**Federal Communications Commission**



**Fiscal Year 2018**

**Budget In Brief**

**May 2017**

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## INTRODUCTION AND SUMMARY OF REQUEST

The Federal Communications Commission (FCC or Commission) is pleased to present its fiscal year (FY) 2018 budget request. The funding request will be used to:

* Carry out the authorized mission of the Commission in section 1 of the Communications Act, as amended, which states that the Commission’s purpose 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, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.” [[1]](#footnote-1) 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 communication.”[[2]](#footnote-2)
* Close the “digital divide” that currently exists across the United States. In FY 2017, the Commission unanimously adopted two Universal Service Fund (USF) orders to address the “digital divide” in America. These unanimous orders will provide over $6.5 billion over a 10-year period to the successful reverse auction winners to expand mobile and fixed networks in high cost areas, including Tribal Lands, through the USF High Cost programs – Mobility Fund Phase II and Connect America Fund Phase II. In order to provide this much needed support on an equitable basis, the Commission must develop appropriate reverse auction mechanisms so that the American people receive the biggest benefit for the finite resources of the USF. The planning, implementation and completion of these two reverse auctions will be achieved in significantly less time and less cost than previous reverse auctions due to the Commission already having highly skilled and talented staff with reverse auction experience.
* Reduce the regulatory burden for the industries that the Commission oversees and eliminate unnecessary rules that do not protect the public interest or promote competition.
* Develop and implement the FCC Agency Reform Plan to deliver on the needs of today and the future in a more proactive and efficient manner.
* Continue investments in critical information technology (IT) systems. By prioritizing critical IT work, the Commission will continue the replacement of its legacy systems with a service based infrastructure to further reduce operations and maintenance costs in FY 2018. In moving towards the goal of 100 percent cloud based services, the FCC will continue to modernize its IT systems and applications to ensure the availability, integrity, and confidentiality of the Commission’s systems and support our nation’s communication infrastructure.
* Make more spectrum available for commercial use through: repacking and reimbursing broadcasters and multichannel video programming distributors (MVPDs) for relocation costs in order to clear contiguous spectrum in the ultra-high frequency band that will be repurposed as the 600 MHz Band; upgrading and improving auctions’ infrastructure in preparing for future auctions; and continue implementing the Spectrum Pipeline Act of 2015, which includes promoting the use of 3.5 GHz band through auctions; and conducting additional spectrum auctions.

For FY 2018, the Commission is requesting the budget and personnel amounts that are summarized in the bullets and table below:

* The Commission requests $322,035,000 in budget authority from regulatory fee offsetting collections. This request represents a decrease of $17,809,000 or 5.2 percent from the FY 2017 level of $339,844,000 that excludes the one-time request amount $16,866,992 for the headquarters move/restack.
* The Commission requests $111,150,000 in budget authority for the spectrum auctions program. This request represents a decrease of $5,850,000 or 5 percent from the FY 2017 level of $117,000,000. To date, the spectrum auctions program has generated over $114.6 billion for government use, including funding for the FirstNet (First Responders Network), and for deficit reduction. In raising over $114.6 billion, the total cost of the auction program has been less than $1.8 billion.
* In creating a lean, accountable, more efficient Commission that works for the American people, the Commission requests 1,448 Full Time Equivalents (FTE’s) for regulatory fee offsetting collections and the spectrum auctions program. This request represents a decrease of 102 FTEs or 6.6 percent from the FY 2017 enacted level of 1,550. This will allow an alignment of the Commission workforce to meet the needs of today and the future rather than the requirements of the past.



In furtherance of these objectives and the FCC’s mission, the FY 2018 budget request will be used to support the following updated Strategic Goals for FY 2018:

**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 telephone calls, 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.

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

* FY 2016 numbers presented are actual numbers.
* FY 2017 numbers presented are the numbers enacted.
* FY 2018 FTEs were calculated assuming a hiring freeze in place from January 23, 2017 through September 30, 2018.
* FTE numbers listed for each Bureau and Office for FY 2018 were calculated by prorating the total decline in FTE’s across the Bureaus and Offices by using the FTE number enacted in FY 2017 with the exception of the Office of the Chairman and Commissioners.
* The Commission’s Lease for Portals II (headquarters building) expires in October 2017, and the Commission does not know the amount of rent it will pay for this facility in FY 2018. As such, the Commission has included an estimate for rent for FY 2018 that shows no increase in the amount for rent from FY 2017.

## Fiscal Year 2018 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, $322,035,000, to remain available until expended: *Provided*, That $322,035,000 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 2018 so as to result in a final fiscal year 2018 appropriation estimated at $0: *Provided further*, That any offsetting collections received in excess of $322,035,000 in fiscal year 2018 shall not be available for obligation: *Provided further*, That remaining offsetting collections from prior years collected in excess of the amount specified for collection in each such year and otherwise becoming available on October 1, 2017, shall not be available for obligation: *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 $111,150,000 for fiscal year 2018: *Provided further*, That, of the amount appropriated under this heading, not less than $11,020,000 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 2018 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 charges for unauctioned 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.

