U.S. DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

FY 2012 Budget as Presented to Congress

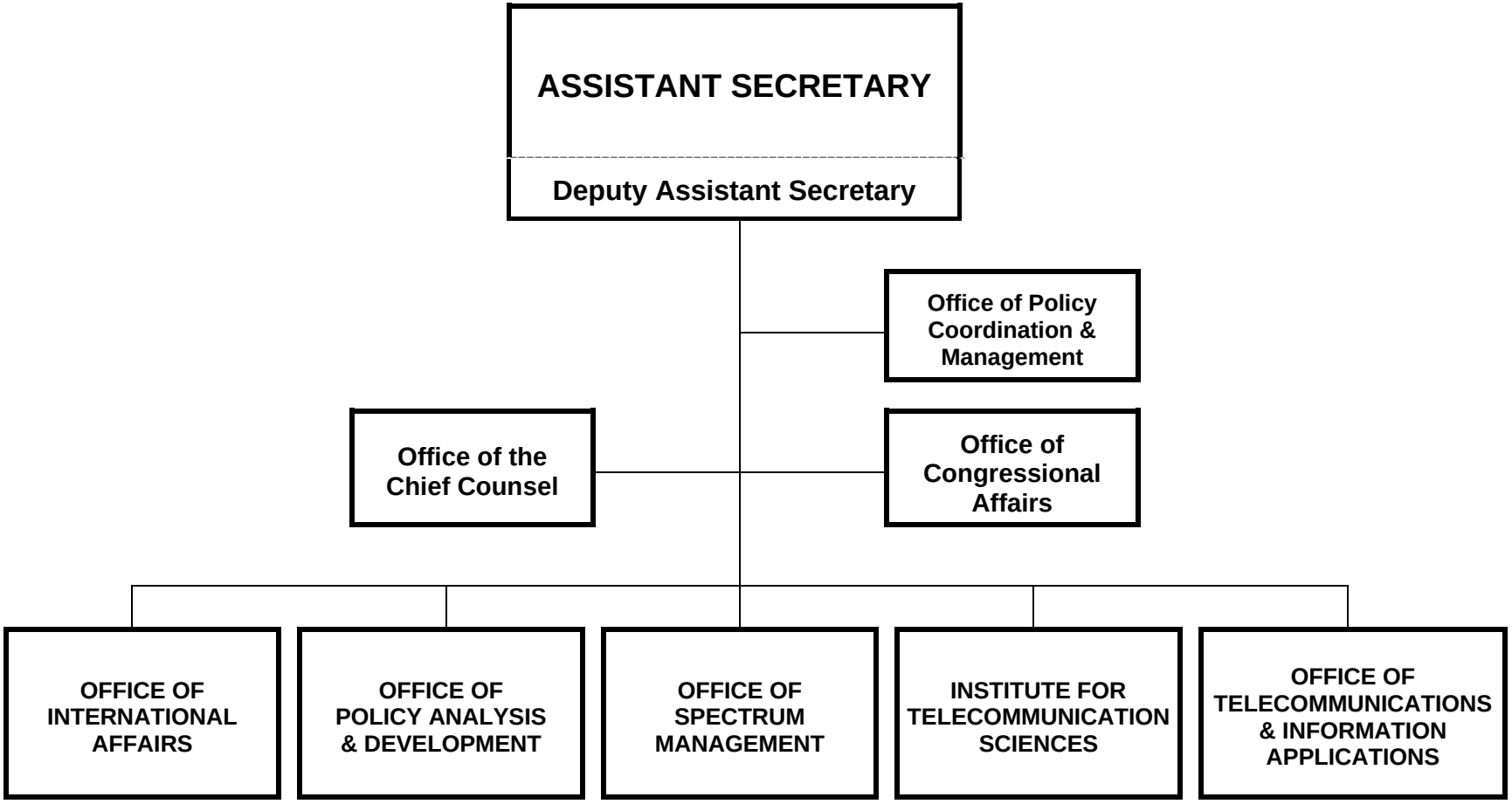
February 2011

DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
Budget Estimates, Fiscal Year 2012
Budget as Presented to Congress

Table of Contents

This page left blank intentionally

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION



This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Fiscal Year 2012 Budget
As Presented to Congress

Executive Summary

The 2012 budget request for National Telecommunications and Information Administration (NTIA) Salaries and Expenses is $55.8 million, an increase of $14.4 million from the annualized FY 2011 Continuing Resolution level. Most of the increase is attributable to support for broadband programs. This Budget request reflects the significant expansion of NTIA's responsibilities caused by a number of recent events. There are four initiatives in this budget, each of which responds directly to the Department's goals and stewardship role, as well as one program termination. They are:

- Support of the Wireless Innovation and Infrastructure Initiative (WI3)
- Build a Public Safety Broadband Network (subject to proposed legislation)
- Internet Innovation
- Broadband Programs
- Termination of the Public Telecommunications Facilities, Planning and Construction Program

The requested increase for WI3 totals $1.7 million and addresses a cross-section of issues in the broadband area. These are detailed in the justification but some of the highlights are:

- The development and advocacy of policies, on behalf of the Administration on issues such as competition, open Internet, commercial spectrum and support mechanisms; and
- The continued search for 500 MHz for wireless broadband to support WI3.

Funding is required to support WI3 and implement the President's Executive Memorandum of June 28, 2010, charging NTIA with finding over the next 10 years 500 MHz of Federal and nonfederal spectrum suitable for both mobile and fixed wireless broadband use. The spectrum must be available to be licensed by the Federal Communications Commission for exclusive use or made available for shared access by commercial and Government users to enable licensed or unlicensed wireless broadband technologies to be deployed. NTIA will analyze, identify, monitor, and report on making the 500 MHz available, develop new spectrum access approaches and technologies, and use its test-bed to test devices that could promote spectrum sharing.

For FY 2012, NTIA is requesting $1.4 billion and 50 FTE to begin developing a nationwide interoperable Public Safety Broadband Network in the 700 MHz band. The program would be administered over several years and would be offset by new spectrum auctions. A total of $7.0 billion in mandatory funding over a period of 10 years will be required. In this endeavor, NTIA

will collaborate with the Departments of Homeland Security and Justice. The program will be fully funded from the proceeds of anticipated spectrum auctions to be conducted by the Federal Communications Commission (FCC) and will be addressed in proposed legislation.

NTIA proposes an initiative entitled Internet 3.0 – Internet Innovation, totaling $1.0 million. The Internet has the ability to act as a key driver for the creation of enterprises and communities. Online commerce amounted to over $3.7 trillion in shipments, sales, and revenue for the U.S. economy in 2008. There are so many wide-ranging issues to be addressed in order to maintain this dynamic economic engine and the United States' leadership role. These issues span through policies such as on-line privacy, cyber security, online copyright protection, and privacy of the users. If not addressed well within the United States and throughout world, the legitimate uses of the Internet could be curtailed. A global Internet economy will empower consumers and users in online transactions and will create opportunities for new economic activities. This is why Secretary Gary Locke created the Internet Policy Task Force. This initiative will further support the Secretary's goals through establishing ways to set "rules of the road" and providing the assurance that the Internet is a trusted, reliable marketplace.

NTIA's budget also includes an increase of $12.2 million to support the administration and monitoring of broadband grants. This is not an increase in program, but it is a result of a contract of $15.9 million that was funded in 2010 with Recovery Act funds for performance in 2011. This request recognizes that impact and represents the full-year cost of the broadband administrative program, which will be $32.3 million in FY 2012. This increase will also contribute to meeting one of the Department's High Priority Performance Goals: "Efficiently and effectively implement the Broadband Technology Opportunities Program, to expand service to communities in a cost-effective manner that maximizes impacts on economic growth, education, health care, and public safety."

NTIA also is proposing the termination of the Public Telecommunications Facilities Planning and Construction Program. However, under this proposal, recoveries and unobligated balances of funds previously appropriated would be available for the administration of all open grants until their expiration.

The Department of Commerce, along with its operating units, supports and is an active participant in the Government-wide e-Government initiatives and lines of business. Each initiative or line of business is managed by another federal agency, such as the General Services Administration, and was implemented in part to avoid redundancy and duplication of government-wide activities such as rulemaking, human resource servicing, financial management, grants management, etc. The e-government initiatives and lines of business play a key role in Commerce's enterprise architecture, particularly for Department-wide administrative systems. These initiatives and lines of business promote internal Commerce efficiency in acquisition and other administrative activities. Commerce external customers benefit from a single source for grant postings, grant application submission, and applying for Commerce benefit programs. Commerce e-government participation provides better services to

the citizen, promotes transparency, and actively supports our stakeholders in the business community. For FY 2012, NTIA has committed $20,000 to e-government.

The Department of Commerce and NTIA have great responsibility in FY 2012 and beyond: management of a $6.0 billion grant portfolio, the creation of economic potential through astute management of the Nation's spectrum resources, and the leadership role in the fast-growing broadband and Internet world. This budget is a large step in supporting achieving the goals that are laid out in the DOC Strategic Plan. Considering the technologies that NTIA/DOC fosters and supports, NTIA's budget request represents a very sound investment for the Nation's people and its economy.

As part of WI3 to make spectrum available, NTIA will continue to support Federal spectrum reallocation for commercial use and, in consultation with the Office of Management and Budget, to enhance flexibility in the utilization of the Spectrum Relocation Fund. Under WI3, NTIA will commence work in conjunction with the FCC in recovering and reallocating spectrum, updating 20th century spectrum policies, and providing adequate incentives and assistance to enable federal agencies or affected entities to make up to 500 MHz (in bandwidth) available. In addition, under WI3, NTIA will help support efforts to build a public safety broadband network. While $1.4 billion is required in FY 2012, a total of $7.0 billion from expected spectrum auction receipts over the next several years will be provided for modern communications capabilities for the Nation's first responders, allowing the network to benefit from commercial innovation and to use additional spectrum in the 700 MHz band. NTIA will work with the Departments of Homeland Security and Justice along with the Federal Communications Commission to implement this program in a way that ensures a secure, interoperable, and efficient network.

This page left blank intentionally

2012 Annual Performance Plan Formulation

National Telecommunications and Information Administration

Section 1 Mission Statement

The National Telecommunications and Information Administration (NTIA) serves as the President's principal adviser on telecommunications and information policy matters, and develops forward looking spectrum policies that ensure efficient and effective spectrum access and use.

NTIA manages all spectrum use by the Federal government departments and agencies, and examines how the radio frequency spectrum is used and managed in the United States. A large part of NTIA's policy activities is devoted to making spectrum use more efficient. NTIA will administer its grant programs, such as the Broadband Technology Opportunities Program (BTOP), in a manner consistent with the Administration's goals of stimulating the U.S. economy and promoting job growth. Both domestically and internationally, NTIA will foster and encourage competition and universal service in telecommunications and information services, promote broadband deployment, and advance the Administration's positions on policy issues such as Internet governance, the stability of communications infrastructure, and cybersecurity. NTIA's research laboratory, the Institute for Telecommunication Sciences (ITS), will perform telecommunications research, conduct cooperative research and development with U.S. industry and academia, and provide technical engineering support to NTIA and to other Federal agencies. NTIA's policy, spectrum management, and research programs will support emerging technologies and uses of spectrum resources for affordable, alternative communications services.

Section 2 Corresponding DOC Themes

ECONOMIC GROWTH -- INNOVATION AND ENTREPRENEURSHIP GOAL Providing the tools, systems, policies, and technologies that will enable U.S. businesses to maintain their technological advantage in world markets.

Objective 4. Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce

NTIA serves as the President's primary policy advisor on domestic and international telecommunications and information issues and acts as the Administration's primary voice on them. NTIA fulfills this role in a number of ways: by advocating globally for foreign regulatory and policy regimes that encourage competition and innovation; by

preparing and issuing special reports on topics of broad interest; providing the Administration's views on actions proposed by the Federal Communications Commission (FCC); issuing requests for public input on specific issues; and encouraging dialogue with the private sector through sponsorship and participation in conferences, workshops, and other forums. NTIA's also directly benefits the American public through promotion of universal, affordable availability of advanced telecommunications such as broadband and wireless services and Internet-related technologies, and by facilitating national and homeland security, public safety, and scientific research. NTIA also is requesting funding for a new program to build a Public Safety Broadband Network that will permit interoperability of public safety equipment nationwide, using spectrum in the 700 MHz band. The program would be administered over several years and would be offset by new spectrum auctions.

NTIA also participates on behalf of the Administration in other proceedings related to telecommunications and information policy, including Internet governance, domain name management, and the core issues of privacy policy, child protection and freedom of expression, and cybersecurity. All of these activities engage other government agencies, both in the Department of Commerce and throughout the Federal government as well as Internet constituencies in the commercial world, civil society and academia. All of these activities will require substantial coordination among NTIA's program offices, as well as interagency coordination to develop the Administration's positions.

U.S. policies must ensure that radio spectrum is used efficiently and fairly to promote the best interests of the public. Current spectrum management policies are under increasing strain as the demand for existing spectrum-based services grows and new spectrum-related technologies and applications emerge. The nation's spectrum policies must keep pace with new technologies and demands on the resources while ensuring that essential government missions are maintained. Under the Wireless Innovation and Infrastructure Initiative (WI3), NTIA will find over the next 10 years 500 MHz of Federal and nonfederal spectrum suitable for both mobile and fixed wireless broadband use. NTIA will work in conjunction with the FCC in recovering and reallocating spectrum, updating 20th century spectrum policies, and providing adequate incentives and assistance to enable federal agencies or affected entities to make up to 500 MHz (in bandwidth) available.

In addition to fostering greater availability and use of broadband technologies, the Broadband Technology Opportunities Program (BTOP) is helping to jump-start economic growth, create jobs, and lay the foundation for long-term prosperity for all Americans. The goal of this program is to improve broadband services in unserved and underserved areas of the United States, ensure that every American may benefit from broadband technologies, and enhance America's competitiveness through advances in broadband speeds, deployment and adoption. The Recovery Act also required NTIA to use a portion of these funds for the purpose of developing a map of broadband services in the United States. All BTOP and mapping grants are to be obligated before the end of fiscal year 2010. Among other things, NTIA must ensure that projects supported by BTOP funds are substantially completed within two years and fully completed within three years, and that funds are used by recipients in an efficient, expeditious, and competent manner.

***ECONOMIC GROWTH* -- TRADE PROMOTION AND COMPLIANCE GOAL:** Improve our global competitiveness and foster domestic job growth while protecting American security.

Objective 11. Develop and influence international standards and policies to support the full and fair competitiveness of U.S. industry

NTIA serves as the President's primary policy advisor on domestic and international telecommunications and information issues and acts as the Administration's primary voice on them. NTIA fulfills this role in part by advocating globally for foreign regulatory and policy regimes that encourage competition and innovation, and by encouraging dialogue with the private sector through sponsorship and participation in conferences, workshops, and other forums. NTIA will pursue policies promoting international trade in telecommunications products and services, promoting consistent international approaches to telecommunications policies, and improving relations with countries with rapidly expanding markets.

NTIA is also responsible for coordinating the federal government's participation in the International Telecommunication Union's (ITU) World Radiocommunication Conferences (WRC) and related national and international meetings. NTIA works with the Federal Communications Commission (FCC), which represents the civil spectrum community, and the State Department, to create United States Preliminary Views and Proposals for the WRCs.

SCIENCE AND INFORMATION GOAL Generating and communicating new, cutting-edge scientific understanding of technical, economic, social and environmental systems

Objective 13. Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety

In addition to its policy-related activities, NTIA supports innovative telecommunications and information technologies through basic research performed at its laboratory, the Institute for Telecommunication Sciences (ITS). ITS performs extensive basic research on quality of digital speech, audio and video compression, and transmission characteristics. This research has the potential to improve both the performance of telecommunications networks and the availability of digital content on the Internet. ITS research also supports U.S. positions in international standards-setting bodies and NTIA's development of Administration policies related to the introduction of new technologies.

Section 3 Impact of Recovery Act

The American Recovery and Reinvestment Act of 2009 (Recovery Act, Public Law No. 111-5) appropriated $4.7 billion to NTIA to provide grants for broadband initiatives throughout the United States. The Recovery Act instructed NTIA to establish the Broadband Technology Opportunities Program (BTOP), a grant program of which the purpose is to provide access to broadband in unserved areas of the United States; improve access in underserved areas; provide broadband technologies to schools, hospitals, libraries and other strategic institutions; improve broadband capabilities for public safety agencies; and stimulate demand for broadband.

Section 4 Priorities and Management Challenges

NTIA's responsibilities in FY 2012 and beyond include management of a $6.0 billion grant portfolio, the creation of economic potential through astute management of the Nation's spectrum resources and a leadership role in the fast-growing broadband and Internet world. A major portion of NTIA's activities in FY 2011 and 2012 will be directed toward achieving the President's goals in the Recovery Act through the continuing administration and execution of the BTOP. The size and scope of the BTOP program demand significant NTIA management attention to managing staff and resources. Significant NTIA resources will also be devoted to ensuring the safety, stability, and security of the Internet via advocacy with regard to Internet governance and cybersecurity both domestically and internationally.

The Secretary of Commerce has made Internet policy issues a top priority. The Internet Policy Task Force will identify leading public policy and operational challenges in the Internet environment. The Task Force leverages expertise across many bureaus, including those responsible for domestic and international information and communications technology policy, international trade, cyber security standards and best practices, intellectual property, business advocacy and export control.

Under WI3, NTIA will support efforts to make spectrum available for fixed and mobile wireless broadband. The President directed that adequate funding and incentives be provided to accomplish these actions. This includes efforts to improve spectrum sharing between Federal and non-Federal users as a means of improving spectrum efficiency. In addition, NTIA will support efforts to build a public safety broadband network to provide the Nation's first responders with communication interoperability and additional spectrum in the 700 MHz band.

Section 5 Targets and Performance Summary
Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce
Measure 1 Update the Spectrum Inventory first established in FY2011

Measure Description	NTIA will develop and maintain, in an understandable written and web-based form, a Spectrum Inventory and other information that describes Executive Branch spectrum use. The spectrum inventory is needed to inform spectrum management policy decision-makers and technology innovators. System characteristics and assignment data will be used to determine spectrum/geographic areas that are underutilized or vacant. With advice and support from the Federal agencies through the Interdepartment Radio Advisory Committee (IRAC), and the Commerce Spectrum Management Advisory Committee (CSMAC), other improvements will be implemented as necessary to ensure the efficiency and effectiveness of spectrum management processes.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Actual**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	Complete initial version of Spectrum Inventory	Spectrum Inventory Update
Comments on Changes to Targets						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	NTIA Office of Spectrum Management (OSM)	Monthly, Annually	Office of Spectrum Management, Associate Administrator	NTIA document clearance process, OMB/Interagency clearance process	None	None

Section 5 Targets and Performance Summary
Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce
Measure 2 Identify up to 500 MHz of spectrum to support commercial broadband services or products

Measure Description	NTIA is undertaking tasks in collaboration with the FCC to make available a total of 500 MHz (in bandwidth) of spectrum to support wireless broadband services or products over the next 10 years. This work will also include regular progress reports.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Actual**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	New	Meet 66% of milestones regarding the identification of 500 MHz for wireless broadband.
Comments on Changes to Targets						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	NTIA Office of Spectrum Management (OSM)	Monthly, Annually	Office of Spectrum Management, Associate Administrator	NTIA document clearance process, OMB/Interagency clearance process	None	None

Section 5 Targets and Performance Summary
Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system and support e-commerce
Measure 3 Miles of broadband networks deployed (Infrastructure Projects) [**Note:** This is a High Priority Performance Goal]

Measure Description	BTOP funds will be used to support projects that provide broadband service in unserved areas and enhance broadband service underserved areas of the United States. NTIA will fund infrastructure projects that deploy a variety of technologies and approaches to enhance the Nation's broadband capabilities. The performance measure contains the number of miles of network (e.g., fiber, microwave) deployed using BTOP funding.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	0	0
Impact of Recovery Funds					10,000	30,000
Adjusted Targets reflecting Original and Recovery Act Funds					10,000	30,000
Comments on Changes to Targets	Due to the early stage of the BTOP program, these targets are preliminary. NTIA anticipates these outcomes will change over time as grant recipients begin reporting on their actual progress in implementing BTOP projects.					
Impact of Recovery Act Funds						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	Grantee reports	Quarterly	Grantee reporting system	Inspection	Reporting errors on the part of grantees	Collection of data

Section 5 Targets and Performance Summary
Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system and support e-commerce
Measure 4 Community anchor institutions connected (Infrastructure Projects) [**Note:** This is a High Priority Performance Goal]

Measure Description	The Recovery Act places a high priority on deploying and enhancing broadband capabilities for community anchor institutions such as libraries, hospitals, schools, and public safety entities. This performance measure contains the number of anchor institutions (as defined in the Program's Notice(s) of Funds Availability) connected with new or improved broadband capabilities.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	0	0
Impact of Recovery Funds					3,000	10,000
Adjusted Targets reflecting Original and Recovery Act Funds					3,000	10,000
Comments on Changes to Targets	Due to the early stage of the BTOP program, these targets are preliminary. NTIA anticipates these outcomes will change over time, perhaps substantially as grant recipients begin reporting on their actual progress in implementing BTOP projects.					
Impact of Recovery Act Funds						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	Grantee reports	Quarterly	Grantee reporting system	Inspection	Reporting errors on the part of grantees	Collection of data

Section 5 Targets and Performance Summary

Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system and support e-commerce

Measure 5 New and upgraded public computer workstations (Public Computer Centers Projects) [**Note:** This is a High Priority Performance Goal]

Measure Description	NTIA must award at least $200 million in grants by the end of Fiscal Year 2010 to expand public computer center capacity. The performance measure contains the number of new and improved computer workstations funded through the BTOP Public Computer Centers category of funding.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	0	0
Impact of Recovery Funds					10,000	20,000
Adjusted Targets reflecting Original and Recovery Act Funds					10,000	20,000
Comments on Changes to Targets	Due to the early stage of the BTOP program, these targets are preliminary. NTIA anticipates these outcomes will change over time as grant recipients begin reporting on their actual progress in implementing BTOP projects.					
Impact of Recovery Act Funds						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	Grantee reports	Quarterly	Grantee reporting system	Inspection	Reporting errors on the part of grantees	Collection of data

Section 5 Targets and Performance Summary

Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system and support e-commerce

Measure 6 New household and business subscribers to broadband (Sustainable Broadband Adoption Projects) [**Note:** This is a High Priority Performance Goal]

Measure Description	NTIA must award at least $250 million in grants by the end of Fiscal Year 2010 for innovative programs to encourage sustainable adoption of broadband service. The performance measure contains the number of new household and business subscribers to broadband generated by projects funded through the BTOP Sustainable Broadband Adoption category of funding, as reported by awardees.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	0	0
Impact of Recovery Funds					100,000	250,000
Adjusted Targets reflecting Original and Recovery Act Funds					100,000	250,000
Comments on Changes to Targets	Due to the early stage of the BTOP program, these targets are preliminary. NTIA anticipates these outcomes will change over time as grant recipients begin reporting on their actual progress in implementing BTOP projects.					
Impact of Recovery Act Funds						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
- FY2011 Target	- Increased from 25,000 to 100,000				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	Grantee reports	Quarterly	Grantee reporting system	Inspection	Reporting errors on the part of grantees	Collection of data

Section 5 Targets and Performance Summary
Objective 11: Develop and influence international standards and policies to support the full and fair competitiveness of US industry
Measure 1 75% of NTIA positions substantially adopted or successful at international meetings

Measure Description	NTIA will develop and provide the Federal Government positions and proposals necessary for technical and policy forums and meetings. This measure encompasses the completion of technical studies and preparation of draft proposals representing the federal agency views to prepare the US proposals to WRC-12. NTIA also will promote acceptance of U.S. positions and proposals internationally by representing U.S. interests at regional telecommunications meetings, bilateral meetings and conferences.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY2010 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	New	75% of NTIA positions substantially adopted/successful at international meetings.
Comments on Changes to Targets						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	NTIA Office of Spectrum Management (OSM), Office of International Affairs (OIA)	Monthly, Annually	OSM, OIA, Associate Administrators	NTIA document clearance process, OMB/Interagency clearance process	None	None

Section 5 Targets and Performance Summary
Objective 13: Enhance scientific knowledge and provide information to stakeholders to improve innovation and technology, support economic growth, and improve public safety
Measure 1 Annual Progress Report on the Test-Bed

