joint Enforcement Agreements (JEAs), which include transfers of funds to state and U.S. territorial law enforcement agencies to perform law enforcement services in support of federal regulations such as the ESA, MMPA, the Magnuson-Stevens Fisheries Conservation and Management Act, and the Lacey Act. The FY2020 budget proposes to eliminate \$18.279 million in funding for this program. As a result, NOAA will be unable to implement JEAs for 27 states

and U.S. territories, significantly hampering law enforcement efforts. Given the importance of this enforcement work, we request maintaining this funding.

Galveston Sea Turtle Facility

In 2018, NOAA announced that the Galveston Sea Turtle Facility would close due to “budget constraints.” This facility does life-saving work by rescuing and rehabilitating threatened and endangered sea turtles. It is also the only facility in the U.S. with a sea turtle captive-rearing program that allows for testing of Turtle Excluder Devices (TEDs) for fishing nets, primarily shrimp trawlers. Metal grates inserted into shrimp nets that allow sea turtles and other ocean wildlife to escape, TEDs are a simple solution to ensure target fish and shrimp species are more effectively and sustainably caught by preventing larger marine species from accidentally getting ensnared and dying. Using TEDs benefits sea turtles, fishermen, and the general public – these devices have the potential to save thousands of sea turtles and other ecologically and economically important marine species, to reduce millions of pounds of wasted seafood, to open new markets to U.S. shrimpers, to boost nature-based tourism, and to leave more fish in the sea for other fishermen. For example, in 2013, the Gulf of Mexico shrimp trawl fishery discarded over 242 million pounds of fish—including species popular with recreational anglers, like red snapper, red and black drum, and Spanish and King mackerel. This wasted seafood equated to over \$357 million in value for commercial fisheries. The Galveston facility requires only \$600,000-\$800,000 per year to stay operational, a mere fraction of NOAA’s \$3 billion-plus annual budget.

We urge the committee to adopt the following language: *The Committee directs the National Marine Fisheries Service to continue full operations of and full funding for the ongoing work on captive sea turtle rearing, Turtle Excluder Device research and certification to reduce sea turtle bycatch, and sea turtle stranding and rehabilitation programs.*

DEPARTMENT OF JUSTICE

Protecting Animals With Shelter (PAWS)

Violence in the home can be directed at companion animals as well as at the human members of the household. Abusers threaten, harm, and even kill pets to frighten and control their victims. Few domestic violence survivors have access to shelters that can protect them and their pets; in fact, large numbers delay their escape out of fear for the safety of the pets left behind. Congress has wisely sought to address this shortage of resources. Section 12502 of P.L. 115-334, the Agriculture Improvement Act of 2018, authorizes a grant program to provide emergency and transitional shelter and housing options for domestic violence survivors with companion animals. It is urgent that Congress now appropriate the authorized funding and direct the agencies involved to take all necessary steps to implement the program. For that reason, we ask the subcommittee to include the following directive to the Department of Justice:

Requested Report Language: *The Committee directs the Attorney General to enter into consultations with the Secretary of Agriculture as soon as possible, and enter into any memoranda of understanding as directed, in order to establish during FY 2020 the requirements for grant application and execution under Section 12502 of P.L. 115-334, the Agriculture Improvement Act of 2018, to provide emergency and transitional shelter and housing options for domestic violence survivors with companion animals.*

Gonzalo de la Melena, President/CEO, Arizona Hispanic Chamber of Commerce
 Michael A. Chan, President, ASIAN, Inc.
 Paul Taylor, Director, Baltimore Mayor's Office of Small, Minority and Women Business Development
 Nancy Carin, Executive Director, Business Outreach Center Network
 Pat Fong Kushida, President/CEO, California Asian Pacific Chamber of Commerce
 Cindy Ramos-Davidson, CEO, El Paso Hispanic Chamber of Commerce
 Della Clark, President, The Enterprise Center
 Beatrice Louissaint, President/CEO, Florida State Minority Supplier Development Council
 Loretta Caldwell, President/CEO, L.S. Caldwell & Associates
 Marie Gill, President/CEO, M. Gill & Associates
 Gary Cunningham, President/CEO, Metropolitan Economic Development Association
 Jozelle Luster Booker, President/CEO, Mid-South Minority Business Council Continuum
 Steven Brown, President/CEO, South Bronx Overall Economic Development Corporation

April 3, 2019

The Honorable José Serrano, Chair
 Subcommittee on Commerce, Justice,
 Science, and Related Agencies
 House Committee on Appropriations
 H-307, The Capitol
 Washington, DC 20515

The Honorable Robert Aderholt, Ranking Member
 Subcommittee on Commerce, Justice, Science,
 and Related Agencies
 House Committee on Appropriations
 1016 Longworth House Office Building
 Washington, DC 20515

RE: House CJS Appropriations Bill and Report Language, Department of Commerce, Minority Business Development Agency, FY2020

Dear Chairman Serrano and Ranking Member Aderholt:

Our organizations have successfully operated multiple MBDA Business Centers at the behest of the U.S. **Department of Commerce's Minority Business Development Agency**. Today, we and other Center operators have specific reason to be gravely concerned about the potential loss of crucial job-creating and job-saving value that the national network of MBDA Business Centers, Export Centers, Advanced Manufacturing Centers and the Federal Procurement Center are providing. Therefore, we are writing to request that, as you negotiate and finalize legislation to fund the government for the FY2020 budget cycle, that the House Appropriations Committee's bill and report include the following language:

[REDACTED]

The nationwide network of 35 MBDA Business Centers is the “flagship” program of the Minority Business Development Agency. The Centers serve as the face of the Agency’s imperative as the direct technical assistance providers to job-generating minority businesses on the ground, in communities across the Nation. Language in the final Senate CJS Appropriations bill report must include language that provides assurance and certainty that the MBDA Business Center network is to be funded fully in the coming fiscal year.

Without the MBDA Business Center network, MBDA would simply be unable to provide hands-on assistance to facilitate access to capital or contracts by minority businesses. In FY2017, nationally the MBDA Business Center network completed nearly **\$5 billion in capital transactions** and nearly **\$3 billion in contract transactions**, helping businesses owned by African Americans, Hispanic Americans, Asian and Pacific Islander Americans, Native Americans (including Alaska Natives, Alaska Native Corporations and Tribal entities), Asian Indian Americans and Hasidic Jewish Americans create and save **18,555 jobs** across the country. All transactions are client-verified and evidenced by documentation submitted to and vetted by MBDA headquarters. It is important to note that as a highly efficient economic development tool, the MBDA Business Center network more than pays for itself. **The MBDA Business Center network has returned \$234 for every taxpayer dollar invested in the Agency and the centers.**

As you know, MBDA was established in 1969 by President Richard Nixon through Executive Order 11458. The agency is a part of the Department of Commerce and is the premier federal agency dedicated to supporting the expansion of minority- and Native-owned business enterprises. The President’s FY2020 budget blueprint recommended the reduction of the agency by transitioning away from MBDA centers, each of which provides businesses with direct services to assist them to grow in size and scale. Activities, which are not in duplication of any Small Business Administration program, include bid proposal support, pricing, commercializing technology, pitching to investors, merging and acquiring firms, and securing investment.

While other federal agencies focus on broader demographic and emerging businesses, MBDA focuses exclusively on the unique needs of minority-owned, middle-stage businesses. MBDA is the only federal agency dedicated to the growth and global competitiveness of our Nation’s **11 million minority business enterprises (MBES)**, which, according to the U.S. Census Bureau’s 2007 Survey of Business Owners, **contributed \$1 trillion in total economic output and employed nearly 6 million Americans**. Given the economic challenges that MBES face and the income and wealth gap between minority and non-minority communities, it is important that we fund the MBDA Business Center network to support these firms with overcoming some of the obstacles that they disproportionately encounter.

Thank you for your commitment to ensuring that MBES are able to maximize their potential, and for your consideration of this request. We appreciate the opportunity to testify further to the importance of preserving the MBDA Business Center network’s job-creating and job-saving value to the Nation.

Sincerely,

Michael A. Chan
 President, ASIAN, Inc.
 San Francisco, CA
 Operator, Fresno & San Jose MBDA Business Centers

Beatrice Louissaint
 President/CEO, Florida State Minority Supplier
 Development Council
 Miami, FL
 Operator, Miami & Orlando MBDA Business Centers

Della Clark
 President, The Enterprise Center
 Philadelphia, PA
 Operator, Philadelphia MBDA Business Center

Loretta Caldwell
 President/CEO, L.S. Caldwell & Associates
 Baltimore, MD
 Operator, Baltimore MBDA Business Center

Paul E. Taylor
 Director, Mayor's Office of Small, Minority and Women
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 Operator, Baltimore MBDA Advanced Manufacturing
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Gary Cunningham
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 Phoenix, AZ
 Operator, Phoenix MBDA Business Center

Steven Brown
 President/CEO, South Bronx Overall Economic
 Development Corporation
 New York, NY
 Operator, South Bronx MBDA Business Center

Cindy Ramos-Davidson
CEO, El Paso Hispanic Chamber of Commerce
El Paso, TX
Operator, El Paso MBDA Business Center

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Jozelle Booker
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Nancy Carin
Nancy Carin
Executive Director, Business Outreach Center
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Operator, Manhattan MBDA Business Center

Pat Fong Kushida
President/CEO, California Asian Pacific Chamber of
Commerce
Sacramento, CA
Operator, Sacramento MBDA Export Center

cc: All Members, House Committee on Appropriations

Testimony submitted for the record on April 4, 2019 to the
House Committee on Appropriations
Subcommittee on Commerce-Justice-Science
by

Sarah Brookhart, Executive Director, Association for Psychological Science

Addressing critical programs at the National Science Foundation

HIGHLIGHTS OF APS RECOMMENDATIONS

- As a member of the Coalition for National Science Funding, **APS recommends at least \$9 billion for NSF in FY 2020.** A bold approach to NSF funding is necessary in FY 2020 to provide needed support for the potentially transformational Big Ideas initiatives, protect core programs that sustain broad science and engineering fields, build and operate world-class research infrastructure, and train the future STEM workforce for the United States to remain globally competitive.
- NSF's Directorate for Social, Behavioral, and Economic (SBE) Sciences conducts research that increases the fundamental understanding of human social development and interaction and of human behavior. SBE programs enable basic research in cross-cutting topics by psychological scientists along with behavioral economists, political scientists, sociologists, linguists, neuroscientists, anthropologists, and other social and behavioral scientists to address problems that range from coastal flood response to the needs of an aging population to preparing our military with the insights they need to understand behavior in a changing world. Through its various core disciplinary and interdisciplinary programs, as well as contributions to cross-directorate NSF investments, SBE supports approximately 5,000 scientists, educators, and students in a typical year. Unfortunately, in eras of tight budgets, the SBE Directorate is also a popular target for budget cuts. **APS urges the Committee to recognize the important contributions of the SBE Directorate with supportive report language and implied funding increases.**

STATEMENT OF APS EXECUTIVE DIRECTOR

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to provide testimony as you consider funding priorities for Fiscal Year (FY) 2020. I am Sarah Brookhart, Executive Director of the Association for Psychological Science (APS).

APS is a nonprofit organization dedicated to the advancement of scientific psychology nationally and internationally. APS's 35,000 members are scientists and educators at the Nation's universities and colleges, conducting research supported by the National Science Foundation (NSF). The research funded by NSF's Social, Behavioral, and Economic (SBE) Sciences Directorate provides a fundamental understanding of such basic human functions as cognition, perception, social connections and influences, and communication, without which decision-making on the full range of major national issues would not be based on evidence, resulting in suboptimal inefficient outcomes and otherwise avoidable waste of federal dollars. SBE scientists

develop and employ rigorous methods to discover fundamental principles of human behavior at levels ranging from cells to society and from neurons to neighborhoods. We urge the Committee to include supportive report language and implied funding increases for the SBE Directorate in the FY 2020 CJS Appropriations bill and report.

Mr. Chairman, APS joins the Coalition for National Science Funding (CNSF)—a broad-based group of over 140 professional organizations, universities, businesses, and scientific societies that advocates for robust and sustained federal support for science—and recommends a FY 2020 appropriation of at least \$9 billion for NSF, an increase of \$900 million or 11% over the FY 2019 funding level. NSF faces enormous unmet funding needs due to a cumulative stagnation over many years. Additionally, we strongly encourage and recommend that Congress reach a bipartisan agreement to raise the budget caps for non-defense discretionary spending.

Further, we urge that the Committee recognize, through report language, the important work conducted by NSF's SBE Directorate. The importance of behavioral research recently has been recognized by a major NSF award. The 2018 Alan T. Waterman Award, the Nation's highest honor for early career scientists and engineers, was recently awarded to psychological scientist Kristina R. Olson. Dr. Olson, of the University of Washington, was selected from a large group of highly qualified nominees representing all disciplines for her innovative contributions to understanding children's attitudes toward and identification with social groups; early prosocial behavior; the development of notions of fairness, morality, inequality; and the emergence of social biases. Dr. Olson received funding from NSF's SBE Directorate and her work exemplifies the type of groundbreaking research funded by that Directorate. Additionally, the 2018 Golden Goose Award winners included Dr. Mahzarin Banaji, of Harvard University, for her fundamental work that uncovered the universal phenomenon in human behavior known as implicit bias. This important work was also funded by SBE.

RECOGNIZING THE LEADERSHIP OF THE SUBCOMMITTEE

Mr. Chairman, APS recognizes and appreciates your leadership and the leadership of this Subcommittee in supporting federal research. We applaud the Committee's commitment to maintaining our nation's economic growth, national security, and overall global competitiveness through investment in science. We are grateful for the appropriations the agency received in FY 2018 and FY 2019, yet we respectfully recognize that more is required to address the effects of historical underinvestment in fundamental research in the United States. According to the National Science Board, approximately \$3.92 billion of cutting-edge research deemed "very good or higher" in NSF's merit criteria was unfunded in FY 2017. The potential impact of these missed opportunities is even starker when considering the return on investment of fundamental scientific research and the significant investments that other nations—both allies and adversaries—are making in comparable research areas.

The National Science Foundation not only supports the competitiveness and growth of our country, but also of each Member's state as well. In FY 2018, for example, New York research institutions were competitively awarded 1,473 NSF grants totaling \$514.2 million, and Alabama

research institutions were competitively awarded 177 NSF grants totaling \$60.1 million. NSF research benefits every state in the country on a local and global level.

FUNDING FOR THE NATIONAL SCIENCE FOUNDATION AND POLICY ISSUES

As previously noted, APS recommends an FY 2020 funding level of at least \$9 billion for NSF, a funding level that would underscore that supporting fundamental scientific research is a national priority. The Administration's request of \$7.07 billion in FY 2020 is a \$1.03 billion cut from the funding level in FY 2019. We view a cut this deep as reckless and short sighted; it would be detrimental to the universities across the country and the American research enterprise. APS is in strong opposition to the Administration's proposal.

Additionally, while APS does not recommend that the Congress start to provide funding by directorate the Administration has recommended directorate level funding. APS opposes this funding approach but notes that the Administration's request proposes cutting funding for the Social, Behavioral, and Economic Sciences Directorate by 8.2% resulting in 93 fewer SBE research awards compared with the number funded in FY 2018. As mentioned previously, SBE research has implications for improving the safety of our troops in combat, reducing violence among our youth, improving public health and education, improving the effectiveness of the criminal justice system, helping paralyzed people communicate, and improving economic decision making. Despite being the smallest Directorate at NSF, the SBE Directorate funds 55% of all university-based behavioral and social science research in the Nation. In the Chairman and Ranking Member's home states of New York and Alabama, SBE in FY 2019 awarded over \$20.4 million to fund 137 competitive research grants. We therefore urge the Committee include the following report language:

Directorate for Social, Behavioral and Economic Sciences—The Committee supports the research funded by the Directorate for Social, Behavioral and Economic Sciences and recognizes the fundamental importance of this research to advancing our understanding of human behavior and its application to improving a wide range of complex human systems, including health, national defense and security, education and learning, and the efficient integration of human and machine. This research has implications for improving the safety of our troops in combat, reducing violence among our youth, improving public health, improving the effectiveness of the criminal justice system, helping paralyzed people communicate, and improving economic decision making. The Directorate for Social, Behavioral and Economic Sciences funds 55% of university-based social and behavioral science research in the nation, but it remains the smallest of the NSF directorates, accounting for only 3.7% of the entire NSF budget. The Committee believes that Social, Behavioral and Economic Sciences Directorate research provides a fundamental understanding of the human condition, without which decision making on the full range of major national issues could not be based on evidence, leading to billions of dollars wasted.

SUMMARY AND CONCLUSION

Mr. Chairman, again we wish to thank the Subcommittee for its past leadership. APS shares your commitment to foster innovation and U.S. economic competitiveness through appropriately investing in our Nation's research infrastructure. The President's request will result in 1,200 fewer grants funded in FY 2020 than were funded last year. While APS requests \$9 billion for the agency, even more federal funding for NSF could result in more research projects being funded—research that could lead to new knowledge, new discoveries, and possibly products, services, and new industries. Additional SBE research will continue to help us understand patterns of stability and change at the individual, group, organizational, and societal levels that can be applied to promote the progress of science and to advance national health, prosperity, and welfare.

We appreciate the opportunity to provide this testimony and thank you for your continued leadership.

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**Dan Ashe, President and CEO
Association of Zoos and Aquariums**

On behalf of the facilities accredited by the Association of Zoos & Aquariums (AZA), a non-profit organization dedicated to the advancement of accredited zoos, aquariums, science centers, and nature centers in the areas of conservation, education, science, and recreation, I am writing to express my strong support for several programs in FY2020. Specifically, I respectfully request that you include at least \$8,000,000 for NOAA's Environmental Literacy Grants Program; \$12,000,000 for the Bay, Watershed, Education and Training (BWET) Program; \$4,000,000 for the John H. Prescott Marine Mammal Rescue Assistance Grant Program; \$10,000,000 for the Marine Debris Program; \$93,500,000 for the National Sea Grant College Program; and, \$5,250,000 for the Marine Mammal Commission in the FY2020 Commerce, Justice, Science, and Related Agencies appropriations bills.

The NOAA Environmental Literacy Grants and BWET programs bring students closer to science by providing them with the opportunity to learn firsthand about our world's marine resources. Through these grant programs, aquariums and zoos work closely with federal, state, and local partners on projects with long-lasting benefits not only for the students but their communities as well. Previous projects funded by these programs at AZA aquariums have focused on establishing a regional network of summer camp programs grounded in ocean science, enhancing teen conservation leadership programs, and conserving and managing coastal and marine resources to meet our nation's economic, social and environmental needs. As schools face increased budgetary pressures, these types of education programs will become even more important in assuring that schoolchildren receive the necessary foundation in science education that they will need to be competitive in the 21st century global economy.

Education programs at AZA-accredited facilities provide essential learning opportunities, particularly about science, for schoolchildren in formal and informal settings. AZA-accredited zoos and aquariums educate more than 12 million students about wild animals, their habitats, and the ways in which the public can contribute to their conservation. Over the past ten years, AZA-accredited facilities also have trained more than 400,000 teachers, ensuring that aquarium and zoo field trips or in-class education programs support science curricula at the state and local levels. Without programs like the NOAA Environmental Literacy Grants Program, the BWET Program, and others, opportunities for engaging schoolchildren to learn about science will be lost and the ability of accredited zoos and aquariums to partner with federal agencies on education initiatives will be severely limited.

Prescott grants provide critical resources to stranding network participants, many of which are AZA-accredited aquariums, for the recovery and treatment of stranded marine mammals and turtles. These are the only federal funds that aquariums receive to help offset the cost of saving and rehabilitating thousands of stranded animals. Moreover, the data that aquariums collect from stranded animals is very important not only as indicators of ocean health, but also in identifying emerging zoonotic diseases and harmful algal blooms that can impact commercially valuable species and human health.

AZA-accredited aquariums and other institutions work hard to leverage federal resources to save and rehabilitate stranded animals in every part of the nation's coastline. Programs utilize the services of thousands of volunteers who donate their time to help save stranded and entangled

marine mammals and collect key data. However, aquariums need resources to fund the equipment, personnel and operating cost to run these extensive and expensive stranding programs, and federal funds provide a small, but critical, piece of overall funding. Without those funds, many aquariums and other institutions are unable to operate their stranding programs.

AZA-accredited facilities work with federal, state, and local partners to address the marine debris accumulating in the ocean and in rivers, lakes, and streams across the country. Recent studies estimate that at least eight million metric tons of plastic are dumped into the world's oceans each year. This pollution affects the availability of clean water for humans, harms the species living in these vital bodies of water, and has an impact on the economy and local communities. The NOAA Marine Debris Program offers several nationwide, competitive funding opportunities for marine debris projects including removal grants, education and outreach grants, and research grants. With the amount of marine debris expected to significantly increase over the next decade, these grants are critical to cleaning up the existing trash as well as educating citizens about how to address this global problem.

The National Sea Grant College Program funds initiatives that are supported by AZA-accredited facilities including conservation of coastal, ocean, and Great Lake areas and promotion of long-term stewardship and responsible use of those aquatic resources. The thirty-three state Sea Grant programs, located in every coastal and Great Lakes state, collaborate with AZA-accredited zoos and aquariums on a variety of projects including aquaculture research, STEM education, and environmental hazards. This valuable program also funds essential government fellowships for qualified individuals who want to help legislators and federal agencies shape policies affecting coastal, Great Lake, and ocean areas.

As mandated by the Marine Mammal Protection Act (MMPA), the Commission's mission is to advance the conservation of marine mammals and their environment. Its activities include providing independent, science-based oversight of domestic and international policies and the actions of federal agencies addressing the human impact on marine mammals and their ecosystems, producing reports for policymakers, coordinating essential research initiatives, and assisting Alaska Natives pursue their traditional rights under the MMPA. AZA-accredited facilities play a critical role in marine mammal conservation through broad-based public education and outreach activities, cutting-edge research projects, and advocacy for marine protected areas and other strong policies to protect our oceans. The work of the Marine Mammal Commission is critical to these efforts.

As you determine priorities for the FY2020 Commerce, Justice, Science, and Related Agencies appropriations bills, I strongly encourage you to assure that the NOAA Environmental Literacy Grants Program, BWET Program, John H. Prescott Marine Mammal Rescue Assistance Grant Program, Marine Debris Program, National Sea Grant College Program, and Marine Mammal Commission receive the necessary funding so that AZA-accredited facilities can continue to work with their federal, state, and local partners to preserve our marine resources and assure that current and future generations will be good stewards of the world's precious aquatic resources.

Thank you.

Addendum:

AZA-accredited facilities:	Abilene Zoological Gardens	African Safari Wildlife Park
	Adventure Aquarium	Akron Zoological Park
		Alaska SeaLife Center

- Albuquerque Biological Park
 Alexandria Zoological Park
 Aquarium of Niagara
 Aquarium of the Bay
 Aquarium of the Pacific
 Arizona Sonora Desert Museum
 Audubon Aquarium of the Americas
 Audubon Zoo
 Bergen County Zoological Park
 Binder Park Zoo
 Birch Aquarium at Scripps
 Birmingham Zoo
 Blank Park Zoo
 Boonshoft Museum of Discovery
 Bramble Park Zoo
 Brandywine Zoo
 Brevard Zoo
 Bronx Zoo/WCS
 Brookgreen Gardens
 Buffalo Zoo
 Busch Gardens (Tampa)
 The Butterfly House
 Butterfly Pavilion
 Buttonwood Park Zoo
 Cabrillo Marine Aquarium
 Caldwell Zoo
 California Science Center
 Cameron Park Zoo
 Cape May County Park Zoo
 Capron Park Zoo
 Central Florida Zoological Park
 Central Park Zoo
 Chahinkapa Zoo
 Charles Paddock Zoo
 Chattanooga Zoo at Warner Park
 Cheyenne Mountain Zoological Park
 Chicago Zoological Society - Brookfield Zoo
 Cincinnati Zoo and Botanical Garden
 Cleveland Metroparks Zoo
 Clyde Peeling's Reptiland
 Columbus Zoo and Aquarium
 Como Park Zoo and Conservatory
 Connecticut's Beardsley Zoo
 Cosley Zoo
 CuriOdyssey
 Dakota Zoo
 Dallas World Aquarium
 Dallas Zoo
 David Traylor Zoo of Emporia
 Denver Zoological Gardens
 Detroit Zoological Park
 Dickerson Park Zoo
 Discovery Cove
 Disney's Animal Kingdom
 El Paso Zoo
 Ellen Trout Zoo
 Elmwood Park Zoo
 Erie Zoo
 The Florida Aquarium
 Fort Wayne Children's Zoo
 Fort Worth Zoo
 Fossil Rim Wildlife Center
 Franklin Park Zoo
 Fresno Chaffee Zoo
 Georgia Aquarium
 Gladys Porter Zoo
 Great Plains Zoo and Delbridge Museum of Natural History
 Greensboro Science Center
 Greenville Zoo
 Grizzly & Wolf Discovery Center
 Happy Hollow Zoo
 Henry Vilas Zoo
 Houston Zoo, Inc.
 Hutchinson Zoo
 Idaho Falls Zoo at Tautphaus Park
 Indianapolis Zoological Society, Inc.
 International Crane Foundation
 Jacksonville Zoo and Gardens
 Jenkinson's Aquarium
 John Ball Zoological Gardens
 John G. Shedd Aquarium
 Kansas City Zoo
 Lake Superior Zoo
 Landry's Downtown Aquarium - Denver
 Landry's Houston Aquarium, Inc.
 Lee G. Simmons Conservation Park & Wildlife Safari
 Lee Richardson Zoo
 Lehigh Valley Zoo
 Lincoln Children's Zoo
 Lincoln Park Zoological Gardens
 Lion Country Safari
 Little Rock Zoological Gardens
 Living Desert Zoo & Gardens State Park
 The Living Desert Zoo and Gardens
 Los Angeles Zoo
 Louisville Zoological Garden
 Maritime Aquarium at Norwalk, Inc.
 Maryland Zoo in Baltimore
 Memphis Zoological Garden and Aquarium
 Mesker Park Zoo & Botanic Garden, Inc.
 Miller Park Zoo
 Milwaukee County Zoological Gardens
 Minnesota Zoological Garden
 Monterey Bay Aquarium
 Moody Gardens Rainforest and Aquarium

Mote Marine Laboratory
 and Aquarium
 Museum of Life and
 Science
 Museum of Science
 Mystic Aquarium
 Naples Zoo
 Nashville Zoo
 National Aquarium
 National Aviary
 National Mississippi River
 Museum & Aquarium
 New England Aquarium
 New York Aquarium
 Newport Aquarium
 North Carolina Aquarium at
 Fort Fisher
 North Carolina Aquarium at
 Pine Knoll Shores
 North Carolina Aquarium
 on Roanoke Island
 North Carolina Zoological
 Park
 Northeastern Wisconsin
 (NEW) Zoo
 Northwest Trek Wildlife
 Park
 Oakland Zoo
 OdySea Aquarium
 Oglebay's Good Zoo
 Oklahoma City Zoo and
 Botanical Garden
 Omaha's Henry Doorly Zoo
 & Aquarium
 Oregon Coast Aquarium
 Oregon Zoo
 Palm Beach Zoo at Dreher
 Park
 Peoria Zoo
 Philadelphia Zoo
 The Phoenix Zoo
 Point Defiance Zoo and
 Aquarium
 Potawatomi Zoo
 Potter Park Zoological
 Gardens
 Prospect Park Zoo
 Pueblo Zoo

Queens Zoo
 Racine Zoological Gardens
 Red River Zoo
 Reid Park Zoo
 Ripley's Aquarium at
 Myrtle Beach
 Ripley's Aquarium of the
 Smokies
 Riverbanks Zoo and Garden
 Riverside Discovery Center
 Roger Williams Park Zoo
 Rolling Hills Zoo
 Roosevelt Park Zoo
 Rosamond Gifford Zoo at
 Burnet Park
 Sacramento Zoo
 Safari West
 Saginaw Children's Zoo
 Saint Louis Zoo
 Salisbury Zoological Park
 San Antonio Zoological
 Society
 San Diego Zoo
 San Diego Zoo Safari Park
 San Francisco Zoological
 Gardens
 Santa Barbara Zoological
 Gardens
 Santa Fe College Teaching
 Zoo
 Scovill Zoo
 SEA LIFE Arizona
 Aquarium
 SEA LIFE Carlsbad
 Aquarium
 SEA LIFE Charlotte-
 Concord Aquarium
 SEA LIFE Grapevine
 Aquarium
 SEA LIFE Kansas City
 Aquarium
 SEA LIFE Michigan
 Aquarium
 SEA LIFE Orlando
 Aquarium
 The Seas
 Seattle Aquarium
 SeaWorld Orlando

SeaWorld San Antonio
 SeaWorld San Diego
 Sedgwick County Zoo
 Seneca Park Zoo
 Sequoia Park Zoo
 Shark Reef Aquarium at
 Mandalay Bay
 Smithsonian National
 Zoological Park
 South Carolina Aquarium
 Squam Lakes Natural
 Science Center
 St. Augustine Alligator
 Farm
 Staten Island Zoo
 Steinhart Aquarium
 Stone Zoo
 Sunset Zoological Park
 Tennessee Aquarium
 Texas State Aquarium
 Toledo Zoological Gardens
 Topeka Zoo and
 Conservation Center
 Tracy Aviary
 Trevor Zoo
 Tulsa Zoo
 Turtle Back Zoo
 Utah's Hogle Zoo
 Utica Zoo
 Virginia Aquarium and
 Marine Science Center
 Virginia Living Museum
 Virginia Zoological Park
 Western North Carolina
 Nature Center
 Wildlife Safari
 The Wilds
 Woodland Park Zoo
 Zoo Atlanta
 Zoo Boise
 Zoo Knoxville
 Zoo Miami
 ZOOAMERICA NA
 Wildlife Park
 ZooTampa at Lowry Park

**STATEMENT OF THE AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM
PREPARED FOR THE U.S. HOUSE OF REPRESENTATIVES - COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES**

April 4, 2019

On behalf of the nation's Tribal Colleges and Universities (TCUs), which collectively are the American Indian Higher Education Consortium (AIHEC), we thank you for the opportunity to share our recommendations regarding the National Science Foundation's TCU Program (NSF-TCUP), Louis Stokes Alliance for Minority Participation (LSAMP), and the National Aeronautics and Space Administration's Minority University Research and Education Program (NASA-MUREP).

National Science Foundation (NSF)

Education and Human Resources Directorate (EHR):

- **Tribal Colleges and Universities Program (TCUP):** *TCUs urge the Subcommittee to fund competitively awarded NSF-TCUP grants at a minimum of \$16,000,000 for FY2020. This program also awards grants to Alaska Native Serving and Native Hawaiian Serving Institutions.*
- **Louis Stokes Alliance for Minority Participation (LSAMP):** *TCUs urge the Subcommittee to support NSF-LSAMP program with an added emphasis for American Indian, Alaska Native, and TCU students.*

National Aeronautics and Space Administration (NASA)

- **NASA Headquarters, Office of Education - Minority University Research and Education Programs (MUREP):** *TCUs urge the Subcommittee to continue the NASA MUREP program with robust funding and support a TCU-specific program within MUREP at \$5,000,000 for FY2020*

Tribal Colleges and Universities: Training the Nation's Native STEM Workforce

TCUs are an essential component of American Indian/Alaska Native (AI/AN) STEM education and research. Currently, 37 TCUs operate more than 75 campuses and sites in 16 states. TCU geographic boundaries encompass 80 percent of American Indian reservations and federal Indian trust lands. American Indian and Alaska Native TCU students represent at least 233 of the 573 federally recognized tribes and hail from more than 30 states. Nearly 80 percent receive federal financial aid. TCUs serve over 160,000 American Indians, Alaska Natives, and other rural residents each year through a wide variety of academic and community-based programs. TCUs are public institutions accredited by independent, regional accreditation agencies and, like all U.S. institutions of higher education, must regularly undergo stringent performance reviews to retain their accreditation status. Each TCU is committed to improving the lives of its students through higher education and to moving AI/ANs toward self-sufficiency. To do this, TCUs serve many roles in their reservation communities functioning as career and business centers, open access computer labs, STEM summer camps, Saturday academies, community farms, economic development centers, GED or HiSET training and testing centers, place-based applied research hubs, and more.

The federal government, despite its direct trust responsibility and binding treaty obligations, has never fully funded TCU institutional operations as authorized under federal law. Yet despite funding challenges, TCUs are responding to the STEM workforce needs across the country. For example, 16 TCUs have established nursing programs, 12 TCUs have established pre-engineering programs, one of which also offers bachelor's degree programs in engineering, and seven TCUs have established STEM teacher education programs through NSF-TCUP. These efforts are preparing AI/AN nurses, engineers, and science and math

teachers who are collectively strengthening the STEM pipeline in Indian Country. TCUs train other professionals in high-demand fields, including agriculture and natural resources management and information technology. By teaching the job skills most in demand on our reservations, TCUs are laying a solid foundation for tribal economic growth, with benefits for surrounding communities and the nation as a whole. But that is not enough. TCU leadership understands that we must do more – we must move beyond simple workforce training. Today, TCUs are tackling the tougher – and much more significant – issue of job creation, because we know that to break the cycle of generational poverty and end the culture of dependency that grips so much of Indian Country, simply preparing students for a very limited labor market is not enough. We must create new industries, new businesses, and build a culture of self-sufficiency and innovation. Our job creation initiative focuses initially on advanced manufacturing, through a partnership with the U.S. Department of Energy, National Laboratories, TCUs, tribes, and industry.

NATIONAL SCIENCE FOUNDATION

Education and Human Resources Directorate (EHR) – Tribal Colleges and Universities Program

(TCUP): TCUs urge the Subcommittee to fund competitively awarded NSF-TCUP grants at a minimum of \$16,000,000. The NSF-TCUP, administered by the Education and Human Resources Directorate, is a competitive grant program that enables TCUs and Alaska Native Serving/Native Hawaiian Serving Institutions (ANNHs) to develop and expand critically needed STEM education and research programs relevant to their respective communities from Michigan to Alaska and Hawaii. Through this program, TCUs and ANNHs have been awarded grants to enhance their STEM instructional courses, workforce development, research, and outreach programs.

AI/AN youth have the highest high school drop-out rate of any ethnic or racial group in the country. Those who do pursue postsecondary education often require developmental classes before taking on a full load of college-level courses. Placement tests administered at TCUs to first-time entering students in academic year 2017-18 show that 61 percent required remedial math. Our data indicates that while 68 percent will successfully complete the course, many will not have done so in one year. Without question, a large proportion of the TCUs' already limited resources are dedicated to addressing the continual failings of K-12 education systems.

Through NSF-TCUP grants, TCUs and ANNHs are actively working to prevent this problem by developing strong partnerships with their K-12 feeder schools to engage students in culturally appropriate STEM education and outreach programs. These efforts include weekend academies and summer STEM camps that reinforce and supplement current K-12 STEM programs.

NSF-TCUP provides crucial capacity-building assistance and resources to TCUs and ANNHs. Since the program began, NSF-TCUP has become the primary federal program for building STEM programmatic and research capacity at TCUs. For example, NSF-TCUP funding supported Navajo Technical University (Crownpoint, NM) in the development of its electrical and industrial engineering program, which received accreditation from the Accreditation Board of Engineering and Technology (ABET) in 2018. This marks a significant milestone, with NTU leading the way as the first TCU to receive ABET accreditation. NTU students will now be prepared to fill high demand STEM jobs that require a degree from an ABET-accredited program.

Through NSF-TCUP, 12 TCUs have established engineering or pre-engineering programs and are developing partnerships with larger institutions that enable AI/AN students to seamlessly transfer to graduate-level programs. The first graduate of United Tribes Technical College's (Bismarck, ND) pre-

engineering program, Jeremy McLeod (Turtle Mountain Band of Chippewa Indians) is an example of how students, tribal communities and states benefit from these partnerships. After graduating from UTTC, Jeremy completed his baccalaureate degree in civil engineering at South Dakota School of Mines and Technology. Upon graduation, he was employed with Knife River Corporation as a project manager and is now a water resource engineer at the North Dakota State Water Commission. He also serves as an advisory board member for the pre-engineering program at UTTC.

Across Indian Country, TCUs provide students with the opportunity to serve their communities through place-based research that has national and international impacts. At Northwest Indian College (NWIC) (Bellingham, WA), students conduct complex research related to food security focused on salmon, shellfish, and Indigenous sea cucumbers. NWIC also has a partnership with Western Washington University through which students continue to master's degree programs. Aaniiih Nakoda College (Harlem, MT) monitors streams for contaminants and investigates West Nile virus vectors; and Sitting Bull College (SBC) (Fort Yates, ND) has established a water quality monitoring laboratory serving the Standing Rock Sioux and surrounding communities. Research at SBC shows that students participating in research opportunities have retention rates that are double the rate of students who are not engaged in research.

Programs funded through the NSF-TCUP are highly leveraged and successful. For example, students from Southwestern Indian Polytechnic Institute (Albuquerque, NM) and NTU compete in NASA's national "Swarmathon" competition. For the past three years, the SIPI student team received high awards, placing first in the nation in 2017 and second in 2018. SIPI has achieved other successes of national note: NSF Science and Engineering Indicators (2016) showed that of students graduating with a science or engineering degree, AI/ANs comprised 0.3%, of which 13% were female. In a time when engaging diverse populations in higher education is a priority and retaining female students in STEM fields is a challenge, the SIPI pre-engineering program is doing something right. In 2017, SIPI's retention rate for engineering students was 44%. Its retention rate for female engineering students was 67%. SIPI's female students attribute their success to several TCU-specific factors: caring faculty who set expectations, sense of community, team research experiences, culturally grounded place-based experiential learning, and unfailing student support.

Despite its advances and successes, funding for the NSF-TCUP program has been stagnant for many years. Therefore, not all of the TCUs have had an opportunity to benefit from this very important program. ***We urge the Subcommittee to fund competitively awarded NSF-TCUP grants at a minimum of \$16,000,000.***

Louis Stokes Alliance for Minority Participation (LSAMP): TCUs urge the Subcommittee to support the NSF LSAMP program with an added emphasis for American Indian, Alaska Native, and TCU students. In FY2019, \$46 million was appropriated for the LSAMP program to support historically underrepresented students in STEM fields. However, only one TCU was awarded direct funding under this program. The All Nations LSAMP (ANLSAMP) program at Salish Kootenai College (Pablo, MT) has had tremendous success in increasing AI/AN degree attainment in STEM programs. Many small underfunded TCU STEM programs consider ANLSAMP as the center for expanding AI/AN student research opportunities, sharing best practices, and student support. Through the combined efforts of the 34 ANLSAMP colleges and universities, more than 2,000 AI/ANs and under-resourced minority students have graduated with bachelor's degrees in STEM. Additionally, a recent survey revealed that more than 80 percent of ANLSAMP participants contacted had either graduated with a STEM major or bridged to an advanced degree program. Unfortunately, since the creation of the LSAMP program in 1991, NSF has

neglected to prioritize AI/AN-serving programs, such as ANLSAMP, which are critically needed to support STEM degree attainment in Indian Country.

In 2018, after several years of *no* funding for a TCU-led grant proposal, \$1 million was awarded through an LSAMP grant and supplement to support TCU students over the next five years. However, it is alarming that less than 1 percent of the total \$46 million was awarded to TCUs in FY2019. (\$200,000 was provided in new funding, as a grant supplement, to TCUs in FY 2019.) ***We ask that the Subcommittee specifically urge NSF to strengthen support for AI/AN students through the LSAMP grant program.***

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

Office of Education/Minority University Research and Education Programs (MUREP): TCUs urge the Subcommittee to continue the NASA MUREP program with robust funding and support a TCU specific program within MUREP at \$5,000,000 for FY2020. Under the MUREP umbrella, NASA has funded TCUs in various programs for the past several years at a modest level. For example, in FY2014, NASA awarded \$1.28 million to TCUs under MUREP, with total TCU support at \$1.55 million. In FY2015, NASA MUREP provided \$2 million to TCUs, with total TCU support of \$2.53 million. In FY2016, TCU support was \$1.7 million under MUREP and \$2.7 million overall. With these modest funding levels, NASA MUREP is only able to fund three TCUs each year, each of which receives a 3-year award. In FY 2017, the 3-year awards went to SIPI to continue its engineering/robotics work, NWIC, and Chief Dull Knife College (Lame Deer, MT).

Under a previous grant from NASA, SIPI students and local AI/AN high school students engage in hands-on projects through which they learn computer programming, computer networking, microprocessors, sensor technology, 3D printing, and design engineering. The annual NASA Swarmathon, funded by MUREP and mentioned previously, is an advanced robotics competition in which students test their STEM skills by writing complex robotic codes and building robots equipped with sensors, webcams, and GPS systems. The STEM knowledge and analytical skills needed to compete in Swarmathon are the same high-demand skills needed to advance our space technology and future space exploration. We are proud that the SIPI teams ranked in the top three nationally over the past four years.

AIHEC strongly disagrees with the Administration recommendation to eliminate the MUREP program as proposed in the President's FY2018 and FY2019 Budget Requests. The NASA MUREP program provides TCUs with resources to advance and build strong STEM programs across Indian Country. ***TCUs urge the Subcommittee to continue the NASA MUREP program through robust funding and to support a Tribal College and University-specific program within MUREP at \$5,000,000 for FY2020.***

CONCLUSION

Tribal Colleges and Universities provide access to high-quality, culturally appropriate postsecondary education opportunities, including STEM-focused programs, for thousands of AI/AN students. The modest federal investment in TCUs has paid great dividends in terms of employment, education, and economic development. We ask you to renew your commitment to help move our students and communities toward self-sufficiency and request your full consideration of our FY 2020 appropriations requests. Thank you.

WRITTEN TESTIMONY OF ANNE WEISMANN, CHIEF FOIA COUNSEL
CITIZENS FOR RESPONSIBILITY AND ETHICS IN WASHINGTON (CREW)

SUBMITTED TO THE HOUSE APPROPRIATIONS COMMERCE, JUSTICE, SCIENCE,
AND RELATED AGENCIES SUBCOMMITTEE CONCERNING THE FY 2020
APPROPRIATIONS BILL

Chairman Serrano, Ranking Member Aderholt, and members of the Subcommittee, thank you for the opportunity to submit testimony regarding the FY 2020 Commerce, Justice, Science, and Related Agencies Appropriations Bill. My organization, Citizens for Responsibility and Ethics in Washington (CREW), is a non-profit, non-partisan organization committed to protecting the rights of citizens to be informed about the actions of government officials, ensuring their integrity, and protecting our democracy from corruption and deceit. My organization relies heavily on government records that are made publicly available by agencies to advance this mission through its research, litigation, advocacy, and public education. Based on my experiences engaging in this work for the past 16 years, today I offer testimony regarding the need for increased transparency and accountability at the Department of Justice — specifically with regard to the body of secret law that continues to be embedded within Office of Legal Counsel (OLC) opinions despite clear congressional intent to eliminate this undemocratic practice.

OLC serves a critical function within the executive branch. Exercising delegated statutory authority afforded the Attorney General,¹ OLC provides definitive interpretations of laws and other legal obligations that bind federal agencies, officers, and employees until overturned. OLC is a unique entity within the executive branch. The Attorney General and President of the United States are the only two individuals who may reject OLC's conclusions. Unless and until that happens, OLC's formal opinions stand as the conclusive views of the executive branch. In the words of its own directive, "OLC's central function is to provide, pursuant to the Attorney General's delegation, *controlling* legal advice to Executive Branch officials in furtherance of the President's constitutional duties to preserve, protect, and defend the Constitution, and to 'take Care that the Laws be faithfully executed.'"² Indeed, the full weight of these opinions is reflected in the fact that federal employees who rely on their conclusions enjoy immunity from prosecution.³

¹ The Judiciary Act of 1789 charged the Attorney General with, *inter alia*, "giving his advice and opinion upon questions of law when required by the President of the United States, or when requested by the heads of any of the departments, touching any matters that may concern their departments[.]" The current codification of this law, found at 28 U.S.C. § 523, directs the Attorney General to render opinions when requested by the President or heads of executive departments "on questions of law arising in the administration of his department." Pursuant to 28 U.S.C. § 510, the Attorney General has delegated the responsibility to render opinions on "questions of law arising in the administration or his department" to OLC.

² See Memorandum for Attorneys of the Office, from David J. Barron, Acting Assistant Att'y Gen., Office of Legal Counsel, *Re: Best Practices for OLC Legal Advice and Written Opinions* (July 16, 2010), available at <https://www.justice.gov/sites/default/files/olc/legacy/2010/08/26/olc-legal-advice-opinions.pdf>.

³ *Id.*

As controlling interpretations of laws that are binding on federal agencies, officers, and employees, OLC's formal opinions create their own body of law. The reach of this body of law extends beyond the federal workforce to members of the public who are profoundly affected by OLC's legal interpretations. These opinions determine the lawfulness of a range of conduct from warrantless surveillance to targeted killing of Americans on foreign soil. Consider for a moment the potential impact of the OLC opinion concluding a sitting president is not subject to indictment or criminal prosecution, which has been offered as grounds for why President Donald Trump cannot be prosecuted for obstruction of justice while in office. That opinion may bind only the Special Counsel appointed by the Deputy Attorney General, but its impact on Senate and House investigations, as well as the conduct of the other persons who are subject to those investigations, is inevitable. OLC's opinion has the potential to alter the course of history, as did OLC's opinions authorizing the use of torture on enemy combatants.

Congress has long recognized the body of law that is composed of OLC and other agency opinions, and it has long endeavored to protect our democracy from the detrimental effect that would result from allowing this body of law to function in the dark. Since 1946 and the enactment of the Administrative Procedure Act, 5 U.S.C. §§ 701-706 ("APA"), Congress has required all federal agencies to publish in the Federal Register or otherwise make publicly available specified categories of records without a triggering request to do so. Particularly relevant provisions of earlier versions of the APA are Section 3(a), which directed every agency to make publicly available "substantive rules adopted as authorized by law and statements of general policy or interpretations formulated and adopted by the agency for the guidance of the public,"⁴ and Section 3(b), which directed agencies to make publicly available "all final opinions or orders in the adjudication of cases (except those required for good cause to be held confidential and not cited as precedents)."⁵

In 1965, upon noting a disturbing trend of agencies exploiting the various loopholes in Section 3 of the APA to "deny legitimate information to the public," and "as an excuse for secrecy,"⁶ Congress proposed legislation to clarify that "section 3 of the Administrative Procedure Act is not a withholding statute but a disclosure statute[.]"⁷ Echoing the words of James Madison, supporters of the proposal noted, "[a] popular government without popular information or the means of acquiring it, is but a prologue to a farce, or a tragedy, or perhaps both."⁸ The following year, the House Committee on Government Operations observed that these agency policy statements and interpretations were "the end product of Federal administration" with the "force and effect of law in most cases," yet so many "have been kept secret from the members of the public affected by the decisions."⁹ These concerns led Congress to strengthen 5

⁴ See Attorney General's Manual on the Administrative Procedure Act, Section 3 – Public Information (1947) (1947 AG Manual), citing 92 Cong. Rec. 56750 (Sen. Doc. P. 357), available at <http://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=3869&context=ilj> (last accessed May 31, 2017).

⁵ *Id.*

⁶ S. Rep. No. 89-913, at 38 (1965).

⁷ *Id.* at 40.

⁸ *Id.*

⁹ H.R. Rep. No. 1497, 89th Cong., 2d Sess. 7 (1966).

