

# **Federal Communications Commission**



**Fiscal Year 2020**  
**Budget In Brief**  
**March 2019**

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# **INTRODUCTION AND SUMMARY OF REQUEST**

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## INTRODUCTION AND SUMMARY OF REQUEST

The Federal Communications Commission (FCC or Commission) is pleased to present its fiscal year (FY) 2020 budget request.

The FCC is an independent regulatory agency of the United States Government. The FCC is charged with regulating interstate and international communications by radio, television, wire, satellite, and cable. The Commission also regulates telecommunications and advanced communication services and video programming for people with disabilities, as set forth in various sections of the Communications Act.

As specified in section 1 of the Communications Act of 1934, as amended, the FCC's mission is to "make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges."<sup>1</sup> In addition, section 1 provides that the Commission was created "for the purpose of the national defense" and "for the purpose of promoting safety of life and property through the use of wire and radio communications."<sup>2</sup>

The FCC is directed by five Commissioners appointed by the President and confirmed by the Senate for five-year terms, except when filling the unexpired term of a previous Commissioner. Only three Commissioners can be from the same political party at any given time. The President designates one of the Commissioners to serve as Chairman.

The FCC's vision is to develop a regulatory environment to encourage the private sector to build, maintain, and upgrade next-generation networks so that the benefits of advanced communications services are available to all Americans. The FCC will work to foster a competitive, dynamic and innovative market for communications services through policies that promote the introduction of new technologies and services and ensure that Commission actions promote entrepreneurship and remove barriers to entry and investment. The Commission will also strive to develop policies that promote the public interest, improve the quality of communications services available to those with disabilities, and protect public safety. Furthermore, in FY 2020, the FCC will continue to implement its Agency Reform Plan to deliver on the needs of today and the future in a more proactive and efficient manner. Through these reform efforts, the Commission will develop and implement reforms that focus the Commission on effectively and efficiently leveraging human capital to deliver on programs that are the highest need to citizens and where there is a unique Federal role.

For FY 2020, the Commission is requesting the budget and personnel amounts that are summarized in the bullets and a table below:

- The Commission requests \$335,660,000 in budget authority from regulatory fee offsetting collections. The requested budget level recommended by the Office of Management and Budget (OMB) of \$335,660,000 for FY 2020 is \$3,950,000 less than the Congressionally

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<sup>1</sup> 47 U.S.C. § 151.

<sup>2</sup> *Id.*

authorized budget level of \$339,610,000 included in the 2018 FCC Reauthorization in Section 101, Title I, Division P of Public Law 115-141, Consolidated Appropriations Act, 2018. Also, the OMB recommended request level for FY 2020 of \$335,660,000 represents a decrease of \$3,340,000 or about 1.0 percent from the FY 2019 appropriated level of \$339,000,000.

Prior to the passage of the Consolidated Appropriations Act, 2019, Public Law 116-6, on February 15, 2019, OMB approved up to \$9.141 million in one-time IT investments for the Commission in FY 2020.

- The Commission requests \$132,538,680 in budget authority for the spectrum auctions program. For FY 2019, the Congress appropriated a cap of \$130,284,000 for the spectrum auctions program, which included additional funds to implement the requirements of the RAY BAUM'S Act of 2018 (2018 Act) that mandated significant additional work for the FCC related to the TV Broadcaster Relocation Fund (TVBRF). The Commission's FY 2020 budget authority request of \$132,538,680 is an increase of \$2,254,680 or 1.7 percent, which represents only non-salary inflationary increases. This level of funding will enable the Commission to continue its efforts to: reimburse full power and Class A stations, multichannel video programming distributors (MVPDs), Low Power TV (LPTV), TV translator, and FM stations for reasonable costs incurred as a result of the Commission's incentive auction; make more spectrum available for 5G; and educate consumers affected by the reorganization of broadcast television spectrum. To date, the Commission's spectrum auctions program has generated over \$114.6 billion for government use; at the same time, the total cost of the auctions program has been less than \$2.0 billion or less than 1.7 percent of the total auctions' revenue.
- In creating a lean, accountable, more efficient Commission that works for the American people, the Commission requests 1,448 Full Time Equivalents (FTEs) funded by budget authority from both regulatory fee offsetting collections and the spectrum auctions program. This FTE level is the same as the level enacted by the FCC for FY 2019. With this FTE level, the Commission will continue to meet its mission demands in FY 2020.



(Dollars in Thousands)

	FY 2019		FY 2020		Change in Request	
	FTEs <sup>1</sup>	Enacted	FTEs <sup>1</sup>	Congressional Request	FTEs <sup>1</sup>	Amount
<b>FY 2020 Congressionally authorized budget level included in the 2018 FCC Reauthorization<sup>2</sup></b>				<b>\$339,610</b>		<b>-\$3,950</b>
<b>Budget Authority - Offsetting Collections:</b>						
Regulatory Fees - Commission	1,388	\$327,936	1,388	\$324,554	0	-\$3,382
Regulatory Fees - Office of Inspector General (OIG)	60	\$11,064	60	\$11,106	0	\$42
<b>Subtotal - Offsetting Collections</b>	<b>1,448</b>	<b>\$339,000</b>	<b>1,448</b>	<b>\$335,660</b>	<b>0</b>	<b>-\$3,340</b>
<b>Budget Authority - Other Offsetting Collections:</b>						
Economy Act Reimbursable Agreements		\$4,000		\$4,000		\$0
Auction Cost Recovery Reimbursement - Commission		\$130,139		\$132,391		\$2,252
Auction Cost Recovery Reimbursement - OIG		\$145		\$148		\$3
<b>Subtotal - Other Offsetting Collections</b>		<b>\$134,284</b>		<b>\$136,539</b>		<b>\$2,255</b>
<b>Subtotal: Offsetting Collections</b>	<b>1,448</b>	<b>\$473,284</b>	<b>1,448</b>	<b>\$472,199</b>	<b>0</b>	<b>-\$1,085</b>
<b>Other Budget Authority:<sup>3</sup></b>						
Credit Program Account <sup>4</sup>		\$50		\$25		-\$25
Universal Service Fund Oversight - OIG		\$4,500		\$311		-\$4,189
<b>Subtotal: Other Budget Authority</b>		<b>\$4,550</b>		<b>\$336</b>		<b>-\$4,214</b>
<b>Total Gross Proposed Budget Authority</b>	<b>1,448</b>	<b>\$477,834</b>	<b>1,448</b>	<b>\$472,535</b>	<b>0</b>	<b>-\$5,299</b>

<sup>1</sup>The FTE numbers include auctions FTEs. Refer to page 16 for a breakdown of FTEs between non-auctions (Regulatory Fees) and auctions.

<sup>2</sup>Section 101, Title I, Division P of Public Law 115-141, Consolidated Appropriations Act, 2018. The reduced request amount for FY 2020 is the Office of Management of Budget (OMB) recommended level.

<sup>3</sup>The Middle Class Tax Relief and Job Creation Act of 2012 (2012 Act) mandated that the Commission reimburse reasonable channel relocation costs incurred by those qualified TV Broadcasters that will be affected by spectrum relocation. The 2012 Act also gave the Commission the authority to use \$1.75 billion from Incentive Auction revenues to reimburse TV Broadcasters for relocation costs. Additional authority totaling \$1 billion was provided to the Commission for this and for other purposes by the Consolidated Appropriations Act, 2018, Public Law 115-141. The TVBRF is capped at \$2.75 billion. This budget authority is not represented in the above schedule to provide a better historical comparison of the components of the FCC's regular budgetary requests. The Commission's budgetary authority related to the TVBRF is presented separately in the Appendices section.

<sup>4</sup>A permanent indefinite appropriation for credit reform that becomes available pursuant to a standing provision of law without further action by Congress.

In furtherance of these objectives and the FCC's mission, the FY 2020 budget request will be used to support the following Strategic Goals for FY 2020:

### Strategic Goal 1: Closing the Digital Divide

Develop a regulatory environment to encourage the private sector to build, maintain, and upgrade next-generation networks so that the benefits of advanced communications services are available to all Americans. Where the business case for infrastructure investment doesn't exist, employ effective and efficient means to facilitate deployment and access to affordable broadband in all areas of the country.

### Strategic Goal 2: Promoting Innovation

Foster a competitive, dynamic, and innovative market for communications services through

policies that promote the introduction of new technologies and services. Ensure that the FCC's actions and regulations reflect the realities of the current marketplace, promote entrepreneurship, expand economic opportunity, and remove barriers to entry and investment.

### **Strategic Goal 3: Protecting Consumers and Public Safety**

Develop policies that promote the public interest by providing consumers with freedom from unwanted and intrusive communications, improving the quality of communications services available to those with disabilities, and protecting public safety.

### **Strategic Goal 4: Reforming the FCC's Processes**

Modernize and streamline the FCC's operations and programs to increase transparency, improve decision-making, build consensus, reduce regulatory burdens, and simplify the public's interactions with the agency.

## **Additional Useful Information to Better Understand the Budget Request**

Below is some additional useful information for readers to better understand the information presented in the Commission's budget request:

- FY 2018 numbers presented are actual numbers.
- FY 2019 numbers presented are enacted numbers.
- There is no change in the total FTE level from the FCC's enacted FTE level for FY 2019 to the total requested FTE level for FY 2020.

## **Fiscal Year 2020 Proposed Appropriation Language**

For necessary expenses of the Federal Communications Commission, as authorized by law, including uniforms and allowances therefor, as authorized by 5 U.S.C. 5901–5902; not to exceed \$4,000 for official reception and representation expenses; purchase and hire of motor vehicles; special counsel fees; and services as authorized by 5 U.S.C. 3109, \$335,660,000, to remain available until expended: *Provided*, That \$335,660,000 of offsetting collections shall be assessed and collected pursuant to section 9 of title I of the Communications Act of 1934, shall be retained and used for necessary expenses and shall remain available until expended: *Provided further*, That the sum herein appropriated shall be reduced as such offsetting collections are received during fiscal year 2020 so as to result in a final fiscal year 2020 appropriation estimated at \$0: *Provided further*, That, notwithstanding 47 U.S.C. 309(j)(8)(B), proceeds from the use of a competitive bidding system that may be retained and made available for obligation shall not exceed \$132,538,680 for fiscal year 2020: *Provided further*, That, of the amount appropriated under this heading, not less than \$11,105,700 shall be for the salaries and expenses of the Office of Inspector General.

## **Legislative Proposals**

The Administration is proposing legislative changes in the President's FY 2020 Budget that pertain to the FCC. These proposals are designed to improve spectrum management and represent sound economic policy.

### **Spectrum License Fee Authority**

To promote efficient use of the electromagnetic spectrum, the Administration proposes to provide the FCC with new authority to use other economic mechanisms, such as fees, as a spectrum management tool. The FCC would be authorized to set user fees on unauctioned commercial spectrum licenses based on spectrum-management principles. Fees would be phased in over time as part of an ongoing rulemaking process to determine the appropriate application and level for fees. Fee collections are estimated to begin in 2020 and total \$4.0 billion through 2029.