Measure Description	NTIA is conducting a pilot test-bed program to evaluate approaches and techniques to increase spectrum sharing between Federal and non-federal spectrum users.					
Target and Performance Table						
	FY2007 Actual	**FY2008 Actual**	**FY2009 Actual**	**FY20 Target**	**FY2011 Target**	**FY2012 Target**
Original Funds	New	New	New	New	Publish Annual Report	Publish Annual Report
Comments on Changes to Targets						
Relevant Program Changes	**Program Changes**	**Title of Program Change**				**Exhibit 13 Page Number**
-	-				-	
Validation & Verification Information	**Data Source**	**Reporting Frequency**	**Data Storage**	**Internal Control Procedures**	**Data Limitations**	**Actions to be Taken**
	NTIA Office of Spectrum Management (OSM)	Monthly, Annually	Office of Spectrum Management, Associate Administrator	NTIA document clearance process, OMB/Interagency clearance process	None	None

Section 5 Previous Measures

Outcome 1: Ensure that the allocation of radio spectrum provides the greatest benefit to all people						
	FY2007 Actual	FY2008 Actual	FY2009 Actual	FY2010 Actual	FY2011 Target	FY2012 Target
Measure 1a Median processing time for interagency action on spectrum assignment requests	9 days	9 days	9 days	9 days	9 days	Discontinued
Measure 1b Median processing time for certification of spectrum support for planned radio communications systems	4 mos.	4 mos.	2 mos.	1.2 mos.	2 mos.	Discontinued
Measure 1c Percent of space system coordination requests meeting 14 days process time	97% 18days	95% 14days	98% 14days	100% 14days	90% 14days	Discontinued
Measure 1d Median comment time for interagency review and NTIA response on FCC draft policy and rules documents	11 days	13.3 days	11 days	11.6 days	15 days	Discontinued
Measure 1f Complete key activities to support effective decision-making by policymakers, businesses, and the public in preparation for the World Radio Conference 2012 (WRC-12)	New	New	New	New	WRC-12 Submission	Discontinued
Measure 1i Clearing of Federal systems from the 1710-1755 MHz band	New	New	New	New	90% 0f 1990 assignments	Discontinued

Outcome 2: Promote the availability and support new sources of advanced telecommunications and information services						
	FY2007 Actual	FY2008 Actual	FY2009 Actual	FY2010 Actual	FY2011 Target	FY2012 Target
Measure 2a Support new telecom and info technology by advocating Administration views in FCC docket filings, and Congressional and other proceedings	8 dockets and proceedings	11 dockets and proceedings	12 dockets and proceedings	27 dockets and proceedings	5 dockets and proceedings	Discontinued
Measure 2b Number of website views for research publications	315K/Q	381K/Q	225K/Q	928K/Q	240K/Q	Discontinued

Outcome 3: Ensure the effective implementation of the Broadband Technology Opportunities Program						
	FY2007 Actual	FY2008 Actual	FY2009 Actual	FY2010 Actual	FY2011 Target	FY2012 Target
Measure 3c Homes, businesses, and anchor institutions with new and improved broadband availability (Infrastructure Projects)	New	New	New	New	500,000	Discontinued

Section 6 2012 Program Changes
Program Funding Changes Table

Program Changes?	Program Name	Accompanying APP Page No.	GPRA Performance Measure Name and Number	Base FTEs	Base Amount	Increase/Decrease FTEs	Increase/Decrease Amount	Exhibit 12-15 Page No.
Yes	Internet 3.0—Internet Innovation	4-5	NA	26	$5,472,000	5	$1,000,000	11
Yes	Wireless Broadband (500 MHz)	4-5	Measure 2: Identify up to 500 MHz of spectrum to support commercial broadband services or products	0	0	5	$1,740,000	37
Yes	Telecommunication Sciences Research Base Reduction	5-6	NA	49	7,403,000	0	($ 150,000)	54
Yes	Broadband Programs	5	4 BTOP measures	50	$20,104,000	(10)	$12,206,000	58

Section 7 Resource Requirements

Objective 4: Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce

	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Actual	FY 2011 Estimate	FY 2012 Base	Increase/Decrease	FY 2012 Request
Salaries & expenses	$28,147	$25,967	$27,096	$30,145	$34,527	$55,691	$13,770	$69,461
Domestic and international policies	3,203	2,987	3,211	3,578	4,024	4,133	699	4,832
Spectrum management	24,281	22,296	23,178	25,826	29,750	30,694	882	31,576
Telecommunication sciences research	663	683	708	741	753	760	(17)	744
Broadband Programs	0	0	0	0	19,874	20,104	12,206	32,310
Digital Television Transition and Public Safety Fund	1,070,272	942,432	593,842	54,059	93,829	2,386	0	2,386
Broadband Technology Opportunities Program (ARRA)	0	0	77,477	4,287,827	0	0	0	0
Grants	0	0	325	4,248,380	0	0	0	0
Program management	0	0	77,152	39,447	0	0	0	0
Digital To Analog Converter Box Program (ARRA)	0	0	418,341	1,258	0	0	0	0
Public Telecommunications Facilities, Planning, and Construction	24,148	21,020	20,943	22,914	20,000	20,000	(20,000)	0
Grants	22,450	19,067	19,005	21,182	18,000	18,000	(18,000)	0
Program management	1,698	1,953	1,938	1,732	2,000	2,000	(2,000)	0
Information Infrastructure Grants	397	323	205	101	0	0	0	0
Grants	0	0	0	0	0	0	0	0
Program management	397	323	205	101	0	0	0	0
Total funding	1,122,964	989,742	1,137,904	4,396,304	148,356	78,077	(6,230)	71,847
IT funding 1	700	700	700	700	3,200	3,200	0	3,200
FTE	137	141	144	179	198	198	(18)	180

Objective 11: Develop and influence international standards and policies to maximize the competitiveness of US industry.

	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Actual	FY 2011 Estimate	FY 2012 Base	Increase/Decrease	FY 2012 Request
Salaries & expenses	$1,742	$1,615	$1,714	$1,910	$2,168	$2,230	$258	$2,488
Domestic and international policies	1,068	996	1,070	1,193	1,341	1,378	233	1,611
Spectrum management	674	619	644	717	826	853	25	877
Telecommunication sciences research	0	0	0	0	0	0	0	0
Total funding	1,742	1,615	1,714	1,910	2,168	2,230	258	2,488
IT funding 1	700	700	700	700	700	700	0	700
FTE	8	8	8	8	10	10	1	11

Objective 13: Enhance scientific knowledge and provide information to stakeholders to improve innovation and technology, support economic growth, and improve public safety.

	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Actual	FY 2011 Estimate	FY 2012 Base	Increase/Decrease	FY 2012 Request
Salaries & expenses	$21,373	$21,032	$21,821	$23,412	$25,056	$25,527	$3	$25,530
Domestic and international policies	0	0	0	0	0	0	0	0
Spectrum management	8,768	8,051	8,370	9,326	10,743	11,084	319	11,402
Telecommunication sciences research	12,605	12,981	13,451	14,086	14,313	14,443	(315)	14,127
Public Safety Broadband Network	0	0	0	0	0	0	1,400,000	1,400,000
Program support	0	0	0	0	0	0	1,330,000	1,330,000
Program management	0	0	0	0	0	0	70,000	70,000
Total funding	21,373	21,032	21,821	23,412	25,056	25,527	1,400,003	1,425,530
IT funding 1	700	700	700	700	700	700	0	700
FTE	107	113	110	111	123	123	51	174

Grand total

	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Actual	FY 2011 Estimate	FY 2012 Base	Increase/Decrease	FY 2012 Request
Salaries & expenses	$51,262	$48,614	$50,631	$55,467	$61,751	$63,344	$14,031	$97,479
Domestic and international policies	4,270	3,983	4,281	4,770	5,365	5,511	932	6,443
Spectrum management	33,724	30,967	32,191	35,870	41,320	42,630	1,225	43,855
Telecommunication sciences research	13,268	13,664	14,159	14,827	15,066	15,203	(332)	14,871
Broadband Programs	0	0	0	0	19,874	20,104	12,206	32,310
Digital Television Transition and Public Safety Fund	1,070,272	942,432	593,842	54,059	93,829	2,386	0	2,386
Broadband Technology Opportunities Program (ARRA)	0	0	77,477	4,287,827	0	0	0	0
Grants	0	0	325	4,248,380	0	0	0	0
Program management	0	0	77,152	39,447	0	0	0	0
Digital To Analog Converter Box Program (ARRA)	0	0	418,341	1,258	0	0	0	0
Public Telecommunications Facilities, Planning, and Construction	24,148	21,020	20,943	22,914	20,000	0	(20,000)	0
Grants	22,450	19,067	19,005	21,182	18,000	0	(18,000)	0
Program management	1,698	1,953	1,938	1,732	2,000	0	(2,000)	0
Information Infrastructure Grants	397	323	205	101	0	0	0	0
Grants	0	0	0	0	0	0	0	0
Program management	0	0	0	0	0	0	0	0
Public Safety Broadband Network	0	0	0	0	0	0	1,400,000	1,400,000
Program support	0	0	0	0	0	0	1,330,000	1,330,000
Program management	0	0	0	0	0	0	70,000	70,000
Total funding	1,146,079	1,012,389	1,161,439	4,421,626	175,580	65,730	(5,969)	1,499,865
Direct	1,113,132	979,965	1,128,656	4,385,855	158,649	23,666	(5,557)	58,213
Reimbursable 2	32,947	32,424	32,783	35,771	16,931	42,064	(412)	41,652
Mandatory	0	0	0	0	0	0	1,400,000	1,400,000
IT funding 1	1,400	1,400	1,400	1,400	4,600	4,600	0	4,600
FTE	262	262	262	298	331	328	(6)	362

Department of Commerce
National Telecommunications and Information Administration

Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR level*				
Salaries and Expenses Request	157	156	40,649	42,913
plus: 2011 transfer in from DOC Census			1,999	1,999
less: Obligations from prior years	0	0	0	(2,264)
plus: 2012 adjustments to base	0	1	(1,264)	(1,264)
2012 Base	157	157	41,384	41,384
Administrative Savings (actual reductions)	0	0	(353)	(353)
plus: 2012 program changes	4	0	14,796	14,796
2012 Estimate	161	157	55,827	55,827

Comparison by activity/subactivity		2010 Actual		Annualized 2011* CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Domestic and international policies	Pos/BA	26	$5,107	26	$5,365	26	$5,511	33	$6,443	7	932
	FTE/Obl.	21	4,770	26	6,497	26	5,511	31	6,443	5	
Spectrum management	Pos/BA	32	7,752	32	8,144	32	8,366	32	8,263	0	(103)
	FTE/Obl.	28	7,762	32	8,932	32	8,366	32	8,263	0	
Wireless Broadband Access (500 Mhz)	Pos/BA	0	0	0	0	0	0	7	1,740	7	1,740
	FTE/Obl.	0	0	0	0	0	0	5	1,740	5	
Telecommunication sciences research	Pos/BA	45	7,140	49	7,266	49	7,403	49	7,071	0	(332)
	FTE/Obl.	46	7,164	48	7,610	49	7,403	49	7,071	0	
Broadband Programs	Pos/BA	0	0	50	21,873	50	20,104	40	32,310	(10)	12,206
	FTE/Obl.	0	0	50	21,873	50	20,104	40	32,310	(10)	
TOTALS	Pos/BA	103	19,999	157	42,648	157	41,384	161	55,827	4	14,443
	FTE/Obl.	95	19,696	156	44,912	157	41,384	157	55,827	0	
Adjustments to Obligations:											
Recoveries/Refunds			(286)		0		0		0		0
Unobligated Balance, start of year			(1,675)		(2,264)		0		0		0
Unobligated Balance, end of year			2,264		0		0		0		0
Unobligated Balance expiring			0		0		0		0		0
Financing from transfers:											
Transfer from DOC Census (-)			0		(1,999)		0		0		0
Transfer to other accounts (+)			0		0		0		0		0
Appropriation			19,999		40,649		41,384		55,827		14,443

* In FY 2011, $23,700k was proposed for Broadband Technology Opportunity Program--Administrative Expenses; however, due to a policy change, Broadband Programs is a separate line item in the Salaries and Expenses appropriation.

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Comparison by activity	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Total Obligations	**$55,467**	**$117,452**	**$83,448**	**$97,479**	**$14,855**
Offsetting collections from:					
Federal funds	(35,271)	(72,040)	(41,564)	(41,152)	(412)
Non-Federal sources	(500)	(500)	(500)	(500)	0
Recoveries/Refunds	(286)	0	0	0	0
Unobligated balance, start of year	(1,675)	(2,264)	0	0	0
Unobligated balance, end of year	2,264	0	0	0	0
Unobligated balance expiring	0	0	0	0	0
Budget Authority	**19,999**	**42,648**	**41,384**	**55,827**	**14,443**
Restoration of unobligated balance, rescission	0	0	0	0	0
Financing:					
Transferred from other accounts (-)	0	(1,999)	0	0	0
Transferred to other accounts (+)	0	0	0	0	0
Appropriation	**19,999**	**40,649**	**41,384**	**55,827**	**14,443**

Exhibit 9

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE

Adjustments to Base	Positions	FTE	Amount ($000)
ADJUSTMENTS:			
Non-recurring Transfer from Census Bureau in FY 2011 for Broadband Programs	0	0	$ (1,999)
Restoration of Base	0	0	(175)
COST CHANGES:			
Full-year cost in FY 2012 of positions financed for part-year in FY 2011		1	118

An increase of $117,500 is required to fund the full-year cost in FY 2012 of positions financed for part-year in FY 2011. The computation follows:

Annual salary of new positions in FY 2011	454,273
Less 5 percent lapse	(22,714)
Full-year cost of personnel compensation	431,559
Less personnel compensation in FY 2011	(341,000)
Cost of personnel compensation in FY 2012	90,559
Amount required for personnel compensation	90,559
Benefits	26,941
Total adjustment to base	117,500

Civil Service Retirement System (CSRS)	0	0	(33)

The number of employees covered by CSRS continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 10.5 percent in FY 2011 to 6.8 percent in FY 2012. The contribution rate will remain 7.0 percent.

FY 2012 ($12,709,000 x .068 x .0700)	60,495
FY 2011 ($12,709,000 x .105 x .0700)	93,411
Total adjustment to base	(32,916)

Federal Employees Retirement System (FERS)	0	0	55

The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 89.5 percent in FY 2011 to 93.2 percent in FY 2012. The contribution rate will be 11.7 percent.

FY 2012 ($12,709,000 x .932 x .117)	1,385,840
FY 2011 ($12,709,000 x .895 x .117)	1,330,823
Total adjustment to base	55,017

Exhibit 9

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE

Adjustments to Base		Positions	FTE	Amount ($000)
ADJUSTMENTS:				
Federal Insurance Contribution Act (FICA)		0	0	$ (4)
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $106,800 in FY 2011 to $110,175 in FY 2012. The OASDI tax rate will remain 6.2 percent.				
Regular Employees				
FY 2012 ($12,709,000 x .932 x .876 x .062)	643,314			
FY 2011 ($12,709,000 x .895 x .918 x .062)	647,394			
Total Adjustment to Base	(4,080)			
Thrift Savings Plan (TSP)		0	0	9
The cost of NTIA's contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2 percent.				
FY 2012 ($12,709,000 x .932 x .02)	236,896			
FY 2011 ($12,709,000 x .895 x .02)	227,491			
Total Adjustment to Base	9,405			
Health Insurance		0	0	68
Effective January 2010, NTIA's contribution to Federal employees' health insurance premiums increased by 6.8 percent. Applied against the 2011 estimate of $999,000, the additional amount required is $67,932.				
Employee Compensation Fund:		0	0	16
The Employees Compensation Fund bill for the year ending June 30, 2009, is $16,000higher than the bill for the year ending June 30, 2008. The Employee Compensation fund is based on an actual billing from the Department of Labor.				
Mileage Rate Decrease		0	0	(2)
Effective January 2010, the General Services Administration decreased the mileage rate from 55 cents to 50 cents per mile, a 9% decrease. This percentage was applied to the 2011 estimate of $29,000 to arrive at a decrease of $2,610.				
Per Diem		0	0	20
Per diem rates are projected to increase 6.4 percent effective October 2009. This percentage was applied to the FY 2011 estimate of $312,000 to arrive at an increase of $19,968.				
Electricity		0	0	144
This average increase for PEPCO electricity is projected to be 27%. This percentage was applied to the 2011 electricity estimate of $532,000 for an increase of $144,000.				

Exhibit 9

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE

Adjustments to Base	Positions	FTE	Amount ($000)
ADJUSTMENTS:			
Water	0	0	$ 2
The average increase for DCWASA is projected to be 5 percent. This percentage was applied to the 2011 DCWASA estimate of $34,000 for an increase of $2,000.			
Rental payments to GSA	0	0	41
GSA rates are projected to increase 1.7 percent in FY 2012. This percentage was applied to the FY 2011 estimate of $2,400,000 to arrive at an increase of $40,800.			
Working Capital Fund	0	0	249
An additional amount of $158,000 is required to fund the cost increases in the Department's Working Capital Fund. An additional increase of $91,000 is required to fund a new initiative Human Capital Fund			
General Pricing Level Adjustment	0	0	227
This request applies 1.2 percent based on OMB economic assumptions for FY 2012 to object classes where the prices that the Government pays are established through the market system. Factors are applied to: other services ($211,660), supplies and materials ($3,900), equipment ($9,360), tranportation of things ($0), rental payments to others ($0), GPO Printing ($600), and communications, utilities, and misc. charges ($1,260).			
Subtotal, Cost Changes	0	1	910
Subtotal, Adjustment			(2,174)
Total, Adjustments to Base	0	1	$ (1,264)

National Telecommunications and Information Administration (NTIA)
Salaries and Expenses

APPROPRIATION ACCOUNT: SALARIES AND EXPENSES

BUDGET ACTIVITY: SALARIES AND EXPENSES

For FY 2012, NTIA requests an increase of $35,828,000 and 54 FTE from the FY 2010 enacted level for a total of $55,827,000 and 157 FTE for Salaries and Expenses. This increase includes $1.5 million in inflationary adjustments. (For FY 2010, funding to oversee broadband programs was included in a separate appropriation account; however, for FY 2012, it is a separate line item under Salaries and Expenses.)

BASE JUSTIFICATION FOR FY 2012:

Salaries and Expenses Overview

NTIA serves as the principal adviser to the President on telecommunications and information policy issues. In this role, NTIA formulates, advocates, and participates in the implementation of policies that further domestic and foreign policy goals and enhance the international competitiveness of U.S. telecommunications and information technology, equipment, and services companies. These policies further the United States' strategic goals of opening markets and encouraging competition, innovation, and entrepreneurship, in the United States and globally; advancing the public interest in telecommunications, mass media, and information services; and promoting the availability of advanced services to all peoples around the globe.

Since its creation in 1978, NTIA has been at the cutting edge of critical telecommunication issues. For example, NTIA identified federal radio spectrum that the Federal Communications Commission (FCC) auctioned to commercial wireless markets, collecting over $19 billion, with the net proceeds deposited in the U.S. Treasury. NTIA also administered the TV Converter Box Coupon Program so that analog televisions could function after the June 2009 transition of full-power television stations to digital broadcasting. In 2009 and 2010, NTIA awarded grants to develop and expand broadband services to unserved and underserved areas, to improve access to broadband by public-safety agencies, and to upgrade technology and capacity at public computing centers, including community colleges and public libraries. During some national and international emergencies, such as Hurricane Katrina, NTIA responders have assisted in maintaining or restoring radio spectrum frequency assignments to ensure continued telecommunications. Additionally, NTIA is the primary U.S. government expert on the Internet's domain name and addressing system (DNS) – the critical underlying infrastructure upon which the Internet depends.

NTIA policy objectives are based on the identification and interdisciplinary analysis of economic, technological, regulatory, legal, social, and foreign policy issues. These activities fall within three Department of Commerce Strategic Goals:

Economic Growth -- Innovation and Entrepreneurship: Providing the tools, systems, policies, and technologies that will enable U.S. businesses to maintain their technological advantage in world markets: Objective 4. Drive innovation through supporting an open global Internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system, and support e-commerce.

***Economic Growth* -- Trade Promotion and Compliance:** Improve our global competitiveness and foster domestic job growth while protecting American security: Objective 11. Develop and influence international standards and policies to support the full and fair competitiveness of U.S. industry.

Science and Information: Generating and communicating new, cutting-edge scientific understanding of technical, economic, social and environmental systems: Objective 13. Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety.

NTIA's budget proposals support the Department of Commerce's Strategic goals and objectives identified in the Department's and NTIA's Balanced Scorecard. The Institute for Telecommunication Sciences laboratory specifically supports the theme of Science and Information and the Department's goal of "Generating and communicating new, cutting-edge scientific understanding of technical, economic, social and environmental systems." The Department of Commerce's Strategic Plan describes NTIA's activities that include working with the White House and other federal agencies on Administration-wide telecommunications and information policy statements and on obtaining private-sector views on a broad range of telecommunications and information policy issues.

NTIA's Salaries and Expenses budget is organized into four subactivities:

- The Domestic and International Policies subactivity formulates and promotes national policies for consideration by the President, Congress, other executive branch agencies, by the independent Federal Communications Commission (FCC), Federal Trade Commission (FTC), and by other government and non-government organizations. The subactivity also formulates and promotes national policies for presentation in multilateral, bilateral, and international organizational settings.
- The Spectrum Management subactivity develops, establishes, and implements plans, policies, activities, capabilities and procedures to ensure that the U.S. spectrum policy, spectrum allocations and spectrum management capabilities and processes keep pace with the needs of Federal agencies and the American public for access to the radio spectrum in the 21st century domestically and internationally.
- The Telecommunication Sciences Research subactivity utilizes telecommunications research and engineering to support Administration telecommunications goals, such as enhanced domestic competition, advanced services and new technology deployment, improved foreign trade opportunities for U.S. telecommunication firms, and more efficient use of the radio frequency spectrum.
- The Broadband Programs subactivity serves and monitors recipients of grants from the Broadband Technology Opportunities Program, which originated from the receipt of $4.7 billion through the American Recovery and Reinvestment Act of 2009 (Recovery Act, Public Law No. 111-5). The grants were awarded for broadband initiatives throughout the United States, to improve broadband services in unserved and underserved areas of the Nation, and to developing a map of broadband services in the United States. Among other things, NTIA must ensure that broadband projects are used by recipients in an efficient, expeditious, and competent manner. Funds for Broadband Programs are now presented as a separate line item in the Salaries and Expenses appropriation.

The majority of NTIA staff and facilities are located in Washington, DC. Boulder, CO, is the site for the NTIA research and engineering laboratory and related offices.

In carrying out its diverse programs and services, NTIA uses a multi-stakeholder approach to lead U.S. policymakers and regulators, governments around the world (including divisions of the United Nations), and industry in addressing telecommunication issues. NTIA also appears before the FCC, which is a regulatory agency, to present the Administration's views on telecommunication and information matters.

The Institute for Telecommunications Sciences (ITS) in Boulder, CO, is NTIA's research and engineering laboratory. ITS provides technical support to NTIA in advancing telecommunications infrastructure development, improving U.S. telecommunications trade opportunities, and promoting more efficient and effective use of the radio spectrum. On a reimbursable basis, NTIA's laboratory also serves as a principal Federal resource for addressing the telecommunications, information technology (IT), and security challenges of other Federal agencies, state, local, and tribal governments

Significant Adjustments-to-Base (ATBs):

NTIA requests a net increase of 1 FTE and $910,000 to fund adjustments to current programs for Salaries and Expenses activities. The increase does not include funds for any pay raise but will provide inflationary increases for non-labor activities, including service contracts, utilities, field-office lease payments, and rent charges from the General Service Administration (GSA).

ADMINISTRATIVE COST SAVINGS:

The Administration is pursuing an aggressive government-wide effort to curb non-essential administrative spending called the Administrative Efficiency Initiative. In order to be good stewards of taxpayer money, the Federal Government should continue to seek ways to improve the efficiency of programs without reducing their effectiveness. As such, the President directed each agency to analyze its administrative costs and identify savings where possible. After reviewing its administrative costs, NTIA has identified $353,000 in administrative savings (including $182,000 in the Telecommunication Sciences Research director's policy support fund), with an additional $264,000 in savings from NTIA's share of contribution to the Department's Working Capital Fund (see the Departmental Management Working Capital Fund section for more details). Of the total $617,000 in administrative savings identified above, $353,000 represent real reductions to NTIA's funding level and will help reduce overall spending by the Federal Government.