U.S.C. § 552(a)(2) (also known as the “reading room provision”) and incorporate it into the newly-enacted Freedom of Information Act (“FOIA”), with the goal of eliminating secret law.¹⁰

Despite this long history of Congress’s unambiguous intent to eliminate secret laws, OLC opinions have been used at times to justify circumventing congressional efforts embodied in the APA and the FOIA to promote the publication of laws and regulations, shielding authoritarian executive actions from public scrutiny. This is a dangerous practice that undermines our democratic system of checks and balances. For example, some members of this subcommittee may recall when, in 2007, Senator Whitehouse uncovered a secret OLC opinion that upheld the president’s ability to unilaterally abrogate an executive order without public notice.¹¹

CREW’s own experience with OLC opinions demonstrates both the weight of their conclusions when the government chooses to wield them to its benefit, and their self-serving nature when the government chooses to weaponize the culture of secrecy that surrounds them to justify its actions.¹² For example, in defending the legality of the President’s decision to circumvent the senate confirmation process in designating Matthew Whittaker as Acting Attorney General, the President cited to the publicly available OLC opinion finding that the designation was authorized by the Vacancies Reform Act and consistent with the Appointments Clause. In contrast, when CREW sought copies under the FOIA of White House visitor records that the Secret Service creates and maintains, the White House claimed the records are actually presidential and therefore not available to the public, relying in part on an OLC opinion that it refused to produce. Similarly, when CREW sought from the Office of Administration — a component of the Executive Office of the President (“EOP”) that had operated as an agency subject to the FOIA since its inception — records relating to the mysterious disappearance of millions of emails from White House servers, the White House about-faced and claimed OA was no longer an agency, basing its position on yet another secret OLC opinion.

As CREW has steadfastly maintained in its litigation-based efforts to hold the government accountable to its democratic duty of transparency, the current codification of the reading room provision requires every agency to make publicly available “(A) final opinions . . . as well as orders, made in the adjudication of cases” and (B) “those statements of policy and interpretations which have been adopted by the agency and are not published in the Federal Register.”¹³ Furthermore, by application of current DOJ guidance, the reading room provision also imposes on federal agencies a duty to “proactively identify” records falling within its scope “and to make those records ‘available for public inspection and copying’ automatically . . .

¹⁰ See, e.g., *U.S. Dep’t of Justice v. Reporters Comm. For Freedom of the Press*, 489 U.S. 749, 796 n.20 (1989) (the FOIA’s “primary objective is the elimination of ‘secret law’”) (quoting Frank H. Easterbrook, *Privacy and the Optimal Extent of Disclosure Under the Freedom of Information Act*, 9 J. Legal Studies 774, 777 (1980)); *Ctr. for Effective Gov’t v. U.S. Dep’t of State*, 7 F. Supp. 3d 16, 29-30 (D.D.C. 2013) (“engag[ing] in what is in effect governance by ‘secret law’ . . . conflicts with the very purpose of FOIA”).

¹¹ See Statement of Sen. Whitehouse, Dec. 7, 2007, Congressional Record, pp. S15011-15012, available at http://www.fas.org/irp/congress/2007_cr/fisa120707.html.

¹² See *Designating an Acting Attorney General*, Op. O.L.C. (November 14, 2018), available at https://www.governmentattic.org/12docs/OLCstyleManula_2013.pdf.

¹³ 5 U.S.C. §§ 552(a)(2)(A), (B).

.without waiting for a FOIA request.”¹⁴ The latter requirement has been a sticking point as at least one court has found it lacked the authority under the FOIA to compel OLC to proactively make its opinions available to the public at large,¹⁵ and could therefore benefit from legislative clarity.

CREW is still engaged in a legal battle to obtain copies of all formal OLC opinions and indices of those opinions that OLC is required to make available for public inspection pursuant to the FOIA’s reading room provision. In that litigation, OLC has claimed that none of its opinions are subject to § 552(a)(2) because they merely provide legal advice that an agency is free to ignore. This defense cannot be reconciled with the already published body of OLC opinions that clearly and expressly dictate how agencies must act in light of OLC’s controlling legal interpretations, and the public statements of former OLC senior officials about the obligation agencies have to comply with OLC’s interpretations. CREW’s case is currently before the United States Court of Appeals for the District of Columbia Circuit awaiting a decision.

This ongoing legal battle highlights an essential need for Congress to further clarify OLC’s ongoing duty to (1) proactively identify records falling within the scope of § 552(a)(2); (2) make those records available for public inspection and copying without a triggering FOIA request; and (3) make publicly available “current indexes providing identifying information for the public as to any matter issued, adopted, or promulgated after July 4, 1967, and required by § 552(a)(2) to be made available or published[.]”¹⁶ Such clarity can prevent the kind of protracted legal battle in which CREW has been engaged for the last six years, and the very real ills that flow from allowing OLC’s binding decisions to hide in the dark.

Thank you for the opportunity to address the subcommittee.

¹⁴ Department of Justice Guide to the Freedom of Information Act 10 (2014) citation omitted), available at <https://www.justice.gov/sites/default/files/oip/legacy/2014/07/23/proactive-disclosures-2009.pdf> (last accessed May 31, 2017).

¹⁵ See *CREW v. Dep’t of Justice*, 846 F.3d 1235 (D.C. Cir. 2017).

¹⁶ 5 U.S.C. § 552(a)(2) (final paragraph E).

ACT 4

JUVENILE JUSTICE

Written Statement of Marcy Mistrett
Co-Chair, Act 4 JJ Coalition

Submitted to the House of Representatives
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations

Fiscal Year 2020 Budget

Submitted April 4, 2019

On behalf of the Act 4 JJ Coalition, a broad network of organizations representing states, territories, and the District of Columbia, I am writing to express how important it is to fully fund critical juvenile justice and delinquency prevention programs for Fiscal Year 2020. **Federal investments play an essential role in state juvenile justice efforts to protect youth, prevent delinquency, and promote safe communities.** This was affirmed by Congress when it passed the Juvenile Justice Reform Act of 2018 (JJRA), which reauthorized the Juvenile Justice and Delinquency Prevention Act (JJDP) at the end of the 115th Congress.¹ The reauthorization brings this critical federal law up to date with evidence-based practices, research, and progress made in states across the country. I urge you to fully fund juvenile justice programs under the Office of Juvenile Justice and Delinquency Prevention as authorized by the JJRA.

Under the newly reauthorized law, states are being asked to do more to receive their federal formula grants under Title II of the Act², and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) is also required to provide additional technical assistance to states and key stakeholders, as well as produce more research. Despite these requirements, overall federal support of key juvenile justice programs has declined by more than half since the last reauthorization in 2002, and we are concerned about the impact that any further reductions in funding would have on states' ability to serve youth.³ It is essential that Congress provide adequate funding for critical juvenile justice and delinquency prevention programs in the Fiscal Year 2020 Commerce, Justice, Science and Related Agencies (CJS) Appropriations bill. The Act

¹ Juvenile Justice Reform Act of 2017, H.R. 1809, 115th Cong. (1st Sess. 2017).

² COALITION FOR JUVENILE JUSTICE, JUVENILE JUSTICE AND DELINQUENCY PREVENTION ACT: STATE PLAN REQUIREMENTS (Jan. 2018), available at <http://www.act4jj.org/sites/default/files/resource-files/State%20Plans%20H.R.%206964%20JJDP.pdf>; ACT 4 JUVENILE JUSTICE, OVERVIEW OF THE JUVENILE JUSTICE REFORM ACT OF 2018 (Dec. 2018), available at <http://www.act4jj.org/sites/default/files/resource-files/JJDP%20Reauthorization%20Summary%20December%202018.pdf>.

³ ACT 4 JUVENILE JUSTICE, JUVENILE JUSTICE FEDERAL FUNDING CHART (2019), available at <http://www.act4jj.org/sites/default/files/ckfinder/files/Appropriation%20Chart%20FY17%20updated.pdf>.

4 JJ Coalition encourages you to work to secure the highest 302(b) allocation possible, and within that amount, we ask that you support the following:

Require full implementation of the JJDPA by appropriating \$176 million dollars for Titles II & V of the Act in FY20 budget, including:

- **\$80,000,000** to carry out programs under the Charles Grassley Juvenile Justice and Delinquency Prevention Program, Title II of the Juvenile Justice and Delinquency Prevention Act, as authorized by the Juvenile Justice Reform Act of 2018;
 - of which not more than 5% goes to provide training and technical assistance to states; and
 - of which not more than 10% goes to support research conducted by OJJDP.

Title II of JJDPA provides federal funding to states to promote delinquency prevention and assist them to comply with federally-mandated core requirements designed to protect children from the dangers of placement in adult jails and lockups; keep status offenders/non-delinquent children out of locked custody; and address the racial and ethnic disparities faced by youth of color in the justice system.

- **\$96,053,401** to carry out programs under in the Incentive Youth Promise Grants for Local Delinquency Prevention Programs Act of 2018, Title V of the Juvenile Justice and Delinquency Prevention Act, as authorized by the Juvenile Justice Reform Act of 2018;
 - of which, 11% goes to support the Tribal Youth Program; and
 - the remaining \$86.4 million goes to support the Title V PROMISE grants.

Title V is the only federal program that provides delinquency prevention funding at the local level to reach at-risk youth and help keep them out of the juvenile justice system. The Juvenile Justice Reform Act of 2018 renames this title “Incentive Grants for Prison Reduction through Opportunities, Mentoring, Intervention, Support, and Education (PROMISE)” and expands the uses of this grant program to include 29 funding areas, and establishes local youth councils to develop prevention programming that ensures needs of at-risk youth are being met.

Tribal Youth are over-represented in state and local delinquency systems. The Juvenile Justice Reform Act also provides an increased percentage in Title V funding for Tribal Youth Programs to ensure Tribes are able to invest in traditionally-grounded, trauma-based delinquency prevention programs.

In addition, the Coalition urges you to include funding for additional juvenile justice programs, including:

- **\$30,000,000** for the Tiffany Joslyn Juvenile Accountability Block Grant Reauthorization and Bullying Prevention and Intervention Act of 2019 (H.R. 494), as passed by

unanimous consent the U.S. House of Representatives in the 115th and 116th Congress.⁴

Historic funding through the JABG program has supported state efforts to effectively strengthen supports for court-involved youth. These funds support vital state efforts to effectively strengthen juvenile court services, such as behavioral health screening and assessment for court-involved youth and alternatives to detention.

The JJDPA has been so successful that 47 states and 6 U.S. territories participate in this voluntary program, yet cuts to these programs have weakened the federal-state partnership and stymied national, state, and local progress in this area. Many states have already had to significantly reduce services.⁵ Further cuts would inhibit the improvements made by the Juvenile Justice Reform Act of 2018 and result in fewer youth having access to services designed to keep them from engaging in unlawful behaviors and penetrating deeper into the juvenile and criminal justice systems. Further, failure to fully fund the JJDPA will undermine broader criminal justice reform. By investing in youth, Congress can help to block the front door to the criminal justice system all together.

It is critical that Congress fully fund these programs as authorized by the Juvenile Justice Reform Act in order for implementation of the new requirements of the law to be successful. Congress must affirm this important federal-state partnership to protect children and to invest in innovative and cost-effective reforms that keep youth out of trouble and communities safe. The Act 4 JJ Coalition urges you to consider these critical supports for youth and communities in this year's CJS Appropriations bill.

Thank you for the opportunity to submit this statement for the record. Should you have any questions, please contact Marcy Mistrett, Co-Chair for the Act 4 JJ Coalition, at mmistrett@cfvj.org or Naomi Smoot, Co-Chair for the Act 4 JJ Coalition, at smoot@juvjustice.org.

⁴Tiffany Joslyn Juvenile Accountability Block Grant Reauthorization and Bullying Prevention and Intervention Act of 2019, H.R. 494, 116th Cong. (2019).

⁵ ACT 4 JUVENILE JUSTICE, JJDPA TITLE II APPROPRIATIONS (2018), available at <http://www.act4jj.org/sites/default/files/ckfinder/files/JJDPA%20Appropriations%20UPDATED.pdf>.

**Testimony of RADM Jonathan White, USN (Ret.)
President and CEO, Consortium for Ocean Leadership
House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
4 April 2019**

On behalf of the Consortium for Ocean Leadership (COL), which represents the leading ocean science, research, and technology organizations from academia, industry, and philanthropy (to include aquariums), I appreciate the opportunity to submit for the record our fiscal year (FY) 2020 funding priorities for the National Oceanic and Atmospheric Administration (NOAA), the National Science Foundation (NSF), and the National Aeronautics and Space Administration (NASA). As a maritime nation, our national, homeland, energy, food, water, and economic securities, as well as our public health and safety, depend on a healthy ocean – which in turn depends on ocean science and technology – a concept I refer to as “ocean security.” This understanding enables us to have advance notice of oncoming hurricanes, to sustainably manage fish populations, to let boat operators know when there’s rough weather ahead, to allow for the safety of maritime commerce, to forecast harmful algal blooms, and so much more that helps protect our nation, its infrastructure, and its prosperity. I hope that as the subcommittee makes funding decisions for FY 2020, you will provide the needed support for programs, many of which are outlined below, that advance our nation’s ocean security, ensuring we remain an economically competitive, scientifically literate nation secure in our access to food, water, and energy.

Many of the issues addressed in this testimony are cross-cutting. The importance of observing our ocean doesn’t exist in a vacuum but instead includes NOAA’s Integrated Ocean Observing System (IOOS), NSF’s Ocean Observatories Initiative, and NASA’s Plankton, Aerosol, Cloud, ocean Ecosystem mission (to name just a few). Advancing science, technology, engineering, and math (STEM) education falls to, among others, NOAA’s Office of Education, NASA’s Office of STEM Engagement, and NSF’s Education and Human Resources. But it’s not just the federal ocean science community investing in these and other similar enterprises; there are more than 600 businesses engaged in ocean observation and forecasting; over 400 postsecondary institutions that provide ocean-related certificates or degrees; and in excess of 45,000 nonprofits focused on ocean and coastal activities. To share information, observations, technology, and best practices, cross-sector and interagency collaboration are necessary. To this end, the National Oceanographic Partnership Program (NOPP), a congressionally mandated program established in 1997, is an ideal vehicle to advance collaborative efforts and already has been involved with funding projects such as IOOS, the Argo Project, and the JASON project. ***To fully utilize NOPP and facilitate the success of projects promoting national goals (national security, economic prosperity, quality of life) related to ocean knowledge, I respectfully request the subcommittee provide \$16 million in NOPP funding – \$8 million to NOAA and \$8 million to NASA.*** I thank the subcommittee for their support of the program in final FY 2019 appropriations.

National Oceanic and Atmospheric Administration

For NOAA to fully execute its mission of service and science, I respectfully request \$6.5 billion for the agency, in addition to support to other programs highlighted below.

Ocean observations are a requisite first step when it comes to understanding the ocean. Without temperature data, we can’t know who needs to evacuate from a hurricane’s path; without depth data, we can’t tell if the shipping channel is deep enough for a vessel to pass through safely; without chemical analysis, we can’t get notice that changing pH will wipe out a shellfish farm; without

knowing the biodiversity of an area, we can't tell if it should be a marine sanctuary or a potential site for offshore wind development. The U.S Integrated Ocean Observing System (IOOS) is a coordinated network of technologies (such as gliders, satellites, buoys, underwater vehicles, and tide gauges) that generate continuous data on our coasts, ocean, and Great Lakes. Building and leveraging local and regional partnerships ensures IOOS' efficiency and provides the infrastructure needed to support jobs, the economy, maritime safety, and environmental health. ***To ensure we continue to collect data and increase our ocean observations, I respectfully request \$50.5 million for U.S. IOOS in FY 2020. This includes \$3.2 million to install high-frequency radar systems to close gaps in surface current mapping; \$3.5 million for underwater gliders to detect harmful algal blooms, ensure safe navigation, and improve hurricane warnings; \$4.3 million for research and development; and funding to integrate federal and non-federal data and coordinate across NOAA and the 17 federal IOOS agencies.***

Hand-in-hand with ocean observations is ocean exploration. NOAA's Office of Ocean Exploration and Research (OER), the only federal organization dedicated to ocean exploration, has not only made significant discoveries but has captured public imagination about our blue planet. Exploring the more than 1.3 billion cubic kilometers of water that makes up our global ocean involves more than just OER but other federal and state agencies, nonprofits, private industry, and academic institutions. ***I respectfully request the subcommittee fund OER at \$50 million and that report language address the importance of collaboration and coordination among federal and state agencies, academic institutions, industry, and other oceanographic partners to maximize return on investment and advance shared data, science and public engagement, and innovative technology.***

I thank the subcommittee for continuing to recognize the importance of STEM education and extension programs, despite repeated attempts by the administration to eliminate many of them. ***I respectfully request \$12 million for NOAA's Bay-Watershed Education and Training and \$8 million for NOAA's Environmental Literacy Program.*** The two goals of NOAA's agency-wide education strategic plan required by the *America COMPETES Act* are workforce development and environmental literacy, where formal and informal education and outreach create an environmentally literate society. Sustained and adequate funding for these programs not only advances NOAA's mission but grows the STEM workforce, strengthens our economy, and ensures our national security. As the longest-standing and most comprehensive national grants program with a focus on environmental literacy, ELP grants have and will continue to keep our coastal communities – and our nation as a whole – safe, secure, and prosperous. Adequately funding ELP will allow programs such as the National Ocean Sciences Bowl (NOSB), a quiz-bowl style ocean science competition for high schoolers that has received ELP funding during its 22-year history, to flourish. The NOSB alone has graduated tens of thousands of students from high school with a solid ocean science foundation who go on to careers that advance our nation and keep it secure.

For more than 50 years, the National Sea Grant College Program (Sea Grant) has supported coastal and Great Lakes communities, improving community and economic resiliency, ensuring the health of coastal ecosystems, and advancing environmental literacy and workforce education. Between February 2016 and January 2017, Sea Grant's research, extension, and education resulted in 1.4 million acres of restored or protected habitat, 494 communities with improved resilience, and 2,002 seafood HACCP safety certifications. The \$74 million in federal investments in 2016 resulted in a \$611 million economic benefit. ***I respectfully request \$93.5 million for the National Sea Grant College Program in FY 2020.***

The importance of programs that address emerging issues cannot be understated. One of these, NOAA's Marine Debris Program, has grown in importance and visibility as scientists and the public better understand the widespread impact of the ocean plastic problem. ***I respectfully request \$10 million for this program to evaluate, track, and clean up debris that threatens ocean health.***

National Science Foundation

As the only federal agency tasked with supporting all fields of fundamental science and engineering (except medical sciences), NSF is vital to our nation's scientific enterprise, today and tomorrow. ***I respectfully request \$9 billion for NSF "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense" in FY 2020.***

I want to thank the subcommittee for providing \$127 million in FY 2019 to finish out the final year of a three-year funding profile to complete construction of all three Regional Class Research Vessels (RCRVs). With more modern technology and abilities than previous generations, these long-awaited RCRVs will provide even more access to the marine realm, and ***I respectfully request the subcommittee maintain full support for these critical research vessels.***

As with NOAA, STEM education at NSF plays a vital role in securing our national, homeland, economic, energy, food, and water securities. Broadening the backgrounds of scientists to represent all people across our nation, better reflecting our diversity of gender, race, class, and perspective, is a critical for all STEM fields — not just ocean science. A diverse, STEM-literate workforce strengthens our nation's economy and is vital to maintaining the nation's leadership in science and technology innovation. It's imperative to reinforce the importance of funding federal programs that empower underrepresented groups to become the next generation of ocean-STEM leaders at every educational and technical level. The NSF INCLUDES (Inclusion across the Nation of Communities and Learners of Underrepresented Discoverers in Engineering and Science) program aims to increase access to and participation in STEM learning by demographic groups with historically low participation in these fields. Programs such as this — that support a more diversified academic core in the science and technology workforce — are key to growing our blue economy.

National Aeronautics and Space Administration

While images of faraway galaxies lead to a desire for space exploration, equally memorable are photos of our planet as seen from space. While the administration's desire for space exploration is exciting, it should not come at the expense of understanding our own home. ***I respectfully request \$7.25 billion for the Science Mission Directorate and \$2.5 billion for NASA Earth Science.*** This should include support for the agency's Earth-facing missions, including those proposed for elimination in the president's budget request, specifically the Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission and the Climate Absolute Radiance and Refractivity Observatory (CLARREO) Pathfinder instrument. Both of these were recommendations from the 2007 Earth Science decadal survey. As support is thrown behind the space-based efforts at NASA, let's not forget how space-based ocean science can inform research related to ocean work on other moons and planets.

In closing, it is clear that ocean science and technology strengthen our national and homeland security; underpin our economy; ensure food, water, and energy security; and provide for safety and efficiency in marine transportation. To ensure this ocean security upon which we all depend, our federal ocean science agencies and programs must be adequately and consistently funded. While the Cold War may remain a distant memory today, the late Admiral James D. Watkins, chief of naval

operations from 1982-1986, used to state, “Oceanography won the Cold War.” Our knowledge of the undersea domain gave the United States a competitive advantage over our enemies. That advantage is in jeopardy today – not just in comparison to federal ocean science investments by our competitors but in comparison to oceanographic threats. In 30 years, will we say oceanography helped us win the “cold war” against harmful algal blooms, ocean plastic, changing climate and ocean conditions, and illegal fishing? Only if we have a prosperous, sustainable, well-understood ocean, and we will only achieve that with federal investments.

As you work to provide funding for these critical programs, COL and our member institutions are doing all we can to give you the subcommittee allocations necessary to fully fund these programs as we continue to encourage the creation of a bipartisan budget agreement that raises the discretionary spending caps. I know you face difficult decisions that involve offsets and divestments to achieve a balanced budget. COL and our members stand ready to engage in discussion to help establish priorities around the ocean security framework to support these difficult decisions. Thank you for your exemplary leadership and dedicated work and for the opportunity to provide input into FY 2020 appropriations.

COL Members: Bermuda Institute of Ocean Sciences•Bigelow Laboratory for Ocean Sciences• College of William & Mary (VIMS)•Columbia University (LDEO)•Dauphin Island Sea Lab• Duke University•FAU Harbor Branch Oceanographic Institute•Harte Research Institute• Louisiana State University•Massachusetts Institute of Technology•Monterey Bay Aquarium Research Institute•Moss Landing Marine Laboratories•Mote Marine Laboratory•Old Dominion University•Oregon State University•Pennsylvania State University•Rutgers University•Skidaway Institute of Oceanography (University of Georgia)•Stanford University•Stony Brook University• Texas A&M University•US Naval Postgraduate School•University of Alaska Fairbanks• University of California (UC) Davis• UC San Diego (Scripps)•UC Santa Barbara•UC Santa Cruz•University of Delaware•University of Florida•University of Hawaii•University of Maryland Center for Environmental Science•University of Massachusetts, Dartmouth•University of Miami•University of New Hampshire•University of North Carolina (UNC), Chapel Hill•UNC, Wilmington•University of Rhode Island•University of South Carolina•University of South Florida•University of Southern California•University of Southern Mississippi•University of Texas at Austin•University of Washington•Woods Hole Oceanographic Institution• Alaska Ocean Observing System •Alaska SeaLife Center•Aquarium of the Pacific•Arctic Research Consortium of the United States•Consumer Energy Alliance• Cooperative Institute for Research in Environmental Sciences• Dalhousie University• Earth2Ocean• East Carolina University•Estuary & Ocean Science Center, San Francisco State University•Florida Institute of Oceanography•Moore Foundation•Hubbs SeaWorld Research Institute•IEEE Oceanic Engineering Society•Institute for Global Environmental Strategies•Institute for Marine and Antarctic Studies•IOOS Association• Johns Hopkins University Applied Physics Lab•Marine Technology Society• MARACOOS• Monmouth University Urban Coast Institute•Mystic Aquarium •National Aquarium•National Ocean Industries Association•NERACOOS•North Carolina State University•North Pacific Research Board•Nova Southeastern University•Savannah State University• South Carolina Sea Grant Consortium•Southeastern Universities Research Association•U.S. Arctic Research Commission• University of Maine•University of Victoria Ocean Networks Canada• University of Wisconsin, Milwaukee School of Freshwater Sciences•ASV Global, LLC•Chevron USA•Eastman Chemical Company•Esri•Exocetus Autonomous Systems•L-3 MariPro, Inc•Liquid Robotics, Inc•Sea-Bird Scientific•Severn Marine Technologies, LLC•Shell Exploration and Production Company• Sonardyne, Inc•Teledyne CARIS•Teledyne RD Instruments•Vulcan, Inc.



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Testimony in Support of Fiscal Year 2020 Funding for the
National Science Foundation, Census Bureau, National Institute of Justice,
and Bureau of Justice Statistics

Prepared for the Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations, United States House of Representatives
Submitted by Wendy A. Naus, Executive Director
Consortium of Social Science Associations
April 4, 2019

On behalf of the Consortium of Social Science Associations (COSSA), I offer this written testimony for inclusion in the official committee record. For fiscal year (FY) 2020, COSSA urges the Committee to appropriate **\$9 billion for the National Science Foundation (NSF), \$8.45 billion for the Census Bureau, \$46.5 million for the National Institute of Justice (NIJ), and \$48 million for the Bureau of Justice Statistics (BJS).**

First, I wish to thank the Subcommittee for its longstanding support for federal science agencies. Despite tough, ongoing fiscal challenges, the Subcommittee has continued to maintain funding for basic research as a top priority. This would not be possible without science champions such as yourselves. Thank you.

COSSA serves as a united voice for a broad, diverse network of organizations, institutions, communities, and stakeholders who care about a successful and vibrant social science research enterprise. We represent the collective interests of all STEM disciplines engaged in the rigorous study of why and how humans behave as they do as individuals, groups and within institutions, organizations, and society.

Social and behavioral science research is supported across the federal government, including at the National Science Foundation and the Department of Justice. Further, federal statistics produced by the Census Bureau and other federal statistical agencies provide important data needed to conduct social science research that informs policy decisions. Taken together, federal social and behavioral science and statistical data help provide answers to complex, human-centered questions.

AMERICAN ANTHROPOLOGICAL ASSOCIATION • AMERICAN ASSOCIATION FOR PUBLIC OPINION RESEARCH • AMERICAN ECONOMIC ASSOCIATION • AMERICAN EDUCATIONAL RESEARCH ASSOCIATION • AMERICAN POLITICAL SCIENCE ASSOCIATION • AMERICAN PSYCHOLOGICAL ASSOCIATION • AMERICAN SOCIETY OF CRIMINOLOGY • AMERICAN SOCIOLOGICAL ASSOCIATION • AMERICAN STATISTICAL ASSOCIATION • LAW AND SOCIETY ASSOCIATION • LINGUISTIC SOCIETY OF AMERICA • MIDWEST POLITICAL SCIENCE ASSOCIATION • NATIONAL COMMUNICATION ASSOCIATION • POPULATION ASSOCIATION OF AMERICA • SOCIETY FOR PERSONALITY AND SOCIAL PSYCHOLOGY • SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT

To cite just a few examples:¹

- Major leaps in emulating human mental capabilities in the fields of information technology and computer science, such as in machine translation and artificial intelligence, have been possible thanks to basic *linguistic* research.
- *Anthropologists* applied expertise in cultural practices to guide policy and shape interventions and strategy in combatting the Ebola epidemic in West Africa.
- Research in *psychology* and *economics* has shown that individuals are not saving enough for retirement and led to enactment of the *Pension Protection Act of 2006*, encouraging the use of practices such as automatic enrollment, employer contribution, contribution escalation, and qualified default investment alternative practices.

In short, knowledge derived from social and behavioral science research has made our population healthier, our democracy fairer, our nation safer, and our economy stronger. Without these sciences, policy-making on major national and global issues would not be based on evidence, and billions of dollars would be wasted.

National Science Foundation

COSSA joins the broader scientific community and the 173 Members of the House of Representatives who signed the March 28, 2019 bipartisan letter in support of \$9 billion for the National Science Foundation (NSF) in FY 2020. As the letter states, “We feel this amount is the minimum level of funding needed to prepare future generations to help our nation remain a world economic leader and to reflect the rising costs of research.” Most importantly, NSF and the broader U.S. scientific enterprise require stability, predictability, and sustainable funding growth, as well as federal policies that are patient and can tolerate a reasonable amount of risk in order to achieve the greatest payoff.

NSF is the only U.S. federal agency tasked with *supporting basic scientific research across all fields of science*. NSF supports about a quarter of all federally-funded basic scientific research conducted at colleges and universities nationwide and serves as the largest single funder of university-based basic social and behavioral science research. Though the Social, Behavioral, and Economic Sciences Directorate (SBE)—one of seven research directorates at NSF—represents less than five percent of the entire NSF research budget, it supports around two-thirds of total federal funding for academic *basic research* in the social and behavioral sciences (excluding psychology). As the primary funding source for the majority of our disciplines, stagnant or reduced funding for SBE has an outsized impact on the social and behavioral science community—and resulting discoveries—simply because of the centrality of the directorate to the research community.

Further, while by far the smallest of the research directorates, SBE’s impact is huge. The National Academies of Sciences, Engineering and Medicine stated in its 2017 consensus report, *The Value of Social, Behavioral, and Economic Sciences to National Priorities*, that “nearly every major

¹ More examples at <https://www.whysocialscience.com>

challenge the United States faces—from alleviating unemployment to protecting itself from terrorism—requires understanding the causes and consequences of people’s behavior. Even societal challenges that at first glance appear to be issues only of medicine or engineering or computer science have social and behavioral components.”²

While continuing to serve as the home for basic scientific discovery, NSF has also been planning and funding research activities as part of its 10 Big Ideas for Future NSF Investment over the last several years. The concepts, goals, and directions of the Big Ideas are exciting and promise to push the frontiers of science. However, we remain concerned about NSF losing its defining characteristic, which is to be the incubator for basic scientific discovery across all areas of science. While we encourage support for the Big Ideas in FY 2020, we hope that such investments do not come at the expense of NSF’s core research activities. NSF’s investigator-initiated, discovery-driven identity is what makes it special and has kept the American science enterprise at the leading edge of innovation. **COSSA urges the Committee to ensure a balanced approach is taken within NSF to support the 10 Big Ideas and NSF’s core research activities.**

Census Bureau U.S. Department of Commerce

COSSA urges the Committee to appropriate \$8.45 billion for the U.S. Census Bureau, including at least \$7.581 billion for the 2020 Census, in FY 2020. FY 2020 will be the culmination of nearly a decade of research, planning, testing, and preparation for the next decennial census. As in previous decennial cycles, the Census year requires a substantial appropriation from Congress to support the massive scale of the Census operation, the nation’s largest non-military mobilization. Further complicating 2020 preparations is the potential addition of a citizenship question, which, while currently in legal limbo, could be re-added to the questionnaire before Census Day. Given the potential—and currently unquantified—impact this question could have on self-response, it is crucial that the Bureau have sufficient FY 2020 funding to enable it to nimbly respond to contingencies like this to protect the quality of the Census.

FY 2020 funding will be used for a final push of preparation ahead of Census Day, including opening field offices nationwide, forming partnerships with local organizations, finalizing the advertising campaign, and printing and packaging the mailings. Once the decennial census has begun, efforts will continue to encourage self-response by internet, telephone, and paper; hundreds of thousands of field staff will be trained and deployed to collect responses; and the Bureau will work to coordinate the operations, data collection, and data processing systems. As the count wraps up, the Census Bureau will begin to process, analyze, and prepare the results for publication and close out the massive operation. Underfunding the Census in its final push towards Census Day on April 1, 2020 could undo years of work and preparation, resulting in disastrous consequences for the accuracy of the census count.

² <https://www.nap.edu/catalog/24790/the-value-of-social-behavioral-and-economic-sciences-to-national-priorities>

In addition, COSSA calls on Congress to fully fund the American Community Survey (ACS) and maintain its status as a mandatory federal survey. The ACS is the only source of comparable, consistent, timely, and high-quality demographic and socio-economic data for all communities in the U.S. As a component of the Constitutionally-mandated Decennial Census, the ACS is a “mandatory” national survey. The accuracy of the data collected by the ACS relies on this mandatory status. Targeted cuts and changes to make the survey voluntary would significantly undermine the ability to collect usable data on all U.S. counties, particularly in less populous, rural areas of the country.

National Institute of Justice and Bureau of Justice Statistics U.S. Department of Justice

COSSA urges the Committee to appropriate \$46.5 million for the National Institute of Justice (NIJ) and \$48 million for the Bureau of Justice Statistics (BJS) within the U.S. Department of Justice (DOJ) in FY 2020. NIJ serves as the research arm of the Department of Justice, filling an important role in helping the agency to understand and implement science-based strategies for crime prevention and control. It supports rigorous social science research that can be disseminated to criminal justice professionals to keep communities safe. Both agencies received devastating cuts in FY 2019, making increases in FY 2020 even more crucial as NIJ and BJS must now address new Congressional mandates, including implementation of the *FIRST STEP* Act.

The Bureau of Justice Statistics (BJS) is one of 13 principal federal statistical agencies. BJS produces data that provides statistical evidence needed by researchers and criminal justice policy decision makers. Taken together with NIJ, these modest annual investments represent the only dedicated sources of federal research support committed to enhancing our understanding of crime and the criminal justice system, including around topics like victimization, law enforcement, recidivism and reentry, drugs and crime, and tribal justice.

Numerous pressing criminal justice and law enforcement issues are at the fore of public consciousness today, including understanding the mental health needs of people involved in the justice system, the drivers of domestic radicalization, effective solutions to opioid addiction, and ways to improve police officer safety and community relations. By working with jurisdictions at all levels to compile data and support research, DOJ—through NIJ and BJS investments—provides key insights that improve public safety. Making the results of this research available to state and local officials and the public allows justice and law enforcement professionals to learn what works, adopt best practices, and improve public safety by leveraging the best research and data to protect the public, reduce recidivism, and support law enforcement and communities. Congress must prioritize federal data collection and research if we are to provide local, state, and federal officials with the information they need to develop strategies to improve public safety in our communities.

Thank you for the opportunity to offer this statement. Please do not hesitate to contact me should you require additional information.



**Testimony of Tara L. Perry, Chief Executive Officer
National Court Appointed Special Advocate Association**

**United States House of Representatives
Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies**

Fiscal Year (FY) 2020 Department of Justice Funding

April 4, 2018

Chairman Serrano, Chairwoman Lowey, Ranking Members Aderholt and Granger, and Members of the Commerce, Justice, Science, and Related Agencies Subcommittee, thank you for the opportunity to submit remarks on the Department of Justice (DOJ) FY 2020 budget including full funding of the Court Appointed Special Advocates (CASA) Program through the Office of Juvenile Justice and Delinquency Prevention (OJJDP) at the Congressionally-authorized level of \$12 million.

CASA/Guardian ad Litem (GAL) advocacy is a well-established model strongly associated with improved long-term outcomes for child victims, for which the need continues to be critical. With Congressional support at the fully authorized level, the CASA/GAL network in 49 states and the District of Columbia will enhance and advance specialized training, tools, and resources to continue delivering vital one-on-one best-interest advocacy that addresses the complex and ever-evolving needs of traumatized children who have been victimized by one or more primary caregivers.

Emerging issues such as the commercial sexual exploitation of children and our nation's growing opioid epidemic – for which children account for an increasing number of victims – both necessitate a greater specialization within one-on-one advocacy, with a keen and deliberate focus on progressing toward the call within the Victims of Child Abuse Act to serve every child victim. As we enrich CASA/GAL advocacy to encompass evolving direct service needs, our national network will further strengthen its capacity to serve over 260,000 child victims of abuse and neglect.

Child victimization and maltreatment by primary caregivers is distressingly on the rise, and with it, so too rises the impact on the child and society. Traumatized victims of child abuse and neglect face significant and multiple risk factors, most notably, juvenile delinquency, adult criminality, and poor educational performance that affects future employment and stability. These



issues result in a hefty impact on federal, state, and local spending –at least one-quarter of the DOJ budget is dedicated to our nation’s prison system, and at the same time, the Centers for Disease Control and Prevention (CDC) estimates the economic and social costs of child abuse and neglect to total \$124 billion nationwide per annum. Local CASA/GAL programs offer an effective service to child victims of abuse and neglect that improves outcomes, increases the efficient functioning of our court systems, and saves hundreds of millions in federal and state taxpayer dollars annually in the process.

CASA/GAL programs are, at the heart of their operation, a highly effective leveraging of community-based resources to provide dedicated and sustained one-on-one advocacy for child victims and advise the courts of the child’s best interests and needs throughout abuse and neglect proceedings. Research has shown that the presence of a caring, consistent adult in the life of a child victim is associated with improved long-term outcomes. These efforts, which focus on helping the child find a safe, permanent home where they can both heal and thrive, require thorough background screening, specialized training, and resources to promote a nationwide system of programs that adhere to and assure the highest quality of services and care for the child victim.

CASA Program funds through DOJ achieve and uphold national standard setting, assessment, accountability, and evaluation across nearly 950 local, state, and tribal programs to promote improved child outcomes and effective stewardship of public investments in victim advocacy. Evidence-based practices, intensive technical assistance, direct program guidance and partnerships, and national program standards and quality assurance processes all lie at the foundation of effective CASA/GAL program service delivery in communities across the nation.

Given the nature of the CASA/GAL advocates’ intensive work with child victims of abuse and neglect, standards of rigorous screening, training, supervision, and service are implemented nationwide, with Congressional support, to ensure consistent quality for victims who directly benefit from having their needs and rights championed in the courtroom and in the community. Comprehensive pre-service, in-service, and issue-focused training curricula – including training in disproportionality, cultural competency, and working with older youth – ensures a cutting edge approach to victim services centered on the child thriving well into the future as a member of the community. Federal support is foundational to the solid and high-quality functioning of a national child advocacy network for victims of abuse and neglect.

As the needs of child victims of abuse and neglect grow and change, so must the specialization of one-on-one advocacy and services by CASA/GAL programs. Since the Victims of Child Abuse Act was passed, the landscape of victims’ services for children has evolved significantly. Researchers and practitioners know more now than ever about trauma, and its associated impacts on child development, as well as the significant and multiple risk factors and



issues faced by abused and neglected children such as mental health/ post-traumatic stress disorder (PTSD), commercial sex trafficking, overmedication, and the growing effects of substance abuse and the opioid epidemic in particular. Further, we know that youth of color in particular face very significant challenges – in addition to victimization – on their path to a thriving adulthood. CASA/GAL advocates bring one-on-one attention and a dedicated focus to each of the issues that the child victim faces, but additional resources are needed to enhance and build their knowledge base as part of a continuous advocacy development process.

These complex issues warrant adaptive and responsive training, technical assistance, and resources, while continuing on a trajectory of maintaining quality care and services within current CASA/GAL caseloads and also simultaneously building the capacity to take on additional cases when appointed by the court. National CASA Association is committed to continuous improvement of training, technical assistance, and resource delivery to strengthen and support local CASA/GAL programs and state organizations to help advocates remain at the forefront of emerging child welfare issues.

Federal support at the fully authorized level is instrumental to bridging advocacy training and best practice tools into multiple and new emerging issue areas including child sex trafficking, substance abuse and opioid-overuse, and the overmedication of child victims, for example. Advocates need to be well versed in warning signs for these issues, as well as the available services, resources, and coordination of community and court efforts in order to best address the child victim's case.

FY 2020 funding of \$12 million will be targeted to fortifying resources and training for CASA/GAL programs in the area of commercial sexual exploitation based upon existing best practices and models. In addition, this federal funding will be used to target resources to serve over 260,000 child victims of abuse and neglect, and continue efforts toward the development of state CASA/GAL organizations in the states currently without this resource that enhances support of program service delivery in local communities. Additional projects include sustaining development of training on best practices in addressing the needs of children impacted by the opioid epidemic and other forms of substance abuse, child sex trafficking, unaccompanied children and addressing racial disproportionality in child welfare and the need for racially and culturally sensitive recruitment and matching of CASA/GAL advocates.

According to the most recent government data available, the number of child maltreatment cases has increased to nearly 700,000 per annum. This remains a significant population with equally significant and complex issues and risk factors. Without the benefit of a specially trained CASA/GAL advocate that is able to devote dedicated time and attention to the details of the case, the child victim faces a complex and cumbersome court process and foster care system that is overwhelmed, overburdened, and under-resourced. Our ability as a national network to serve every



child victim of abuse and neglect is directly tied to strengthening and expanding a foundational and interwoven program of advocate training, technical assistance, standards, tools, and resources that are funded with DOJ support.

While children who are the victims of maltreatment have suffered deep layers of trauma, these experiences do not have to be their only life story. Juvenile detention and adult incarceration do not have to be the path to their future. Substance abuse, PTSD, homelessness, and joblessness do not have to be the basis of their experiences. We can change their trajectory, together, with Congressional support.

Caring, dedicated, and extensively trained CASA/GAL advocates bring about positive changes in the lives of child victims. Full funding is needed to continue expanding the advocate pipeline, enhance the training, resources, and services provided to and through CASA/GAL programs, and strengthen outcomes for future members of our nation's workforce.

We urge the Subcommittee to fund the Court Appointed Special Advocates Program at our authorized level of \$12 million in FY 2020 to address the overwhelming need for dedicated advocacy on behalf of child victims of abuse and neglect. Thank you for your consideration.

Written Testimony

FY20 Funding: VAWA, VOCA Programs & Crime Victims Fund

Prepared for presentation to the
U.S. House Appropriations Subcommittee on
Commerce, Justice, Science, and Related Agencies

Submitted By:

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April 3, 2019

Chairman Serrano, Ranking Member Aderholt, and distinguished members of the Commerce, Justice, and Science Appropriations Subcommittee, the **Daughters of Penelope (DOP)**, an international service organization for women of Greek heritage and Philhellenes, which is dedicated in part to supporting victims of domestic violence, is requesting support for **Victims of Crime Act (VOCA)** and **Violence Against Women Act (VAWA)** programs at the **Department of Justice**. Specifically, we request a **Crime Victims Fund** cap for FY2020 to be set at least at **\$2.6 billion** and without any transfers to programs not authorized under the VOCA statute; and we support a strong investment of **\$582 million** for **VAWA** programs and for Congress to pass a strong bipartisan-backed reauthorization of VAWA.

VOCA Programs & Crime Victims Fund

The Victims of Crime Act (VOCA) created the Crime Victims Fund, which serves as a mechanism to fund compensation and services for the nation's victims of federal crime. The Fund is comprised of money from criminals, and by law, the Fund is dedicated solely to victim services. For example, the Fund is used to help pay for state victim compensation and assistance programs, grants to victim service providers, and other victim related programs. A considerable amount of this money supports victims' out-of-pocket expenses such as medical and counseling fees; lost wages and funeral and burial costs. According to the Department of Justice, in FY2017, state VOCA victim assistance grants supported an estimated 14,000 victims' services projects administered by nearly 7,800 public and community-based agencies in the United States.¹ These agencies provided services to nearly millions of victims of crime, including victims of murder, assault and sexual assault, domestic violence, stalking and elder abuse, among many others.

The Crime Victims Fund is financed by fines, forfeitures, or other penalties paid by federal crime offenders. Therefore, the Crime Victims Fund is not funded by

¹ <https://www.justice.gov/jmd/page/file/1039211/download>, Page 58.

taxpayer dollars. However, it is unfortunate Congress often carves out funds from the Crime Victims Fund to use as offsets for other government programs. Because the Crime Victims Fund is comprised of non-taxpayer dollars, it should not be considered available for use for non-VOCA programs in the federal budget. Moreover, according to a previous statement of the Congressional Victims' Rights Caucus, "not only does raiding the Crime Victims Fund violate the intent of the law, but it violates the [VOCA] statute itself..." Therefore, we recommend to the Subcommittee that the Crime Victims Fund be used only for programs authorized under the VOCA statute. However, recent major appropriations bills passed by Congress, and previous administrations' budget requests, have carved out funds from the Crime Victims Fund for non-VOCA authorized programs. As examples, the FY2019 omnibus appropriations bill transferred \$497.5 million from the Crime Victims' Fund to VAWA programs and the administration's FY2020 budget proposes a \$492.5 million transfer from the Crime Victims' Fund to VAWA programs. We request the elimination of transfers that harm the Fund's long-term viability and ability to commit fully to crime victims. Another unfortunate ramification of allowing transfers from the Fund is that it causes politicization of the Fund. This is why in the past we have supported bipartisan-backed legislation (such as **H.R. 5363, Crime Victims Fund Preservation Act of 2018** in the previous Congress) that creates a "lockbox" to ensure that money in the Fund cannot be used for anything other than victims' programs authorized under the VOCA statute and that permanently excludes the Crime Victims Fund from any future government sequestration.

Finally, we recommend setting the Crime Victims Fund cap to at least \$2.6 billion. Congress established an appropriation cap on funds available for distribution intended to maintain the Crime Victims Fund as a stable source of support for future victim services. At the cap level, Congress will not only ensure the continuation of enhanced services to victims to meet their needs, but it also does not contribute to, or add to, the national debt or deficit because these are non-taxpayer funds.

VAWA Programs

Domestic violence is a pervasive, life-threatening crime affecting millions of individuals across our nation regardless of age, gender, socio-economic status, race or religion. The statistics are alarming. According to the Centers for Disease Control and Prevention (CDC) and The National Intimate Partner and Sexual Violence Survey (NISVS), 2010-2012 State Report:

- In the United States, intimate partner contact sexual violence, physical violence, and/ or stalking was experienced by 37.3% of U.S. women during their lifetime.²
- One in 4 women and 1 in 9 men have experienced severe physical violence by an intimate partner during their lifetime.³
- In 2015, 1270 women and men were murdered by an intimate partner (e.g. husband, wife, boyfriend, girlfriend).⁴

Also, of concern, are the following stats:

² <https://www.cdc.gov/violenceprevention/pdf/NISVS-StateReportBook.pdf>

³ <https://www.cdc.gov/violenceprevention/pdf/NISVS-infographic-2016.pdf>

⁴ <https://www.cdc.gov/violenceprevention/pdf/NISVS-StateReportBook.pdf>

- On average, nearly 20 people per minute are physically abused by an intimate partner in the United States. During one year, this equates to more than 10 million women and men.⁵
- Nationwide, an average of 3 women are killed by a current or former intimate partner every day.⁶
- Approximately 15.5 million children are exposed to domestic violence annually.⁷

Our nation's response to intimate partner violence is driven by VAWA programs at the U.S. Department of Justice. Each of these programs is critical to ensuring that victims are safe, that offenders are held accountable, and that our communities are more secure. Thanks to VAWA, steady progress has been made there are many victims who still suffer in silence. A 2017 24-hour survey of domestic violence programs across the U.S. found that although 20,352 Hotline calls were answered (averaging more than 14 calls every minute). However, 11,441 requests for services (such as emergency shelter, transportation, or legal representation) went unmet because programs lacked the resources to provide them.⁸ The unconscionable gap between need and resources only widens.

Daughters of Penelope's Work to Support Domestic Violence Shelters

Why are VAWA and VOCA programs important to the Daughters of Penelope? In addition to our chapters supporting domestic violence shelters in their respective local communities, the Daughters of Penelope is a national sponsor and stakeholder of two domestic violence shelters—**Penelope House, in Mobile, Alabama;** and **Penelope's Place, in Brockton, Massachusetts.** In the past, the Daughters of Penelope has supported WIN Hellas, which is an NGO based in Athens, Greece that is active in the prevention of violence against women.

Regarding Penelope House, it was the first of its kind in Alabama when it opened its doors in 1979. Since then, Penelope House has become a nationally-recognized as a model shelter for others to emulate. VAWA and VOCA grant funding has been critical in helping Penelope House to meet its mission of providing safety, protection and support to victims of domestic violence and their children through shelter, advocacy, and individual and community education.

For example, Penelope House has been awarded VAWA and VOCA grants from the following programs: Shelter Services, Court Advocate Program, and Transitional Living Program. Portions of these grants help to fund the case managers, case and court advocates, and children's counselors and program coordinators, among other employees who help to provide the life-saving support to domestic violence victims and their children.

Statistics – Effectiveness and Importance of VAWA & VOCA Grant Funding

- VOCA/VAWA grant funding comprised 27% of Penelope House's 2018 budget.
- VOCA is the largest source of Penelope House's funding.

⁵ https://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf

⁶ NNEDV Domestic Violence Fact Sheet, accessed <https://nnedv.org/mdocs-posts/domestic-violence-and-sexual-assault-factsheet/>

⁷ Ibid.