### **Spectrum Auctions**

The Spectrum Pipeline Act of 2015 requires 30 MHz of spectrum to be reallocated from Federal use to non-Federal use or shared Federal and non-Federal use, or a combination thereof; requires the FCC to auction this spectrum by 2024; and extends the FCC's auction authority only to allow auction of this spectrum. To facilitate this, the Act also authorizes the use of funds from the Spectrum Relocation Fund for research and development and planning activities by Federal entities that are expected to increase the probability of relocation from or sharing of Federal spectrum and that meet other requirements. The Budget proposes to require the auction of additional spectrum by 2029 and further extend the FCC's auction authority solely to allow this auction to proceed. Auction proceeds are expected to reach \$6.0 billion through 2029.

### **Auction or Assign via Fee 1675-1680 Megahertz**

The Budget proposes that the FCC either auction or use fee authority to assign spectrum frequencies between 1675-1680 megahertz for flexible use by 2020, subject to sharing arrangements with Federal weather satellites. Currently, the spectrum is being used for radiosondes (weather balloons), weather satellite downlinks, and data broadcasts, and the band will also support future weather satellite operations. The National Oceanic and Atmospheric Administration (NOAA) began transitioning radiosondes operations out of the band in 2016 as part of the Advanced Wireless Services 3 (AWS-3) relocation process. If this proposal is enacted, NOAA would establish limited protection zones for the remaining weather satellite downlinks and develop alternative data broadcast systems for users of its data products. Without this proposal, these frequencies are unlikely to be auctioned and repurposed to commercial use. The proposal is expected to raise \$600 million in receipts over 10 years.

## Summary of FYs 2018 - 2020 FTEs and Funding by Bureaus and Offices

(Dollars in Thousands)

Bureaus and Offices	FY 2018		FY 2019 <sup>2</sup>		FY 2020	
	FTEs <sup>1</sup>	Actuals	FTEs <sup>1</sup>	Enacted	FTEs <sup>1</sup>	Congressional Request
Chairman and Commissioners	21	\$4,353	20	\$4,433	20	\$4,487
Consumer & Government Affairs Bureau	118	\$21,195	118	\$22,021	118	\$22,266
Enforcement Bureau	184	\$37,685	191	\$38,116	194	\$39,168
International Bureau	94	\$18,240	85	\$16,949	82	\$16,458
Media Bureau	153	\$23,441	138	\$21,663	133	\$20,840
Public Safety & Homeland Security Bureau	96	\$18,647	97	\$19,423	97	\$19,631
Wireless Telecommunications Bureau	187	\$16,238	164	\$14,512	153	\$13,732
Wireline Competition Bureau	167	\$32,285	139	\$27,487	132	\$26,421
Office of Administrative Law Judges	4	\$532	4	\$552	4	\$557
Office of Communications Business Opportunities	8	\$1,522	7	\$1,407	7	\$1,423
Office of Economics and Analytics <sup>3</sup>	0	\$0	74	\$11,644	97	\$14,985
Office of Engineering & Technology	73	\$14,972	73	\$15,052	73	\$15,216
Office of General Counsel	71	\$14,800	68	\$14,359	68	\$14,510
Office of Legislative Affairs	9	\$1,753	8	\$1,626	8	\$1,643
Office of Managing Director	190	\$96,390	184	\$115,252	184	\$109,739
Office of Media Relations	13	\$2,503	11	\$2,410	11	\$2,438
Office of Strategic Planning & Policy Analysis	14	\$2,594	0	\$0	0	\$0
Office of Workplace Diversity	7	\$989	7	\$1,029	7	\$1,040
<b>Subtotal</b>	<b>1,409</b>	<b>\$308,139</b>	<b>1,388</b>	<b>\$327,936</b>	<b>1,388</b>	<b>\$324,554</b>
Office of Inspector General	49	\$8,236	60	\$11,064	60	\$11,106
<b>TOTAL</b>	<b>1,458</b>	<b>\$316,375</b>	<b>1,448</b>	<b>\$339,000</b>	<b>1,448</b>	<b>\$335,660</b>

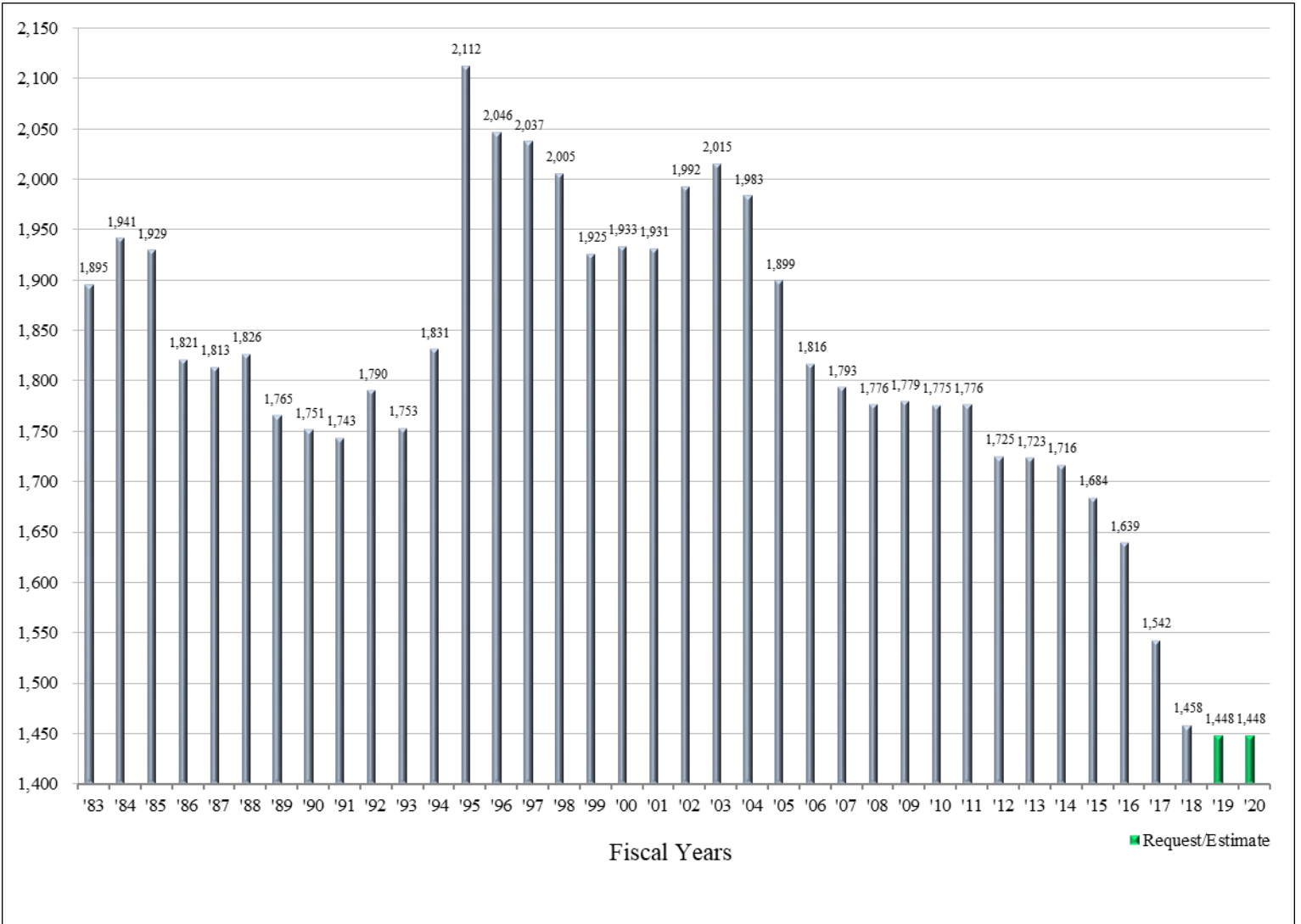
<sup>1</sup>The FTE numbers include the spectrum auctions program FTEs.

<sup>2</sup>For FY 2019, the amounts shown reflect the transfer of existing resources to implement a reorganization to establish the new Office of Economics and Analytics (OEA) and the reorganization of Equal Employment Opportunity (EEO) work from MB to EB. See Agency Reform Plan section for additional details.

<sup>3</sup>The FTE number for FY 2019 represents only three quarters of the fiscal year since OEA was officially created in December 2018, whereas the FTE number for FY 2020 represents the entire four quarters of the fiscal year. The existing FTEs from WTB, WCB, MB, IB, PSHSB, and OSP were transferred to OEA in creating the OEA.

The Commission is responsible for the overall management, oversight, and administration of the Universal Service Fund (USF), including all USF policy decisions. All USF related activities are currently funded by regulatory fees. The Universal Service Fund Activities and Costs section on pages 19 through 22 provides more details related to the Commission's USF activities and related costs.

## FTEs - Historical and Estimated Fiscal Years 1983 – 2020



## Summary of Changes - Regulatory Fees (Offsetting Collections)

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Congressional Request	TOTAL NET CHANGE	
			Amount	Percent
<b>Regulatory Fees - Offsetting Collections:</b>				
Commission	\$327,936	\$324,554	-\$3,382	
Office of Inspector General (OIG)	\$11,064	\$11,106	\$42	
<b>Total Spending Authority - Offsetting Collections</b>	<b>\$339,000</b>	<b>\$335,660</b>	<b>-\$3,340</b>	<b>-1.0%</b>
Full-Time Equivalents (FTEs) - Commission <sup>1</sup>	1,388	1,388	0	
FTEs - Office of Inspector General	60	60	0	
<b>Total Full-Time Equivalents</b>	<b>1,448</b>	<b>1,448</b>	<b>0</b>	<b>0.0%</b>
<b>Explanation of Changes</b>				
<b>FY 2019 Appropriated - Regulatory Fees (Offsetting Collections)</b>			<b>\$339,000</b>	
<b>Reversal of FY 2019 One-Time Investments:</b>				
IT - Cloud Services and <u>Systems</u> Modernization		-\$4,619		
IT - Cloud Services and <u>Applications</u> Modernization		-\$3,666		
IT - Public Safety Answering Points (PSAP) - Do Not Call Registry		-\$250		
<b>Subtotal</b>		<b>-\$8,535</b>		
<b>FY 2020 Base</b>			<b>\$330,465</b>	
<b>FY 2020 Non-Salary Inflationary Increase to Base:<sup>2</sup></b>				
Commission		\$1,961		
Office of Inspector General		\$42		
<b>Subtotal - FY 2020 Non-Salary Inflationary Increase to Base</b>		<b>\$2,003</b>		
<b>FY 2020 Adjusted Base Before One-Time Investment Requests</b>			<b>\$332,468</b>	
<b>FY 2020 - One-Time New Investment Requests:</b>				
IT - Cloud Services and <u>Systems</u> Modernization		\$926		
IT - Cloud Services and <u>Applications</u> Modernization		\$2,266		
<b>Subtotal - FY 2020 One-Time New Investment Requests</b>		<b>\$3,192</b>		
<b>FY 2020 Total Request - Regulatory Fees (Offsetting Collections)</b>			<b>\$335,660</b>	
<b>TOTAL NET CHANGE</b>			<b>-\$3,340</b>	<b>-1.0%</b>

<sup>1</sup>Includes spectrum auctions program FTEs.