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Salaries and expenses
Subactivity: Domestic and international policies

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Domestic and international policies.....	Pos/BA	26	$5,107	26	$5,365	26	$5,511	33	$6,443	7	$932
	FTE/Obl.	21	4,770	26	6,497	26	5,511	31	6,443	5	932
Direct Obligations.....	Pos/BA	26	5,107	26	5,365	26	5,511	33	6,443	7	932
	FTE/Obl.	21	4,770	26	6,497	26	5,511	31	6,443	5	932

SUBACTIVITY: DOMESTIC AND INTERNATIONAL POLICIES

The objectives of the Domestic and International Policies subactivity are to:

Domestic Policies

- Promote the deployment of broadband services;
- Preserve and promote an open Internet, consistent with service providers' need to manage their networks in a transparent and nondiscriminatory manner;
- Encourage greater innovation and use of the Internet, by protecting, among other things, users' privacy and security, children who go online, intellectual property, and the global free flow of information.
- Open telecommunications and information markets to greater competition;
- Refrain from regulating telecommunications and information markets wherever market forces are sufficient to ensure reasonable prices and terms of services and to protect consumers;
- Encourage the development of new telecommunications and information technologies and services for the American public;
- Promote economic growth; and
- Promote minority ownership in the telecommunications industry.

International Policies

- Continue support for private-sector management of the Internet's domain name and addressing system (DNS), and the security and stability of the DNS;
- Coordinate new international telecommunications and information policies and technologies with domestic policies (such as, the introduction of internationalized domain names (IDN), identity management (IdM), the deployment of Internet Protocol Version 6 (IPv6), Radio Frequency Identification (RFID), etc.);
- Negotiate open, competitive markets abroad for telecommunications and information services, including IP-enabled services;
- Work multilaterally and bilaterally to ensure policy and regulatory approaches pertaining to converged communications services are fair, open, transparent, not-overly burdensome and in line with U.S. domestic policies; and
- Encourage other governments to adopt sound policies, laws, and regulations to stimulate telecommunications and information technology innovation and development, including the Internet.

These activities are conducted under the authority arising from NTIA's statutory responsibilities as lead telecommunications and information expert agency. (NTIA Organization Act of 1992, Pub. L. No. 102-538, 106 Stat. codified at 47 U.S.C. Section 901 *et seq.)* The Act identifies a number of

functions and requires the Secretary of Commerce to assign these functions to the Assistant Secretary for Communications and Information and to NTIA.

The Act give NTIA the "authority to coordinate the telecommunications activities of the executive branch " and to "assist in the formulation of policies and standards for those activities, including (but not limited to) considerations of interoperability, privacy, security, spectrum use, and emergency readiness." (§103(b)(2)(H); 47 U.S.C. § 902(b)(2)(H)).

The act also specifically grants NTIA the "authority to serve as the President's principal adviser on telecommunications policies pertaining to the Nation's economic and technological advancement and to the regulation of the telecommunications industry" § 103(b)(2)(D), 47 U.S.C. § 902(b)(2)(D); "the authority to develop and set forth" such policies, § 103(b)(2)(I), 47 U.S.C. § 902(b)(2)(I); and the "responsibility to ensure that the views of the executive branch on telecommunications matters are effectively presented to the [Federal Communications] Commission and, in coordination with the Director of the Office of Management and Budget, to the Congress." § 103(b)(2)(J), 47 U.S.C. § 902(b)(2)(J). NTIA also serves as the manager of the federal government's use of the electromagnetic spectrum.

Internationally, the Act assigns NTIA functions that involve working with the Secretary of State on developing and setting forth plans, policies and programs that relate to international telecommunications issues; coordinating preparations for international conferences, and providing advice and assistance on international telecommunications issues, § 103(b)(2)(G), 47 U.S.C. § 902(b)(2)(G). The Telecommunications Trade Act of 1988 sets forth policy goals for international telecommunications trade. NTIA assists in implementation of the Act through policy coordination with the International Trade Administration (ITA), USTR and other U.S. agencies by preparing for and participating in telecommunications consultations with selected countries, with such organizations as the World Trade Organization (WTO), and through bilateral and regional Free Trade Agreements (FTAs) where telecommunications and information regulatory policies are involved.

NTIA also leads the Department of Commerce's Internet Policy Task Force (IPTF). The Task Force leverages expertise across many bureaus, including those responsible for domestic and international information and communications technology policy, international trade, cyber security standards and best practices, intellectual property, business advocacy and export control.

The Domestic and International Policies subactivity contains two items: Domestic Policies and International Policies.

DOMESTIC POLICIES (http://www.ntia.doc.gov/opadhome/opadhome.html)
NTIA is the only Executive Branch agency dedicated exclusively to telecommunications and information policy making. NTIA formulates and promotes national policies for consideration by the President, Congress, other executive branch agencies, the independent Federal Communications Commission (FCC) and Federal Trade Commission (FTC), and other government and non-government organizations. Thus, NTIA staff must possess expertise, skill, and understanding in legal, economic, and technical issues: in telecommunications and information technology innovations, products, and services; in telecommunications and information technology policy; and in regulatory structures and processes.

Domestically, NTIA communicates policy positions in many ways. NTIA works with the White House to develop policy positions and draft executive memoranda; participates in White House or interagency policy committees (e.g., the cabinet-level National Science and Technology Council

(NSTC), Interagency Policy Committees (IPCs); files comments with independent agencies such as the FCC or FTC; works with Congress on the formulation of legislation and provides comments through OMB; addresses issues through briefings to senior officials or interagency meetings; and communicates with the public through reports, speeches, or public events.

The U.S. has the world's leading telecommunications and information markets, and leads the world in the number of broadband connections. This translates to increased jobs for Americans, economic growth, innumerable socio-economic benefits to the public, improved supply of governmental services, and strong public-safety, national, and homeland security capabilities. Much of the U.S. success in these sectors is based on market-driven, pro-competitive policies and prudent deregulation--measures that have been emulated throughout the world. In radio spectrum management in particular, market based spectrum management reforms, advocated by NTIA and adopted by the FCC, have led to more efficient and innovative use of spectrum for commercial services.

The Communications Act of 1934, as amended, provides a basis for policymaking with respect to many telecommunications and information services and products. Other U.S. and state laws also affect the telecommunications and information sectors. Existing laws, regulations, and administrative procedures are subject to enormous pressures created by rapid changes in technology and increased demand for advanced services and equipment. NTIA's responsibilities are set forth by statute (47 U.S.C. §901 et seq). NTIA's domestic policy activities require it to identify important current telecommunications and information policy issues, to evaluate and articulate those policies, and to respond to specific requests.

NTIA's policy activities support the Department's strategic themes of providing the information and the framework to enable the economy to operate efficiently and equitably, on a global scale; providing infrastructure for innovation and entrepreneurship to enhance American competitiveness; and strengthening management at all levels. NTIA's domestic policy activities require it to maintain expertise with respect to current telecommunications and information policy issues and to identify the most important for Executive Branch attention. NTIA performs research and analysis, and prepares written recommendations for future courses of action that affect these sectors. In coordination with other parts of the Administration, NTIA makes recommendations and works with the Congress on new or revised laws affecting these sectors; it also files written comments to the FCC on specific regulatory proposals.

NTIA engages in public discussions and meetings with government (Federal, state, and foreign) officials and private sector representatives to formulate and advocate its policies. NTIA obtains information and advice both informally, on an ad hoc basis, and through the Commerce Spectrum Management Advisory Committee. Consistent with the Federal Advisory Committee Act, this committee provides advice to the Assistant Secretary of Commerce for Communications and Information on needed reforms to domestic spectrum policies and management to enable the introduction of new spectrum-dependent technologies and services, such as policy reforms for expediting the American public's access to broadband services, public safety, and long-range spectrum planning. In addition, NTIA facilitates business ownership and participation, particularly small business and minority participation, in these important sectors.

NTIA has a number of domestic programmatic responsibilities as well. NTIA co-chairs the NSTC's broadband subcommittee. It is also a co-chair of a White House level working group on child online protection. This activity follows NTIA's work organizing and supporting the Online Safety and Technology Working Group (OSTWG) as required by the 2008 "Protecting Children in the 21st Century Act." Congress directed NTIA to establish the working group to examine industry efforts to

create a safe online environment for children, and the OSTWG's final report was released in June 2010. (*See* http://www.ntia.doc.gov/reports/2010/OSTWG_Final_Report_070610.pdf)

NTIA will remain at the forefront of other new technologies and the policy changes they will require, such as next generation broadband services. NTIA will continue to develop and advocate policies that affect the Internet, wireless and wireline telecommunications competition, terrestrial and satellite video services, unlicensed devices, and future products and services important to the United States and its economy. It will also continue to promote minority ownership opportunities in telecommunications; provide staff support and expertise to White House offices and the Department of Commerce; respond to requests for technical and policy advice from the Congress, other Federal Government officials and from the private sector; and to provide staff support to the Commerce Spectrum Management Advisory Committee.

INTERNATIONAL POLICIES (http://www.ntia.doc.gov/oiahome/oiahome.html

NTIA formulates and promotes national policies for presentation in multilateral and bilateral organizational settings. The objective of these policies is to enhance competition in pursuit of both improved market access for U.S. service and equipment providers, and to achieve foreign policy goals such as economic development, democratization, and promotion of U.S. national security telecommunications and information interests in geographically strategic areas.

Consequently, NTIA must possesses expertise in the following areas: an understanding of international telecommunications and information policies and the resultant regulatory structures and processes; an appreciation of U.S. economic, foreign, and trade policies and objectives, in particular as they relate to foreign telecommunications and information regulatory policies; knowledge of U.S.-backed foreign assistance resources that can supplement our educational efforts; in-depth expertise regarding U.S. and foreign-developed telecommunications and information products and services; and a detailed understanding of relevant international and intergovernmental organizations and treaties.

If U.S.-invested companies are to continue to innovate and maintain their global leadership in these sectors, policy and regulatory environments at home and abroad need to encourage the development of and access to telecommunications and information technologies and networks. To meet this need, NTIA advocates for flexible, technology-neutral, and transparent policy and regulatory regimes. This approach supports universal access to telecommunications and information technologies and networks that stimulates democratization, economic development, and entrepreneurship. It also facilitates the use of these technologies in disaster relief efforts and meeting broader U.S. national security, telecommunications, and information interests in war-torn areas. NTIA is uniquely positioned to serve as, or advise, U.S. negotiators by participating as delegates or in leadership posts in a variety of fora on international, regional, and bilateral policies and regulations, mainly of an intergovernmental nature. Delegations draw upon NTIA's wide-ranging expertise in telecommunications and information policy issues, particularly those related to the Internet's critical underlying infrastructure, to support these goals of innovation, market entry, and universal telecommunications and information access. For example, NTIA advocates adoption abroad of open and transparent processes that take into account the input of all relevant stakeholders and that avoid overly prescriptive or burdensome regulation.

NTIA implements its policy objectives through a variety of representational and management responsibilities in inter-governmental fora such as the International Telecommunication Union (ITU), which is a United Nations organization, the Inter-American Telecommunication Commission (CITEL), the Asia-Pacific Economic Cooperation forum (APEC), the Organization for Cooperation and Economic Development (OECD), the International Telecommunications Satellite Organization

(ITSO), the International Mobile Satellite Organization (IMSO), as well as in bilateral discussions (e.g., China, India, Japan). NTIA also works with other Federal agencies to prepare for and participate in other related international telecommunications and information activities, such as trade negotiations involving the telecommunications and information sector. For example, NTIA staff possesses the most extensive technical knowledge and policy expertise in the U.S. Government regarding management of a critical Internet infrastructure asset: the Internet's DNS. As such, NTIA staff administers the Department's Internet Assigned Numbers Authority (IANA) functions contract with the private-sector Internet Corporation for Assigned Names and Numbers (ICANN), through which all changes to the Internet's authoritative root zone file – or "address book" are approved.

NTIA also oversees the administration of the Department's Affirmation of Commitments with ICANN and represents the U.S. Government in the ICANN's Governmental Advisory Committee, which advises ICANN on public policy issues related to the Internet DNS. ICANN also performs the IANA functions under contract to the Department of Commerce. The IANA functions consist of several interdependent internet management responsibilities, including coordination of the assignment of technical protocol parameters; performance of administrative functions associated with root zone management; and the allocation of Internet numbering resources.

NTIA also serves as the point of contact for the Department's contract with Neustar, Inc. for the management of the DOT-US (".us") Internet top-level domain, and educating parents/guardians by promoting awareness of the KIDS-DOT-US ("kids.us") Internet domain. NTIA also serves as the Federal Program Officer for the Department's Cooperative Agreement with EDUCAUSE to manage the DOT-EDU (".edu") domain space for use by educational institutions. This cooperative agreement facilitates the policy development and technical operations of the .edu domain and provides a framework for the administration of the .edu domain. NTIA also coordinates with the Department of Homeland Security, the National Security Council, and others to safeguard the security and stability of the Internet DNS.

The NTIA Organization Act as amended (47 U.S.C. §902(b)) requires the Secretary of Commerce to assign the Assistant Secretary for Communication and Information and NTIA various responsibilities and functions regarding international telecommunications and information policy. These responsibilities and functions include the development of plans, policies, and programs relating to international telecommunications and information issues for use in conferences, negotiations, and other fora. The Secretary is also responsible for coordinating economic, technical, operational, and related preparations for U.S. participation in Information and Communications Technology (ICT) organizations and negotiations. The Act requires NTIA to formulate telecommunications and information policy for participation and activities in international organizations such as the U.S. International Telecommunications Union (ITU), Inter-American Telecommunication Commission (CITEL), Asia-Pacific Economic Cooperation (APEC), Organization for Economic Cooperation and Development (OECD), International Telecommunications Satellite Organization (ITSO), International Mobile Satellite Organization (IMSO), and others. A July 1997 Presidential directive requires the Department of Commerce (DOC) to transition the management of the Internet DNS to the private sector. Internet Corporation for Assigned Names and Numbers (ICANN) signed an Affirmation of Commitments with the Department of Commerce in September 2009, which completed the transition of the technical management of the DNS to a private-sector-led, multi-stakeholder model and ensures accountability and transparency in ICANN's decision-making with the goal of protecting the interests of global Internet users. ICANN facilitates DNS policy development through a bottom-up process involving the diverse interests of generic and country code top level domain registries, domain name registrars, the regional Internet registries, the technical community, business and individual Internet users, and governments. In June 2005, NTIA released U.S. Principles on the Internet's Domain Name and Addressing System that explain the continued importance of the U.S.

Government's role and objectives in this area. In March 2008, NTIA released the results of a mid-term review of the current JPA articulating that while some progress has been made towards privatization more efforts were needed by ICANN to increase institutional confidence through implementing effective processes that will enable long-term stability; accountability; responsiveness; continued private sector leadership, stakeholder participation; increased contract compliance; and enhanced competition. NTIA will continue its efforts in the stewardship of the DNS including the management of certain contracts for the technical management of the .us and .edu top-level domains as well as the Internet Assigned Numbers Authority (IANA) functions.

In FY 2012, NTIA will continue its wide-ranging activities to enhance the global strength of U.S. telecommunications and information interests.

NTIA will encourage bilateral, regional, and multilateral adoption of policies that encourage open and competitive foreign markets, with transparent decision-making, while stimulating democratization, economic development, and promotion of U.S. national security telecommunications and information interests overseas. We will advance these objectives by advocating, monitoring, and participating in the structural reform of international institutions such as the ITU, CITEL, OECD, APEC, IMSO, and ITSO.

NTIA will assist other parts of the Administration in development of specific trade negotiation language, for instance, in the continuation of the Doha Round of Services negotiations at the World Trade Organization, and the annual telecommunications trade act reviews under Section 1377 of the Telecommunications Trade Act of 1988. We will assist the International Trade Administration (ITA), Treasury, State, Justice, and the FCC to review potential acquisitions of strategic, critical U.S. telecommunications assets under FCC regulations and the Exon-Florio review mechanism for Foreign Direct Investment (FDI) in the Committee on Foreign Investment in the United States (CFIUS) process). NTIA will work through bilateral, regional, and international fora such as the ITU, OECD, APEC, and CITEL to promote the rollout and uptake of broadband infrastructure, services, and equipment. We will work with the Office of the United States Trade Representative (USTR), other Commerce agencies (ITA, National Institute of Standards and Technology (NIST), Foreign Commercial Service (FCS)), and the State Department on policy approaches to telecommunications and information standards developments worldwide, especially in key emerging markets such as India and China and our North American partners (Canada and Mexico). These standards are emerging in influential new technologies in developing economies, such as next generation networking (NGNs), Advanced Wireless systems such as third and fourth Generation Wireless (3G/4G), Radio-Frequency Identification (RFID), and Worldwide Interoperability for Microwave Access (WiMAX). NTIA will continue to work with other agencies to develop implementation strategies for improved and continuous telecommunications and information development in key countries and regions (e.g., Africa, Central and Latin America, the Middle East), through such foreign assistance efforts as the Telecommunications Leadership Program, and the U.S. Telecommunications Training Institute. NTIA will also provide policy and technical guidance to the State Department in the IMSO and ITSO oversight processes, to ensure fair and competitive provisioning of fixed and mobile satellite services on a global basis, to protect lifeline telecommunications connectivity for developing nations, to protect Safety of Life at Sea (under the SOLAS treaty), and to implement provisions of the U.S. Maritime Transport Security Act of 2002 to ensure long-range tracking of vessels on the high seas.

NTIA will work to preserve key U.S. foreign policy goals in the telecommunications and information sector, in particular on the policy approaches to Internet governance to counter the many opponents to the U.S. approach. We will continue to promote market driven approaches to telecommunications and information pricing issues, such as international settlement rates and proposals for Internet cost-

sharing arrangements. We will work collaboratively with other countries and institutions to ensure the benefits of new technologies that bring increased connectivity, such as electronic numbering and unlicensed usage of advanced wireless technologies. We will continue to support the transition of management of the DNS to the private sector through ICANN and to advance public and private sector policies that promote the security and stability of the Internet and the DNS.

PROGRAM CHANGE FOR FY 2012:

Internet 3.0—Internet Innovation (Base Funding: $5,511,000 and 26 FTE; Program Change: $1,000,000 and 5 FTE): NTIA requests an increase of $1,000,000 and 5 FTE for a total of $6,472,000,000 and 31 FTE to bolster the Department of Commerce's leadership role in the evolution of innovation-promoting policies for the Internet both domestically and internationally. NTIA will develop, implement, and advocate an "Internet 3.0" policy framework, building on previous work, including the Department's successful engagement with the Internet Corporation for Assigned Names and Numbers.

While a number of individual government agencies have interests in Internet policy, it is important that there be a single point within the Administration to consider and harmonize national policy. As noted above, NTIA is directed by law to provide for the "coordination of the telecommunications activities of the executive branch, including (but not limited to) considerations of interoperability, privacy, security, spectrum use and emergency readiness. (47 U.S.C. Sec. 902(b)(2)(H)) While the legislation creating NTIA predates the rise of the Internet, the statute further directs NTIA "to conduct studies and make recommendations concerning the impact of the convergence of computer and communications technology," in other words, the Internet. (47 U.S.C. 902 Sec. 902(b)(2)(M))

This Internet Innovation Initiative includes the following components:

1) Privacy: ($428,390 and 2 FTE) Consumer privacy is a fundamental issue in the development of a sustainable Internet Policy 3.0 framework. For consumers, it can mean protection against identify theft or the use of private data by social media or other increasingly popular web sites. For businesses, the ability to make flexible and innovative use of personal information, in an environment of consumer trust, is vital to future development of the marketplace. There is widespread agreement that the current privacy frameworks are in need of updating, both domestically and globally. The Internet Policy Task Force (IPTF) is developing will have laid our general policy principles to guide this effort, but refining and implementing consensus principles will require sustained engagement with a multi-stakeholder group. In the mid-1990s, NTIA played a leading role, along with the Federal Trade Commission (FTC), in exploring options for addressing new online privacy issues. This initiative would provide funding to take on these issues in the current Internet environment and would implement the policy recommendations of the IPTF. Using new public policy and technology expertise, NTIA would establish a Privacy Policy Office to oversee the privacy efforts. This office would negotiate best practice agreements with industry, develop global privacy guidelines (working through the international Organization for Economic Cooperation and Development (OECD) or other organizations), and update its privacy report annually. This initiative would also support new issues to be taken up by the IPTF, such as lawful surveillance and the role of Internet Service Providers (ISPs).

In addition, this initiative would provide funds for NTIA to consider and respond to recommended Internet policies in the National Broadband Plan (NBP) prepared by a task force of the Federal Communications Commission (FCC). That plan recommends a number of actions for itself and executive branch agencies. As the President's principal adviser on telecommunications and information policy issues, NTIA has the jurisdiction and responsibility to review these proposals and coordinate their implementation within the government as appropriate. Many of the Commission's proposals require the NTIA offer Internet policy expertise to other Federal agencies as they implement Internet-based applications that make intensive use of personal information. The proposals recommend that government agencies (primarily the FCC and Federal Trade Commission (FTC) consider whether and how to clarify the relationship between users and their online profiles (NBP Recommendation 4.14); that there be legislation creating new consumer privacy tools such as

trusted "identity providers" to allow consumers to manage their data (NBP Recommendation 4.15); that government agencies (FCC and FTC) develop principles to require informed consent before broadband providers share certain types of information (NBP Recommendation 4.16); that the federal government (primarily FTC) put more resources into combating identify theft and fraud (NBP Recommendation 4.17); that broader national online security policy should be coordinated with the among Executive branch and independent agencies (NBP Recommendation 4.18); that the Federal Chief Information Officers Council accelerate agency adoption of social media for internal use (on which NTIA can provide expertise) (NBP Recommendations 14.8 and 15.10); and that there be legislation reexamining the Privacy Act to facilitate the delivery of online government services (NBP Recommendation 14.17). NTIA would participate on behalf of the Administration in the FCC and FTC proceedings.

2) Cybersecurity and Other Internet Issues: ($246,610 and 1 FTE)

a) Cybersecurity: The Department of Commerce views improving the nation's commercial cybersecurity posture and establishing consumer and business confidence in the security of cyberspace as essential to the country's economic well-being. Cybersecurity and confidence in that security are fundamental to realize the potential of electronic commerce (e-commerce), fuel innovation, create new types of jobs, and accelerate economic growth. Recognizing the vital importance of the Internet to U.S. innovation, prosperity, education, politics and cultural life, the Department of Commerce has made it a top priority to ensure that the Internet remains an open and trustworthy space for innovation through the work of the Internet Policy Task Force (IPTF). A major cybersecurity goal will be to implement policy recommendations of the IPTF.

NTIA must also consider and respond to policies recommended in the NBP within NTIA's policy jurisdiction. These recommendations included that the executive branch, in collaboration with relevant regulatory authorities, develop machine-readable repositories of actionable real-time information concerning cybersecurity threats in a process led by the White House Cybersecurity Coordinator (NBP Recommendation 14.9); the federal government should take an active role in developing public-private cybersecurity partnerships (NBP Recommendation 14.10); that the executive branch expand existing and develop additional educational programs, scholarship funding, training programs, and career paths to build workforce capability in cybersecurity (NBP Recommendation 14.11); and that the Executive Branch develop a coordinated foreign cybersecurity assistance program to assist foreign countries in the development of legal and technical expertise to address cybersecurity.

NTIA's activities with respect to these recommendations would include advising the Administration on appropriate policies to ensure commercial cybersecurity; conducting a government-industry study analyzing the reliability and resilience of commercial broadband communications networks; working with other agencies to lead the creation of a voluntary cybersecurity certification program; expanding international outreach on cybersecurity; convening interagency working groups on cybersecurity; improving government online security efforts; participating in an interagency initiative to draft a domestic and international strategy to build on "The Cyberspace Review" issued by President Obama in May, 2009 (http://www.whitehouse.gov/the_press_office/Statement-by-the-Press-Secretary-on-Conclusion-of-the-Cyberspace-Review/); and supporting agency protections to allow greater agency adoption of social media tools.

b) Child Online Safety: There is growing consensus that children need to be taught the critical skills necessary to succeed in an online environment. As more children go online, law enforcement resources must be targeted against serious crime while remembering that the most important line of defense against harmful content is the well-informed and engaged parent or teacher.

