

Federal Communications Commission



**Spectrum Auctions
Fiscal Year 2018**

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SPECTRUM AUCTIONS

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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.

(Dollars in Thousands)

	FY 2017 Enacted	FY 2018 Congressional Request	TOTAL NET CHANGE	
			Amount	Percent
Spectrum Auctions Cost Recovery	\$117,000	\$111,150	-\$5,850	-5.0%
Explanation of Changes				
FY 2017 Appropriated Cap - Spectrum Auctions Program				\$117,000
FY 2018 Adjustments:				
Salary Increases - Pay Raises (1.9%)			\$672	
Non-Salary Increases (1.9%) ¹			\$1,554	
Subtotal			<u>\$2,226</u>	\$2,226
FY 2018 Adjusted Base				\$119,226
Reduction In Funding				<u>-\$8,076</u>
FY 2018 Total Request - Spectrum Auctions Program				\$111,150
TOTAL NET CHANGE (-5.0%)				-\$5,850

¹Utilized the FY 2018 inflationary pay raise rate provided by the OMB.

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

Fiscal Years 2011 - 2016

Dollars in Thousands

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Beginning Cash Balance as of October 1	\$217,280	\$199,151	\$166,489	\$69,071	\$317,931	\$513,456
Current Year Net Cash	23,581	(18,801)	(90,057)	252,796	11,115,179	2,777,519
Less:						
Deferred Revenue as of September 30 ¹	(41,412)	(13,136)	(6,760)	(3,318)	(10,919,416)	(308,607)
Deposit Liability - Refunds as of September 30 ²	(298)	(725)	(601)	(618)	(238)	(2,214)
Available Cash as of September 30	<u>\$199,151</u>	<u>\$166,489</u>	<u>\$69,071</u>	<u>\$317,931</u>	<u>\$513,456</u>	<u>\$2,980,154</u>

¹Cash associated with licenses that have not been granted as of stated date.

²Upfront auction deposits not refunded as of stated date.

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 2016 Actuals</u>	<u>FY 2017 Enacted</u>	<u>FY 2018 Congressional Request</u>
Personnel Compensation & Benefits:			
Full-time & Other than full-time Permanent (11.1 & 11.3)	\$28,263	\$27,228	\$23,890
Personnel benefits (12.0)	8,316	8,043	7,378
Subtotal - Personnel Compensation & Benefits	\$36,579	\$35,271	\$31,268
Other Expenses:			
Benefits for former personnel (13.0)	\$11	\$11	\$11
Travel & transportation of persons (21.0)	200	327	327
Transportation of things (22.0)	23	24	24
Rent payments to GSA (23.1)	6,090	6,162	5,657
Communications, utilities, & misc. charges (23.3)	999	1,785	1,785
Printing and reproduction (24.0)	191	182	182
Other services from non-Federal sources (25.2)	12,630	24,117	22,775
Other goods & services from Federal sources (25.3)	431	393	393
Operation & maintenance of equipment (25.7)	41,403	44,287	44,287
Supplies and materials (26.0)	3,229	3,530	3,530
Equipment (31.0)	1,347	906	906
Land and structures (32.0)	0	0	0
Insurance claims & indemnities (42.0)	7	5	5
Subtotal - Other Expenses	\$66,563	\$81,729	\$79,882
Total - Auctions Cost Recovery Reimbursable Authority	\$103,143	\$117,000	\$111,150

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 on page 18. On page 16 is a crosswalk showing how spectrum auctions program funds will be utilized in FY 2018.

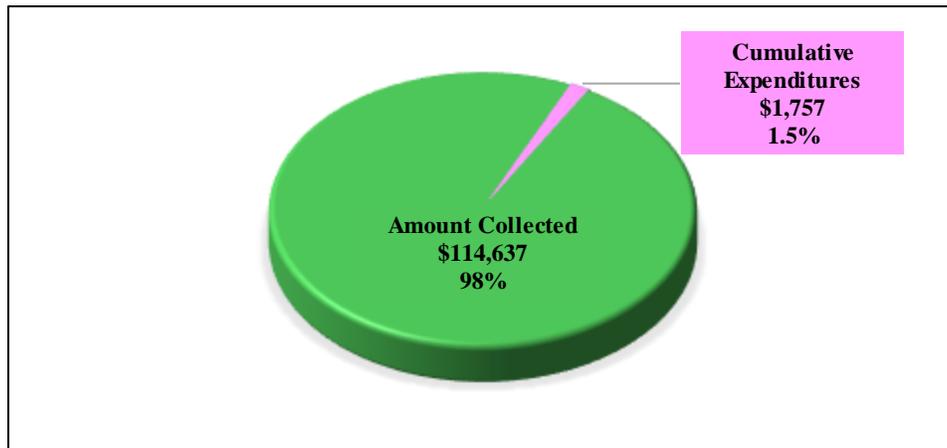
The following two schedules provides some details of the spectrum auctions held since its inception in 1994. These schedules also provide some perspective into how much money was collected for the U.S. Treasury or for broader government use and the total cost in running the Commission’s spectrum auctions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

Spectrum Auctions and Collections
 Fiscal Years 1994 through April 24, 2017
 As of April 24, 2017

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	18,988,042,918
2009	2	115	5,597,028
2010	3	4,788	25,973,019
2011	3	126	31,491,503
2012	1	93	3,869,571
2013	2	3,197	5,780,165
2014	2	186	1,564,594,550
2015	2	1,611	41,755,656,040
2016	0	0	0
2017	1	2,776	19,318,157,706
Totals	88	44,167	\$114,637,140,318

The amount for FY 2017 is an estimated amount to be collected.