<sup>2</sup>Utilized an estimated inflationary rate of 2.0%.

## **Narrative Explanation of Changes - Salaries and Expenses - Regulatory Fees**

### **Non-Salaries Inflationary Increase to Base: (\$2,003,000)**

1. **Non-Salary Inflationary Increase** – The request of \$2,003,000 provides expected inflationary increases for space rentals (GSA and non-GSA facilities), phones, utilities, printing and reproduction services, contractual services, supplies, travel, training, and other expenses. The total non-salary increase includes related increases for the Office of Inspector General (OIG), which total \$41,700. This increase is developed using an estimated inflationary rate of two percent.
2. **Personnel Compensation and Benefits** – Pursuant to OMB’s guidance, the request does not include any increase for personnel compensation and benefits (salary increase), which is estimated to be \$4,519,000. As a result, the Commission will absorb the salary increase of \$4,519,000 in FY 2020 out of the Commission’s base budget. This amount also includes the OIG’s total salary increase, which would be \$179,900.

### **FY 2020 New Investments – One-Time Requests: (\$3,192,000)**

Prior to the passage of the Consolidated Appropriations Act, 2019, Public Law 116-6, on February 15, 2019, OMB approved up to \$9.141 million in one-time IT investments for the Commission in FY 2020.

#### **1. Information Technology (IT) Modernization & Implementation – One-Time Requests (\$3,192,000)**

The Commission has made tremendous strides in modernizing its IT infrastructure and legacy dependent applications to better meet its mission as mandated by Congress; however, many of the Commission’s systems and applications are still relying on outdated legacy technologies and aging physical infrastructure. Many of the technologies these systems and applications are built on are no longer supported by vendors, leaving the requisite skillsets and expertise to operate and maintain this outdated technology both difficult to find and costly. Furthermore, the highly-customized nature of these systems and applications makes any necessary enhancements expensive, cumbersome, slow to implement, and resource-intensive, resulting in a high total cost of ownership. Continued use of IT systems and applications built on outdated technology also significantly increases cybersecurity risks and increases risks to the FCC’s ability to deliver on its mission in a timely manner.

Since FY 2014, the Commission has modernized several of its outdated legacy-based systems, including the following systems most recently: Electronic Document Management System (EDOCS), Reimbursable Funds Administrator System (RFAS), Universal Licensing System (ULS) Auctions Hotline, Fixed Satellite Services, and 3650 MHz Licensing. These modernization successes have resulted in a dramatic technology shift that has allowed the Commission to move away from on premises and custom developed systems to cloud-based platform solutions. These modernization efforts also have been successful in empowering the Commission by employing modern technology solutions to transform outdated legacy-based applications into more resilient, secure, and highly available cloud-based applications.



Building on these successes, the momentum of IT modernization should continue to better meet the Commission’s mission needs. By continuing to modernize and/or migrate outdated technology-based systems and applications to cloud-based environments, the Commission will reduce its operation and maintenance (O&M) costs, reduce time and resources required to make application changes and enhancements, and provide the ability to scale to meet increased demand loads such as public filing surges. In addition, security vulnerabilities that currently exist in these outdated systems will largely be eliminated as they are moved to modern cloud-based technology platforms.

Other key benefits of modernizing and/or moving outdated technology-based systems and applications to modern cloud-based technologies include:

- Reuse of enterprise services and solutions to reduce development and maintenance costs;
- Improved cycle time for system enhancements or changes required to keep pace with the Commission’s rules and industry needs by leveraging Platform as a Service (PaaS) and Software as a Service (SaaS) capabilities;
- Quickly adapting to changing network requirements;
- Reducing the Commission’s dependence on physical desktops with potential reduction in hardware, software licensing, and support costs;
- Creation of core enterprise services to reduce development time and O&M costs for future data collection efforts; and
- Ability to scale application capacity up or down to balance demand and cost factors.

To realize these benefits, the Commission requests new one-time funding for the following:

**a. Cloud Services and “System” Modernization (\$926,000)**

By modernizing and migrating outdated legacy-based systems and/or manual operations listed below to a cloud-based environment, the Commission expects to save approximately \$201,000 per year in database administration, O&M support, infrastructure costs, developer support, management cost, and desktop infrastructure.

- International High Frequency (IHF) Coordination System: IHF is used by the International Bureau (IB) to conduct frequency propagation analysis to identify potential interference/channel conflicts on a seasonal basis. Based on this analysis, IB authorizes the use of High Frequency bands on a non-interference basis. Visual Basic 6.0 (VB6) is the programming language that was used to develop the IHF application. Microsoft is no longer supporting this programming language. As a result, the system lacks support for hotfixes, patches, and security vulnerabilities that may be found within the application.
- Wide Area Network (WAN) Modernization: This request is for the replacement of critical routers and switches that are unsupported and at the end of their life. Replacing this equipment allows consistent and reliable access for FCC users to access the WAN. The WAN is the access point of entry for all users accessing FCC resources such as cloud, VDI, and e-mail services.

**b. Cloud Services and “Application” Modernization (\$2,266,000)**

By modernizing the outdated technology-based application listed below and/or moving it to a cloud-hosted environment, the Commission expects to save approximately \$301,750 per year in database administration, O&M support, developer support, and infrastructure costs.

- Security as a Service (SECaaS): Will deliver subscription-based security services into the FCC infrastructure and reduce costs by eliminating the high initial acquisition costs for security appliances and FCC hosted tools. These security services may include authentication, anti-virus, anti-malware/spyware, intrusion detection, and security event management. This service expands the current environment’s capabilities by moving the remaining on-premises security services to the cloud.

**Agency Reform Plan**

*Plan to Maximize Employee Performance under OMB Memo - 17-22, Comprehensive Plan for Reforming the Federal Government and Reducing the Federal Civilian Workforce.*

The Commission implemented a plan to maximize employee performance and design a workforce to meet current and future needs. The Commission undertook a comprehensive and on-going effort to:

- Review and update formal agency policy.
- Provide transparency around the performance improvement plan process.
- Ensure managers and supporting human resources staff are appropriately trained.
- Ensure accountability in manager performance plans and establish real-time manager support mechanisms.

The FCC’s plan supports managers and supervisors in managing employee performance and addressing conduct and performance issues. In doing so, the Commission:

- Reviewed steps for addressing poor performance and limits the use of administrative leave.
- Ensures clear guidance is provided on the use of performance improvement plans (PIPs) and maintains data on PIPs, including the number of employees placed on them and the number who successfully improve performance.
- Strengthened training on employee relations, performance and conduct for supervisors and managers.
- Automated the performance management system and provided clear guidance to enhance accountability within the FCC’s pass/fail and supervisory performance plans.
- Ensured that the Labor and Employee Relations team is adequately staffed to provide prompt and expert guidance and support and develop templates to facilitate the taking of action for performance and/or conduct based issues.

### Workforce Actions

The Commission identified and implemented actions to consolidate support functions, reduce costs and increase efficiency in the provision of Human Resources and administrative services across the agency. In FY 2018 the Commission offered a voluntary early retirement authority (VERA) to all staff, as well as VERA and voluntary separation incentive payments (VSIP) for certain staff, and 19 staff took these offers. We are offering VERA and VSIP to administrative staff again in FY 2019, and expanding the offer to include additional occupations in FY 2019 and FY 2020. These Workforce Actions are intended to identify cost savings and reduce administrative and other staff that are duplicative and redirect resources to other mission critical areas.

### High Level Agency Reform Plan

The FCC announced the creation of an Office of Economics and Analytics to coordinate the contributions of economists and data professionals from around the FCC and better incorporate their analysis into the FCC's policymaking process. By ensuring that economic analysis is incorporated into policy work throughout the decision-making process, including the earliest stages, the Commission will ensure that it assesses the costs and benefits of its proposed actions and is able to establish a mechanism to measure the ongoing effectiveness of adopted approaches. The new Office will be charged with conducting Regulatory Impact Analysis and informing FCC policy making as well as undertaking long-term research on emerging market conditions and advances in communications technology, including implications for innovation and effects on the economy. The new Office will streamline the FCC's information collection procedures and uses of data and identify duplicative collections, thus substantially reducing financial and human capital burdens associated with unnecessary collections. We entered into a Memorandum of Understanding with the union, received the necessary Congressional approvals, and established the Office officially on December 7, 2018, when the reorganization was published in the Federal Register.

The Commission has also approved the transfer of the audit and enforcement responsibilities associated with its Equal Employment Opportunity (EEO) rules from the Media Bureau Policy Division to the Enforcement Bureau Investigations and Hearings Division. Shifting the EEO team to the Enforcement Bureau will improve operations and result in more effective enforcement of the Commission's EEO rules. The key objectives of this organizational change are to more efficiently deploy Commission audit and enforcement resources, enhance industry-wide oversight of compliance with EEO rules, improve cross-Commission consistency in audit-based enforcement, and rationalize and modernize our organizational structure. We received Congressional approvals and completed the reorganization on March 15, 2019, when the reorganization was published in the Federal Register.

The Commission voted to create a Fraud Division within the Enforcement Bureau, comprised of existing staff, that will be dedicated to taking enforcement actions against fraud in the USF and other funding programs that the Commission oversees. The Fraud Division will work cooperatively with other law enforcement entities, including the Office of Inspector General, where appropriate. The Fraud Division will consist of the individuals who presently focus on fraud cases. Establishing this division will capitalize on and enhance the Commission's expertise in rooting out fraud in programs over which the Commission has jurisdiction. We are currently

discussing with the union the impact and implementation of this new division within the Enforcement Bureau.

## **Office of Inspector General Narrative**

The Office of the Inspector General's (OIG or the Office) workload continues to increase in all mission-critical areas. The Office keeps focus on increasing mission responsibilities and ensuring appropriate staff levels to keep pace with the workload. OIG has increased its Full-Time Equivalent (FTE) staff over the past few budget years and this recruitment effort has permitted the Office to engage in a greater number of, and more complex, audits and investigations. We anticipate further growth in the coming year. We hope to hire two junior-level 1811 criminal investigators to begin a program of pro-active investigations into E-Rate and Lifeline providers and recipients. In addition, to expand our data analytics capabilities, we intend to hire a second data analyst. Three senior level audit positions are vacant, and we plan to fill those positions during the current budget cycle. Regardless, we are continually mindful of budget restraints and attempt, to the best of our ability, to gauge the relative merits of any audit and investigation prior to expending valuable resources.

The OIG FY 2020 budget request of \$11,105,700 reflects a \$41,700 increase over the FY 2019 enacted level of \$11,064,000. The increase is wholly attributable to a non-salary inflationary increase of 2 percent.