⁸ 12th Annual National Domestic Violence Counts National Summary

Penelope House's Court Advocacy Program is funded by VOCA & VAWA. It's stats for clients served are:

- Adult Clients: 4,895
- Children: 4,676
- Court Appointments with Clients: 3,904
- Clients Assisted to obtain protection from abuse or no contact orders: 1,272

VOCA supports the salaries and benefits for seven Court/Victim Advocates who provide services to victims of domestic violence throughout Mobile, Washington, Clarke and Choctaw Counties of Alabama as they navigate within the court system. (VOCA grant funding has become increasingly important to Penelope House because Penelope House's services has been expanded to include more counties in Alabama.)

VAWA supports a full-time Court Advocate Assistant and a portion of the salary for a Court/Victim Advocate for the Court Advocacy Program. The Court Advocate Assistant provides administrative support to Court/Victim Advocates and provides assistance to the Court Advocacy Supervisor. The Assistant also collects and compiles program data needed for the evaluation of the Court Advocacy Program. The Court Advocate Assistant is dually trained to serve as a Court/Victim Advocate when necessary in case of illness or any other absence of court advocates. Thus, a victim will not have to be alone as he/she attempts to navigate within the court system.

Penelope House's Emergency Shelter Program is funded by VOCA. It's 2017 service stats are:

- Adults sheltered: 402
- Children sheltered: 431
- Total Client Service Hours: 12,773
- Total Nights of shelter provided: 7,960
- Crisis calls: 1,602
- Meals Served: 23,880

RECOMMENDATION

The Daughters of Penelope (DOP) is requesting support for **Victims of Crime Act (VOCA)** and **Violence Against Women Act (VAWA)** programs, which are vital to DOP programs that serve its mission. Specifically, we request a Crime Victims Fund cap for FY2020 to be set at least \$2.6 billion and without any transfers to programs not authorized under the VOCA statute; and we support a strong investment of \$582 million for VAWA programs.

The Crime Victims Fund is not funded by taxpayer dollars. Therefore, the cap can be sustained or raised without adding to the national debt or deficit and transfers (or carve outs) must be eliminated in FY2020 and going forward. Also, it therefore must not be subject to sequestration.

Clearly, as the missions of domestic violence centers across the country, such as Penelope House, have expanded into jurisdictions due to the unfortunate increased need to provide victims' services, the viability of the Crime Victims Fund, VOCA, and VAWA grants have become increasingly important to meet the victims' needs.

Thank you for the opportunity to present and submit our written testimony before the Subcommittee.

Sean Vitka, Policy Counsel, Demand Progress
Written Testimony Submitted to the The House Appropriations Commerce, Justice,
Science, and Related Agencies Subcommittee Concerning the FY 2020 Appropriations Bill

Dear Chairman Serrano, Ranking Member Aderholt, and members of the subcommittee:

Thank you for the opportunity to submit testimony regarding the FY 2020 Commerce, Justice, Science, and Related Agencies Appropriations Bill. I am testifying on behalf of Demand Progress, a national grassroots organization with more than two million affiliated activists who fight for the basic rights and freedoms needed for a modern democracy. Our policy agenda encompasses civil liberties, civil rights, money in politics, and government reform. Today we testify regarding increasing transparency and accountability at the Department of Justice, specifically with regard to the growing body of secret law embedded within Office of Legal Counsel opinions.

The Office of Legal Counsel

Opinions by the Justice Department's Office of Legal Counsel ("OLC") can have the effect of law within the executive branch, but they are regularly withheld from Congress and the public. The executive branch withholds not only the substance of these opinions but also basic information about them, such as when and to whom they are issued, the subject of their analyses, and even how many are currently in effect. Worse, the OLC may and has issued final opinions that are at variance with interpretations of law made by Congress and the courts. The Commerce, Justice, Science, and Related Agencies Subcommittee can take the first step toward addressing this problem by requiring the Department of Justice to report on the volume of OLC opinions that have been produced with taxpayers' money.

Office of Legal Counsel opinions pose a serious threat to the rule of law, and secrecy around them has caused significant harm. For example, the now-infamous "torture memos," which declared legal under domestic and international law life-threatening "enhanced interrogation techniques" in secret CIA prisons, are, in fact, OLC opinions.¹ One of these opinions acknowledged three times that OLC "cannot predict with confidence whether a court would agree with this conclusion," but nevertheless concluded that the "question is unlikely to be subject to judicial inquiry."² The Department of Justice's Office of Professional Responsibility concluded that one author, John Yoo, "committed intentional professional misconduct when he

¹ <https://www.nytimes.com/2004/06/27/world/reach-war-interrogations-aides-say-memo-backed-coercion-already-use.html>

² <https://www.justice.gov/sites/default/files/olc/legacy/2013/10/21/memo-bradbury2005.pdf>

violated his duty to exercise independent legal judgment and render thorough, objective, and candid legal advice.”³

When the matter did encounter public scrutiny, then-Attorney General Eric Holder articulated another power of OLC opinions: “the Department would not prosecute anyone who acted in good faith and within the scope of the legal guidance given by the Office of Legal Counsel regarding the interrogation of detainees.”⁴ Office of Legal Counsel opinions are similarly at the heart of a number of other controversies, like whether a sitting president may be indicted,⁵ whether the president may use an autopen to sign a bill,⁶ under what circumstances an American citizen can be targeted by a drone strike,⁷ the ban on immigrants from Muslim countries,⁸ and individuals’ eligibility for certain senior government positions.⁹

Withholding OLC opinions is not only against the interests of the rule of law and transparency writ large, it is also at odds with express Congressional intent and agency policy. Congress incorporated a “presumption of openness” in the 2016 FOIA Improvement Act, which codified an Obama-era executive order that prohibited an agency from withholding documents except in situations where disclosure would result in foreseeable harm.¹⁰ In the context of OLC opinions specifically, twenty prominent former OLC attorneys wrote a memorandum on best practices in 2006 calling on the OLC to “publicly disclose its written legal opinions in a timely manner, absent strong reasons for delay or nondisclosure.”¹¹ And the Office of Legal Counsel itself, in a 2010 “best practices” memo, asserted that “the Office operates under the presumption that it should make its significant opinions fully and promptly available to the public,” including considering “disclosing documents even if they technically fall within the scope of a FOIA exemption.”¹²

Considering the guidance, policies, actions by Congress, and the significance of OLC opinions detailed above, the policy of the Justice Department should be to disclose all opinions to congress and the public by default, except in certain limited circumstances. The government

³ https://www.aclu.org/files/pdfs/natsec/opr20100219/20090729_OPR_Final_Report_with_20100719_declassifications.pdf

⁴ <https://www.justice.gov/opa/pr/statement-attorney-general-regarding-investigation-interrogation-certain-detainees>

⁵ <https://www.justice.gov/olc/opinion/sitting-president%E2%80%99s-amenability-indictment-and-criminal-prosecution>

⁶ <https://www.justice.gov/olc/opinion/whether-president-may-sign-bill-directing-his-signature-be-affixed-it>

⁷ https://www.washingtonpost.com/world/national-security/legal-memo-backing-drone-strike-is-released/2014/06/23/1f48dd16-faec-11e3-8176-f2c941cf35f1_story.html

⁸ <https://assets.documentcloud.org/documents/3442905/EO-Foreign-Terrorist-Entry.pdf>

⁹ <https://www.justice.gov/olc/file/1078061/download>

¹⁰ Public Law No: 114-185, available at <https://www.congress.gov/bills/114/114th-congress/senate-bill/337/>

¹¹ https://web.archive.org/web/20090624234142/http://www.acslaw.org/files/Microsoft%20Word%20-%2011_Johnsen_OLC.pdf

¹² <http://www.justice.gov/olc/pdf/olc-legal-advice-opinions.pdf>

instead argues, however, that OLC opinions are not final, but rather “predecisional” and “deliberative,” putting them at times outside the reach even of the Freedom of Information Act, an argument with which some courts have agreed.¹³ This stands in contrast to the OLC’s “best practices” memorandum, which describes its “core function” as providing “controlling advice to Executive Branch officials on questions of law that are centrally important to the functioning of the Federal Government.”¹⁴ That memorandum further acknowledged that OLC is “frequently asked to opine on issues of first impression that are unlikely to be resolved by the courts” and that in such circumstances “OLC’s advice may effectively be the final word on the controlling law.”¹⁵

This subcommittee need not resolve all of the issues concerning OLC opinions today. Rather, before this subcommittee is an opportunity to assess the scope of secret law emanating from the Justice Department by requiring a basic accounting of OLC opinions that are currently in effect. The Department of Justice obscures the scope of the problems discussed here, and makes OLC opinions even harder to reach through the Freedom of Information Act, by failing to disclose even the existence of an unknown number of OLC opinions. A 2012 review by the Sunlight Foundation, for instance, found that the Department of Justice redacted the titles of 36% of at least 509 opinions issued from 1998 to 2012.¹⁶

We recognize that due to classification, national security, and privacy concerns, not all OLC reports can be fully released to the public. Nevertheless, there is an analogous situation with federal Inspectors General and the Government Accountability Office. Several executive branch IGs and other oversight institutions have found ways to restrict access to sensitive reports without keeping the public in the dark about the reports’ existence. For example, the Department of Defense Inspector General and the Government Accountability Office currently provide basic information, such as a report title or report number, in cases when some or all of a report’s contents must remain nonpublic. If the Department of Defense — which produces a large number of classified and sensitive reports — can provide this level of transparency, a similar remedy should suit the Office of Legal Counsel. By providing this information, the Department of Justice would provide the information it determines can be shared publicly, and would empower the public to request the report through the Freedom of Information Act when a dispute around publication persists.

¹³ See [https://www.cadc.uscourts.gov/internet/opinions.nsf/BA847AE67CFA826785257C550053C612/\\$file/12-5363-1473387.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/BA847AE67CFA826785257C550053C612/$file/12-5363-1473387.pdf)

¹⁴ <https://www.justice.gov/sites/default/files/olc/legacy/2010/08/26/olc-legal-advice-opinions.pdf>

¹⁵ *Id.*

¹⁶ <https://sunlightfoundation.com/blog/2012/08/15/39-of-office-of-legal-counsel-opinions-kept-from-the-public/>

In sum, an unknown subset of OLC opinions has been actively kept secret by the executive branch from Congress and the public. Their concealment undermines the system of checks and balances created by the framers, and at times the withholding of these opinions has served to conceal wrongdoing and faulty legal interpretations.¹⁷ This subcommittee has the opportunity to take a step toward addressing this body of secret law by requiring the Department of Justice take the simple step of reporting to the House Committee on Appropriations and the public a complete list of all final opinions.

We therefore request this subcommittee and the Appropriations Committee include the following legislative language in the FY 2020 Commerce, Justice, Science, and Related Agencies Appropriations Bill and accompanying committee report:

Report to Committee on Office of Legal Counsel Opinions: Not later than 90 days after enactment of this legislation, or no later than January 15, 2021, the Department of Justice shall submit to the House Committee on Appropriations and the Senate Committee on Appropriations and publish on its website a report that includes the following:

(a) A complete list of final OLC opinions currently in effect, where ‘final’ is defined as:

- (1) designated by the Attorney General or his designee as final; or
- (2) government officials or government contractors are following its guidance; or
- (3) it has been relied upon to formulate current legal guidance; or
- (4) it is directly or indirectly cited in another final Office of Legal Counsel opinion.

(b) For each opinion included in (a), the Department of Justice shall include --

- (1) The full name of the opinion, subject to classified redaction;
- (2) The date it was finalized or updated;
- (3) The author’s name; and
- (4) The recipient’s name(s).

We thank the subcommittee for the opportunity to submit this testimony, and urge it to order this report to stave off a growing body of secret law.

¹⁷ <http://www.nytimes.com/2008/04/03/washington/03intel.html>

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April 3, 2019

The Honorable José Serrano, Chair
 The Honorable Robert Aderholt, Ranking Member
 U.S. House Committee on Appropriations
 Subcommittee on Commerce, Justice, Science, and Related Agencies
 H-307 The Capitol
 Washington, DC 20515

Dear Chairman Serrano and Ranking Member Aderholt:

We write to you regarding the FY20 Budget Hearing for the Department of Commerce.¹ EPIC is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.² We are currently litigating *EPIC v. Dept of Commerce*,³ to block the Census Bureau from collecting citizenship information.

EPIC's central claim is that Commerce Department failed to conduct required Privacy Impact Assessments prior to adding the citizenship question. The Commerce Department does not dispute that it must complete new Privacy Impact Assessments before conducting the census, but a lower court held that the agency could wait until the moment the census forms are put in the mailbox to assess the privacy risks.⁴ That view is entirely at odds with Section 208 of the E-Government Act.⁵

EPIC has appealed that decision and we will argue the appeal before the D.C. Circuit on May 8.⁶

The citizenship question poses a unique threat to privacy. If the question is included on the 2020 Census, millions will be forced to provide sensitive personal information to the federal government that could expose individuals and their family members to investigation, sanction, and even deportation. The Census Bureau has already said it would transfer block-level citizenship data to the Department of Justice⁷—data that could subject targeted communities to prosecution..

¹ *Department of Commerce Budget Request for FY 2020*, 116th Cong. (2019), H. Comm. on Appropriations, Subcomm. on Commerce, Justice, Science, and Related Agencies (April 3, 2019), <https://appropriations.house.gov/legislation/hearings/department-of-commerce-budget-request-for-fy-2020>.

² *About EPIC*, EPIC (2019), <https://www.epic.org/epic/about.html>.

³ *EPIC v. Dep't of Commerce*, No. 19-5031 (D.C. Cir. appeal docketed Feb. 21, 2019).

⁴ *EPIC v. Dep't of Commerce*, 356 F. Supp. 3d 85 (D.D.C. 2019).

⁵ Pub. L. No. 107-347, 116 Stat. 2899 (Dec. 17, 2002) (codified at 44 U.S.C. § 3501 note).

⁶ Order, *EPIC v. Dep't of Commerce*, No. 19-5031 (Mar. 12, 2019), <https://epic.org/privacy/litigation/pia/epic-v-commerce/EPIC-v-Commerce-19-5301-EPIC-order-scheduling-argument-050819.pdf>.

⁷ Letter from Wilbur Ross, Secretary of Commerce, to Karen Dunn Kelley, Under Secretary for Economic Affairs, at 1 (Mar. 26, 2018), <https://epic.org/privacy/litigation/pia/epic-v-commerce/EPIC-v-Commerce-PI-Motion-Exhibit-1.pdf>.

EPIC Statement
 House Appropriations Committee

1

FY20 Budget – Dept. of Commerce
 April 3, 2019

Privacy is a Fundamental Right.

Despite these extraordinary privacy risks, the Census Bureau has failed to complete required Privacy Impact Assessment as mandated by Congress.⁸ The E-Government Act of 2002 requires federal agencies to conduct and publish an impact assessment *before* initiating a new collection of personally identifiable information.⁹ Yet as *EPIC v. Commerce* reveals, the Bureau ignored this legal mandate and abruptly added the citizenship question with no informed understanding of the privacy risks involved.

Privacy Impact Assessments are a necessary step in an agency's decision whether to collect personal data. In Section 208, Congress made clear that data collection simply could not occur with the completion and review of these assessments.¹⁰ Conducting and publishing an impact assessment forces an agency "to demonstrate that the agency fully considered privacy and incorporated appropriate privacy protections from the earliest stages of the agency activity[.]"¹¹ When carrying out a Privacy Impact Assessment, an agency may even decide to abandon a proposed collection of personal data because it poses too great a threat to privacy.

Nowhere is the duty of a federal agency to assess privacy risks more important than the decennial census, a "unique" and compulsory collection of data that "reaches every population group, from America's long-time residents to its most recent immigrants."¹² Even the Census Bureau admits that it must complete new privacy impact assessments before it can collect citizenship data.¹³ Yet contrary to the E-Government Act, the Bureau claims that it can postpone these assessments until next year, long after the census questionnaire has been finalized and printed.

The Census Bureau's disregard for Section 208 and its unlawful refusal to address the privacy risks of the citizenship question is already spawning troubling consequences. The most recent Privacy Impact Assessment for the decennial census simply ignores the citizenship question, leaving the public to guess about the intended uses of the citizenship data collected by the Bureau.¹⁴ Remarkably, the same agency document claims that census response data—which could include individuals' citizenship status—may be transferred in "[b]ulk" to other federal agencies "[f]or criminal law enforcement activities."¹⁵

The Committee should require the Census Bureau to remove the citizenship question pending completion of the required Privacy Impact Assessments.

⁸ *EPIC v. Dep't of Commerce*, *supra* note 3.

⁹ E-Government Act, Pub. L. No. 107-347, § 208(b), 116 Stat. 2899, 2921–22 (Dec. 17, 2002) (codified at 44 U.S.C. § 3501 note).

¹⁰ *Id.* at § 208(b).

¹¹ Office of Mgmt. & Budget, OMB Circular A-130: Managing Information as a Strategic Resource (2016), app. II at 10, <https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/OMB/circulars/a130/a130revised.pdf>.

¹² Presidential Proclamation No. 7,286, 65 Fed. Reg. 17,985, 17,985 (Apr. 1, 2000).

¹³ *EPIC v. Dep't of Commerce*, 356 F. Supp. 3d 85 (D.D.C. 2019) (noting "defendants' conce[ssion]" that they must "prepare PIAs that adequately address the collection of citizenship data in the 2020 Census").

¹⁴ See generally U.S. Dep't of Commerce, *Privacy Impact Assessment for the CEN08 Decennial Information Technology Division (DITD)* (approved Sep. 28, 2018), <https://epic.org/privacy/litigation/pia/epic-v-commerce/EPIC-v-Commerce-PI-Motion-Exhibit-6.pdf>.

¹⁵ *Id.* at 5, 7, 9.

We ask that this letter be submitted into the hearing record. EPIC looks forward to working with the Subcommittee on Commerce, Justice, Science, and Related Agencies on this issue.

Sincerely,

/s/ Marc Rotenberg
 Marc Rotenberg
 EPIC President

/s/ Caitriona Fitzgerald
 Caitriona Fitzgerald
 EPIC Policy Director

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April 4, 2019

The Honorable José Serrano, Chair
The Honorable Robert Aderholt, Ranking Member
U.S. House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
H-307 The Capitol
Washington, DC 20515

Dear Chairman Serrano and Ranking Member Aderholt:

We write to you regarding your hearing on the Federal Bureau of Investigation's (FBI) FY 2020 budget request¹ and the FBI's failure to notify hundreds of government officials that Russian actors compromised their email. The Electronic Privacy Information Center ("EPIC") is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.²

After reports emerged about Russian interference with the 2016 election, EPIC launched a new project on Democracy and Cybersecurity.³ EPIC is pursuing several Freedom of Information Act cases to learn more about the Russian interference.⁴ The Committee should be interested in the documents EPIC obtained in *EPIC v. FBI*,⁵ concerning victim notification procedures, particularly after this week's Inspector General's report. The Inspector General found that the FBI's system for notifying victims of cyberattacks is "unreliable" and "incomplete" and that "not all victims were informed of their rights as required by" DOJ guidelines, which are "outdated since they do not consider the needs of victims of cybercrime."⁶

The IG's finding is consistent with the documents EPIC obtained in our FOIA case against the FBI. In *EPIC v. FBI*, EPIC sought to understand and assess the FBI's response to the Russian interference in the 2016 Presidential election. As PPD-41 sets out, the FBI is the lead federal agency for investigating cyber attacks in the United States by criminals, overseas adversaries, and

¹ *Federal Bureau of Investigation Budget Request for FY 2020*, 116th Cong. (2019), H. Comm. on Appropriations, Subcomm. on Commerce, Justice, Science, and Related Agencies, <https://appropriations.house.gov/legislation/hearings/federal-bureau-of-investigation-budget-request-for-fy-2020> (April 4, 2019).

² See EPIC, *About EPIC*, <https://epic.org/epic/about.html>.

³ See EPIC, *Democracy and Cybersecurity*, <https://epic.org/democracy/>.

⁴ *EPIC v. ODNI*, No. 17-163 (D.D.C. filed Jan. 25, 2017); *EPIC Seeks Release of FISA Order for Trump Tower*, EPIC (March 6, 2017), <https://epic.org/2017/03/epic-seeks-release-of-fisa-ord.html>; *EPIC v. IRS*, No. 17-670 (D.D.C. filed Apr. 15, 2017).

⁵ *EPIC v. FBI*, 2018 U.S. Dist. LEXIS 85467 *, 2018 WL 2324084 (D.D.C. May 22, 2018); *EPIC v. FBI* (Russian Hacking), <https://epic.org/foia/fbi/russian-hacking/>.

⁶ Office of the Inspector General, U.S. Dept. of Justice, *Audit of the Federal Bureau of Investigation's Cyber Victim Notification Process* (Mar. 2019), <https://oig.justice.gov/reports/2019/a1923.pdf>.

EPIC Statement

House Appropriations

1

FBI FY2020 Budget
April 4, 2019

Privacy Is a Fundamental Right.

terrorists.”⁷ But questions were raised about the failure of the FBI to adequately investigate the attacks on the nation’s political institutions.⁸ EPIC therefore pursued to help the public “evaluate the FBI response to the Russian interference, assess threats to American democratic institutions, and to ensure the accountability of the federal agency with the legal authority to safeguard the American people against foreign cyber attacks.”⁹

EPIC requested four sets of documents from the FBI:

- (1) All records including, but not limited to, memos, reports, guidelines, procedures, summaries, and emails pertaining to the FBI’s investigation of Russian-sponsored cyber attack on the RNC, DNC, and DCCC.
- (2) All records of communications to the RNC, DNC, and DCCC regarding the threat of Russian interference in the 2016 Presidential election.
- (3) All records of communications with other federal agencies regarding Russian interference in the 2016 Presidential election.
- (4) All records including, but not limited to, memos, reports, guidelines, and procedures pertaining to the FBI’s procedure to notify targets of cyber attacks.

As a result of the FOIA lawsuit, EPIC has obtained document set (4) regarding FBI procedures for notifying victims of cyberattacks. According to the FBI procedure for “Victim Notification in Computer Intrusion Matters” in the Cyber Division (CyD) Policy Guide (emphasis added) set out in the documents EPIC received:

CyD’s top priority is the protection of our national security, economy, and information infrastructure from intrusions, malicious code, and nefarious computer network operations. This effort entails the sharing of investigative information with intrusion victims and the CND community to protect compromised systems, mitigate economic loss and damage, and prevent future attacks. Victim notification is a compelling way for CyD to contribute to network defense for the protection of individual, commercial, and government users of the Internet, as well as for the protection of the infrastructure itself. It is the policy of CyD to notify and disseminate meaningful information to victims and the CND community in a timely manner to the extent to which it does not interfere with ongoing law enforcement or USIC investigations, operations, methods, sources, or technologies.

In a computer intrusion investigation, the victim to be notified is the individual, organization, or corporation that is the owner or operator of the computer at the point of compromise or intrusion. Cyber victims are generally individuals or organizations subjected to cyber-based operations, including computer network attack (CNA) and computer network exploitation (CNE), in furtherance of criminal activity or threats to

⁷ *What We Investigate, Cyber Crime*, FBI.gov, <https://www.fbi.gov/investigate/cyber>; Directive on United States Cyber Incident Coordination (“PPD 41”), 2016 Daily Comp. Pres. Doc. 495 (July 26, 2016) (setting forth the FBI’s legal authority for cybersecurity threat response).

⁸ Ellen Nakashima & Adam Entous, *FBI and CIA Give Differing Accounts to Lawmakers on Russia’s Motives in 2016 Hacks*, Wash. Post (Dec. 10, 2016), https://www.washingtonpost.com/world/national-security/fbi-and-cia-give-differing-accounts-to-lawmakers-on-russias-motives-in-2016-hacks/2016/12/10/c6dfadfa-be0f-11e6-94ac-3d324840106c_story.html.

⁹ Complaint at 7, *EPIC v. FBI*, *supra* note 5.

national security. These CNA and CNE operations often result in the compromise of electronic systems, resulting in the alteration, loss, exfiltration, or denial of access to data that the victim maintains or controls. Victims may be identified, to the extent possible, by the FBI or its partner agencies in the course of investigative activities of suspected cybercrimes and cyber-related threats.

Because timely victim notification has the potential to completely mitigate ongoing and future intrusions and can mitigate the damage of past attacks while increasing the potential for the collection of actionable intelligence, CyD's policy regarding victim notification is designed to strongly favor victim notification. Even when it may interfere with another investigation orUSIC operation, notification should still be considered in coordination with the operational stakeholders when the equities of victim notification serve to protect USPERs, a national infrastructure, or other U.S. interests from significant harm.¹⁰

The District Court in *EPIC v. FBI* acknowledged the significance of this inquiry. As the Court stated:

As EPIC stresses, Russian interference in the 2016 presidential election is an important matter which has undoubtedly captured the attention of the American people and their elected representatives. Congress has made the issue a priority. The Senate Intelligence Committee is conducting a bipartisan investigation, armed with the power to compel testimony and documents, and reporting the information that it believes the public needs. The United States intelligence community is also actively investigating and has issued public reports, as EPIC notes. Special Counsel Mueller is leading a team of investigators and attorneys to explore Russian interference and to hold wrongdoers accountable.¹¹

However, the Court, somewhat surprisingly, sided with the FBI on its claims that it need not release further information to EPIC.

In this context, EPIC's purported goals of enabling "the public to evaluate the FBI response to the Russian interference, assess threats to American democratic institutions, and to ensure the accountability of the [FBI]," are best served by allowing federal investigators and lawmakers to conduct their missions on their timetables without the forced piecemeal dissemination of internal government documents relating to these ongoing efforts.¹²

So, the FY 2020 budget process provides a critical opportunity to "evaluate the FBI response to the Russian interference, assess threats to American democratic institutions, and to ensure the accountability of the [FBI]." As you aware, the Intelligence community assessed that both the DNC

¹⁰ Cyber Division Policy Guide at 4.7, available at <https://epic.org/foia/fbi/russian-hacking/EPIC-16-12-22-FBI-FOIA-20170511-Production-2.pdf>.

¹¹ *EPIC v. FBI*, 2018 U.S. Dist. LEXIS 85467, *16. (citations to the record omitted).

¹² *Id.*

and the RNC were subject to a cyber attack by the Russian government.¹³ And now we know that the FBI did not follow the required procedures for Victim Notification once the Bureau learned of this attack.

Based on the documents already obtained in *EPIC v. FBI* and the recent Inspector General's report, the Appropriations Committee should ensure that the FBI improve its cyberattack victim notification procedures.

It is stunning that the FBI failed to follow its own written procedures, particularly where the cyber attack threatened national security and the integrity of democratic institutions. And it is vitally important that the American public is fully informed about the extent of Russian interference with the 2016 election.¹⁴

We ask that this statement be entered into the hearing record.

Sincerely,

/s/ Marc Rotenberg

Marc Rotenberg
EPIC President

/s/ Caitriona Fitzgerald

Caitriona Fitzgerald
EPIC Policy Director

/s/ Jeramie Scott

Jeramie Scott
EPIC Senior Counsel

Attachment

FBI Cyber Division Policy Guide (CyD), "Victim Notification in Computer Intrusion Matters" (Obtained in *EPIC v. FBI*, No. 17-121 (D.D.C. filed Jan. 18, 2017).

¹³ Office of the Dir. of Nat'l Intelligence, *Assessing Russian Activities and Intentions in Recent US Elections* (2017), https://www.dni.gov/files/documents/ICA_2017_01.pdf [hereinafter Declassified ODNI Assessment].

¹⁴ Marc Rotenberg, *Americans have a right to know what intel community knows on Russia*, The Hill (Mar. 27, 2017), <http://thehill.com/blogs/pundits-blog/the-administration/325862-americans-have-a-right-to-know-what-intel-community>

April 8, 2019

The Honorable José Serrano, Chair
The Honorable Robert Aderholt, Ranking Member
U.S. House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
H-307 The Capitol
Washington, DC 20515

Dear Chairman Serrano and Ranking Member Aderholt:

We write to you regarding the FY2020 budget hearing for the Department of Justice ("DOJ").¹ Americans are rightly concerned about the scope of government surveillance, the impact of new technologies, and the protection of Constitutional freedoms.² The DOJ must improve reporting on its surveillance orders.

For over twenty years, the Electronic Privacy Information Center (EPIC)³ has reviewed the annual reports produced by the Administrative Office of the US Courts on the use of federal wiretap authority as well as the letter provided each year by the Attorney General to the Congress regarding the use of the FISA authority.⁴ EPIC routinely posts these reports when they are made available and notes any significant changes or developments.⁵

The annual report prepared by the Administrative Office of the U.S. Courts provides a basis to evaluate the effectiveness of wiretap authority, to measure the cost, and even to determine the percentage of communications captured that were relevant to an investigation. These reporting requirements ensure that law enforcement resources are appropriately and efficiently used while safeguarding important constitutional privacy interests.

¹Department of Justice Budget Request for Fiscal Year 2020, U.S. House Comm. on Appropriations (Apr. 9, 2019), <https://appropriations.house.gov/legislation/hearings/departments-of-justice-budget-request-for-fiscal-year-2020>.

²Abigail Geiger, *How Americans Have Viewed Government Surveillance and Privacy Since Snowden Leaks*, Pew Research Center (June 4, 2018), <http://www.pewresearch.org/fact-tank/2018/06/04/how-americans-have-viewed-government-surveillance-and-privacy-since-snowden-leaks/>.

³*About EPIC*, EPIC, <https://epic.org/epic/about.html>.

⁴See, e.g., Administrative Office of the US Courts, *Wiretap Report 2017*, <https://www.uscourts.gov/statistics-reports/wiretap-report-2017>; Letter from Assistant Attorney General Stephen E. Boyd to the Honorable Michael Pence, President, U.S. Senate, et al., Apr. 30, 2018, <https://fas.org/irp/agency/doj/fisa/2017rept.pdf>.

⁵See *Title III Wiretap Orders: 1968-2017*, EPIC, http://epic.org/privacy/wiretap/stats/wiretap_stats.html; *Foreign Intelligence Surveillance Act*, EPIC, <http://epic.org/privacy/terrorism/fisa/>; *Foreign Intelligence Surveillance Court (FISC)*, EPIC, <https://epic.org/privacy/terrorism/fisa/fisc.html>.

By way of contrast, the Attorney General's annual FISA report provides virtually no meaningful information about the use of FISA authority other than the applications made by the government to the Foreign Intelligence Surveillance Court.⁶ There is no information about cost, purposes, effectiveness, or even the number of non-incriminating communications of US persons that are collected by the government. Similarly, The Department of Justice has never released to the public any comprehensive reports concerning the collection and use of cell site location information. In 2017, EPIC submitted two Freedom of Information Act requests to DOJ seeking the release of reports on the collect and use of cell site location information.⁷ EPIC has since sued DOJ for failure to respond to our FOIA requests.⁸

Even after the Supreme Court's decision in *Carpenter*, which held that law enforcement must get a warrant to obtain cell site location information, there is little to no information available to Congress or the public about how frequently the government is seeking this location data.

The use of aggregate statistical reports has provided much needed public accountability of federal wiretap practices. These reports allow Congress and interested groups to evaluate the effectiveness of Government programs and to ensure that important civil rights are protected. Such reports do not reveal sensitive information about particular investigations, but rather provide aggregate data about the Government's surveillance activities. That is the approach that should be followed now for FISA and CSLI, particularly after the Supreme Court's decision in *Carpenter*.

The Appropriations Committee should halt funding for wiretap programs until DOJ publicly reports statistics on FISA and CSLI orders.

We appreciate your consideration of EPIC's views, and we would welcome the opportunity to provide additional information to the Committee. We ask that this statement be entered in the hearing record.

Sincerely,

/s/ Marc Rotenberg
Marc Rotenberg
EPIC President

/s/ Alan Butler
Alan Butler
EPIC Senior Counsel

/s/ Caitriona Fitzgerald
Caitriona Fitzgerald
EPIC Policy Director

⁶ It is clear from the Attorney General's annual reports that FISC applications are routinely approved with very rare exceptions. See *Amnesty Int'l USA v. Clapper*, 638 F.3d 118, 140 (2d Cir. 2011) ("Empirical evidence supports this expectation: in 2008, the government sought 2,082 surveillance orders, and the FISC approved 2,081 of them."). Of the Government's 1,499 requests to the FISC for surveillance authority in 2015, none were denied in whole or in part. See 2011 FISA Annual Report to Congress, *supra*, note 3.

⁷ EPIC, *EPIC v. DOJ (CSLI Section 2703(d) Orders)*, <https://epic.org/foia/doj/location-data/>.

⁸ *EPIC v. DOJ*, No. 18-1814 (D.D.C. Aug. 1, 2018).



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National Estuarine
Research Reserve
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**NATIONAL
MARINE
SANCTUARY
FOUNDATION**



**RESTORE
AMERICA'S
ESTUARIES**



The National Association of Marine Laboratories

The Sea Grant Association

The IOQS Association

The National Estuarine Research Reserve Association

The National Marine Sanctuary Foundation

The Coastal States Organization

Restore America's Estuaries

The Association of State Floodplain Managers

for the

Subcommittee on Commerce, Justice, Science, and Related Agencies

Committee on Appropriations, House of Representatives

April 4, 2019

***In support of FY 2020 Appropriations for the Nation's Ocean, Coastal, and Great Lakes Research,
Education, Conservation, and Resource Management Enterprise***

Mr. Chairman and Members of the Subcommittee, this joint statement is submitted on behalf of the non-profit organizations listed above who share a **deep and overriding concern for the health of the Nation's oceans, coasts, and Great Lakes**. This Subcommittee is responsible for the health of the ocean, coastal, and Great Lakes enterprise via oversight and resource decision-making related to NOAA, NSF, NASA, and other agencies. That enterprise is a critical part of the security of the Nation as it relates to economic, environmental, national, homeland, energy, conservation, and food security issues. The Administration budget for FY2020 proposes the elimination of extramural funding for this Subcommittee's ocean, coastal, and Great Lakes research, conservation, observing, and education programs. We urge the Subcommittee to reinstate these programs based on the significant contributions they make for the health of our ocean and coastal enterprises.

The future well-being of the U.S. is in large part dependent on our ocean, coastal, and Great Lakes resources. The U.S. ocean economy is estimated to have contributed more than \$320 billion to the U.S. Gross Domestic Product (GDP) and supported 3.2 million jobs in 2015. Over 40% of the U.S. labor force is employed in coastal watersheds. The offshore mineral industry contributed over 170,000 jobs in 2013 and \$122 billion to GDP. Approximately 88,000 square miles of the Nation's coastal wetlands provide nursery areas for commercially harvested fish and places of refuge for migrating birds. Estuaries provide habitat for nearly 70% of the U.S. commercial fisheries catch and 80% of recreational catch. In 2015, the commercial and recreational fishing industry supported 1.6 million jobs and contributed \$208 billion in sales to the U.S. economy. Ocean measurements, observations, and forecasting generate about \$7 billion in revenues annually. For every \$1 invested in environmental restoration, \$4 in economic value is generated by enhancing the tourism and fishing industries.

The ocean and our coasts are equally important for humanitarian, environmental, and health reasons. The oceans are a primary source of food for over one billion people, a globally significant regulator of the earth's climate, the basic source of water for the hydrologic cycle, a cleaning agent that absorbs carbon



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**RESTORE
AMERICA'S
ESTUARIES**



dioxide and generates oxygen, and home to many thousands of flora and fauna. The oceans are a source of discovery to understand and treat cancers and other human diseases. A wide gulf often separates science from the people who need research results to protect and support them. However, the new ocean economy puts science and predictive capabilities to work in a way that can fill critical, fast-rising needs across sectors.

All of the organizations that contribute their names to this statement stand in strong support for the ocean, coastal and Great Lakes research, conservation, observing, and education programs managed by NOAA. Specifically, we are referring to:

- The National Sea Grant College Program and Marine Aquaculture;
- The Integrated Ocean Observing System;
- The National Estuarine Research Reserve System;
- The National Marine Sanctuary System;
- Coastal Zone Management Grants;
- Coastal Resilience Grants (Title IX);
- NMFS Habitat Conservation and Restoration; and
- The Digital Coast Program

Sea Grant is a unique program within NOAA that sends 95% of its appropriated funds to coastal states through a competitive process to address critical issues identified by public and private sector constituents and coastal communities throughout the United States. Sea Grant fosters cost-effective partnerships among state universities, state and local governments, NOAA, and coastal communities and businesses. In 2017, the Sea Grant program helped generate an estimated \$579 million in economic impacts, created or supported over 12,500 jobs, provided 33 state-level programs with funding that assisted 462 communities to improve their resilience, helped nearly 17,700 fishers adopt safe and sustainable fishing practices, helped restore an estimated 700,000 acres of coastal ecosystems, worked with about 1,300 industry, private sector, local, state and regional partners, and supported the education and training of over 1,800 undergraduate and graduate students.

America's estuaries sustain coastal businesses, protect communities from flooding, keep water clean, sustain commercial fisheries, support wildlife, and provide opportunities for recreation. The National Estuarine Research Reserve System (NERRS) maintains 280 stations that track local water quality, pollution, and weather around the country. These platforms collect data – 42 million data points each year – that track hazardous spills, shellfish industry operations, storm damage and more. Reserves engage more than 36,000 volunteers and community members. Over 3,000 educators and 81,000 K–12 students receive outdoor STEM education. Over 100 universities & research institutions are Reserve partners. In excess of 350 graduate research fellows have studied at a Reserve. Similar to Sea Grant, approximately 98% of federal NERRS funding goes to the communities in which the Reserves are located. NERRS funding also leverages State matching funds raising \$6 million annually to supplement the federal funding; and over the last three years, matching funds invested in the NERRS leveraged an average of approximately \$22 million annually.



Coastal observing systems are used to gather real time information and turn it into useful products that support coastal residents, coastal economies, and a healthy, sustainable environment. They provide timely, actionable information developed from reliable and user-driven science to provide insight into present and future conditions. The need for data and information to help protect lives, economies and the environment has never been greater. Flood protection, safe and efficient marine operations, fisheries, aquaculture, water quality and safe recreation require an expanded network of observing systems and enhanced analysis that will improve predictive and forecasting capabilities for all users. The Integrated Ocean Observing System (IOOS) is a federal partnership that generates and delivers quality information about the nation's oceans, coasts and Great Lakes. IOOS increases economic efficiency and minimizes redundancy by leveraging non-federal investments. Over fifty percent of the marine data now assembled and disseminated by NOAA's National Data Buoy Center is from non-federal sources. IOOS provides a cost-effective approach to providing the nation with reliable information to enhance maritime commerce; improve weather and flooding forecasting; supporting fisheries, ecosystems and water quality; and enhances our ability to plan for and respond to unforeseen hazards.

The National Coastal Zone Management Program (CZM Program) is a state-federal partnership supporting the effective management, beneficial use, protection, and development of the coastal zone. Healthy coastal resources support business and conservation, and long-term planning is essential for coastal areas to remain the economic drivers they are today. In FY 2017, states and territories matched over \$56.9 million in investment in the CZM Program. The CZM program helps enable our nation's coastal communities to plan for uncertainties and protect lives and investments on the coast. This state-federal partnership ensures the responsible use of coastal resources by balancing the needs of economic development and conservation of natural resources while also planning for potential impacts to a state's coastal zone.

The National Marine Sanctuary System is our essential network of protected waters held in trust for all Americans. Encompassing more than 600,000 square miles, national marine sanctuaries conserve some of the Nation's most critical natural, historic, and cultural resources. They are home to many thousands of species, preserve our nation's maritime heritage, and promote access for exploration and world-class outdoor recreation. Sanctuaries are vital to maintaining the healthy ocean and Great Lakes ecosystems that underpin our productive coastal economies. They generate \$8 billion annually in local economies and support jobs and businesses in fishing, tourism, recreation, and scientific research. Nationwide, communities are coming together to conserve our oceans, coasts, and Great Lakes by expanding existing national marine sanctuaries and proposing new designations for the first time in 19 years. Engaging communities as stewards of these protected waters makes sanctuaries unique and provides a comprehensive, highly participatory approach to managing and conserving marine ecosystems and the Great Lakes for current and future generations.

The Digital Coast effort meets the unique information needs of the coastal management community. It provides access not just to a growing body of coastal data, but also the tools, training, and information needed to make over 5 trillion points of LIDAR, 37 terabytes of imagery, and 800,000 square miles of land cover, collected from both federal and non-federal sources, useful for coastal managers, planners,



and decision makers charged with managing the Nation's coastal resources. The products and services provided by the Digital Coast include data, information, and training for more than 4,000 coastal communities.

In conclusion, we urge the Subcommittee to continue support for its portfolio of ocean and coastal programs and we offer the following specific programmatic recommendations:

- National Sea Grant College Program, \$93.5 million for research, education, extension, and outreach activities, including aquaculture, STEM education, and Sea Grant Knauss fellowship programs within the NOAA Operations, Research, and Facilities account within the Office of Oceanic and Atmospheric Research;
- Integrated Ocean Observing System (IOOS), \$50.5 million to support both the regional and national system within NOAA's Operations, Research, and Facilities account, National Ocean Service;
- National Estuarine Research Reserve System, \$30 million in NOAA's Operations, Research and Facilities account within the National Ocean Service; and \$4 million for the Procurement, Acquisition and Construction account within the National Ocean Service;
- Sanctuaries and Marine Protected Areas, \$57 million within the NOAA's Operations, Research, and Facilities account in the National Ocean Service; and \$8.5 million within NOAA's Procurement, Acquisition, and Construction account in the National Ocean Service;
- Coastal Zone Management Grants, \$80.5 million within NOAA's Operations, Research, and Facilities account, National Ocean Service;
- Coastal Resilience Grants (Title IX), \$35 million within NOAA's Operations, Research, and Facilities account, National Ocean Service;
- Habitat Conservation and Restoration (includes Community-Based Restoration Program), \$58 million within NOAA's Operations, Research, and Facilities account, National Marine Fisheries Service; and
- Digital Coast Program, \$5 million within NOAA's Operations, Research, and Facilities account, National Ocean Service.

Ocean, coastal, and Great Lakes research, education, conservation, and resource management programs funded by this Subcommittee are investments in the future health, resiliency, and well-being of our coastal communities which will result in returns of improved quality of life, as well as environmental and economic outcomes many times over the federal investment.

Thank you for the opportunity to provide this unified message.



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Contact:

Benjamin H. Krinsky, PhD
Associate Director for Legislative Affairs
Federation of American Societies for Experimental Biology (FASEB)

Testimony of the

Federation of American Societies for Experimental Biology

Prepared for the

House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Representative José Serrano, Chair
Representative Robert Aderholt, Ranking Member

On

FY 2020 Appropriations for the National Science Foundation

The Federation of American Societies for Experimental Biology (FASEB) respectfully requests a minimum of \$9.0 billion in fiscal year (FY) 2020 for the National Science Foundation.

With its broad mandate to support fundamental research across all fields of science, engineering, and mathematics, the National Science Foundation (NSF) is the cornerstone of our nation's scientific enterprise.¹ NSF investments in discovery-based research at institutions nationwide generate new knowledge, which in turn leads to transformative innovations that enhance quality of life.

Web browsers, modern weather forecasting, and magnetic resonance imaging (MRI) are just a few of the tangible benefits enabled by NSF-funded research.^{2,3}

Many of these advances result from NSF's relationship to other scientific agencies such as the National Institutes of Health (NIH). For example, in the biological sciences, NSF supports research that expands our understanding of life at multiple scales of time and space, from molecules to ecosystems.³ This fundamental knowledge is then applied to advance medicine, enhance agriculture, stimulate new technologies, and protect our health and environment. For example, NSF supported 2018 Nobel-prize winning research that led to the development of directed enzyme evolution, a revolutionary technology now used to produce pharmaceuticals, biofuels, and pesticide alternatives.⁴

The American Physiological Society • American Society for Biochemistry and Molecular Biology • American Society for Pharmacology and Experimental Therapeutics
American Society for Investigative Pathology • American Society for Nutrition • The American Association of Immunologists • American Association of Anatomists
The Protein Society • Society for Developmental Biology • American Peptide Society • Association of Biomolecular Resource Facilities
The American Society for Bone and Mineral Research • American Society for Clinical Investigation • Society for the Study of Reproduction • The Teratology Society
The Endocrine Society • The American Society of Human Genetics • American College of Sports Medicine
Biomedical Engineering Society • Genetics Society of America • The Histochemical Society • Society for Pediatric Research • Society for Glycobiology
Association for Molecular Pathology • Society for Redox Biology and Medicine • Society for Experimental Biology and Medicine
American Aging Association • U.S. Human Proteome Organization • Society of Toxicology

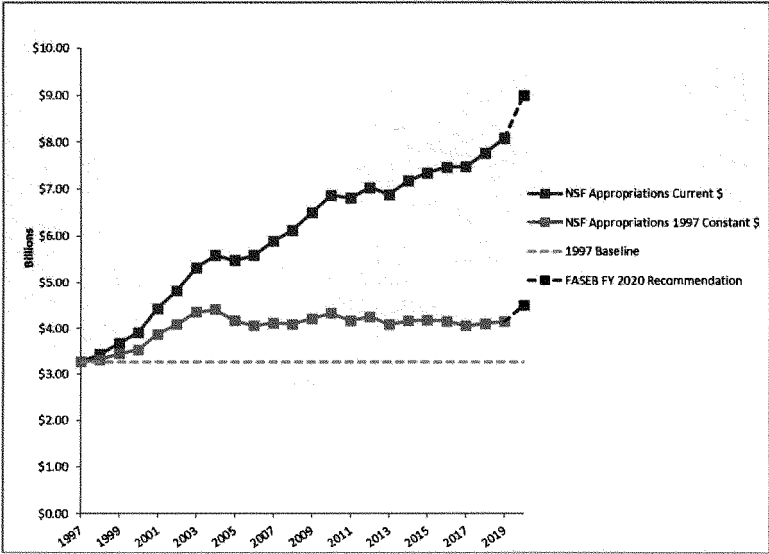
NSF is uniquely positioned to support interdisciplinary collaboration, research facilities, and scientific resources to meet national challenges. By harnessing expertise and technology from across the sciences, NSF-supported research is crucial in safeguarding our national security and addressing the effects of global warming.

NSF also has a critical educational mission. The Foundation’s graduate and postdoctoral fellowships and other educational programs underwrite the training of thousands of young scientists and engineers. This investment ensures a technical and scientific workforce capable of pursuing research and leading the innovative, dynamic industries of the future.

Even as the demand for scientific research has dramatically grown, the NSF budget has remained flat in real terms for 15 years (Figure 1). The federal government must renew its commitment to fundamental, discovery-based science.⁵ Providing NSF with a budget of \$9.0 billion (\$925 million above FY 2019⁶) would support about 1,000 additional research grants, enabling researchers to rapidly seize new scientific opportunities.

FASEB FY 2020 recommendation: at least \$9.0 billion for NSF

Figure 1: NSF Appropriations, FY 1997-2020



¹ <https://www.nsf.gov/about>

² *Transforming the World Through Science*. National Science Foundation, Alexandria, VA

³ NSF Sensational 60. National Science Foundation, Alexandria, VA

⁴ Celebrating 2018 Nobel Laureate Frances Arnold. National Science Foundation, Alexandria, VA

⁵ Innovation: An American Imperative

⁶ H.J.Res.31 – Consolidated Appropriations Act, 2019

**Statement of Juliane Baron, Executive Director, Federation of Associations in
Behavioral and Brain Sciences on the**

FY 2020 Appropriations for the National Science Foundation

submitted for the record to the

**United States House of Representatives
Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies**

**Honorable Jose Serrano, Chairman
Honorable Robert Aderholt, Ranking Member**

April 4, 2019

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee:

The Federation of Associations in Behavioral and Brain Sciences (FABBS) appreciates the opportunity to submit testimony for the record in support of the National Science Foundation budget for fiscal year 2020. FABBS represents twenty-three scientific societies and nearly sixty university departments whose members and faculty share a commitment to advancing knowledge of the mind, brain, and behavior. Understanding the human element of our most pressing challenges through research in these sciences will improve the welfare of our nation, our society, and our people. Fundamental research funded by the NSF helps to create a body of knowledge and build future generations of scientists whose work will be essential in keeping this country at the forefront of discovery. As a member of the Coalition for National Science Funding, FABBS joins the broader scientific community in urging Congress to fund the NSF at \$9 billion in FY 2020.