**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 2027 and further extend the FCC’s auction authority solely to allow this auction to proceed. Auction proceeds are expected to reach $6.0 billion in 2027.

**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. 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.

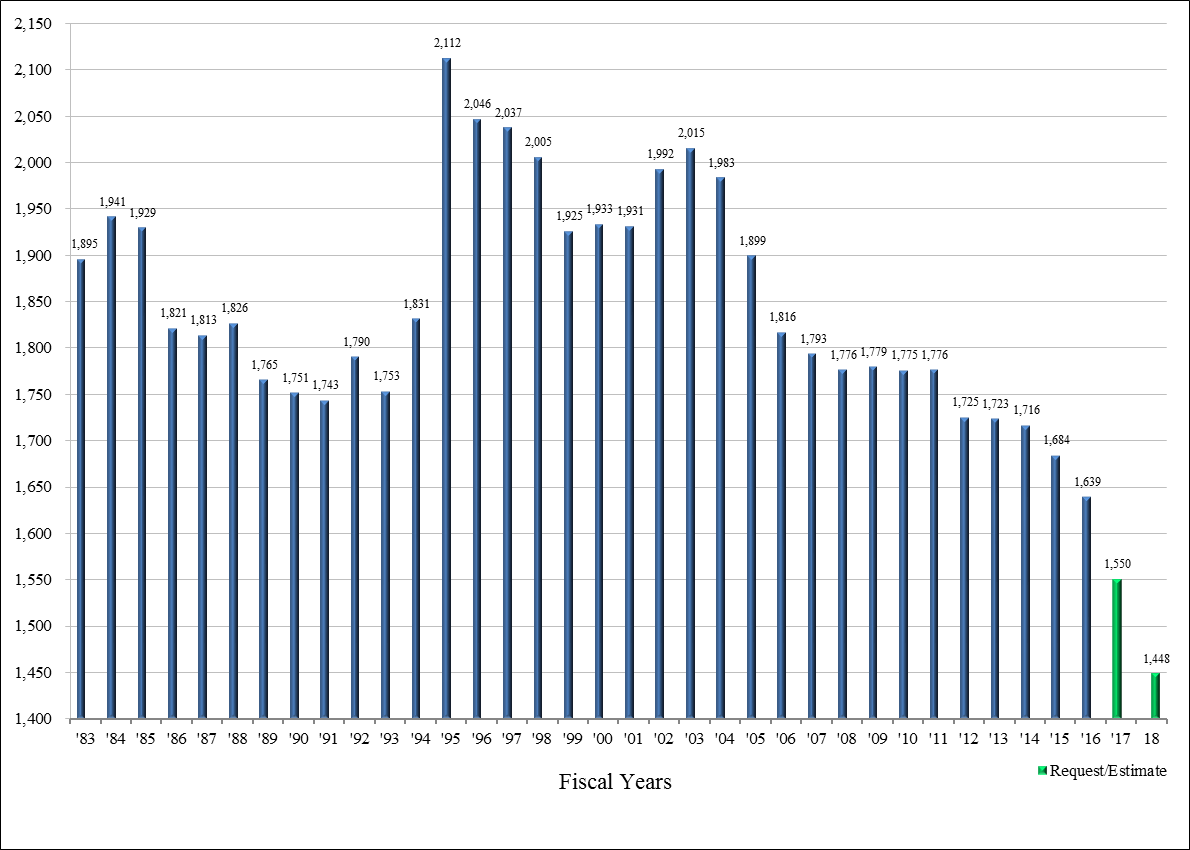
Summary of FYs 2016 - 2018 FTEs and Funding by Bureaus and Offices



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 13 through 15 provides more details related to Commission’s USF activities and related costs.

## FTEs - Historical and Estimated

Fiscal Years 1983 – 2018

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Summary of Changes - Regulatory Fees (Offsetting Collections)



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

1. **Personnel Compensation and Benefits** – The request includes a decrease of over $13.8 million, which is a reduction of 94 non-auction FTEs from the FY 2017 estimated level of 1,300 to 1,206 FTEs for FY 2018.[[3]](#footnote-3) This reduction in non-auction FTEs is a 7.2 percent reduction and is due to the assumption that the hiring freeze would be in effect through FY 2018.
2. **Other Reductions –** The request includes a decrease of $4 million in travel, rent, contract services, supplies and materials, and equipment.

**FCC Agency Reform Plan**

Develop and implement the FCC Agency Reform Plan to deliver on the needs of today and the future in a more proactive and efficient manner.

* Develop and implement reforms that focus the Commission on effectively and efficiently delivering programs that are the highest need to citizens and where there is a unique Federal role rather than assuming current programs are optimally designed or even needed.
* Maximize employee performance and strengthen the Commission by enabling and empowering front-line employees to deliver results, hold them accountable, and reward innovation and success.
* Collaborate with other agencies and use their lessons learned; leverage shared services opportunities.
* Leverage business management tools that provide real time access to relevant and reliable information for better decision making and overall improved performance.
* Use an enterprise systems management approach to increase economies of scale and reduce administrative costs.