OIG Office of Audit (OA) conducts or contracts for the performance of independent and objective audits, inspections, evaluations and related projects, designed to promote economy, effectiveness and efficiency in FCC programs and operations, and to prevent and detect fraud, waste and abuse. OA has completed 10 projects in FY 2018, and an additional 7 projects are in process at the end of the FY. OA plans to complete more than 50 audits, inspections and evaluations over the next five years, not including any unforeseen Congressional requests or special projects.

OIG Office of Investigation (OI) matters cover a wide range of topics touching on myriad aspects of the FCC's mission and programs. Most significantly, our investigations often address allegations of criminal misconduct or civil fraud in the Commission's Universal Service programs. We deal with complex investigations, large criminal conspiracies, and matters involving complex financial transactions throughout the United States and its territories. As of September 30, 2018, OI had 71 open cases. Working with the Department of Justice, in recent years, OI and has recovered many tens of millions of dollars of government funds and saved the government hundreds of millions of additional dollars, resulting from criminal and civil fraud cases that have been successfully prosecuted or settled.

In compliance with the IG Reform Act of 2008, this FCC OIG FY 2020 budget request includes:

- A fair share ratio in the amount of \$29,811 for contribution to the Council of the Inspectors General on Integrity and Efficiency (CIGIE),
- Funds to support IGSNet Management Services, and
- Training funds in the amount of \$85,000.

## **Universal Service Fund Activities and Costs**

The Commission is responsible for the overall management, oversight, and administration of the Universal Service Fund (USF), including all USF policy decisions. The Commission continues to work with the Universal Service Administrative Company (USAC), as administrator of the USF, to review its administrative expenses to find savings and also to review the effectiveness of its internal controls around USAC's spending, procurement, information technology, and personnel processes. For example, in response to the Chairman's concerns about cost overruns and schedule delays surrounding the implementation of information technology supporting the E-Rate program, USAC has implemented corrective actions and continues to make additional improvements. Furthermore, in response to investigations raising serious concerns about the Lifeline program's operations, the Chairman directed USAC to implement improvements to the management of the Lifeline program to mitigate the risks of fraud, waste, and abuse. USAC responded by applying corrective actions and has ongoing initiatives that will result in further improvements to the management of the Lifeline program. The descriptions below provide additional information about how various Commission Bureaus and Offices work together as the agency carries out its USF management and oversight responsibilities.

Office of Managing Director. The Office of Managing Director (OMD) is responsible for all USF management and administrative activities, including finance, accounting, procurement, information technology, and audits of beneficiaries and contributors. OMD provides instruction and oversight to USAC on these issues.

Wireline Competition Bureau. The Wireline Competition Bureau (WCB) oversees USF policy and provides guidance on the applicability and interpretation of the Commission's USF rules, orders, and directives to USAC and to stakeholders. WCB also is primarily responsible for USF rulemaking proceedings, appeals of USAC decisions, requests for waivers of the Commission's USF rules, petitions for USF declaratory rulings, interactions with the Federal-State Joint Board on Universal Service, and preparation and publication of USF information in the Universal Service Monitoring Report.

Wireless Telecommunications Bureau. The Wireless Telecommunications Bureau (WTB), in coordination with WCB, develops policy and procedures concerning the Mobility Fund, a universal service support mechanism dedicated exclusively to mobile services. WTB, in coordination with WCB, also oversees reverse auctions policy and implementation for distributing Mobility Fund and Connect America Fund universal service support.

Office of General Counsel. The Office of General Counsel (OGC) oversees issues relating to litigation and settlements and serves as the Commission's chief legal advisor, including on issues pertaining to USF matters. OGC is also the lead contact on issues relating to the treatment and potential disclosure of confidential information and of other nonpublic information as defined in the Commission's rules.

Enforcement Bureau. If USAC or a Commission Bureau or Office identifies a possible violation of the Communications Act or a Commission rule, order, or directive, the matter is referred to the Enforcement Bureau (EB) for possible investigation and administrative enforcement action, including issuing forfeitures. EB also pursues potential investigations of USF-related matters from other sources of information as well. In addition, EB is authorized to suspend and debar persons

from participating in the universal service mechanisms upon a criminal conviction of or civil judgment for fraud against a USF program.

Office of Inspector General. The Office of Inspector General (OIG) conducts audits, evaluations, and inspections of USF programs and operations, as well as program service providers and beneficiaries designed to prevent and detect fraud, waste, and abuse. These oversight activities and related initiatives help promote economy, effectiveness, and efficiency of the USF.

## **USF Activities**

In 2017 and 2018, the Commission has focused the USF on closing the digital divide. In early 2017, the Commission adopted rules for the Connect America Fund (CAF) Phase II auction, which aims to advance fixed voice and broadband service to unserved areas across the country. The auction was held in 2018, and on August 28, 2018, the Commission announced that there were 103 winning bidders in the auction, with the 10-year support amount totaling \$1.488 billion covering 713,176 locations in 45 states. Using an auction to allocate support for rural broadband is an efficient way to target limited resources where they are needed most.

Under Mobility Fund Phase II, the Commission's goal is to ensure that more Americans have access to advanced mobile services. In 2017, the FCC adopted, on a bipartisan basis, a plan to bring 4G LTE service to millions of rural Americans who currently do not have wireless service. The Commission established a budget of over \$4.5 billion over ten years to bring mobile broadband to unserved areas and preserve such service where it otherwise might not exist. This support will be distributed through a reverse auction, after a thorough process designed to determine which areas should be eligible for support.

Chairman Pai has formed a Rural Broadband Auctions Task Force, drawn from senior leaders across the agency, including OMD, WCB and WTB. The Task Force is overseeing both the Connect America Fund Phase II and Mobility Fund Phase II auctions.

In addition to these two auctions, the Commission also continues to work to close the digital divide through other initiatives focused on rural, high-cost areas. Specifically, in March 2018, the Commission adopted rules providing an additional \$500 million in funding to assist rate-of-return carriers in expanding broadband deployment in rural America and sought comment on reforms for rate-of-return carriers generally. In December 2018, the Commission continued those efforts by providing rate-of-return carriers with additional support in exchange for providing at least 25/3 Mbps service to rural homes and businesses, while combatting waste and seeking further comment on additional reforms. And in May 2018, the Commission established the Uniendo a Puerto Rico Fund ("Bringing Puerto Rico Together") and the Connect USVI Fund to make additional universal service support available to rebuild fixed and mobile voice and broadband networks damaged in the 2017 hurricane season.

In the E-Rate program, the Commission's goal is to help schools and libraries obtain affordable broadband. The Commission continues to oversee USAC's remediation of problems with its E-Rate application system that have negatively impacted the ability of schools and libraries to apply for and receive funding. The Commission also continues to ensure USAC's administration of this program is transparent and accountable.

Under the Rural Health Care Program, the Commission remains committed to facilitating healthcare delivery in rural and remote parts of America by providing funding for telecommunications and broadband services necessary for the provision of healthcare to eligible health care providers. In June 2018, the Commission increased the annual budget for the program by \$171 million and continues to consider overall reforms to improve the program.

In the Lifeline program, the Commission’s goals are to: (1) increase access to communication services, including broadband Internet, for low-income Americans; and (2) ensure fiscal responsibility and combat waste, fraud, and abuse so Lifeline USF dollars spent reach the consumers Lifeline was created to help. Actions to accomplish these goals include closing loopholes that let unscrupulous carriers exploit the Lifeline program. The Commission is overseeing USAC’s work to deploy the National Lifeline Eligibility Verifier (National Verifier) providing a unified interface that independently processes eligibility, verification, and recertification of subscribers. The National Verifier was fully launched in six states in November 2018 and will continue its staggered rollout for other states and territories in 2019.

In addition, the Commission is taking steps to explore the creation of an experimental “Connected Care Pilot Program” to support the delivery of advanced telehealth services to low-income Americans. Through a Notice of Inquiry, the Commission is currently gathering public feedback on creating this USF pilot program to promote the use of broadband-enabled telehealth services among low-income families and veterans, with a focus on services delivered directly to patients beyond the doors of brick-and-mortar health care facilities.

Finally, the Commission proposed rules in April 2018 to help protect the nation’s communications networks by prohibiting universal service spending on equipment and services from companies that pose national security threats. By asking for comments on how best to implement such a prohibition, the Commission is seeking to ensure that USF funds are not used in a way that can undermine our national security.

The chart below shows the projected costs that the Commission will incur in overseeing USF activities, which includes costs incurred by the OIG.

(Dollars in Thousands)

<b>Fiscal Years</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
<b>FCC's USF Activities Costs<sup>1</sup></b>	\$20,424	\$20,833	\$21,249
<b>Full-Time Equivalent (FTEs)</b>	104	104	104

<sup>1</sup>For FYs 2019 and 2020, the amounts shown are projections based on actual costs.

The chart below shows the number of Commission FTEs working on USF activities by bureau and office for FY 2018.

<b>Number of FCC FTEs Working On USF Activities By Bureau and Office</b>	<b>FTEs</b>
Wireline Competition Bureau	58
Wireless Telecommunications Bureau	20
Office of Inspector General	10
Enforcement Bureau	7
Office of the Managing Director	4
Office of General Counsel	4
Consumer and Government Affairs Bureau	1
<b>Total FTEs</b>	<b>104</b>

### **Crosswalk of USF Outlays to FCC Strategic Goals**

The Commission develops policies for the USF, and USAC collects and delivers funding through four programs -- Schools and Libraries (E-Rate), Rural Health Care, Lifeline, and High Cost -- focused on places where broadband and connectivity needs are critical. These programs serve people in rural, underserved, and difficult-to-reach areas.

In FY 2018, USF made outlays totaling almost \$10 billion. These outlays were allocated to the following FY 2018 strategic goals:

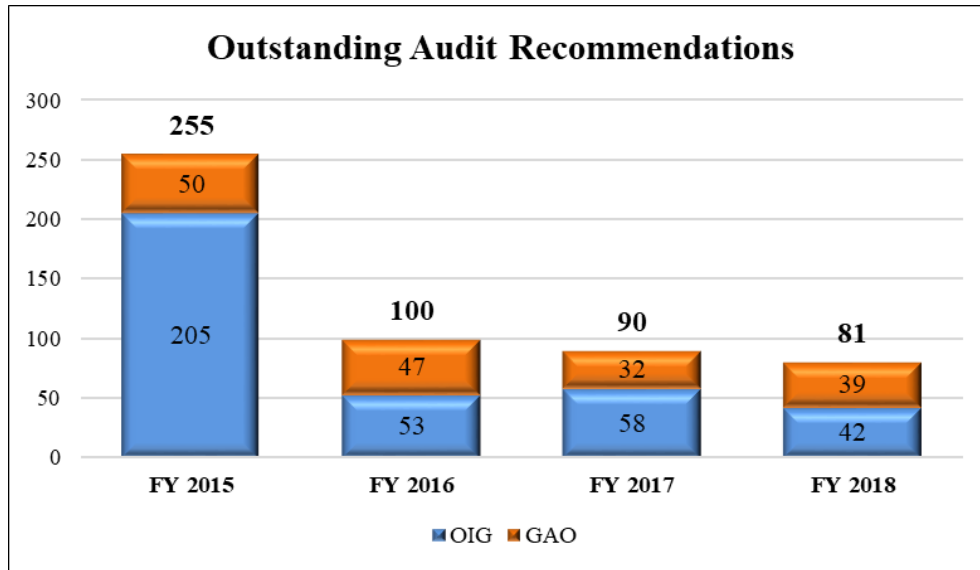
(Dollars in Millions)

<b>Applicable FY 2018 Strategic Goals</b>	<b>Outlay Amount</b>	<b>Percent</b>
Closing the Digital Divide	\$8,177	82.3%
Promoting Innovation	\$1,758	17.7%
<b>Total</b>	<b>\$9,935</b>	<b>100.0%</b>



## Overall Status of Audit Recommendations

The chart below shows the number of audit recommendations outstanding from various audits conducted by FCC's Office of Inspector General (OIG) and the Government Accountability Office (GAO). The numbers shown below exclude those recommendations for which the Commission has already submitted information to GAO and OIG requesting closure of the recommendation. The count also excludes those recommendations that the Commission has determined to close as not implemented.