Spectrum Auctions Program – Collections vs. Expenditures
 Fiscal Years 1994 through April 24, 2017
 (Dollars in Millions)



Cumulative Expenditures includes the Congressional request amount for FY 2017.

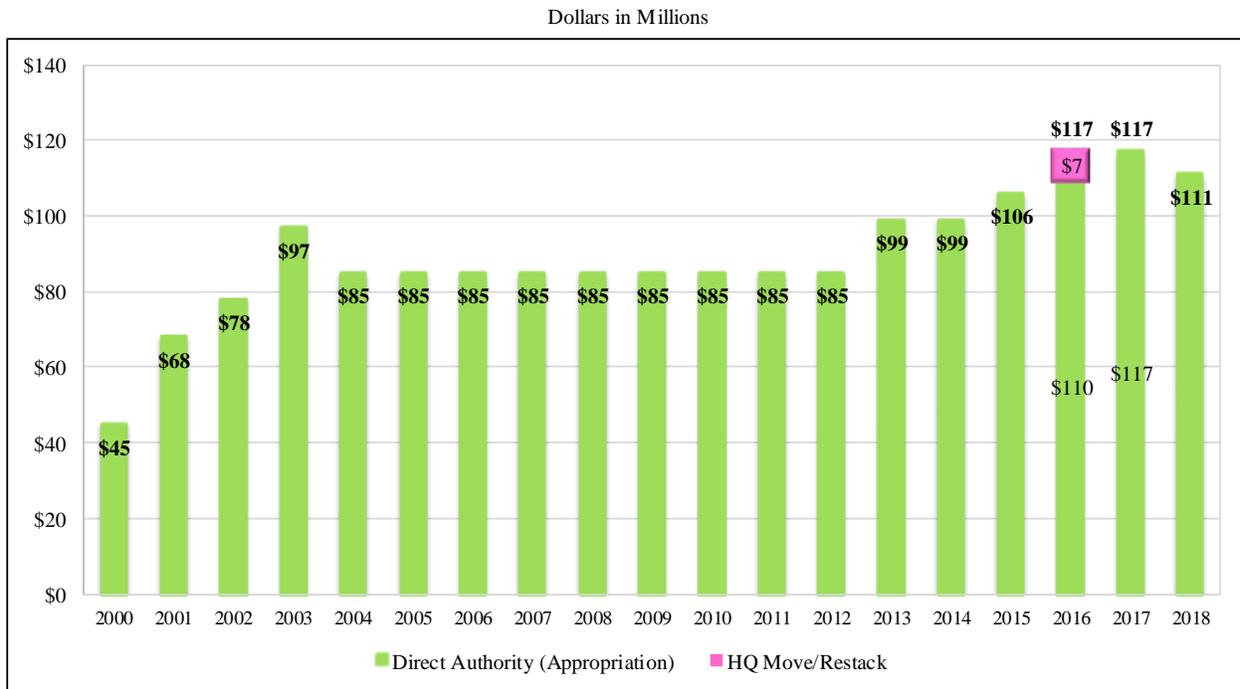
Crosswalk - Summary of Changes for Spectrum Auctions Program

(Dollars in Thousands)

	FY 2017 Enacted	Inflationary Increases		Reduction in Funding	FY 2018 Congressional Request
		Personnel	Non-Salary		
Consumer & Governmental Affairs Bureau	\$130	\$0	\$2	-\$2	\$130
International Bureau	\$247	\$0	\$5	-\$5	\$247
Media Bureau	\$1,457	\$0	\$28	-\$28	\$1,457
Wireless Telecommunications Bureau	\$9,823	\$0	\$187	-\$3,187	\$6,823
Office of Administrative Law Judges	\$10	\$0	\$0	\$0	\$10
Office of General Counsel	\$4	\$0	\$0	\$0	\$4
Office of Managing Director	\$69,905	\$0	\$1,329	-\$175	\$71,060
Office of Media Relations	\$34	\$0	\$1	-\$1	\$34
Office of Workplace Diversity	\$13	\$0	\$0	\$0	\$13
Compensation & Benefits	\$35,235	\$672	\$0	-\$4,675	\$31,232
Office of Inspector General	\$142	\$0	\$3	-\$3	\$142
TOTAL	\$117,000	\$672	\$1,554	-\$8,076	\$111,150

Historical Appropriated Budget Authority – Spectrum Auctions Program

The following graph depicts the historical appropriated budget authority for the spectrum auctions program since fiscal year 2000.



The FY 2018 represent amount requested.

For FY 2016, \$7 million represent amount provided for the necessary expenses associated with moving the FCC headquarters to a new facility or reconfiguring the existing space to significantly reduce space consumption.

FTEs by Resource Category

The following graph shows actual and estimated FTE levels for the spectrum auctions program for FYs 2016 through 2018.