**FCC IT Modernization Strategy**

The Federal Communications Commission is engaged in an effort to modernize the Commission’s Information Technology (IT) systems. The goal of this effort is to transform the services and tools offered by IT from costly legacy solutions to innovative, cloud-based solutions that lower costs and improve security and performance. FCC prioritizes IT spend according to impact, value, and efficiency gains by investing in modernization instead of maintaining the status quo.

The FCC has reduced its legacy spend by 35% via achieving technology wins, leveraging agile processes, and ultimately, reducing contract personnel. Since 2013, IT has accomplished two major milestones which translate in reducing steady state (operations & maintenance) spending from 85% to less than 50% of the IT budget. First, FCC has targeted and begun migrating legacy systems to Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS) cloud solutions. Second, IT physically moved government-owned legacy systems to a commercial cloud provider. Additionally, as part of this transformation, the security posture of the FCC has been dramatically improved, and reduced audit findings demonstrate the benefit of the investment in next-generation cloud-based security tools.

FY 2018 finds the FCC approaching the half-way point in its modernization journey. Efforts are focused on moving licensing systems to the cloud, supporting Mobility Fund II and Connect America Phase II efforts, modernizing the Equipment Authorization System, and completing the Broadcast Incentive Auction.

Recently completed modernization efforts include:

1. **Operation Server Lift**

FCC IT completed “Operation Server Lift” in September 2015. The move to the cloud and a commercial service provider reduced rack count from 90 to 72, lowering both physical footprint and operating costs. As a result, the Commission was able to avoid $9 million in hosting costs by performing the Server Lift in 2015 instead of waiting for the Commission headquarters move/restack effort in 2019-2020. The effort also provided the FCC a more accurate inventory of all the applications, unique configurations, and software in its environment, which has allowed for a more targeted technology modernization.

1. **FCC Consumer Helpdesk**

FCC IT delivered a cloud-based consumer helpdesk solution – instead of spending $3.2 million to internally build a new system over two years as originally quoted, the FCC spent $450,000 for a system that was ready to go in six months. Additionally, the new solution has annual operations costs of $100,000 in the cloud instead of an estimated annual cost of $640,000 to maintain the system on premises with FCC contract staff and government-owned equipment and software.

1. **Office365 and Virtual Desktop Infrastructure**

The FCC IT team completed a 100% migration of the Commission staff to the Microsoft Office 365 SaaS cloud environment as of August 2015. To improve accessibility and remote capabilities, the Commission implemented a Virtual Desktop Infrastructure (VDI) solution that supports nearly the entire FCC staff. The robust platforms have improved the ability for information sharing and collaboration and eliminated nearly a dozen legacy servers.

**Progress and Funding Challenges**

To date, the FCC has made good progress in the drive to modernize and migrate systems to the cloud. Challenges to the Commission’s progress include obtaining continued funding necessary to appropriately staff modernization teams and perform migration of legacy systems to cloud platforms. The FCC continues to pursue its goals towards 100% cloud services within the decade to best serve the American public and the FCC mission of ubiquitous communication for public safety, defense, education, health, commerce, and international competition.

**Office of Inspector General Narrative**

The Office of the Inspector General’s (OIG) workload continues to increase in the areas of audit and investigation and administration.  Currently OIG only takes on top-level investigation cases and high priority financial, information technology and program audits, inspections, and assessments.  The Office keeps focus on increasing mission responsibility and ensuring appropriate staff levels to keep pace with the workload.  The OIG Full Time Equivalent (FTE) staff has been increasing over the past few budget years and this influx has provided OIG more capability to maintain the mission of the OIG and assist with taking on more investigations and performing more audits.

The OIG FY 2018 budget request of $11,020,000 includes a reduction of $731,000 from the FY 2017 enacted level of $11,751,000.

OIG audits help FCC management identify internal control weaknesses and program risks, including fraud, waste and abuse, and recommend corrective actions to safeguard public funds and improve program outcomes. In addition to audits and assessments mandated by laws and regulations, Office of Audit (OA) plans include over 50 projects over the next five years. Those projects include audits, inspections, and assessments both FCC and Universal Service Fund Programs.  This equates to more than 10 audits per year not including any Congressional requests, special projects, and non-recurring mandates.

The OIG Office of Investigation (OI) has 85 open cases as of September 30, 2016.  OIG continues working with the Department of Justice (DOJ) and has recovered millions of dollars of government funds resulting from criminal and civil fraud cases referred to the DOJ.

In compliance with the IG Reform Act of 2008 this FCC OIG FY 2018 budget request includes:

* A fair share ratio in the amount of $26,000 for contribution to the Council of the Inspectors General on Integrity and Efficiency (CIGIE),
* Funds to support IGNet Management Services, and,
* Training funds in the amount of $82,000.