## Status of FCC Headquarters Move

The Commission's headquarters (HQs) lease for the Portals II building at 445 12th Street SW, Washington, DC expired on October 15, 2017. In June 2018, GSA executed a lease extension for the HQs at the Portals II building that expires on November 30, 2020.

In 2015, Congress approved a prospectus for a replacement lease for a 15-year term that would reduce FCC headquarters square footage by approximately 30 percent and lower the overall rental expense. It is estimated that the move will provide up to \$119 million in total savings over the 15 years of the new lease. Subsequently, the GSA conducted a competitive lease procurement and awarded the contract to a new lessor. The new lease will require the Commission to move to a newly built facility in fiscal year 2020. The Commission's obligation to pay rent at the new headquarters building commences when the construction is substantially complete.

GSA estimated that the total cost for the headquarters move would be \$70,971,489. In FYs 2016 and 2017, as part of the Commission's budget request, the Commission requested a total amount of \$51,358,497 and \$19,612,992, respectively, from both regulatory fees and auctions program funds. Congress appropriated a total amount of \$68,225,489 from both regulatory fees and auctions program funds. As of September 30, 2018, the Commission has obligated approximately \$3.6 million of the total funds allocated for the headquarters move project.

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# **SPECTRUM AUCTIONS**

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## Spectrum Auctions Program - Explanation of Requested Change

The Federal Communications Commission requests \$132,538,680 for the Spectrum Auctions Program for FY 2020, as detailed below. This level of funding will enable the Commission to continue its efforts to: reimburse full power and Class A stations, multichannel video programming distributors (MVPDs), Low Power TV (LPTV), TV translator, and FM stations for reasonable relocation costs incurred because of the Commission’s incentive auction; make more spectrum available for 5G; and educate consumers affected by the reorganization of broadcast television spectrum.

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Congressional Request	TOTAL NET CHANGE	
			Amount	Percent
<b>Spectrum Auctions Program Cost Recovery</b>	\$130,284	\$132,539	\$2,255	1.7%
<b>Explanation of Changes</b>				
<b>FY 2019 Enacted FY 2020 Base - Spectrum Auctions Program</b>			<b>\$130,284</b>	
<b>FY 2020 - Adjustment To Base:</b>				
Non-Salary Inflationary Increase <sup>1</sup>				<u>\$2,255</u>
<b>FY 2020 Total Request - Spectrum Auctions Program</b>				<u><b>\$132,539</b></u>
<b>TOTAL NET CHANGE</b>				<b>\$2,255</b>

<sup>1</sup>Utilized an estimated inflationary rate of 2.0%.

## Spectrum Auctions Program

The Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, required the Commission to auction portions of the electromagnetic spectrum for certain services, replacing the former lottery process. The Act further requires the Commission to ensure that small businesses, women, minorities, and rural telephone companies have an opportunity to participate in the competitive bidding process. The Commission initiated regulations implementing the spectrum auction authority granted by the legislation and conducted its first round of auctions in July 1994.

As of September 30, 2018, the total amount collected for broader government use and deficit reduction since 1994 exceeds \$114.6 billion. The original spectrum auction authority was scheduled to expire in FY 1998; however, it was extended through FY 2007 in the Balanced Budget Act of 1997, P.L. 105-33; extended through FY 2011 by the Deficit Reduction Act of 2005, P.L. 109-171; extended through FY 2012 by the DTV Delay Act (2012), P.L. 111-4; and extended through FY 2022, by the Middle Class Tax Relief and Job Creation Act of 2012, P.L. 112-96. Furthermore, the Commission's authority to conduct auctions was further extended until September 30, 2025, in the Spectrum Pipeline Act of 2015 (included as Title X in the Bipartisan Budget Act of 2015, P.L. 114-74), with respect only to electromagnetic spectrum identified under section 1004(a) of that Act.

The Commission is authorized to retain funds from auction revenues to develop, implement, and maintain the auctions program. These funds cover the personnel and administrative costs required to plan and execute spectrum auctions; operational costs to manage installment payments and collections activities; development, implementation, and maintenance of all information technology systems necessary for auctions operations, including development of a combinatorial bidding system; and a proportional share of the general administrative costs of the Commission. This budget submission assumes that the auctions program will continue to recover the costs of conducting auction activities from spectrum license auction receipts as the Commission continues to use auctions as a licensing mechanism for spectrum-based communications services.

The Commission's initial proposed FY 2019 Appropriations language, which was provided to Congress in February 2018, capped the auctions program obligations at \$112.734 million. On March 23, 2018, the 2018 Consolidated Appropriations Act, which included the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018, (the "RAY BAUM'S Act"), Division P of Public Law 115-141, and the Reimbursement Expansion Act ("REA"), Pub. L. 115-141, Division E, Title V, § 511, 132 Stat. 348 (2018), was enacted. As a result of the REA, the Commission had to evaluate the need for additional funding necessary to implement the new statutory requirements, including the addition of new categories of television and FM radio stations to the universe of stations eligible for reimbursement from the TV Broadcaster Relocation Fund (TVBRF) for costs incurred due to the broadcast incentive auction (BIA). To cover these unforeseen costs, the Commission requested an increase of \$17.55 million in the auctions program cap for FY 2019 to \$130.284 million. The revised cap of \$130.284 million was appropriated and enacted for FY 2019.

The Commission request of \$132.539 million for FY 2020 includes only an uncontrollable non-payroll inflationary increase of about 2 percent, or \$2.255 million, from FY 2019 enacted level. Funding at this level will enable the Commission to continue substantial post-BIA work related to repacking and reimbursing broadcasters and multichannel video programming distributors (MVPDs) for their relocation costs to implement the results of the BIA, as well as expand that

program to include new requirements included in the REA as related to the universe of TV and radio stations eligible for reimbursement from the TVBRF; upgrade and improve its auctions program infrastructure in preparation for future auctions; conduct additional potential auctions to make spectrum available for next-generation wireless services; and continue implementing the Spectrum Pipeline Act of 2015 by, for example, taking the steps necessary to promote use of the 3.5 GHz band through auctions of certain licenses.

### *Broadcast Incentive Auction and Post-Broadcast Incentive Auction Transition Work*

In the Incentive Auction Closing and Channel Reassignment Public Notice, released on April 13, 2017, the Commission announced the completion of the first-ever spectrum incentive auction and publicly released the results of the reverse auction, the forward auction, the assignment phase, and the channel reassignments, for full power and Class A television stations that are required to change their TV channels during the 39-month relocation process that commenced as of the release of that Public Notice and that ends July 13, 2020. The licensing process for the winning bidders for new flexible-use wireless spectrum licenses also commenced with the release of that Public Notice.

After the post-auction transition is complete, the BIA will have made available 84 megahertz of low-band spectrum for commercial and unlicensed wireless use by repurposing a portion of the broadcast TV band. The total net winning bids of approximately \$19.3 billion from the auction placed it second among all Commission auctions in terms of the amount of total winning bids. The auction proceeds from winning bidders of new spectrum licenses were used, among other things, to pay winning broadcast bidders in the reverse auction and to fund the TVBRF with \$1.75 billion as directed in the Middle Class Tax Relief and Job Creation Act of 2012 to reimburse full power and Class A broadcast stations and MVPDs for their eligible expenses incurred as a result of broadcast stations being involuntarily relocated to new channels.

Determining that the TVBRF was likely to fall short of covering the costs of the post-BIA broadcast transition, Congress appropriated \$1 billion in additional funds for the TVBRF in the 2018 REA, increasing the total to \$2.75 billion from \$1.75 billion. The \$1 billion in new funding includes \$600 million in FY 2018 and \$400 million in FY 2019. The Act also expands the universe of entities eligible for reimbursement to cover costs reasonably incurred by displaced low power TV and TV translators stations (LPTV/translator stations) to relocate or modify their facilities, and by FM stations to reasonably minimize disruption of service due to the repacking process. For FY 2018, the REA provides for funding of not more than \$350 million to reimburse full power and Class A stations, not more than \$150 million for LPTV/translator stations, and not more than \$50 million for FM radio stations to reimburse such stations for their costs. The REA also provides \$50 million in FY 2018 funds for the Commission to use for consumer education relating to the reorganization of broadcast television. The REA includes no express delineation on the use of FY 2019 funds. In implementing the REA for the new universe of entities eligible for reimbursement in the *REA Report & Order* adopted March 15, 2019, the Commission determined that reimbursement of full power and Class A stations and MVPD would be prioritized over reimbursement of LPTV/translator, and FM stations. Although the REA did not expand the transition period ending July 13, 2020, for television stations to move to new channels, the act does permit the Commission to expand the reimbursement program until July 3, 2023, under certain circumstances.

Because of the complex nature of the post-BIA transition and the addition of new categories of broadcast stations eligible for reimbursement, the Commission will continue to engage in an unprecedented amount of post-auction activity. For example, the results of the BIA require 987 full-power and Class A broadcasters nationwide to relocate to create contiguous spectrum in the 600 MHz band that has been repurposed and auctioned for flexible wireless uses.<sup>3</sup> More than 2,100 low power television (LPTV) and TV translator stations have applied for displacement relief requesting to relocate to alternative channels, and, to the extent their applications are found to be mutually exclusive, the Commission will hold an auction to resolve such applications. The repacking of full power and Class A stations will also require modification by some MVPDs of facilities to continue to carry the station's signals and may also impose costs on approximately 500 FM stations collocated with, adjacent, or in close proximity to a full power or Class A station. Roughly 100 additional full power or Class A stations have or will also relocate to share a channel with another broadcaster television station.<sup>4</sup>

The 39-month transition period ends July 13, 2020, and Congress has authorized the reimbursement period to potentially extend to July 3, 2023. Hundreds of full power and class A broadcast stations and potentially over 2,100 LPTV and translator television stations will need to be relocated and reimbursed during FY 2020. The following are a list of highlights from the many activities that will continue to take place on an aggressive schedule through at least FY 2020.