Our members sincerely thank the CJS Appropriations Subcommittee for the final budget level for the NSF in FY 2019, a significant and deeply needed increase over FY 2018. While we recognize that the Subcommittee worked diligently to pass a timely budget for the NSF, we feel obligated to mention the wastefulness of the extended shut down. We thank you in advance for your efforts to complete the FY 2020 budget before the end of the fiscal year. Together with our sister scientific societies, we have and will continue to bring attention to the devastating effects of shutting down the NSF.

In addition to continually strengthening core research to generate discovery and train and inspire those individuals doing the discovering, the NSF funds critical infrastructure to sustain and grow the nation's scientific enterprise. We applaud the NSF for encouraging interdisciplinary collaboration and innovation through the launch of its Big Ideas and Convergence Accelerators and agree strongly with their position that funding for these new initiatives can not come at the expense of continued increased funding for core discipline research in any of the research directorates. Indeed, the National Science Board has estimated that in FY2017, nearly \$4 billion in grants evaluated by the NSF merit review process to be "very good or higher" were left unpursued due to lack of funding. We are, potentially, in a period of tremendous growth and discovery. We need to be thinking about attracting the next

generation to build upon the knowledge that this country needs to address its priorities in national security, defense, health, education, economics, and more.

This committee has expressed a commitment to enable the U.S. to maintain its leadership status in science and technology in an increasingly competitive global economy. However, the NSF has not received the same budget increases as other major research agencies during the same time period. Furthermore, funding for the NSF has remained stagnant at a time period when we are seeing rapid growth in federal investment in research and development from our global competitors. Increasing federal support for the NSF is vital in order to ensure the health, security, and economic well-being of our nation.

In addition to receiving support from the Directorate for Social, Behavioral, and Economic Sciences, FABBS members appreciate critical funding from the Computer and Information Science and Engineering (CISE) and Biological Sciences (BIO) Directorates as well as the Education and Human Resources (EHR) Directorate.

The SBE directorate provides an estimated 62 percent of the federal funding for fundamental research in SBE sciences at academic institutions across the country. This means that our finest universities and colleges are heavily dependent on the NSF to inform discoveries from identifying vulnerabilities in the nation's cyber-networks to improving early detection and treatment of brain disorders such as autism and Alzheimer's. The discoveries fueled by fundamental SBE research provide a foundational understanding of human thought, feeling, and behavior that is critical for making advances in several of the NSF's Big Ideas — including harnessing the data revolution, the future of work at the human-technology frontier, and building an inclusive community of STEM learners. An increase in the NSF's 2020 budget would allow the agency to continue funding core disciplinary research, as well as invest in the Big Ideas.

We recognize the pressing need to raise the budget caps. Accordingly, we have been working in collaboration with the broad scientific society as well as with federal, state and local colleagues in health, education, and hundreds of other groups affected by non-defense discretionary funding to encourage members of Congress to raise the caps so that we can complete the budget process keep our government working.

Increasing federal investment in fundamental scientific research across all sciences is critical to ensuring the prosperity, security and health of our nation and its people. Thus, **we urge you to provide the National Science Foundation with \$9 billion for FY 2020.** Along with the broader scientific community, we believe that increased funding for fundamental scientific research would help set the NSF on a solid path with potentially transformative benefits to the country.

Thank you for considering this request.

FABBS Member Societies:

American Educational Research Association, American Psychological Association, Association for Applied Psychophysiology and Biofeedback, Association for Behavior Analysis, Behavior Genetics Association, Cognitive Science Society, International Society for Developmental Psychobiology, Massachusetts Neuropsychological Society, National Academy of Neuropsychology, The Psychonomic Society, Society for Behavioral Neuroendocrinology, Society for Computers in Psychology, Society for Judgement and Decision Making, Society for Mathematical Psychology, Society for Psychophysiological Research, Society for the Psychological Study of Social Issues, Society for Research in Child Development, Society for Research in Psychopathology, Society for the Scientific Study of Reading, Society for Text & Discourse, Society of Experimental Social Psychology, Society of Multivariate Experimental Psychology, Vision Sciences Society

FABBS Affiliates:

APA Division 1: The Society for General Psychology; APA Division 3: Experimental Psychology; APA Division 7: Development Psychology; APA Division 28: Psychopharmacology and Substance Abuse; Arizona State University; Boston College- Psychology; Boston University- Psychology; California State University at Fullerton- Psychological and Brain Sciences; Carnegie Mellon University- Psychology; Cornell University- Psychology; Duke University- Psychology and Neuroscience; Florida State University- Psychology; Georgetown University- Psychology; George Washington University- Psychology; Georgia Institute of Technology- Psychology; Harvard University- Psychology; Indiana University Bloomington- Psychology; Indiana University Purdue University Indianapolis- Psychology; Johns Hopkins University- Psychological and Brain Sciences; Kent State University- Psychological Sciences; Lehigh University- Psychology; New York University- Psychology; Northeastern University- Psychology; Northwestern University- Psychology; Ohio State University- Center for Cognitive and Brain Sciences; Pennsylvania State University- Psychology; Princeton University- Psychology; Purdue University- Psychological Sciences; Rice University- Psychology; Southern Methodist University- Psychology; Stanford University- Psychology; Syracuse University- Psychology; Temple University- Psychology; University of Arizona- Psychology; University of California at Berkeley- Psychology; University of California at Davis- Psychology; University of California at Los Angeles- Psychology; University of California at San Diego- Psychology; University of Chicago- Psychology; University of Cincinnati- Psychology; University of Delaware- Psychological & Brain Sciences; University of Houston- Psychology; University of Illinois at Urbana-Champaign- Psychology; University of Iowa- Psychological and Brain Sciences; University of Maryland at College Park- Psychology; University of Massachusetts at Amherst- Psychological and Brain Sciences; University of Michigan- Psychology; University of Minnesota- Psychology; University of Minnesota- Institute of Child Development; University of North Carolina at Greensboro- Psychology; University of Pennsylvania- Psychology; University of Pittsburgh- Psychology; University of Texas at Austin- Psychology; University of Texas at Dallas- School of Behavioral and Brain Sciences; University of Virginia- Psychology; University of Washington- Psychology; Vanderbilt University- Psychological Sciences; Virginia Tech- Psychology; Wake Forest University- Psychology; Washington University in St. Louis- Psychology

Testimony of

Kasey White

Director for Geoscience Policy
for the**Geological Society of America**

Regarding the

National Science Foundation

and

National Aeronautics and Space Administration

FY 2020 Appropriation

to the

U.S. House of Representatives

Committee on Appropriations

Subcommittee on Commerce, Justice, Science, and Related Agencies

April 4, 2019

Summary

The Geological Society of America (GSA) supports strong and sustained investments in geoscience research and education at the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA). We thank Congress for the investments made in FY 2019 and encourage a path of sustainable growth forward. We encourage Congress to appropriate \$9 billion for NSF in FY 2020 and fully support geoscience research at the agency without restriction. We request \$7.5 billion in FY 2020 to fund NASA's Science Mission Directorate with increased funding for the Earth Science and Planetary Science Divisions. Investment in NSF and NASA is necessary to secure America's future economic leadership, both through the discoveries made and the talent developed through their programs. Earth and space science at these two agencies play a vital role in American prosperity and security through understanding and documenting mineral and energy resources that underpin economic growth; researching and monitoring potential natural hazards that threaten U.S. and international security; and determining and assessing water quality and availability.

The Geological Society of America (GSA) is a global professional society with a growing membership of 23,000 individuals. GSA provides access to elements essential to the professional growth of earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry.

SCIENCE ■ STEWARDSHIP ■ SERVICE

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www.geosociety.org

National Science Foundation

The Geological Society of America (GSA) appreciates the increase to the National Science Foundation (NSF) budget in FY 2019 and thanks the Committee for recognizing the important role that the agency plays in our country's global competitiveness. We urge Congress to provide NSF at least \$9 billion in fiscal year 2020 and reject the cuts proposed by the Administration's request.

Sustained increases beyond inflation are necessary to regain America's science and technology leadership and to enable the discoveries that lead to future innovations and industries. According to the *2018 Science and Engineering Indicators Report*, the U.S. now ranks 11th in the world in research and development intensity. Increases in funding will allow NSF to continue to fund its core basic research in addition to growing investments in its *Ten Big Ideas*. These ideas are designed to position the U.S. on the cutting edge of global science and engineering leadership and will build upon and complement the basic research occurring in the directorates.

Geoscience research is a critical component of the overall science and technology enterprise and should be funded without restriction. NSF's Directorate for Geosciences is the largest federal supporter of basic geoscience research at universities. NSF's programs in geoscience research and graduate and undergraduate student support contribute significantly to the education and training of the workforce. A recent report by the American Geosciences Institute, *Status of Recent Geoscience Graduates 2017*, illustrates the diversity of careers supported by geoscience research. For example, the report found that the majority of master's degree graduates found jobs in the oil and gas industry and government, while environmental services, such as environmental consulting and remediation of water and soil, hired the highest percentage of geoscience bachelor's degree graduates. Other industries hiring geoscientists include manufacturing, trade, construction, information technology services, mining, and agriculture.

Increased investments in NSF's geoscience portfolio are necessary to address such issues as natural hazards, energy and minerals, water resources, and education; geoscience is a key contributor to groundbreaking research across disciplines at NSF. Specific needs include:

- On December 20, 2017, President Trump signed an executive order entitled *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals*, that finds,

"The United States is heavily reliant on imports of certain mineral commodities that are vital to the Nation's security and economic prosperity. This dependency of the United States on foreign sources creates a strategic vulnerability for both its economy and military to adverse foreign government action, natural disaster, and other events that can disrupt supply of these key minerals."

NSF's Division of Earth Sciences supports research on the structure, composition, and evolution of the Earth and the processes that govern the formation and behavior of the Earth's materials. This research contributes to a better understanding of the natural distribution of mineral and energy resources.

- The quality and quantity of surface water and groundwater have a direct impact on the wellbeing of societies and ecosystems, as evidenced by flooding and drought impacts experienced across the U.S. during the past year. NSF's research addresses major gaps in our understanding of water availability, quality, and dynamics, including the impact of both a changing climate and human activity on the water system.
- The Division of Atmospheric and Geospace Sciences provides critical infrastructure and research funding for understanding our planet, including weather and precipitation variability and atmospheric and space weather hazards. Earth and space observations provide data necessary to predict severe space weather events, which affect the electric power grid, satellite communications and information, and space-based position, navigation, and timing systems.
- The National Research Council report *Sea Change: 2015-2025 Decadal Survey of Ocean Sciences* highlights areas of research that are need to make informed decisions, including: How can risk be better characterized and the ability to forecast geohazards like megaequakes, tsunamis, undersea landslides, and volcanic eruptions be improved? What are the rates, mechanisms, impacts, and geographic variability of sea level change? How different will marine food webs be at mid-century? In the next 100 years?
- Natural hazards – including floods, earthquakes, tsunamis, volcanic eruptions, wildfires, and landslides – are a major cause of fatalities and economic losses. Recent natural disasters provide unmistakable evidence that our nation remains vulnerable to staggering losses. An improved scientific understanding of geologic hazards will reduce future losses by informing effective planning and mitigation. We urge Congress to support NSF investments in fundamental Earth science research and facilities that underpin innovations in natural hazards monitoring and warning systems.

National Aeronautics and Space Administration

GSA requests \$7.5 billion to fund NASA's Science Mission Directorate (SMD) and increased funding for the Earth Science and Planetary Science Divisions. Increased funding will be critical to implement the recommendations of the recent National Academy of Sciences' *Earth Science and Applications from Space (ESAS) Decadal Survey* report. The report notes,

"Earth science and applications are a key part of the nation's information infrastructure, warranting a U.S. program of Earth observations from space that is robust, resilient, and appropriately balanced."

The data and observations from Earth observing missions and research are a tremendously important resource for natural resource exploration and land use planning, as well as assessing water resources, natural disaster impacts, and global agriculture production. GSA supports interagency efforts to ensure the future viability of Landsat satellites as well as funding to increase the capabilities and uses of multi-spacecraft constellations of small scientific satellites.

We appreciate congressional support in FY 2019 for Earth Science Missions, and request that Congress continue their funding in FY 2020. These missions will advance science frontiers and

provide critical data for society. For example, NASA's Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission will help us monitor the duration and impact of harmful algae blooms and The Climate Absolute Radiance and Refractivity Observatory (CLARREO) Pathfinder will enable industry and military decision-makers to more accurately assess natural hazards, such as flooding.

Planetary research is directly linked to Earth science research and cuts in either program will hinder the other. To support missions to better understand the workings of the entire solar system, planetary scientists engage in both terrestrial field studies and Earth observation to examine geologic features and processes that are common on other planets, such as impact structures, volcanic constructs, tectonic structures, and glacial and fluvial deposits and landforms. In addition, geochemical planetary research studies include investigations of extraterrestrial materials now on Earth, including lunar samples, meteorites, cosmic dust particles, and, most recently, particles returned from comets and asteroids. We appreciate past congressional support for this area and urge you to continue to increase this important area to support priority areas identified in the Planetary Science Decadal Survey.

Support Needed to Educate Future Innovators

Earth scientists will be essential to meeting the environmental and resource challenges of the twenty-first century, but a shortage is expected in the future workforce. The Status of the Geoscience Workforce Report 2018 found an expected deficit of approximately 118,000 geoscientists by 2026. Increased NSF and NASA investments in Earth science education are necessary to meet these workforce needs and develop an informed, science-literate population.

NSF's Education and Human Resources Directorate researches and improves the way we teach science and provides research and fellowship opportunities for students to encourage them to continue in the sciences. Similarly, NASA's educational programs have inspired and led many into science careers. GSA fully supports these efforts, as well as programs to make the geoscience workforce more diverse.

Please contact GSA Director for Geoscience Policy Kasey White to learn more about the Geological Society of America – including GSA Position Statements on water resources, planetary research, energy and mineral resources, natural hazards, climate change, and public investment in Earth science research.

Patrice McDermott, Director, Government Information Watch

April 03, 2019

The Honorable Nita Lowey
Chairwoman
Committee on Appropriations
H-307, the Capitol
Washington, DC 20515

The Honorable Kay Granger
Ranking Member
Committee on Appropriations
1016 Longworth House Office Building
Washington, DC 20515

The Honorable José Serrano
Chairman
Subcommittee on Commerce, Justice, Science
H-310, the Capitol
Washington, DC 20515

The Honorable Robert Aderholt
Ranking Member
Subcommittee on Commerce, Justice, Science
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairwoman Lowey, Chairman Serrano, and Ranking Members Granger and Aderholt,

We write to you as organizations that believe the federal government has an important role to play in overseeing law enforcement agencies throughout the country in order to ensure constitutional policing practices and provide for transparency and accountability. Below are two recommendations to achieve those ends.

Consent Decrees

Former Attorney General Sessions worked to overturn consent decrees and settlements the Department entered into with local law enforcement. These consent decrees have been vital in reducing unconstitutional policing practices and fostering communities' trust in their police. We believe Congress should direct the Department to continue their enforcement. We would request the following report language under "Department of Justice, Salaries and Expenses, General Legal Activities:"

Consent decrees.—The Committee notes the importance of DOJ's obligation to enforce settlements and consent decrees negotiated under civil rights statutes, including but not limited to the Civil Rights Act of 1964, the Voting Rights Act of 1965, the Fair Housing Act of 1968, and the pattern or practice investigations provisions under the Omnibus Crime Control and Safe Streets Act of 1968 and the Violent Crime Control and Law Enforcement Act of 1994. The Committee directs the Department to enforce all consent decrees negotiated under any civil rights statute vigorously and directs the Department to report not later than 90 days after enactment of this Act on the status of its enforcement efforts.

Additionally, it is concerning that many of these civil rights consent decrees are impermeable by state and federal open records laws and, thus, not available for grassroots accountability efforts. We request the following report language under "Department of Justice, State and Local Law Enforcement Activities, Research, Evaluation, and Statistics:"

Consent decrees.—The Committee notes the importance of DOJ’s obligation to enforce settlements and consent decrees negotiated under civil rights statutes and is concerned that civil rights consent decrees have been routinely exempted from public accountability. The Committee directs the Department to ensure that the valuable data collected and analyses developed through consent decrees is subject to open records/freedom of information laws at both the federal and state level.

Death in Custody Reporting Act

In 2014, Congress passed the Death in Custody Reporting Act (DICRA). This bipartisan law requires state and local law enforcement to report information on deaths of people in their custody to the Justice Department. The Department has yet to issue any final guidance on DICRA as required by statute, delaying implementation until at least fiscal year 2020. We request the following report language under “Department of Justice, State and Local Law Enforcement Activities, Research, Evaluation, and Statistics” to direct the Department to implement and enforce data collection on deaths in custody at once:

Death in Custody Reporting Act.—The Committee is extremely disappointed that the Department seeks to delay implementation of the Death in Custody Reporting Act of 2013 (DICRA; Public Law 113–242) until at least fiscal year 2020, having failed to issue compliance guidelines as required by statute. The Committee reminds the Department of its legal obligations under DICRA, and directs the Department to implement the compliance guidelines published in the *Federal Register* on December 19, 2016 immediately. The Committee also directs the Bureau of Justice Statistics to prioritize funding for DICRA implementation.

The federal government plays an important role both in overseeing law enforcement agencies and in providing transparency and accountability in the actions of government agencies at every level. We thank you for your consideration of these recommendations.

If you have any questions, please contact Patrice McDermott, Government Information Watch, pmcdermott@govinfowatch.net.

Sincerely,

Defending Rights and Dissent
Government Accountability Project
Government Information Watch
NAACP

National Council of Churches
Project On Government Oversight
Restore The Fourth

cc: Members of U.S. House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies



**Human Factors
and Ergonomics
Society**

**Official Written Testimony in Support of
Fiscal Year 2020 Science and Research Funding**

Submitted to the House Subcommittee on Commerce, Justice, and Science, and Related
Agencies; Committee on Appropriations
United States House of Representatives
April 4, 2019

Submitted by

Kermit Davis, PhD, President, Human Factors and Ergonomics Society
Steven C. Kemp, CAE, Executive Director, Human Factors and Ergonomics Society

On behalf of the Human Factors and Ergonomics Society (HFES), we are pleased to provide this written testimony to House Appropriations Subcommittee on Commerce, Justice, and Science, and Related Agencies for the official record. **HFES urges the Subcommittee to provide \$9 billion for the National Science Foundation (NSF) and \$22.575 billion for the National Aeronautics and Space Administration (NASA) in the fiscal year (FY) 2020 appropriations process.**

HFES and its members believe strongly that investment in scientific research serves as an important driver for innovation and the economy, national security, and for maintaining American global competitiveness. We thank the Subcommittee for its longtime recognition of the value of scientific and engineering research and its contribution to innovation in the U.S.

The Value of Human Factors and Ergonomics Science

HFES is a multidisciplinary professional association with over 4,500 individual members worldwide, comprised of scientists and practitioners, all with a common interest in enhancing the performance, effectiveness and safety of systems with which humans interact through the design of those systems' user interfaces to optimally fit humans' physical and cognitive capabilities.

For over 50 years, the U.S. federal government has funded scientists and engineers to explore and better understand the relationship between humans, technology, and the environment. Originally stemming from urgent needs to improve the performance of humans using complex systems such as aircraft during World War II, the field of human factors and ergonomics (HF/E) works to develop safe, effective, and practical human use of technology. HF/E does this by developing scientific approaches for understanding this complex interface, also known as "human-systems integration." Today, HF/E is applied to fields as diverse as transportation, architecture, environmental design, consumer products, electronics and computers, energy systems, medical devices, manufacturing, office automation, organizational design and

management, aging, farming, health, sports and recreation, oil field operations, mining, forensics, and education.

With increasing reliance by federal agencies and the private sector on technology-aided decision-making, HF/E is vital to effectively achieving our national objectives. While a large proportion of HF/E research exists at the intersection of science and practice—that is, HF/E is often viewed more at the “applied” end of the science continuum—the field also contributes to advancing “fundamental” scientific understanding of the interface between human decision-making, engineering, design, technology, and the world around us through research funded by NSF. The reach of HF/E is profound, touching nearly all aspects of human life from the health care sector, to the ways we travel, to the hand-held devices we use every day.

Human Factors and Ergonomics at the National Science Foundation

HFES and its members believe strongly that federal investment in NSF will have a direct and positive impact on the U.S. economy, national security, and the health and well-being of Americans. It is for these reasons that HFES supports robust funding for the Foundation to encourage further advancements in the fields of technology, education, defense, and healthcare, among others. HFES also supports the Foundation’s dedication to its “10 Big Ideas,”¹ including the *Future of Work at the Human-Technology Frontier (FW-HTF)*, which seeks to address and improve human-technology interactions as workplaces integrate and adapt to artificial intelligence, automation, machine learning, and beyond. In the past, NSF funding for HF/E basic research has strengthened interdisciplinary partnerships allowing for a multilateral approach to technology research and development, including the human and user perspectives. The benefits of this research are not confined to one field but rather span across a range of disciplines to increase understanding of the way humans interact with technology, as well as with each other.

In particular, NSF funds HF/E research to:

- Better understand and improve the effectiveness of how individuals, groups, organizations, and society make decisions.²
- Improve understanding of the relationship between science and engineering, technology, and society, in order to advance the adoption and use of technology.³
- Gain a better understanding of how humans and computers interact to ensure the development of new devices or environments that empower the user.⁴

¹ National Science Foundation-proposed “10 Big Ideas”

(https://www.nsf.gov/about/congress/reports/nsf_big_ideas.pdf?dm_i=1ZJN,4FGWL,E29O0Q,GB891,1)

² Decision, Risk & Management Sciences (DRMS) Program

(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5423)

³ Science, Technology, and Society (STS) Program

(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5324&org=SES&from=home)

⁴ Human Centered Computing (HCC) Program

(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503302&org=IIS&from=home)

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- Inform decision making in engineering design, control, and optimization to improve individual engineering components and entire systems.⁵

Human Factors and Ergonomics at the National Aeronautics and Space Administration

HF/E is a critical enabler of NASA science, aeronautics, and human spaceflight missions. Through the Human Research Program,⁶ NASA and external HF/E practitioners conduct research on the design and procedures that influence most, if not all, aspects of astronaut and mission control performance. This crucial role is necessary for the Agency to ensure safety and efficiency in complex systems with narrow risk parameters.

The practical applications of HF/E will only become more pronounced as NASA looks to expand the horizon of human exploration. With the United States planning to send humans beyond Earth orbit, unique challenges will arise that necessitate an increased reliance on HF/E research. Long duration missions with the potential for delayed Earth communications will require systems and procedures designed to guarantee safe operation of autonomous systems. This and other issues were highlighted in the *National Aeronautics and Space Administration Transition Authorization Act of 2017*,⁷ wherein Congress required NASA to take into consideration HF/E research outcomes in the mandated *Human Exploration Roadmap*.

Conclusion

Given NSF's critical role in supporting fundamental research and education across science and engineering disciplines, HFES supports an overall FY 2020 NSF budget of \$9 billion and a NASA budget of \$22.575 billion. This investment funds important research studies, enabling an evidence-base, methodology, and measurements for improving organizational function, performance, and design across sectors and disciplines.

On behalf of HFES, we would like to thank you for the opportunity to provide this testimony. Please do not hesitate to contact us should you have any questions about HFES or HF/E research. HFES truly appreciates the Subcommittee's long history of support for scientific research and innovation.

⁵ Systems Engineering and Design Cluster

(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13473&org=CMMI&from=home)

⁶ NASA Human Research Program (<https://www.nasa.gov/hrp>)

⁷ National Aeronautics and Space Administration Transition Authorization Act of 2017, Sec. 432(b)(3)(I) (<https://www.congress.gov/115/bills/s442/BILLS-115s442enr.pdf>)

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**RECORD TESTMONY OF REBECCA BROWN,
DIRECTOR OF POLICY FOR THE INNOCENCE PROJECT,
FOR THE COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES
SUBCOMMITTEE OF THE HOUSE COMMITTEE ON APPROPRIATIONS**

April 4, 2019

On behalf of the Innocence Project, and as a member of the Innocence Network, a coalition of approximately 60 local innocence organizations working to exonerate the innocent and prevent wrongful convictions nationwide, thank you for the Subcommittee's critical funding increases and strong support for innocence and forensic science programs in FY19. Thank you also for allowing me to submit written testimony for the record as you consider budget requests for FY20. I urge you to robustly fund the following programs at the Department of Justice and the National Institute of Standards and Technology at the Department of Commerce, including:

- **\$10 million** for the Wrongful Conviction Review Program at the Department of Justice (DoJ), Bureau of Justice Assistance (*the Wrongful Conviction Review Program is a part of the Capital Litigation Improvement Program*);
- **\$10 million** for the Kirk Bloodsworth Post-Conviction DNA Testing Program at the DoJ, National Institute of Justice (NIJ);
- **\$30 million** for the Coverdell Forensic Sciences Improvement Grant Program at NIJ;
- **\$4.2 million** to support forensic science standards setting activities at the National Institute of Standards and Technology (NIST);
- **\$15 million** for NIST to support forensic science research and measurement science.

These innocence and forensic science programs increase the accuracy and fairness of the criminal justice system, provide the strongest possible forensic science tools to justice system stakeholders, and generate greater public safety for our nation.

National Registry of Exonerations data show that the number of exonerations has significantly increased since federal innocence programs - the Bloodsworth Post-Conviction DNA Testing and Wrongful Convictions Review programs - began to receive funding in 2008 and 2009, respectively. ***This dramatic increase in the number of exonerations is in part a result of the federal decision to invest in these programs to help ensure the accuracy and integrity of the criminal justice system.*** In the 20 years prior to the initiation of innocence program funding (from 1989 to 2008), the rate of exonerations was much lower. ***In 2016, the number of exonerations was at its peak at 171 exonerations, and in recent years exoneration totals have been approximately 150 per year – or on average, more than 12 exonerations per month.*** These effective program outcomes show the power and need to invest in federal innocence and forensic science programs.

Freeing innocent individuals and preventing wrongful convictions through reform ***greatly benefits public safety.*** Every time DNA identifies a wrongful conviction, it enables the possible identification of the person who actually committed the crime. ***Such true perpetrators have been identified in almost half of the first 350 DNA exoneration cases.*** Unfortunately, many of these individuals went on to commit additional crimes while an innocent person was convicted and incarcerated in their place.

To date over 360 individuals in the United States have been exonerated through DNA testing, including 20 who served time on death row. These innocents served an average of 14 years in prison before exoneration and release. However, the value of federal innocence and forensic science programs is not to just these exonerated individuals. It is important to fund these critical programs because reforms and procedures that help to prevent wrongful convictions ***enhance the accuracy of criminal investigations, strengthen criminal prosecutions, and result in a stronger, fairer system of justice that provides true justice to victims of crime.***

Wrongful Conviction Review Program

We know that wrongful convictions occur in cases where DNA evidence may be insufficient or unavailable to prove innocence. The National Registry of Exonerations currently lists almost 2,300 exonerations since 1989 -- over 360 of which were based primarily on DNA. The Wrongful Conviction Review Program provides critical support to ensure that experts are available to navigate the complex landscape of post-conviction litigation, as well as oversee the thousands of volunteer hours local innocence organizations leverage to help investigate these complex cases and support the significant legal work they require. ***The Wrongful Conviction Review Program has contributed to 34 exonerations over the past 36 months.***

The Wrongful Conviction Review Program provides funding to local innocence organizations so that they may provide this type of expert, high quality, and efficient representation for innocent individuals. The program's goals are both to alleviate burdens placed on the criminal justice system through costly and prolonged post-conviction litigation ***and to identify, whenever possible, the person who actually committed the crime.***

In recent years, only 5-10 percent of local innocence organizations received Wrongful Conviction Review funding during each grant cycle. To continue and expand this important work, ***we urge you to provide \$10 million for the Wrongful Conviction Review Program in FY20. (Please note the Wrongful Conviction Review Program is a part of the Capital Litigation Improvement Program.)***

The Bloodsworth Post-Conviction DNA Testing Program

The Bloodsworth Program supports states and localities that want to pursue post-conviction DNA testing in appropriate cases, and grantees range from state and local prosecutor offices to law enforcement agencies and crime labs. These grantees can collaborate with local innocence organizations when appropriate. For example, a Bloodsworth grant to Arizona allowed the state's Attorney General's Office to partner with the Arizona Justice Project to create the Post-Conviction DNA Testing Project. This effort canvassed the Arizona inmate population, reviewed cases, located evidence, and filed joint requests with the court to have evidence released for DNA testing. In addition to identifying the innocent, *Arizona Attorney General Terry Goddard noted that the "grant enable[d] [his] office to support local prosecutors and ensure that those who have committed violent crimes are identified and behind bars."*¹

The Bloodsworth program is a powerful investment for states seeking to free innocent individuals and identify the individuals who actually committed the crimes. ***The program has resulted in the exonerations of 51 wrongfully convicted persons in 14 states. The person who***

¹Arizona receives federal DNA grant, <http://community.law.asu.edu/news/19167/Arizona-receives-federal-DNA-grant.htm> (last visited Mar. 13, 2012).

actually committed the crime was identified in 13 of those cases. For example, Virginian Thomas Haynesworth, who was wrongfully incarcerated for 27 years, was freed thanks to Bloodsworth-funded DNA testing that also revealed the person who actually committed the crime. The culpable person in that case went on to terrorize the community by attacking twelve women, with most of the attacks and rapes occurring while Mr. Haynesworth was wrongfully incarcerated. Given the importance of this program to both innocent individuals and public safety, we ***urge you to provide \$10 million to continue and expand the work of the Bloodsworth Post-Conviction DNA Testing Program in FY20.***

The Coverdell Program

The Coverdell Program provides state and local crime laboratories and medical examiner offices with much needed federal funding to carry out forensic testing and analysis both efficiently and effectively. As forensic science budgets find themselves severely stretched in many states and localities as a result of the opioid epidemic, and as federal bodies recommend the implementation of new policies, standards, and guidelines, the Coverdell program funds are critical to ensure that crime labs can function well and produce accurate and reliable results.

Additionally, in recognizing the need for independent government investigations in the wake of allegations of forensic negligence or misconduct, Congress created the forensic oversight provisions of the Coverdell Program to help ensure the integrity of and public confidence in forensic evidence. Specifically, Congress requires that a State or unit of local government shall submit to the Attorney General certification that a government entity exists and an appropriate process is in place to conduct independent external investigations into allegations of serious negligence or misconduct substantially affecting the integrity of the forensic results committed by employees or contractors of any forensic laboratory system, medical examiner's office, coroner's office, law enforcement storage facility, or medical facility in the State that will receive a portion of the grant amount.

As the program supports both the capacity of crime labs to process forensic evidence and the essential function of ensuring the integrity of forensic investigations in the wake of serious allegations of negligence or misconduct, we ***urge you to provide \$30 million for the Coverdell Program in FY20.***

Forensic Science Improvement

To continue the critical work to improve forensic science, and help prevent wrongful convictions, we urge you to provide ***the following amounts in FY20 for forensic science improvements, including:***

- **\$4.2 million** directed to the **National Institute of Standards and Technology (NIST)** at the Department of Commerce to support forensic science technical standards development, including **\$3 million** to support the Organization of Scientific Area Committees (OSAC) and **\$1.2 million** to support technical merit evaluations.
- **\$15 million** for NIST to support forensic science research and measurement science.

As the federal entity that is both perfectly positioned and institutionally constituted to conduct measurement science and foundational research in support of forensic science, NIST's work will improve the validity and reliability of forensic evidence, a need cited by the National

Academy of Sciences 2009 report, *Strengthening Forensic Science in the United States: A Path Forward*.² NIST's reputation for innovation will result in technological solutions to advance forensic science applications and achieve a tremendous cost savings by reducing court costs posed by litigating scientific evidence.

The OSAC is seen by many as the most significant federal forensic science initiative in recent years. State and local forensic scientists, who conduct the vast majority of forensic science casework, are in strong support and are significantly involved in this effort. In order for a standard to qualify for the registry that the OSAC maintains, it must demonstrate that it is technically sound. Some forensic science methods have not yet received an evaluation of their technical merit and NIST needs further support to conduct these vital reviews. At a time when public safety and national security are some of our nation's top priorities, it is imperative that Congress invest in scientific tools that support these endeavors. The forensic science activities and research at NIST will help greatly to improve forensic disciplines and propel forensic science toward greater accuracy and reliability.

Conclusion

Thank you so much for your leadership in helping to ensure the accuracy, integrity, and reliability of our nation's criminal justice system. We urge you to support all of the aforementioned programs, including the Wrongful Conviction Review; Bloodsworth; Coverdell; and NIST forensic science programs. If you have any questions, or need additional information, please contact Jenny Collier, Federal Policy Advisor to the Innocence Project, at jcollier@colliercollective.org.

² National Research Council. *Strengthening Forensic Science in the United States: A Path Forward*. Washington, DC: The National Academies Press, 2009. doi:10.17226/12589, p. 22-23.



**HOUSE COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
“FY2020 APPROPRIATIONS TESTIMONY
FOR DEPARTMENTS OF JUSTICE AND COMMERCE**

Thursday, April 4, 2019

Written Testimony of

**THE HONORABLE W. RON ALLEN, TRIBAL CHAIRMAN/CEO
JAMESTOWN S'KLALLAM TRIBE**

On behalf of the Jamestown S'Klallam Tribe, I am pleased to submit this written testimony on our funding priorities and requests for the Fiscal Year 2020 Department of Justice and Department of Commerce Budgets. Our Budget Request endorses the requests and recommendations of the Northwest Indian Fisheries Commission, the Pacific Salmon Commission and the National Congress of American Indians. Failure to fully fund public safety and justice in Indian country has undermined Tribal sovereignty and the ability of Tribal governments to protect their citizens and communities. American Indians/Alaska Natives suffer from the Nation's highest rates of crime and victimization as documented by the Department of Justice (DOJ) and US Commission on Civil Rights. Based on recent appropriations, the Bureau of Indian Affairs (BIA) is funding law enforcement at 20% of need, detention at 40% of need and courts at 3% of need. Insufficient base funding has many Tribes relying on short-term competitive grants to try and address a portion of the funding shortfall. Honoring the Federal trust obligation requires substantial investment in public safety and justice in Indian country.

TRIBAL SPECIFIC – DEPARTMENT OF JUSTICE /DEPARTMENT OF COMMERCE

1. Provide Recurring Base Funding for Tribal Justice Programs
2. Hold Indian Country Harmless from Budgetary Reductions, Rescissions, and Sequestration
3. Data Collection to Support Funding Requests

REGIONAL REQUESTS AND RECOMMENDATIONS – DEPARTMENT OF COMMERCE (Support the FY 2019 request of the Pacific Salmon Commission)

1. Provide \$110 million for the Pacific Coastal Salmon Recovery Fund (NOAA/NMFS)
2. Provide \$18.3 million for the Pacific Salmon treaty, including the additional \$5.5 million for the 2008 Chinook Salmon Agreement (NOAA/NMFS)
3. Provide \$20.3 million for the Mitchell Act Hatchery Program (NOAA/NMFS)

NATIONAL REQUESTS AND RECOMMENDATIONS - DEPARTMENT OF JUSTICE

1. Fully Fund the Tribal Law and Order Act (TLOA)
2. Fully Fund Violence Against Women Act (VAWA)
3. Office of Justice Programs (OJP) – Create a Ten Percent (10%) Tribal Set-Aside for Tribes
4. Victims of Crime Act Funding – Provide a five percent (5%) set aside
5. Fund COPS Program - \$52 million

TRIBAL SPECIFIC REQUESTS

1. Provide Recurring Base Funding for Tribal Justice Programs

Stable funding at sufficient levels is essential for viable and effective Tribal justice institutions. Grant funding is, at best, a short term investment that is used to support the ongoing and critical Tribal justice needs. Although we appreciate the intent of the Department in developing the CTAS to streamline the grant process and provide Tribes a tool for quick access and reference to funding that is specifically available to Tribes, competitive grants do not work well as the main funding source. The time limitation leads to instability, the administrative burden on Tribes remains excessive, the lack of flexibility creates challenges to addressing justice needs, funding is insufficient, and the CTAS application process is highly competitive, tedious, and complex and there are many restrictions imposed on how Tribes may use the funds. Base funding coupled with more flexibility would allow for more effective and efficient use of the federal dollar and stronger Tribal justice systems.

2. Hold Indian Country Programs Harmless from Budgetary Reductions, Rescissions and Sequestration

Decades of unfulfilled Federal obligations has devastated Tribal communities who continue to face persistent shortfalls and overwhelming unfulfilled federal obligations as documented by the US Civil Rights Commission 2018 Report: Broken Promises Continuing Federal Funding Shortfall for Native Americans. Sequestration, reductions and rescissions further exasperate an already precarious budget situation undermining the Tribes ability to maximize program operations and their ability to provide basic services to our citizens. In addition, many of these reductions are permanent rescissions and the cumulative effect over the years has critically impacted Tribal communities. Until Tribes attain exclusive taxing jurisdiction within their Tribal lands, Federal support remains critical to ensure the delivery of essential governmental services to our Tribal citizens. The Federal trust obligation must be honored and vital programs and services for Tribes must be sustained and held harmless in any budgetary deal enacted to reduce the national deficit.

3. Improve Data Collection to Support Tribal Funding Requests

Data is critical to support Tribal policy goals, implementation of programs and services, managing impacts of the federal investment and community planning for program success. Accurate data can capture the community needs and guide Tribal investments resulting in efficient and effective use of resources and strong Tribal justice systems. However, there is a lack of available data and data gathering throughout the Federal agencies. OMB and the Agencies should work together with Tribes to develop uniform measures that track federal spending for Native American programs and services and that capture the unfulfilled federal obligations.

REGIONAL REQUESTS AND RECOMMENDATIONS

1. \$110 million for the Pacific Coastal Salmon Recovery Fund (NOAA/NMFS) - The FY18 appropriations provided a total of \$65.0 million. These funds have decreased from the peak of \$110.0 million in FY02. The Tribes' overall goal in the PCSRF program is to restore wild salmon populations while the key objective is to protect and restore important habitat in Puget Sound and along the Washington coast. These funds support policy and technical capacities within Tribal resources management to plan, implement, and monitor recovery activities.

2. \$18.3 million for the Pacific Salmon Treaty - The U.S. Section estimates that this funding is needed to implement national commitments created by the Treaty

(NOAA/NMFS) - The Pacific Salmon Commission (PSC) establishes fishery regimes, develops management recommendations, assesses each country's performance and compliance with the treaty, and is the forum for all entities to work towards reaching an agreement on mutual fisheries issues

3. \$20.3 million for the Mitchell Act Hatchery Program (NOAA/NMFS) - Funding is provided for the operation and maintenance of hatcheries that release between 50 and 60 million juvenile salmon and steelhead in Oregon and Washington. This program has historically provided fish production for Tribal treaty and non-Tribal commercial and recreational fisheries in the Columbia River, and also contributes to ocean fisheries from Northern California to Southeast Alaska.

NATIONAL REQUESTS AND RECOMMENDATIONS DEPARTMENT OF JUSTICE

1. Fully Fund the Tribal Law and Order Act (TLOA)

The Tribal Law and Order Act was an important step in empowering Tribes to better address the unique public safety challenges and reduce the prevalence of violent crime in Indian country. However, effective implementation of TLOA is contingent upon adequate Federal funding. Funding is needed to implement the comprehensive and improved measures that were enacted to address the public safety crisis in Tribal communities. The entire Tribal justice system is dependent on this funding to carry out law enforcement, court, and detention functions, and to provide rehabilitation and preventive services. Tribal justice systems are the cornerstone that paves the way for economic development and Tribal self-sufficiency.

2. Fully Fund Violence Against Women Act (VAWA) Including \$5 million for VAWA Special Domestic Violence Criminal Jurisdiction

The Office on Violence Against Women provides funding for Tribes to assist victims of domestic violence. Funding for Tribal governments is derived from other OVW Programs and combined into a single source called the "Grants to Tribal Governments Program". Therefore, it is imperative to Tribes that these other programs receive full funding so the Tribal grant program will, in turn, receive full funding. The root cause of these high rates of violence was a justice system that forced Tribal governments to rely on distant Federal, and in some cases, state officials to investigate and prosecute incidences of domestic violence committed by non-Natives against Native women. The statistics on violence against Native women show that outside law enforcement has proven ineffective in addressing these crimes of violence. Between 2005 and 2007, U.S. Attorneys declined to prosecute nearly 52 percent of violent crimes that occurred in Indian country; and 67 percent of cases declined were sexual abuse related cases. It is unconscionable to force Tribes to submit to a system of justice that declines to prosecute over half the criminal cases brought before it and leaves our Native women without judicial recourse.

Office of Justice Programs (OJP) – Provide a 10% Tribal Set-Aside for all (OJP) Programs and Allow for Greater Flexibility

The Office of Justice Program (OJP) provides funding to Tribes to address public safety and criminal justice needs in Indian communities. We are advocating for a 10% Tribal set-aside to

allow for a more flexible grant structure for Tribes to complement the Coordinated Tribal Assistance Solicitation (CTAS) grant. Although Congress and the Administration have taken steps in recent years to try and address some of these concerns through the passage of the Tribal Law and Order Act (TLOA) of 2010 and the Reauthorization of the Violence Against Women Act (VAWA) of 2013, significant funding is needed in order to implement these new authorities to address the crisis level need in Indian country and elevate the safety and wellness of our Tribal citizens and communities. Tribal court systems are evolving to meet the increasing demands of Tribal communities and ensure that Tribal citizens are provided with adequate legal representation and protection. Under TLOA and VAWA Tribal courts are required to expand judicial services and meet certain costly thresholds, including, providing public defenders, recording criminal proceedings, and retaining legally trained and licensed Tribal judges. Without adequate funding for Tribal court systems, decisions to arrest, prosecute and detain will be based on financial restraints rather than in the best interest of public safety. Stable funding for Tribal courts is a prerequisite to ensure a safe, healthy and thriving Tribal community.

4. Increase the Funding Caps and Create a Permanent Five Percent (5%) Tribal Set-Aside for Victims of Crime Act Funding

We commend Congress for providing a 3% set aside for Tribes in the Victim of Crimes Fund in the FY2018 and FY2019 Budget. We request that a similar Tribal set aside is included in the FY2020 appropriations. Congress created the Crime Victims Fund in 1984 with the idea that money collected from those who commit crimes should be used to assist those that have been victimized. Each year, the fund is financed by the collection of funds, penalties and bond forfeitures from defendants convicted of Federal crimes. It is important to note that the fund receives no tax payer dollars. DOJ disburses funds to states and other entities. Crime victimization rates on Tribal lands have been estimated as much as 250% higher than the national rate and the rate of murder of American Indian/Alaska Native women on some reservations are 1000% higher than the national average. Tribal governments, like state governments, are responsible for addressing the needs of victims in their communities. Despite the devastating rates of victimization in Tribal communities, Indian Tribes have largely been left out of the fund. Indian Tribes are only able to access these dollars through state pass through grants or very limited short term competitive DOJ grants. However, many states do not provide funds to Tribes for victim services and the vast majority of Tribes are unable to access these funds at all. Tribes are again requesting a Tribal set-aside of 5% of the VOCA funds.

5. Fund the COPS Program - \$52 million

The COPS Office provides funding to Tribes for law enforcement officers. The funding can also be used for training, equipment, vehicle, and technology. There is a great need for additional law enforcement officers throughout Indian country but limited resources has led to inadequate funding for justice systems, specifically, in the area of hiring, retention and training of law enforcement officers. It is imperative for the safety of Tribal citizens and surrounding communities that a significant increase in funding is allocated for Tribal law enforcement officers and programs.

I would like to extend my thanks to the Subcommittee for an opportunity to submit testimony on the FY2020 Appropriations for DOJ and DOC.

April 3, 2019



Testimony of the Joint Ocean Commission Initiative to the U.S. House Committee on Appropriations, Subcommittee on Commerce, Justice, Science, and Related Agencies for NOAA, NSF, and NASA

Chairman Serrano, Ranking Member Aderholt, and other distinguished Members of the Subcommittee on Commerce, Justice, Science, and Related Agencies, we thank you for the opportunity to submit written testimony regarding the Fiscal Year (FY) 2020 Commerce, Justice, Science, and Related Agencies appropriations bill. We are deeply appreciative of the comprehensive funding that you provided to ocean priorities in the FY 2019 Omnibus. We recognize the difficulty of allocating resources in these challenging fiscal times and we laud your decision to support key ocean accounts despite the Administration's short-sighted proposed cuts to core ocean and coastal programs.

For FY 2020, we are again facing a long list of accounts that would be eliminated or severely hamstrung by the President's Budget, including bedrock staples such as Sea Grant, Coastal Zone Management Grants, ocean observations, ocean acidification, and fisheries management. If enacted, these cuts would undermine our investments and compromise our ability to address the ongoing impacts of a changing climate, protect and promote economic development, safeguard our citizens, and responsibly balance the use of our oceans and coasts.

The Joint Ocean Commission Initiative (Joint Initiative) is a collaborative, bipartisan effort to catalyze action and monitor progress toward meaningful ocean policy reform. We believe that a continued commitment to protecting base funding and core programs at NOAA, NSF, and NASA is an investment that will save lives, protect national security, grow our economy, and preserve the health of our oceans and coasts. Ocean observations play a critical role in maintaining our undersea superiority and ocean and coastal resources provide fundamental goods and services, including food, minerals, transportation, medicines, tourism, and recreational opportunities. In 2015, the ocean economy contributed more than \$320 billion to the GDP and directly supported over 3.2 million jobs, many of which were located in coastal counties. Moreover, ocean and coastal environments are often the first line of defense when it comes to promoting resilience and protecting American communities from severe weather events.

Based on the need for significant and sustained investment to invigorate public-private partnerships and energize national, regional, state, and local initiatives, **we strongly support increasing NOAA's overall budget to a minimum of \$6.5 billion, NSF's overall budget to a minimum of \$9 billion, and NASA Earth Science's budget to a minimum of \$2.1 billion.** We believe the recommendations articulated in this testimony represent a modest investment relative to the threats and opportunities facing oceans and coastal communities, as the benefits they confer significantly outweigh the costs. The Joint Initiative is highly appreciative of progress the Subcommittee has made in providing resources to essential ocean and coastal accounts, and we urge you to continue supporting these priorities.

Research, Exploration, and Observation

A critical component of America's economic, military, and diplomatic power lies in its ocean science, research, education, exploration, monitoring, and observation enterprises. Especially given the pace of observed changes in climate and ocean chemistry, we strongly urge the Subcommittee to protect vital ocean science and research capabilities.

Observation and monitoring programs, as well as other scientific and data programs, are integral to NOAA's ability to accurately forecast weather. They are central for NOAA's protection and management of America's coastal and ocean resources and for the U.S. military's navigation and extreme weather preparedness. **We ask that your committee continue to support enhanced capabilities for observation and monitoring by allocating \$550 million to NOAA's Office of Oceanic and Atmospheric Research (OAR) and \$53 million to NOAA's Sustained Ocean Observations and Monitoring Program.** We also suggest the committee **allocate \$50 million for the Ocean Exploration program to maintain the pace, scope, and efficiency of exploration.** NOAA's Ocean Exploration program has a long history of bipartisan support and has greatly contributed to our knowledge of the ocean, largely by utilizing supporting infrastructure such as ships, moorings, buoys, and autonomous underwater vehicles, and computational and data management hardware. It is also critical to **fund climate research at OAR at no less than \$160 million to promote high-priority climate science** that advances our understanding of Earth's climate system and foster the application of this research in risk management and adaptation efforts

In addition, **we recommend allocating \$9 billion for the NSF.** NSF's investment in the geosciences – which includes ocean sciences – has spurred innovations, addressed salient national and global challenges, galvanized new economic sectors, generated countless jobs, and led to the development and implementation of advanced technologies. Finally, **we recommend you allocate \$2.1 billion in funding for NASA's Earth Science Division** to improve national capabilities to predict climate, weather, and natural hazards, and better manage national resources.

