Federal Communications Commission

Fiscal Year 2015 Budget In Brief
March 2014

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Introduction

The Federal Communications Commission (FCC or Commission) is pleased to present its fiscal year (FY) 2015 budget request. The FCC is requesting a budget of $375,380,313 to carry out the FCC's functions and meet the expectations of Congress.

The FCC's FY 2015 budget submission includes requests for funding to:
   (1) support reform of the Universal Service Fund Support Program;
   (2) provide resources for mission-critical systems to ensure that they are operational during a Continuity of Operations (COOP) event;
   (3) create a Do-Not-Call registry for telephone numbers used by Public Safety Answering Points (PSAPs);
   (4) to replace Enforcement Bureau's Equipment;
   (5) support Commission-wide information technology improvements through new FTEs; extending the enterprise storage; big data cybersecurity analytics; and cybersecurity authorization, admission, and education; and
   (6) improve the evolution of the Broadband map.

In furtherance of these objectives and the FCC's mission, the FY 2015 budget request will be used to support the following Strategic Goals:

Strategic Goal 1: Connect America
Maximize Americans' access to and use of affordable fixed and mobile broadband where they live, learn, work, and travel.

Strategic Goal 2: Maximize Benefits of Spectrum
Maximize the availability of spectrum in order to provide diverse and affordable communications services to consumers.

Strategic Goal 3: Protect and Empower Consumers
Empower consumers by ensuring that they have the tools and information they need to make informed choices in their use of communications services; protect consumers from harm in the communications market.

Strategic Goal 4: Promote Innovation, Investment, and America's Global Competitiveness
Ensure that all lawful content can be provided, and accessed, without artificial barriers; promote innovation in a manner that improves the nation's ability to compete in the global economy, creating a virtuous circle that results in more investment and in turn enables additional innovation.

Strategic Goal 5: Promote Competition
Ensure a competitive market for communications and media services to foster innovation, investment, and job creation, and to ensure consumers have meaningful choice in affordable services.

Strategic Goal 6: Public Safety and Homeland Security
Promote the availability of reliable, interoperable, redundant, rapidly restorable critical communications infrastructures that are supportive of all required services.

Strategic Goal 7: Advance Key National Purposes
Through international and national interagency efforts, advance the use of broadband for key national purposes.

Strategic Goal 8: Operational Excellence
Make the FCC a model for excellence in government by effectively managing the FCC's human, information, and financial resources; by basing decisions on sound data and analyses; and by maintaining a commitment to transparent and responsive processes that encourage public involvement and best serve the public interest.

The FCC's FY 2015 budget submission also includes a request for the spending of Auctions funding at $106 million to support the timely implementation of the Incentive Auctions program.

As in prior years, the FCC is submitting its FY 2015 budget request information at the organizational level to show the proposed use of resources. In addition, the FCC's budget request also shows the proposed use of funds by key accounts within each bureau or office. This format provides a detailed view of the FCC's proposed use of budgetary resources. We welcome the budgetary process and stand ready to provide Congress with the information to ensure effective oversight of the FCC.

SUMMARY OF REQUEST

The Federal Communications Commission (FCC) is requesting a FY 2015 appropriation of $375,380,313. We project the FCC will employ 1,790 full-time equivalents (FTEs) in FY 2015 from requested resources.

The FCC will use the FY 2015 funds to carry out its fundamental mission to ensure that the American people have available, at reasonable costs and without discrimination, rapid, efficient, Nation - and world-wide communications services whether by radio, television, wire, satellite, or cable.