In FY2009 and 2010, as directed by the Protecting Children in the 21st Century Act, NTIA organized and is supporting the Online Safety and Technology Working Group (OSTWG), which was required to make recommendations to Congress and NTIA. Other U.S. Government agencies are independently addressing aspects of child safety, including the Federal Trade Commission, the FCC, and the Departments of Justice and Education. NTIA proposes to reach out to stakeholders to develop and advocate Administration policy and to create an interagency working group to implement those policies in a coordinated fashion.

This activity would follow on the NBP recommendation that the federal government create an interagency working group to coordinate child online safety and literacy work, facilitate information sharing, ensure consistent messaging and outreach and evaluate the effectiveness of governmental efforts. The working group should consider launching a national education and outreach campaign involving governments, schools, and caregivers (NBP Recommendation 14.19).

In addition, several international organizations, including the ITU and several countries have expressed growing interest in child online protection issues. The ITU intends to identify risks and vulnerabilities to children in cyberspace, to create awareness, to develop practical tools to minimize risk, to encourage industry-led solutions for social-networking companies and other entities in this space, and to share knowledge and experience. NTIA has pledged to work with the appropriate international bodies to eliminate redundancy and guide international policies to support the interests of the United States.

c) Online Copyright Protection: Internet growth and innovation require a balance between protecting against illegal piracy of copyrighted works and intellectual property, while preserving the rights of users to access lawful content. This activity will implement policy recommendations of the ITPF. It will also provide NTIA with the resources to lead interagency efforts to address recommendations in the NBP. Relevant recommendations include that the Department of Education or other departments increase the supply of digital educational content online (NBP Recommendation 11.2); that the Department of Education examine digital data and interoperability standards to ensure consistency with the needs and practices of the educational community (NBP Recommendation 11.3); that Congress review existing copyright law and methods to encourage copyright holders to grant educational digital rights of use (NBP Recommendation 11.4); for public and broadcast media to more easily contribute their archival content to a digital national archive and grant reasonable noncommercial downstream usage rights (NBP Recommendation 15.9).

3) Global Internet Economy: ($325,000 and 2 FTE) If U.S. companies are to continue to innovate and maintain their global leadership in the ICT sector, policy/regulatory environments abroad need to foster user confidence in order to facilitate deployment of ICT networks, which will enhance network adoption and usage, ultimately enabling and driving a cycle of continued innovation and economic growth. Challenges associated with achieving a Global Internet Economy include the fundamental need to expand Internet access and use worldwide, as well as the need to secure these critical information infrastructures and respond to new threats in order to ensure a trusted Internet-based environment, which will offer protection to individuals, especially children and other vulnerable groups. In this regard, efforts are needed to ensure the protection of digital identities and personal data, as well as the privacy of individuals online. A key way to meeting these challenges head on is to create a policy/regulatory environment that assures a level playing field for competition and upholds the open, decentralized, and dynamic nature of the Internet, which has been the foundation for its unprecedented growth and impact.

To meet the need to build a culture of cybersecurity worldwide, NTIA proposes to promote the development of the Global Internet Economy. NTIA brings to the ITPF its functions as the

President's principal adviser on telecommunications and information policy and its expertise as the primary U.S. government expert on the Internet's domain name and addressing system (DNS) – the critical underlying infrastructure upon which the Internet is dependent. NTIA is uniquely positioned to facilitate collaboration between the U.S. government, the private sector, civil society, and the Internet technical community to launch a new round of targeted bilateral policy and technical exchanges via Information and Communications Technology (ICT) policy summits that will support the development of the global Internet economy. These policy summits will be aimed at key regional actors (e.g., China, India, Egypt, Brazil, and Russia) would facilitate exchanges on critical issues such as cybersecurity, universal service, online safety, privacy, spectrum management, and broadband deployment and usage. In addition, this initiative would seek to leverage existing international institutions such as the Organization for Economic Cooperation and Development (OECD) and the International Telecommunication Union (ITU), an agency of the United Nations, by devoting additional NTIA staff resources to develop policy and regulatory tools as well as accurate metrics to effectively measure the growth and impact of the global Internet Economy.

Proposed Actions:

NTIA's initiative would use a multi-stakeholder approach to lead U.S. policymakers and regulators, governments around the world, and industry, in the formation of Internet policies and best practices to ensure continued innovation in Internet-based services and products, the growth of the global internet economy, Internet-savvy intellectual property protection regimes, and the protection of consumers and children. (The term "Internet 3.0" refers to the next generation of Internet use, with 1.0 being primarily informational websites and 2.0 being increased user-generated content and developments such as social media. The third phase of the development of the Internet bring with it a range of new public policy challenges that the U.S. must be prepared to meet. NTIA must ensure that the federal government is able to lead policy developments so that it can continue in its role as principal telecommunications and information policy adviser to the President.

Just as the U.S. Government led the world in creating a policy framework for the first phase of the Internet, so to must we show leadership in this new era. At stake are the commercial interests of US Internet companies and the continued role of the Internet as a platform for education, research, and political expression. President Obama has called for harnessing the immense transformative power of technology and innovation to improve the lives of all Americans and spur the economy. Secretary of Commerce Gary Locke observed "the vital role the Internet plays in driving innovation throughout the economy," and that "the Department has made it a top priority to ensure that the Internet remains open for innovation. . . ." The Department has created an Internet Policy Task Force to identify leading public policy and operational challenges in the Internet environment. These activities fall within the Department of Commerce Strategic Goal 2 - Promote U.S. innovation and industrial competitiveness. The economic benefits provided by the Internet economy increased during our recent economic downturn, when e-commerce significantly outpaced overall retail sales growth. Globally, the Internet economy is growing even faster. The global Internet marketplace is critical to the United States because it leverages America's strength in first-time innovation, which permits the United States to excel in any business environment where innovation is a market prerequisite.

Guiding the development of Internet Policy 3.0 requires using a broad spectrum of tools, many of which will require leveraging and coordinating private sector, civil society, technical community, and government cooperation. This initiative describes the resources necessary to lead, engage, and build multistakeholder coalitions both domestically and globally that will carry the Internet Policy 3.0 message around the world and see that it is successfully implemented in legislative and regulatory venues.

By engaging in promotion of the global Internet economy, NTIA proposes to extend the initial work of the Department's Internet Policy Task Force (IPTF). NTIA drove the formation of the IPTF in mid FY 2010 and will lead its efforts in coordination with the Office of the Secretary. The IPTF's mission is to identify leading public policy and operational challenges in the Internet environment. It has already leveraged expertise across many bureaus, including those responsible for cybersecurity standards and best practices, domestic and international information and communications technology policy, international trade, intellectual property, business advocacy, and export control. The FY2010-2011 results for the IPTF will include the broad articulation of policy frameworks necessary to enable continued Internet innovation. The purpose of this initiative is to see that those frameworks are implemented. Given the reliance on global, multi-stakeholder coalition building, the resources needed for the implementation phase far exceed those used in the initial development of the frameworks.

The IPTF has proposed to address issues in the following areas:

1) Privacy
2) Cybersecurity, including Child Online Safety
3) Online Copyright Protection
4) Global Internet Economy

The increase will provide the policy and technical expertise, and empirical foundation, and the necessary fora for government and private sector actions. Each issue area, however, will be addressed using a common approach: leading development of global, multi-stakeholder organizations to advance U.S. Internet policy goals.

Each issue under the Task Force, and the programs being created for each issue area, require particular and specialized staff expertise (special industry knowledge, policy training, and technical background). Many of the projects require bringing order to all the disparate activities underway throughout the Administration and being responsible for communications and negotiations with high-level private sector industry and civil society leaders. This requires a core team of seasoned, senior experts in areas that include:

- Internet law and policy analysis
- Internet economics
- Web and Internet technology
- International outreach

Statement of Need and Economic Benefits:

In the space of a decade and a half, the Internet has gone from an interesting academic and defense communications tool to an unimaginably important foundation of modern civilization. The Internet now has the ability to act as a key driver for the creation of enterprises and communities. The Internet contributes directly and indirectly to the U.S. economy and affects the lives of every citizen in myriad ways. As cited in the DOC privacy Notice of Inquiry, April 23, 2010, and according to Census figures and published reports, between 1999 and 2007, business-to-consumer online commerce increased over 500 percent. Taking into account business-to-business transactions, online commerce in 2008 accounted for over $3.7 trillion in shipments, sales, and revenue for the U.S. economy. U.S. mobile commerce has grown to $1.2 billion. In addition to the growth of online

commerce, the World Wide Web and associated information systems have led to an unprecedented growth in productivity.

Need for FTEs (Privacy): The FTEs are needed to take on the tasks of the initiative: to establish a Privacy Policy Office; to develop the recommendations of the IPTF through public events and reports; to create global guidelines; to create enforcement mechanisms; and to negotiate with industry on adoption.

Need for FTEs (Cybersecurity and Other Internet Issues): The FTEs are needed to accomplish the tasks of the initiative: to bring network security and vulnerability expertise to the report described above, to develop the capacity-building program, and to address and help implement the recommendations of the IPTF.

The FTEs also are needed to develop coordinated policy on child online protection following release of the report of the Online Safety and Technology Working Group's Report and in consideration of NBP recommendations. Staff will reach out and engage domestic and international stakeholders through symposia or other actions, will develop principles, and will create an outreach program. NTIA's current base program is capable only of organizational support to the private-sector working group. The child online safety portions of the cybersecurity activity require specialized policy expertise.

In addition, the FTEs are needed to address the online copyright issues and proposals raised through the IPTF and by the NBP by analyzing the issues, creating interagency processes as necessary, undertaking research, and taking steps to implement particular recommendations.

Need for FTEs (Global Internet Economy): The FTEs will participate with international organizations and governments in bilateral and multilateral meetings and follow-on activities and will organize regional summits. The FTEs will also develop strategies to achieve U.S. Government objectives and will also develop and implement additional recommendations of the IPTF.

This initiative among other things addresses issues that have the potential to undermine the Internet's economic success. If policies could guarantee privacy, copyrights, security, safety, and international adoption, the Internet would become even more widely used for commerce or business. Even a small percentage increase would translate into millions or billions of dollars of the national economy.

Beyond the boundaries of commerce, the Internet is transforming critical sectors of the U.S. and global society, such as health care, energy, education, the arts, and political life. The Internet is also the base of new forms of civic engagement and participation, thereby promoting a diversity of opinions and enhancing transparency, accountability, privacy, and trust. The growth of commerce, of new social media applications and the growing pervasiveness of Internet services require reexamination of existing frameworks regarding privacy, security, protecting intellectual property, and protecting children online.

Innovation and the Internet are nearly synonymous, yet we cannot take for granted that the United States will remain the leader in either. This initiative will develop new approaches in relevant areas. It will encourage innovation within the United States and also through its global outreach effort. Implementation of the policies will enable innovative information applications and services. The benefits are potentially broad and extensive, and yet intangible and not subject to simple measurement.

Base Resource Assessment:

NTIA does not currently have sufficient base program resources to accomplish the objectives of the Internet Innovation initiative. NTIA's base plan has historically provided funding for analysis of traditional telecommunications. NTIA's programs have provided funding for activities involving regulated wired and wireline telephony, spectrum management.

NTIA has no base funding to broaden its activities into analysis of subjects affecting Internet use and innovation or such a broad range of issues. NTIA's involvement in the DOC IPTF, for example, is the first time NTIA has undertaken a policy assessment of privacy issues since the mid-1990s, when the policy office had approximately twice the staff. NTIA has in some areas been able to undertake issue-scoping exercises, or in the case of Child Online Protection, the organization of meetings of a task force created by Congress. NTIA's base program does not support more in-depth economic or technical studies or multi-stakeholder activities to implement policies.

The Internet Policy Task Force (ITPF) referred to above, commits NTIA to a series of deliverables beyond its current base program. Moreover, in March 2010, a task force of Federal Communications Commission staff released the National Broadband Plan (NBP), which contained a series of recommendations for Executive branch policies. NTIA's Administrator is co-chair of the Broadband Subcommittee of the National Science and Technology Council's Committee on Technology. The issues being addressed by both the IPTF and the Broadband Subcommittee fall under NTIA's responsibilities as principal adviser to the President on communications and information policies as they pertain to the Nation's economic and technological advancement. In past years, some of the projects covered by this initiative may have fallen under the Department's Technology Administration, which undertook work in privacy and related issues until its termination in 2007.

Schedule & Milestones:

Privacy

- FY 12: Public meetings/symposia; economic assessment and report
- FY 13-14: Creation of privacy enforcement mechanisms; negotiation with industry regarding adoption of guidelines

Cybersecurity

- FY 12: Conclude contractor's work on a coordinated foreign cybersecurity capacity-building program to assist foreign countries in the development of legal and technical expertise to address cybersecurity
- FY 12-13: Conclude work on a government-industry study analyzing the reliability and resiliency of commercial broadband communications networks

Child Online Safety

- FY 12: Interagency review of government activities; leadership in international organizations
- FY 13: Creation of national outreach campaign

Online Copyright Protection

- FY 12: With DOC's Patent and Trademark Office, publish updated report on online copyright protection.

Global Internet Economy

- FY 12: Targeted regional workshop to advocate Internet Policy 3.0
- FY 13: Targeted regional workshop to advocate Internet Policy 3.0

Deliverables:

Privacy

- FY 12: Proposed privacy guidelines for public comment; notices of inquiry; symposia on issues
- FY 12-13 Bilateral and multilateral meetings
- FY 13: Final privacy guidelines; negotiation with industry stakeholders; development of new policies, e.g. re: lawful surveillance and the role of Internet Service Providers

Cybersecurity

- FY 12: Publish a USG-industry study analyzing the reliability and resiliency of commercial broadband communications networks
- FY 12: Schedule and perform a coordinated foreign cybersecurity capacity-building program to assist foreign countries in the development of legal and technical expertise to address cybersecurity

Child Online Protection

- FY 12: Symposium
- FY 13: Agreement on Administration principles
- FY 14: National Outreach campaign

Online Copyright Protection

- FY 12: Symposium

Global Internet Economy

- FY 12-14: International agreement on principles following policy summits

Performance Goals and Measurement Data

Performance Goal: Innovation and Entrepreneurship Number of new policies adopted	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	0	2	3	4	4	4
Without Increase	0	0	0	0	0	0
Description: This measure is focused on formulating recommendations through the Internet Policy Task Force (IPTF) pertaining to privacy, cybersecurity, online copyright, and the global, free flow of information. Such policies will be advanced through policy papers, speeches, and domestic and international conferences.						

Performance Goal: Innovation and Entrepreneurship Number of policies in accord with United States positions	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	0	2	2	2	2	2
Without Increase	0	0	0	0	0	0
Description: This measure is focused on advancing and gaining agreement on policy proposals of the IPTF, given the global nature of the Internet, through engaging stakeholders internationally--at conferences, meetings of international telecommunication organizations, and discussions with individual countries, industry stakeholders, and other non-governmental organizations.						

PROGRAM CHANGE PERSONNEL DETAIL

(Dollar amount in thousands)

Activity: Salaries and Expenses

Subactivity: Domestic and International Policies

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Internet Privacy					
Chief Technology Officer	Washington, DC	GS-15	1	123,758	123,758
Telecommunications Policy Specialist	Washington, DC	GS-14	1	105,211	105,211
Program Analyst	Washington, DC	GS-12	1	74,872	74,872
Cybersecurity & Other Internet Issues					
Telecommunications Policy Specialist	Washington, DC	GS-15	1	123,758	123,758
Program Analyst	Washington, DC	GS-9	1	51,630	51,630
Global Internet Economy					
Economist	Washington, DC	GS-15	1	123,758	123,758
Telecommunications Policy Specialist	Washington, DC	GS-13	1	89,033	89,033
Total			7		692,020
less Lapse		25%	2		173,005
Total full-time permanent (FTE)			5		519,015
2011 Pay Adjustment (0%)					0
2012 Pay Adjustment (0%)					0
TOTAL					519,015

Personnel Data	Number
Full-Time Equivalent Employment	
Full-time permanent	5
Other than full-time permanent	0
Total	5
Authorized Positions:	
Full-time permanent	7
Other than full-time permanent	0
Total	7

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Domestic and International Policies

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$519
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	519
12	Civilian personnel benefits	147
13	Benefits for former personnel	0
21	Travel and transportation of persons	82
22	Transportation of things	2
23.1	Rental payments to GSA	37
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	13
24	Printing and reproduction	12
25.1	Advisory and assistance services	0
25.2	Other services	96
25.3	Purchases of goods & services from Gov't accounts	58
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	9
25.8	Subsistence and support of persons	0
26	Supplies and materials	4
31	Equipment	21
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	1,000

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Domestic and International Policies
Program Change: Administrative Savings

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	(18)
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	(10)
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	0
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	(20)
31	Equipment	(20)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	(68)

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Salaries and expenses
Subactivity: Spectrum management

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Spectrum management.....	Pos/BA	32	$7,752	32	$8,144	32	$8,366	32	$8,263	0	($103)
	FTE/Obl.	28	7,762	32	8,932	32	8,366	32	8,263	0	
Direct Obligations.....	Pos/BA	32	7,752	32	8,144	32	8,366	32	8,263	0	(103)
	FTE/Obl.	28	7,762	32	8,932	32	8,366	32	8,263	0	

Activity: Salaries and expenses
Subactivity: Spectrum management
Line Item: Wireless Broadband Access (500 MHz)

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Wireless Broadband Access (500 MHz)...	Pos/BA	0	$0	0	$0	0	$0	7	$1,740	7	$1,740
	FTE/Obl.	0	0	0	0	0	$0	5	1,740	5	
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	7	1,740	7	1,740
	FTE/Obl.	0	0	0	0	0	0	5	1,740	5	

SUBACTIVITY: SPECTRUM MANAGEMENT

The objectives of the Spectrum Management subactivity are to:

- Execute the spectrum management functions and activities assigned to NTIA under 47 U.S.C. 902 and 903;
- Develop, establish, and implement plans, policies, activities, capabilities and procedures to ensure that the U.S. spectrum policy, spectrum allocations and spectrum management capabilities and processes stay up with the needs of the federal agencies and the American public for access to the radio spectrum in the 21st century domestically and internationally;
- Ensure federal agencies use the radio spectrum efficiently and only occupy the spectrum as necessary to perform their missions;
- Plan for and enable performance of federal spectrum management functions during emergencies;
- Coordinate and register internationally planned Federal Government satellite networks and selected assignments for terrestrial systems; to work cooperatively with the Federal Communications Commission and the federal agencies in coordinating spectrum use; and
- Develop, implement, and maintain the automated information technology capabilities necessary for performing these activities.

These activities fall within the Department of Commerce Strategic Goal – Innovation and Entrepreneurship: Develop the tools, systems, policies, and technologies critical to transforming our economy, fostering U.S. Competiveness, and driving the development of new businesses. Within NTIA, they are carried out by the Office of Spectrum Management (OSM).

Interdepartment Radio Advisory Committee (IRAC) Support

NTIA will continue to maintain and update the NTIA Manual of Regulations & Procedures for Federal Radio Frequency Management governing the Federal spectrum, and provide the management and administrative support to the Interdepartment Radio Advisory Committee (IRAC), the executive branch interagency advisory body for federal spectrum management. The IRAC is composed of the representatives of 19 Federal agencies and an FCC liaison. Through the Space Systems, Spectrum Planning, Technical, Radiocommunication Conference, Emergency Planning and Frequency Assignment Subcommittees as well as numerous ad hoc groups, the IRAC advises NTIA on spectrum policy and procedural matters, develops Federal positions on international radio treaty conferences, and provides recommendations for conflict resolution. NTIA chairs and provides secretariat support and maintains the archive of all documents for the committee.

Domestic Spectrum Policy

In coordination with the IRAC, NTIA develops and implements policies regarding spectrum use by the federal agencies. At the same time, NTIA develops executive branch views and inputs on FCC decisions that may affect federal operations.

When necessary, NTIA convenes the Policy and Plans Steering Group (PPSG), a body of senior level representatives of federal agencies whose missions require significant use of the radio frequency spectrum resource. The PPSG deals with particularly contentious or difficult

issues or issues of a long term or strategic nature. NTIA provides management and administrative support to this body.

The OSM Domestic Policy Division conducts spectrum training courses and seminars for U.S. and foreign spectrum managers. The Division coordinates these courses, drawing upon experts from other divisions of OSM as well as various federal agencies and the private sector. The Division also develops and provides to the public information, on the web or in print, describing federal spectrum management and use.

NTIA, in coordination with the DOC Office of Security, maintains a security program that adheres to HSPD–12. The security program: initiates and processes requests for background investigations for applicants and current NTIA personnel; forwards up-to-date national security information to supervisors and employees in their organization; assists a senior facility manager in coordinating a physical security risk assessment of his facility; assists the head of the organization in ensuring that all persons with security clearances receive an annual refresher security briefing; requests assistance from the office of security in a security matter; certifies NTIA/OSM personnel security clearances for a visit to another agency or facility and validates security clearance notifications for non-NTIA personnel to engage in an NTIA/OSM sponsored meeting or event; and makes arrangements for security training to all OSM personnel.

International Spectrum Plans and Policies

NTIA, via the OSM International Spectrum Plans and Policies Division (ISPPD), provides leadership and participates with the State Department, FCC, Federal agencies, commercial industry, and private sector interests in preparing for diverse international radio treaty conferences, negotiations and forums on spectrum management, allocations, technical standards and regulation. Specifically, NTIA coordinates and develops the Federal Government's contributions to the U.S. proposals for these treaty conferences and forums and helps prepare the preliminary and final U.S. positions. In many cases, NTIA representatives chair the national preparatory groups for these forums. In addition, these representatives are often called upon to chair or organize activities at an international level on behalf of the International Telecommunications Union (ITU). NTIA analyzes the known intentions and positions of other nations to determine whether U.S. counter-proposals are necessary. NTIA also participates in bilateral/multilateral negotiations and provides personnel and technical support for the U.S. delegations to radio treaty conferences and other ITU and regional administrative, policy, and technical forums. In addition, NTIA works toward building confidence worldwide in U.S. spectrum planning techniques to win support for U.S. positions in negotiations and forums. After each World Radiocommunication Conference, ISPPD leads efforts to develop and propose a plan to implement the results of the completed conference.

Strategic Planning

NTIA, via OSM's Strategic Planning Division (SPD) develops the Federal Strategic Spectrum Plan and prepares a comprehensive strategy to carry out spectrum management improvements to meet long range goals and objectives for Federal Spectrum Management, and develops the spectrum management architecture for the future and an overarching roadmap that will lead to improved means to assuring spectrum access and efficient and effective spectrum use across the Federal Government. The Division will : (1) investigate the means to gather, maintain and update accurate information relating to current and future

spectrum requirements, including collaborating and coordinating effectively among the various Federal agencies to obtain the necessary results to collectively execute the means in a unified approach; (2) develop a future architecture designed to incrementally improve Federal spectrum management and use; (3) investigate advanced technologies and concepts for the management of the spectrum that hold the potential for increasing the efficiency of spectrum use; and (4) assessing the continued effectiveness of spectrum allocations in light of changes in planned spectrum usage.

Emergency Preparedness and Public Safety

In recognition of the importance of public safety services to the American public and the importance of spectrum to these activities, NTIA provides the necessary leadership, technical expertise, applied research, policy guidance, and spectrum management support for the successful coordination of national public safety requirements, goals and objectives both within the Federal Government and state and local entities in coordination with the Department of Homeland Security and the FCC. NTIA will address and support the needs of: (1) Project SAFECOM; (2) a follow-on program (National Public Safety Telecommunications Council) to the Public Safety Wireless Advisory Committee (PSWAC) to further address PSWAC recommendations including satisfying future spectrum needs; (3) interoperability between Federal, state and local emergency entities; (4) national and international public safety standards; (5) new technology evaluation and testing; and (6) funding assistance for state and local agencies to adopt new technology (as per the Digital Television Act, P.L. 109-171). Consideration also will be given to shared and joint use plans, use of standard radio systems, and coordination processes with all Federal agencies.

NTIA will address and implement the new requirements of National Communications System (NCS) Directive 3-10 to provide the required continuity communications capabilities at both the NTIA primary and alternate operating facilities. NTIA also will maintain a viable Continuity of Operations (COOP) capability by: (1) enhancing the capabilities of the NTIA COOP Alternate Operating Facilities, (2) conducting COOP/Continuity of Government (COG) tests, training, and exercises for NTIA and IRAC personnel to include annual national exercises, and (3) supporting the National Response Framework (NRF) and upon activation of Emergency Support Function #2 by the Department of Homeland Security deploy (as needed) in support of the coordinated Federal response effort to provide Federal spectrum management services at the Joint Field Office or other designated facility.