It is essential that Congress provide the operational and maintenance support necessary to keep research, monitoring, and exploration infrastructure functioning, and to facilitate its modernization. In combination with remote sensing, ocean observation infrastructure has helped to establish and maintain the long-term in-situ data sets that are essential to safeguarding U.S. assets and understanding changes in physical, chemical, and biological processes. These data sets have generated vital tools that support the American economy and environment. Maintaining U.S. research and development infrastructure is critical to our long-term economic competitiveness.

Education and Extension

The National Sea Grant College Program works to better understand, conserve, and utilize America's coastal resources, making it critical to coastal states, communities, and economies. Sea Grant works to extend the findings of marine and coastal research to impact American livelihoods. For example, Sea Grant programs support fisheries and aquaculture business development and help Americans plan for and respond to extreme weather events. We are alarmed by the President's proposal to eliminate funding for Sea Grant, and we urge this committee to secure the benefits that Sea Grant provides by **allocating \$93.5 million to Sea Grant in FY 2020.**

Likewise, we are equally alarmed by the elimination of funding for environmental education and ocean stewardship at NOAA. We urge the committee to provide **\$12 million for the Bay-Watershed Education and Training (B-WET) program and \$8 million for Environmental Literacy Programs (ELP)**, which are essential for STEM education and encouraging environmental stewardship.

Resilience and Security

Variability in oceanographic and atmospheric conditions, coupled with demographic changes that increasingly crowd our coasts, make the impact of storms and flooding events more severe. Changing weather and charged geopolitical relationships heighten the already serious need for ocean and coastal security. Ocean and coastal communities must be safeguarded and made more resilient. Congress took a pioneering first step with the FY 2018 Omnibus by authorizing \$30 million for the National Ocean and Coastal Security Fund (NOCSF), and built upon this work by authorizing another \$30 million for the NOCSF in FY 2019. **We ask this subcommittee to continue leading on ocean and coastal security by allocating \$50 million for the NOCSF in FY 2020.** We further recommend that a portion of this funding continue to support critical ocean partnerships that encourage collaboration and data sharing on the regional scale. In addition, we recommend a **total allocation of \$80 million to Coastal Management Grants and a minimum allocation of \$28 million for the National Estuarine Research Reserve System in FY 2020.** These programs, eliminated in the Administration's budget, support vital federal/state partnerships to help protect our coasts and preserve millions of acres of coastal habitat, buffering against rising seas and storm events.

NOAA's National Ocean Service (NOS) is also critical for sustained resilience and security. **We strongly recommend that NOS receive an allocation of \$600 million.** NOS funding supports economy boosting programs that ensure safe and efficient transportation and commerce; preparedness and risk reduction; and stewardship, recreation, and tourism. For example, NOAA's Office for Coastal Management delivers technical assistance communities need to address storm preparedness, erosion, development, habitat loss, sea level rise, and threats to water quality. Moreover, the National Centers for Coastal Ocean Science provides coastal managers with the scientific information they need to protect public health, preserve valued habitats, and foster sustainable community interaction with coastal ecosystems. In addition, NOS supports the Integrated Ocean Observing System (IOOS), which plays an instrumental role in collecting and distributing data that is used at the national, regional, state, and local levels.

The NOS is also responsible for administering the Office of National Marine Sanctuaries and a range of restoration projects that dramatically enhance the resilience of coastal communities and ocean environments. It is worth noting that these investments pay serious economic dividends: National Marine Sanctuaries generate approximately \$8 billion annually for local economies and NOAA's restoration projects create an average of 17 jobs for every \$1 million invested. Moreover, every dollar invested in strengthening coastal communities against storm surge mitigates four dollars in losses. We ask the subcommittee to support the NOCSF and the NOS to bolster the nation's economic and environmental resilience and security.

Ocean Acidification

Ocean acidification is evident along every shoreline and is having major impacts on economies worldwide. By changing the chemistry of seawater, ocean acidification endangers shellfish, corals,

and other marine life that form calcium shells or skeletons and disrupts marine food webs. In the United States, ocean acidification poses a fundamental risk to our fisheries and aquaculture industries. Left unresolved, ocean acidification will exact a substantial toll on the world's economies and diminish our capacity to nourish growing populations. **We strongly urge you to allocate a minimum of \$50 million for NOAA's Integrated Ocean Acidification program.** Funding the Integrated Ocean Acidification program at elevated levels will support critical research, monitoring, education, and outreach. It will help develop a better understanding of the causes, impacts, and scale of ocean acidification and identify interventions to help protect fisheries and aquaculture.

Sustainable Fisheries

Fishing is a cornerstone of the ocean economy and an important aspect of American history and culture. Since 1976, we have seen tremendous progress toward creating and maintaining sustainable fisheries domestically and internationally. Much of this progress can be credited to your Subcommittee's commitment to scientifically-sound fishery management and the tireless efforts of U.S. fishermen, regional fishery management councils, state commissions, scientists, and managers.

However, America's fisheries are currently facing unprecedented challenges including changing ocean conditions, impacts from land-based activities, shifts in historic stock distributions, increasingly complex data requirements, and a rapidly growing recreational fishing sector. Globally, illegal, unreported, and unregulated (IUU) fishing remains a threat to fisheries sustainability worldwide. NOAA Fisheries requires elevated funding to address these numerous challenges. For example, better science and real-time data can improve the quality of management decisions and provide regional management councils with more tools to assess the current status of fish stocks. **To protect America's fisheries and the jobs that rely on them, we recommend allocating \$1.1 billion to the National Marine Fisheries Service to fully implement the Magnuson-Stevens Fishery Conservation and Management Act.** This should include the ability to improve the coastal infrastructure on which fisheries depend and address threats that changing conditions pose. We also urge you to support full implementation of the U.S. Seafood Import Monitoring Program to address IUU fishing and other initiatives to spread sustainable fisheries management globally.

Concluding Remarks

The Joint Initiative greatly appreciates your commitment to stretching scarce resources to address the challenges of our maritime nation. We thank you for the substantial funding allotted to ocean priorities in FY 2019, and we appreciate your consideration of our FY 2020 request. We will continue to track progress on key ocean and coastal programs and accounts in FY 2020 and beyond, and we stand ready to assist you in advancing positive and lasting changes in the way we manage our nation's oceans and coasts.

Joint Initiative Co-Chairs and Leadership Council Members

The Honorable Christine Todd Whitman | The Honorable Norman Mineta

Frances Beinecke | Don Boesch | Lillian Borrone | The Honorable Norm Dicks | Quenton Dokken | Robert Gagosian | Sherri Goodman | Scott Gudes | The Honorable Conrad Lautenbacher | Margaret Leinen | The Honorable Jane Lubchenco | Julie Packard | The Honorable Leon Panetta | John Pappalardo | The Honorable Pietro Parravano | Diane Regas | Randy Repass | Andrew Rosenberg | The Honorable William Ruckelshaus | Paul Sandifer



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David Shapiro
 Chief Executive Officer
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**Testimony in Support of the Youth Mentoring Grant
 House Committee on Appropriations
 Subcommittee on Commerce, Justice, Science and Related Agencies**

On behalf of MENTOR: The National Mentoring Partnership (MENTOR), our network of Affiliates, and youth mentoring programs throughout the country, I thank Chairman Serrano and Ranking Member Aderholt for the opportunity to provide testimony in support of a critical federal investment in America's young people. My testimony will focus on the Part G Youth Mentoring Program housed in the **Office of Juvenile Justice and Delinquency Prevention (OJJDP) at the Department of Justice (DOJ)**. MENTOR and our partners are calling on your committee to continue your bipartisan support of the Youth Mentoring Program with an investment of \$120 million in Fiscal Year 2020. This investment will make it possible for quality mentoring organizations using evidence-based practices to better meet the mentoring needs of many of our nation's most at-risk youth.

MENTOR is the unifying national champion for expanding quality youth mentoring relationships and connecting volunteers to mentoring opportunities in their local communities. In a time when 1 in 3 young people are growing up without a mentor, MENTOR seeks to close this "mentoring gap" and ensure our nation's young people have the caring adult support they need to succeed at school, in community, and in the workforce. We seek to leverage resources and provide the tools and expertise that local programs -- whether in schools, nonprofits, faith-based institutions, or the private sector -- require to provide high-quality mentoring for young people who need it most, build greater awareness of the value of mentors, and positively inform public policy in order to bring support and opportunity to young people in need.

I write this testimony on behalf of the thousands of mentoring programs and millions of volunteer adult mentors that serve our communities each day, as well as the millions of young people in the United States still waiting to find the supportive caring adults they need to thrive. I would also like to thank the House Commerce, Justice and Science Subcommittee for its strong history of supporting these critical federal funds for evidence-based mentoring and demonstrating leadership in expanding pathways for young people.

The Benefits of Quality Youth Mentoring

Youth mentoring is a simple, yet powerful concept: a caring adult provides guidance, support, and encouragement to help a young person achieve success in life. Research confirms that quality evidence-based mentoring relationships have powerful positive effects on young people in a variety of personal, academic, and professional situations. Mentoring is a strategic intervention and prevention-based strategy that helps foster positive outcomes for young people from all backgrounds and Zip codes. Mentoring is proven to play an important role in the following areas of support for young people:

Reducing Unsafe or Risky Behaviors: Mentors provide young people with consistent support as they encounter the daily challenges of navigating their lives. Mentors serve to help young people make healthy decisions and stay away from high-risk behaviors. Young people who meet regularly with their mentors are 46 percent less likely than their peers to start using illegal drugs and 27 percent less likely to start drinking. Mentors also provide guidance to positive behaviors that could support growth and development in a young person. Young adults who face an opportunity gap but have a mentor are 81 percent more likely to participate regularly in sports or extracurricular activities than those who do not.

Workforce Development: Mentoring helps develop the future workplace talent pipeline by preparing young people for careers through exposure and 21st century skill-building. One study estimates that the human potential lost as a result of the educational achievement gap is the economic equivalent of a permanent national recession. There are far too many young people who have not had access to the opportunities that having a mentor opens to professional and career development. Mentoring helps young people set career goals and take the steps to accomplish those goals. Through their mentors, young people are also introduced to resources and organizations they may not be familiar with, providing them with new networks as well as methods to find jobs and internships.

Educational Achievement: According to the Department of Education, during the 2013-14 school year, over 6.8 million students (14 percent of all students) were chronically absent. Students who are chronically absent are more likely to fall behind academically, particularly in reading, more likely to have increased behavioral issues and more likely to drop out of school. Young people who are chronically absent benefit exponentially from having a mentor to aid regular attendance and provide the young person academic and emotional support. Students who meet regularly with their mentors are 52 percent less likely than their peers to skip a day of school and 37 percent less likely to skip a class. Mentoring provides young people with an important support that helps develop positive attitudes towards school and reduce recurring behavior problems. Young adults who face an opportunity gap but have a mentor are 55 percent more likely to be enrolled in college than those who did not have a mentor.

Social Emotional Development and Mental Health: Mentoring provides young people with improved communications with their families and other caring adult relationships. A recent study showed that the strongest benefit from mentoring, and most consistent across risk groups, was a reduction in depressive symptoms. Mentoring promotes positive social attitudes and relationships. Mentored youth trust their parents and guardians more and communicate better. These benefits serve as building blocks for engagement in positive activities, increased school participation and improved attitudes.

Youth Mentoring ultimately provides much-needed social support, increased positive relationships with and perceptions of adults, life skills training, and access to social capital to young people who are in need of support leading them to positive and productive futures.

Closing the Mentoring Gap

While mentoring is an effective evidence-based intervention and prevention strategy for at-risk and high-risk young people, mentoring organizations across the nation still face barriers in providing high-quality mentoring services. Thousands of young people remain on waitlists at organizations because of limited resources and funding for programs. Many programs also lack the training and technical assistance that could bolster their mentoring programs to better support young people and specifically high-risk young people. These two issues combined have provided many obstacles for mentoring programs, but with the critical support of both private and public funds mentoring organizations have been able to serve more young people.

One of the ways that mentoring programs have succeeded in decreasing waitlists is through support from the Youth Mentoring Program. The program focuses on prevention and interventions for at-risk youth and helps mentoring programs as they work to close the mentoring gap. **These funds go directly to providing support for some of our highest risk young people, who without these kinds of interventions could likely become involved in negative behaviors and activities causing harm to themselves, their communities, and which take an economic toll.** In a 2016 study conducted by MENTOR it was found that 75 percent of programs have a budget of under \$100,000. Mentoring programs work far beyond their financial capacity to serve young people, but with additional resources their reach expands exponentially and the quality of their services can strengthen through improved training and technical assistance. The individual cost per mentored youth has remained relatively steady over the past 20 years, however costs for high-risk groups of young people including those with mental health needs, teen parents, or victims of commercial sexual exploitation, for example, require more resources and expertise, increasing the cost per youth in order to fully address their unique needs. Mentoring programs utilize federal support in part to better serve the large number of young people who could benefit most from evidence-based mentoring.

Mentoring programs are able to safely serve young people when they are fully trained on the most up to date mentoring evidence and training. In 2015, through funds from the Youth Mentoring Program, The National Mentoring Resource Center (NMRC) was created to improve the quality and effectiveness of mentoring by supporting youth mentoring practitioners. MENTOR runs the National Mentoring Resource Center and provides free mentoring tools, program and training materials and no-cost, evidence-based technical assistance to mentoring

programs, school districts, nonprofits and faith-based institutions across the nation. **This important resource has bolstered the ability of mentoring programs to serve young people from vulnerable populations including young people at-risk of entering the juvenile justice system, youth in foster care, and victims of commercial sex trafficking.**

Research on youth mentoring demonstrates that, at a minimum, for every dollar invested in quality mentoring programs there is a return of at least three dollars. This positive return on investment reflects projected increases in lifetime earnings gained by leading at-risk youth down the path towards becoming productive adults. It also derives from dollars saved through reduced risky behaviors in young people, decreased school absence, high school graduation rates, and lowered risk of youth involvement in unsafe and costly behaviors.

Unfortunately, the Youth Mentoring Program is now the only remaining federal grant exclusively dedicated to providing funds for evidence-based mentoring. **Youth Mentoring Program funds have been awarded to national, multi-state and collaborative mentoring projects and programs who serve suburban, rural and urban populations. The flexibility of the grant has allowed organizations to use these funds to specifically tailor programs to their community's unique needs. This provides local control and specialized concentration on results that work best for each young person and their communities.** As previously outlined, these funds also invest in research to learn what is most effective, bridging this research to practice, and driving quality and impact through hands-on community-based capacity building. These funds are simply invaluable in the ways that they affect youth development, educational achievement, and safe communities.

Without adequate resources and funding mentoring programs and ultimately America's young people do not have access to the caring adults they need to develop healthy, safe, and productive lives. It better weaves together our communities, drives greater understanding, enriches the lives of both parties, and efficiently leverages volunteers to drive impact backed by quality programs.

This request in support of \$120 million for the Youth Mentoring Program will allow more young people to have access to the important social, professional, and academic opportunities we hope to provide for all America's youth. **The Youth Mentoring Program demonstrates a sound and an effective investment in evidence-based programs that works and will have definitive and measureable impact on closing the mentoring gap in America.**

Thank you again for this opportunity to provide testimony on this critical federal resource supporting young people.

Testimony for the Record
Ms. Margaret Spring, Chief Conservation Officer
Monterey Bay Aquarium, Monterey, California
Subcommittee on Commerce, Justice, Science and Related Agencies (Appropriations)
U.S. House of Representatives
April 4, 2019

The Monterey Bay Aquarium is pleased to submit this statement in support of increased funding for the **National Oceanic and Atmospheric Administration (NOAA)** within the FY 2020 Commerce-Justice-Science Appropriations Act. The Aquarium recognizes NOAA's critical role in serving as the nation's lead science agency and information provider on oceanic and atmospheric matters. NOAA's work supports millions of American businesses and citizens through its science, stewardship and safety mission every day of the year. NOAA's research, environmental observations and predictions, marine conservation and management, as well as its education programs and services shape the way we live today and provide the environmental intelligence to guide decisionmaking about the health of the coupled ocean and climate systems.

The Aquarium is grateful for the Subcommittee's support of NOAA in the FY19 Consolidated Appropriations Act, including programs to address illegal, unreported and unregulated (IUU) fishing, marine debris, and continue NOAA research and education programming. For FY20, we urge the Subcommittee to continue its balanced and strategic investment strategy for NOAA, including restoration of the extramural ocean and coastal research, conservation, and education programs proposed for either elimination or drastic reduction by the Administration. **In addition, and importantly, we urge the Subcommittee to enhance funding within NOAA Fisheries for both Illegal, Unreported, and Unregulated (IUU) Fishing and highly migratory species research, specifically Management Strategy Evaluation for Pacific bluefin tuna.**

The mission of the Monterey Bay Aquarium is to inspire conservation of the ocean. We carry out this mission by providing an educational experience that connects over 2 million visitors per year to some of the most striking species and ecosystems on our planet. The Aquarium uses exhibits and educational programs to demonstrate the connection between the ocean and our human existence - from the air we breathe to the weather patterns and resources that drive our multi-billion-dollar blue economy.

The Aquarium's strategic conservation priorities are aimed at addressing some of the most pressing challenges to ocean health, including those posed by plastic pollution, unsustainable fisheries and aquaculture, threats to ocean wildlife and special places, and the ocean impacts of climate change and acidification. Like NOAA, science underpins our approach to ocean conservation challenges, and we seek a collaborative approach that encourages partnerships with the private sector, governments, academia and other stakeholders. The Aquarium's Conservation and Science programs are working on significant policy issues that impact ocean health both here and around the world. We bring decades of expertise and relationships in ocean science, policy, and markets to the task, and we use our voice as a trusted source of

ocean information to make a difference globally – among policymakers, the business community, and with individuals. Our priorities are well aligned with NOAA’s mission and programs, and future progress on these critical topics will rely on NOAA’s continued ability to provide robust data, management expertise, and services to the public and partners. In particular, NOAA ensures the US remains a global leader in sustainable fisheries under the Magnuson-Stevens Act and provides the science needed to engineer lasting solutions to ocean threats. The enhanced funding requests below are intended to support US leadership on ocean policy around the world.

Illegal, Unreported, and Unregulated (IUU) Fishing/ Seafood Traceability – Global losses attributable to IUU fishing are estimated to be between \$10 and \$23 billion annually, and has links to other forms of criminal activity, as well as slavery and human rights abuses. IUU fishing also undermines economic opportunities for legitimate fishermen in the U.S. and has global implications for national security and food security. In recent years, Congress has provided new authorities and funding to fight IUU fishing. These bills passed with broad bipartisan support, highlighting the importance of these activities to American businesses, consumers and the public.

A key portion of IUU activities is NOAA’s implementation of the Seafood Import Monitoring Program (SIMP). In April 2018, NOAA lifted its stay on shrimp and abalone in SIMP, and at the end of the year it became mandatory for foreign shrimp (the top U.S. seafood import) and abalone imports to be accompanied by harvest, landing and chain of custody records as part of compliance with SIMP. However, shrimp and abalone have been in a period of “informed compliance” from December 31, 2018 through April 1, 2019 to allow importers to phase in the new requirements. NOAA continues to work toward full implementation and optimization of SIMP. Additional funding is needed to ensure full and effective implementation of SIMP, including adding shrimp and abalone to the program, as well as increased port inspections, enforcement and supply chain audits that are critical to ensure compliance.

The Aquarium urges the Subcommittee to provide at least an additional \$5 million beyond the Administration’s request for activities to address IUU fishing in FY 2020. The funding will ensure strong implementation of the Seafood Import Monitoring Program in 2020, as well as improved international enforcement and port security responsibilities under the SAFE Ports Act. These funds will improve the ability of the federal government to identify, inspect and enforce against imported IUU products coming into U.S. commerce and will enhance efforts to incentivize foreign compliance with international laws.

Pacific Bluefin Tuna - Pacific bluefin tuna, a highly migratory species, are critical to California’s economy and key top predator in the ocean. The population has been depleted to 3.3% of historic size – the lowest of all commercially harvested tunas globally. Pacific bluefin tuna are managed through international agreements, and the U.S. has been a leader in advocating to recover the species to sustainable levels, consistent with the Magnuson-Stevens Act (MSA). In 2017 the U.S., working with Aquarium experts and the U.S. recreational sector, secured an international agreement to recover the population to sustainable levels by 2034 – a major

achievement. However, in the coming year, achieving this hard-won recovery plan is at risk if countries do not follow a precautionary approach and decide to increase quotas, exacerbating the existing overfishing problem.

The U.S. has been a leader in advocating for strong science to guide management and recovery of Pacific bluefin tuna to sustainable levels. A key part of the solution is to bring scientists, managers and stakeholders together through a process called Management Strategy Evaluation (MSE). MSE has been identified globally as an optimal “next-generation” fishery management process to build consensus and support for science-based management in international highly migratory species, particularly tunas. Importantly, the MSE process will improve the ability to meet the needs of U.S. stakeholders and ensure population recovery. Funding to increase NOAA’s MSE scientific capacity would enhance the U.S. negotiating position, increase transparency and position the U.S. to lead MSE for other valuable tunas and highly migratory species.

In the last two years, the Commerce, Justice, Science Appropriations Act Report emphasized Atlantic and Gulf of Mexico highly migratory species issues, but **unfortunately did not similarly recognize the key threats in the Pacific**. Pacific tuna fisheries are in dire need of attention in the face of increasing pressure from non-U.S. fishing vessels and interests, especially the iconic Pacific bluefin tuna. We need to maintain a strong management presence and scientific authority on this issue to prevent weakening of the recovery plan and ensure this pattern does not spread to other U.S. key tuna species and fisheries in the Pacific.

We request the Subcommittee to increase funding within NOAA Fisheries by \$1 million over FY19 to prioritize and add MSE capacity, including for Pacific bluefin tuna, and to allocate resources for highly migratory species research equitably among the regions. In addition, we urge the Subcommittee to call on NOAA Fisheries to provide resources to support continued engagement by the Pacific Fishery Management Council to position the U.S. in the international negotiations and ensure progress on the Pacific bluefin tuna recovery plan.

Marine Debris – Our ocean is at increasing risk from growing levels of plastic pollution. Studies estimate that an average of eight million metric tons of plastic enter the global ocean each year. Unless we curb the flow, this number is expected to double by 2025, which poses a growing risk to water quality, wildlife and human health. NOAA’s Marine Debris program offers competitive grants for aquariums and others to work with federal, state, and local partners on marine debris education and reduction projects. The Monterey Bay Aquarium has previously received \$52,306 from this program for our Ocean Plastic Pollution Summit for Teachers. Over 100 pre-K to 12th grade teachers from throughout California have participated in the Summit and follow-up activities, learning how to use the issue of ocean plastic pollution to engage their students in marine conservation and science. **We request support for the NOAA Marine Debris Program of at least \$10 million in FY 2020.**

Ocean Science and Technology – The Aquarium collaborates with the Monterey Bay Aquarium Research Institute (MBARI) on science and conservation issues of mutual interest. The success

of our efforts to engage cutting edge research to address challenging ocean-related issues is dependent on a vibrant ocean science and technology enterprise. Through NOAA and the other relevant agencies, including NSF and NASA, the Aquarium recommends the Subcommittee provide support that will address the research challenges contained in the National Academies' *Sea Change* and in *Science and Technology for America's Oceans: A Decadal Vision* published last year by the interagency Subcommittee on Ocean Science and Technology.

There are a number of other important NOAA programs that make important contributions to the vitality of our U.S. economy, our communities and way of life. We urge the Subcommittee to support the following programs:

Ocean Education – We urge the Subcommittee to reject the Administration's plan to terminate NOAA education programs and request \$20 million for the NOAA Education Program, including funding to maintain the Environmental Literacy Grants Program (including ocean education grants), and \$12 million for the Bay, Watershed, Education and Training Program.

Bycatch Reduction – We recommend the Subcommittee include at least \$2.5 million for bycatch reduction competitive grants to non-Federal researchers for the development and implementation of practical bycatch solutions that support sustainable U.S. fisheries.

Marine Aquaculture – We request that the Subcommittee fund NOAA's marine aquaculture programs within NOAA Fisheries and in the Office of Oceanic and Atmospheric Research (OAR) through the Sea Grant Program at least at \$12 million and \$15 million, respectively.

National Marine Sanctuaries and National Monuments – We request the Subcommittee fund Sanctuaries and Marine Protected Areas at \$57 million within NOAA's ORF account in NOS, and \$8.5 million for Marine Sanctuaries Construction within NOAA's PAC account. In addition, we request sufficient funding to support Papahānaumokuākea, Rose Atoll and New England Coral Canyons marine national monuments.

John H. Prescott Marine Mammal Rescue Assistance Grant Program – We call on the Subcommittee to reject the Administration's proposal to terminate the program, and fund the program at \$4 million.

NOAA Coastal Resilience Grants (Title IX) – We request that the Subcommittee support NOAA Coastal Resilience Grants at \$35 million to prepare for and recover from extreme weather events, climate hazards and changing ocean conditions.

NOAA National Sea Grant College Program - We urge the Subcommittee to reject the Administration's proposal to terminate the Sea Grant Program, and provide \$93.5 million.

Thank you for your consideration of these requests and look forward to working with you to ensure strong support for these important ocean research and conservation programs.



Written Testimony of Terri Poore, Policy Director
National Alliance to End Sexual Violence
House Committee on Appropriations Subcommittee on
Commerce, Justice, & Science

On behalf of the National Alliance to End Sexual Violence (NAESV) representing 56 state and territorial sexual assault coalitions and more than 1500 local rape crisis centers, we respectfully **request \$50 million for the Sexual Assault Services Program (SASP) at the Office on Violence Against Women, Department of Justice**. We are grateful for your recognition of the need to invest in services and for increases in the Sexual Assault Services Program (SASP) in FY 2019 to \$37.5 million, however, an increased investment is required to meet the need.

Data from the Centers for Disease Control and Prevention's (CDC) *National Intimate Partner and Sexual Violence Survey (NISVS)* reveals that domestic violence, sexual assault, dating violence, and stalking are insidious, pervasive, and deadly crimes. Nearly one in five women have been raped in their lifetime; nearly one in two women have experienced some form of sexual violence. With the #MeToo movement and high-profile cases of sexual violence, there's more demand than ever for recovery services. Our message to survivors must be clear: when you come forward for help and support, it will be available.

Our nation has made such phenomenal progress in understanding and addressing violence against women, because Congress has made a national, ongoing, annual investment. The Sexual Assault Services Program (SASP) funds rape crisis centers through state formula grants, ensuring that victims of sexual assault have access to vital medical services, legal advocacy, and counseling. Advocates help the criminal justice system respond more effectively – more police reports, more prosecutions and more convictions equal safer communities. According to the Office on Violence Against Women's most recent report to Congress, over 49,000 victims were served by the SASP program in one year.

Victims of sexual assault suffer. They are more likely to struggle professionally, academically and from depression, post-traumatic stress disorder, substance abuse, and to contemplate suicide. SASP funds ensure quality services. Through support of coalitions which provide training and technical assistance, SASP helps ensure that victims receive high quality services and improved responses from the criminal justice system. SASP funds also support underserved communities. Grants to culturally specific organizations help support intervention and related assistance for underserved victims and communities of color.

According to our 2018 data, half of programs have a waiting list for counseling services with many survivors waiting many weeks or even months for counseling. 44% have a waiting list for trauma-informed therapy. Attention to campus and military sexual assault cases, as well as high profile media cases, has meant more victims have come forward needing critical recovery services. 87% of programs experienced increased demand last year. Programs must be expanded to meet the demand.

If you have any additional questions at the importance of increasing funding for SASP, please feel free to contact me at terri@endsexualviolence.org.

House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies

“FY 2019 Public Witness Testimony”

**Statement of Judge Michael Barrasse, Lackawanna County, PA
Chairman, National Association of Drug Court Professionals**

on behalf of the National Association of Drug Court Professionals

April 4, 2019

To Chairman Serrano, Ranking Member Aderholt, and distinguished Members of the Subcommittee, I am honored to have the opportunity to submit my testimony on behalf of this nation's over 3,000 drug courts and the 150,000 people they will connect to life-saving addiction and mental health treatment this year. Given the unprecedented success of drug courts, and the urgent and growing need for solutions to the addiction epidemic that promote both public health and public safety, **I am requesting the Congress maintain the enacted fiscal year 2019 numbers of \$77 million for the authorized Drug Court Discretionary Grant Program (Pub. L. 115-271) and \$22 million for the authorized Veterans Treatment Court Program at the Department of Justice (Pub. L. 114-198).**

I serve as President Judge of the Lackawanna County Court of Common Pleas in Pennsylvania, where I have been on the bench for nineteen years. I also have the privilege of presiding over the county's drug court and veterans treatment court. Before becoming a judge, I served three terms as Lackawanna County's district attorney. No aspect of my legal career has been as consequential, effective and personally rewarding as my involvement with drug courts and other treatment courts.

Lackawanna County is a testament to the significant impact these programs have on communities grappling with addiction and related crime. By bringing together the criminal justice community, treatment and social service agencies and organizations - including the Department of Veterans Affairs - and local government, our drug court and veterans treatment court ensures individuals who come before the court with a substance use and/or mental health disorder receive the treatment and accountability needed to transform their lives. This translates into cost-savings for taxpayers and reduced drug use and crime for the community.

Behind the statistics, however, are real people who come before me mired in the deepest depths of addiction; individuals with no hope for a future without drugs; who've been given up on by their friends and families. People like Sandra, for example, who were addicted for years and eventually succumbed to crime to support her habit. Her home life was in chaos and she risked losing custody of her four children. That was two-and-a-half years ago. Today, she is a graduate of drug court. She has a job, is back with her family and is living a life of recovery. At her graduation, she said, "This is the beginning of the rest of my life. Recovery was something that seemed so impossible to do, but this program helped me do it. I didn't think I would be able to, but they are truly amazing and really want me to get better."

Had she not come to participate in drug court, she would likely be behind bars. Or worse. Sandra is just one of the 150,000 people nationally who get access to treatment through drug court each year. What started as an experiment three decades ago is today the most successful strategy for addressing addiction and mental health in the justice system. In fact, no other intervention in our nation's history has anywhere near comparable evidence of reducing recidivism and saving taxpayer dollars.

Our drug court, like thousands across the country, serves individuals whose involvement in the justice system is linked to a substance use and/or mental health disorder. The population we serve is generally facing incarceration for crimes ranging from forgery and theft to fraud and DUI. Before drug court, there were few sentencing options, and most of these cases resulted in continued recidivism at great cost to taxpayers and continued damage to offenders' families. Instead, drug court brings treatment providers into the courtroom to ensure each participant receives an individualized, evidence-based treatment plan - including addiction medication when appropriate - and work as a team with law enforcement, probation, defense, prosecution and the judge to provide ongoing supervision, support and accountability. This community-based approach allows drug courts to identify and meet individual needs beyond clinical treatment, from education, employment and housing assistance to family reunification, restitution and healthcare.

Research continues to confirm that this comprehensive approach works. The Government Accountability Office finds drug courts reduce crime by up to 58%. Widely regarded as the most comprehensive study on drug court to date, the Department of Justice National Institute of Justice Multi-Site Drug Court Evaluation (MADCE) confirmed drug court significantly reduces both drug use and crime, and found cost savings averaging \$6,000 for every individual served. The MADCE found drug courts improve education, employment, housing and financial stability for nearly all participants. They are proven to promote family reunification, reduce foster care placements and increase the rate of addicted mothers delivering babies who are fully drug-free.

Several years ago this successful model was expanded to serve veterans in Lackawanna County struggling to reengage following their service. Veterans treatment court builds on the drug court model but ensures veterans with substance use or mental health disorders are connected to the appropriate local, state and federal resources they have earned. Allowing veterans to go through the treatment court process surrounded by other veterans creates an environment where they are more receptive to the help being offered.

The success of drug courts and other treatment courts in Lackawanna County is transforming the community's attitudes around addiction and recovery. This month Recovery Bank will open in downtown Scranton. The Recovery Bank is a community center providing a safe, supportive place for people in recovery from addiction, their family, friends and those interested in engaging in activities beneficial to the individual and community. The first of its kind in the state, Recovery Bank volunteers will operate a food pantry, coordinate with Lackawanna County Prison staff to prepare inmates with substance use disorders for life after incarceration, operate a peer recovery program to connect individuals in treatment with a peer support specialist and work with treatment court participants to provide recovery support services.

Like the rest of the nation, Lackawanna County has been devastated by the opioid epidemic and the greater addiction epidemic gripping this nation. Our drug courts and other treatment courts are on the front lines of ensuring we have an effective, evidence-based response that saves lives, reunites families and makes the community safer.

Our robust network of treatment courts have benefitted, and continue to benefit, greatly from federal funding provided by the Department of Justice. I encourage this committee to focus on proven programs which guarantee financial returns and measurable success. There is no better example than drug courts and other treatment courts.

**Testimony of National Congress of American Indians
The House Appropriations Committee
Subcommittee on Commerce, Justice, Science and Related Agencies**

April 4, 2019

On behalf of the National Congress of American Indians (NCAI), this testimony addresses important programs in the Department of Justice and Department of Commerce. As the most representative organization of American Indian and Alaska Native tribal nations, NCAI serves the broad interests of tribal governments across the United States. As Congress considers the FY 2020 budget and beyond, leaders of tribal nations call on decision-makers to ensure that the promises made to Indian Country are honored in the federal budget. Specifically, NCAI requests the following:

AGENCY	PROGRAM	NCAI FY 2020 Request
Commerce	Minority Business Development Agency	\$39,000,000 and a set-aside to re-establish NABECs within MBDA.
Commerce	Office of Native American Business Development	\$2,000,000
Commerce	Office of Native American Affairs	\$2,000,000
Commerce	Pacific Coastal Salmon Recovery Fund	\$110,000,000
Commerce	Salmon Management	Provide \$25.9 million for NOAA Mitchell Act Hatchery Programs
Commerce	2020 Census	Provide the Census Bureau with at least \$8.45 billion in FY 2020
NSF	Education and Human Resources Funding for Tribal Colleges and Universities	\$15,000,000
DOJ	Tribal Grants: Eliminate competitive grant funding process and utilize DOJ appropriations as base funding where tribes determine priorities	Use DOJ appropriations as base funding with tribes setting own priorities
DOJ	Tribal Set-Aside from Office of Justice Programs	Create a 10 percent tribal set-aside for all discretionary Office of Justice Programs (OJP) programs
DOJ	Tribal Youth Program under the Juvenile Accountability Block Grants Program	\$25,000,000
DOJ	Crime Victims Fund	Create a 5 percent set-aside for tribal governments

DOJ	Community Oriented Policing Services (COPS) Tribal Law Enforcement	\$52,000,000
DOJ	Tribal programs under the Violence Against Women Act (VAWA)	Provide full authorized amount

Department of Justice

The public safety problems that continue to plague tribal communities are the result of decades of gross underfunding for tribal criminal justice systems; a uniquely complex jurisdictional scheme; and the historic, abject failure by the federal government to fulfill its public safety obligations on American Indian and Alaska Native lands. Crime rates in tribal communities are among the highest in the nation and American Indians and Alaska Natives experience rates of violent crime that are 2.5 times the national average. Residents and visitors on tribal lands deserve the safety and security that is taken for granted outside of Indian Country. Increased and streamlined funding in the following program areas will have a huge impact on safety in tribal communities for tribal citizens, residents, and visitors to tribal lands.

Include tribal governments in disbursements from the Crime Victims Fund (a mandatory account). The Crime Victims Fund (CVF) is the federal government's primary funding source for providing services to victims of crime. NCAI expresses our sincere gratitude to appropriators for providing a direct funding stream for tribal governments from the CVF for the first time in FY 2018 and again in FY 2019. For this funding to achieve its purpose, however, it needs to be recurring funds that tribal governments can plan on in order to ensure program stability for victims for the long term. We urge appropriators to keep disbursements from the CVF at the increased level and to direct an amount equal to 5% of overall CVF disbursements to tribal governments.

Create a streamlined tribal allocation across Office of Justice Programs (OJP) programs. For several years the Administration has proposed bill language that would streamline and consolidate OJP tribal programs by allocating seven percent from all discretionary OJP programs to address Indian country public safety and tribal justice needs. In past years, both the House and Senate CJS Subcommittees have supported this request, but it has never been enacted. One of the biggest shortcomings of DOJ tribal funding is that it is administered as competitive funding. In order to obtain this funding, tribal nations – on behalf of their tribal justice systems – must compete against each other under priorities and guidelines established by DOJ. As a result, tribal nations must develop projects that align with changing DOJ priorities and cannot count on funding continuing beyond the current grant period. A streamlined OJP tribal allocation would significantly improve the federal funding process by which tribal nations receive resources to establish tribal courts; assist in developing detention facilities; provide legal assistance; develop and maintain juvenile delinquency prevention programs; and provide substance abuse prevention programs. Further, the tribal allocation would give tribal nations the flexibility to develop a detailed strategic plan on how best to spend those resources.

If Congress declines to adopt the flexible allocation across OJP programs, restore FY 2010 levels of \$25 million in funding for the Tribal Youth Program under the Juvenile Accountability Block Grants program. Although Native children comprise only 2.2 percent of the overall youth

population, they are arrested at a rate of more than two-to-three times that of other ethnic groups. According to a recent DOJ report, “[s]ubstance abuse, depression, and gang involvement fuel a vast majority of the offenses for which American Indian juveniles are disproportionately confined.” Funding for the Tribal Youth Program has decreased significantly in recent years and should be restored to its FY 2010 level of \$25 million.

Increase funding of tribal law enforcement programs under DOJ’s Community Oriented Policing Services (COPS) Grants to \$52 million. Since the creation of the COPS Office, more than 2,000 grants totaling more than \$400 million have been awarded to tribal nations to hire more than 1,700 new or redeployed law enforcement officers. It has also helped tribal nations to obtain necessary law enforcement training, equipment, vehicles, and technology. Yet, there is still a tremendous unmet need within tribal justice systems for more COPS funding. The COPS Office has acknowledged that due to limited resources, it has not been able to adequately fund tribal justice systems, particularly in the area of hiring/retaining tribal law enforcement officers. In a report released in December 2010, the COPS Office described its practice of intermittent funding as “problematic,” especially “when referring to hiring of officers.” Indian Country urges Congress to significantly increase funding for tribal law enforcement programs under the COPS program.

Fully fund the programs authorized in the Violence Against Women Act (VAWA), including the funds authorized for tribal implementation of VAWA special domestic violence criminal jurisdiction. It is estimated that over 85% of American Indian and Alaska Native women will experience violent victimization in their lifetimes. OVW provides funding to tribal governments to address violence against women in their communities. OVW’s largest source of funding for tribal governments is the Grants to Tribal Governments Program, which is funded via statutory allocations from other OVW programs. Fully-funding these OVW programs results in full funding for the Grants to Tribal Governments Program.

The Violence Against Women Reauthorization Act of 2013 (VAWA 2013) recognized and affirmed the inherent sovereign authority of Indian tribes to exercise Special Domestic Violence Criminal Jurisdiction (SDVCJ) over all persons—Indian and non-Indian—who commit crimes of dating violence, domestic violence, and violations of protection orders within Indian country. The bill authorized \$5 million per year for 5 years for Indian tribes to implement the VAWA 2013 provisions and otherwise strengthen tribal justice systems. In FY 2019, \$4 million was appropriated for this program. We urge Congress to appropriate the full amount authorized for VAWA implementation purposes so that more communities are able to take advantage of this lifesaving law.

Department of Commerce

Provide \$39 million for the Minority Business Development Agency (MBDA). The Minority Business Development Agency (MBDA) was created to support minority business development centers to provide business consulting and financing services. Initial funding for the MBDA was set at \$63 million, but this budget has since decreased. Funding the MBDA at \$39 million will assist tribal nations in obtaining vital business consulting, financing services, and procurement of technical assistance.

Fund the Office of Native American Business Development at a minimum of \$2 million as part of the Commerce Department Management Budget. The establishment of the Office of Native American Business Development (ONABD) was codified by the enactment of the Native American Business Development, Trade Promotion and Tourism Act of 2000, Public Law 106-464 (the 2000

Act). However since its establishment, ONABD has relied on base resources from the Minority Business Development Agency (MBDA) to coordinate federal programs for financial and technical assistance to increase business, expand trade, and support economic development on tribal lands. In its FY 2016 budget request submitted to Congress, MBDA noted the absence of appropriations to support ONABD since it was created by the 2000 Act, and also the lack of appropriations to implement other aspects of PL 106-464 and the Indian Tribal Regulatory Reform and Business Development Act of 2000. In order to carry out its mission, ONABD must receive adequate and sustained support to implement Indian policy initiatives and expand Native American business development initiatives both domestically and internationally.

Provide the Census Bureau with at least \$8.45 billion in FY 2020. The census is a critical and powerful information source that will significantly influence American policy for the coming decade. An accurate count is necessary to ensure the fair distribution of billions of dollars to tribal nations and American Indian/Alaska Native people across the United States. Certain population groups are at higher risk of being missed in the decennial census – groups considered hard-to-count. Native people especially on reservations and in Alaska Native villages have been historically underrepresented in the census. In the 2010 Census, the Census Bureau estimates that American Indians and Alaska Natives living on reservations or in Native villages were undercounted by approximately 4.9 percent, more than double the undercount rate of the next closest population group. The President’s Budget request was significantly lower than Secretary Ross’s estimates of overall costs, and we urge Congress to ensure sufficient funding for a successful 2020 Census, including funding for Questionnaire Assistance Centers, which currently are not included in the Census Bureau’s operational plan. With only half the number of Regional Census Centers and local census offices across the country, it will be important to expand the field footprint, to provide ‘safe space’ for people who do not have reliable internet access, are wary of using the telephone to respond, or need assistance filling out a paper form, to meet with sworn Census Bureau employees near where they live.

Conclusion

Thank you for your consideration of this testimony. For more information, please contact Virginia Davis, Senior Advisor, at vdavis@ncai.org.

**STATEMENT OF RACHEL SHONFIELD, FIRST VICE PRESIDENT
NATIONAL COUNCIL OF EEOC LOCALS, NO. 216, AFGE/AFL-CIO
TO
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
ON
FY20 APPROPRIATION FOR EEOC
THE ADMINISTRATION'S PROPOSED \$23.7M CUT TO EEOC WILL MAKE IT
HARDER FOR WORKERS FACING DISCRIMINATION TO GET HELP;
HUGE WORKLOAD, INCLUDING 13.6% INCREASE IN SEXUAL HARASSMENT
CLAIMS, BOOKED APPOINTMENTS, AND RECORD LOW STAFF JUSTIFY
INCREASED FUNDING; OVERSIGHT IS NEEDED TO STOP CASE CLOSURE
SCHEMES FROM IMPEDING SUBSTANTIVE HELP TO THE PUBLIC
April 4, 2019**

Chairman Serrano, Ranking Member Aderholt and members of the Subcommittee, this testimony is submitted on behalf of the National Council of EEOC Locals, No. 216, AFGE/AFL-CIO. The Council is the exclusive representative of the bargaining unit employees at the Equal Employment Opportunity Commission (EEOC), including investigators, attorneys, administrative judges, mediators, paralegals, and support staff in 53 offices nationwide. The Council thanks this Subcommittee for its leadership and bipartisan support of a much needed \$15.7M increase to EEOC's budget for FY18 and FY19 "to address sexual harassment claims."

The administration is proposing to cut EEOC's current budget from \$379.5M to \$355.8M in FY20, even while the agency is facing rising workloads. EEOC reported a 13.6% increase in sexual harassment claims in 2018 and a 30% increase in overall inquiries.

Unfortunately, even with EEOC's first funding increase in seven years, the agency's workforce dwindled and could not keep up with demand. Short-staffing means the public waits months for an appointment and over an hour on hold for live help on the agency's 1-800 line. The FY20 budget calls for more frontline staffing losses. EEOC's budget justification concedes there will be a "steady rise in pending inventory" as "there will be no replacement of staff."

One consequence of the massive workload and short staffing is a push by EEOC to swiftly close cases without substantive processing by tagging them as "C charges" under the agency's triage system. The vast majority of workers who come to EEOC for help receive a dismissal with a 'right to sue' letter and are left to find help on their own. There is also a concerning rise in inquiries that do not result in charges. Similar case closure initiatives impact the Federal sector.

The Council seeks this Subcommittee's continued support by increasing EEOC's budget to support hiring frontline staff to provide real help to the public and including oversight to ensure EEOC effectively enforces laws barring workplace discrimination, including sexual harassment.

Introduction: The EEOC enforces laws barring job discrimination based on race, color, religion, sex (including sexual harassment), national origin, age, disability, genetics, and retaliation. The EEOC, as the agency tasked with stopping and preventing workplace sexual harassment, needs more resources not less to address a rising workload and a heightened profile in the #MeToo era.

Funding to Address Sexual Harassment Claims Must Not be Cut: As the #MeToo movement went viral, more workers began visiting EEOC's website for information and training on harassment and other covered bases. Congress responded with a \$15.7M increase in FY18, which was maintained in FY19, "to address sexual harassment claims." In fact, sexual harassment claims went up 13.6% in FY18. At a time of rising awareness of sexual harassment, it sends the wrong message to cut funding and staff at the agency handling those complaints.

EEOC Faces a Huge Workload and a Significant Jump in Inquiries that Must be Handled: In FY18 EEOC handled 76,418 charges, 40,000 interviews, 105,600 calls, and 34,600 e-mails. Last year, EEOC received 200,000 inquiries, a 30% jump from FY17. EEOC ended FY18 with a 49,607 case-backlog. Cases piled up as EEOC was closed for the 35-day government shutdown.

EEOC's Workforce Has Shrunk as Demand Increased, Impacting Services to the Public: For seven years, from 2011 to 2017, EEOC's budget was frozen or cut. EEOC's staff dropped from 2,505 to 2,082 during this time. While Congress provided EEOC a needed increase for FY18, EEOC's limited hiring for the year resulted in a net staffing loss. EEOC ended FY18 with only 1,968 employees nationwide, the lowest level since before 1980.

EEOC's critical frontline positions have declined. EEOC has approximately 552 investigators (compared to a high of 917 in FY01), who process charges and conduct training and outreach. Investigative staffing shortages were exposed when a new appointment system went nationwide in FY18 and calendars remain booked up for months. According to EEOC's FY20 Budget: "The surge in demand for intake interviews has stretched agency resources to their limits . . ."

The staffing crisis extends across EEOC. Only 36.9 % of EEOC field staff reported on the 2018 FEVS survey "sufficient resources (for example, people, materials, budget) to get my job done."

Slashing EEOC's FY20 Budget and Staff Will Devastate Civil Rights Enforcement: The specter of the dramatic budget cut is already negatively impacting operations. According to the FY20 Budget there will be a "halt in hiring in mid-FY19" and there "will be no replacement of staff." The budget concedes the cut "will yield a loss of 50 investigators and mediator staffing will remain stagnant after three successive years of losses of a combined 19 positions." EEOC admits "without any hiring of investigators and mediators or the ability to backfill vacancies starting in FY 2019, the agency will return to a cycle of an increasing pending inventory."

EEOC will not even be able to replace IIRs, the 34 GS-5 staff who handle about 427,000 contacts each year to the 1-800 line. Due to high turnover, the budget warns "anticipate that the impact on the agency's ability to timely provide service to the public will occur quickly, leading to longer wait times for the public." If hold time can be over an hour now, it will get worse.

Jobs are lost and workers, including those experiencing harassment, are vulnerable to retaliation during delays. Resources are needed for EEOC to maintain its deterrent force. The Acting Chair's Message in the budget is clear, "Maintaining steady state in mission critical positions: investigators, administrative judges, and trial attorneys is crucial for the agency's continued success." However, the budget is also clear that it cuts staff, which will undermine any success.

EEOC needs to rebuild staffing from the current record low to provide substantive assistance to the public. Unfortunately, even with the \$15M increase, EEOC staffing dropped to 1,968 FTE,

which was 379 below FY18's approved ceiling of 2,347 FTE. Increasing EEOC budget again, \$15 to \$20M would assist in producing a net gain and providing funding to support that ceiling. As a reference point, the EEOC's FY11 budget request for \$385M provided for net frontline staffing gains. Adjusted for inflation, this would be \$432M in 2019. Therefore, the Council requests this Subcommittee's continued support by increasing EEOC's budget, but in no event to cut the current \$379.5M. Now is not the time to go backwards on addressing discrimination.