($ in thousands)

	FTE	FY 2014 Congressional Appropriation	FTE	FY 2015 Congressional Request	FTE	Requested Changes
Budget Authority to use Offsetting Collections:						
Regulatory Fees - Commission	1,689	$328,754	1,738	$364,290	49	$35,536
Regulatory Fees - OIG	46	$11,090	52	$11,090	6	$0
Total Offsetting Collections	1,735	$339,844	1,790	$375,380	55	$35,536
Authority to spend Other Offsetting Collections:						
Economy Act/Misc. Other Reimbursables		$6,000		$6,000		$0
Auction Cost Recovery Reimbursements - Commission		$98,033 [1/]		$105,481 [1/]		$7,448
Auction Cost Recovery Reimbursements - OIG		$706 [1/]		$519 [1/]		($187)
Subtotal: Budget Authority Offsetting Collections		$104,739		$112,000		$7,261
Subtotal: Offsetting Collections	1,735	$444,583	1,790	$487,380	55	$42,797
Other Budget Authority:						
Credit Program Account		$1,933		$500		($1,433)
Universal Service Fund (USF)	0	$3,315 [2/]	0	$4,130 [2/]	0	$815
Subtotal: Other Budget Authority	0	$5,248	0	$4,630	0	($618)
Total Gross Proposed Budget Authority	1,735	$449,831	1,790 [3/]	$492,010	55	$42,179

1/ The Auctions request of $106M in FY 2015 represents a increase of $7.3M from FY 2013 & FY 2014 for Incentive Auctions of $98.7M.

2/ The Consolidated Appropriations Act, 2008 (P.L. 110-161) authorizes use of $21.5M to be used by the Office of the Inspector General for USF Audit Support. In FY 2008 - FY 2013, $13.9M was obligated. The remaining $7.6M has been carried forward, as follows $3.3M is estimated to be used in FY 2014 and $4.3M will be used in FY 2015.

3/ The total request of 1,790 FTEs is increase of 55 FTEs, of which includes 10 new FTEs to support the IT Center and 45 new hires for the USF support oversight.

FY 2015 PROPOSED APPROPRIATION LANGUAGE

For necessary expenses of the Federal Communications Commission, as authorized by law, including uniforms and allowances therefore, 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, $375,380,313, to remain available until expended: *Provided*, That $375,380,313 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 **2015** so as to result in a final fiscal year **2015** appropriation estimated at **$0**: *Provided further*, That any offsetting collections received in excess of $375,380,313 in fiscal year **2015** 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 year and otherwise becoming available on October 1, **2014**, 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 $106,200,000 for fiscal year **2015**, including not to exceed $518,981 for obligation by the Office of the Inspector General: *Provided further*, That, of the amount appropriated under this heading, not less than $11,090,000 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 2015 Budget that pertain to the FCC and that are designed to improve spectrum management and represent sound economic policy. The proposed legislative changes are included below.

Spectrum License User Fee

To promote efficient use of the electromagnetic spectrum, the Administration proposes to provide the FCC with express authority to use other economic mechanisms, such as fees, as a spectrum management tool. The FCC would be authorized to set user fees on unauctioned spectrum licenses, which could be useful in certain instances. Fees would be phased in over time to determine the appropriate application and level for fees. Fee collections are estimated to begin in 2015, and total $4.8 billion through 2024.

Repurpose 1675 -1680 Megahertz using Auction or Fee Authority

The Administration proposes to direct that the FCC use either auction or fee authority to repurpose spectrum frequencies between 1675-1680 megahertz for wireless broadband use by 2017, subject to sharing arrangements with Federal weather satellites. Currently, the spectrum is being used for radiosondes (weather balloons). A new weather satellite that is scheduled for launch in 2015 will operate in adjacent frequencies. If this proposal is enacted, the National Oceanic and Atmospheric Administration would move the radiosondes to another frequency, allowing the spectrum to be repurposed for commercial use with limited protection zones for the remaining weather satellite downlinks. Without this proposal, these frequencies are unlikely to be repurposed to commercial use. The proposal is expected to raise $230 million over the next 10 years.

Auction Domestic Satellite Service Spectrum Licenses

The FCC would be allowed to assign licenses for certain satellite services that are predominantly domestic through competitive bidding, as had been done before a 2005 court decision called the practice into question on technical grounds. The proposal is expected to raise $50 million from 2015-2024.