NTIA will also serve in the capacity as the executive committee member to the Emergency Communications Preparedness Center. The Division will support the Assistant Secretary in that capacity while also serving as the working/focus group member for the Department.

Spectrum Services

NTIA, via the OSM Spectrum Services Division, reviews, processes, and authorizes federal radio frequency assignments. NTIA also reviews each frequency assignment action to determine the degree of compliance with authorized use and will continue its reviews of Federal frequency assignments to evaluate the validity of current needs. This frequency assignment responsibility involves chairing the IRAC Frequency Assignment Subcommittee (FAS) as well as directing the subcommittee's activities and providing its administrative support. The assignment responsibility also involves ensuring that the spectrum needs of certain federal agencies not represented on the IRAC and the spectrum access requirements of the United Nations and foreign embassies in the United States are satisfied. NTIA

maintains and updates files and records for radio spectrum management. The computerized files include: the Government Master File of Frequency Assignments (GMF); portions of the FCC frequency records necessary for use in federal spectrum management, especially the management of frequency bands allocated for shared federal/non-federal use; frequency allocation records; terrain elevation data; and Federal systems characteristics data used to support the processing of requests for spectrum certification. NTIA also coordinates federal spectrum requirements with Canada and Mexico.

The Division also reviews proposed Federal radiocommunication systems to determine compliance with applicable Federal regulations and policies and to evaluate such systems for compatibility with other present and planned spectrum-dependent systems, providing guidance concerning frequency bands, design parameters, and appropriate operating constraints necessary to mitigate harmful interference and ensure effective use of available spectrum resources. NTIA, in accordance with the advice of the IRAC Spectrum Planning Subcommittee (SPS), approves or withholds certification of spectrum support for the system or, alternatively, indicates what adjustments to the system are needed to enable the certification to be approved. The spectrum certification responsibility involves chairing the SPS and directing the subcommittee's activities. NTIA performs certification reviews at the conceptual, experimental, developmental, and operational stages of a given system's procurement cycle, as required by OMB Circular A-11.

Spectrum Engineering and Analysis

NTIA, via the OSM Spectrum Engineering and Analysis Division, conducts in-depth analyses of spectrum use, technically reviews new Federal radiocommunication systems, including space systems; assists Federal agencies in resolving operational problems; provides technical engineering/policy analysis support for international radio treaty conferences; and establishes and improves Federal standards to assure efficient use of the spectrum. The in-depth studies evaluate the effect of existing and planned radiocommunication systems on the radio frequency spectrum and provide technical engineering support for domestic and international policy development and long range planning. These technical/policy analyses fall into two categories: the first focuses on the selected portions of the radio frequency spectrum and the second focuses on particular types of uses of the spectrum. Both types of studies examine present and planned equipment usage to determine if the spectrum is efficiently and effectively used, the potential for compatible sharing of federal radio services, and the effects of proposed and planned national and international allocation changes on the ability of Federal agencies to complete their mandated missions. NTIA also investigates the possibility of increased sharing of spectrum resources between federal and non-federal radiocommunication systems in order to increase the efficient use of the spectrum within the United States. Results from field and laboratory measurements aid in the evaluation of frequency utilization, policy compliance, new technologies, and radio frequency interference.

The Division resolves operational conflicts that arise between Federal agencies regarding the use of the spectrum and coordinate the process of meeting spectrum requirements that cannot be satisfied within existing policies and procedures. These operational problems become known through NTIA studies or concerns from other agencies. Solving such problems demands analyses of the effects that proposed changes in frequency assignments, operational procedures, or equipment will have on the electromagnetic environment as well as consideration of the various tradeoffs between technical and operational factors. In support of international spectrum management, NTIA provides engineering analyses on technical issues

necessary to support U.S. participation in and preparation for international conferences and meetings.

National and international radio regulations ensure that various radio services can operate compatibly in the same environment without unacceptable levels of radio interference. These regulations focus primarily on radio systems using the same allocated bands. Recent years have seen a dramatic increase in the number of problems and spectrum issues involving adjacent band interference (i.e., interference from a transmitter operating in one band to a receiver operating in an adjacent allocated band). In the national and international marketplace, adjacent band problems surface as the search goes on to identify spectrum for an ever-expanding number of new and innovative radio-based telecommunication services continues. Billions of dollars of investment depend on the availability of spectrum and the resolution of in-band and adjacent band interference concerns through proper coordination or by effective equipment designs through the use of technologies. Within this environment, addressing the adjacent band interference problem has become a significant issue. The effects of adjacent band emission from transmitters and the characteristics of the adjacent band receiving equipment and its interference susceptibility to unwanted signals creates a particularly challenging problem because the FCC has not traditionally applied standards to receivers and cost factors have led to interference prone designs. NTIA has undertaken a comprehensive examination of adjacent band and man-made interference, including technical and regulatory issues.

NTIA evaluates new technologies that can be used to increase the efficiency with which the federal and private sector use the radio spectrum that makes more spectrum available for emerging technologies, develops new engineering analysis capabilities to improve spectrum efficiency in the federal frequency assignment process, uses advances in engineering modeling and information technology to improve existing federal spectrum certification and frequency assignment processes, and develops measurement techniques to assess innovative adaptive sharing techniques between federal and non-federal systems.

Information Technology

NTIA, via the OSM Information Technology Division, will continue its activities relative to Systems Development, Network Engineering & Operations, Customer Support Operations, Systems Support, Enterprise Architecture, Information Assurance and Project Management.

Systems Development -- NTIA will design, develop, and implement software and services that are necessary to optimize the spectrum authorization processes; optimize the Federal agencies' computer automated capabilities to manage their frequency spectrum assets; and provide the spectrum management community the optimal spectrum information (e.g., Federal Spectrum Management System) that will enable the Federal agencies to manage their spectrum assets without interference and within the current rules and regulations. The goal is to ensure that Federal agencies have access to accurate spectrum management data, that Federal agencies have the information technology tools necessary to use that data to develop new assignment application requests or changes to existing authorizations that comply with Federal regulations and procedures for using the radio frequency spectrum, and that NTIA has the information technology required to effectively process agency requests for frequency assignment authorizations in a timely manner. NTIA will also develop and improve engineering and analysis models and tools to support spectrum engineering and analysis and the spectrum authorization processes, review its automated analytical capability to ensure the methods of problem solving are appropriate for new communications systems and for state-of-

the-art changes in telecommunications technology, develop and enhance analytical computer programs that permit rapid computation of potential interference between existing and proposed communications systems. NTIA also supports design, development, and implementation of administrative/back office systems that support NTIA mission-specific functions including domestic and international telecommunications policy, financial management, human resources, and grants administration.

Network Engineering & Operations - NTIA will provide the information technology systems and services required for inter-office communications, processing frequency assignment requests, exchanging spectrum management information with Federal agencies using the radio-frequency spectrum, telecommunications grants administration, and providing the public with electronic access to spectrum management and telecommunications policy information. It will also maintain and enhance local area networks and use the Internet to support spectrum management activities (NTIA's unclassified local area network supports traditional office automation activities, such as e-mail and word processing. A classified local area network provides the NTIA staff with access to the computers that process frequency assignment actions and provides secure access to Federal spectrum managers via remote access servers and through the Secret Internet Protocol Router Network (SIPRNet). Internet servers provide spectrum management information on NTIA's World Wide Web pages. List-servers provide a means for electronic conferences); and provide the necessary coordination with and support of NTIA's Chief Information Officer (CIO) to implement guidance provided by the Department of Commerce CIO relative to information technology (IT). NTIA also serves as the Department of Commerce SIPRNet and Information Sharing Environment program office, providing a centralized, managed interconnection to the multiple systems at varying security levels.

Customer Support Operations – NTIA will provide the Bureau's information technology (IT) users a central point of contact for NTIA and Department of Commerce (DOC) provided services. It serves as liaison to DOC in securing telephone and other services supplied by the Department, as well as reporting and tracking of requests and anomalies. It coordinates user based support activities with NTIA IT support groups, allowing the user to have a single interface for problem reporting, status updates and resolution confirmation. It provides direct support of Desktop services of classified and unclassified systems.

Systems Support - NTIA will modify and maintain the production software and databases necessary to operate the spectrum authorization process; provide the Federal agencies the computer automated capability to manage their frequency spectrum assets; and provide the spectrum management community the necessary spectrum information, which will enable the Federal agencies to manage their spectrum assets without interference and within the current rules and regulations. Additionally, as the new Federal Spectrum Management System is placed into production, NTIA will provide the application, database, and end-user support necessary to ensure a smooth transition from the legacy system to the new system.

Enterprise Architecture - NTIA will provide the business strategy and operational transformation to support the information technology required for NTIA to manage the Federal Government's use of the radio frequency spectrum, formulate international information and communications policy, goals, and strategies; enhance the public interest by generating, articulating, and advocating creative and influential policies and programs in the telecommunications and information sectors; and to assist public and non-profit entities in effectively using telecommunications and information technologies to better provide public services and advance other national goals.

This will ensure that the business of NTIA supports the Government's goals for providing value to the public through citizen-centered, results-oriented, and market-based approaches. This is accomplished by providing a common framework for improvement in the following areas:

- Budget Allocation
- Information Sharing
- Performance Measurement
- Budget/Performance Integration
- Cross-Agency Collaboration
- E-Government
- Component-Based Architectures

These methodologies will be used for all Information Technology projects.

Enterprise Architecture (EA) will assure alignment of NTIA business processes with NTIA objectives by conducting a maturity assessment of NTIA's EA using as a guideline OMB's EA Assessment framework. A plan for improvement will be developed, if necessary.

EA assists with capital planning and purchasing by aligning the NTIA EA model with the following documents and processes:

- OMB Federal Enterprise Architecture (FEA) Model;
- Exhibit 300 Capital Asset Plans and Business Cases;
- NTIA IT Strategic Plan and OSM Acquisition Plan and budget planning process;
- Conducting a maturity assessment using the Commerce IT Capital Planning and Investment Control Maturity Model; and
- Processing IT related purchase requests ensuring all requests meet established guidelines, procedures, and architectural compliance.

Information Assurance - NTIA will provide compliance with applicable information technology laws and regulations regarding the security of information systems and communications security. In support of future system requirements, Information Assurance will design, develop, and implement the policies and procedures that will allow implementation of cross-domain security systems that protect national security information while simultaneously providing greater access to Federal spectrum managers and the public to spectrum management data. Information Assurance includes certification and accreditation of system; active monitoring of systems, networks, and applications to ensure compliance with security related parameters; maintenance of a computer incident response capability; and Federal Information Security Management Act (FISMA) reporting.

Project Management - NTIA will plan, charter, and establish a Program Management Office (PMO) in order to standardize and more effectively manage NTIA IT projects, maximize returns on investment, provide better reporting to NTIA and DOC management, and ensure compliance with all OMB and GAO mandates, regulations, and recommendations regarding project planning and execution. The PMO will provide the leadership that will enable the Administration to manage its IT portfolio, programs, and projects utilizing sound project management methodologies based on industry best practices as presented in the Project Management Institute's Project Management Body of Knowledge Guide and The Standard for Program Management. NTIA established a PMO charter, scope statement, and management team; developed the PMO implementation plan; and partnered with an industry expert to

establish the NTIA PMO organizational and mission constructs. Effective portfolio management is essential to achieving the mission and objectives of NTIA. The NTIA PMO will develop and implement portfolio management tools and processes to ensure that IT Project Managers conduct projects in a disciplined, well-managed, and consistent manner so that quality products are completed on time and within budget. The systematic process for portfolio management will ensure that project needs are prioritized and governed by importance to the Administration's mission rather than by urgency. NTIA will conduct impact analyses for projects within the portfolio, including project impacts resulting for schedule, work force, and resource changes. The NTIA PMO will partner with the NTIA EA office in working with DOC procurement organizations to establish and subsequently assist in the management of IT procurements that are in response to NTIA's business needs. The NTIA PMO will develop and implement contract management processes and procedures in order to ensure that new IT procurements are planned and executed in a timely manner.

IT ensures compliance with applicable information technology laws and regulations regarding the operation, information assurance, including continuity of operations, communications security, emergency operations, and procurement of IT products and services. NTIA has established an Enterprises Architecture Council to ensure IT capital investments are made wisely and in coordination with all business processes. IT also maintains an active Emergency Relocation Site to meet the National Security/Emergency Preparedness functions of the NTIA.

During FY 2012, NTIA's OSM will:

- Support the Wireless Innovation and Infrastructure Initiative (WI3) effort to free spectrum for commercial use;
- Provide IRAC Support administrative services for the IRAC, its subcommittees, and ad hoc groups (benefits realized through the year);
- Maintain the Manual of Regulations and Procedures for Federal Radio Frequency Management (benefits realized through the year);
- Complete one United States Telecommunications Training Institute (USTTI) course for foreign students and two courses on federal spectrum management (benefits realized at the completion of the courses);
- Implement policies regarding spectrum use by the federal agencies and respond to FCC decisions that may impact federal operations (benefits realized through the year);
- Review and improve international spectrum management policies, including U.S. processes for World Radiocommunication Conferences (WRCs), outreach efforts to foreign administrations, and participation and representation in international fora addressing spectrum management policies (benefits realized leading up to the WRC in 2012);
- Provide leadership and participate in ITU-Radiocommunication Sector (ITU-R) Study Activities affecting international treaty text, technical studies in preparation for WRCs, and development of regional positions (benefits realized at the WRC in 2012);
- Review federal space systems for compliance with Federal and non-Federal radiocommunication systems, and participate in satellite coordination meetings with other administrations (benefits realized through the year);
- Provide updated version to the Federal Strategic Spectrum Plan by 2nd quarter of FY12 (benefits being realized by 4th quarter of FY12 to improve transparency of Federal spectrum usage);
- Conduct strategic planning to develop, coordinate, and execute long-term plans by the beginning of FY12 (benefits realized immediately for effective planning and policy

development).

- Conduct a series of workshops to coordinate and refine the draft future Federal spectrum management architecture by 1st quarter of FY12 (benefits realized immediately to obtain Federal agency endorsement by 4th quarter of FY11);
- Maintain a viable alternate COOP site and capability so that its Primary Mission Essential Function of spectrum management can continue to be performed should its primary site be inaccessible (benefits realized through the year);
- Provide cognizant spectrum management liaison support to the National Response Framework, specifically Emergency Support Function 2, so that Federal requirements can be met in the event of a natural or man-made disaster (benefits realized through the year, but particularly during hurricane season);
- Serve as the Department of Commerce representative to the Emergency Communications Preparedness Center so that emergency responders have the necessary tools to communicate with each other in the event of a disaster (benefits realized through the year);
- Review and coordinate requests from federal agencies for frequency assignments in a thorough and timely manner (benefits realized through the year);
- Review and process requests from federal agencies for certification of spectrum support in a thorough and timely manner (benefits realized through the year);
- Improve the methods and procedures used to process requests for frequency authorizations and certification of spectrum support to ensure equitable and expeditious access to the radio spectrum resource (benefits realized through the year),
- Complete the Spectrum Sharing Innovation Test-Bed Pilot Program, evaluating the ability of devices employing Dynamic Spectrum Access sharing techniques to compatibly operate with systems in the land mobile radio service frequency bands (benefits realized in the following years);
- Complete the technical studies identifying changes to the federal regulations, procedures, and processes necessary to improve spectrum efficiency in the land mobile radio, fixed, and radiolocation service frequency bands (benefits realized through the year)
- Implement the unclassified version of Federal Spectrum Management System (FSMS);
- Migrate the NTIA Data Center to the HCHB Consolidated Server Area; and
- Implement the electronic exchange of information between the OSM and National Archives and Records Administration (NARA).

Interdepartment Radio Advisory Committee (IRAC) Support: NTIA will:

- provide the necessary leadership and administrative support for the IRAC, its subcommittees, and ad hoc groups as the committee provides advice to NTIA on spectrum management, including coordination of spectrum use, review of spectrum plans, development of federal technical standards, emergency planning, satellite registration and coordination, international conference preparations, and development of coordination arrangements with Canada and Mexico;
- with the advice of the IRAC, coordinate with the FCC views on all technical and policy decisions under consideration by the FCC which may impact federal operations, and decisions under consideration by NTIA which may impact non-federal operations;
- develop and update the Federal Government rules and regulations necessary to manage the Federal Government's use of the spectrum including those governing the relationships between the FCC and the NTIA;
- provide public access to the IRAC and to releasable spectrum management information; and
- improve and upgrade the electronic archives of the IRAC and distribute it

periodically to the NTIA staff and Federal agencies.

Domestic Spectrum Policies: NTIA will:

- provide leadership and support for the Policy and Plans Steering Group, an interagency advisory committee whose membership includes representatives from those Federal agencies whose missions require significant use of the radio frequency spectrum resource. The representation of the Federal agencies on this committee will be limited to individuals holding the rank equivalent to Assistant Secretary in their respective agencies; the role of this committee will be advisory and this committee will report to the Assistant Secretary of Commerce for Communications and Information. This forum will serve as a significant mechanism for resolving spectrum policy issues within the Executive Branch.
- plan and conduct spectrum training courses and seminars for U.S. and foreign spectrum managers;
- respond to queries from the private sector relative to the use of spectrum by the Federal Government;
- develop and disseminate via the web and printed materials information describing executive branch spectrum management and federal agency use of spectrum; and
- develop and implement policies regarding spectrum use by the federal agencies.

International Spectrum Plans and Policies: NTIA will:

- Coordinate, develop, and present the Federal Government's contribution to U.S. proposals and positions for international fora where radio frequency spectrum management issues are addressed such as the ITU World and Regional Radiocommunication Conferences, ITU Plenipotentiary Conferences, ITU Council, ITU Standards Conferences, the ITU Development Conferences, and the Organization of American States' Inter-American Telecommunication Commission (CITEL);
- Analyze other administration's proposals to determine the impact on U.S. spectrum requirements:
- Develop and implement a plan for ongoing outreach strategies to facilitate gaining international support for U.S. positions;
- Lead or participate in and contribute to ITU-Radiocommunication Sector study groups and other international telecommunication regulatory fora;
- Participate in and contribute to other international fora dealing with radio spectrum issues such the NATO Joint Civil/Military Committees, the International Civil Aviation Organization and the International Maritime Organization.
- Chair the IRAC Radio Conference Subcommittee (RCS) and through this forum coordinate Federal Government positions and proposals to be submitted to international fora involved in spectrum management matters;
- Consult with foreign countries on reforming their spectrum management processes to use the spectrum more efficiently and effectively;
- Lead and participate in bilateral and multilateral meetings on spectrum management issues with foreign administrations including bi-lateral frequency coordination agreements with Mexico and Canada;
- Implement the results of international radio treaty conferences by recommending changes to U.S. domestic rules;
- Chair the IRAC ad hoc group on WRC Implementation;

- Provide leadership on spectrum-related issues that come before the ITU Council and Plenipotentiary Conference;
- Review Federal space systems for compliance with national requirements, coordinate with other Federal and non-Federal radiocommunication systems, and participate in satellite coordination meetings with other administrations;
- Chair the IRAC Space Systems Subcommittee;
- Coordinate non-Federal space systems with Federal radiocommunication systems;
- Develop spectrum policies relative to satellite operation, national and international coordination, notification, and advanced publication;
- Negotiate satellite coordination agreements with foreign countries relative to either Federal Government satellite operations or foreign government satellite operations;
- Coordinate with the FCC on both domestic satellite systems and Federal Government systems. Provide recommendations on FCC rulemakings on space allocations and rules and regulations;
- Provide comments to the FCC on rulemakings concerning international activities;
- Provide support and technical analysis in cooperation with other Department offices to promote U.S. product sales to other countries;
- Initiate and conduct scientific and technical cooperation in the field of telecommunications and spectrum management with specific foreign countries in accordance with U.S. foreign and international trade policy objectives;
- Identify regulatory and procedural barriers to the timely and global implementation of United States innovations in radiocommunications technologies and services and recommend methods to remove those barriers;
- Participate in and contribute to Federal strategic spectrum planning on emerging technologies such as dynamic spectrum access, and incorporate domestic activities in international planning; and
- Lead and participate in international spectrum management training activities including support for the USTTI.

Strategic Planning: NTIA will:

- Develop, coordinate, and execute an integrated program that responds to the basic tenets of the Spectrum Policy Initiative for the 21st Century (SPI);
- Promote and bring awareness to the outcomes of the SPI.
- Develop long range goals for Federal Spectrum Management that will include the development of a spectrum management architecture for the future and coordinate among affected stakeholders;
- Assist the Federal agencies in maintaining and updating their agency-specific spectrum plans defining current and future spectrum requirements; to include the identification of those spectrum efficiency enhancing technologies under consideration;
- Develop a methodology and provide an implementation for an NTIA capability to electronically compile, store, update, and analyze current and future spectrum requirements for all the Federal agencies that will include how, where, and when it is intended to be used;
- Maintain and update the Federal Strategic Spectrum Plan—biennially—and coordinate the Plan with appropriate Federal agencies;
- Assist the Federal agencies and the Office of Management and Budget with incorporating the consideration of spectrum-related requirements within the capital planning process;

- In coordination with the FCC, assist in the development and updating of a National Strategic Spectrum Plan to include appropriate coordination with affected Federal agencies and other executive components;
- Assist NTIA's Office of Policy and Development in formulating, revising and advocating plans and policies that provide both market and non-market based incentives for Federal agencies to implement spectrum efficient concepts and technologies in their respective acquisitions of mission-related systems;
- Investigate and develop a future Federal spectrum management architecture that considers advanced and spectrum efficient concepts to improve the effectiveness and efficiency of spectrum use by the Federal agencies and thereby increase the spectrum availability in fulfilling the national interest for national security, public safety and economic opportunities; and
- Provide monitoring of and annual reporting on the achieved progress toward the satisfaction of the United States Spectrum Policy for the 21st Century in coordination with Federal agencies and other relevant components of the Executive branch.

Emergency Planning and Public Safety: NTIA will:

- Support implementation of WI3's efforts to build a public safety broadband network;
- Develop Public Safety Telecommunications Policy consistent with Administration goals;
- Provide leadership, liaison, and guidance for the integration of National Public Safety telecommunications systems, ensuring inter-operability among Federal, state, and local public safety agencies; and provide for the spectrum needs of these integrated systems,
- Provide the necessary leadership, technical expertise, applied research, policy guidance, and spectrum management support for the successful coordination of national public safety requirements, goals and objectives both within the Federal Government and the state and local entities in coordination with the FCC;
- Identify current and future technology which could enhance interoperability;
- Develop security/emergency preparedness and long-range plans for use of the spectrum;
- Develop procedures and incorporate them in the planning process for a timely and orderly transition from normal to emergency modes;
- Participate with other Federal agencies in communications emergency readiness planning and implementation;
- Formulate and advocate plans and policies necessary to the development of strategies to improve and restore U.S. telecommunications resources;
- Develop and modify spectrum policies and procedures for crisis-related situations under the National Response Framework, specifically Emergency Support Function 2;
- Provide emergency readiness planning for the Federal use of the radio frequency spectrum;
- Identify and provide solutions to issues and deficiencies in the national security/emergency preparedness communications planning process in support of the National Communications System (NCS);
- Serve as the Department's working group and focus group representative for the Emergency Communications Preparedness Center; and
- Maintain a viable NTIA continuity of operations (COOP) capability.

Spectrum Services: NTIA will**:**

- Process Federal agencies requests for frequency assignment authorizations and actions;
- Provide Federal agencies with accurate spectrum management data;
- Assist non-IRAC agencies in identifying spectrum to meet their radiocommunications needs;
- Resolve conflicting requirements concerning Federal agencies' use of the spectrum;
- Evaluate proposed Federal radiocommunications systems for certification for spectrum support in accordance with OMB Circular A-11;
- Identify and implement the information technology capabilities required to satisfy the needs of the Federal agencies for computer automated tools to assist in the preparation of frequency authorization and spectrum certification requests, the determination of compliance with rules and regulations, and the prediction and mitigation of interference;
- Participate in the negotiation of spectrum coordination agreements and spectrum sharing protocols with Mexico and Canada;
- Coordinate requests for radio frequency assignments in the U.S./Canadian border area in order to ensure interference-free operations to both the U.S. and Canada;
- Coordinate FCC requests for Special Temporary Authorizations from the private sector when such requests use spectrum that is allocated for Federal use on a primary or shared Federal/non-Federal basis; and
- Chair the IRAC Frequency Assignment and Spectrum Planning Subcommittees (FAS and SPS) and through these forums, coordinate the processing of requests by the Federal agencies for frequency assignment and spectrum certification actions.