Oversight Needed to Enable Real Help, not Case Closure Schemes that Focus on Quotas:

EEOC's giant backlog of 49,607 cases delays help to workers. However, backlog reduction strategies introduced in 2017, raise red flags of justice denied. EEOC's priority charge handling process (PCHP) - A, B, C system, has been reinterpreted to increase "C" charges, which are the easiest, as they do not involve substantive processing. EEOC does not even request a position statement for "C" charges. The changes also undermine EEOC's popular mediation program, by reducing the pool of "B" cases eligible for mediation.

Staff have seen this translate to office inventory reduction goals and arbitrary "C at intake" categorization quotas believed to be 35% or higher. The result is a press for cursory closures after the intake interview, e.g., a dismissal with a right to sue. The mantra is "the interview is the investigation." Many individuals will not be able to navigate the Federal court system or locate and afford an attorney. Those that can will add to the busy Federal docket, while previously EEOC investigated, mediated, and conciliated many such cases to resolution.

Another strategy to reduce volume is discouraging filing. EEOC's FY18 PAR says that 22,000 individuals were interviewed, but "decided" not to file, an increase of 8,000 over FY17. This reflects a press to counsel out inquiries, so then these never become charges. There is a mismatch between inquiries going up, but filings going down, that cries for oversight.

EEOC has not released its enforcement statistics for FY18. But for FY17 they show a decrease in overall merit resolutions and settlements. Only 2.9% of charges were reasonable cause, the lowest percent EEOC has ever reported and a jump in "no reasonable cause" dismissals.

The statistics are an apparent outcome of an initiative cited by OIG in the EEOC's FY17 PAR report, "Acting Chair Victoria Lipnic, in July 2017, addressed the inventory issue by distributing a discussion memo to senior managers describing how to substantially reduce the inventory." This dovetails with a controversial performance system introduced in 2017 that for the first time contains arbitrary closure quotas of percentile of aged inventory and "rigorous use" of PCHP.

In most past years, EEOC's backlog grew 1% to 38%. A rare exception was a 10% drop in FY11 and FY12 due to additional staff. Yet, EEOC reported a 16.2% backlog reduction in FY17 and a 19.5 % in FY18. This decrease is out of scale with previous years and raises alarms about how it occurred with record low staff particularly investigators (almost 200 fewer than FY11).

EEOC claims that due to limited staffing, it must focus on cases with the greatest impact. This means the majority of those seeking EEOC's help receive a dismissal with a "right to sue." EEOC should use any available hiring authority to hire staff and let them properly work the cases. Congress should direct a review of EEOC's new performance system and leadership initiative "to substantially reduce inventory" to determine if justice is denied to workers by strategies that result in fewer mediations and more case closures without substantive processing.

EEOC Should Work Smarter to Make Sure Its Valued Resources are Used Efficiently:

(1) Make EEOC Flatten its Current 1:5 Supervisor to Employee Ratio:

EEOC should flatten its current inefficient 1:5 supervisor to employee ratio. Prioritizing frontline staff within any available hiring mean faster help for the public.

(2) Dedicated intake staff needed to free up investigators to investigate cases: EEOC finally hired five GS-8 ISAs for intake, but more are needed for EEOC's 53 offices. But, EEOC should not impose unreasonable interview quotas that impact customer service and cause high turnover.

(3) Require EEOC to Reduce Costly Turnover by Improving Morale with Efficiencies:

Sadly, EEOC is not the "model employer." EEOC receives below average scores on Federal Employee Viewpoint Survey, such as disclosing violations without fear of reprisal. EEOC's OEO department has made 0% findings of discrimination. FLRA issued three Unfair Labor Practice complaints against EEOC, one escalating to a Summary Judgment Order.

(4) Work Smarter by Eliminating Management Travel and Unnecessary Contracts:

EEOC should not hire contract mediators, when an in-house mediator is within 100 miles. EEOC should eliminate management travel that can occur by VTC.

(5) Invest in technology to improve EEOC's Digital Charge and Appointment Systems: EEOC's digital systems were built on a 1990s platform that require workarounds, making the systems awkward to use for the public and time-consuming for staff to maneuver.

Bill and Report Language Should Retain Oversight of Restructuring and Reporting:

Bill language should retain oversight of any reorganization. The budget states, "In FY 2019, our CHCO will begin the process of creating a workforce plan to reduce duplicative efforts and improve organizational efficiencies and effectiveness" and EEOC posted for an HR specialist to "make recommendations on abolishing or creating organizational level units, reassigning functions," etc. The last restructuring added bureaucratic layers, but no frontline staff. Congress should ensure a transparent process with stakeholder feedback. EEOC must continue to report on the past five years A, B, and C charges and inquiries not resulting in charges.

Federal Employees Must Have Rights to Discovery and Full and Fair Hearings before AJs:

EEOC has only 72 available Administrative Judges (AJs) to adjudicate the approximately 8,000 federal sector discrimination complaints received each year. Performance standards for the first time contain closure quotas pressuring administrative judges (AJs) to quickly close cases, e.g., by denying discovery and granting summary judgment. Adequate AJ staffing, judicial independence and subpoena power are critical to a full and fair hearing.

Conclusion: The Council seeks this Subcommittee's continued support to ensure EEOC effectively enforces laws barring workplace discrimination, by including bill and report language for FY20 which: (1) Increases EEOC's budget again, \$15-\$20M, but in no event cuts EEOC's current \$379.5M; (2) directs EEOC to hire frontline field staff to meet appointment demand and provide real help to the public; (3) preserves Federal workers' rights to discovery and a hearing; (4) continues oversight of any restructuring; and (5) continues to report on the past 5 years of: A, B, and C charges, and on inquiries received but not resulting in charge filings after being interviewed.

**National Legal Aid & Defender Association Testimony to the U.S. House Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies**

**From Don Saunders, Vice President, Civil Legal Services,
National Legal Aid & Defender Association**

April 4, 2019

This testimony is submitted on behalf of the National Legal Aid & Defender Association (NLADA), which is America's oldest and largest national nonprofit organization whose resources are exclusively dedicated to promoting excellence in the delivery of legal services in order to advance access to justice for all. We are grateful for the opportunity to provide comments to the committee regarding the Legal Services Corporation, for which we request \$683 million, the Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program, for which we recommend \$2 million, and the John R. Justice student Loan Repayment Assistance program, for which we recommend \$25 million.

Legal Services Corporation

LSC is America's investment in its promise of equal justice. LSC distributes 94 percent of its appropriation directly to 133 organizations providing civil legal aid to people in every U.S. state and territory who have legal problems with life-altering potential consequences. Family and housing cases are the most common. Without access to legal help in these matters, victims of domestic violence can be denied safety from an abusive parent or spouse, and families can lose their homes through unnecessary eviction or foreclosure. LSC also enables legal aid programs to respond quickly and effectively to emerging challenges facing low-income and middle-class Americans. The new LSC task forces on the opioid crisis and disaster recovery are helping guide legal aid programs in confronting these complex large-scale issues that have created immeasurable damage to so many communities across our country.

There is a wealth of data that demonstrates how access to civil legal aid creates positive long-term outcomes for clients, such as increased housing stability and income levels, lower incidence of mental health problems in veterans¹, and improved "safety, psychological well-being, and economic self-sufficiency" for victims of intimate partner violence.² Despite this evidence, and despite the current strength of our economy, the need for legal assistance continues to dramatically outweigh the amount we choose to spend on it, which is the reason for our request that this committee significantly expand the appropriation for LSC.

Data published by LSC in 2017 revealed that the \$385 million appropriated for LSC the previous year only enabled grantees to fully address roughly one third of legal problems brought to them, and that 41 percent received no service at all.³ The vast majority of those who did not receive services were turned away because the program from which they sought help did not have sufficient resources to assist. Based on this data, we developed an approximate average cost of

¹ Tsai, J., Middleton, M., Villegas, J., Johnson, C., Retkin, R., Seidman, A., Sherman, S., and Rosenheck, R. (2017) "Medical-Legal Partnerships At Veterans Affairs Medical Centers Improved Housing And Psychosocial Outcomes For Vets", *Health Affairs* 36 (12)

² Hartley, C., and Renner, L. (2016) "The Longer-Term Influence of Civil Legal Services on Battered Women", U.S. Department of Justice

³ Legal Services Corporation (2017) *The Justice Gap: Measuring the Unmet Civil Legal Needs of Low-income Americans*

service per case, and using this estimate, calculated the amount that would have been needed to fully address every eligible legal problem. This number is \$683 million, adjusted for inflation.

However, we emphasize that the appropriation level we request would not meet the real need for civil legal aid. Across the country, only an estimated 20 percent of low-income Americans even seek assistance with their civil legal problems, often because they are unaware that resources exist to help them.⁴ In fact, the level we recommend in this testimony is 27 percent *lower* than funding would have been had the LSC appropriation simply kept pace with inflation since 1980,⁵ and the FY2019 appropriation is *less than half* of the 1980 level in inflation-adjusted dollars.

This diminished level of funding for LSC is not only harmful to communities that rely on civil legal assistance, but it is economically short-sighted. There is a direct, measurable, and significant return on investment from civil legal aid. In Alabama, for example, analysis demonstrates that for every dollar spent on civil legal aid, communities in the state received \$8.84 in direct and long-term financial benefits.⁶ This return includes a reduction in taxpayer spending on community services that results from provision of legal help, such as on housing and other support costs for a family that would have been forced out of their home were it not for access to an attorney.

While there are sources of funding for civil legal aid outside of LSC, these resources are distributed in a highly uneven manner. Rural areas in particular are routinely underserved, but through LSC the federal appropriation can be highly targeted to meet the areas of most extreme need. At the same time, the civil legal aid infrastructure that is built around LSC facilitates the investment of private resources into expanding access to civil legal assistance, multiplying the impact of the federal appropriation. Private attorneys from firms of all sizes contribute more than a week of legal services pro bono on average each year,⁷ but they are only able to volunteer in such volume because of the existence of LSC grantee organizations that provide needed training, supervision, and access to client communities. LSC also invests directly in expanding private attorney involvement through its Pro Bono Innovation Fund.

Equal justice for all is the foundation of American democracy. By continuing to underfund civil legal aid, we not only fail to preserve this foundation but also cause significant and often severe harm to the people and communities for whom access to a lawyer can be the difference between poverty and opportunity, sickness and health, and even life and death. We ask that you take the first step toward fully meeting our country's most fundamental promise by providing \$683 million for LSC in FY2020.

Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance

We urge this Subcommittee to support the work done on behalf of Native Americans by Indian Legal Services by maintaining funding within the Department of Justice, Office of Justice Programs, State and Local Law Enforcement Assistance account at a level similar to that provided in recent years, which is approximately \$1 to 2 million for the Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program (TCCLA). This

⁴ Ibid.

⁵ Houseman, A. & Perle, L. E. (2018) Securing Equal Justice for All: A Brief History of Civil Legal Assistance in the United States

⁶ Community Services Analysis, LLC (2015) Alabama Legal Aid Social Return on Investment Analysis

⁷ American Bar Association (2018) Supporting Justice: A Report on the Pro Bono Work of America's Lawyers

could be either within a specified line item for “assistance to Indian tribes,” as Congress provided \$37.5 million for in the FY 2019 Consolidated Appropriations Act, or within a tribal set-aside percentage of Office of Justice Programs accounts, as the Administration has proposed in the FY 2020 budget request in section 210.

For the past eight years, through FY 2018, a consortium of 24 Indian Legal Services programs connected with the Legal Services Corporation and operating in 23 states has been awarded funding under the TCCLA grants program. In addition to using TCCLA funds to provide legal representation to thousands of American Indian and Alaska Native individuals in tribal and state courts, Indian Legal Services programs are currently assisting more than 160 tribal governments and/or tribal judicial systems to enhance or develop their justice systems.

Examples of the Indian Legal Services programs’ tribal civil justice assistance work done under TCCLA awards include initial drafting of tribal laws as well as revisions to civil codes, policies and procedures; developing alternative resolution systems, based on tribal customs and traditions; and developing and conducting tribal court advocate training programs. Civil and criminal representation of individuals in tribal and state courts has included family law, probate, employment, disability benefits claims, public housing, property disputes, debt collection, child welfare and juvenile delinquency matters; *guardian ad litem* work in high conflict custody, guardianship, and parental termination cases; representation of families in Indian Child Welfare Act cases in state court; and addressing the impact on individuals and families from substance abuse and correlated incidents of criminal activity by reforming tribal sentencing guidelines.

The Indian Legal Services programs’ tribal criminal work under TCCLA has included assisting tribes with revisions to their criminal codes for compliance with these statutes, as well as drafting and updating codes, policies and procedures, and drafting of civil and criminal codes, including children’s codes, and rules of procedure; tribal court development, restructuring and improvement; training of judicial, law enforcement and justice systems personnel and tribal court lay advocates and guardians *ad litem*; and negotiation or litigation to address jurisdictional issues with state court systems. Lay advocate and peacemaker trainings have been done with tribal colleges and university law schools. Several Indian Legal Services programs have worked with the tribes and their tribal courts to establish “Wellness Courts” in conjunction with the local state courts. In these instances, a defendant appears before a tribal court judge and county district court judge simultaneously. The programs are engaged in helping 18 of the 160 tribes we serve to implement the Tribal Law and Order Act of 2010 (TLOA) and the Violence Against Women Reauthorization Act of 2013 (VAWA). The programs provide the only public defender service available in at least 46 tribal courts.

In FY 2020, whether Congress provides funding to the DOJ for Indian Country tribal justice and law enforcement programs as a tribal set-aside of a percentage of overall DOJ funding, or in an overall sum as the \$37.5 million appropriated in the FY 2019 Consolidated Appropriations Act for “assistance to Indian tribes,” we request that funding, bill and report language be included directing that some funds be allocated for the purpose of the provision of both tribal civil and criminal legal assistance to individual tribal citizens and to tribal judicial systems pursuant to the Indian Tribal Justice Technical and Legal Assistance Act.

John R. Justice Student Loan Repayment Assistance Program

Public defenders fulfill the constitutional right to counsel; they are essential to due process and our concept of liberty. They protect the rights of defendants in criminal cases and work to ensure

that case outcomes are fair and just. A law degree is a requirement of all public defenders, but obtaining such a degree routinely leaves graduates with a six-figure student loan debt. This debt can make it financially impossible to enter low-paying jobs at public defender organizations, or to remain in those jobs for long enough to gain the experience needed to become a highly effective advocate for their clients. The John R. Justice program can provide relief from this debt, and as such support the recruitment and retention needs of public defender and prosecutor offices, by contributing to an individual's monthly student loan payments. However, the FY2019 appropriation for John R. Justice was just \$2 million and this level of funding severely limits the scope and effectiveness of the program. We therefore request that this committee fully fund the John R. Justice program at the authorized amount of \$25 million for FY2020.

Ms. Kristen J. Sarri, President and CEO, National Marine Sanctuary Foundation
Written Testimony Submitted to the House Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
FY2020 NOAA Coral Reef Conservation Program Appropriations

April 4, 2019

Mr. Chairman and members of the Subcommittee on Commerce, Justice, Science and Related Agencies, thank you for the opportunity to submit written testimony regarding appropriations for National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program in Fiscal Year (FY) 2020. We respectfully request that you prioritize requests for \$30.6 million for Coral Reef Conservation within NOAA's Operations, Research and Facilities (ORF) account.

Coral reefs are among the most biologically diverse ecosystems in the world. They provide economic benefits and vital ecosystem services such as food, recreation, marine habitat, coastal protection, and climate regulation. We are requesting \$3 million in order to support coral monitoring, research and restoration in the Florida Keys National Marine Sanctuary and connected ecosystems. Florida's coral reefs are experiencing a multi-year outbreak of stony coral tissue loss disease. This event is unique due to its large geographic range, extended duration, rapid progression, high rates of mortality and the number of species affected. The disease is thought to be caused by bacteria and can be transmitted to other corals through direct contact and water circulation. Researchers are working to identify potential pathogens and relationships with environmental factors, strategies to treat diseased colonies, and identify genotypes of corals that are resistant to the disease in order to aid in restoration. With less than six percent of the total Florida Keys reef tract remaining, protecting and restoring corals is vital to conserving our only U.S. living coral reef and a sustaining an ecosystem critical to the Florida and U.S. tourism economy. We also believe that with this investment the Florida Keys can become a living laboratory for coral restoration. We must enable the best and the brightest of our coral scientists and researchers to work together to restore and protect America's underwater national treasures.

Thank you for this opportunity to provide written testimony to the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies.

Ms. Kristen J. Sarri, President and CEO, National Marine Sanctuary Foundation
Written Testimony Submitted to the House Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
FY2020 NOAA Office of National Marine Sanctuaries Appropriations

April 4, 2019

Mr. Chairman and members of the Subcommittee on Commerce, Justice, Science and Related Agencies, thank you for the opportunity to submit written testimony regarding appropriations for the Office of National Marine Sanctuaries in Fiscal Year (FY) 2020. As supporters, stakeholders, and partners of America's National Marine Sanctuary System, we strongly urge Congress to support the Office of National Marine Sanctuaries at no less than \$65.5 million in FY2020. The same level requested by 101 Members of Congress in their bipartisan dear colleague letter. We respectfully request that you prioritize requests for:

- **\$57 million for Sanctuaries and Marine Protected Areas**, within the National Oceanic and Atmospheric Administration's (NOAA) Operations, Research, and Facilities (ORF) account; and,
- **\$8.5 million for Marine Sanctuaries Construction**, within NOAA's Procurement, Acquisition, and Construction (PAC) account.

The National Marine Sanctuary Foundation, California Marine Sanctuary Foundation (CA), Cordell Marine Sanctuary Foundation (CA), Greater Farallones Association (CA), Monterey Bay National Marine Sanctuary Foundation (CA), Friends of Mollusks Potomac (MD), Friends of Thunder Bay National Marine Sanctuary (MI), Gray's Reef National Marine Sanctuary Foundation (GA), Olympic Coast National Marine Sanctuary Foundation (WA), and Florida Keys National Marine Sanctuary Foundation (FL) strongly support funding the National Marine Sanctuary System at these levels. Our organizations work together to conserve treasured places in our oceans and Great Lakes for current and future generations of Americans to enjoy. We promote citizen science, research, conservation, education, and community engagement to protect coral reefs and marine habitats, conserve places of cultural significance, and preserve our maritime history and heritage. Partnerships are critical to the National Marine Sanctuary System. Through collaboration with local communities, government, corporations, and individual donors, our organizations increase our impact.

Today, the National Marine Sanctuary Systems consists of 13 national marine sanctuaries, and NOAA ONMS co-manages two marine national monuments, totaling over 620,000 square miles. These sites conserve some of the Nation's most critical natural, historic, and cultural resources in the ocean and Great Lakes such as the USS Monitor, Midway Island, sacred heritage sites for Native Americans, and some of the largest and oldest corals in the world. They are home to millions of species, preserve more than 300 shipwrecks and our nation's maritime heritage, and promote public access for exploration and world-class outdoor recreation and enjoyment for future generations. Sanctuary visitor centers, vessels, and facilities are key assets for

communities; stimulate public-private partnerships on emerging technologies, cutting edge science, and hands-on education; and attract millions of visitors to the coasts each year.

Across all national marine sanctuaries, about \$8 billion annually is generated in local, coastal economies from diverse activities like commercial fishing, research, education and recreation-tourist activities. Over 42 million people visit sanctuaries each year. From restaurants and hotels, to aquariums and kayak operators, the success of many businesses, millions of dollars in sales and thousands of jobs, directly depend on thriving national marine sanctuaries. As a travel destination, few places on the planet can compete with the diversity of the National Marine Sanctuary System. The majority of national marine sanctuaries' waters are open to recreational activities, which also allows for considerable benefits to local economies. Public-private partnerships bring innovative approaches to conserving our natural and cultural resources. Collaborations among universities, institutions, non-profits, businesses, and enforcement entities at local, state, and national levels leverage resources and build relationships to have a greater impact for communities and the economy. Below are a few examples of the value of sanctuaries to local economies:

- In Washington State, \$101.6 million was spent on recreation in the Olympic Coast National Marine Sanctuary. This spending generated, with multiplier impacts, \$128.2 million in output, \$78 million in value-added (gross regional product), and \$46.1 million in income, which supported 1,192 jobs.
- Along the California coast, \$155.6 million on average is spent annually on recreational fishing in the state's four national marine sanctuaries. This spending supports an average of 1,400 jobs, and generates \$213.1 million in sales and output and \$74.6 million in income in local communities.
- In the Florida Keys, more than 33,000 jobs are supported by ocean recreation and tourism, accounting for 58 percent of the local economy and \$2.3 billion in annual sales.
- In Michigan, the Thunder Bay National Marine Sanctuary is the focus of its tourism attractions and local development strategy from the Sanctuary Inn to the Great Lakes Maritime Heritage Center, to the STEM education opportunities through the Alpena Community College and local high school ROV competitions, to its glass bottom boat tours to experience the shipwrecks without getting wet. Over half (58 percent) of visitors to Alpena came to visit Thunder Bay National Marine Sanctuary, which is the region's most popular attraction, boasting nearly 100,000 visitors per year.
- In Massachusetts, over \$126 million in whale watching revenue and 600 jobs at 31 businesses resulting from less than \$2 million invested in the Stellwagen Bank National Marine Sanctuary off of Massachusetts. Virtually all of Massachusetts whale watching occurs in Stellwagen Bank National Marine Sanctuary, recently named one of the premiere whale watching locations in the world.

Balancing multiple uses on the water and engaging many constituencies in the community, sanctuaries provide a comprehensive, highly participatory approach to managing and conserving marine and Great Lakes resources. National marine sanctuaries are the blue backyards for tens of thousands of citizens and volunteers who live along the coast or in the watersheds of these treasured sites. Public participation is a hallmark of sanctuaries and underscores their dedication to civic engagement and leadership.

Every year, thousands of volunteers devote their time and effort to protect sanctuaries for future generations. They represent the best of America and what starts as one passionate citizen becomes an empowered community. Sanctuary volunteer programs are nationally recognized and awarded for their work increasing awareness, engaging the community, promoting stewardship, and providing critical information and support for science, research, education, and management. In 2018, sanctuary volunteers contributed over 130,000 hours across the system, contributing more than \$3.16 million in valuable support.

In 2022, the Nation will mark the 50th anniversary of the National Marine Sanctuaries Act. As the Nation moves towards this anniversary, it is a unique opportunity to invest in America's public waters, and the communities and businesses that depend upon them. We hope that the appropriations request for FY 2020 will serve as the beginning of a deliberate and strategic investment in national marine sanctuaries building up to the 50th Anniversary. Robust funding will ensure sound management of these treasured places and the mission critical tools, like small boats; strengthen community engagement and stewardship of sanctuaries; and improve our understanding of marine and Great Lakes issues.

For sanctuary Operations, Research and Facilities (ORF) funding, we urge Congress to provide \$57 million. Because sanctuaries are located offshore, public awareness and education about the sites and the resources they conserve are critical, as is technology to let Americans look "under the surface." Therefore, we are proposing \$3 million to support growth in community-based sanctuaries, respond to the groundswell of communities nationwide seeking to expand sites or propose and designate new ones, and increase funds for management at existing sanctuaries. To support this effort, the proposed increase includes \$1 million to for national blue business stewardship efforts for marine sanctuaries. Similar to America's national parks, marine sanctuaries support tourism and a robust recreational industry. Such efforts will also set the stage for the 50th anniversary of the National Marine Sanctuary System. We are requesting \$2 million to conduct cooperative conservation science and research programs within sanctuaries that will improve resources management and advance innovative public-private partnerships. Finally, the requested increase includes \$2 million for public education, outreach, and awareness efforts at individual sites in the National Marine Sanctuary System to show how the sanctuaries can serve as a model for protecting marine ecosystems around the world, explore beyond our horizons using new technologies, and connect communities to their marine and Great Lakes wonders.

Sanctuary visitor centers, vessels, and facilities are key assets for communities; stimulate public-private partnerships on emerging technologies, cutting edge science, and hands-on education; and attract millions of visitors to the coasts each year. These platforms act as the public face of

proactive management and protection, promoting partnerships for science and education, and are a vital link between sanctuaries and the millions of Americans who visit the coast each year.

For sanctuary Procurement, Acquisition, and Construction (PAC) funding, we propose \$8.5 million. This request includes \$4.5 million to replace vessels critical to operations, management, and enforcement, including the replacement of the R/V Tatoosh in the Olympic Peninsula, WA and the R/V Rachael Caron in the Florida Keys, FL. This is the first year in a long-term effort to recapitalize the ONMS Small Boat Fleet. Last April, ONMS released its Small Boat Fleet Assessment. Every national marine sanctuary relies on its NOAA small boats to access its protected resources and implement management plans. The small boat fleet also supports partnerships to help improve understanding of our marine and Great Lakes environments. Increasing demands on an aging fleet are leading to higher operating costs as well as near and long-term challenges to maintaining safe, efficient and effective operations. For managers and partners to continue to assess, monitor, research, and protect our oceans and Great Lakes, recapitalizing aging vessels across the National Marine Sanctuary System in addition to upgrades, retrofits, and life cycle extensions is critical. Investment is necessary now for new vessels. The request also includes \$2 million for visitor centers, facilities, and signage improvements and ADA compliance; and \$2 million in a Sanctuary Challenge Fund. The Sanctuary Challenge Fund is an innovative approach, based on the model of the highly successful National Park Service Centennial Fund, to finance signature projects and programs across the National Marine Sanctuary System. The public investment would be matched at least 1:1 by nonfederal donations to address the backlog of needs for sanctuary facilities that enhance the sanctuary visitor experience as part of the ramp up to the 50th anniversary.

Our national marine sanctuaries are national treasures. The National Marine Sanctuary Foundation and our network of community leaders strongly urge Congress to invest in community-based national marine sanctuaries by prioritizing a budget of no less than \$65.5 million in FY2020. Investments in these areas support local economies and jobs in a diversity of sectors from education to outdoor recreation to fishing and underscore the value of communities in America's iconic underwater places.

Thank you for this opportunity to provide written testimony to the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies.

Written Testimony of Richard J. Hirn
Legislative Director, National Weather Service Employees Organization
Submitted to the Subcommittee on Commerce, Justice, Science and Related Agencies
on the Administration's FY 20 Budget Request for the National Weather Service

NWSEO urges rejection of the Administration's proposal to cut 355 additional positions from the National Weather Service that is contained in its FY 20 budget submission. All but a handful of these positions are "emergency essential" operational personnel critical to protecting lives and property.

In May 2017, the Government Accountability Office released a study that confirms the vacancy rate in NWS operational units has already reached a point where NWS employees are "unable at times to perform key tasks." National Weather Service: Actions Have Been Taken to Fill Increasing Vacancies, but Opportunities Exist to Improve and Evaluate Hiring (GAO 17-364). The GAO found that the vacancy rate in operational units (defined as those 168 NWS offices that issue forecasts or warnings and that are staffed by emergency-essential personnel) rose from 5 percent at the end of fiscal year 2010 (211 positions) to 11 percent at the end of fiscal year 2016 (455 positions). The GAO also found that NWS "staff experienced stress, fatigue and reduced morale resulting from their efforts to cover for vacancies" due to lack of time off and a loss of training. According to the GAO, NWS managers admit "that employees are fatigued and morale is low" and that employees "were demoralized because they had to cover the workload for multiple vacancies."

Furthermore, the proposed reductions compromise the ability of the National Weather Service to meet specific requirements of the *Weather Research and Forecasting Innovation Act of 2017*, Pub. L. No. 115-25.

Weather Service forecasters

Program Change: NWS Workforce Savings (-110 FTE/-248 Positions, -\$15,000)

The budget proposes to eliminate 20% of the 1,250 or so forecasters who issue these forecasts, warnings and advisories from the nation's 122 Weather Forecast Offices. The Budget Justification concedes that "operation times at various offices will be reduced" as a result of these staffing reductions, and that this will present "potential risk to the public and partners." The budget admits that communities affected by these closures will have to rely on "other NWS offices for met watch and services during off hours." *NOAA Budget Justification* at NWS-53.

The nation's 122 Weather Forecast Offices operate 24/7, and most of the time would have just two forecasters on duty. Thus, even with full staffing, there is usually only the minimal number of staff on duty to be alert for severe weather and to call in the rest of the staff when it occurs. According to the National Academy of Sciences:

Though this works well in fair weather, it can become problematic in severe weather, particularly when events develop rapidly under seemingly benign conditions. While managers at individual WFOs generally plan ahead to add sufficient staff to cover forecasted dangerous weather situations, more innocuous weather scenarios that suddenly and unexpectedly "blow up" often lead to shortcomings that are directly

attributed to having insufficient manpower. Several recent Service Assessments (e.g., NWS, 2003, 2009, 2010) illustrate the critical role that adequately enhanced staffing (or lack thereof) plays in the success (or weakness) of NWS performance during major events. Appropriate levels of staffing, beyond normal fair weather staffing, during major weather events, are critical for fulfilling the NWS's "protection of life" mission.

NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES, THE NATIONAL WEATHER SERVICE MODERNIZATION AND ASSOCIATED RESTRUCTURING: A RETROSPECTIVE ASSESSMENT, 60-61 (2012).

The Service Assessments to which the NRC refers are conducted by the NWS after major storm events where there are multiple fatalities or a major economic impact, in order to evaluate its performance. Assessment teams, composed of experts from within and outside the NWS, generate a report that serves as an evaluative tool to identify and share best practices in operations and procedures, and to identify and address service deficiencies. Service assessments conducted following eleven major storms that occurred between 2008 and 2016 found that the ability of the NWS to protect lives during these major events was compromised due to already inadequate staffing at Forecast Offices or River Forecast Centers.¹

The Budget Justification claims that the agency will attempt to "minimize potential risk" inherent in closing offices part-time by "collaborat[ing] with other NWS offices for met watch and services during off hours . . . similar to the backup practice used today when there is a system or communications failure of an office." Budget Justification at NWS-53-54. However, no savings can be achieved by reducing staff at one office and transferring its workload to a back-up office, because when this occurs now additional staff is called into the back-up office on overtime. Even the Budget Justification concedes that this "may require the supporting office to increase staffing." Page NWS-54.

Furthermore, the backup offices only issue critical products, and the quality of the forecasts are degraded because the forecasters in the backup office have limited knowledge of the climate, terrain, hydrology and weather patterns of the remote areas for which they are now forecasting. According to *NWS Western Region's Back-Up Plan, Supplement 18-2003*, (Sept. 19, 2011) at 4: "Personnel at the disabled site remain the best authorities on local weather. They should retain as much responsibility as possible during back-up situations." The backup office has no access to local weather models residing on the servers in the office that is closed. Transferring responsibility for forecasts and warnings back and forth between forecasters at one office and another disrupts the continuity of meteorological analysis and results in lack of continuity in successive forecast products.

The Budget Justification also explains that at other times, a forecast office may be staffed by a single person once the reductions take place. (NWS-54). This would violate a 2007 ruling from

¹ Central U.S. Flooding of June 2008; Southeast U.S. Floods, September 18-23, 2009; Record Floods of Greater Nashville: Including Flooding in Middle Tennessee and Western Kentucky, May 1-4, 2010; Historic Tornadoes of April 2011; Missouri/Souris River Floods of May-August 2011; Middle and Lower Mississippi River Valley Floods of Spring 2011; Remnant of Tropical Storm Lee and the Susquehanna River Basin Flooding of September 6-10, 2011; Hurricane/Post Tropical Storm Sandy, October 22-29, 2012; Historic South Carolina Floods of October 1-5, 2015; Historic Nor'easter of January 2016; October 2016 Hurricane Matthew. These reports can be found at: <http://www.weather.gov/publications/assessments>

Labor Arbitrator James Lundberg in *National Weather Service and National Weather Service Employees Organization*, FMCS No. 06-04457-7. The Budget Justification explains that “this operational change will also require the office to be able to recall employees . . . if unexpected local operations or high-impact weather events occur.” NWS-54. According to the 2012 study by the National Academy of Sciences, “the quality of the NWS’s warning capability corresponds with its capacity to muster an ample, fully trained local staff at its Weather Forecast Offices as severe weather unfolds.” *Id* at 60. However, if staffing at the office is reduced, there may be no one available. The Budget Justification (at 54) also anticipates a four-fold increase in service-backup due to closed or understaffed forecast offices.

The Budget Justification also explains that the reductions sought “will move away from the current uniform staffing model” and rebalance staffing between forecast offices based on population and partner needs. However, according to a study completed by McKinsey and Co., the workload at most forecast offices exceeds the available meteorologist workforce. NWS, *Operations and Workforce Analysis Catalog*, (September 2017) at 17-18. Thus, rather than reducing staff overall, rebalancing should be achieved by increasing the intake of meteorologist interns (forecasters in training) at the majority of forecast offices that are now overworked, and let normal attrition rebalance the staff at the small number of offices that have excess capacity.

Information Technology Officers

Program Change: Establishment of Regional Enterprise Application Development and Integration Teams (-74 FTE/-74 Positions, -\$10,100)

The President’s budget also again proposes the elimination of the Information Technology Officers (“ITOs”) at each of the 122 Weather Forecast Offices (“WFOs”) – a proposal that has been rejected by Congress every year for the past seven years. As the Senate Appropriations Committee noted when rejecting an earlier proposal to eliminate the ITOs, the “IT staff have proven to be valuable parts of the local forecast office teams.” SENATE REPORT NO. 112-158, at 31. The NWS itself recognized the critical role that the ITOs play in the operations of its forecast offices in its recently published service assessment of the agency’s performance during Hurricane Matthew in October 2016:

The evolution of NWS is reliant on cutting-edge advanced technologies that improve forecasting, warning, and distribution of weather information. Therefore, it is imperative that adequate, well-trained IT expertise is readily available and accessible throughout NWSH and the NWS field to operate and maintain a solid infrastructure. Information Technology Officers (ITO) played a critical role within WFOs leading up to and during the event. WFOs are required to complete a series of preparations ahead of a hurricane season, many of which include technical upgrades. During events, the ITO is the WFO’s primary resource when technical issues arise. WFOs were unanimous in their support of having a local ITO present to address issues before, during, and after hurricane season . . . SR WFOs were required to complete a system upgrade to a new Content Management System (CMS) by the end of September 2016. . . . ITOs provided critical support to their WFOs during the event to mitigate website issues associated with the CMS change.

<https://www.weather.gov/media/publications/assessments/HurricaneMatthew8-17.pdf> (at 31).

Consolidation of the Tsunami Warning Centers

Program Change: Reduce Tsunami Warning Program (-25 FTE/-25 Positions, - \$11,000)

The President's budget also proposes to consolidate the two tsunami warning centers (possibly at the National Center for Environmental Prediction in College Park, Maryland) and eliminate 25 scientists and technicians employed at these Centers. The proposed merger of the two warning centers violates the express terms of the Tsunami Warning, Education and Research Act of 2017, which was signed into law in April as Title V of the Weather Research and Forecasting Innovation Act. Section 504 of the Act, codified at 33 U.S.C. § 3203(d)(1), requires NOAA to maintain two tsunami warning centers - one in Alaska (with primary responsibility for Alaska and the continental U.S.) and one in Hawaii (with primary responsibility for Hawaii, the Caribbean and other areas of the Pacific). Subsection 3203(d)(3), "Fail-safe warning capability," mandates that the two centers maintain the capability to "perform back-up duties for each other." These requirements cannot be met if the two centers are merged, and if 25 of the 40 scientists and technicians employed at these two centers are eliminated, as proposed. The Budget Justification (at NWS-58) also concedes that all anticipated improvement in tsunami warning accuracy will be forgone if the tsunami warning centers are consolidated. The Budget Justification (at NWS-57) also states, without explanation of its impact or justification, that the International Tsunami Information Center and the Caribbean Tsunami Warning Program will be terminated.

NWS Climate Prediction Center

Program Change: Consolidate Climate Prediction Center/Weather Prediction Center functions (- 8 FTE/- 8 Positions, -\$1,200)

Finally, the budget also proposes to eliminate eight positions at the NWS Climate Prediction Center - which does "short-term" climate prediction for floods and drought from weeks to seasons. These activities aid U.S. aid and national security agencies in their global efforts. The Budget Justification (at NWS-67) frankly identifies the catastrophic impact of these cuts:

While some efficiency will be realized, 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 have supported national security planning and execution activities at the Department of Defense and the United States Agency for International Development including food security and disaster risk reduction, as well as pandemic health planning.

Consolidation of the CPC and reduction of its efforts would jeopardize the ability of the NWS to meet its requirements under Section 201 of the *Weather Research and Forecasting Innovation Act* "to make usable, reliable, and timely foundational forecasts of sub-seasonal and seasonal temperature and precipitation" and to "build upon existing forecasting and assessment programs and partnerships, including— by consulting with the Secretary of Defense and the Secretary of Homeland Security to determine the highest priority sub-seasonal and seasonal forecast needs to enhance national security."



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The Nature Conservancy
Written Testimony for programs under the National Oceanic and Atmospheric
Administration (NOAA) for Fiscal Year 2020
U.S. House Subcommittee on Commerce, Justice, Science and Related Agencies
April 4, 2019

Thank you for the opportunity to comment on the Fiscal Year 2020 (FY20) appropriations for the National Oceanic and Atmospheric Administration (NOAA). The Nature Conservancy (the Conservancy) is a non-profit conservation organization working in all 50 states and 72 countries to conserve the lands and waters on which all life depends. As the nation enters the FY20 budget cycle, the Conservancy acknowledges the need for fiscal restraint. However, the Conservancy also recognizes the critical role that oceans and coasts play in the lives of millions of Americans and in our nation's economy. Each year the U.S. ocean and coastal economy contributes \$359 billion to the nation's GDP and supports 3 million jobs. NOAA's funding keeps this ocean and coastal economic engine running. It not only helps NOAA catalyze local and regional action, but also reduces risk and saves money based on the tangible economic and societal benefits that coastal natural resources provide.

While the President's FY20 Budget once again called for unwarranted cuts to the National Marine Fisheries Service and the National Ocean Service including the proposed elimination of "grants and programs supporting coastal and marine management, research, and education including Sea Grant," the Conservancy was encouraged by Congress' FY19 omnibus funding levels to maintain and, in some cases, provide modest increases to these and other critical NOAA programs. Over the years and across many sites, NOAA has been an invaluable partner to the Conservancy. NOAA programs provide practical, community-oriented approaches to restoration, resource management, and conservation that align naturally with the Conservancy's mission. NOAA has made important strides in addressing key challenges, but much more remains to be done. We believe that the NOAA budget levels proposed by the Conservancy represent a prudent investment in our country's future and ask your support for the requests detailed below.

National Marine Fisheries Service

Fisheries and Ecosystem Science Programs and Services: The Conservancy supports at least \$155.807 million. The Conservancy requests an increase of \$8.2 million from FY19 to support two important grant programs - National Fish and Wildlife Foundation's (NFWF) Electronic Monitoring and Reporting grants (+\$3.5 million) and NOAA's Fisheries Information System (FIS) program (+\$5.2 million) - that are helping fishermen, fishing councils and NOAA modernize outdated data systems. Good information about the status of fish stocks is essential for effective management. Systems for collecting fishery data tend to be paper-based, slow, expensive, and prone to errors; they are long overdue for modernization. By supporting a modest increase in funding for these programs, Congress can expand the use of electronic monitoring and reporting into more commercial and recreational fisheries across the nation. Also key is improving our understanding of the ecological

and economic connections between fisheries and nearshore habitats. Funding for ecosystem-based solutions for fisheries management will provide tools and information to better target fisheries habitat restoration efforts.

Habitat Conservation and Restoration: The Conservancy supports at least \$56.384 million, consistent with FY19 funding. Coastal wetlands and nearshore waters produce the fish and shellfish that feed America. The health of these places is essential to the economic and social well-being of those who live, work, and recreate in coastal communities. NOAA and the Conservancy have partnered on over 150 habitat restoration projects across the U.S. Through the Community-based Restoration Program, that the Administration proposes to eliminate, and the Habitat Blueprint Initiative, the Conservancy works closely with NOAA to restore the health of degraded habitats in places and ways that benefit not just local marine life, but communities and coastal economies as well. NOAA funding for coastal habitat restoration supports on average 15 jobs per million dollars spent and up to 30 jobs per million dollars spent on labor intensive restoration projects.¹ The several grants managed by this program are awarded on a competitive basis and typically leverage the resources and capacity of multiple partners. This work enhances our understanding of the connections between fisheries productivity and habitat, measures the effectiveness of conservation and restoration activities, and applies those lessons to improve future efforts. This funding provides for NOAA's consultations on and implementation of Essential Fish Habitat at the enhanced level Congress provided in FY19 and not the reduction proposed by the Administration. The Regional Fishery Management Councils address fishing impacts on these areas, and NOAA must have sufficient capacity to provide technical assistance to the Councils and to work with federal agencies to avoid, minimize, and mitigate the impacts on these important fishery habitats.

Fisheries Management Programs and Services: The Conservancy supports the appropriation of at least \$121.116 million, consistent with FY19 funding. With a \$214 billion dollar fisheries and seafood sector, fishermen rely on management services and information from NOAA to make the most informed decisions on where, how, and when to fish. NOAA Fisheries has made important strides in addressing these challenges and strengthening fisheries management, and support for these efforts is necessary to recover fish stocks so that they provide food and jobs now and in the future. It is critical that funding be provided to reduce destructive fishing practices, restore coastal habitats, and support the efforts of fishermen and fishing communities and do so in a collaborative way. Funding for work already begun to improve the management of electronic monitoring and reporting must be maintained. Recent legislation and administrative action to combat illegal, unreported, and unregulated (IUU) fisheries show great promise in leveling the playing field for legal fishermen. Funding provided will enable NOAA to take the next steps on traceability of seafood.

Fisheries Data Collections, Surveys and Assessments: The Conservancy supports at least \$168.086 million, consistent with FY19 funding. Limited or poor-quality information on the status of fishery stocks undermines the effectiveness of fishery management and can erode community support for conservation measures. Accurate and timely stock assessments are essential for the sound management of fisheries and the sustainability of fishing resources. The funding proposed will help the agency prioritize assessments, determine what level of assessments are needed and where to appropriately incorporate ecosystem linkages – such as ocean conditions, habitat, multispecies assemblages, and socioeconomic factors. The Conservancy does not support the Administration's

¹ Samonte et al. 2017. Socioeconomic Benefits of Habitat Restoration. NOAA Tech. Memo. NMFS-OHC-1. <http://www.habitat.noaa.gov/pdf/TM-OHC-1.pdf>.

proposed reduction for cooperative research efforts with fishermen to directly engage them in the collection of data that drives management.

Pacific Coastal Salmon Recovery Fund (PCSRF): The Conservancy supports at least \$70 million, an increase of \$5 million from FY19 funding and the level provided in the Senate's FY19 reported bill. This is the most critical federal program addressing major threats to Pacific salmon so that these fish can continue to sustain culture, economies, recreation, and ecosystem health. PCSRF funding is tailored for each state, competitively awarded based on merit, and has funded hundreds of successful, on-the-ground salmon conservation efforts. PCSRF invests in cooperative efforts to conserve species under NOAA's jurisdiction, and projects are matched at a 3:1 ratio (federal/non-federal). The PCSRF has catalyzed thousands of partnerships among federal, state, local, and tribal governments, and conservation, business, and community organizations.

Protected Resources Science and Management: The Conservancy supports at least \$196,848 million, consistent with FY19 funding. Competitive grants to states and tribes support conservation actions that contribute to recovery, or have direct conservation benefits for, listed species, recently de-listed species, and candidate species that reside within the states. Maintaining level funding and not the Administration's proposed reduction for Species Recovery Grants would allow the agency to strengthen and expand partnerships to address the growing number of listed species and allow for larger, ecosystem-level scale recovery efforts. The Conservancy works with state agency partners to restore endangered species and monitor the results of these efforts. Additional listed species and emerging challenges to recovery have increased the number and complexity of NOAA's consultation and permitting requirements. Funding is needed to aid NOAA's ability to complete these requirements in a timely and predictable manner. NOAA's cooperative efforts with states, tribes, and other partners such as the Conservancy, help to improve our understanding of and ability to protect listed salmon and the habitats that sustain them. Maintaining the Pacific and Atlantic salmon base funding, instead of implementing the Administration's proposed reduction, will allow NOAA to enhance recovery efforts including monitoring, fish passages, hatchery operations, and stakeholder engagement.

National Ocean Service

Coastal Zone Management and Services: The Conservancy supports at least \$48.039 million, consistent with the Administration's request for FY20. This is an increase over the amount provided by Congress in FY19 to fund the regional data portals and an adjustment to base. These data portals make accessible a wide array of federal ocean data critical to ocean users and conservation efforts. NOAA's research and monitoring of coastal and marine systems provide data and decision-support tools that inform the safe operations of industry, prioritize habitats for restoration, and advance science-based management decisions. Improving our ability to incorporate natural infrastructure into coastal protection efforts before and after storms can help communities achieve multiple benefits such as improving fisheries productivity and coastal water quality. Additionally, the Conservancy has worked with NOAA through the Digital Coast partnership to develop decision support tools and techniques that help communities understand and reduce risk and build resilience. Sharing this work across federal, state, and tribal agencies, industry, and with non-governmental organizations can increase our collective ability to understand and incorporate into decision making complex coastal economic, social, and ecological needs.

Coastal Management Grants: The Conservancy supports at least \$75.5 million for Coastal Zone

Management Grants, consistent with FY19 funding. Our nation's coastal areas are vital to our economy and our way of life. The narrow area along our coasts is home to approximately 163 million people and coastal economies contribute over 45 percent of our gross domestic product. The Conservancy collaborates with state coastal programs around the country to meet multiple goals for coastal communities including economic development, enhancement of public access and recreation, and conservation of coastal resources. To advance these goals, the Conservancy supports at least an additional \$30 million in Title IX funds for the competitively National Coastal Resilience Fund, consistent with the FY19 level. The National Coastal Resilience Fund has provided the resources and tools to build coastal resilience to avoid costly federal disaster assistance and sustain healthy fisheries, maintain robust tourism opportunities, provide for increased shipping demands, and support other coastal industries. Coastal communities have clearly shown that they are ready to match and leverage this funding to take proactive measures to protect their way of life.

Coral Reef Conservation Program: The Conservancy supports at least \$27.6 million, consistent with FY19 funding. The Administration's proposed reduction to the program is unwarranted given that the decline of coral reefs continues to have significant social, economic, and ecological impacts on people and communities in the United States and around the world. The Conservancy works with NOAA's Coral Reef Conservation Program under a competitively awarded, multi-year cooperative agreement to address the top threats to coral reef ecosystems: changing ocean conditions, overfishing, and land-based sources of pollution. Together, we develop place-based strategies, measure the effectiveness of management efforts, and build capacity among reef managers globally.

National Estuarine Research Reserve System: The Conservancy supports at least \$27 million, consistent with FY19 funding and opposes the Administration's proposed elimination of the program. The National Estuarine Research Reserve System (NERRS) partners with states and territories to ensure long-term education, stewardship, and research on estuarine habitats. Atlantic, Gulf, Pacific, Caribbean and Great Lakes reserves advance knowledge and stewardship of estuaries and serve as a scientific foundation for coastal management decisions. By using local management needs to help shape research, the NERRs aim to fill critical gaps. Incorporating the results of this research into training programs and through public engagement, the NERRs make science actionable for communities.

Sanctuaries and Marine Protected Areas: The Conservancy supports at least \$55.5 million, consistent with FY19 funding. National marine sanctuaries support economic growth and hundreds of coastal businesses in sanctuary communities, preserve vibrant underwater and maritime treasures for Americans to enjoy, and provide critical public access for over 42 million visitors each year. Through a transparent, inclusive approach, the marine sanctuaries provide for the conservation of our natural and cultural marine resources while balancing multiple uses and diverse stakeholder needs.