SUMMARY OF FY 2013 - FY 2015 FULL-TIME EQUIVALENTS (FTEs) AND FUNDING BY BUREAU AND OFFICE

(Dollars in Thousands ($000))	FY 13		FY 14		FY 15	
	FTEs	Appropriation Actuals	FTEs	Congressional Appropriation	FTEs (Note 1)	Congressional Request
Chairman and Commissioners	16	$4,241	30	$6,708	30	$6,824
Consumer & Governmental Affairs Bureau	160	$23,304	160	$25,315	160	$26,254
Enforcement Bureau	264	$44,137	264	$46,251	264	$47,670
International Bureau	119	$21,094	119	$21,427	119	$21,798
Media Bureau	181	$26,920	181	$28,051	181	$28,539
Public Safety & Homeland Security Bureau	113	$18,386	113	$18,262	113	$18,577
Wireless Telecommunications Bureau	215	$15,537	215	$16,800	215	$17,091
Wireline Competition Bureau	178	$30,270	178	$30,934	217	$38,529
Office of Administrative Law Judges	4	$385	4	$550	4	$560
Office of Commun. Business Opportunities	12	$1,903	12	$2,015	12	$2,050
Office of Engineering & Technology	82	$13,804	82	$14,393	82	$14,641
Office of the General Counsel	71	$13,040	71	$13,734	71	$13,973
Office of Legislative Affairs	12	$2,007	11	$2,107	11	$2,143
Office of the Managing Director	209	$91,152	204	$93,765	214	$113,056
Office of Media Relations	14	$2,489	14	$2,525	14	$2,569
Office of Strategic Planning & Policy Analysis	26	$3,954	26	$5,079	26	$9,166
Office of Workplace Diversity	5	$821	5	$837	5	$851
FCC SUBTOTAL	1,681	$313,443	1,689	$328,754	1,738	$364,290
Office of Inspector General	42	$9,061	46	$11,090	52	$11,090
FCC TOTAL	1,723	$322,504	1,735	$339,844	1,790	$375,380

Note 1: The total request of 1,790 FTEs is increase of 55 FTEs, of which includes 10 new FTEs to support the IT Center and 45 new hires for the USF support oversight.

SUMMARY OF CHANGES

($ in thousands)

	FY 2014 Cong. Approp.	FY 2015 Cong. Request	Net Change From FY 2014 Request
Offsetting Collections	$328,754	$364,290	$35,536
Offsetting Collections - OIG	11,090	11,090	0
Total Offsetting Collection/Spending Authority	**$339,844**	**$375,380**	**$35,536**
FCC Full-time Equivalents	1,689	1,738	49
FCC-OIG Full-time Equivalents	46	52	6
Total Full-time Equivalents [1]	**1,735**	**1,790**	**55**

Explanation of Changes

FCC - Commission without Office of the Inspector General	Amount
Inflationary Increases to Base:	
Salary Increases - Pay Raise (1%)	$2,133
Non Salary Increases (1.6%)	$1,524
FERS Retirement Increase	$2,182
Subtotal	**$5,839**
Adjustments to the Base:	
Support for Reform of the Universal Service Fund Support Program	$10,877
Continuity of Operations Plan	$520
Public Safety Answering Points - Do Not Call Registry	$500
Broadband Map (Transfer from NTIA)	$3,000
Enforcement Bureau Equipment	$625
New FTEs for ITC Support	$610
Subtotal	**$16,132**
Programmatic Increases:	
IT Storage Expansion	$1,290
Big Data Cybersecurity Analytics	$700
Cybersecurity Authorization, Admission, & Education	$800
Cybersecurity Metrics Program	$575
Modernization of Aging IT Systems	$9,200
Broadband Map (One-time Cost)	$1,000
Subtotal	**$13,565**
FCC Subtotal - before the Office of the Inspector General	**$35,536**
FCC-OIG Subtotal	**$0**
Total	**$35,536**

[1] The total request of 1,790 FTEs is increase of 55 FTEs, of which includes 10 new FTEs to support the IT Center and 45 new hires for the USF support oversight.