**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. During FY 2017, the FCC has asked 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. The FCC’s Chairman has publicly communicated to USAC his concerns about cost overruns and schedule delays surrounding the implementation of information technology supporting the E-rate program. Furthermore, the FCC is evaluating improvements to USAC’s collection and disbursement processes in an effort to improve the efficiency and effectiveness of the management of the USF funds. For additional information about how the FCC coordinates with USAC, below are descriptions of the USF oversight duties and responsibilities of the various Commission Bureaus and Offices that work closely together as an oversight team.

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 the USAC on these issues.

Wireline Competition Bureau. The Wireline Competition Bureau (WCB) oversees USF policy and provides guidance on the applicability 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) oversees USF policy concerning the Mobility Fund, a universal service support mechanism dedicated exclusively to mobile services. WTB also oversees reverse auctions activity for the Mobility Fund and the Connect America Fund. The FCC has formed a Rural Broadband Auctions Task Force to implement upcoming USF-related auctions

Office of General Counsel. The Office of General Counsel (OGC) oversees issues relating to litigation and settlements of civil, criminal, or bankruptcy 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 identifies a possible violation of the Communications Act or a Commission rule, order, or directive, it will refer the issue to the Enforcement Bureau (EB) for possible investigation and administrative enforcement action. EB also pursues potential investigations of USF related matters from other sources of information as well.

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

**USF Activities**

On February 23, 2017, the Commission adopted rules for allocating nearly $2 billion, through a reverse auction, from the Connect America Fund, which aims to advance fixed broadband service to unserved and underserved areas across the country. Through the auction mechanism, the Commission will seek the best deal for the American people with the limited available funds.

Under Mobility Fund Phase II, the Commission’s goal is to ensure that all Americans have access to advanced wireless services. In order to solve this problem, the FCC adopted, on a bipartisan basis, a plan to bring 4G LTE service to millions of rural Americans who currently do not have it. Over ten years, the USF will spend over $4.5 billion to bring mobile broadband to unserved areas. This support will be distributed through a reverse auction, which ensures fiscal responsibility.

In the Lifeline program, the Commission’s goals are to: (1) continue implementation of the modernization of the Lifeline program to support affordable, high-speed Internet access for our nation’s poorest families; 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.

In the E-rate program, the Commission is committed to solving recent problems with USAC’s application system that have negatively impacted the ability of schools and libraries to apply for and receive funding. The Commission will ensure that USAC remediates these problems and administers this program in a manner which is transparent and accountable.

Finally, under the Rural Healthcare program, the Commission remains committed to ensuring all Americans have access to advanced medicine and health care services no matter where they live.

The chart below shows the costs the Commission has incurred and paid by regulatory fees in overseeing the USF Fund activities, which includes costs incurred by the OIG.



## Status of FCC Headquarters Move/Restack

The Commission’s current headquarters (HQ) lease for Portals II building at 445 12th Street SW, Washington, DC will expire in October 2017. In 2015 Congress approved a prospectus for a replacement lease for a 15-year term that would reduce our 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 General Services Administration (GSA) conducted a competitive lease procurement and the current lessor filed pre-award protests with GSA, Government Accountability Office (GAO), and the Court of Federal Claims, all of which denied the lessor’s protests. In December 2016, GSA awarded a lease, which will require the Commission to move to a newly built facility in fiscal year 2019. Post award, the current lessor filed a protest with the United States Court of Appeals for the Federal Circuit, and the case remains pending a decision. Since the Commission cannot move to a new facility before the termination of the lease, GSA informed the Commission that the current lessor may want a 20% premium over the current rental rate, translating to an increase of approximately $9 million per year in lease costs. GSA is working on negotiating with the current lessor for a lease extension.

In FY 2016, Congress provided the funding for the first part of the headquarters move/restack. In FY 2017, Congress provided only S&E portion of the Commission’s remaining request of the funding necessary to complete the headquarters move/restack. Total funds provided for the headquarters move/restack is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Total** | **S&E (Reg. Fees)** | **Auctions** |
| Amount Provided in FY 2016 | **$51,358,497** | $44,168,497 | $7,190,000 |
| Amount Provided in FY 2017 | **$16,866,992** | $16,866,992 | $0 |
| **TOTAL** | **$68,225,489** | **$61,035,489** | **$7,190,000** |

In order for GSA to complete the final execution of the lease, we must send the majority of the FY 2016 funds to GSA to cover real property costs, such as design and drawings, construction, lessor’s management and inspection fees, GSA management fees, contingency and escalation.  The funds provided in FY 2017 will be used to fund our personal property costs, such as information technology (IT) and telecommunications, security, project management, furniture and the physical move. The first six months after the lease award is critical as the Commission will be required to meet design and construction timetables established by the GSA and the new lessor. The FCC is also required to provide the details related to specialized areas and requirements related to electrical, heating, air conditioning, floor loading, specialized construction and the equipment to support them.  The procurements necessary for the FCC to be able to provide the necessary information to GSA and the new lease holder are project management and acquisition support; change management; engineering and design services for IT, audio visual, communications, and special construction; space reduction strategies for records; long lead procurements for the IT infrastructure, communications and security; furniture; equipment; and move services.