Spectrum Engineering and Analysis: NTIA will:

- Assess the present and projected Federal use of the spectrum by conducting studies of spectrum use, concentrating on bands and services involving: upcoming international radiocommunication conferences, federal and non-federal sharing, and those areas where significant improvements in utilization appear possible;
- Resolve spectrum sharing problems concerning conflicts between Federal agencies or between Federal and non-Federal spectrum users, and identify any changes to existing spectrum policies and procedures that could minimize such problems in the future;
- Provide technical engineering support to the IRAC and its subcommittees, especially in the area of spectrum standards, FCC proposed rulemaking, improved frequency coordination procedures, and resolving reported interference cases;
- Undertake a comprehensive examination of adjacent band interference, including technical and regulatory issues, and make appropriate recommendations;
- Evaluate new technologies, applicable to various radio services and frequency bands, to determine their potential spectrum efficiency and usefulness for Government applications;
- Develop plans for intra-service and inter-service sharing in selected bands;
- Define new or improved automated techniques for the study of spectrum sharing, interference prediction, and frequency coordination;
- Plan and coordinate spectrum measurements in selected frequency bands to support ongoing studies involving spectrum sharing, radio interference, spectrum standards, spectrum policy development, frequency coordination, and/or spectrum efficiency;
- Provide technical support in performing research and development of automated spectrum engineering and analysis capabilities;

- Provide technical engineering and policy analysis support in preparation for and participation in international radiocommunication conferences and in development of domestic spectrum policy and long-range planning; and
- Chair the IRAC Technical Subcommittee (TSC) and through this forum, coordinate and develop spectrum standards that apply to all Federal systems.

Information Technology: NTIA, via OSM's Information Technology Division (ITD), provides support to the spectrum management, grants administration, and domestic and international policy development mission areas as well as, back-office administrative support. As such, the Chief, ITD also serves as the NTIA Chief Information Officer (CIO).

NTIA supports and is an active participant in the Government-wide e-Government initiatives and lines of business. Each initiative or line of business is managed by another federal agency, such as the General Services Administration, and was implemented in part to avoid redundancy and duplication of government-wide activities. NTIA's e-government participation provides better services to citizens, promotes transparency, and actively supports our stakeholders in the business community.

NTIA will:

- Provide the information technology systems required for inter-office and back-office communications in support of administrative systems;
- Provide creation and maintenance of NTIA Internet and Intranet web site pages, software, hardware, and network connectivity; and
- Develop, modify, implement, and maintain software that is necessary to operate and administer NTIA grant activities.

Under the ITD functions, NTIA will: (1) continue to maintain and update existing computer software used for processing assignments, databases, and interference calculations; (2) continue to design or implement new software packages to further improve assignment data processing and analytical engineering evaluation; (3) develop new automated systems to improve access to spectrum management information; (4) plan for upgrading the spectrum management frequency assignment and system review processes; (5) plan, upgrade and improve the computer automated software tools (e.g., Federal Spectrum Management System) provided to the Federal agencies to assist them in: (a) making more efficient and effective use of the spectrum, (b) preparing frequency assignment and spectrum certification applications, (c) developing spectrum related policies and procedures and (d) resolving interference problems; (6) prepare and implement plans to improve the efficiency and effectiveness of the Federal Government's spectrum management process using advanced information technology techniques and business re-engineering; and (7) plan, upgrade and implement new methods of providing secure and non-secure access to Federal spectrum management data by NTIA staff, Federal spectrum managements, the telecommunications industry, and the general public.

NTIA will:

- Provide the information technology systems required for inter-office communications, processing frequency assignment requests, exchanging spectrum management information with Federal agencies using the radio-frequency spectrum, and providing the public with electronic access to spectrum management information;
- Develop and improve engineering and analysis models and tools to support spectrum

engineering and analysis and the spectrum authorization processes;

- Develop, modify, and implement software that is necessary to operate the spectrum authorization processes, to provide the Federal agencies the computer automated capability to manage their frequency spectrum assets, and to provide the spectrum management community the necessary spectrum information that will enable the Federal agencies to manage their spectrum assets without interference and within the current rules and regulations;
- Develop plans to implement computer automated software tools to assist the Federal agencies in: (1) preparing their requests for frequency authorization and spectrum certification; (2) insuring that requests for spectrum are interference free and comply with NTIA's rules and regulations; (3) coordinating spectrum requests of other agencies; (4) ensuring that their use of the spectrum is efficient and effective; (5) managing their frequency assignment assets; and (6) resolving interference problems;
- Develop and implement automated workflow processes and the electronic exchange of information between the OSM and National Archives and Records Administration (NARA) for the purpose of archiving OSM federal records; and
- Develop and implement standardized processes to ensure alignment of spectrum management systems with the Federal IT Enterprise Architecture Models, Capital Planning and Investment Control guidelines, IT security regulations, and best practices.

PROGRAM CHANGES FOR FY 2012:

Wireless Innovation and Infrastructure Initiative (WI3) (500 MHz) (Base Funding: $0 and 0 FTE; Program Change: $1,740,000 and 5 FTE): NTIA requests $1,740,000 and 5 FTE for a total of $1,740,000 and 5 FTE to implement WI3's charge to NTIA to find over the next 10 years 500 MHz of Federal and nonfederal spectrum suitable for both mobile and fixed wireless broadband use. The spectrum must be available to be licensed by the Federal Communications Commission for exclusive use or made available for shared access by commercial and Government users to enable licensed or unlicensed wireless broadband technologies to be deployed. NTIA will analyze, identify, monitor, and report on making the 500 MHz available, develop new spectrum access approaches and technologies, and use its test bed to test devices that could promote spectrum sharing. Heretofore, NTIA has been involved with spectrum management functions and activities assigned to NTIA under 47 U.S.C. 902 and 903. Finding 500 MHz is an entirely new project for NTIA, so there is no base funding available for this new assignment.

Under WI3, NTIA will commence work in conjunction with the FCC in recovering and reallocating spectrum, updating 20th century spectrum policies, and providing adequate incentives and assistance to enable federal agencies or affected entities to make up to 500 MHz (in bandwidth) available. This work will also include regular progress reports. It will require in-depth review of federal spectrum use and short- and long-term actions for accommodating mobile broadband. Some actions are likely to require analytical support and spectrum measurements. Other actions may require "domino" movement of systems from additional bands.

NTIA will develop new spectrum access approaches and technologies that will improve management of the nation's airwaves and deliver new ways for industry to provide wireless services to consumers. NTIA will apply its policy and scientific expertise to advance the Administration's spectrum sharing reform recommendations.[1] The White House, Congress, telecommunications industry, and consumers support reforms that will ensure that there is a sufficient, flexible spectrum of radio frequencies that can accommodate growing consumer demand and evolving wireless technologies, with the understanding that scarcity of mobile broadband could mean higher prices, poor service quality, and an inability for the U.S. to compete internationally**.** NTIA will address increasing the access to and efficiency of spectrum through an integrated program of research, testing, and policy development. This will be done through the combined efforts of NTIA's spectrum management and research programs.

The wireless broadband spectrum research efforts will examine the feasibility of increased spectrum sharing between Federal and non-Federal users as a means of improving spectrum efficiency. More specifically, Section 3 of the President's Memorandum calls for the following action: *"to facilitate research, development, experimentation, and testing by researchers to explore innovative spectrum-sharing technologies, including those that are secure and resilient."*[2] NTIA's research focus will expand the initial test-bed pilot program to review all promising spectrum sharing technologies and implementation approaches to ascertain if these are effective in sharing with other radio services. This research will play a critical role in making available 500 MHz of spectrum within the next 10 years.

---

[1] Presidential Determination: Memorandum for the Heads of Executive Departments and Agencies, *Improving Spectrum Management for the 21st Century*, 40 WEEKLY COMP. PRES. DOC. 2875 (Nov. 30, 2004).

[2] Presidential Memorandum for the Heads of Executive Departments and Agencies, *Unleashing the Wireless Broadband Revolution* (June 28, 2010).

Proposed Actions:

NTIA will identify and make available 500 MHz of spectrum as directed by the President. However, new resources are required to be dedicated solely in developing criteria for nominating candidate bands, evaluating band selection factors, determining candidate bands, determining what categories of repurposing for these candidate bands, and transitioning planning that will be required for either relocation or spectrum sharing. In addition, this work will have supporting actions regarding legislative, regulatory rulemaking, and international agreements that will be required in fulfilling the availability of spectrum. This work is expected to require the entire resources for the next ten years.

NTIA will provide opportunities for Federal agencies to work with industry, researchers, and academia to examine cooperatively new ways of sharing radio spectrum through spectrum management reforms and new technologies. In response to the executive memorandum from the President, NTIA will create and implement a plan to facilitate research, development, experimentation, and testing by researchers to explore innovative spectrum-sharing technologies. This effort will be accomplished in close consultation with NIST, the Wireless Spectrum Research & Development Technology Workgroup, National Science Foundation, and all agencies as appropriate.

NTIA, in coordination with the Federal Communications Commission (FCC) and other Federal agencies, has established a Spectrum Sharing Innovation Test-Bed (Test-Bed) pilot program to examine the feasibility of increased sharing between Federal and non-Federal users. The pilot program is currently evaluating the ability of devices employing Dynamic Spectrum Access (DSA) techniques to share spectrum with land mobile radio (LMR) systems. To fulfill the objectives being set out by the Executive Memorandum from the President, the program will expand research into spectrum-sharing technologies, such as DSA, which can be made as a part of the overall plan in making 500 MHz of spectrum available.

As part of the pilot program, NTIA engineers will develop performance monitoring tools, models, and measuring techniques that can accurately evaluate spectrum-sharing technologies and techniques. The goal of the pilot program is to develop the necessary policies and spectrum management strategies to promote the development of this potentially flexible and innovative approach to spectrum access.

Test-Bed Pilot Program: NTIA will expand and accelerate the existing Test-Bed pilot program examining DSA sharing techniques in the LMR frequency bands: The laboratory and field measurements currently planned under the pilot program, were initially scheduled to be completed in April 2011. The work being performed under the pilot program has progressed more slowly than anticipated, due to the complex nature of the technologies and the difficulties experienced in tailoring the testing to each technology. Given the progress to date, in all likelihood it will take an additional three years (2014) or more to complete and document the measurements.

As directed in the Executive Memorandum, NTIA and the FCC are to work together and identify 500 MHz of spectrum for mobile broadband technologies.[3] New and innovative techniques must be employed to facilitate sharing between Federal and non-Federal users if there is any hope of identifying 500 MHz. Adaptive sharing techniques such as DSA are envisioned as a key component to increasing access to spectrum. DSA is intended to allow each device to evaluate its radio frequency environment using spectrum sensing, geo-location, or a combination of spectrum sensing

[3] Presidential Memorandum for the Heads of Executive Departments and Agencies, *Unleashing the Wireless Broadband Revolution* (June 28, 2010).

and geo-location techniques; determine which frequencies are available for use on a non-interference basis; and reconfigure itself to operate on the identified frequencies. DSA has the possibility to permit access to the spectrum without relocating the incumbent spectrum users.

Accomplishing the Administration's goals will require an expansion of staff and equipment. To date, NTIA has not conducted much research on spectrum-sharing techniques and technologies. Some of the technical actions above require original research and new analysis tools and techniques. In FY 2009, NTIA initiated the Test-Bed pilot program as a limited effort focused on existing LMR systems. Additional resources will be required to expand this effort, move the testing ahead more quickly, and to release measurement resources to perform based functions related to interference analysis and spectrum planning. The FY 2011 spectrum-access initiative using intelligent networks and cognitive radio means NTIA will expand spectrum-sharing research next year.

Statement of Need and Economic Benefits:

New resources are required to be dedicated solely in monitoring, tracking, and reporting assessment of progress toward accomplishing the actions necessary in fulfilling the goal of making available 500 MHz of spectrum. This action involves monitoring, tracking, and coordinating with over 100 Federal agencies and will require reporting to various executive offices of the President.

Few technological developments hold as much potential to enhance America's economic competitiveness, create jobs, and improve the quality of our lives as wireless high-speed access to the Internet. Innovative new mobile technologies hold the promise for a virtuous cycle -- millions of consumers gain faster access to more services at less cost, spurring innovation and then a new round of consumers benefit from new services. Expanded wireless broadband access will trigger the creation of innovative new businesses, provide cost-effective connections in rural areas, increase productivity, improve public safety, and allow for the development of mobile telemedicine, telework, distance learning, and other new applications that will transform Americans' lives.

Spectrum and the new technologies it enables also are essential to the Federal Government, which relies on spectrum for important activities, such as emergency communications, national security, law enforcement, aviation, maritime, space communications, and numerous other Federal functions. Spectrum is also critical for state, local, and tribal government functions. As the wireless broadband revolution unfolds, innovation can enable efficient and imaginative uses of spectrum to maintain and enhance the Government's capabilities. This global technology leadership will only happen if there is adequate spectrum available to support the forthcoming myriad of wireless devices, networks, and applications that can drive the new economy. To carry this out, NTIA is finding ways to use spectrum more efficiently by reviewing current uses of the Federal Spectrum, investigating innovative sharing techniques, and researching the development of advanced, situation-aware spectrum-sharing technologies.

LMR systems are used for two-way communication by Federal agencies over spectrum that is occupied infrequently throughout the day. This infrequent usage pattern allows opportunities for DSA enabled devices to access spectrum that is unused at any point in time on a non-interference basis. With the funds requested in FY 2012, NTIA will accelerate research to show that DSA can be a viable sharing technique and a legitimate option in the ongoing effort to identify 500 MHz of spectrum that can be made available for emerging broadband technologies in order to satisfy the demand described in the National Broadband Plan and the Executive Memorandum of June 28, 2010.

This effort will require additional Institute for Telecommunication Sciences (ITS) engineers to accelerate the progress of the laboratory and field measurements to characterize the behavior of DSA with incumbent systems. These measurements are critical to the acceptance of DSA as a viable sharing technique. Additional OSM engineers are needed to ensure that the data collected by ITS is sufficient to develop policy and service rules for devices using DSA sharing techniques. NTIA is currently the only Federal organization that performs the types of measurements necessary to support policy decisions on this emerging technology.

As aptly summarized by the FCC in the National Broadband Plan, "The growth of wireless broadband will be constrained if government does not make spectrum available to enable network expansion and technology upgrades. In the absence of sufficient spectrum, network providers must turn to costly alternatives, such as cell splitting, often with diminishing returns. If the U.S. does not address this situation promptly, scarcity of mobile broadband could mean higher prices, poor service quality, an inability for the United States to compete internationally, depressed demand and, ultimately, a drag on innovation … Flexibility of use enables markets in spectrum, allowing innovation and capital formation to occur with greater efficiency. More flexible spectrum rights will help ensure that spectrum moves to more productive uses, including mobile broadband, through voluntary market mechanisms. Spectrum flexibility, both for service rules and license transfers, has created enormous value. For example, the combined book value of flexible-use licenses held by the four national wireless providers, reflecting the prices paid at auction as well as in mergers and other corporate transactions, is over $150 billion. Some economists estimate that the consumer welfare gains from spectrum may be 10 times the private value to the spectrum holder. If this rule of thumb is true, it suggests that the social value of licensed mobile radio spectrum alone in the U.S. is at least $1.5 trillion." [4]

This initiative will result in a number of benefits. Non-monetary benefits include advances in spectrum science and policy, experimentation, innovation, and growth of new technologies. The monetary benefits are difficult to quantify, but the return on investment, to NTIA alone, is expected to be substantial. The Test-Bed pilot program, if properly executed, will serve as a best practices model for other similar research efforts to provide Federal agencies with more information about the performance of emerging technologies. This information can be used by Federal agencies to make sound decisions regarding whether sharing is possible through the use of DSA devices. Finally, industry and the economy overall will benefit as strengths and weaknesses of DSA sharing techniques are better understood, providing opportunities for increased spectrum access.

With the requested funding, NTIA will deliver the following:

- Measurement techniques to evaluate DSA devices. These will be made available to government, industry, and academia.
- Proposals for DSA spectrum-sharing techniques and presentation to national and international organizations.
- A plan to facilitate research, development, experimentation, and testing by researchers to explore other innovative spectrum-sharing technologies.
- Recommendations for further evaluation of spectrum-sharing technologies that have potential for the greatest near term benefits.

[4] *Connecting America: The National Broadband Plan*, pages 77-79 (March 2010).

Base Resources Assessment:

OSM's base funding does not include resources for the search for 500 MHz for wireless broadband. The base funding will be used primarily for OSM labor expenses for domestic and international spectrum management. NTIA is reimbursed by other Federal agencies to execute the spectrum management functions and activities assigned to NTIA under 47 U.S.C. 902 and 903; to develop, establish, and implement plans, policies, activities, capabilities, and procedures to ensure that the U.S. spectrum policy, spectrum allocations and spectrum management capabilities and processes stay up with the needs of the Federal agencies and the American public for access to the radio spectrum in the 21st century domestically and internationally; to ensure Federal spectrum management functions during emergencies; to coordinate and register internationally planned Federal Government satellite networks and selected assignments for terrestrial systems; to work cooperatively with the Federal Communications Commission and the Federal agencies in coordinating spectrum use; and to develop, implement and maintain the automated information technology capabilities necessary for performing these activities. NTIA should not collect reimbursable funds from other Federal agencies to fund the search for 500 MHz because the effort is not intended to provide spectrum management support to those agencies. As a result, the $1.7 million for 500 MHz will be needed to address the recently signed Executive Memorandum that commits the Federal Government to make available 500 MHz available for wireless broadband. The spectrum will be identified from spectrum that may currently have Federal and/or non-Federal users. New resources are needed to identify, analyze, and reallocate spectrum and to recover current operations.

NTIA's involvement with the Test-Bed program began in the summer of 2008. NTIA provided reimbursable funds collected from other Federal agencies to evaluate the ability of DSA devices for employing spectrum sensing and/or geo-location techniques to share spectrum with land mobile radio (LMR). NTIA subsequently drafted the Phase I test plan and is presently drafting the test plans for the Phase II and III field tests. As the case above, NTIA should not collect reimbursable funds from other Federal agencies to fund a long-term research program on spectrum sharing innovation. The additional funds are required to expand the initial test-bed pilot program to review all technologies that are poised for advancement in development and commercialization. NTIA should also credibly examine all of the different DSA implementation approaches being tested to ascertain if DSA techniques are effective in sharing with other radio services. The Test-Bed program and spectrum sharing research efforts play a critical role in making available 500 MHz of spectrum within the next 10 years.

Schedule & Milestones:

- FY 2010: Develop an in depth plan and milestones for searching for 500 MHz for wireless broadband, working with the FCC and the Federal agencies
- FY 2011-13: Implement the plan and milestones to review and identify bands to be made available
- FY 2012-16: Increase the spectrum available to wireless broadband services by 500 MHz within the next ten years
- FY12-13: Complete the measurements under the Test-Bed pilot program
- FY12-14: Develop and evaluate interference protection criteria, and appropriate interference models, for assessing potential interference between DSA devices and LMR systems (in coordination with appropriate Federal agencies)
- FY13 -16: Identify policies and management strategies to perform spectrum sharing between DSA devices and LMR effectively

- FY14-16: Based on the lessons learned in the Test-Bed pilot program, develop a set of general tools and models that can be used to predict behavior and interactions of DSA spectrum-sharing techniques with other radio services

Deliverables:

Search for 500 MHz for Wireless Broadband

- FY 12 Criteria for nominating bands
- FY 12 Evaluation report on selection factors
- FY 12 Report on selection of candidate bands
- FY 12 Progress Reports every 6 months
- FY 13 Recommendations for legislative action
- FY 13 Transition plans for each system to be relocated or considered for band sharing
- FY 13-15 Proposed regulatory rulemakings as required
- FY 11-14 Completion of testing and associated reports on devices being tested within the Test-Bed
- FY 12-14 Evaluation and validation of interference protection criteria of LMR services
- FY 12-14 Analysis techniques for assessing potential interference to primary systems. These will be made available to government, industry, and academia
- FY 14 Measurement techniques to evaluate DSA devices. These will be made available to government, industry, and academia
- FY 16-20 New international agreements as required

Performance Goals and Measurement Data

Performance Goal: Innovation and Entrepreneurship Identify 500 MHz of available spectrum	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	50 MHz	100 MHz	200 MHz	300 MHz	400 MHz	500 MHz
Without Increase	0	0	0	0	0	0
Description: Performance targets a cumulative total of 500 MHz required to be identified due to impact on reducing the amount of new required resources.						

Performance Goal: Innovation and Entrepreneurship Make 500 MHz of spectrum available	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	50 MHz	100 MHz	200 MHz	300 MHz	400 MHz	500 MHz
Without Increase	0	0	0	0	0	0
Description: Performance targets a cumulative total of 500 MHz required to be made available.						

Performance Goal: Science and Information Performance Measure: Test and evaluate dynamic spectrum access devices	FY 2011 Target	FY 2012 Target	FY 2013 Target	FY 2014 Target	FY 2015 Target	FY 2016 Target
With increase	0	50%	100%			
Without increase	0	25%	50%	75%	100%	
Description: This measure is focused on the testing of spectrum devices and accelerating the on-going Test-Bed pilot program evaluating DSA sharing techniques to help satisfy the goal of indentifying 500 MHz for the deployment of broadband consistent with the goals established in the Executive Memorandum.						

PROGRAM CHANGE PERSONNEL DETAIL
(Dollar amount in thousands)

Activity: Salaries and Expenses
Subactivity: Spectrum Management

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Telecommunications Specialist	Washington, DC	GS-14	2	105,211	210,422
Electronics Engineer	Washington, DC	GS-14	1	105,211	105,211
Electronic Engineers	Boulder, CO	ZP-IV	2	129,668	259,336
Electronic Engineers	Boulder, CO	ZP-III	2	92,181	184,362
Total			7		759,331
less Lapse	25%		2		189,833
Total full-time permanent (FTE)			5		569,500
2011 Pay Adjustment	0.00%				0
2012 Pay Adjustment	0.00%				0
TOTAL					569,500

Personnel Data	Number
Full-Time Equivalent Employment	
Full-time permanent	5
Other than full-time permanent	0
Total	5
Authorized Positions:	
Full-time permanent	7
Other than full-time permanent	0
Total	7

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Spectrum Management

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	$570
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	570
12	Civilian personnel benefits	161
13	Benefits for former personnel	0
21	Travel and transportation of persons	186
22	Transportation of things	4
23.1	Rental payments to GSA	54
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	19
24	Printing and reproduction	11
25.1	Advisory and assistance services	0
25.2	Other services	147
25.3	Purchases of goods & services from Gov't accounts	84
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	56
25.8	Subsistence and support of persons	0
26	Supplies and materials	30
31	Equipment	418
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	1,740

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Spectrum Management
Program Change: Administrative Savings

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	(31)
22	Transportation of things	0
23.1	Rental payments to GSA	(40)
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	0
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	(32)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	(103)

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Salaries and expenses
Subactivity: Telecommunication sciences research

Comparison by line item		2010 Actual		Annualized 2011 * CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Telecommunication sciences research.....	Pos/BA	45	$7,140	49	$7,266	49	$7,403	49	$7,071	0	($332)
	FTE/Obl.	46	7,164	48	7,610	49	7,403	49	$7,071	0	
Direct Obligations.....	Pos/BA	45	7,140	49	7,266	49	7,403	49	7,071	0	(332)
	FTE/Obl.	46	7,164	48	7,610	49	7,403	49	7,071	0	

SUBACTIVITY: TELECOMMUNICATION SCIENCES RESEARCH

The objectives of the Telecommunication Sciences Research subactivity are to:

- Continue applied engineering and measurement work that is essential to effective NTIA and Federal Communications Commission (FCC) management of the radio frequency spectrum; the efficient implementation and electromagnetic compatibility of advanced wireless, public safety, broadcasting, and satellite communications technologies; and the development and effective use of emerging technologies, such as dynamic spectrum access (DSA), ultrawideband, dynamic frequency selection, digital television, land mobile radio communications, Worldwide Interoperability for Microwave Access (WiMAX), Long Term Evolution (LTE), and software-defined radio systems;

- Provide timely technical advice to support the mandate of NTIA to develop and promulgate executive branch policies addressing domestic and international telecommunications and information issues. Provide support through leadership and participation in standards organizations both international and national;

- Promote timely, effective application of NTIA's research and engineering results to U.S. industry through technology transfer and commercialization activities;

- Accomplish research and engineering to promote technology advancement and the efficient delivery of public services, enabling private industry, other Federal agencies, and state and local governments to meet their specific telecommunications needs in the areas of applied radio science, public safety communications, and next-generation networks (NGN);

- Organize and coordinate preparations for U.S. participation in international telecommunications conferences, standards development organizations, and negotiations in cooperation with other interested U.S. government agencies and industry groups; and

- Develop and present public interest and user-oriented technical contributions to national and international standards organizations addressing quality of service (QOS), communication network resource management, and other topics critical to the development and implementation of advanced Internet Protocol (IP)-based networks, optical transport networks, NGNs, and supporting broadband infrastructures.