Narrative Explanation of Increases and Decreases

Inflationary Increases to Base   **$5,839,312**

1. <u>Personnel Compensation and Benefits</u>. The requested $2,133,618 provides funds to cover the cost of the 1% FY 2015 pay raise for 75% of the fiscal year, funds to annualize 25% of the FY 2014 pay raise (.5%), and funds to cover the cost of pay increases resulting from actions other than pay raises (such as time-in-grade step increases) and increases in health benefit costs.

2. <u>FERS Retirement Cost Increase</u>. The requested $2,181,792 will provide funding to cover the expected increase in FERS Retirement benefits.

3. <u>Non-Salary Increases</u>. The requested $1,523,902 provides expected inflationary increases for space rentals (GSA and non-GSA facilities), phones, utilities, printing and reproduction services, contractual services, and supplies. These increases are developed in accordance with OMB guidelines for projected inflationary costs (1.6%).

Other Increase Base   **$16,132,000**

1. <u>Reform of the Universal Service Fund Support Program: ($10,877,000)</u>

   This request is for funds to support the Commission's work to modernize and reform the Universal Service Fund (USF) Support programs. Since 2009, the Commission has taken major steps to modernize the four USF support programs with a particular emphasis on improving broadband connectivity nationwide. In 2010, the Commission undertook fundamental reform of the rural portion of the USF program to repurpose approximately $4.5 billion annually to provide broadband to all Americans, including the more than 19 million unserved homes. In 2011, the Commission reformed the Lifeline program, which provides basic phone service to low-income families, realizing cost savings of more than $200 million in the past year and repurposing a portion of those savings to initiate a pilot program to provide broadband to low-income families. Also in 2011, the Commission undertook reform of the under-utilized program that provides broadband connectivity to non-profit rural health care providers, allowing them to realize cost savings through increased use of the telemedicine program. More resources are required to continue the Commission's work to modernize USF, implement reforms, increase its oversight of the newly-reformed programs and provide for critical enforcement of the rules. This request will support funding for additional staff including, attorneys, economists, IT specialists, program managers, and technologists.

2. <u>Continuity of Operation Plan: ($520,000)</u>

   The Commission must provide for its mission-critical systems to be redundant and fully operational in a Continuity of Operations (COOP) event. The Commission has many (over 20) mission-critical IT systems and is undertaking an ongoing review of such systems, starting with the highest priority systems, to determine what actions are needed to be fully

operational in such an event. In the past two years, the FCC has assessed two of its most important mission-critical systems, the Universal Licensing System (ULS) and the Office of Engineering and Technology's Frequency Assignment System (OFACS). The ULS is an interactive licensing database system used to track wireless licenses and to process and approve new applications, including emergency applications during disasters. This system is used for both commercial and public safety licenses. The ULS enables the FCC, public safety frequency coordinators, and the public to efficiently search for application and license information. OFACS is also essential for the conduct of the FCC's spectrum management and coordination responsibilities. OFACS enables FCC spectrum personnel to access all major FCC spectrum license databases and to provide frequency assignment records to the National Telecommunications and Information Administration (NTIA), our primary partner in the conduct of the Nation's spectrum management activities.

3. Public Safety Answering Points (PSAP) Do Not Call Registry: ($500,000)

Section 6507 of the Middle Class Tax Relief and Job Creation Act of 2012 requires the FCC to create a Do-Not-Call registry for telephone numbers used by Public Safety Answering Points (PSAPs) and to prohibit the use of automatic dialing equipment to contact those numbers. PSAPs are facilities that have been designated to receive emergency calls and route them to emergency service personnel. On October 17, 2012, the FCC released a report and order to create such a registry. Under the statute, verified PSAP administrators or managers must be able to place into the PSAP registry telephone numbers that are used for the provision of emergency services or for communications between public safety agencies.