Thank you for this opportunity to share The Nature Conservancy's priorities. Please contact me if you have questions or would like additional information.

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

TESTIMONY OF THE NEZ PERCE TRIBE

APRIL 4, 2019

The Nez Perce Tribe (Tribe) appreciates the opportunity to provide written testimony to the Committee as it evaluates and prioritizes FY 2020 appropriations for the Department of Commerce and the Department of Justice. This testimony addresses spending allocations for the Pacific Coastal Salmon Recovery Fund and Salmon Management Activities within the National Oceanic and Atmospheric Administration (NOAA), and funding or set-asides for the grants provided to tribes within the Department of Justice (DOJ).

As detailed below, for FY 2020, the Tribe recommends both preservation of the Pacific Coastal Salmon Recovery Fund—which has again been proposed to be eliminated—and funding for the Pacific Salmon Recovery Fund at \$70 million but no less than \$65 million; funding for Salmon Management Activities at \$122.5 million; full funding for programs authorized under the Tribal Law and Order Act; continuation of the \$37.5 million for assistance to Indian tribes enacted in FY 2019 through the Office of Justice Programs (OJP), with flexibility in program funding, or in the alternative the 7% tribal set-aside proposed by the Administration in the FY 2020 budget request; maintaining the tribal set-aside of 5% out of Crime Victims Fund distributions; and keeping tribal funding under the Community Oriented Policing Services program at \$30 million or greater.

The Nez Perce Tribe is a federally-recognized Indian tribe with treaty-reserved fishing, hunting, gathering, and pasturing rights in the Snake River Basin and Columbia River Basin. In its 1855 Treaty, the Tribe reserved, and the United States secured, “the right of taking fish at all usual and accustomed places in common with the citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.”¹

It is the Tribe’s desire that all species and populations of anadromous and resident fish and their habitats be healthy and harvestable throughout the Tribe’s usual and accustomed fishing places. The Tribe has long had an interest, and played an active role, in restoring anadromous and resident fish runs—including fall and spring Chinook, steelhead, sockeye, lamprey, bull trout, and white sturgeon—throughout all of the areas where the Tribe reserved treaty fishing rights. The Tribe is involved in these efforts to protect implementation of treaty rights, to restore species and conditions consistent with the Treaty, and to protect the long-term productivity of their natural resources.

¹ Treaty with the Nez Percés, June 11, 1855, 12 Stat. 957. The Treaty with the Nez Percés, June 9, 1863, 14 Stat 647, preserved the off-reservation rights that the Tribe reserved in its 1855 Treaty.

The Tribe's Department of Fisheries Resources Management (DFRM) is one of the largest and most successful tribal fisheries programs in the United States,² with offices located at Lapwai, Sweetwater, Orofino, McCall, Powell, and Grangeville, Idaho, as well as Joseph, Oregon. The DFRM has an annual operating budget of over \$22 million and employs 190 tribal and non-tribal employees, 150 of whom are full-time.

The DFRM manages its own salmon fish hatchery at Cherrylane, Idaho, as well as ten acclimation sites in Idaho and Oregon. In addition, the DFRM manages Kooskia National Fish Hatchery and co-manages Dworshak National Fish Hatchery. The DFRM also coordinates with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service on production from other salmon and steelhead hatcheries throughout Idaho. The Tribe is committed to this work and requests that the United States properly fund the programs that are an instrumental part of the overall work on fish recovery.

Pacific Coastal Salmon Recovery Fund

The Pacific Coastal Salmon Recovery Fund (PCSRF) was established by Congress in FY 2000 to protect, restore, and conserve Pacific salmonids and their habitats. The congressionally-authorized activities that were funded under the PCSRF program maintain populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing. Over \$1.2 billion has been appropriated for PCSRF since 2000. With this funding, states and tribes have leveraged additional resources to collectively implement 13,200 projects to conserve West Coast salmon.³ The Tribe requests PCSRF be funded at least at the FY 2019 level of \$65 million for FY 2020 but ideally requests it be funded at \$70 million to support the on the ground restoration actions.

PCSRF has been used by the Tribe to restore coho (silver) salmon to the Tribe's reservation in the Clearwater River, a distance of 500 miles from the ocean. Coho were extirpated from the Clearwater River over 40 years ago and most of these fish returned only as far as the lower Columbia River. Through the PCSRF (and Mitchell Act funds) the Tribe is able to rear and release almost one million coho into the Clearwater River, restoring their presence in the Snake River Basin. The Tribe views these returns as a tremendous success with counts of coho numbering more than 18,000 in 2014.

In 2017, the Tribe worked with Oregon Department of Fish and Wildlife and the Confederated Tribes of the Umatilla Indian Reservation to also have the first release of coho in the Lostine River, a tributary of the Grande Ronde River. After decades of extirpation, these fish are being restored to some of the best habitat in the Columbia River Basin. Continued funding for the operation of these hatchery supplementation efforts is needed to maintain the populations of most species of salmon and steelhead in this "breadbasket" of salmon habitat, located upstream of eight Columbia River dams.

² The Nez Perce Tribe's DFRM received the 2015 Honoring Nations award with High Honors from The Harvard Project on American Indian Economic Development.

³ National Oceanic and Atmospheric Administration Budget Estimates Fiscal Year 2019, page NMFS-65

Salmon Management Activities

The Mitchell Act provides for the conservation of the fishery resources of the Columbia River and is administered by NOAA's National Marine Fisheries Service. Funding for the Mitchell Act component of NOAA Fisheries supports the operations and maintenance of Columbia River hatcheries through grants and contracts to the states of Washington, Oregon, and Idaho, and to the U.S. Fish and Wildlife Service, to mitigate the loss of salmon on the Columbia and Snake Rivers. The level for Salmon Management Activities in the final FY 2019 Consolidated Appropriations Act was \$37 million, an increase over the \$35.5 million enacted in both FY 2017 and FY 2018. Of the total \$37 million, up to \$1.5 million in FY 2019 funding is to implement the newly-renewed Pacific Salmon Treaty Agreement. The Tribe would respectfully request that \$122.5 million be appropriated in FY 2020 for Salmon Management Activities. This significant increase is directly tied with implementation needs of the Pacific Salmon Treaty. Of this amount, it is recommended that \$26.6 million be allocated for Mitchell Act Programs to implement reforms called for in the "Conservation of Columbia Basin Fish" and the Federal Columbia River Power System Biological Opinion, of which \$6.7 million (or 25% of enacted) is directed to the tribes to enhance natural stock recovery programs. The remaining \$95.9 million would be allocated for the Pacific Salmon Treaty—of which \$42.3 million is annual operations for the implementation the 2019-2028 Agreement, and \$53.6 million is one-time funding for specific projects to support the implementation of the 2019-2028 Agreement.

The importance of this funding cannot be overstated as the comprehensive, geographic nature of its application in the Pacific Northwest provides for an integrated infrastructure for fish management. In addition, these funds allow for fish to be grown at other facilities that are used at Nez Perce Tribal production facilities. Other regional agencies also use the funds to grow fish that enhance treaty fishing opportunities for Nez Perce Tribal members on the Columbia River.

Department of Justice Tribal Assistance Grant Funding

Providing law and order is one of the fundamental requirements of any functioning government. However, tribes are limited in the resources available to commit to these programs as the United States has historically underfunded such programs in Indian Country. Tribes rely on the grant programs with the Department of Justice to help grow the capacity of tribal law and order systems.

In order to provide law enforcement, victims services, and tribal justice to Indian and non-Indian residents on the reservation, the Tribe has relied on programs such as the Coordinated Tribal Assistance Solicitation grants program, the Tribal Juvenile Healing to Wellness Court program, the Comprehensive Tribal Victim Assistance Program, the Tribal Justice Systems Infrastructure Program, Violence Against Women Act programs, the Justice Systems and Alcohol and Substance Abuse Program, and the Children's Justice Act Partnership program. These programs need to continue to be funded.

As stated above, the Tribe recommends full funding for programs authorized under the Tribal Law and Order Act. The Tribe also recommends either continuation of the \$37.5 million for

“assistance to Indian tribes” enacted in FY 2019 under the State and Local Law Enforcement Assistance account in the Office of Justice Programs grants, or the President’s requested 7% tribal set-aside of OJP funds. There needs to be flexibility provided in program funding so that the funding is not narrowly allocated to tribes solely through competitive grant programs.

The Tribe strongly supports the 5% from the Crime Victims Fund for grants to Indian tribes to improve services for victims of crime as provided in section 510 of the final Consolidated Appropriations Act. This tribal set-aside will provide some \$168 million to the Office for Victims of Crime for tribes.

Finally, the Tribe urges this Subcommittee to fund the Tribal Resources Grant Program under Community Oriented Policing Services programs at \$30 million, an increase of \$3 million over FY 2019, and to maintain a level of \$3 million for the Tribal Access Program.



Northwest Indian Fisheries Commission

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**WRITTEN TESTIMONY OF LORRAINE LOOMIS, CHAIR
 NORTHWEST INDIAN FISHERIES COMMISSION
 SUBMITTED TO THE HOUSE OF REPRESENTATIVES APPROPRIATIONS
 SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
 AGENCIES ON THE FISCAL YEAR 2020 BUDGET FOR THE
 NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION**

April 4, 2019

Chairman Serrano, Ranking Member Aderholt, and Honorable Members of the Subcommittee, my name is Lorraine Loomis and I am the Chair of the Northwest Indian Fisheries Commission (NWIFC). The NWIFC is comprised of the twenty tribes that are party to *United States v. Washington*, which upheld the tribes' treaty-reserved right to harvest and manage various natural resources on and off-reservation, including salmon and shellfish. On behalf of the NWIFC, we provide testimony for the record on the natural resources and fishery management program funding requests for the National Oceanic & Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS) Fiscal Year 2020 (FY20) appropriations. These programs support the management of salmon fisheries, which contribute to a robust natural resource-based economy and the continued exercise of tribal treaty rights to fish.

SUMMARY OF FY20 APPROPRIATIONS REQUESTS

- ❑ **\$70.0 million for NOAA Pacific Coastal Salmon Recovery Fund**
- ❑ **\$42.3 million for NOAA Pacific Salmon Treaty operational costs, plus \$53.6 million in one-time implementation costs**
- ❑ **\$25.9 million for NOAA Mitchell Act Hatchery Programs**
- ❑ **\$20.0 million for NOAA Fisheries Disaster Assistance Program**
- ❑ **\$5.0 million for NOAA Hatchery Genetic Management Plans**

The member tribes of the NWIFC ceded much of the land that is now western Washington in exchange for reserving the continued right to harvest and manage various natural resources including salmon and shellfish. Salmon are, and have always been, the foundation of tribal cultures, traditions and economies in western Washington. To ensure that tribal treaty rights and lifeways are protected and not rendered meaningless, it is essential that the federal government provide support to all aspects of salmon management including harvest planning and implementation (e.g. Pacific Salmon Treaty), hatchery production, (e.g. Mitchell Act Hatchery Programs, and Hatchery Genetic Management Plans) and habitat protection and restoration (e.g. Pacific Coastal Salmon Recovery Fund).

JUSTIFICATION OF REQUESTS

- **Provide \$70.0 million for NOAA Pacific Coastal Salmon Recovery Fund (PCSRF)**

We respectfully request \$70.0 million for PCSRF, an increase of \$5.0 million over the FY19 enacted level. It is worth noting that this request is a significant departure from the PCSRF peak

level of \$110.0 million in FY02 or subsequent years in which budget authority was maintained upwards of \$80.0 million through FY11. We ultimately would like to see PCSRF funding fully restored to FY02 levels, but we recognize that budget conditions may necessitate an incremental increase in the short term. Nevertheless, we continue to support the original Congressional intent of these funds that would enable the federal government to fulfill its obligations to salmon recovery and the treaty fishing rights of the tribes.

The PCSRF is a multi-state, multi-tribe program established by Congress in FY00 with a primary goal to help recover salmon throughout the Pacific coast region. Through PCSRF, tribes work collaboratively to help protect and restore salmon habitat in an effort to increase natural salmon productivity. To accomplish this, tribes implement scientifically-based salmon recovery plans developed for each watershed in concert with federal, state, and local partners. Tribes also participate in sustainable harvest management activities such as monitoring of fish abundance, which is then used to forecast adult returns and subsequently develop annual harvest rates that achieve conservation objectives and provide for tribal and non-tribal harvest opportunities. Since its inception, PCSRF has been the primary salmon recovery response. This has resulted in over 1.1 million acres of spawning and rearing habitat restored and protected, and re-establishing salmon access to 11,980 miles of previously inaccessible streams in our region.

- **Provide \$42.3 million for operational costs, plus \$53.6 million in one-time implementation costs for national commitments in the newly renegotiated Pacific Salmon Treaty agreement (within Salmon Management Activities and Regional Councils and Fisheries Commissions)**

We support the Pacific Salmon Commission (PSC) U.S. Section's request of \$42.3 million for operational costs, plus \$53.6 million in one-time implementation costs for the national commitments in the newly renegotiated Pacific Salmon Treaty (PST) agreement. The PST is renegotiated every decade between the United States and Canada to govern salmon catch, research, and enhancement in Alaska, Oregon, Washington, and British Columbia. The new international agreement brings new federal obligations to ensure compliance with the treaty. The cost of programs conducted to fulfill commitments created by the treaty are substantially greater than the funding provided in the NMFS budget in past years. At this time the President's FY20 budget request does not include additional funding to meet national commitments in the renegotiated PST agreement.

Within our collective request to support the PSC and implement the PST, we specifically request the following funding within Salmon Management Activities account: \$2.5 million for the Coded Wire Tag (CWT) Program, \$4.81 million for the Puget Sound Critical Stock Augmentation Program, \$5.0 million to increase prey availability for Southern Resident Killer Whales, \$3.5 million to improve catch and escapement estimates, and restoration of funding levels for the Chinook Salmon Agreement line to the original level of \$1.8 million.

Adult salmon returning to most western Washington streams migrate through U.S. and Canadian waters and are harvested by fishermen from both countries. For years, there were no restrictions on the interception of returning salmon by fishermen of neighboring countries. After many years of negotiations, in 1985 the U.S. and Canada agreed to cooperate in the management, research

and enhancement of Pacific salmon stocks of mutual concern by ratifying the PST. The PSC was created to implement the PST, and is responsible for developing management recommendations, assessing each country's performance and compliance with the treaty. It is also the forum for all entities to work towards reaching agreement on fisheries issues.

The Puget Sound Critical Stock Augmentation Program is required for effective implementation of the PST. This program provides funding for operation and maintenance costs for hatchery augmentation programs. These hatchery efforts were initiated in connection with the 2008 agreements and will be enhanced through the new agreement, because the conservation needs of these populations could not be met by harvest restrictions alone.

The funding and implementation of the CWT Program is also a U.S. obligation under the PST. The CWT Program produces data that is widely used by state, federal and tribal fisheries managers to evaluate hatchery contributions to catch, smolt to adult survival rates, spawner abundance on spawning grounds, differential in-hatchery treatments, and other important information that supports fisheries management and research. Funding for the coast-wide CWT Program supports continued maintenance and efficiency improvements.

- **Provide \$25.9 million for NOAA Mitchell Act Hatchery Programs (within Salmon Management Activities)**

We respectfully request \$25.9 million for the Mitchell Act Hatchery Programs. The FY18 appropriations provided a total of \$20.2 million. The request for an additional \$5.7 million in Mitchell Act funds above the FY18 funding level is to ensure that mitigation hatcheries operate at full production level to meet federal obligations. This program is funded through the Salmon Management Activities account.

Mitchell Act hatchery production is intended to mitigate for fish and habitat loss caused by the federal hydropower dam system on the Columbia River. Funding for these programs supports the operation and maintenance of hatcheries that release between 50 and 60 million juvenile salmon and steelhead in Oregon and Washington. These programs provide fish production for tribal treaty and non-tribal commercial and recreational fisheries in the Columbia River, and also contribute to ocean fisheries from Northern California to Southeast Alaska. Unfortunately, overall production from these hatcheries has been reduced from more than 110 million to fewer than 60 million fish due to inadequate funding.

Adequate funding for Mitchell Act hatcheries is of particular importance to us because it supports salmon production for tribal treaty harvest along the Washington coast. Additionally, adequate funding to ensure full production from the Mitchell Act hatcheries dampens the impact of Canadian and Alaskan ocean fisheries on Washington fisheries under the terms of the PST.

- **Provide \$20.0 million for NOAA Fisheries Disaster Assistance Program**

We respectfully request \$20.0 million for the Fishery Disaster Assistance Program, an increase of \$5.0 million above the FY19 enacted level. Numerous salmon fisheries disasters have adversely impacted Washington tribes and the financial impact from these disasters is severe.

Unforeseen natural and manmade disasters can have grave and unexpected impacts on tribal treaty fishing and the livelihoods of tribal members who are economically dependent upon these fisheries. Because of the seasonal nature of fishing, a single disaster can have significant impacts on annual revenues needed to maintain boats and gear, forcing fishers to drop out of the sector, and therefore sometimes lead to diminished fishing fleets. An ongoing Fisheries Disaster Assistance Program is a much-needed stop gap measure to prevent the collapse of this important economic sector during difficult times. We therefore, respectfully request ongoing appropriations to maintain and enhance the Fisheries Disaster Assistance Program, which is needed to support a resilient national fishing fleet.

- **Provide \$5.0 million for NOAA Hatchery Genetic Management Plans (within Pacific Salmon)**

We respectfully request \$5.0 million to provide increased funding to expedite NMFS's review and approval of the backlog of western Washington Hatchery Genetic Management Plans (HGMPs) and implement those plans that are now complete. Review and approval of HGMPs is necessary to provide hatcheries with ESA coverage. The FY19 appropriations provided \$65.0 million for the Pacific Salmon account, which funds HGMP review. However, the FY19 report language was silent regarding funding for NMFS' expedited review of HGMPs. NMFS' FY20 proposed budget requests a decrease of \$2.0 million for HGMP review, despite reported progress with new funding, still facing a backlog of plans and rising HGMP implementation needs.

NMFS uses the information provided by HGMPs to evaluate a hatchery's impacts on salmon and steelhead listed under the ESA. With the lack of improvement in salmon stocks, hatchery operations have become even more important to achieving recovery goals and maintenance of salmon fisheries. However, the lack of improvement in natural origin salmon has also resulted in scrutinizing hatcheries for their potential genetic impacts on natural spawning populations. This has resulted in increasingly specific performance standards and management expectations included in tribes' HGMPs. Tribes need help addressing the escalating costs of hatchery management associated with the monitoring and adaptive management practices called for by HGMPs.

CONCLUSION

Federal support for sustainable salmon fisheries management that improves harvest planning, hatchery production and habitat management are essential components of the federal obligation to ensure continued exercise of tribal treaty-reserved rights. The treaties and the treaty-reserved right to harvest are the "supreme law of the land" under the U.S. Constitution (Article VI). It is therefore, critically important for Congress and the federal government to provide continued support in upholding the treaty obligations and fulfilling the trust responsibilities. This can be accomplished, in part, by supporting the aforementioned programs. We respectfully urge you to continue to support our efforts to protect and restore our natural resources that in turn will provide for thriving economies. Thank you.

Jeff Watters, Director, Government Relations, Ocean Conservancy
Testimony for the Subcommittee on Commerce, Justice, Science and Related Agencies
FY 2020 Appropriations for the National Oceanic and Atmospheric Administration

Thank you for this opportunity to provide Ocean Conservancy's recommendations for FY 2020 funding for NOAA. Ocean Conservancy has worked for over 40 years to address threats to the ocean through science-based, practical policies that protect our ocean and improve our lives. To learn more about Ocean Conservancy's support for a strong ocean budget at NOAA, see www.TheMoreYouNOAA.org.

We greatly appreciate the Subcommittee's efforts to ensure a positive outcome for NOAA in the FY 2019 omnibus, which made important investments in NOAA ocean programs, including Integrated Ocean Acidification, Marine Debris and Regional Ocean Data and Partnerships.

We reject the Trump administration's proposed budget for NOAA in FY 2020, which would cut nearly \$1 billion in funding and wholly eliminate vital ocean and coastal programs. As described in this testimony, we support funding for NOAA ocean programs at or above FY 2019 funding levels to maintain current effort and provide targeted increases as appropriate.

NOAA's mission to understand, protect, restore, and manage our ocean, coasts, and Great Lakes is vitally important to sustain these resources and our economy. The U.S. ocean and coastal economy contributes \$352 billion annually to the nation's GDP and supports 3 million jobs. There is a good reason that NOAA is in the Department of Commerce, and adequate funding is vital to support a healthy and resilient ocean that can maintain and grow our coastal economies and communities. For example, our nation's fisheries and seafood sector generates \$212 billion in sales impacts to the U.S. economy and fishermen rely on information from NOAA to make the most informed decisions on where to fish, how to fish and when to fish. Coastal wetland buffer zones in the U.S. are estimated to provide economically important storm protection benefits, saving New Jersey \$625 million in direct property damage during Superstorm Sandy. NOAA works to build resilient coasts that are more storm-ready and prepared for threats like sea level rise and ocean acidification.

Much of the U.S. ocean is under federal jurisdiction, and yet many of NOAA's most successful programs focus on pushing resources and decision-making power out to regions, states and frontline communities. NOAA is providing leverage for hardworking people on the coast and on the water who are fighting for a stronger economy and a healthier ocean, through region-by-region fishery management, region-specific program, extramural funding that supports state agencies and universities, place-based conservation in our estuaries and oceans and more.

As you craft the FY20 spending bills, we ask that you also consider the balance between NOAA's oceanic and atmospheric missions, and the nexus between the two. Americans should not have to choose between weather forecasts and ocean and coastal resources like coral reefs and marine mammals. We need both. NOAA's ocean programs support many other federal agencies and missions that will also suffer if NOAA funding is cut. For example, ocean observations and monitoring provide critical information for severe storm tracking and weather

forecasting. Ocean programs also facilitate homeland security and national defense functions, including U.S. Navy operations and U.S. Coast Guard search and rescue missions.

We continue to raise the alarm about this administration's proposals to wholly eliminate vital NOAA programs like Coastal Zone Management Grants, Sea Grant, National Centers for Coastal and Ocean Science, and the National Estuarine Research Reserve System, among others. **We also offer additional testimony and recommend funding increases for the following NOAA programs.**

Account, Program or Activity	FY 2019 enacted	FY 2020 recommendation
Operations Research and Facilities		
<i>National Ocean Service</i>		
Coastal Science, Assessment, Response and Restoration: Marine Debris	\$7.5 m	\$10 m
Coastal Zone Management Grants	\$75.5 m	FY19 or above
Coastal Zone Management and Services - Regional Ocean Data Portals	\$1.5 m (IOOS)	\$10 m
<i>National Marine Fisheries Service</i>		
Marine Mammals, Sea Turtles, & Other Species	\$118.348 m	FY19 or above
Fisheries Data Collections, Surveys and Assessments	\$168.086 m	FY19 or above
Regional Councils and Fisheries Commissions – PFMC Climate and Communities Initiatives		\$250,000
<i>Office of Oceanic and Atmospheric Research</i>		
Integrated Ocean Acidification	\$12 m	\$21.775 m
<i>Office of Marine and Aviation Operations</i>		
Marine Operations & Maintenance	\$190.670 m	FY19 or above

Marine Debris - \$10 million

Marine debris, particularly plastic waste pollution, is one of the most widespread pollution problems threatening the world's oceans and waterways. An estimated 150 million metric tons of plastic waste are in the ocean today, and every year an estimated 8 million metric tons more are being added. With oil prices at an all-time low, coupled with growing population levels and economic prosperity, plastic production and consumption are predicted to double over the coming decade. Without immediate intervention, 250 million metric tons of plastic waste could be in the ocean in fewer than 10 years. Marine debris has serious effects on the marine environment and the economy. It causes impacts on wildlife through entanglement, ingestion and ghost fishing and also impacts marine transportation causing navigational hazards and vessel damage.

Last year, Congress reauthorized the program via the Save Our Seas Act of 2018. The SOS Act enjoyed broad bipartisan support in both chambers, and the President signed it into law in an Oval Office ceremony. While reauthorized at the traditional level of \$10 million, the program received only \$7.5 million in FY 2019. Given the magnitude of the problem, there is an urgent need for the NOAA Marine Debris Program to do more to counter the growing threat to ocean health. Fundamental knowledge gaps exist in four critical areas: the sources of plastic waste in the ocean, how the waste distributes within the marine environment, the fates of those materials, as well as their impacts. More scientific research into these key areas will support data-driven policy solutions to prevent plastic from entering the environment and impacting ocean health. Additional funding will enable NOAA MDP to support this additional research.

Coastal Zone Management Grants

These grants achieve multiple goals for coastal communities including economic development, enhancement of public access and recreation, and protection of coastal resources. The CZM program provides federal support for these state programs to ensure that as a nation, all coastal states and territories can enable their coastal communities to achieve both state and national priorities. This state-federal partnership also enables states to leverage federal funds to improve permitting processes, provide grants to communities, and ensure federal actions are consistent with state laws. Moreover, the CZMA requires a dollar-for-dollar state match for almost all federal funding, with states matching over \$59 million FY2016.

Regional Ocean Data Portals/Regional Ocean Partnerships – \$10 Million

Regional Ocean Partnerships are regional organizations voluntarily convened by the governors to address ocean and coastal issues of common concern in the region. Regional Ocean Partnerships provide interagency engagement with states, tribes, localities, and Federal agencies to collaborate on cross-jurisdictional ocean and coastal matters. These partnerships also coordinate and engage ocean and coastal stakeholders, including academia, non-governmental organizations, and industry. Some regions have advanced state and regionally identified management challenges by sharing and integrating Federal and non-Federal data to support regional coastal, ocean, and Great Lakes priorities through Regional Ocean Data Portals. Regional Ocean Data Portals are publicly available online tools created and maintained by Regional Ocean Partnerships to disseminate maps, data, and information with the purpose to inform decisions and enhance entrepreneurial opportunity. Ocean Data Portals are created with engagement from marine industries, the ocean science and technology community, State, tribal, and local governments, and other ocean stakeholders. We greatly appreciated the appropriation of \$1.5M for FY19, and we believe increased Federal funding support is critical, largely because the funding is split among nine regions. Appropriating \$10M would provide sufficient funds for all nine regions to support state and regionally identified ocean priorities.

Marine Mammals, Sea Turtles and Other Species

Because of the need to for capacity for Gulf of Mexico restoration and the increasing impacts of climate change and other stressors on sea turtles, we support continued funding at or above FY 2019 funding levels, including for the John H. Prescott Marine Mammal Rescue Assistance Grant Program, which funds the first responders for sick or dying marine animals.

Fisheries Data Collections, Surveys and Assessments

We support funding for programs that implement the *Magnuson-Stevens Fishery Conservation and Management Act* (MSA). Since the MSA was enacted in 1976, NOAA has made great strides towards ending overfishing and continued investments in these programs and our fishing communities are needed. This budget line supports a host of activities critical to MSA implementation, including resources for fisheries managers to conduct stock assessments for priority fish stocks, collect catch data from commercial and recreational fisheries, implement the requirement for annual catch limits (ACLs), and ensure the successful recovery of overfished populations.

We support funding for **electronic monitoring and reporting** for nationwide efforts. In particular we support funding that goes to the Gulf of Mexico region, where managers need electronic monitoring to keep track of catch and prevent catch overages in the red snapper fishery. Given the unique management challenges that exist in the Gulf of Mexico, there is a significant need for additional funding.

Regional Councils and Fisheries Commissions

We support funding for the operations and initiatives of the Regional Fishery Management Councils. The Councils were established by the MSA to prepare management plans aimed at preventing and eliminating overfishing and rebuilding overfished stocks for the Nation's fisheries. As the Councils strive to understand the impacts of climate change on our oceans and fisheries, we are seeing growing needs from fishery managers, scientists, and industry to address impacts and understand their causes. We additionally support \$250,000 for the PFMCI to **update and implement their ecosystem management plans and Climate and Communities Initiative** to support climate-ready fisheries and ecosystem-based fisheries management.

Integrated Ocean Acidification - \$21.775 million

The Integrated Ocean Acidification line item funds NOAA's ocean acidification program (OAP), which was established and mandated by the Federal Ocean Acidification Research and Monitoring (FOARAM) Act of 2009. Under FOARAM, OAP is directed to "provide grants for critical research projects that explore the effects of ocean acidification on ecosystems and the socioeconomic impacts of increased ocean acidification," establish long-term monitoring, identify adaptation strategies, and conduct public outreach.

Ocean acidification (OA) is the rise in acidity of the earth's ocean caused by uptake of CO₂ from the atmosphere. This rising acidity makes it harder for shell-forming species such as oysters and crabs to grow, and fundamentally alters many other processes (e.g., reproduction, risk avoidance) necessary for healthy ecosystems and the coastal industries that depend on them. Prior federal investments in OAP, such as FOARAM, have greatly expanded our knowledge of OA and its risks to coastal communities and industries, but current funding levels are not at the scale needed to understand this global problem and its impacts. We request \$21.775 million for this program.

Marine Operations and Maintenance

Marine Operations and Maintenance should be funded at or above the FY 2019 level. Days at sea funded by this line are functionally tied to fishery stock assessments, and the two programs must be viewed together.

US Commissioners
Phil Anderson
McCoy Oatman
Douglas Vincent-Lang
Robert Turner

**UNITED STATES SECTION
of the
PACIFIC SALMON COMMISSION**

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**W. Ron Allen, Chair
US Section Budget Committee of the PACIFIC SALMON COMMISSION
BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
on the FY 2020 Budget for the National Marine Fisheries Service
April 4, 2019**

Mr. Chairman, and Honorable Members of the Committee, I am W. Ron Allen, the Alternate Tribal Commissioner and Chair for the US Section Budget Committee of the Pacific Salmon Commission (PSC). I am also the Tribal Chairman/CEO of the Jamestown S'Klallam Tribe located on the northern Olympic Peninsula of Washington State. The US Section prepares annual budgets for the implementation of the Pacific Salmon Treaty.

Department of Commerce funding in support of implementing the Pacific Salmon Treaty is part of the Salmon Management Activities account in the National Marine Fisheries Service (NMFS) budget. Funding in the Department of Commerce budget intended for the programs to fulfill national commitments created by the Treaty was \$13,113,113 in the 2017 budget. The US and Canada completed negotiations of revised Annex Chapters to the Treaty in 2018. **The US Section estimates that annual operational costs of \$42,260,604 plus \$53,561,341 in one-time implementation costs is needed for FY 2020 to implement national commitments created by the Treaty.**

The implementation of the Treaty is funded through the Departments of Commerce, Interior and State. The Department of Commerce principally funds programs conducted by the States of Washington, Oregon, Idaho and Alaska and the National Marine Fisheries Service. The cost of programs conducted by the States to fulfill national commitments created by the Treaty are substantially greater than the funding provided in the NMFS budget in past years. Consequently the States have supplemented the Federal Treaty appropriations from other sources, including State general funds. Many of those funding sources are limited or no longer available.

The US Section recommends that the Pacific Salmon Treaty line item in the Salmon Management Activities section of the National Marine Fisheries Service budget be funded at \$42,260,604 for FY 2020. This line item includes \$20,698,063 to provide base support for the States of Alaska, Washington, Oregon, and Idaho. The National

Marine Fisheries Service is funded at \$5,803,190 to conduct salmon stock assessments and fishery management programs required to implement the Treaty's conservation and allocation provisions for Coho, Sockeye, Chinook, Chum, and Pink salmon fisheries. Effective, science-based implementation of negotiated salmon fishing arrangements and abundance-based management approaches for Chinook, southern Coho and Northern Boundary and Transboundary River salmon fisheries. The US Section recommends annual operational costs of \$2,800,000 for improving the Coded Wire Tag Program, \$3,920,000 to improve catch and escapement estimates, \$5,387,200 for Puget Sound critical stocks, and \$5,600,000 to increase prey availability for southern resident killer whales.

The Chinook Salmon Agreement line item in the Salmon Management Activities was funded at \$1,440,947 in FY 2017 representing a reduction from previous years. The US Section recommends to fund \$2,016,000 to support research and stock assessments necessary to acquire and analyze the technical information needed to fully implement the abundance-based Chinook Salmon management program provided for by the Treaty. The States of Alaska, Washington, Oregon, and Idaho, and the twenty-five Treaty Tribes conduct projects selected in a rigorous competitive process.

The International Fisheries Commissions line, under Regional Councils and Fisheries Commissions in the NMFS budget was funded at \$367,000 and provides the US contribution to bilateral cooperative salmon enhancement on the transboundary river systems, which rise in Canada and flow to the sea through Southeast Alaska. This project was established in 1988 to meet US obligations specified in the Treaty and had been previously funded at \$400,000 annually.

The core Treaty implementation projects included in the Pacific Salmon Treaty line, and the US Chinook Agreement line under Salmon Management Activities, as well as the International Fisheries Commission line under Regional Councils and Fisheries Commissions consist of a wide range of stock assessment, fishery monitoring, and technical support activities for all five species of Pacific salmon in the fisheries and rivers between Cape Suckling in Alaska to Cape Falcon in Oregon. The States of Alaska, Washington, Oregon, Idaho, and the National Marine Fisheries Service conduct a wide range of programs for salmon stock abundance assessment, escapement enumeration, stock distribution, and fishery catch and effort information. The information is used to establish fishing seasons, harvest levels, and accountability to the provisions of Treaty fishing regimes.

Like many other programs, funding to implement the Pacific Salmon Treaty decreased in recent years. Prior to that, the base annual Treaty implementation funding remained essentially flat since the inception of the Treaty in 1985. In order to continue to fulfill the Federal commitments created by the Treaty, as costs and complexity increased

over time, the States had to augment Federal funding with other Federal and State resources. However, alternative sources of funding have seen reductions or, in some cases, have been eliminated.

Negotiations to revise the provisions of five annex chapters to the Treaty were successfully completed in 2018. The revised provisions will last for ten years. These chapters contain the specifics for implementing the Treaty for each salmon species in each geographic area. An agreement in principle has been reached for the Transboundary, Coho, and Chum chapters. Agreements for the Northern Boundary and Chinook chapters should be reached in the near future. The revised chapters represent the combined efforts of the participants to ensure healthy salmon populations for the next ten years. They also require commitments to increase efforts to improve upon current management strategies for numerous salmon populations. The provisions for a revised Fraser River chapter will be completed in 2019.

Finally, you should consider the fact that the value of the commercial harvest of salmon subject to the Treaty and managed at productive levels under the Treaty, supports the infrastructure of many coastal and inland communities. The value of the commercial and recreational fisheries, and the economic diversity they provide for local communities throughout the Pacific Northwest and Alaska, is immense. The Pacific Salmon Commission recently funded an economic study of these fisheries and determined that this resource creates thousands of jobs and is a multi-billion dollar industry. The value of these fish to the twenty-five Treaty Tribes in Washington, Oregon, Idaho and Alaska goes far beyond their monetary value, to the cultural and religious lives of Indian people. A significant monetary investment is focused on salmon due to the listings of Pacific Northwest salmon populations under the Endangered Species Act.

Given these resources, we can continue to utilize the Pacific Salmon Commission to develop recommendations that help with the development and implementation of solutions to minimizing impacts on listed stocks. We continue to work towards the true intent of the Treaty, and with your support, we will manage this shared resource for mutual enhancements and benefits.

This concludes the statement of the US Section of the Pacific Salmon Commission submitted for consideration by your Committee. We wish to thank the Committee for the support given to us in the past. Please let us know if we can supply additional information or respond to any questions the Committee Members may have.

Thank you

Outside Witness Testimony: Fiscal Year 2020 Appropriations

Submitted by:

Physical Science Education Policy Coalition, facilitated by Dr. Bethany R. Johns at the
American Institute of Physics

To:

House Appropriations Committee
Subcommittee on Commerce, Justice, Science, and Related Agencies

Regarding:

Physical Science Education

April 3, 2019

Dear Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee:

The Physical Science Education Policy Coalition (PSEPC) is a diverse group of scientific non-profit organizations that works to promote issues regarding all aspects of physical science education to benefit both students and teachers.

- We urge you to once again to reject the White House's proposal to eliminate **NASA's Office of STEM Engagement and fund the office consistent with the FY 2019 enacted level of \$110 million.**
- We urge you to support **the National Science Foundation (NSF) Education & Human Resources (EHR).**
- We also urge you to reject the White House's proposal to eliminate **NOAA's Office of Education and fund the office at the FY 2019 enacted level of \$29 million.**

NASA, OFFICE OF STEM ENGAGEMENT

NASA has an enormous reach in inspiring future scientists and engineers that keep the nation at the forefront of research and exploration. NASA plays a pivotal role in inspiring and encouraging young people to pursue STEM disciplines of study and careers; engaging the broader public in NASA's mission; and strengthening NASA and the nation's workforce. Bolstering American science and innovation is central to the Administration's strategy for strengthening the economy and increasing opportunities for Americans. The NASA Office of STEM Engagement supports programs such as the National Space Grant College and Fellowship Program (Space Grant) and the Experimental Program to Stimulate Competitive Research (EPSCoR).

The Space Grant program funds nearly 4,000 fellowships and scholarships for students in all 50 states and the District of Columbia who are pursuing a STEM career, allowing them to

participate in NASA aeronautics and space projects integrating classroom learning with on-the-job training much like apprenticeships.

EPSCoR plays a key role in U.S. economic competitiveness by establishing partnerships with government, higher education and industry that are designed to effect lasting improvements in a state's or region's research infrastructure, R&D capacity and hence, its national R&D competitiveness. The goal of EPSCoR is to provide funding that will enable jurisdictions to develop an academic research enterprise directed toward long-term, self-sustaining, nationally-competitive capabilities in aerospace and aerospace-related research. The EPSCoR program is directed at those jurisdictions that have not in the past participated equitably in competitive aerospace and aerospace-related research activities.

EPSCoR states are home to 20 percent of the country's population and workforce. They contain nearly 30 percent of the nation's research institutions and more than 15 percent of the nation's scientific and technological personnel. They bestow 20 percent of the nation's undergraduate degrees in science and engineering and 16 percent of the nation's doctorate degrees in these fields of study. They are home to 20 percent of the country's high-tech industries. Fifty-seven of the Fortune 500 companies have their corporate headquarters in EPSCoR states¹.

Continued support for NASA's Office of STEM Engagement is vital to ensure the United States continues to train and inspire our next generation of scientists, engineers, and technicians in order to remain globally competitive.

NSF, EDUCATION & HUMAN RESOURCES (EHR)

Progress in STEM depends on educating discoverers—innovators and future leaders in the nation's science and engineering enterprise. These discoverers are critical members of the STEM workforce. They fill vital roles throughout the public and private sectors, including academic, policy, research, and teaching positions. EHR programs educate, train, and support discoverers. These programs also engage citizen scientists and help foster a well-informed, STEM-literate citizenry prepared to handle rapid technological change and pursue STEM careers.

In addition to supporting programs aimed at preparing the next generation of STEM professionals, it also funds the discoveries—the foundational research and the design and implementation studies—that underpin these STEM human capital development initiatives. Just as NSF's Research and Related Activities (R&RA) directorates are dedicated to funding basic research that accelerates progress in science and engineering, EHR supports early-stage, exploratory research that enables improvements in STEM education, learning, and assessment. EHR programs fund crucial foundational, design and development, and implementation

¹ EPSCoR 2030 Report,
http://www.epscorideafoundation.org/media/docs/EPSCoR_2030_Report_4-23b.pdf

research that is made available to inform large investments at scale made by other agencies, organizations, and the private sector.

In 2018, EHR funded \$788 million in grants. The top three states to receive NSF EHR funding were California, Texas, and New York. The state of New York received more than \$46 million. Alabama received more than \$14 million, placing it in the top 20 states receiving EHR funding.

In 2018, Tuskegee University (AL) received a five-year, \$2.6 million grant to lead an alliance of universities and U.S. Department of Energy (DOE) National Laboratories. Their goal is to study and evaluate a model for career development of historically underrepresented minority early career STEM faculty at historically black colleges and universities (HBCUs). Dr. Mohammed A. Qazi, one of the grant's lead researchers, said, "Faculty at HBCUs are typically overburdened with extreme teaching and advising responsibilities, making it difficult for them to find the time and resources for the other activities that are highly valued in tenure and promotion decisions." The alliance works with faculty who are writing and submitting research grants to external funding sources; engaging in visiting faculty positions at DOE National Laboratories; working with experienced STEM faculty mentors across the country; and participating in mock pre-tenure review processes. The results of the study will help faculty better address unique challenges, promote overall academic growth, and reduce isolation. One of the highlights of the model is that it will have the capability to grow and attract other HBCUs as participants.

Another critical EHR program is the Robert Noyce Teacher Scholarship Program. The Noyce program seeks to encourage institutions of higher education to develop and sustain a culture where undergraduate STEM majors and STEM professionals, especially those of the highest achievement and ability who might otherwise not have considered a career in K-12 teaching, are encouraged and supported to become teachers in high-need local educational agencies.

The Warner School of Education at the University of Rochester in New York, for example, has received \$5 million in combined funding through the Noyce program to improve science and math education in urban high schools. Cynthia Callard, Associate Professor and Director of the Center for Professional Development and Education Reform, leads a team whose goal is to develop high-quality math and science teachers by selecting teachers from urban schools and providing them with academic support, a stipend, and graduate school tuition as they take on leadership and coaching roles at other schools. These teachers will then become "master teachers" and "teacher leaders" at schools in the other districts.

New York has 36 active Noyce awards at 28 different colleges and universities across the state and total more than \$45 million in funding.

While PSEPC does not advocate for Directorate level funding levels at NSF, the goals of NSF EHR are in line with many of the core values of the organizations within PSEPC to promote an active, inclusive and diverse physical sciences community.

NOAA, OFFICE OF EDUCATION

The NOAA Office of Education advances education internally within the agency and to the broader public. The Office has several major areas of emphasis: the Educational Partnership Program (EPP) with Minority-Serving Institutions (MSI); the Ernest F. Hollings Undergraduate Scholarships; the Environmental Literacy Program; and the Bay Watershed Education and Training (B-WET). The Office of Education also coordinates interagency educational activities and those involving external partners.

The EPP/MSI workforce development program supports four NOAA-University education and collaborative research-based Cooperative Science Centers at Florida A&M University, Howard University, CUNY City College, and the University of Maryland Eastern Shore. These four universities partner with 24 additional universities to increase the number of students who graduate within degrees in STEM and natural resource management/policy. So far more than 1800 students have graduated in NOAA-mission fields. Other key EPP/MSI initiatives are the Undergraduate Scholarship Program and NOAA Experiential Research & Training Opportunities.

The Hollings Scholarship Program provides students with two years of undergraduate academic assistance and a summer internship. There are more than 130 active scholars and a network of more than 1400 alumni, of which 75% have attended graduate school. Among other benefits, the program prepares students for careers in public service or as oceanic and atmospheric science teachers and educators who can improve U.S. science and environmental education.

The Environmental Literacy Program supports competitive grants and long-term external partnerships. The grants programs is most comprehensive and enduring national funding opportunity focused on improving environmental stewardship and increasing resilience to natural hazards.

B-WET provides competitive funding in support of K-12 Meaningful Watershed Educational Experiences, which promote classroom-based and outdoor education ecosystem learning and stewardship. B-WET currently operates in California, Hawaii, and the Chesapeake Bay, Great Lakes, Gulf of Mexico, New England, and Pacific Northwest regions.

In support of PSEPC goals, these NOAA Office of Education programs broaden STEM education and promote workforce development, with focus on underserved audiences.

Endorsed by the following member organizations:

American Physical Society (APS)	Acoustical Society of America (ASA)
American Association of Physics Teachers (AAPT)	American Association of Physicists in Medicine (AAPM)
American Astronomical Society (AAS)	American Institute of Physics (AIP)
The Optical Society	

Regional Information Sharing Systems (RISS) Program
A Proven Resource for Law Enforcement

Fiscal Year 2020 Testimony to the Subcommittee on Commerce, Justice, Science, and Related
 Agencies of the Committee on Appropriations, United States House of Representatives

Submitted by Donald F. Kennedy, Jr., Chair, RISS National Policy Group

Law enforcement officers fight every day to keep our communities safe. Their jobs are challenging and dangerous. New threats emerge constantly, requiring officers to respond to diverse and complex situations. One organization—the **Regional Information Sharing Systems (RISS) Program**—is providing a solution by answering the demand for rapid, but secure, sharing of information and intelligence among law enforcement and public safety professionals, offering critical analytical and investigative support services, and providing lifesaving event deconfliction. It is respectfully requested that RISS be funded in **FY2020 at \$48 million**.

RISS reaches across the country (and to some international partners) and serves every level of government; local, state, regional, federal, and tribal criminal justice agencies benefit from RISS. More than 9,200 criminal justice agencies and other partners, as well as hundreds of thousands of law enforcement officers and criminal justice professionals, trust RISS and rely on it to:

- ✓ Share critical law enforcement and intelligence data across jurisdictions.
- ✓ Access case and analytical services that help solve crimes and prosecute offenders.
- ✓ Prevent friendly fire and safeguard the men and women protecting our streets.
- ✓ Preserve the integrity of operations and protect citizens and communities.
- ✓ Equip officers and criminal justice professionals with training, assistance, and research.

RISS is composed of six regional centers and the RISS Technology Support Center (RTSC). The RISS Centers work regionally to respond to the unique crime problems of their regions, while working together on nationwide issues. The RTSC maintains the **RISS Secure Cloud (RISSNET)** and develops and implements RISSNET resources. The RTSC coordinates technical matters among the RISS Centers—including security and hardware and software upgrades—and communicates the direction of RISS information technology and database applications development.

What RISS Does

RISS integrates advanced technology and field-based solutions that connect systems and officers across jurisdictions.

RISSNET connects disparate systems, provides bidirectional sharing, offers a single simultaneous search of connected systems, houses hundreds of resources, and provides access to millions of records. Without RISSNET resources and information, multijurisdictional information sharing would become difficult, leads may be lost, and some cases may not be solved timely or at all.

RISS develops, maintains, and provides access to intelligence and investigative databases, including:

- The **RISS Criminal Intelligence Database (RISSIntel)**—provides for a real-time, online federated search of more than 50 RISS and partner intelligence databases.
- The **RISS National Gang Program (RISSGang)**—provides an intelligence database, a website, and information resources.
- The **RISS Automated Trusted Information Exchange (ATIX)**—a secure platform for law enforcement, public safety, first responders, and the private sector to share information.
- The **RISSLeds Investigative Website**—enables law enforcement officers to post information regarding cases or other law enforcement issues.
- The **RISS Officer Safety Website**—provides users with timely officer safety information and a secure infrastructure to exchange and share officer safety-related information.
- The **RISS Property and Recovery Tracking System (RISSProp)**—houses millions of pawn, secondhand, and other shop transactions to enable officers to identify and return stolen property and identify other related criminal activities.
- The **RISS Master Telephone Index (MTI)**—an analytical database designed to compare and match common telephone numbers in law enforcement investigations from across the nation.
- The **RISS Money Counter Project (MCP)**—stores currency serial numbers for comparison to currency submitted by officers in previous cases.
- The **RISS Drug Pricing Reference Guide**—an online tool that enables officers to search for comparable prices on narcotics; serve as a price guide when assessing the value of seizures and contraband; and identify supply, demand, and popularity trends within the drug market.

RISS provides essential officer safety event deconfliction and related resources.

The **RISS Officer Safety Event Deconfliction System (RISSafe)** supports law enforcement personnel who are conducting an event near one another at the same time. Events include law enforcement actions, such as undercover operations, surveillance, or executing search warrants. When certain elements are matched between two or more events, a conflict results. Immediate notification is then made to the affected agencies or personnel regarding the identified conflict.

Since RISSafe's inception, **1,913,653 operations** have been entered into RISSafe, resulting in **459,799 identified conflicts**. Without the identification of these conflicts, officers may have interfered with another agency's or officer's investigation, links between cases may have been lost, or officers or citizens may have been unintentionally hurt or killed. RISSafe is accessible and monitored on a **24/7/365 basis** and available at **no cost to all law enforcement agencies**. Currently, **29 RISSafe Watch Centers** are operational, 23 of which are operated by organizations other than RISS. In May 2015, the three nationally recognized event deconfliction systems—Case Explorer, SAFETNet, and RISSafe—were integrated. The partners worked in collaboration to accomplish this goal with the help of many vested partners. This partnership and system integration have further strengthened officer and citizen safety across the country.