## Spectrum Auctions Program - Explanation of Requested Change

The Federal Communications Commission is requesting $111,150,000 for the Spectrum Auctions Program for FY 2018, as shown below, in furtherance of making more spectrum available for commercial use; repacking and reimbursing broadcasters and multichannel video programming distributors (MVPDs) in order to clear contiguous spectrum in the ultra-high frequency band that will be repurposed as the 600 MHz Band; upgrading and improving auctions infrastructure in preparing for future auctions; continue implementing the Spectrum Pipeline Act of 2015, which includes promoting the use of 3.5 GHz band through auctions; and conducting additional spectrum auctions.



## Spectrum Auctions Program

The Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, required the Commission to auction portions of the spectrum for certain services, replacing the former lottery process. The Commission is required 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. At the official date of the completion of the incentive auction on April 13, 2017, the Commission has completed 88 spectrum auctions and the total amount collected for broader government use and deficit reduction exceeds $114 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 with respect to electromagnetic spectrum identified under section 1004(a) of the Spectrum Pipeline Act of 2015, which was included as Title X in the Bipartisan Budget Act of 2015, P.L. 114-74, does not expire until September 30, 2025.

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 the auctions program will continue to recover the costs of conducting all auctions activities from spectrum license auction receipts as the Commission continues to use auctions as a licensing mechanism for spectrum-based communications services.

The FY 2017 Appropriations language capped the auctions program obligations at $117.0 million. The FCC request of $111.15 million for FY 2018 is a decrease of $5.85 million or 5 percent. While this amount reflects reductions related to the end of bidding in the incentive auction, funding at this level will enable the Commission to continue substantial post incentive auctions work related to repacking and reimbursing broadcasters and multichannel video programming distributors (MVPDs) for relocation costs; to upgrade and improve auctions infrastructure in preparation for future actions; and to 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, and conducting additional spectrum auctions.

*Post Incentive Auctions Work*

Because of the complex, two-sided nature of the broadcast incentive auction, the Commission will need to engage in an unprecedented amount of post-auctions activity to fully and successfully complete follow-up auction implementation tasks. The results of the incentive auctions showed that 957 full-power and Class A broadcasters nationwide will be required to be relocated in order to create contiguous spectrum in the 600 MHz band that has been repurposed and auctioned for flexible wireless uses. Some secondary broadcast stations, low power, and TV translator stations will also be displaced and will have the opportunity to apply for alternative channels. The bidding concluded in the forward auction’s assignment phase on March 30, 2017, and the Media and Wireless Telecommunications Bureaus released the Auction Closing and Channel Reassignment Public Notice on April 13, 2017, which announced the completion of the incentive auction and publicly provided the results of the reverse auction, the forward auction and assignment phase, and the channel reassignments of television stations that will be required to change their channels during the 39-month relocation process that commenced as of the release of that Public Notice. The release of that Public Notice also started the licensing process for the winning bidders for the new flexible use wireless spectrum licenses.

The auction proceeds from the winning bidders of new spectrum licenses will be used to pay the winning broadcast bidders in the reverse auction and to reimburse full power and Class A broadcast stations and MVPDs for their eligible expenses incurred as a result of being involuntarily relocated to new channels as authorized by Congress in the Middle Class Tax Relief and Job Creation Act of 2012, P.L. 112-96. The following highlights many of the activities that will be taking place during the 39-month transition period. All of these activities will have started in FY 2017 and will continue at a high tempo through FY 2020, and the Commission estimates that the total resources needed for these activities will exceed the amount of resources used to design the auction and complete bidding.