Through telecommunications research and engineering, NTIA supports Administration telecommunications goals, such as enhanced domestic competition, advanced services and new technology deployment, improved foreign trade opportunities for U.S. telecommunication firms, and more efficient use of the radio frequency spectrum. These activities fall within the Department of Commerce strategic goal to promote U.S. innovation and industrial competitiveness.

.

NTIA, through its Institute for Telecommunications Sciences (ITS) in Boulder, CO, supports advancing telecommunications infrastructure development, improving U.S. telecommunications trade opportunities, and promoting more efficient and effective use of the radio spectrum. On a reimbursable basis, NTIA's laboratory also serves as a principal Federal resource for addressing the telecommunications, IT, and security challenges of other Federal agencies, state, local, and tribal governments.

FY 2012 operating objectives for the Telecommunication Sciences Research activity are summarized by program area below:

Characterization of the Radio Environment: Advance the current state of knowledge, including the impact of radio frequency noise and interference on radio systems. Develop analysis techniques that may be used to describe the radio environment.

Radio Spectrum Measurement and Analysis: Provide measurements of environmental radio signals assessing levels and types of spectrum occupancy, and technical support to help resolve selected spectrum management problems and interference issues. Perform engineering analyses to characterize telecommunications systems and apply radio/wireless propagation models to help maximize performance of systems and to ensure interference-free sharing of bands.

Propagation Model Development: Conduct radio propagation measurements and analyses in support of the development and validation of improved radio propagation models across various frequencies and environments. Share these models with industry, other agencies, and national and international standard bodies.

Broadband Radio: Study and characterize the broadband transmission channel for within-building and campus-wide wireless local area networks and ultrawideband communications. Develop models and radio link simulators.

Interoperability of Public Safety Communication Systems: Develop standards, technologies, and test methods to ensure interoperability of land mobile radio and broadband systems used by public safety and justice communities. Develop information technology standards that public safety can adopt to ensure interoperability for information sharing.

Land Mobile Radio Service Analysis: Provide analysis methods to evaluate new wireless communication systems and to ensure compatible operation between systems to be used by public safety, public service, and land transportation agencies.

Domestic and International Standards: In cooperation with the U.S. International Telecommunications Union (ITU) National Committees, continue leadership of committees in ITU-T (Telecommunication Standardization Sector) and ITU-R (Radiocommunication Sector) Study Groups developing technical standards of importance to U.S. industry and Government (e.g., NGNs, switched optical networks, IP Multimedia Subsystem (IMS) and other advanced signaling systems, integrated broadband cable networks, and radar systems). Submit ITU recommendations on emerging mobile radio technologies, broadband network performance (e.g., NGN QOS), radio propagation prediction, multimedia quality of service, and radar systems, and coordinate their formal review and approval. Develop and coordinate approval of related U.S. voluntary consensus standards where appropriate.

Performance Assessment: Demonstrate NTIA-developed, perception-based audio and video performance assessment tools for critical new areas including Internet multimedia conferencing, advanced television, and wireless services. Document the advances associated with these tools in open-literature publications. Encourage technology transfer to Government, industrial, academic, and individual users via NTIA-developed, easy-to-use, portable software toolkit.

Wireless Networks: Perform interoperability and quality assessments of representative wireless network technologies. Spearhead standards committee activities and provide engineering analysis

and simulation results defining quantitative limits for adjacent and co-frequency block interference within and among advanced wireless communications technologies.

E-Government Research and Engineering: Support agencies and industry in the evaluation and development of innovative E-government tools aimed at improving government services, expanding Internet access, and promoting technology transfer opportunities.

Through the Telecommunication Sciences Research activity, NTIA performs state-of-the-art telecommunications research and engineering to further the knowledge of the radio frequency spectrum and to improve wireless telecommunications system planning, design, and evaluation. These efforts strengthen coordination with the FCC on the use of the non-Federal portion of the spectrum. This technical research also improves the fundamental understanding of radio-wave transmission, wireless communications technologies, and networking systems, thereby enhancing spectrum utilization and the performance of advanced wireless systems. These efforts directly support industry and government needs, and directly address NTIA requirements to manage Federal use of the radio spectrum. Important results of this research include spectrum use and interference mitigation strategies, models, and measurements that lead to more efficient industry and government use of the radio frequency spectrum, improved radio-wave propagation, and wireless communication techniques to enhance spectrum efficiency, and better methods to describe the performance of both conventional radio and emerging wireless systems. This knowledge base is essential to support the government's spectrum management responsibilities and for technical support to other Federal agencies and industry. These research and engineering efforts will result in an improved U.S. telecommunications technology base and a strong technical foundation for telecommunication standards development in national and international arenas.

As a result of these activities, NTIA has established a core telecommunications research expertise that is accessible to both the public and private sectors. Through cooperative research and development agreements (CRADAs) with industry and reimbursable agreements with other Federal agencies, NTIA applies its expertise to some of the most important practical problems in telecommunications today. For example, both the private sector and other agencies have direct access, at cost, to an on-line radio-wave propagation model. Direct-funded NTIA programs and other agency-sponsored research activities interact in a synergistic manner, leading to greater contributions to national goals, such as public safety communications interoperability, and the spectrum management role of the government.

In support of NTIA’s mandate to oversee the usage of the radio spectrum by Federal agencies, NTIA maintains a comprehensive capability to measure spectrum use. NTIA's Radio Spectrum Measurement Science (RSMS) program uses the most modern test equipment to measure and record signals between 10 kHz and 26 GHz. A transportable radiofrequency shielded enclosure isolates the equipment from strong external signals to ensure the integrity of the measurements. NTIA uses this system to perform measurements at selected sites, to make specialized measurements necessary to ensure compliance with frequency assignment rules and regulations or to investigate the efficacy of new proposed rules and regulations. NTIA conducts measurements of spectrum usage, efficiency, and channel occupancy in selected bands and summarizes the results in support of specific Interdepartment Radio Advisory Committee (IRAC) concerns. The RSMS program also analyzes and resolves difficult or unusual interference problems where a government system is thought to be involved. This often saves costs to Federal agencies and the private sector. NTIA also assists various Department of Defense agencies and Department of Commerce agencies in efficiently operating their own radio spectrum measurement programs through technical consultations, and modification, design, and construction of new radio spectrum and propagation

measurement systems. This work draws on expertise developed for the RSMS program, but also provides an opportunity to investigate advanced measurement methods for use in the system itself.

As new wireless technologies emerge, NTIA must strengthen its efforts to develop improved software and measurement techniques to support increasingly sophisticated uses of the spectrum, including spread-spectrum, ultrawideband, and frequency-agile systems, i.e. Dynamic Frequency Selection or DSA. NTIA performs spectrum-engineering analyses to assess current and future Federal use of the spectrum and determine where significant improvements in utilization appear possible. NTIA is currently assessing emerging spectrum requirements for public safety and law enforcement in coordination with the Public Safety Communications Research (PSCR) program, and a number of different Federal departments and programs that have a keen interest in public safety interoperability. NTIA is also evaluating the Federal Government's use of its spectrum to promote more efficient and economic spectrum use. In FY 2012, NTIA will continue to support essential spectrum utilization analyses, including the impact of new frequency-agile, software-defined DSA radio technologies. NTIA develops the measurement procedures needed to characterize these new signals and perform the increasingly complex system-compatibility analyses to assess, for example, the effects such technologies may have on incumbent systems. Technical support will be continued for major frequency management concerns through representation at technical subcommittee (Interdepartment Radio Advisory Committee - IRAC) meetings, with principal emphasis on improving Federal spectrum efficiency.

Global trends are moving toward providing diverse services, such as audio, video, data, broadcasting, and common carrier services through a converged system of wireline and wireless networks. Radio science has an important role in portable and mobile communications and will play an increasingly important role in connecting the end user to the information infrastructure and in providing personal communication services. Another trend becoming evident as technology advances is that of radio systems utilizing higher frequencies. Some radio systems are already moving into the millimeter-wave band, located at the upper end of the allocated radio spectrum (30-300 GHz).

NTIA continues to provide support to the development and deployment of various wireless technologies such as DSA technologies, which have been proposed as interference-free secondary users in Land Mobile Radio bands. Knowledge from measurements and modeling DSA technologies are crucial in determining the feasibility of interference-free, commercially viable systems. NTIA is developing models to predict the performance of radio systems operating over short paths using detailed geographic information systems (GIS).

NTIA supports private industry in their wireless technology development efforts through technology transfer under a CRADA. Under a CRADA, NTIA is able to collaborate with a variety of companies, state agencies, and non-profit organizations on research projects where technology and knowledge are transferred from the government to commercial organizations and academia resulting in new or improved technologies. CRADAs also create opportunities for government, industry, and academia to publish scientific information jointly.

On a reimbursable basis, NTIA provides telecommunications engineering support to improve public safety communications interoperability through the Public Safety Communications Research program on behalf of a multiagency effort that includes the National Institute for Standards and Technology (NIST) Office of Law Enforcement Standards (OLES), the Department of Homeland Security (DHS) Office for Interoperability and Compatibility (OIC), the Department of Justice (DoJ) Office of Community Oriented Policing Services (COPS), and the DHS' Office of Emergency Communications (OEC). In general, the broad based interoperability effort addresses four key areas: (1) development

of qualitative and quantitative public safety communication and information sharing requirements that are accepted nationally by the public safety community and industry; (2) identification and development of interface standards that satisfy defined user requirements through leadership and direct technical contribution to national and international standards bodies focused on public safety communications; (3) research, development, test and evaluation of concepts, products, and services for long-term interoperability solutions as well as interim improvements; and (4) research and development to accommodate technical gaps that emerge during the entire process. All elements of the NTIA public safety activity involve close and constant coordination with public safety practitioners.

In cooperation with U.S. industry, NTIA prepares and coordinates proposed domestic and international telecommunications standards, develops and demonstrates technologies for assessing the performance and optimizing the utilization of public and private telecommunication networks from a user perspective, and evaluates emerging technologies for application to future needs. These activities promote international trade opportunities for U.S. telecommunication firms, enhance competition in the U.S. telecommunications industry, and improve the cost effectiveness of government telecommunications use. In its international standards activity, NTIA is working to expand trade opportunities for U.S. telecommunications and information providers by leading and supporting U.S. participation in key technical negotiations of the International Telecommunication Union's Telecommunication Standardization Sector (ITU-T) and Radiocommunication Sector (ITU-R). ITU telecommunication standards and radiocommunication recommendations serve as blueprints for future technology development involving billions of dollars in telecommunications industry investment worldwide. NTIA activities strengthen U.S. participation in ITU negotiations and provide the technical content for international standards and recommendations.

To support fundamental research into the nature, interaction, and evaluation of telecommunication devices, systems, and services NTIA manages the Table Mountain Field Site and Radio Quiet Zone. This is a 1,800-acre, open-air test location protected from strong external radio signals by both Federal and State laws. This site is used for performing sensitive radio or electromagnetic experiments, as well as for applications needing low vibration and unobstructed views of the sky. NTIA actively solicits research proposals from inside the Institute as well as from external agencies. This research serves to expand the knowledge base available to the Institute, helps identify emerging technologies, and provides for the development of new measurement methods needed to study the characteristics of new devices and systems based on this technology. The results of the Table Mountain work benefit the public via reports, technical papers, journal articles, conference papers, web documents, and computer programs.

In FY 2012, NTIA will continue to provide leadership in key ITU-T standards development groups. This work will advance the realization of multi-service IP-based NGNs and will provide objective quality metrics and quality objectives enabling assessment and optimization of NGN services. NTIA will continue to Chair ITU-T Study Group 9 (Television and sound transmission and integrated broadband cable networks) and contribute to its technical work.

NTIA will continue to spearhead and contribute to the ITU-affiliated Video Quality Experts Group (VQEG) and will promote and lead related national standards work organized by the Alliance for Telecommunications Industry Solutions (ATIS), the Society of Cable Telecommunications Engineers (SCTE), and other U.S. voluntary consensus standards organizations. NTIA contributions to national standards committees provide technical solutions to some of the most compelling issues facing U.S. telecommunications planners, thereby helping to evolve more rapidly our national information infrastructures. Examples include the inter-operation of multi-vendor systems employing various transmission media (cable, microwave, fiber, and satellite) in a competitive environment and key Internet Protocol/optical network planning issues including traffic management and economical

resource sharing among integrated multimedia services. This work promotes industry competition and innovation in the provision of integrated broadband digital services, facilitates efficient matching of offered services with user needs, and ensures that emerging U.S. broadband network standards are consistent with Internet evolution, U.S. broadband network deployment objectives, and applicable Government (e.g., Office of Management and Budget (OMB) and FCC) policy guidelines.

NTIA provides important, ongoing technical support for the U.S. in ITU-R Study Group 3 (Radiowave Propagation) and Study Group 5 (Mobile, Radiodetermination, Amateur and Related Satellite Services); Working Party 5B; the Radar Correspondence Group, and the Radar Unwanted Emissions Group. In Study Group 3, NTIA is a leader in the development and evaluation of radio propagation models for Working Party 3K. An NTIA engineer serves as the Chair of U.S. Study Group 3. It is devoted to making improvements in propagation models and studies with the goal of improved efficiency in radio spectrum usage domestically and internationally.

In Study Group 5, Working Party 5B, current areas of interest include (but are not limited to): potential reallocation of radar spectrum; effects on radars of interference from communication systems; dynamic frequency selection technology; development of radar emission spectrum measurement techniques; development of more efficient radar spectrum emission criteria. ITS staff provides critical support to the U.S. on radar systems, preserving the spectrum that critically important radar systems need for their continued operation in areas of safety and defense.

ITU-R Working Party 5D is involved with the development of standards for future terrestrial wireless communication networks. Current work involves the development of guidelines involving technologies to be considered for the next generation of communication systems (International Mobile Telecommunications Advanced (IMT-Advanced)). ITS staff provides necessary technical support for the policy decisions made by other members of the U.S. delegation to WP-5D to assure that the guidelines and standards produced by WP-5D are technology-neutral and that U.S. interests and needs are taken into account.

NTIA's international and U.S. standards committee leadership is supported by telecommunications research and engineering activities directed toward the development, implementation, and promulgation of user-oriented performance measures for integrated data, audio (including voice), video, and multimedia communication equipment and services. NTIA will continue to apply its unique expertise and state-of-the-art voice and video measurement laboratories to validate and optimize telecommunication performance standards. This research is leading U.S. industry and the world in the development of user-oriented, technology-independent performance parameters and measurement methods for high-speed data communication services. In FY 2012, NTIA will continue its groundbreaking work in perception-based audio and video quality assessment and associated digital compression and transmission issues. NTIA will focus its development work toward important new technology areas including Internet multimedia conferencing and advanced television (e.g., Internet Protocol Television (IPTV)) services. Both of these fundamentally new areas pose significant and novel coding, transmission, and quality assessment challenges. NTIA will also conduct research addressing specific coding and transmission quality issues associated with wireless and broadband access services. NTIA will continue to pursue in-service quality assessment techniques, since these allow for the most relevant assessments and do not require the interruption of services. NTIA will continue to enhance its laboratory facilities to support fully-automated, all-digital subjective audio-visual testing, and will demonstrate the enhanced audio/video test capabilities to industry and government users. To encourage technology transfer and widespread adoption of NTIA-developed audio and video quality assessment technologies, NTIA continues to refine its easy-to-use audio-video assessment tools and test scenes for video. These tools are used by users and service

providers to quantify audio and video quality of their networks using methods standardized by ANSI and the ITU.

Under agency reimbursable agreements, NTIA will continue to support other federal agencies with telecommunication challenges. This work includes the development of telecommunication specifications, standards, proof of concept and demonstration measurements, interoperability analyses, and technical and economic impact assessments, and prototype development. FY 2012 reimbursable programs are expected to address public safety communications interoperability, digital land mobile radio standards development, network reliability and restoration, and priority access capabilities for public wireless and IP-based networks. In Public Safety work, for example, NTIA advances the work of other Federal Programs (e.g., NIST/OLES, DHS/OIC, etc.) through leadership and critical technical contributions to the Third Generation Partnership Project (3GPP) for public safety broadband and the Project 25 Technical Committees, Working Groups, and Task Groups, as well as the associated organizational entities within the Telecommunications Industry Association (TIA) TR-8 Committees for public safety narrowband communications. NTIA is also supporting the National Archives and Records Administration (NARA) in an effort to develop a prototype system for storing temporary electronic records.

NTIA will continue its on-going program in wireless networking in FY 2012. Advanced wireless technologies are expected to provide wireless voice, data, and image communications and a variety of advanced service features using small, inexpensive, lightweight, low-powered portable radio terminals. Advanced wireless technologies can extend wired information infrastructures to mobile, rural, and other users and can dramatically improve telecommunication service availability in natural disaster and other emergency situations. However, achieving these benefits will require solutions to major implementation problems. As wireless networks and applications expand, interference among users sharing spectrum is likely. Users and service providers hoping to develop advanced wireless networks may be faced with an over-abundance of candidate technologies, many of which are non-interoperable. NTIA is addressing these problems by providing objective, expert technical contributions in support of public interest concerns in national and international committees responsible for resolving wireless network implementation issues. A particular focus of NTIA activity is in the development of intra-system and inter-system interference assessment metrics and standards in the Alliance for Telecommunications Industry Solutions (ATIS) subcommittee WTSC/G3GRA (Wireless Technologies and Systems Committee — Radio Aspects of GSM/3G and Beyond) to enhance capability and harmonization among telecommunication systems in the environment. Results promote efficient use of increasingly scarce radio spectrum and improve wireless system coverage and performance.

PROGRAM REDUCTION FOR FY 2012:

Telecommunication Sciences Research Base Reduction (Base Funding: $7,403,000 and 49 FTE; Program Change: -$ 150,000 and -0 FTE): NTIA requests a base reduction of $150,000 and 0 FTE for a total of $7,071,000 and 49 FTE in its Telecommunication Sciences Research subactivity. To support the Administration's commitment to deficit reduction, NTIA will cancel the International Symposium on Advanced Radio Telecommunications for 2012. This conference brings technical experts together to discuss evolving technologies and issues. NTIA will explore the option of obtaining support from private industry or nonprofit organizations, through its existing authorities, in order to keep the ISART functionality. An additional reduction of $182,000 in administrative savings is also being realized.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Telecommunication Sciences Research

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	(50)
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	(50)
31	Equipment	(50)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	(150)

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Salaries and Expenses
Subactivity: Telecommunication Sciences Research
Program Change: Administrative Savings

	Object Class	2012 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	(60)
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	(60)
31	Equipment	(62)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	(182)

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Salaries and expenses
Subactivity: Broadband Programs

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Broadband Programs……	Pos/BA	0	$0	50	$21,873	50	$20,104	40	$32,310	(10)	$12,206
	FTE/Obl.	0	0	50	21,873	50	20,104	40	32,310	(10)	12,206
Direct Obligations.....	Pos/BA	0	0	50	21,873	50	20,104	40	32,310	(10)	12,206
	FTE/Obl.	0	0	50	21,873	50	20,104	40	32,310	(10)	12,206

* In FY 2011, $23,700k was proposed for Broadband Technology Opportunity Program--Administrative Expenses; however, due to a policy change, Broadband Programs is a separate line item in the Salaries and Expenses appropriation.

SUBACTIVITY: BROADBAND PROGRAMS

The objectives of the Broadband Program subactivity are to:

- oversee over $4 billion in grants funded through the Broadband Technology Opportunities Program and the State Broadband Data and Development Program to prevent waste, fraud, and abuse by grant recipients and to protect the Federal Government's investment in broadband infrastructure and services;
- provide assistance to grant recipients in carrying out their projects;
- ensure the timely distribution of Recovery Act funds to create and maintain jobs;
- demonstrate transparency and accountability of program activities and recovery act funds by ensuring the public availability of recipient reporting and other program information; and
- maintain a comprehensive nationwide inventory map of existing broadband service capability and availability.

Broadband Programs: www.ntia.doc.gov/broadbandgrants

The American Recovery and Reinvestment Act of 2009 (Recovery Act, Public Law No. 111-5) appropriated $4.7 billion to NTIA to provide grants for broadband initiatives throughout the United States. The Recovery Act instructed NTIA to establish the Broadband Technology Opportunities Program (BTOP), a grant program of which the purpose is to provide access to broadband in unserved areas of the United States; improve access in underserved areas; provide broadband technologies to schools, hospitals, libraries and other strategic institutions; improve broadband capabilities for public safety agencies; and stimulate demand for broadband.

In addition to fostering greater availability and use of broadband technologies, BTOP will help to jump-start economic growth, create jobs, and lay the foundation for long-term prosperity for all Americans. The goal of this program was to improve broadband services in unserved and underserved areas of the United States, ensure that every American may benefit from broadband technologies, and enhance America's competitiveness through advances in broadband speeds, deployment, and adoption.

The Recovery Act also required NTIA to establish the State Broadband Data and Development (SBDD) Program and to developing a map of broadband services in the United States. The SBDD Program provided grants to U.S. State and Territories for projects that collect comprehensive and accurate State-level broadband mapping data, development State-level broadband maps, and fund statewide initiatives that plan for and improve the availability of broadband. The nationwide broadband inventory map will become available in February 2011, and the broadband inventory map will be updated and maintained by NTIA per the requirements of the Broadband Data Improvement Act, P.L. 100-385.

All BTOP and SBDD grants were obligated by the end of Fiscal Year 2010. Among other things, NTIA must ensure that the BTOP projects supported by these funds are substantially completed within two years and fully completed within three years, and that funds are used by recipients in an efficient, expeditious, and competent manner.

PROGRAM CHANGES FOR FY 2012:

Broadband Programs (Base Funding: $20,104,000 and 50 FTE; Program Change: (+$12,206,000 and -10 FTE): NTIA requests an increase of $12,206,000 and a reduction of 10 FTE for a total of $32,310,000 and 40 FTE to continue monitoring broadband grants to prevent, fraud, waste, and abuse. The American Recovery and Reinvestment Act of 2009 (Recovery Act, Public Law No. 111-5) appropriated $4.7 billion to NTIA to provide grants for broadband initiatives throughout the United States. Although those funds expired in FY 2010, the grants still are open and require oversight to protect the Federal Government's investment in broadband infrastructure, public computer centers, and broadband adoption projects.

Proposed Action:

During the FY 2011 budget process, NTIA used current obligations to fund FY 2011 contract services with ARRA funds expiring at the end of FY 2010. To align contract services with the fiscal year budget process, NTIA is seeking an increase to the FY 2011 base budget for critical contract services to oversee over $4 billion in ARRA grant funds. With the increase in funds and funding from the base, NTIA will use approximately $14 million to fund ongoing contract support to assist with program administration that had been funded with Recovery Act funds. NTIA will continue to contract resources to support staff in the areas of grant oversight and monitoring of Federal spending; technical assistance; grantee helpdesk, communications, and stakeholder management; and program management. These support resources are essential to ensure that program grant recipients comply with Federal grants management regulations and requirements and that the program is conducted in accordance with Recovery Act objectives of transparency and accountability.

Statement of Need and Economic Benefits:

Without the funding, NTIA will be unable to conduct adequate oversight to mitigate the risk of waste, fraud, and abuse of public funds. Total anticipated administrative expenses – which include this initiative, ARRA administrative expenses, base resources, and out year plans – represent less than 5 percent of the funds for the program. Based on NTIA's experience, competitive Federal grant programs require approximately 10% of an appropriation to manage grants from application to closeout. For example, NTIA's Public Telecommunications Facilities Program regularly receives 10% of its appropriation for administrative costs. With over $4 billion in grant funds at risk of potential waste, fraud, and abuse, this is a prudent investment to protect taxpayer funds.