RISS provides investigative and analytical services, training and publications development, and comprehensive investigative research, including

- Equipment loans
- Audio/video enhancements
- Digital forensics
- Case support
- Field services
- Examples of training
 - Building Resilience Against Violent Extremism
 - Prescription Drug Crimes
- Examples of publications
 - *Domestic Terrorism and Extremism*
 - *Orlando Pulse Nightclub*
 - *The Heroin Resurgence: A Painkiller Epidemic*

RISS supports federal and nationwide initiatives that enhance and expand efficient and effective information sharing among the criminal justice community.

More than **1,000 federal entities** utilize RISS. RISS helps federal programs meet information sharing mandates and serves as a bridge between local, state, regional, federal, and tribal law enforcement partners. Example partnerships include:

- Federal Bureau of Investigation’s (FBI) Law Enforcement Enterprise Portal
- FBI’s Law Enforcement National Data Exchange (N-DEX)
- High Intensity Drug Trafficking Areas
- National Fusion Center Association
- National Motor Vehicle Title Information System
- Nationwide Deconfliction Council/National Virtual Pointer System
- Nlets—The International Justice and Public Safety Network
- Office of the Director of National Intelligence, Federal, State, Local, Tribal - Information Sharing
- U.S. Attorneys’ Offices
- U.S. Department of Homeland Security and the Homeland Security Information Network (HSIN)
- U.S. Department of Justice

RISS serves as an expert in intelligence and technology solutions, including federation and single sign-on (SSO).

RISS has streamlined processes, increased information sharing and officer access to critical data, enhanced the safety of officers and communities, and advanced important technology solutions. Examples of nationwide projects include:

- Expanded access to N-DEX
- Connected **19** fusion center intelligence systems to RISSIntel
- Deployed HSIN/RISS federated search
- Expanded law enforcement identity vetting and SSO capabilities
- Integrated a one-time passcode, online registration, and new user services

RISS’s Impact

RISS has been aggressively setting and achieving evidence-based goals since its inception. Below are some highlights of RISS’s **FY2018** results and productivity.

- Developed **188,310 analytical products**.
- Loaned **2,527 pieces of specialized equipment**.
- Responded to and provided research and information for **74,898 requests** for assistance.
- **Trained 43,145** law enforcement officers and personnel.
- Provided access to more than **49.7 million records** to authorized personnel, including access to investigative databases, such as **RISSProp**, the **MCP**, and the **MTI**.
- Enabled users to conduct more than **5.1 million inquiries** to RISS resources.

In addition, RISS services helped locate **1,175 individuals**, resolve **1,325 cases**, and prosecute **310 cases** in FY2018. Law enforcement agencies reported that by using RISS services, their officers were able to arrest more than **36,780 offenders** and seize more than **\$629.6 million in narcotics, property, and currency** over the last ten years. RISS is an excellent return on investment for our nation. Hundreds of shared successes are submitted to RISS each year from agencies utilizing RISS services. Examples can be viewed at www.riss.net/Impact.

Investing in RISS

RISS's proposed efforts for FY2020 will increase the number of RISS users and the number of database records available to users, as well as the number of inquiries to RISSNET resources. Funding for technology initiatives will improve speed, security, access, and authentication and enhance the entire user experience.

The FY2020 request for \$48 million will support the following:

- Operation of the six RISS Centers and all of their current support services and resources
- Operation of the RTSC (nationwide RISS data center)
- Support for the 24/7/365 nationwide RISSafe Watch Center
- Critical equipment and infrastructure
- RISSGang enhancements
- Trustmarks/federation expansion
- RISS ATIX enhancements
- Expansion of RISS's school safety response plans
- Combating opioids, heroin, and narcotics
- Expansion of RISSProp nationwide
- Officer safety/deconfliction enhancements
- Continued and additional support for fusion center partnerships

RISS is a resource that saves agencies money and time and produces results. With increased funding, RISS can continue to operate while building on its successes. It would be counterproductive to require local and state RISS members to self-fund match requirements or to reduce the amount of Bureau of Justice Assistance discretionary funding. Agencies require more funding to fight the nation's crime problem. RISS is unable to make up the decrease in funding that a match would cause, for it has no revenue source of its own. RISS is grateful to provide this testimony at your request and appreciates the support that this committee continuously provides to the RISS Program. For additional information, visit www.riss.net.

Testimony of Research!America to the House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies Concerning FY20 Appropriations for NSF
Submitted for the Record, March 28, 2019

Contact: Ellie Dehoney, Vice President of Policy and Advocacy, Research!America,
edehoney@researchamerica.org

Research!America appreciates the opportunity to submit testimony for the record. The Research!America alliance advocates for science, discovery, and innovation to achieve better health for all. We are grateful for the Subcommittee's dedicated stewardship over funding for such crucial priorities as the National Science Foundation (NSF). As you consider fiscal year 2020 (FY20) allocations, we request that the National Science Foundation (NSF) receive at least \$9 billion to grow jobs, empower sustained economic growth, and advance the wellbeing of Americans and populations across the globe.

NSF's portfolio, which is intentionally diverse to maximize the returns on science investment, spans biology, economics, engineering, mathematics, computer science, the social and behavioral sciences, and other high impact scientific disciplines. We firmly believe that robust funding for NSF is a sound strategy for advancing our nation's strategic interests in an increasingly complex global landscape and meeting the goals and aspirations of the American people.

What the NSF Provides

NSF funds diverse basic and applied research in local universities and other research institutions located in all 50 states, the District of Columbia and three U.S. territories. An estimated 386,000 students, teachers, researchers and postdoctoral fellows were empowered by the NSF in FY 2018. Approximately 90% of NSF funding is allocated to grants or cooperative agreements to researchers through a competitive merit review process. Since 1950, NSF has supported more than 236 Nobel Prize winners, including five Nobel Laureates in 2018. The studies supported by NSF bear on virtually every sector of our economy, support cyber- and other crucial areas of national security, and factor importantly into the productive use of big data and other highly promising avenues of research.

NSF Leverages American Ingenuity to Break New Ground in Science and Technology

NSF supports the type of high-risk research that drives progress and has resulted in recent, groundbreaking discoveries. Researchers are using the NSF-funded Stampede super computer at the Texas Advanced Computing Center to design next generation batteries by modeling interactions between atoms. This research is critical for storing energy from new smart grid technologies and wind turbines. The development of more advanced super computers also

Testimony of Research!America
House Committee on Appropriations
CJS Subcommittee

directly impacts the health and well-being of all Americans by helping researchers more accurately predict natural disasters and aid in the discovery of new therapeutic drugs. This progress would not have been possible without NSF investment in computer science, math and statistics.

NSF-funded research continues to propel progress, often through collaboration across multiple fields. “Lab on a chip” devices can simulate human lungs to find treatments for diseases like COPD, asthma, and lung cancer in a more cost and time efficient manner. A team of chemists, engineers, and physicians have developed new way to evaluate the results of these studies in real time using light, further speeding up the treatment discovery process. Through NSF’s continued support, fields work together to produce cutting-edge research that pushes the fields of medicine, engineering, and biomedical science forward.

Americans Understand the Value NSF Delivers

Since 1992, Research!America has commissioned national and state-level surveys to gauge public sentiment on issues related to research and innovation. One of the most consistent finding over time has been Americans’ support for basic research. In our most recent survey, fielded in January of 2019, 80 percent of respondents agreed that “even if it brings no immediate benefits, basic scientific research that advances the frontiers of knowledge is necessary and should be supported by the federal government.” Our surveys have also explored Americans’ perspectives on the role of NSF funded tools in advancing key national priorities. For example, a large majority of Americans -- 83% -- assign importance to putting science, technology and engineering to work to strengthen US infrastructure.

NSF is Crucial to Training the Next Generation of American Scientists and Innovators

Our nation’s continued global leadership is inexorably linked to our strength in the fields of Science, Technology, Engineering, and Mathematics (STEM). NSF fosters future American leaders in these strategically important disciplines. Since 1952, NSF has supported more than 57,700 students through Graduate Research Fellowships and has provided grant support to thousands of postdoctoral fellows and young investigators. The agency also engages in innovative educational initiatives such as NSF INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoveries in Engineering and Science), a national initiative to make STEM education more inclusive of underrepresented and underserved populations. Efforts like this set the stage for future success as our nation seeks to accelerate the pace of medical and scientific progress.

Testimony of Research!America
House Committee on Appropriations
CJS Subcommittee

Research!America appreciates the difficult and complex task facing the subcommittee as it seeks to prioritize funding in a manner that best serves the American people. In that context, we urge to provide at least \$9 billion for NSF. We hope you will call on our organization if additional information would prove useful.

Thank you for your continued leadership and consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mary Woolley".

Mary Woolley
President and CEO
Research!America



TESTIMONY OF ABIGAIL ECHO-HAWK, MA
DIRECTOR, URBAN INDIAN HEALTH INSTITUTE
CHIEF RESEARCH OFFICER
SEATTLE INDIAN HEALTH BOARD
FOR
HOUSE APPROPRIATIONS SUBCOMMITTEE
ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES
THURSDAY, APRIL 4, 2019

Members of the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies, my name is Abigail Echo-Hawk, and I am an enrolled citizen of the Pawnee Nation of Oklahoma, currently living in an urban Indian community in Seattle, Washington. I am the Director of the Urban Indian Health Institute (UIHI) and the Chief Research Officer of the Seattle Indian Health Board (SIHB). I am an experienced American Indian and Alaska Native health researcher in both academic and non-profit settings, and am part of numerous local, state, and federal efforts to engage American Indians and Alaska Natives in research.

UIHI is an Indian Health Service (IHS)-funded Tribal Epidemiology Center (TEC), providing services to more than 62 Urban Indian Health Programs, social service and faith-based agencies who provide culturally attuned health services in areas that represent approximately 1.2 million American Indians and Alaska Natives living in urban settings nationwide. UIHI recognizes research, data, and evaluation as an integral part of informed decision making for our American Indian and Alaska Native community and our policy and funding partners. We assist our communities in making data driven decisions, conduct research and evaluation, collect and analyze data, and provide disease surveillance to improve the health and well-being of our entire American Indian and Alaska Native community. UIHI's mission is to advocate for, provide, and ensure culturally appropriate, high quality, and accessible data for American Indian and Alaska Native public health organizations that provide culturally attuned care to American Indians and Alaska Natives living off tribal lands in urban settings. Today, my testimony asks for increased funding from the Department of Justice for culturally appropriate research practices and interventions that serve the needs of urban American Indian and Alaska Native communities.

TECs are IHS, division funded organizations who serve the IHS Direct, Tribal 638, and Urban Indian Health Program (I/T/U) system of care by managing public health information systems, investigating diseases of concern, managing disease prevention and control programs, responding to public health emergencies, and coordinating these activities with other public health authorities. There are currently 12 TECs nationwide that work to improve the health status of American Indians and Alaska Natives by identification and understanding of health risks and inequities, strengthening public

health capacity, and assisting in disease prevention and control. UIHI is unique in that it serves the national urban American Indian and Alaska Native population while its sister TECs serve regional IHS areas including Alaska, Albuquerque, Bemidji, Billings, California, Great Plains, Nashville, Navajo, Oklahoma, Phoenix, and Portland. My organization also works directly with over 120 tribes as the National Coordinating Center of the Center for Disease Control and Prevention's (CDC) Good Health and Wellness in Indian Country (GHWIC) program.

UIHI's unique service population represents approximately 71% of the 5.2 million American Indian and Alaska Native peoples (alone or in combination) in this country. This population bears a disproportionate burden of disease, evidenced by sustained, and seemingly intractable health disparities.¹ These include injury, chronic disease, infectious disease, and unintended injury with extraordinarily high levels of co-morbidity and mortality that literally translates into shorter lifespans coupled with greater suffering. For all American Indians and Alaska Natives, there are systemic issues which give rise to health disparities: genocide, uprooting from homelands and tribal community structure, bans on cultural practices and language, racism, poverty, poor education, and limited economic opportunity.

GAPS IN RESEARCH AND PROGRAMMING

Local and state public health jurisdictions rarely disaggregate and/or analyze data separately for the urban American Indian and Alaska Native population, despite evidence of a distinct set of needs and health risks. Consistently omitted or lumped into categories described as "other" or "statistically insignificant", this population and their health concerns are often invisible. UIHI functions as the only national TEC representing the health needs and resiliencies of urban American Indians and Alaska Natives. Currently, there is a lack of community-driven research being conducted with American Indians and Alaska Natives. This has directly resulted in evidence-based practices being implemented to address health disparities that do not include any evidence that the practice is appropriate and impactful with the American Indian and Alaska Native population. This directly impacts the ability of urban Indian and tribal communities to make meaningful progress in improving the health of their communities.

While the Department of Justice has worked to ensure inclusion of underrepresented minorities in research and programming, their efforts have had limited impact in the urban American Indian and Alaska Native community. Urban Indian concerns must be included as the Department of Justice continues to become a more inclusive and diverse agency. Currently, the Department of Justice does not have an Urban Confer policy. As a result, 71% of the American Indian and Alaska Native population is excluded from the conversations of creating diverse research and programming. Urban Indians need to be included through the Confer process anytime there are Tribal Consultations. In addition, further funding dollars for research and direct services need to be carved out and directed toward urban Indian organizations and

¹ Urban Indian Health Institute, Seattle Indian Health Board. (2016). Community Health Profile: National Aggregate of Urban Indian Health Program Service Areas. Seattle, WA: Urban Indian Health Institute.

TECs serving the urban Indian population. Specifically, these need to be new funds and should not be redirected from any already allocated tribal funds.

INCREASE INVESTMENT IN TRIBAL EPIDEMIOLOGY CENTERS AND URBAN INDIAN ORGANIZATIONS

Tribal Epidemiology Centers (TECs) work in partnership with tribes and urban Indian organizations (UIOs) to improve the health and well-being of their community members. We offer culturally attuned approaches that work toward eliminating health disparities that are faced by American Indian and Alaska Native populations. Accomplishing this often requires the TECs to work with a coordinated approach with the tribes, UIOs, IHS, other federal agencies, state agencies, and academic institutions throughout the country. TECs possess a unique ability as tribal organizations to reach, engage, and provide culturally appropriate research, data, and evaluation for American Indians and Alaska Natives, by American Indians and Alaska Natives, and to ensure the funds actually reach and impact our population. For example, UIHI provides individual community health profiles for 30 urban Indian areas and a national aggregate that includes more than 60 health indicators. These health profiles are the only comprehensive scientifically sound public data sources available on urban Indians and became the first public online data dashboard of its kind.² UIHI's sister TECs provide similar yet distinct services for their regional areas that are responsive to tribal needs. However, due to a lack of funding, we are limited as to what we can do.

The long and unfortunately recent history of health and research abuses against American Indians and Alaska Natives has made a strong and lasting impression in urban and rural tribal communities. Part of the work of developing capacity, buy-in, and knowledge around epidemiology, data surveillance, and collection of data includes reclaiming the traditional value of evaluation, data collection and analysis, and building trusting and engaged relationships. Developing structures that reflect not just the disparities and challenges of American Indians and Alaska Natives, but also tell the story of strengths, resilience, and capabilities of these communities, is inherently crucial to all Indian people: the story of urban American Indian and Alaska Native data must be grounded in both scientific and cultural rigor and TECs are positioned to do this. No greater issue is more evident of this than the lack of data relating to Missing and Murdered Indigenous Women and Girls (MMIWG). In November 2018, UIHI released the first ever report on MMIWG in 71 cities across the United States. This report found a problem of epidemic proportions that warrants significant investment in research, prevention, and direct services by the Department of Justice to support urban Indian communities.

Overall, American Indian and Alaska Native women experience a higher rate of homicide when compared to Non-Hispanic White (NHW) women (7.3 out of 100,000 v. 5.0 per 100,000). However, these differences are even more extreme within certain counties. For example, in Bon Homme County, South Dakota the homicide rate for American Indian and Alaska Native women was 111.1 times higher than the national

² Urban Indian Health Institute, Seattle Indian Health Board. (2017). Data Dashboard. Retrieved from: <http://www.uihi.org/urban-indian-health/data-dashboard/>

homicide rate for non-Hispanic White women (555.6 per 100,000 American Indian and Alaska Native women).³ However, we do know that this is an under-representation due to racial misclassification and lack of data collection on race for women who go missing or are murdered. This trend of racial misclassification was confirmed in a study that found that American Indian and Alaska Native people are the most likely to be misclassified when compared to people of other races (30% frequency).⁴ We found rampant racial misclassification in our MMIWG study. UIHI is an indigenous organization with trusted partnerships with urban and rural tribal communities. UIHI used indigenous knowledge methodologies to interpret the data and conduct MMIWG research in a culturally attuned manner. We were uniquely situated to address this issue in a culturally and scientifically rigorous manner and find what Department of Justice had yet to discover. However, due to lack of funding, UIHI used the Director's minimal speaking fees to pay for this important MMIWG project. As a direct result, we were only able to conduct a study that scratched the surface of the issue. Yet, as the first study of its kind, it has been referred to by member of Congress as "groundbreaking."

UIHI is dedicated to improving the health and well-being of urban American Indian and Alaska Native people. As a national leader on the subject, and the strongest partner available to be able to address their public health needs, UIHI and TECs need sufficient funding to fully fulfill the needs of our partner urban Indian organizations and tribal communities. Fully funding TECs will increase our capacity to provide relevant, timely, and culturally competent information to make data driven decisions. UIHI recognizes that data reflects both our resiliencies and the needs of our communities, and as a TEC we are uniquely situated to incorporate cultural methodologies that do not use a deficit-based framework. Our communities have the solutions; however our communities must be engaged to share those solutions with policymakers and funders. Health outcomes and research for American Indian and Alaska Native communities will not only benefit our population, but will positively affect the overall population health of the country as a whole. We urge the subcommittee to allocate \$10 million dollars per year through the Department of Justice for urban Indian specific research and research to address issues of MMIWG, and \$5 million dollars per year to urban Indian organization to implement indigenous approaches in programming to ending gender-based violence.

Abigail Echo-Hawk (Pawnee), MA
Chief Research Officer, Seattle Indian Health Board
Director, Urban Indian Health Institute

³ Bachman R, Zaykowski H, Kallmyer R, Poteyeva M, Lanier C. *Violence Against American Indian and Alaska Native Women and the Criminal Justice Response: What Is Known.*; 2008. <https://www.ncjrs.gov/pdffiles1/nij/grants/223691.pdf>. Accessed December 5, 2017.

⁴ Jim MA, Arias E, Seneca DS, et al. Racial misclassification of American Indians and Alaska Natives by Indian Health Service Contract Health Service Delivery Area. *Am J Public Health*. 2014;104 Suppl 3(Suppl 3):S295-302. doi:10.2105/AJPH.2014.301933



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**Outside Witness Testimony from:
Society for Industrial and Applied Mathematics (SIAM)**

**Submitted by:
Lisa Fauci, President, SIAM
Anne Gelb, Vice President for Science Policy, SIAM**

**Submitted to the Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations, United States House of Representatives**

**Testimony on the Fiscal Year 2020 Appropriations
for the National Science Foundation**

April 4, 2019

Summary: This written testimony is submitted on behalf of the Society for Industrial and Applied Mathematics (SIAM) to ask you to continue your support of the National Science Foundation (NSF) in fiscal year (FY) 2020 by providing NSF with \$9 billion to advance both core research areas and NSF's Big Ideas for Future Investment. These Big Ideas dramatically propel interdisciplinary research forward while revolutionizing quantum communications, medicine, and other areas. In particular, we urge you to provide strong support for the Research and Related Activities Account (RRA) that supports key applied mathematics and computational science programs in the Division of Mathematical Sciences and the Office of Advanced Cyberinfrastructure. SIAM also requests your support for the Education and Human Resources (EHR) directorate that addresses fundamental challenges in mathematics and STEM education.

Full Statement: On behalf of SIAM, we submit this written testimony for the record to the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the U.S. House of Representatives.

SIAM has over 14,000 members, including applied and computational mathematicians, computer scientists, numerical analysts, engineers, statisticians, and mathematics educators. They work in industrial and service organizations, universities, colleges, and government agencies and laboratories all over the world. In addition, SIAM has almost 500 institutional members, including colleges, universities, corporations, and research organizations. SIAM members come from many different disciplines but have a common interest in applying mathematics in partnership with computational science to solve real-world problems, which affect national security and industrial competitiveness.

First, we would like to emphasize how much SIAM appreciates your Committee's continued leadership on and recognition of the critical role of the National Science Foundation (NSF) and

Testimony for the House Appropriations Committee – Commerce, Justice, Science Subcommittee (4/04/2019)–Page 1



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its support for mathematics, science, and engineering in enabling a strong U.S. economy, workforce, and society.

Today, we submit this testimony to ask you to continue your support of NSF in FY 2020 and beyond. ***In particular, we join with the research and higher education community and request that you provide NSF with at least \$9 billion in funding for FY 2020.*** After years of stagnant funding before FY 2018, NSF needs bold growth to protect U.S. competitiveness as countries such as China are rapidly increasing their science and engineering investments. According to the National Science Board, in FY 2017, NSF rejected close to four billion dollars of proposals rated “very good or higher” due to budget constraints. Funding of \$9 billion would help the agency address critical unmet national research needs and historical underinvestment.

As we are reminded every day, the nation’s economic strength, national security, and welfare are being challenged in profound and unprecedented ways. Many of these challenges are fueled by gaps in our understanding of complex systems such as cyberspace, terrorist networks, the human brain, or the energy grid. Mathematics and computational science play a foundational and cross-cutting role in understanding these systems through advanced modeling and simulation, developing techniques essential to designing new breakthrough technologies like Artificial Intelligence, and providing new tools for managing resources and logistics. Progress in computational sciences and applied mathematics also underpins advances across an array of fields and challenges in computing, materials, biology, engineering, and other areas.

National Science Foundation

NSF serves a unique and critical function supporting all areas of science and engineering to further innovation and seed the knowledge and technologies for a strong future America. NSF provides essential federal support for applied mathematics and computational science, including 64 percent of all federal support for basic academic research in the mathematical sciences. Of particular importance to SIAM, NSF funding supports the development of new mathematical models and computational algorithms, which are critical to making substantial advances in such fields as neuroscience, energy technologies, genomics, and nanotechnology. In addition, new techniques developed in mathematics and computing research often have direct application in industry. Modern life as we know it – from search engines like Google to the design of modern aircraft, from financial markets to medical imaging – would not be possible without the techniques developed by mathematicians and computational scientists using NSF funding. NSF also supports mathematics education at all levels, ensuring that the next generation of the U.S. workforce is appropriately trained to participate in cutting-edge technological sectors and that students are attracted to careers in mathematics and computing.

SIAM supports NSF’s investments in the ***10 Big Ideas for Future Investment***, which represent major scientific challenges where sustained investment can make a transformative difference. In particular, SIAM urges support for the Harnessing the Data Revolution, Understanding the

Testimony for the House Appropriations Committee – Commerce, Justice, Science Subcommittee (4/04/2019)—Page 2



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Rules of Life, and Quantum Leap Big Ideas, which each have revolutionary potential. SIAM applauds NSF's programs in these areas, such as the Institutes for Data-Intensive Research in Science and Engineering, Quantum Leap Challenge Institutes, TRIPODS¹ Institutes, and the NSF-Simons Research Centers for Mathematics of Complex Biological Systems. While Big Ideas investments are important, SIAM urges Congress to provide sufficient NSF support for core programs, which have stagnated in recent years and whose foundational investments underpin advances across many science and engineering challenges.

SIAM urges strong investment in the Research and Related Activities account (RRA) to enable robust funding for the Division of Mathematical Sciences (DMS), the Office of Advanced Cyberinfrastructure (OAC), and other core programs for essential mathematical and computational science research, workforce development programs, and early career researcher support.

NSF Division of Mathematical Sciences

The NSF Division of Mathematical Sciences (DMS) in the Directorate for Mathematical and Physical Sciences (MPS) provides core support for all mathematical sciences. DMS also funds national mathematical science research institutes; infrastructure, including workshops, conferences, and equipment; and postdoctoral, graduate, and undergraduate training.

The activities supported by DMS and performed by SIAM members, such as modeling, analysis, algorithms, and simulation, underpin advancements across science and engineering and provide new ways of obtaining insight into the nature of complex phenomena, such as the power grid, software for military applications, and the human body.

Investment in DMS is critical because of the foundational and cross-cutting role that mathematics and computational science play in sustaining the nation's economic competitiveness and national security, and in making substantial advances on societal challenges such as energy and public health. NSF, with its support of a broad range of scientific areas, plays an important role in bringing U.S. expertise together in interdisciplinary initiatives that bear on these challenges. Agencies such as the Department of Defense and National Institutes of Health depend on the NSF-supported applied math and computational sciences ecosystem to fulfill their missions as they build on NSF-funded modeling, algorithm, and simulation breakthroughs and leverage the workforce trained using NSF support. Both agencies and foundations partner with NSF thereby leveraging federal funding for maximum impact, such as with the Joint NSF/National Institutes of Health Initiative Quantitative Approaches to Biomedical Big Data (QuBBB).

¹ Transdisciplinary Research on Principles of Data Science



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NSF Office of Advanced Cyberinfrastructure

Work in applied mathematics and computational science is critical to enabling effective use of the rapid advances in information technology and cyberinfrastructure. Programs in the NSF Office of Advanced Cyberinfrastructure (OAC) in the Directorate for Computer and Information Science and Engineering (CISE) focus on providing research communities access to advanced computing capabilities to convert data to knowledge and increase our understanding through computational simulation and prediction.

SIAM strongly endorses OAC's efforts as a steward for computational science, building bridges across NSF to accelerate transformational science and engineering, and driving universities to improve their research and education programs in this multidisciplinary area.

SIAM strongly endorses NSF's role advancing high performance computing to meet critical national security needs, fully leverage computing technology for economic competitiveness and scientific discovery, and position the U.S. for sustained technical leadership.

Supporting the Pipeline of Mathematicians and Scientists

Funding for NSF's *Education and Human Resources* (EHR) directorate has stagnated for many years leaving critical gaps in addressing fundamental challenges for mathematics and STEM education across educational levels. SIAM supports EHR and its programs like *Improving Undergraduate STEM Education* (IUSE), which is key to both advancing STEM professional development and developing a STEM literate citizenry. SIAM notes that mathematical education is foundational to STEM learning across disciplines, and NSF should continue to fund development of mathematical and computational skills, including at the undergraduate level when young scientists and engineers gain critical interests and competencies.

SIAM is deeply concerned by proposals in the budget request to cut the *Graduate Research Fellowships* and *CAREER awards* that are crucial to the training and professional development of the next generation of leadership in mathematical sciences research and education.

Conclusion

We would like to thank you again for your ongoing support of NSF that enables the research and education communities it supports, including thousands of SIAM members, to undertake activities that contribute to U.S. health, security, and economic strength. NSF needs sustained growth to maintain our competitive edge in science and technology, and therefore we respectfully ask that you continue robust support of these critical programs in FY 2020.

We appreciate the opportunity to provide testimony to the Committee on behalf of SIAM. SIAM looks forward to providing any additional information or assistance you may ask of us during the FY 2020 appropriations process.

Testimony for the House Appropriations Committee – Commerce, Justice, Science Subcommittee (4/04/2019)—Page 4

Diane Lipscombe, PhD, President, Society for Neuroscience
202-962-4000 – Email: advocacy@sfn.org
Subcommittee on Commerce, Justice, Science and Related Agencies
U.S. House of Representatives Appropriations Committee
In Support of FY20 Appropriations for the National Science Foundation

Mr. Chair and members of the Subcommittee, I am Diane Lipscombe, President of the Society for Neuroscience (SfN), and it is my honor to present this testimony on behalf of SfN in support of increased funding for the National Science Foundation (NSF), to \$9 billion, for FY20. I am offering this testimony in my capacity as President of SfN, now entering its 50th year, an association of nearly 37,000 neuroscientists from all 50 states and around the world. Our members stand with the broader scientific community in requesting increased funding for NSF in FY20, which will advance understanding of basic brain functions, enable the development of new technologies to study brain function, and catalyze yet unimagined discoveries in neuroscience research. Moreover, SfN urges Congress to provide relief from the draconian cuts set to take effect as a result of the Budget Control Act (BCA). By raising the caps directed by the BCA, Congress can ensure that we do not backslide on previous support for scientific research and discoveries. We also urge the Committee to complete their appropriations work in advance of the September 30 deadline to provide predictability and stability to scientists relying on federal funding to support their work.

As a neuroscience researcher and Director of The Carney Institute for Brain Science at Brown University, I see the impact of federal funding for neuroscience research daily. For example, at Brown University, we are developing new approaches to the brain machine interface, which could dramatically improve the quality of life of individuals who depend on prosthetic devices or who may have restricted mobility, such as paralysis resulting from a stroke or traumatic brain injury. The success of this technically-demanding research, depends on the combined skills of neuroscientists, computer scientists, engineers, neurologists, neurosurgeons and mathematicians, and other disciplines to help those impacted regain movement and independence using brain-controlled technology. Collaboration across scientific disciplines continues to advance new research involving computational neuroscientists, cognitive neuroscientists, and data scientists in the Carney Institute for Brain Science at Brown. This collaboration develops new mathematical approaches for extracting content rich information from large data sets of human brain activity. Computational tools are now essential to neuroscience research as we study massive datasets resulting from the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, including those that map the millions of connections between neurons and enable us to understand high level brain function.

NSF funded research has contributed significantly to transformative scientific discoveries. Notably, since 1952, 217 Nobel Prize recipients were recipients of NSF funding. NSF provides the investments needed in basic science to bring about the next breakthroughs in technology, health, and education toward improved well-being for all Americans. Increasing the NSF budget is thus critical to the continued ability of researchers to make impactful scientific advancements, speed innovative research, and allow for the development of powerful tools to advance our understanding of brain function. As we age, the incidence of brain disease grows at a frightening rate and we must double down on our collective efforts to diagnose and treat them.

Successful, impactful neuroscience research requires collaboration across disciplines and an unbroken series of funding streams, and NSF-funded research allows for some of our most significant scientific achievements. As we take on more and more challenging research problems, for example: “why do neurons die too soon in one in three of people over the age of 65?”, we are increasingly dependent on new tools to help us examine aging human brains without causing damage. These endeavors depend on support from the federal government—in fact, 27% of the federal budget for basic science is funded by NSF. NSF funding is critical for stimulating new ideas and tools to study the human brain, the most “complex biological structure on Earth”¹, in both normal and diseased patients

As the Subcommittee continues its work for FY20, we ask that Congress ensure that final FY20 funding is approved before the end of FY19. Reliance on Continuing Resolutions (CR) in place of regular appropriations has immediate and critical implications for scientists working in the neuroscience field. We are currently experiencing severe restrictions in the ability of NSF to fund the work of many basic young scientists of extraordinary potential. Even worse are government shutdowns, which pause all science being performed at affected agencies. The 35-day shutdown that occurred earlier this year caused a great deal of damage to NSF-funded projects, halting scientific discovery. There is no substitute for robust, sustained, and predictable funding for NSF-supported research.

The Committee’s support for NSF’s “Understanding the Brain” (UtB) initiative, which is part of the cross-agency BRAIN Initiative, is a critical piece of our nation’s neuroscience effort. Through the UtB initiative, NSF empowers researchers to study principles and processes underlying memories, thoughts, and complex behaviors. Federal investment into the BRAIN Initiative, including NSF funding, will enable the development of new tools and technologies needed to more deeply map brain functions for a plethora of therapeutic applications.

Advances in basic science will ultimately speed discoveries in clinical and translational research. Our discoveries, sometimes unexpected, advance basic knowledge of brain function and reveal new therapeutic targets to treat brain disorders affecting millions of people around the world. Support for basic neuroscience research, including at NSF, is a critical function of the federal government in advancing the foundation for advancements in public and individual health, education, and workforce development. We are extremely encouraged by the pace of discovery in neuroscience and the promise it offers for future treatments of neurological disorders. Some recent, exciting advancements include the following:

The Impacts of Neuroscience Research

Regulation of neuronal communication

My research seeks to understand how neurons communicate with each other. Brain function is defined by neurons communicating information from cell to cell, and from one brain region to another. Communication between neurons is carried across spaces called synapses by neurotransmitters. The number of neurotransmitters available to transmit these signals is controlled by “gatekeepers,” which ensure appropriate size responses. Many therapeutic drugs used in the clinic act on these molecular gatekeepers to dial up or down the flow of

¹ https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=128239

communication in the brain. I describe the basic properties of gatekeepers and show how they are generated in specific neurons of the brain and nervous system. My work is basic in nature, but these findings inform the development of new therapeutics for treating major neurological diseases, including chronic pain, migraine, epilepsy, and neuropsychiatric disorders.

Research infrastructure to improve understanding of the brain

Improving our understanding of the brain requires a national research infrastructure, where partnerships can be leveraged towards advances in neuroscience. NSF's Next Generation Networks for Neuroscience (NeuroNex) program facilitates partnerships and develops innovative capabilities, including resources, theoretical frameworks, and computational modeling to advance neuroscience research. NSF support for NeuroNex aids in developing new conceptual tools for understanding how neuronal activity gives rise to behavior. In one of the NeuroNex awarded projects, a team of scientists, including myself and three others, are developing new light-emitting molecules—think of a fire fly—for use in studying and correcting abnormal brain activity. The neurotechnologies arising from NeuroNex National Hubs will provide approaches to record, visualize, and manipulate neuronal activity, facilitating diagnosis and treatment of abnormal brain function. An essential aspect of all NeuroNex awards are activities that support workforce training to ensure that we prepare the next generation of neuroscience researchers to use and improve on technologies for improving our understanding of the brain. NSF, therefore, makes a unique contribution to not only developing new technologies in neuroscience but also combining this with training neuroscientists—both are critical to ensure that scientific ideas are translated into technologies and advanced treatments for neuroscience.

Interdisciplinary approaches to neuroscience

Understanding how the human brain functions requires integrative research teams of the best scientists from a range of disciplines, including mathematics, engineering, and biology. NSF recognizes the power of this level of collaboration to advance research and has funded several interdisciplinary projects in neuroscience and cognitive science. One NSF funded project investigates how networks of neurons work together to perceive the world around us and produce coordinated muscle movements. This requires simultaneous, parallel recording of a massive number of brain regions for prolonged periods of time, followed by utilizing machine learning methods to extract meaningful information. This work, only possible through collaborations of neuroscientists with data scientists and computer scientists, has the potential to benefit individuals who have lost the ability to control their limb movement due to brain injury or disease. The ability to record from many individual regions of the brain is revolutionizing our ability to understand complex brain function, and the use of neural stimulation to correct abnormal brain activity is being refined. NSF is funding collaborations with mathematicians, engineers, and neuroscientists to incorporate smart, closed-loop feedback systems to improve therapeutic brain stimulation only when necessary for patients with limited ability to move their limbs, including Parkinson's disease patients and those suffering from chronic pain. In these exciting times for science, NSF is a critical front-line funder of these and many other cross disciplinary research collaborations.

Summary and Conclusion

NSF funding is critical for the future of biomedical research and for training the next generation of researchers, but it is also a major driver of the United States' economy. While our

nation is the global leader, other countries are also investing increasing amounts into biomedical research. Congress must continue to support basic research in order to fuel scientific discoveries, maintain our preeminence as a leader in the field, and continue to drive the United States economy into the future. Nearly one in five US adults live with mental illness, early childhood stress has lasting impacts through adulthood, and the growth of age-related neurological disorders is still increasing. The only way to change the trajectory of neurological and psychiatric disorders is to increase federal government investment in biomedical research.

For these reasons, the SfN urges the Subcommittee to appropriate no less than \$9 billion to NSF. Just as significantly as providing federal funds, we also implore you to complete your action on the FY20 appropriations bill on time, thus avoiding any need for a Continuing Resolution or any chance of a government shutdown, as we saw earlier this year.

On behalf of the Society for Neuroscience, we thank Congress for its support and look forward to working with you as you undertake your work on the FY20 appropriations process. SfN is here to be a resource for you, now and into the future, in order to ensure that basic research remains central to our economy and is supported by our nation's leaders.

**Written Testimony of James D. Ogsbury, Executive Director
Western Governors' Association**

**Submitted to the United States House of Representatives
Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
April 4, 2019**

Fiscal Year 2020 Appropriations

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee, the Western Governors' Association (WGA) appreciates the opportunity to comment on two items within the jurisdiction of the Subcommittee on Commerce, Justice, Science, and Related Agencies, both of which relate to the U.S. Department of Commerce. WGA is an independent organization representing the Governors of 19 western states and 3 U.S. territories in the Pacific. The Association is an instrument of the Governors for bipartisan policy development, information-sharing and collective action on issues of critical importance to the western United States.

Western Governors support adequate funding of the National Integrated Drought Information System (NIDIS) program under the National Oceanic and Atmospheric Administration (NOAA). We are well-acquainted with the significant environmental, economic, and social effects of drought on the West and its communities. The cyclical nature of drought conditions, as well as increased populations and their dependence on limited water resources, keep drought at the forefront of western water issues. Drought contributes to the incidence of forest and rangeland wildfire, impairs ecosystems and wildlife habitat, degrades agricultural productivity, and poses threats to municipal and industrial water supplies. A growing population creates challenges for water management across the West – from the Great Plains to the Intermountain West to the coastal, estuarine and marine environments of the Pacific states and islands. Planning for an adequate, reliable and clean water supply requires accurate and complete water and weather information.

NIDIS promotes a coordinated and integrated approach to managing future drought. This approach involves improved forecasting and monitoring which provides the kind of authoritative, objective and timely drought information that farmers, water managers, decision-makers, and local governments require for effective drought preparation and response. Through NIDIS, NOAA is building a network of early warning systems for drought while working with local resource managers to identify and address unique regional drought information needs.

Western Governors value the approach used to build and improve NIDIS. Rather than creating a new NIDIS bureaucracy, the system draws from existing capacity in states, universities and multiple federal agencies, as called for in the original authorizing legislation. Given our shared fiscal challenges, we regard this as a model for federal-state collaboration in shared information services.

Water users throughout the West – including farmers, ranchers, tribes, land managers, business owners, recreationalists, wildlife managers, and decision-makers at all levels of government –

must be able to assess the risks of drought before its onset in order to make informed decisions and implement effective mitigation measures. For these reasons, Western Governors request continued support and adequate funding of the National Weather Service Climate Prediction Center precipitation forecasts and the NIDIS program, as they perform a valuable role in western water management and drought response.

Western Governors also support adequate funding for the National Telecommunications and Information Administration (NTIA) to improve the accuracy and granularity of measuring broadband data coverage. Many western communities lack access to broadband internet due to the high cost of infrastructure and the low number of customers in potential service areas. This has left many rural businesses at a competitive disadvantage and citizens without access to telework, telemedicine and distance learning opportunities. Deployment of broadband infrastructure to these underserved and unserved communities requires an accurate picture of broadband availability nationwide. Unfortunately, broadband coverage is often overstated in rural western communities due to reporting measures based on census blocks. NTIA can provide a valuable service by improving our understanding of broadband infrastructure in rural communities. We also encourage coordination of data collection strategies among the Federal Communications Commission, U.S. Department of Agriculture and other agencies involved in broadband mapping and deployment.

Western Governors recognize the enormous challenge you have in balancing competing funding priorities, and we appreciate the difficulty of the decisions the Subcommittee must make. These recommendations are offered in a spirit of cooperation and respect, and WGA is prepared to assist you in discharging these critical and challenging responsibilities.

Kevin Washington
President and CEO
YMCA of the USA

**Testimony in Support of the Youth Mentoring Grant
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies**

Thank you, Chairman Serrano and Ranking Member Aderholt, for the opportunity to provide testimony on behalf of our nation's 2,700 YMCAs and the 9 million youth we serve annually. Every day, Ys work to address critical social issues that affect our nation's youth and limit their opportunities for success, and providing youth with positive role models and caring adults is essential to this work. That is why the Y is committed to mentoring. As President and CEO of YMCA of the USA (Y-USA), I believe that youth mentoring is an effective strategy to improve the long-term outcomes for our nation's youth, and I submit this testimony in support of the Youth Mentoring Program (Part G), administered by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) at the U.S. Department of Justice (DOJ).

The OJJDP Youth Mentoring Program is the only remaining federal grant exclusively dedicated to mentoring. This important funding stream provides grants to youth-serving organizations to fund quality mentoring programs, grounded in evidence-based research, to improve outcomes for at-risk and high-risk youth. Federal investments in mentoring programs have decreased significantly over time, and funding for the Youth Mentoring Program has been inconsistent and has not fully met the needs of at-risk youth. These fluctuations have had a direct impact on youth-serving organizations that use these funds to provide much-needed mentoring services in the communities they serve. I encourage the Committee to support increased funding for this program by providing \$120 million for Fiscal Year 2020.

Mentoring Programs Improve Youth Outcomes

There are significant returns on investment associated with quality mentoring relationships, not just for the youth served, but also their mentors and society at large as well. With a mentor, at-risk youth are 52% less likely than their peers to skip a day of school, 55% more likely to be enrolled in college and 78% more likely to volunteer regularly in their communities. Community-based mentoring programs are also an effective strategy to prevent youth involvement in the juvenile justice system and to redirect a young person away from harmful activities and behaviors. Given these outcomes, it's disheartening to know that an estimated 1 in 3 young people will grow up without a mentor.

At the Y, we believe that all kids deserve the opportunity to discover who they are and what they can achieve. Mentoring is, and always has been, a component of our youth development programming. Through mentoring, Ys provide youth with positive adult role models who support young people through their challenges and accomplishments; show them that they matter; and improve their self-esteem, decision-making skills, academic performance and interpersonal relationships. Quality mentoring programs help youth develop life and social skills,

improve their academic achievement, develop leadership skills, explore career paths and realize their full potential.

Evidence-Based Mentoring at the YMCA

With support from OJJDP's Youth Mentoring Program, the Y has been able to increase our impact in the lives of at-risk youth. Since 2013, Y-USA has received \$12 million from the Youth Mentoring Program, which we have sub-granted to YMCAs to support REACH & RISE®, the Y's evidence-based mentoring program. These funds have enabled the Y to scale REACH & RISE® nationally, serving thousands of young people who are at-risk of entering the juvenile justice system by helping them achieve positive academic and personal outcomes. Today, 36 Ys in 32 states offer this program.

REACH & RISE® serves youth ages 6-17 who lack role models and live in communities challenged by poverty, crime, substance misuse, gangs, single-parent households and other social issues. Developed in 1992 by the YMCA of San Francisco, REACH & RISE® is a therapeutic mentoring program that combines evidence-based practices, mental health approaches, rigorous mentor training and a mentee matching system to deliver positive life experiences for youth. Providing young people with positive, consistent and nurturing relationships with adults leads to personal growth and development, and social and economic opportunity.

The original REACH & RISE® model is a one-to-one mentoring program where Y staff with a mental health background match each youth with an adult for 12 to 18 months of mentoring. This experience improves youth's self-esteem, decision-making skills, school performance and interpersonal relationships. In 2016, the Y expanded our REACH & RISE® one-to-one model to also include small-group mentoring. Using a ratio of two mentors for every six youth, this approach provides youth with the opportunity to receive support from peers as well as dedicated mentors trained through the traditional REACH & RISE® curriculum. The group-mentoring program includes activities to help youth build trust with each other and skills such as problem-solving, communication and anger management.

The Impact of REACH & RISE®

Maverick Bishop is among the thousands of youth whose lives have been transformed by the OJJDP Youth Mentoring Program through REACH & RISE®. Maverick grew up in poverty, experiencing domestic violence and homelessness, and had a hard time fitting in at school. Eventually, he and his mother found the YMCA of San Francisco's REACH & RISE® program, where he was matched with a local businessman. "Having a good mentor helped me block out what I was going through on a day-to-day basis and just enjoy the little things that keep us going."

In 2016, Maverick testified before the House Democratic Steering and Policy Committee and shared his story. He concluded his testimony by stating:

"Every child deserves an opportunity to better themselves and earn their place as a contributing member in our society. Through my journey I made lifelong friendships and learned no matter what situation you're in, regardless of your past or what class you fall under, it doesn't define who you are as a person. Anyone can change, beat the odds

and manifest your own miracles! I hope the committee will open doors for more young people like myself through continued funding for important mentoring programs like the YMCA REACH & RISE® Mentoring Program.”

Today, Maverick is a journeyman carpenter, employed by his mentor and friend. Maverick’s story demonstrates the power of quality mentoring and the importance of federal funding in support of these programs.

With this testimony, I add the Y’s voice in support of this important funding stream, which has changed the trajectory of the lives of so many youth we serve. The Youth Mentoring Grant Program is essential, and I urge Congress to increase funding for it. Thank you for this opportunity. I welcome any questions you may have.

WITNESSES

	Page
Allen, W. R.....	366, 423
Ashe, Dan	299
Baron, Julianne	350
Barr, W. P	127
Barrasse, Judge Michael	383
Beinecke, Frances	370
Blaney, Nancy	287
Boesch, Don	370
Booker, Jozelle	291
Borrone, Lillian	370
Bridenstine, James	1
Brookhart, Sarah	295
Brown, Rebecca	362
Brown, Steven	291
Butler, Alan	341
Caldwell, Loretta	291
Carin, Nancy	291
Carlson, Bob	260
Chan, M. A	291
Clark, Delia	291
Crocker, D. T	267
Cunningham, Gary	291
Davis, Kermit	359
Davis, Virginia	386
Dehoney, Ellie	434
de la Melena, Gonzalo	291
Dicks, Hon. Norman	370
Dillingham, Steven	203
Dokken, Quenton	370
Donahue, Dr. Megan	256
Echo-Hawk, Abigail	437
Farrell, Stephanie	279
Fauci, Lisa	441
Fitzgerald, Caitriona	334
Fortenberry, Norman	279
Gagosian, Robert	370
Gelb, Anne	441
Gill, Marie	291
Goldenkoff, Robert	203
Goodman, Sherri	370
Gudes, Scott	370
Hill-Morgan, Sheila	291
Hirn, R. J	403

	Page
Jacobs, Neil	55
Johns, Dr. B. R	426
Kemp, S. C	359
Kennedy, D. F., Jr	430
Krinsky, B. H	347
Kromer, Kathi	274
Kushida, P. F	291
Lautenbacher, Hon. Conrad	370
Lawson, Dr. Christopher	252
Leinen, Margaret	370
Levine, F. J	264
Lipscombe, Diane	445
Lofthus, L. J	127
Loomis, Lorraine	415
Louissaint, Beatrice	291
Lubchenco, Hon. Jane	370
Marinos, Nicholas	203
McDermott, Patrice	357
Mineta, Hon. Norman	370
Mistrett, Marcy	311
Murdock, Sarah	407
Naus, W. A	318
Oggsbury, J. D	449
Packard, Julie	370
Panetta, Hon. Leon	370
Pappalardo, John	370
Parravano, Hon. Pietro	370
Perry, T. L	322
Poore, Terri	382
Posey, Margo	291
Ramos-Davidson, Cindy	291
Regas, Diane	370
Repass, Randy	370
Rosenberg, Andrew	370
Ross, Hon. Wilbur	83
Rotenberg, Marc	334
Ruckelshaus, Hon. William	370
Sandifer, Paul	370
Sarri, K. J	398
Saunders, Don	394
Scott, Jeramie	337
Shapiro, David	374
Shonfield, Rachel	390
Shultz, Lexie	270
Smith Kevin	203
Spring, Margaret	378
Taylor, P. E	291
Thomas, Demi	326
Todd Whitman, Hon. Christine	370
Vitka, Sean	330
Washington, Kevin	451
Watters, Jeff	419
Weismann, Anne	307
White, Kasey	353
White, RADM Jonathan (Ret.)	314

	Page
Woolley, Mary	434
Wray, Christopher	101