* Wireless Licensing – Winning bidders must submit license applications and deposit the winning bid amounts with the Commission within four weeks after the close of the auction. The Commission will review the applications and make them available for public comment. After public comments are reviewed and any issues raised are resolved, the Commission will grant the wireless spectrum licenses. The Commission may grant these licenses on a rolling basis. Historically, some licenses have been granted in as little as two months while others may take one to two years as issues are resolved.
* Payments to Reverse Auction Winning Bidders – Broadcasters will be paid as funds become available after grants of wireless licenses. Broadcasters that are relinquishing their licenses will have 90 days to discontinue operations on their pre-auction channels while broadcasters that will be channel-sharing will have 180 days to discontinue operations on their pre-auction channels. Waivers may be requested to extend these deadlines. The Commission will issue a series of ‘ready to pay’ public notices to announce when specific broadcasters will be paid as the funds from the winning wireless spectrum bidders become available.
* Submission of Banking Information by Broadcasters and MVPDs – The Commission requires broadcasters that will be receiving payments for relinquishing their spectrum or for reimbursement of repacking expenses and MVPDs that will be receiving payments for reimbursement of expenses related to continued carriage of repacked stations to provide detailed banking information that is notarized on paper form and in a secure electronic system. The information will be reviewed by the Commission prior to making any payments. This process will start after the Closing and Channel Reassignment Public Notice is released.
* 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. Broadcasters being relocated are required to file a construction permit application with the Commission that includes detailed technical parameters of their broadcast configuration. There will be three sequential windows in which broadcasters may submit their CPs to the Commission, depending on the broadcaster’s specific circumstances and needs. In addition, broadcasters may ask for waivers of some of the deadlines based on certain criteria. The Commission has adopted a phased transition process in which each station that is being repacked is assigned one of ten transition phases, each with a specific sequential testing period, at the end of which they must discontinue operations on their pre-auction channels. 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. If applications filed during the window are mutually exclusive, certain priorities apply and applicants will be provided an opportunity to resolve remaining issues through settlement or technical solution. If they are unable to do so they will be resolved pursuant to the Commission’s competitive bidding rules. Including the consideration of processing waivers, the CP process is anticipated to take nine to twelve months. Additional waiver applications and requests for transition relief may be received outside of the three windows and after the anticipated processing period. 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. After a broadcaster completes the construction of its new facilities, it will file an application with the Commission for its license.
* Reimbursements to MVPDs and Repacked Broadcasters – Congress established a TV Broadcaster Relocation Fund, not to exceed $1.75 billion, to reimburse broadcasters and MVPDs for their relocation expenses. The reimbursement process has two major components: (1) cost estimates and fund allocation and (2) invoice reimbursement processing. Broadcasters and MVPDs will have 90 days from the Closing and Channel Reassignment Public Notice to file their relocation cost estimates with the Commission. The Commission will review the cost estimates and issue a reimbursement allocation public notice announcing the initial amount of money that the eligible broadcasters and MVPDs will have available for reimbursement of their repacking expenses. After the allocations are announced, the Commission will review and pay approved invoices submitted by broadcasters and MVPDs. Entities are required to update their cost estimates if their plans for purchasing reimbursable equipment or services change. The Commission will 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. The Commission has engaged an independent consulting firm, Ernst & Young, to assist in administering the TV Broadcaster Relocation Fund.
* Displaced LPTV (Low Powered Television) and TV Translators – After licensing for full power and Class A broadcasters being relocated in the three filing periods described above is substantially complete, the Commission will open a special filing window for operating LPTV and TV translator stations that are displaced by the reallocation of the television bands and the repacking. The displacement window is anticipated to open approximately seven to nine months after release of the Closing and Channel Reassignment Public Notice. Processing of applications is anticipated to take nine to twelve months. If applications filed during the window are mutually exclusive, certain priorities apply and applicants will be provided an opportunity to resolve remaining issues through settlement or technical solution. If they are unable to do so, they will be resolved pursuant to the Commission’s competitive bidding rules.
* Stakeholder Outreach – To minimize disruptions and ensure an orderly transition, the Commission will conduct necessary stakeholder and consumer communications, education, and outreach. These efforts include developing training materials for broadcast stations, MVPDs, wireless microphone operators, and unlicensed users affected by the transition, as well as consumer outreach efforts geared toward reaching affected Americans where they live and work. The Commission will also maintain a comprehensive website to serve as a single point of reference for all transition-related information.

*Spectrum Pipeline Act of 2015 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, and requires the FCC, as part of its role on the Technical Panel, to review Federal entities’ proposals for funds for these purposes. Additionally, the Act also requires the Commission to submit four separate reports to Congress. By November 2018, the Commission must submit 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 and identify at least 1 gigahertz of spectrum between 6 GHz and 57 GHz for such use. By January 1, 2022, the Commission must submit a report, in coordination with the Assistant Secretary of Commerce for Communications and Information, which identifies at least 50 megahertz of spectrum below 6 GHz for potential auction. Finally, by January 2, 2024, the Commission must submit a report, in coordination with the Assistant Secretary of Commerce for Communications and Information, which identifies at least an additional 50 megahertz of additional spectrum below 6 gigahertz for potential auction. Both of these 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.

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

* Auctions Systems Replacement – The replacement of 10-year-old old backend database and software components that support the auction application set-up and management. Modernization of this system is critical to conform to current best practices, allow for modular builds, communicate with auction bidding systems and other Commission databases, and enable greater flexibility for future auction development. This modernization will support all future auctions.
* 3.5 GHz Auction Development and Implementation – These auctions will have a unique set of requirements, which includes auctioning more than 500,000 licenses every three years, at a minimum.
* Other Auction Development and Implementation – The Commission needs to make additional changes to the auction bidding system for other planned auctions that include an AWS-3 re-auction, millimeter wave auction(s), FM Auction 83, and FM Translators.
* Auction Security Enhancements – As recent news headlines have emphasized, the threat of cyber-attacks and security vulnerabilities are very real, and the Commission takes these threats and vulnerabilities very seriously. The FCC will proactively engage security engineers and architects to ensure the modernization of systems in the cloud are secure and adhere to Federal mandates and regulations to include two factor authentication. Making FCC auction systems resilient to cyber-attacks and mitigating security vulnerabilities will be a critical part of these efforts.