- **Licensing for Broadcasters Being Relocated** – Broadcast licensing is performed in two steps: (1) application review and grant of a construction permit (CP) and (2) application review and grant of a license to cover. The Commission will continue to process applications throughout the transition period.
- **Transition Phases and Licensing** – The Commission has adopted a phased transition process in which each station that is being repacked is assigned one of 10 transition phases. By the end of its assigned transition phase, a station must discontinue operations on its pre-auction channels. In addition, pursuant to Commission rules, all broadcasters must cease operation on their pre-auction channels no later than 39 months after the issuance of the Closing and Channel Reassignment Public Notice. Consideration of all CPs and requests for waivers and applications to alter deadlines must be analyzed by staff for compliance with applicable rules and to determine the impact that granting such requests would have on the phased transition schedule.

After a broadcaster completes the construction of its new facilities, it must file an application with the Commission for its license, which will require review and approval by the Commission. In addition, active oversight of the multi-year process will require substantial Commission staff resources to coordinate with broadcasters; with vendors involved in transition tasks; with other government and regulatory agencies at the federal, state, and local levels; and with international regulatory partners in the U.S.-Canada and U.S.-Mexico

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<sup>3</sup> As a result of the BIA, 987 full-power and Class A broadcast stations were assigned new channels and must be relocated during the 39-month transition period. Of those, 30 full-power stations were winning bidders in the reverse auction and are not eligible for reimbursement of relocation costs. The remaining 957 full-power and Class A stations that are being relocated are eligible for reimbursement from the TVBRF.

<sup>4</sup> The relocation costs of these stations, all of which were winning auction bidders who received incentive payments for relinquishing their pre-auction channel, are not eligible for reimbursement from TVBRF, but they nevertheless must file applications, licenses to cover, and/or waivers that will require processing by the Commission.



border zone regions. The implementation process will also require Commission staff to monitor broadcaster progress, identify and resolve transition-related problems and challenges that could endanger the transition schedule, process applications, and review and verify information. Accomplishing the transition will require additional software, cloud computing resources, and assistance from skilled computer scientists, software engineers, and technology security experts.

- Regional Coordination of Transition Phases – The Commission’s Incentive Auction Task Force and Media Bureau have created a specialized team to assist broadcasters through the transition phases on a regional basis. Regional Coordinators assist with communications among the 987 broadcast stations as well as affected MVPDs, function as liaisons within the Commission, and assist with coordination with other federal government agencies such as the Federal Aviation Administration as well as with Tribal governments.
- Displaced LPTV and TV Translators – A Special Displacement Window closed on June 15, 2018, for operating LPTV and TV translator stations displaced due to the new 600 MHz wireless band and the post-auction repacking process for full power and Class A stations. More than 2,100 applications were filed. A number of those applications were mutually exclusive, and the Commission created a settlement window from October 30, 2018, to January 10, 2019, during which applicants had the opportunity to resolve remaining issues through settlement or technical solution. Commission staff is reviewing the settlements and related applications and will establish bidding and application procedures and hold a new auction to issue LPTV licenses in the event that any mutually exclusive stations are unable to reach agreements. Like the full power and Class A stations identified above, broadcast licensing for LPTV and TV translators is performed in two steps: (1) application review and grant of a CP and (2) application review and grant of a license to cover. The Commission will continue to process applications throughout the transition period.
- Reimbursements to Repacked Broadcasters, MVPDs – Reimbursements to eligible broadcasters and MVPDs started in FY 2018 and will continue through FY 2020. The Commission has engaged an independent consulting firm to assist in administering the TVBRF. The reimbursement process has two major components: (1) cost estimates and fund allocation and (2) invoice reimbursement processing.
  - Cost Estimates and Fund Allocation – The Commission is working with a contractor (Fund Administrator) with extensive experience in television broadcast engineering and federal funds management to review cost estimates. The Fund Administrator reviewed the initial reimbursement estimates and the accompanying supporting documentation submitted by eligible entities to validate that the estimates reflect costs that may be reasonably incurred to relocate television service from a station’s original channel to its reassigned channel or, in the case of MVPDs, to continue to carry the broadcast signal of a reassigned broadcast station. Requests for additional information were sent to entities where reasonableness could not be determined, where necessary documentation appeared to be missing, or where the requested reimbursement appeared to be excessive. The Commission has allocated a total of \$1.81 billion, exceeding the amount originally authorized by Congress in 2012. The allocation gives full power and Class A stations and MVPDs access to approximately 92.5 percent of their currently estimated and verified costs. Under

the REA, not more than an additional \$350 million was added to the TVBRF in FY 2018 to reimburse full power and Class A stations after the Commission certified that the existing funds are likely to be insufficient to cover reasonably incurred reimbursement costs, and an additional \$400 million appropriated for all eligible entities under the REA and has been added to the TVBRF in FY 2019. The Commission may announce one or more additional allocations during the transition period, and subsequent allocations may be based on revised cost estimates. Prior to the end of the three-year reimbursement period, entities will provide information regarding their actual and remaining estimated costs and will be issued a final allocation, if appropriate, to cover the remainder of their eligible costs.

- Invoice Reimbursement Processing – Eligible full power and Class A stations and MVPDs may only draw upon their allocated funds upon submission of actual invoices and other supporting documentation. Since the initial allocation, the Fund Administrator has begun to review invoices for actual costs incurred by broadcasters and MVPDs and to make recommendations to the Commission as to their reasonableness. The Commission reviews those recommendations and pays approved invoices submitted by broadcasters and MVPDs.
- Reimbursements to LPTV/translator and FM stations – Consistent with Congress’ directive that REA be implemented within one year of enactment, on March 15, 2019, the Commission adopted eligibility rules and procedures in the *REA Report & Order* and the Incentive Auctions Task Force and Media Bureau adopted a revised version of the Cost Catalog reflecting costs or cost ranges for equipment and services most likely to be purchased by LPTV, TV translator, and FM stations. The Commission will now implement the newly adopted procedures and begin reimbursement of approximately 2,100 LPTV/translator and potentially 500 FM stations. The REA appropriated not more than \$150 million and not more than \$50 million, respectively, in FY 2018 for purposes of making reimbursements to LPTV/translator stations and FM stations, and the Commission has determined that the additional \$400 million appropriated to the TVBRF for FY 2019 may be used to reimburse LPTV/translator and FM stations after the prioritization of reimbursement payments to full power and Class A stations and MVPDs.
- Consumer Education – The REA makes \$50 million available through July 3, 2023, to the Commission for consumer education. The Commission is currently in the process of developing additional consumer resources to provide information about what the post-auction transition will require consumers to do to continue to receive over-the-air TV signals during and after the transition. For instance, In January 2019, the Commission announced the launch of a dedicated call center to assist consumers with rescanning their televisions and any other questions related to the broadcast transition. The Commission also awarded a contract to a national public relations firm to execute a comprehensive nationwide consumer education campaign that includes social media outreach and advertising, radio, print, and online advertising, paid online search, and earned local and regional media.
- Submission of Revised Banking Information by Full Power and Class A Broadcasters and MVPDs – The Commission requires broadcasters and MVPDs that will receive TVBRF payments to provide detailed banking information that is both notarized on paper form and submitted in a secure electronic system. The Commission reviews this information prior to

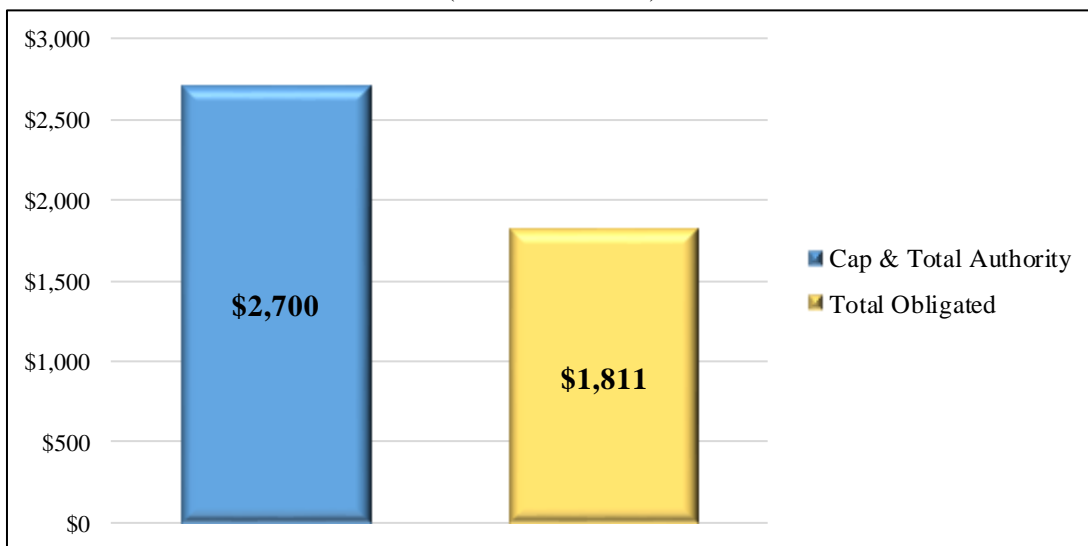
making any payments. Broadcast stations and MVPDs may revise their banking information throughout the transition period. After adoption and implementation of rules and procedures for LPTV/translator and FM stations, those entities will have similar obligations and abilities.

- **Wireless Licensing** – Winning bidders submitted license applications and deposited winning bid amounts with the Commission in FY 2017. The Commission completed review of the final remaining applications in December 2018.
- **Stakeholder Outreach** – To minimize disruptions and ensure an orderly transition, the Commission provides necessary stakeholder and consumer communications, education, and outreach. These efforts include providing education materials for broadcast stations, MVPDs, wireless microphone operators, and unlicensed users affected by the transition. The Commission also maintains a comprehensive website to serve as a single point of reference for all transition-related information. The Commission will continue to maintain and update these efforts throughout the transition period ending in 2020.

The following chart shows the status of the amounts available and obligations for the TVBRF, including the additional funds made available by the REA.

### Status of TV Broadcaster Relocation Fund

(Dollars in Millions)



Note: Cap & Total Authority shown does not include the \$50 million in the TVBRF designated by the Reimbursement Expansion Act for consumer education relating to the reorganization of broadcast television spectrum.

### *Spectrum Pipeline Act of 2015, RAY BAUM'S Act, and Other Auction Program Improvements*

The Spectrum Pipeline Act of 2015 (Act) requires the Commission to auction 30 megahertz of spectrum identified by the Secretary of Commerce for reallocation from Federal use to non-Federal use, shared use, or a combination thereof. The Act also appropriates funds from the Spectrum

Relocation Fund to support activities by Federal entities to improve the efficiency and effectiveness of Federal use of spectrum in order to make Federal spectrum available for non-Federal use, shared use, or a combination thereof. The Act requires the FCC, as part of its role on the interagency Technical Panel established within the National Telecommunications and Information Administration (NTIA), to review Federal entities' proposals for funds for these purposes.