4. Broadband Map (Transfer from NTIA): ($3,000,000)

In FY 2014 and prior fiscal years the Broadband Map costs were included in NTIA's appropriations from Congress. Then, NTIA entered into reimbursable agreements with the FCC for the work performed by the Commission staff. In FY 2015, the Commission will be fully responsible for the Broadband Map.   The modernization of FCC Form 477 will drive an evolution of the national broadband map to further improve its utility as a key resource of broadband deployment for consumers, policymakers, researchers, economists, and others. The online platform will leverage previous investments with new approaches to open government data, creating a robust and sustainable online platform. The ongoing cost of these efforts for FY 2015 will be $3 Million. The Commission has requested $1 million as a one-time initiative for the Broadband Map.

5. Enforcement Bureau Equipment: ($625,000)

An important part of the Enforcement Bureau's (EB) responsibilities is the enforcement of technical rules and interference resolution, particularly in the areas of homeland security and public safety. Emerging technology is adding increased complexity to the resolution of harmful interference that affects both federal and local government operated public safety services, and critical infrastructure. As radio technology evolves, manufacturers of test and measurement equipment also follow those advances, and EB's technical capability must also

keep pace with the evolving technology.

6. FTEs for Information Technology Center Support ($610,000)

Analysis performed in 2010 of other agencies comparable to the FCC in workforce size and budget showed that such organizations, on average, have 72 FTEs providing IT support and services. The FCC, in contrast, has only 37 IT FTEs.   Funds are requested to support the hiring of 10 new FTEs for FY 2015 to perform inherently governmental functions of FCC security, IT project management, and IT contract oversight and management.

This request represents a conservative increase, recognizing the constraints of the budget, and is necessary to meet the current demand and work of the IT office and address concerns of under-resourcing this important work. While a larger request would allow the FCC to perform more efficiently, even offsetting the increased funding in realized efficiencies and reduced costs (such as reducing the number of contractors needed and better managing long-term investment) the FCC will work to leverage this conservative increase to achieve such goals, since, without such increase, the FCC faces significant risk. The agency's IT workforce has been drastically reduced in recent years. The FTEs most likely to leave the agency are those representing the bulk of the agency's institutional knowledge base. Without increased resources in this critical area, the FCC faces the inability to onboard a sufficient amount of new talent to engage in knowledge transfer from more senior FTEs before those FTEs either retire or move on to other more lucrative careers. Loss of that institutional knowledge could put FCC's legacy IT systems at substantial operational risk.

New Program Performance Initiatives   **$13,565,000**

1. Commission-wide Information Technology: $12,565,000

During FY 2014, the Commission will continue the work of creating a more robust cybersecurity program and upgrading mission critical systems. In FY 2015, the Commission will need to invest additional resources in order to sustain and build upon these efforts.

IT Storage Expansion ($1.290M): The FCC needs to expand the tiered enterprise storage solution to include off-site external storage providers, lower cost storage servers, distributed file systems, and off-site backup and replication technologies. The solution will be able to move seamlessly and access data stored in multiple locations through multiple providers without impacting the users or business applications in the Commission. The system will be scalable at all levels and storage locations and will provide for improved disaster recovery and COOP capabilities.

Big Data Cybersecurity Analytics ($700K): Big Data Cybersecurity Analytics is applying big data technologies to Cybersecurity. Current big data technologies are seeing tremendous success in social media, intelligence, and marketing industries. These technologies will mature through the year with acceptance by the Cybersecurity community in 2015.

Current big data technology includes massive data repositories, cloud technology, and the use of unstructured data. Big Data Cybersecurity Analytics will be a disruptive technology in the Cybersecurity arena, as traditional analysis and forensics techniques will be superseded by automation conveniences that reduce the burden of work on the analyst. Big data will become a platform for new methods of analysis. This will greatly increase the Commission's abilities to perform Root Cause Analysis.

One example of such analysis is the reverse engineering of malware on computer networks. Current techniques use a variety of mechanisms to reassemble, export, quantify, and analyze behavior of malware. Pending capability and skill set, this task can take weeks to perform, as it involves a number of analysis steps to retrieve a call graph of malware execution from a disassembler. Big Data Cybersecurity Analytics will present options that automate this capability, reduce the analyst burden, and improve the ability to quickly perform this function.