* 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, and are necessary to protect incumbent Federal operations. These systems will first be launched 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 millions of devices, we need to ensure they operate properly and consistently with our rules prior to approval.
* Optimization for New Spectrum Opportunities – The optimization team will help us analyze and study options for making new spectrum 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.
* Spectrum Visualization Tools – Public Facing and Internal – The public has a significant interest in understanding who has the rights to different spectrum bands at different locations, and desires the ability to manipulate and analyze this data. Federal agencies would also 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.
* Integrated Spectrum Auctions System (ISAS) Enhancement/Modifications – It is necessary to modify the application forms for participation in each auction in response to the auction’s unique requirements. This work will provide additional modernization of the primary auctions application via the ability to customize the form to support each auction.
* Auction Warehouse – The Commission will create a persistent data warehouse where it will host the vast amounts of data generated from each auction. Keeping the data over time will help as both a reference and a tool to continue to improve the auctions and bidding systems.

The Balanced Budget Act of 1997, P.L. 105-33, required that the Commission provide to authorizing committees a detailed report of obligations in support of the auctions program for each fiscal year of operation, as a prerequisite to the continued use of auctions receipts for the costs of all auctions activities. As required by the law, each year the FCC provides the spectrum auctions expenditures report for the preceding fiscal year to Congress by the statutory deadline of September 30 of the following fiscal year. The following table shows available auction cash for the respective fiscal years.

## Spectrum Auctions Activities



## Summary of Distribution of Resources - Spectrum Auctions Program

**SPECTRUM AUCTIONS COST RECOVERY REIMBURSABLE AUTHORITY**

**INCLUDING OFFICE OF INSPECTOR GENERAL**



## Spectrum Auctions Expenditures Report

Section 309(j) of the Communications Act permits the Commission to utilize funds raised from auctions to fund auction purchases, including contracts for services, and 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 2018 is $111,150,000 in furtherance of making more spectrum available for commercial use; to continue the post incentive auctions work; to upgrade and improve auctions infrastructure in preparation for future actions; and to continue implementation of the Spectrum Pipeline Act of 2015. The FY 2018 request is a decrease of $5,850,000 or 5 percent, from the FY 2017 enacted cap level of $117,000,000.

The Commission’s spectrum auctions program expenditures support efficient licensing while also contributing significant funds to the U.S. Treasury for deficit reduction and providing direct support to other broader 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 the broadcast incentive auction, fund certain public safety related programs and contribute to deficit reduction. Specifically, Congress directed that the net proceeds from these auctions 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 September 30, 2016, the FCC has transferred $39.8 billion from the H-Block and AWS-3 auctions to satisfy all the distribution requirements as directed by Congress in the Middle Class Tax Relief and Job Creation Act of 2012. Of this total, in FY 2016, the Commission transferred $8.4 billion to the Public Safety Trust Fund. This amount includes $328.9 million for deficit reduction above and beyond the initial $20.4 billion initially mandated by Congress in the Middle Class Tax Relief and Job Creation Act of 2012.

At the conclusion of the incentive auctions on April 13, 2017, the Commission had raised over $114 billion in auctions revenues since initiating the auctions program in 1994. During this period, the 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 without any increase in funding, including increases for inflation, only receiving increases in FYs 2013 through 2017 to fund the implementation costs for the incentive auctions and Spectrum Pipeline Act of 2015, and to fund the necessary expenses associated with headquarters move to a new facility or reconfiguring the existing space in FY 2016.

Spectrum auctions activities are performed agency-wide and are very information technology (IT) intensive, as reflected in our Spectrum Auctions Expenditures Reports, which are provided to Congress on an annual basis. For example, the Incentive Auctions team is composed of staff from across the Commission, including the Wireless Telecommunications Bureau, Media Bureau, International Bureau, Office of Engineering and Technology, Office of the Managing Director, and Office of General Counsel. 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 that objective.

Every auction is different and unique with very specific requirements, which require careful attention to detail and planning. Since auctions activities are performed agency-wide and are unique, allocating 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, and 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.  These items that are allocated by the FTE rate include Commission-wide information technology 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.

After years of planning with all the rules in place, and at the direction of Congress, the Commission concluded the final bidding phase of the historic broadcast incentive auction. The incentive auction makes available 84 megahertz of low-band spectrum for commercial and unlicensed wireless use by repurposing a portion of the broadcast TV bands for wireless use.  The auction that began on March 29, 2016, ended on March 30, 2017. The total net winning bids of $19.3 billion from this first-ever incentive auction put it in second place among all Commission auctions in terms of the amount of total winning bids. Approximately $6.5 billion will be transferred to the General Fund of the U.S. Treasury for deficit reduction.