Additionally, the Act requires the Commission to submit four reports to Congress. In November 2018, the Commission submitted a report with an analysis of its new rules for the innovative Citizens Broadband Radio Service in the 3550-3650 MHz band and a report analyzing proposals to promote and identify additional bands that can be shared under such rules and identifying at least 1 gigahertz of spectrum between 6 GHz and 57 GHz for such use. By January 1, 2022, in coordination with the Assistant Secretary of Commerce for Communications and Information, the Commission must submit a report that identifies at least 50 megahertz of spectrum below 6 GHz for potential auction. Finally, by January 2, 2024, in coordination with the Assistant Secretary of Commerce for Communications and Information, the Commission must submit a report which identifies at least an additional 50 megahertz of additional spectrum below 6 gigahertz for potential auction. The latter two reports must contain an assessment of the Federal operations in such spectrum, an estimated timeline for the competitive bidding process, and a proposed plan for balance between unlicensed and licensed use.

The RAY BAUM'S Act amended the Pipeline Act to require notice and comment for certain Pipeline Act reports and required the Commission to undertake numerous rulemakings and initiatives related to potential repurposing, reallocation, sharing, or auction of spectrum bands, including a requirement to work with NTIA to identify 255 additional MHz of spectrum for mobile and fixed wireless use by 2022.

To fulfill these statutory requirements and enhance the Commission's ability to execute upcoming auctions, auctions funding will be used for the following:

- 3.5 GHz Auction Development and Implementation – The Commission has updated its rules for issuing certain licenses in this band that will be subsequently auctioned. Due to the characteristics of and use cases for licenses in this band, this auction may have a novel set of requirements that will require the Commission to develop new auctions procedures and software. The Commission currently estimates that work will take place in FY 2019 and FY 2020 to prepare for and implement this auction.
- Other Auction Development and Implementation – The Commission needs to make additional changes to the auction bidding system for other planned auctions that could include an AWS-3 re-auction, auction of bands made available for flexible terrestrial use in the Spectrum Frontiers proceedings, potential auction of mid-band spectrum, and auction of the 30 MHz required by the Spectrum Pipeline Act of 2015. In particular, the Commission expects a substantial amount of activity in FY 2020 in preparation for auctions related to Spectrum Frontiers bands and potential mid-band auctions, which may involve novel requirements related to sharing with incumbents, tracking satellite earth station placements, and other issues.
- SAS/ESC Testing for 3.5 GHz and Beyond – The Spectrum Access System (SAS)/Environmental Sensing Capability (ESC) are necessary components to share

additional spectrum in this band and are necessary to protect incumbent Federal operations. These systems will be launched first for the 3.5 GHz band and may have additional applications in the future. Because the systems will work as a dynamic frequency coordinator for a complex ecosystem of devices, we need to ensure they operate properly and consistently with the FCC's rules prior to approval.

- Optimization for New Spectrum Opportunities – The optimization team will help the Commission analyze and study options for making new spectrum licenses available, including through sharing scenarios, to ensure we are maximizing the amount of useful commercial spectrum. They will develop optimal band plans accommodating incumbent uses and demonstrate the value of additional clearing or sharing as necessary. This research will also provide statistical and technical analysis, simulation, and modeling, including geographic data and mapping, related to auctions.
- Spectrum Visualization Tools – Public Facing and Internal – The public has a significant interest in understanding who has licensed rights to different spectrum bands at different locations and in the ability to manipulate and analyze this data. Federal agencies also would benefit from this information as they consider sharing/relocation options. Additionally, it is critical for internal teams to have robust data, including mapping, to understand coverage and operations across the country.
- Auction Application System (formerly known as Integrated Spectrum Auctions System (ISAS)) Enhancement/Modernization – The Commission must modify the application forms for participation in each auction in response to the auction's unique requirements. Work to modernize the auction application system will provide for new implementations of the primary auctions application software, including providing the ability to customize the form to support each auction.
- Universal Licensing System (ULS) Modernization – The Commission must modernize its licensing database and infrastructure to implement complex new auction services and rules, as well as eliminate the use of outdated technology and improve reliability, security, and access to data. The system modernization efforts will allow the FCC to better support new auction services, inventory existing auction licenses, and re-auction spectrum.

Pursuant to 47 U.S.C. §309(a), the Commission must provide its authorizing and appropriations committees in Congress with a detailed report of the FCC's obligations in support of the auctions program for each fiscal year of operation. The following table shows available auction cash for recent fiscal years.

## Spectrum Auctions Activities

Dollars in Thousands

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>
Beginning Cash Balance as of October 1	\$69,071	\$317,931	\$513,456	\$2,980,154	\$8,620,648
Current Year Net Cash	252,796	11,115,179	2,777,519	7,728,932	(3,929,722)
Less:					
Deferred Revenue as of September 30 <sup>1</sup>	(3,318)	(10,919,416)	(308,607)	(2,064,903)	(1,158,650)
Deposit Liability - Refunds as of September 30 <sup>2</sup>	(618)	(238)	(2,214)	(2,214)	(2,214)
Accounts Payable <sup>3</sup>	0	0	0	(21,321)	(21,321)
<b>Available Cash as of September 30<sup>4</sup></b>	<b><u>\$317,931</u></b>	<b><u>\$513,456</u></b>	<b><u>\$2,980,154</u></b>	<b><u>\$8,620,648</u></b>	<b><u>\$3,508,741</u></b>

<sup>1</sup>Cash associated with licenses that have not been granted as of stated date.

<sup>2</sup>Upfront auction deposits not refunded as of stated date.

<sup>3</sup>Remaining amount owed to the Incentive Auction Reverse Auction Winners.

<sup>4</sup>The FY 2017 amount includes approximately \$7 billion for deficit reduction when all the licenses from the incentive auction are granted. On August 22, 2018, the Commission transferred \$5.895 billion of earned auctions revenue from the incentive auction to the Public Safety Trust Fund.

## Summary of Distribution of Resources - Spectrum Auctions Program

### SPECTRUM AUCTIONS COST RECOVERY REIMBURSABLE AUTHORITY INCLUDING OFFICE OF INSPECTOR GENERAL

(Dollars in Thousands)

<u>Object Classification Description</u>	<u>FY 2018</u> <u>Actuals</u>	<u>FY 2019</u> <u>Enacted</u>	<u>FY 2020</u> <u>Congressional</u> <u>Request</u>
<b>Personnel Compensation &amp; Benefits:</b>			
Full-time & Other than full-time Permanent (11.1 & 11.3)	\$26,453	\$24,364	\$24,853
Personnel benefits (12.0)	8,058	7,524	7,675
<b>Subtotal - Personnel Compensation &amp; Benefits</b>	<b>\$34,511</b>	<b>\$31,888</b>	<b>\$32,528</b>
<b>Other Expenses:</b>			
Benefits for former personnel (13.0)	\$4	\$11	\$12
Travel & transportation of persons (21.0)	231	334	340
Transportation of things (22.0)	9	24	24
Rent payments to GSA (23.1)	6,607	5,769	5,885
Communications, utilities, & misc. charges (23.3)	1,454	1,820	1,857
Printing and reproduction (24.0)	216	185	189
Other services from non-Federal sources (25.2)	15,768	35,157	35,502
Other goods & services from Federal sources (25.3)	1,059	401	409
Operation & maintenance of equipment (25.7)	27,695	50,165	51,172
Supplies and materials (26.0)	3,513	3,600	3,672
Equipment (31.0)	623	924	943
Land and structures (32.0)	0	0	0
Insurance claims & interest (40.0)	16	5	5
<b>Subtotal - Other Expenses</b>	<b>\$57,196</b>	<b>\$98,396</b>	<b>\$100,011</b>
<b>Total - Auctions Cost Recovery Reimbursable Authority</b>	<b>\$91,707</b>	<b>\$130,284</b>	<b>\$132,539</b>

## Spectrum Auctions Expenditures Report

Section 309(j) of the Communications Act permits the Commission to use funds raised from auctions to fund its auctions program, including contracts for services and costs related to personnel performing work in support of Commission auctions authorized under that section. The FCC's Office of General Counsel (OGC) and Office of Managing Director (OMD) provide direction to FCC employees attributing hours for this purpose. The House of Representatives and Senate Appropriations Committees review and set a yearly cap for the spectrum auctions program. The requested cap level for FY 2020 is \$132,538,680 to fund the following activities: further the objective of making more spectrum available for commercial use; continue post-BIA work to include the new additional requirements from the REA related to the TVBRF; upgrade and improve

auctions infrastructure in preparation for future actions; and continue implementation of the Spectrum Pipeline Act of 2015 and certain provisions of the RAY BAUM'S Act.

The Commission's spectrum auctions program supports efficient licensing while also contributing significant funds to the U.S. Treasury for deficit reduction and providing direct support to other government programs. In particular, in the Middle-Class Tax Relief and Job Creation Act of 2012, Congress directed that proceeds from certain spectrum auctions, including auctions of licenses covering spectrum offered in the H-Block, AWS-3, and broadcast incentive auctions, fund certain public safety-related programs and contribute to deficit reduction. Specifically, Congress directed that the net proceeds from these auctions, in addition to being used to reimburse Federal agencies for costs incurred as a result of sharing or relocating Federal spectrum assignments and to reimburse the relocation expenses of full power and Class A broadcast stations being repacked in the new TV Band following the BIA, be distributed as follows: \$135 million for a state and local First Responder Network Authority (FirstNet) implementation fund; \$7 billion for FirstNet build out; \$115 million for 911, E911, and NG911 implementation; \$300 million for public safety research; and \$20.4 billion plus any additional proceeds for deficit reduction.

As of the conclusion of the BIA on April 13, 2017, the Commission had raised over \$114.6 billion in auctions revenues since initiating the auctions program in 1994. During this period, auctions program expenses have been less than two percent of the Commission's total auctions revenues. The Commission operated the auctions program for nine years at \$85 million annually without any increase in funding, including increases for inflation. The FCC received increases in FYs 2013 through 2018 to fund the implementation costs for the BIA and Spectrum Pipeline Act of 2015, and in FY 2016 to fund the necessary expenses associated with a headquarters move to a new facility to significantly reduce space consumption.

Spectrum auction planning, development, and implementation is performed agency-wide and is very information technology (IT) intensive, as reflected in our Auction Expenditure Justification Reports. For example, the Incentive Auction Task Force draws upon the resources and expertise of staff from across the Commission, including the Wireless Telecommunications Bureau, Media Bureau, International Bureau, Bureau of Consumer and Governmental Affairs, Office of Engineering and Technology, OMD, and OGC. Auctions funds also cover the program's share of Commission operating expenses. The Commission uses these funds to enable successful auctions and expends them in a manner consistent with statutory requirements.

Every auction is different and has specific requirements, which require careful attention to detail and planning. Since auction activities are performed agency-wide and are unique, allocating the appropriate amount of cost and overhead related to the auctions program is a challenge. In addition, the complexity of spectrum auctions has increased steadily as the Commission works through more difficult technical and policy issues. Spectrum auctions generally require long lead times to design, develop, and implement secure, reliable, and effective auction application, bidding, and post-auction licensing systems.