Cybersecurity Authorization, Admission & Education ($800K): Authorization & Admission is going to be an evolving concern as applications like Virtual Desktop Infrastructure (VDI) are installed onto our networks. This challenge is similar to those we face with physical network access. Instead of worrying about unauthorized computers being attached to the physical network, organizations must be concerned with virtual computers. These virtual computers must be authorized before they may be admitted to the network enclave.

A current challenge organizations have solved is network access control for physical computers. A favorite tactic of auditors is to sneak a computing device into a building and plug it into the network. They use this to gain unfettered access to network resources and demonstrate that their client's network is vulnerable to attack. This has been solved most recently with network access control technologies that probe new devices to make certain they match network requirements.

With virtualization comes new challenges. Now computers can spawn within the network and on computers already connected to the network. At this point, the computers already have access to the network. Authorization and admission technology for virtual computers is required to prevent this from happening. Applications must be authorized to access network resources. This prevents attacks analogous to the physical computer. Trusted operating systems have this as a limited capability, but this must be expanded to include networks.

As technology continues to evolve, it is becoming more important for the average user to understand Cybersecurity and the steps necessary to protect FCC data. As the FCC moves into a new area of VDI and Bring Your Own Device (BYOD), the Commission opens itself to vulnerabilities that can be best thwarted by good user education of Security Best Practices.

Cybersecurity Metrics Program ($575K): The FCC has initiated planning efforts to collect and analyze monthly metrics related to the cybersecurity threats addressed using data obtained from commercial sources. For example, metrics such as the number of bot infections across an ISP's customer base will be provided to Cybersecurity and

Communications Reliability Division (CCRD) for analysis and baseline tracking. Once effective metrics begin to be voluntarily reported in FY14, the FCC will implement a Cybersecurity Dashboard to track the commercially-obtained data to support the analysis process. The Cybersecurity Dashboard will help the FCC track the ongoing progress of cybersecurity initiatives.

Modernization of Aging IT Systems (9.2M): About 40% of the FCC's application portfolio is more than 10 years old, and 70% of the IT portfolio depends on depreciated, legacy technologies. FCC is making significant investments in FY14 in a modular, modern, open standardized computing platform that allows reusability of IT modules across the FCC Bureaus and Offices where appropriate. In FY15, the FCC seeks to modernize the application environment via bottom-up, modular architecture approach to a current, secure, open-source based, and cloud-friendly framework that is significantly more manageable and sustainable and consistent with this modular, modern platform. Modular modernization of legacy systems will reduce maintenance and long-term support costs of the portfolio, enable significant application consolidation, improve security controls, enable the Commission to move applications to an external cloud or host, and reduce the risk of a critical legacy system failure during a national spectrum auction.

This bottoms-up, modular modernization effort also will significantly reduce/enable closure of open FISMA findings, make ongoing remediation efforts more efficient, reduce the risk of cyber-exploits on aged infrastructure, and greatly improve the agency's computer security posture. The modular approach will focus on smaller IT modules that can be reused. The modular approach will also incorporate improvements that save time, save money, or reduce the number of workers required to carry out the work flows of the different FCC Bureaus and Offices. Without this modular modernization effort, FCC legacy application support and maintenance costs will continue to increase at a much higher rate than is sustainable, as support and maintenance for outdated technologies becomes more difficult to locate and more costly to procure.

2. **Bureaus and Offices: $1,000,000**

Broadband Map ($1.0M): The modernization of FCC Form 477 will drive an evolution of the national broadband map to further improve its utility as a key resource of broadband deployment for consumers, policymakers, researchers, economists, and others. The online platform will leverage previous investments with new approaches to open government data, to create a robust and sustainable online platform. A one-time cost of $1 Million is required in order to accommodate the increase in data collected under Form 477, improve access to the public, and provide long-term stability for the national broadband map; to accomplish this, an investment in programming code, software licensing, and cloud service expansion is required. The Commission requested $3 Million as a base increase for the Broadband Map.