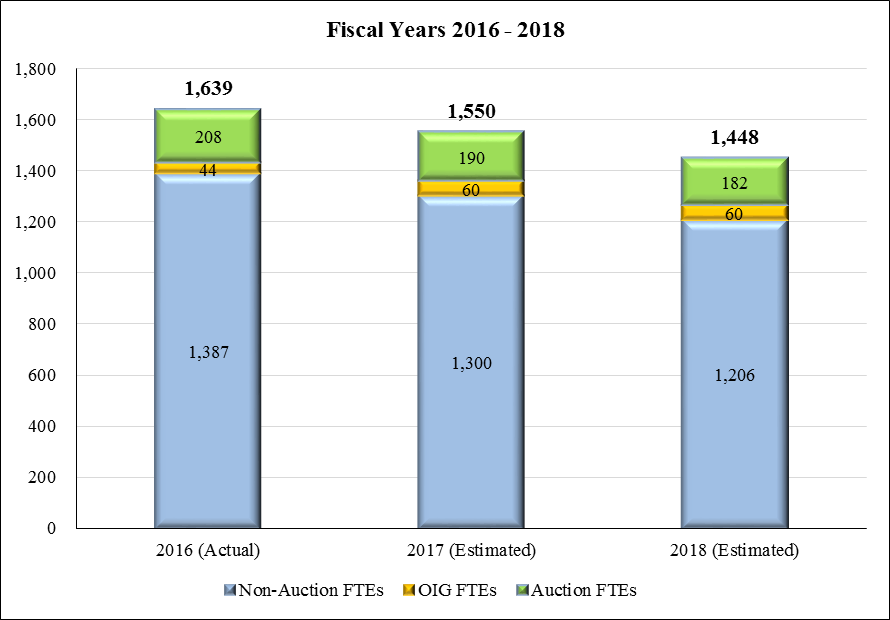
The Commission’s primary auctions focus in FY 2018 is to carry on its responsibilities related to the post incentive auction activities. This includes disbursing $1.75 billion to broadcasters and MVPDs and relocating 957 broadcasters and planning to provide with minimum disruption to the viewing public. The Commission must also carry out its responsibilities to consider the relocation of potentially hundreds of LPTV and TV translator stations that are displaced by the reallocation of the television bands and repacking. The “repacking” process” began on April 13, 2017, with the release of the Closing and Channel Reassignment Public Notice, and will continue for 39 months. Repacking involves reorganizing and assigning channels to the remaining broadcast television stations in order to create contiguous blocks of cleared spectrum suitable for flexible wireless use. The scope of the repacking component of this auction makes it uniquely, computationally complex challenge that will require substantial resources and engagement from the Commission over the next four years. The task mandates 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, vendors involved in transition tasks, and other government and regulatory agencies, including at the federal, state, and local level and with international regulatory partners in the U.S. - Canada and U.S. - Mexico border zone regions. It 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. It also requires an administrator, overseen by Commission staff, to manage the reimbursement of $1.75 billion to the qualified relocating broadcasters to minimize fraud.

In planning for the post-auction transition, the Commission is focused on communications, education, and outreach efforts to all stakeholders. The Media Bureau and Incentive Auction Task Force are developing training materials for broadcast stations, MVPDs, wireless microphone operators, and unlicensed users affected by the transition. Additionally, the Consumer and Governmental Affairs Bureau is preparing an extensive consumer outreach effort geared toward reaching affected Americans where they live and work, including public service announcement-style videos, scripts, and troubleshooting guides for our consumer call center staff; an updated Consumer Q&A; and updated Consumer Guides. Wherever possible we want to make these materials available in multiple languages. The Commission is also developing, 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 consumers.

In addition, the Commission continues to plan for future auctions, including the re-auction of certain AWS-3 licenses; the auction of a number of FM translator allocations that will be paired with full-power AM stations, and possibly full-power FM stations; a potential auction of unsold 600 MHz licenses from the broadcast incentive auction; and the creation of a new auction for Citizens Broadband Radio Service (CBRS) licenses.  The CBRS auctions will involve over 500,000 licenses and will take place every three years, at a minimum.  The Commission is also working to update and modernize its overall auctions system to be prepared to quickly hold new auctions when additional spectrum that could be made available is identified.

The actual and estimated FTE levels for the spectrum auctions program for FYs 2016 through 2018 are shown below.

FTEs by Resource Category

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The following two schedules provides some details of the spectrum auctions held 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 in running the Commission’s spectrum auctions program.

## Spectrum Auctions and Collections

Fiscal Years 1994 through Aprill 24, 2017

As of April 24, 2017



## Spectrum Auctions Program – Collections vs. Expenditures

Fiscal Years 1994 through April 24, 2017

(Dollars in Millions)



1. 47 U.S.C. § 151. [↑](#footnote-ref-1)
2. *Id.* [↑](#footnote-ref-2)
3. Refer to a chart on page 27 for a breakdown of FTEs between non-auctions (Regulatory Fees) and auctions. [↑](#footnote-ref-3)