In the practice of cost accounting, costs are identified as one of the following: (1) direct cost, (2) indirect cost, or (3) generally allocated cost. The methodology for deriving the proportional share of generally allocated administrative costs to be charged to the auctions program is based on the Commission's time reporting system and Generally Accepted Accounting Principles. The allocation is based on the percentage of actual hours that employees worked to support the auction



program plus the same proportional share of the employee's indirect hours (leave hours). This full time equivalent (FTE) rate is applied to costs that benefit the Commission as a whole. The items that are allocated by the FTE rate include Commission-wide IT systems, guard service, administrative facility services, supplies, furniture, equipment, and human resources training activities. The FCC has maintained an average of 14 percent for this purpose, with minor deviations.

A significant Commission auction focus in FY 2020 will be to continue post-incentive auction implementation. This work includes continuing to relocate (or "repack") 987 full power and Class A television stations and over 2,100 LPTV/translator stations with minimum disruption to the viewing public. We will also continue to make disbursements from the TVBRF to repacked full power and Class A TV stations and MVPDs, and, with the release of the March 15, 2019 Report and Order, we have begun the implementation process for the reimbursement of approximately 2,100 LPTV and TV translator stations and an estimated 500 FM stations impacted by the post-auction repack that have become eligible for reimbursement as a result of the REA. The construction period of this "repacking" process for full power and Class A television stations formally began on July 12, 2017, 90 days after the release of the Closing and Channel Reassignment Public Notice. This post-auction transition period will continue for 36 months thereafter and is scheduled to be completed in FY 2020. The Commission will also oversee during this period the licensing (including a possible auction for mutually exclusive applications) of LPTV and TV translator stations, which are not subject to the same construction deadlines as full power and Class A Stations, that are displaced by the repacking of full power and Class A stations as a result of the BIA. Although the transition of full power and Class A stations is scheduled to be completed in July 2020, the reimbursement period for costs associated with the repack of full power and Class A TV stations, and the reimbursement of LPTV, TV translator and FM stations, is authorized by Congress to extend up to FY 2023.

Repacking involves reorganizing and assigning channels to the remaining broadcast television stations to create contiguous blocks of cleared spectrum suitable for flexible wireless use. The scope of the repacking component of this auction makes it a unique and computationally complex challenge that will continue to require substantial resources and engagement from the Commission over the next two years. The task requires that the Commission manage and organize every station's transition in a manner that respects the constraints imposed by linked-station sets – that is, a set of two or more stations with interference relationships and dependencies – as well as accounting for limited resources available to accomplish transition-related work. Active oversight of the multi-year process will require substantial Commission staff resources to coordinate with broadcasters; with vendors involved in transition tasks; with other government and regulatory agencies at the federal, state, and local levels; and with international regulatory partners in the Canada and Mexico border regions of the United States. This effort will require Commission staff to monitor broadcaster progress, identify and resolve transition-related problems and challenges that could endanger the transition schedule, process applications, and review and verify information. Accomplishing the transition will require additional software, cloud computing resources, and assistance from skilled computer scientists, software engineers, and technology security experts. This transition also requires the Fund Administrator, which is overseen by Commission staff, to administer the reimbursement of up to \$2.70 billion to the eligible broadcasters, MVPDs, LPTV

stations, TV translators, and FM stations by reviewing cost estimates and invoices to prevent waste, fraud, and abuse.

In FY 2020, the Commission also will continue to focus on communications, education, and outreach efforts to all consumers and stakeholders in the BIA. The Incentive Auction Task Force, together with the Media Bureau and the Consumer and Governmental Affairs Bureau, will continue to provide training materials for broadcast stations, MVPDs, wireless microphone operators, and unlicensed users affected by the transition. These efforts will include strategic outreach to consumers of over-the-air television that must rescan their television sets in order to continue to receive uninterrupted service from a repacked television station after the station moves to its post-auction channel assignment; activities will focus on the most at-risk communities. The Commission will continue to support a dedicated call center to assist these consumers that are impacted by the repack. The Commission will also maintain troubleshooting guides for the Commission's existing consumer call center staff, an updated Consumer Q&A, and updated Consumer Guides. Wherever possible, the Commission will make these materials available in multiple languages. The Commission has also created, and will maintain and update throughout the transition, a comprehensive "Post-Auction Transition" website that will serve as a single point of reference for all transition information for stakeholders and a "Broadcast Transition/TV Rescan" website that provides a consumer-friendly overview of the transition, answers common questions, and links to additional consumer resources. It has also launched a dedicated call center for the benefit of TV viewers who need help rescanning their TVs in order to assure that they retain uninterrupted access to the important local news, emergency alerts, and other programming that local stations provide. The Commission will also continue to expand its outreach efforts using paid internet search, social media, earned and paid radio, and other outreach channels. These efforts will continue to be maintained and updated throughout the transition period ending in 2020 and reimbursement period ending no later than 2023.

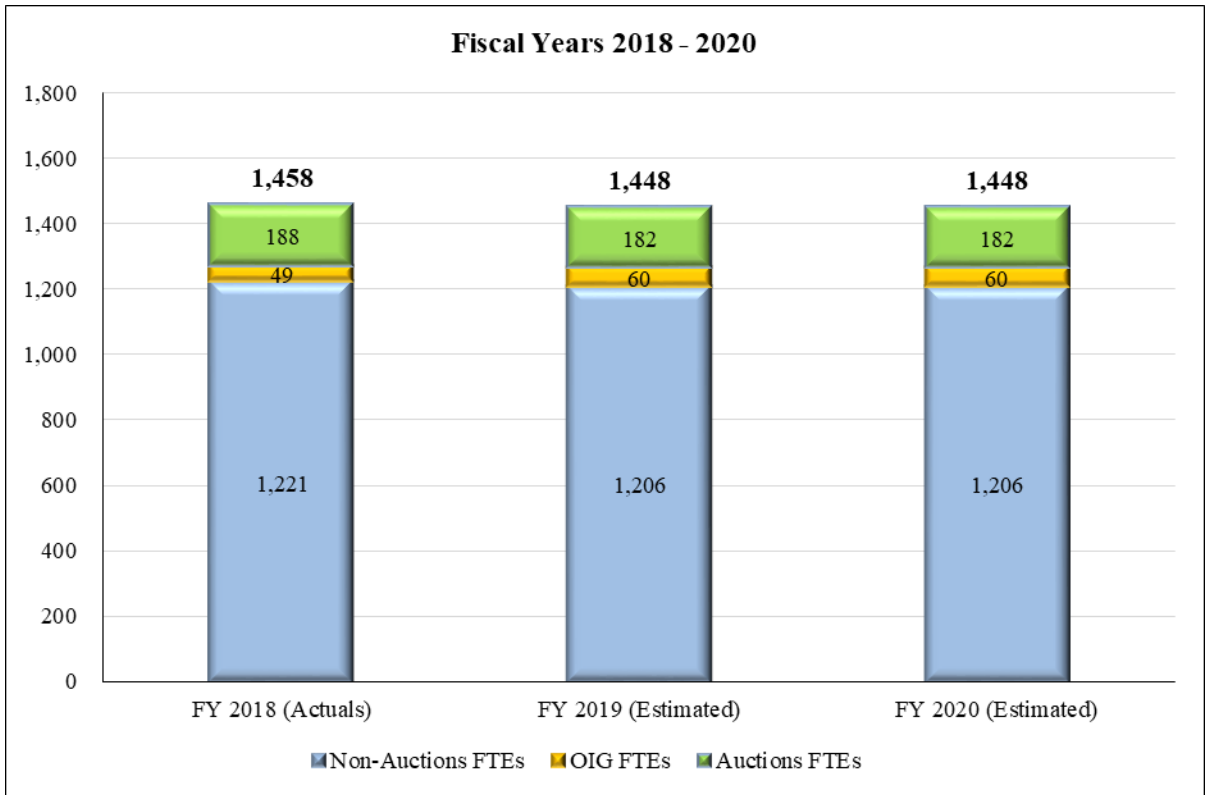
In addition to these post-BIA efforts, the Commission continues to plan for potential future auctions, most notably auctions related to reallocating bands made available in the Spectrum Frontiers proceeding to terrestrial wireless use, a new auction for Citizens Broadband Radio Service (CBRS) (3.5 GHz band) licenses, and auction of the spectrum required by the Spectrum Pipeline Act of 2015. Other auctions that may continue to be a focus for the Commission in FY 2020 include the re-auction of certain AWS-3 or other licenses potential auction of mid-band spectrum, and an auction of unsold 600 MHz licenses from the BIA. The Commission will also leverage auctions expertise and infrastructure to support reverse auctions that allocate Universal Service Funding in an efficient and effective manner. In addition, the Commission is working to update and modernize its auction bidding and application systems to improve their speed, flexibility, reliability, and security to support timely new auctions when additional spectrum that could be made available is identified.

In addition, in FY 2020, the Commission will continue implementation of the RAY BAUM'S Act, including working with NTIA to identify 255 MHz of additional spectrum (subject to certain frequency and use requirements) for mobile and fixed broadband use; preparing annual reports on upcoming systems of competitive bidding; investigating potential reallocation and auction of some or all of the 3.7-4.2 GHz spectrum band; and coordinating with NTIA on initiatives related to

incentivizing Federal agencies to share spectrum allocations, bidirectional sharing, and potential commercial wireless use in the 3100-3550 MHz bands.

The actual and estimated FTE levels for the spectrum auctions program for FYs 2018 through 2020 are shown below.

### FTEs by Resource Category



The following two schedules provide some details of the spectrum auctions program since its inception in 1994. These schedules also provide some perspective into how much money was collected for the U.S. Treasury or for broader government use and the total cost for running the Commission’s spectrum auctions program.

## Spectrum Auctions and Collections

Fiscal Years 1994 through 2018

Fiscal Year	Number of Auctions	Number of Licenses Won	Amount Collected
1994	2	604	\$652,954,213
1995	2	129	8,234,321,194
1996	6	2,026	2,019,376,024
1997	4	1,614	2,205,922,232
1998	2	1,388	860,878,576
1999	6	1,693	499,598,445
2000	8	4,403	1,335,043,185
2001	4	3,447	583,599,901
2002	7	7,036	135,630,842
2003	7	3,144	77,121,620
2004	5	267	126,790,232
2005	6	2,803	2,208,332,556
2006	5	1,284	13,834,978,827
2007	5	293	163,429,971
2008	3	1,144	18,988,396,013
2009	2	115	5,695,861
2010	3	4,788	25,973,019
2011	3	126	31,493,200
2012	1	93	3,878,133
2013	2	3,197	5,783,780
2014	2	186	1,564,597,176
2015	2	1,611	41,756,131,741
2016	0	0	0
2017	1	2,776	19,306,110,662
2018	2	41	804,521
<b>Totals</b>	<b>90</b>	<b>44,208</b>	<b>\$114,626,841,924</b>

## Spectrum Auctions Program – Collections vs. Expenditures

Fiscal Years 1994 through 2018  
(Dollars in Millions)