Base Resource Assessment:

The FY 2011 Continuing Resolution that funded the Broadband Programs subactivity into FY 2011 provides $19,874,000. The adjusted base of $20,104,000 for FY 2012 will be used to fund basic grants oversight but falls short of the funds required to effectively oversee and assist the broadband grant recipients. Funding under the FY 2011 Continuing Resolution does not cover contract services that were previously funded in FY 2010 and extend through FY 2011. The additional funding of $12,206,000 will continue with these contract services that support oversight and technical assistance for the broadband grant recipients. While 50 FTEs are

proposed in the FY 2011 President's Budget, those FTEs will be scaled down to 40 in FY 2011 as the recipients and projects become mature and require less assistance.

Schedule & Milestones:

- 9/30/2011: All Environmental and Fund Limiting Award Conditions Lifted
- 9/30/2012: Projects Substantially (67%) Complete
- 9/30/2013: Projects Complete
- 9/30/2014: Program Closed, Final Program Evaluation

Deliverables:

- Annual Program Assessments
- Quarterly Program Reports to Congress

Performance Goals and Measurement Data

Performance Goal: Innovation and Entrepreneurship Project Completion Rate (based on milestones completed)	**FY 2011 Target**	**FY 2012 Target**	**FY 2013 Target**	**FY 2014 Target**	**FY 2015 Target**	**FY 2016 Target**
With Increase	20%	67%	100%	--	--	--
Without Increase	20%	40%	60%	80%	--	--

Description: This performance measure focuses on the infrastructure, public computing center, and sustainable broadband adoption recipients' ability to timely complete the projects based on the oversight, guidance, and assistance provided by the federal program office.

* Note that these measures do not include the State Broadband Data and Development grants, which have a longer period of performance.

PROGRAM CHANGE PERSONNEL DETAIL

(Dollar amount in thousands)

Activity: Broadband Programs
Subactivity: Broadband Programs

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Communications Program Specialist	Washington, DC	GS-14	(5)	105,211	(526,055)
Communications Program Specialist	Washington, DC	GS-13	(5)	89,033	(445,165)
Total			(10)		(971,220)
No Lapse--staff already on board			0		0
Total full-time permanent (FTE)			(10)		(971,220)
2011 Pay Adjustment (0%)					0
2012 Pay Adjustment (0%)					0
TOTAL					(971,220)

Personnel Data	Number
Full-Time Equivalent Employment	
Full-time permanent	(10)
Other than full-time permanent	0
Total	(10)
Authorized Positions:	
Full-time permanent	(10)
Other than full-time permanent	0
Total	(10)

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Broadband Programs
Subactivity: Broadband Programs

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	(971)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(971)
12	Civilian personnel benefits	(274)
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	13,451
25.3	Purchases of goods & services from Gov't accounts	0
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	12,206

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$10,279	$17,456	$17,399	$17,517	$118
11.3	Other than full-time permanent	0	260	260	260	0
11.5	Other personnel compensation	302	20	20	20	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	10,581	17,736	17,679	17,797	118
12.1	Civilian personnel benefits	2,673	3,780	3,891	3,925	34
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	481	747	765	1,033	268
22	Transportation of things	3	40	40	46	6
23.1	Rental payments to GSA	647	1,900	1,941	2,032	91
23.2	Rental payments to others	5	10	10	10	0
23.3	Communications, utilities and miscellaneous charges	75	110	257	289	32
24	Printing and reproduction	27	86	87	110	23
25.1	Advisory and assistance services	373	410	410	410	0
25.2	Other services	2,005	1,383	1,595	14,879	13,284
25.3	Purchases of goods and services from Government accounts	2,199	17,863	13,849	13,898	49
25.7	Operation and maintenance of equipment	55	124	124	189	65
26	Supplies and materials	256	281	285	319	34
31	Equipment	316	442	451	890	439
41	Grants, subsidies and contributions	0	0	0	0	0
99	**TOTAL OBLIGATIONS**	$19,696	$44,912	$41,384	$55,827	$14,443
	Prior Year Recoveries/Refunds	(286)				
	Unobligated balances from Prior Years	(1,675)	(2,264)			
	Unobligated balance EOY	2,264				
	Transfer from other accounts		(1,999)			
	Total Budget Authority	$19,999	$40,649	$41,384	$55,827	$14,443

* In the FY 2011 President's Budget, $23,700k was proposed for Broadband Technology Opportunity Program--Administrative Expenses; however, due to a policy change, Broadband Programs is presented as a separate Program, Project, or Activity in Salaries and Expenses.

Note: The distribution of administrative savings reflected in this exhibit are based on current estimates. As the review and implementation processes proceed, the distribution of these savings may change the funding levels for these line items.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	95	156	157	157	0
Other than full-time permanent	0	0	0	0	0
Total	95	156	157	157	0
Authorized Positions:					
Full-time permanent	103	157	157	161	4
Other than full-time permanent	0	0	0	0	0
Total	103	157	157	161	4

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
APPROPRIATIONS LANGUAGE AND CODE CITATIONS

For necessary expenses, as provided for by law, of the National Telecommunications and Information Administration (NTIA), [$21,825,000] $55,827,000, to remain available until September 30, [2012] 2013. Provided, That notwithstanding 31 U.S.C. 1535(d), the Secretary of Commerce shall charge Federal agencies for costs incurred in spectrum management, analysis and operations, and related services and such fees shall be retained and used as offsetting collections for costs of such spectrum services, to remain available until expended: Provided further, That the Secretary of Commerce is authorized to retain and use as offsetting collections all funds transferred, or previously transferred, from other Government agencies for all costs incurred in telecommunications research, engineering, and related activities by the Institute for Telecommunication Sciences of NTIA, in furtherance of its assigned functions under this paragraph, and such funds received from other Government agencies shall remain available until expended.

15 U.S.C. § 1512
15 U.S.C. § 1532
47 U.S.C. § 305
47 U.S.C. § 606
47 U.S.C. § 901, et seq.
47 U.S.C. § 1304 47 U.S.C. § 1305

15 U.S.C. § 1512 authorizes the Secretary of Commerce to foster, promote and develop foreign and domestic commerce.

15 U.S.C. § 1532 authorizes the Secretary of Commerce to conduct research and analysis in all telecommunications sciences; to investigate the transmission of radio waves and electromagnetic radiation; and to compile, evaluate, publish, and distribute related information.

47 U.S.C. § 305 authorizes the President to assign frequencies to radio stations or classes of radio stations belonging to and operated by the United States. Originally delegated to the Department of Commerce by Executive Order 12046, as later codified in the National Telecommunications and Information Administration Organization Act, 47 U.S.C. § 901, et seq.

47 U.S.C. § 606 and associated Executive Orders authorize the President to perform certain telecommunications emergency functions essential to security and the national defense.

47 U.S.C. § 901, et seq. authorizes NTIA to perform the Secretary's communications and information functions.

47 U.S.C. § 1304 authorizes the Secretary of Commerce to establish and administer a grant program for the development and implementation of statewide initiatives to identify and track the availability and adoption of broadband services within each State.

47 U.S.C.§ 1305 authorizes the Assistant Secretary of Commerce for Communications and Information to establish and administer a national broadband service development and expansion grant program and to develop and maintain a comprehensive nationwide inventory map of existing broadband service capability and availability in the United States.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
ADVISORY AND ASSISTANCE SERVICES

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Management and Professional Support Services	$183	$185	$185
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	190	225	225
Total	$373	$410	$410

NTIA utilizes consultants throughout its programs to provide scientific or technical expertise in specialized areas.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Periodicals	$0	$0	$0
Pamphlets	51	20	20
Audiovisual Products	0	0	0
Total	$51	$20	$20

NTIA utilizes pamphlets to provide an overview of NTIA programs and services to the public.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
AVERAGE GRADE AND SALARIES

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Direct:			
Average ES Salary	$167,009	$167,009	$167,009
Average Career Path Salary	101,571	$101,571	$106,248
Average GS Grade	13.8	13.8	13.9
Average GS Salary	$108,960	$108,960	$107,086

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration

Public Telecommunications Facilities, Planning and Construction
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR level	13	13	$20,000	$21,118
less: Obligations from prior years	0	0	0	(1,118)
plus: 2012 adjustments to base	0	0	0	0
2012 Base	13	13	20,000	20,000
plus: 2012 program changes	(13)	(13)	(20,000)	(20,000)
2012 Estimate	0	0	0	0

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Public Telecommunications Facilities, Planning and Construction											
Grants	Pos/BA	0	$18,000	0	$18,000	0	$18,000	0	0	0	($18,000)
	FTE/Obl.	0	21,182	0	18,345	0	0	0	0	0	0
Program management	Pos/BA	13	2,000	13	2,000	13	2,000	0	0	(13)	(2,000)
	FTE/Obl.	8	1,732	13	2,773	13	0	0	0	(13)	0
TOTALS	Pos/BA	13	20,000	13	20,000	13	20,000	0	0	(13)	(20,000)
	FTE/Obl.	8	22,914	13	21,118	13	0	0	0	(13)	0
Adjustments to Obligations											
Recoveries/Refunds			(781)		0		0		0		0
Unobligated Balance, start of year			(3,251)		(1,118)		0		0		0
Unobligated Balance, end of year			1,118		0		0		0		0
Unobligated Balance expiring			0		0		0		0		0
Financing from transfers:											
Transfer from other accounts (-)			0		0		0		0		0
Transfer to other accounts (+)			0		0		0		0		0
Appropriation			20,000		20,000		20,000		0		(20,000)

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Comparison by activity	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Total Obligations	**$22,914**	**$21,118**	**$20,000**	**$0**	**($20,000)**
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries/Refunds	(781)	0	0	0	0
Unobligated balance, start of year	(3,251)	(1,118)	0	0	0
Unobligated balance, end of year	1,118	0	0	0	0
Unobligated balance expiring	0	0	0	0	0
Budget Authority	**20,000**	**20,000**	**20,000**	**0**	**(20,000)**
Restoration of unobligated balance, rescission	0	0	0	0	0
Financing:					
Transferred from other accounts (-)	0	0	0	0	0
Transferred to other accounts (+)	0	0	0	0	0
Appropriation	**20,000**	**20,000**	**20,000**	**0**	**(20,000)**

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Public telecommunications, facilities, planning and construction
Subactivity: Grants and program management

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Grants.....	Pos/BA	0	$18,000	0	$18,000	0	$18,000	0	$0	0	($18,000)
	FTE/Obl.	0	21,182	0	18,345	0	0	0	0	0	
Program management.....	Pos/BA	13	2,000	13	2,000	13	2,000	0	0	(13)	(2,000)
	FTE/Obl.	8	1,732	13	2,773	13	0	0	0	(13)	
Direct Obligations.....	Pos/BA	13	20,000	13	20,000	13	20,000	0	0	(13)	(20,000)
	FTE/Obl.	8	22,914	13	21,118	13	0	0	0	(13)	

National Telecommunications and Information Administration (NTIA)
Public Telecommunications Facilities, Planning and Construction (PTFPC)

APPROPRIATION ACCOUNT: PUBLIC TELECOMMUNICATIONS FACILITIES, PLANNING AND CONSTRUCTION

BUDGET ACTIVITY: PUBLIC TELECOMMUNICATIONS FACILITIES, PLANNING AND CONSTRUCTION

NTIA will discontinue the Public Telecommunications Facilities, Planning, and Construction (PTFPC) program in FY 2012 because the Administration needs to make hard cuts to programs in a fiscally constrained environment. Hereafter, previously appropriated funds that remain available will be used to administer prior-year grants.

BASE JUSTIFICATION FOR FY 2012:

Public Telecommunications Facilities, Planning and Construction Overview
www.ntia.doc.gov/ptfp

For over forty years, the PTFPC has provided matching grants to assist in the planning and construction of public telecommunications facilities. Through the PTFPC, the Federal Government has supported the development of a broad base of public telecommunications infrastructure to serve the American people. This program has enabled Americans to access quality public television and radio services through digital broadcasts and alternative digital distribution platforms. Pursuant to Pub. L. 106-113, NTIA made funds from the PTFPC account available on a competitive basis to support satellite communications services that educational, medical, and cultural needs of Pacific Basin communities through the Pan-Pacific Education and Communications Experiments by Satellite (PEACESAT) Program. The period of performance of these grants extends up to three years, and NTIA is required by statute to protect the federal investment in equipment funded through the grants for up to ten years after the completion of the project.

SUBACTIVITY: GRANTS AND PROGRAM MANAGEMENT

The objectives of the Grants and Program Management subactivity are to:

- oversee approximately $80 million in grants funded through the Public Telecommunications Facilities, Planning and Construction Program;
- provide assistance to grant recipients in carrying out their projects;
- ensure the timely distribution of funds in order for grant recipients to complete projects and ensure uninterrupted public broadcasting service to the American public; and
- protect the federal interest in the nation's public telecommunications infrastructure.

PROGRAM CHANGES FOR FY 2012:

Public Telecommunications Facilities, Planning and Construction (Base Funding: $20,000,000 and 13 FTE; Program Change: (-$20,000,000 and -13 FTE): NTIA requests a decrease of $20,000,000 and 13 FTE to discontinue this program. In today's fiscal environment, it is important to reduce federal spending wherever possible in order to focus limited resources on those activities that provide the most benefit to the American public. The Administration proposes to support public broadcasters through the Corporation for Public Broadcasting. Recoveries and unobligated balances of funds previously appropriated to this account will remain available for the administration of prior-year grants.

PROGRAM CHANGE PERSONNEL DETAIL

(Dollar amount in thousands)

Activity: Public Telecommunications Facilities, Planning and Construction
Subactivity: Public Telecommunications Facilities, Planning and Construction

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Telecommunications Specialist	Washington, DC	GS-14	(2)	105,211	(210,422)
Grant Specialist	Washington, DC	GS-13	(3)	89,033	(267,099)
Grant Specialist	Washington, DC	GS-12	(3)	74,872	(224,616)
Grant Specialist	Washington, DC	GS-11	(4)	62,467	(249,868)
Administrative Assistant	Washington, DC	GS-7	(1)	42,209	(42,209)
Total			(13)		(994,214)
No Lapse			0		0
Total full-time permanent (FTE)			(13)		(994,214)
2011 Pay Adjustment (0%)					0
2012 Pay Adjustment (0%)					0
TOTAL					(994,214)

Personnel Data	Number
Full-Time Equivalent Employment	
Full-time permanent	(13)
Other than full-time permanent	0
Total	(13)
Authorized Positions:	
Full-time permanent	(13)
Other than full-time permanent	0
Total	(13)

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Public Telecommunications Facilities, Planning and Construction
Subactivity: Public Telecommunications Facilities, Planning and Construction

	Object Class	Increase
11	Personnel compensation	
11.1	Full-time permanent	(918)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	(76)
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(994)
12	Civilian personnel benefits	(238)
13	Benefits for former personnel	0
21	Travel and transportation of persons	(14)
22	Transportation of things	(1)
23.1	Rental payments to GSA	(84)
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	(20)
24	Printing and reproduction	(15)
25.1	Advisory and assistance services	0
25.2	Other services	(115)
25.3	Purchases of goods & services from Gov't accounts	(389)
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	(115)
25.8	Subsistence and support of persons	0
26	Supplies and materials	(15)
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	(18,000)
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	(20,000)

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$741	$918	$918	$0	(918)
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	77	77	76	0	(76)
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	818	995	994	0	(994)
12.1	Civilian personnel benefits	193	238	238	0	(238)
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	13	14	14	0	(14)
22	Transportation of things	1	1	1	0	(1)
23.1	Rental payments to GSA	84	84	84	0	(84)
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	17	20	20	0	(20)
24	Printing and reproduction	12	15	15	0	(15)
25.2	Other services	0	115	115	0	(115)
25.3	Purchases of goods and services from Government accounts	585	1,161	389	0	(389)
25.7	Operation and maintenance of equipment	0	115	115	0	(115)
26	Supplies and materials	9	15	15	0	(15)
31	Equipment	0	0	0	0	0
41	Grants, subsidies and contributions	21,182	18,345	18,000	0	(18,000)
99	**TOTAL OBLIGATIONS**	$22,914	$21,118	$20,000	$0	($20,000)
	Recoveries/Refunds	(781)				
	Unobligated Balance SOY	(3,251)				
	Unobligated balances from Prior Years		(1,118)			
	Unobligated balance EOY	1,118				
	Unobligated balance, rescission					
	Total Budget Authority	$20,000	$20,000	$20,000	$0	($20,000)

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	8	13	13	0	(13)
Other than full-time permanent	0	0	0	0	0
Total	8	13	13	0	(13)
Authorized Positions:					
Full-time permanent	13	13	13	0	(13)
Other than full-time permanent	0	0	0	0	0
Total	13	13	13	0	(13)

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
APPROPRIATIONS LANGUAGE AND CODE CITATIONS:

For the administration of prior-year grants, recoveries and unobligated balances of funds previously appropriated are hereafter available for the administration of all open grants until their expiration. [(Department of Commerce Appropriations Act, 2010)]

47 U.S.C. 391 authorizes the Secretary of Commerce to provide grant funds for the planning and construction of public telecommunications facilities by eligible entities.

47 U.S.C. 392 sets forth the application requirements to be submitted to the Secretary of Commerce by eligible entities to request funds for the construction of public telecommunications facilities.

47 U.S.C. 902(b)(3) assigns to NTIA the administration of the Public Telecommunications Facilities Program.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
ADVISORY AND ASSISTANCE SERVICES
(Dollar amounts in thousands)

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Management and Professional Support Services	$0	$0	$0
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	$0	$0	$0

NTIA utilizes consultants throughout its programs to provide scientific or technical expertise in specialized areas.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Dollar amounts in thousands)

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Periodicals	$0	$0	$0
Pamphlets	0	0	0
Audiovisual Products	0	0	0
Total	$0	$0	$0

NTIA utilizes pamphlets to provide an overview of NTIA programs and services to the public.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
AVERAGE GRADE AND SALARIES
(Dollar amounts in thousands)

	2010 Actual	Annualized 2011 CR Level	2012 Estimate
Direct:			
Average ES Salary	$0	$0	$0
Average Career Path Salary	0	0	0
Average GS Grade	13.9	13.9	0
Average GS Salary	$113,982	$113,982	$0

Department of Commerce
National Telecommunications and Information Administration

Information Infrastructure Grants

SUMMARY OF RESOURCE REQUIREMENTS

(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR Level	0	0	0	213
less: Obligations from prior years	0	0	0	(213)
plus: 2012 adjustments to base	0	0	0	0
2012 Base	0	0	0	0
plus: 2012 program changes	0	0	(2,000)	(2,000)
2012 Estimate	0	0	(2,000)	(2,000)

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Technology Opportunities Program											
Grants	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0		0		0	
Program management	Pos/BA	0	0	0	0	0	0	0	(2,000)	0	(2,000)
	FTE/Obl.	0	101	0	213	0		0		0	
TOTALS	Pos/BA	0	0	0	0	0	0	0	(2,000)	0	(2,000)
	FTE/Obl.	0	101	0	213	0		0		0	
Adjustments to Obligations											
Recoveries/Refunds			(1)		0		0		0		0
Unobligated Balance, start of year			(2,313)		(2,213)		0		(2,000)		(2,000)
Unobligated Balance, end of year			2,213		2,000		0		0		0
Unobligated balance expiring			0		0		0		0		0
Financing from transfers:											
Transfer from other accounts (-)			0		0		0		0		0
Transfer to other accounts (+)			0		0		0		0		0
Appropriation			0		0		0		(2,000)		(4,000)

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Information Infrastructure Grants
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Comparison by activity	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Total Obligations	**$101**	**$213**	**$0**	**$0**	**$0**
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries/Refunds	(1)	0	0	0	0
Unobligated balance, start of year	(2,313)	(2,213)	0	(2,000)	(2,000)
Unobligated balance, end of year	2,213	2,000	0	0	0
Unobligated balance expiring	0	0	0	0	0
Budget Authority	**0**	**0**	**0**	**(2,000)**	**(2,000)**
Financing:					
Transferred from other accounts (-)	0	0	0	0	0
Transferred to other accounts (+)	0	0	0	0	0
Appropriation	**0**	**0**	**0**	**(2,000)**	**(2,000)**

Department of Commerce
National Telecommunications and Information Administration
Information Infrastructure Grants
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Technology Opportunities Program
Subactivity: Grants and program management

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Grants.....	Pos/BA	0	$0	0	$0	0	$0	0	0	0	0
	FTE/Obl.	0	0	0	0	0		0		0	
Program management.....	Pos/BA	0	0	0	0	0	0	0	(2,000)	0	(2,000)
	FTE/Obl.	0	101	0	213	0		0		0	
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	(2,000)	0	(2,000)
	FTE/Obl.	0	101	0	213	0		0		0	

APPROPRIATION ACCOUNT: INFORMATION INFRASTRUCTURE GRANTS

BUDGET ACTIVITY: INFORMATION INFRASTRUCTURE GRANTS

The Technology Opportunities Program was discontinued in FY 2005.

Department of Commerce
National Telecommunications and Information Administration
Information Infrastructure Grants
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		2010 Actual	Annualized 2011 CRLevel	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	56	$100	$0	$0	$0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation		0	0	0	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	56	100	0	0	0
12.1	Civilian personnel benefits	15	0	0	0	0
13	Benefits for former personnel	0	26	0	0	0
21	Travel and transportation of persons	0	0	0	0	0
22	Transportation of things	0	0	0	0	0
23.1	Rental payments to GSA	14	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	0	0	0	0	0
24	Printing and reproduction	0	0	0	0	0
25.1	Advisory and assistance services	0	0	0	0	0
25.2	Other services	0	0	0	0	0
25.3	Purchases of goods and services from Government accounts	16	87	0	(2000)	(2000)
25.7	Operation and maintenance of equipment	0	0	0	0	0
26	Supplies and materials	0	0	0	0	0
31	Equipment	0	0	0	0	0
41	Grants, subsidies and contributions	0	0	0	0	0
44	Refunds	0	0	0	0	0
99	**TOTAL OBLIGATIONS**	101	213	0	(2,000)	(2,000)
	Recoveries/Refunds	-$1				
	Unobligated Balance SOY	-$2,313	(2,213)			
	Unobligated balance EOY	$2,213	2,000			
	Total Budget Authority	0	0		(2,000)	(2,000)

Department of Commerce
National Telecommunications and Information Administration
Information Infrastructure Grants
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	Annualized 2011 CRLevel	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0
Authorized Positions:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0

Department of Commerce
General Provision
APPROPRIATIONS LANGUAGE AND CODE CITATIONS

Sec. ___. RESCISSION.—Of the amounts made available for the administration of Information Infrastructure Grants in the Consolidated Appropriations Act, 2005 (Pub. L. 108-447), $2,000,000 in unobligated balances are rescinded.

Department of Commerce
National Telecommunications and Information Administration

Digital Television Transition and Public Safety Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
President's Budget, FY 2011	0	9	$0	$93,829
less: Obligations from prior years	0	(6)	0	0
2012 Base	0	3	0	93,829
Change in Mandatory Program	0	0	(4,311)	0
2012 Mandatory Estimate		3		2,386
2012 Discretionary Estimate	0	0	(4,311)	(4,311)

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Public Safety Interoperable Communications Grants.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	3	8,813	3	6,185	0	0	0	0	0	0
Low-Power Television and Translator Upgrade Program……	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	3	7,727	3	38,647	2	1,712	2	1,712	0	0
National Alert Program……	Pos/BA	0	0	0	0	0	0	0	(4,311)	0	(4,311)
	FTE/Obl.	2	37,304	3	48,658	0	0	0	0	0	0
Tsunami Warning Program……	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	206	0	339	1	674	1	674	0	0
Enhanced 9-1-1 Program……	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	9	0	0	0	0	0	0	0	0
TOTALS.....	Pos/BA	0	0	0	0	0	0	0	(4,311)	0	(4,311)
	FTE/Obl.	8	54,059	9	93,829	3	2,386	3	2,386	0	0
Adjustments to Obligations:											
Recoveries/Refunds.....			(2,596)		0	0	0	0	0	0	0
Unobligated Balance, start of year.....			(8,696,735)		(8,841,885)	0	0	0	(6,697)	0	0
Unobligated Balance, end of year.....			8,841,885		6,697	0	0	0	0	0	0
Capital Transfer to General Fund……			0		8,835,188	0	0	0	0	0	0
Mandatory Budget Authority ……			196,613		0	0	0	0	0	0	0
Change in Mandatory Program ……			0	0	0	0	0	0	(4,311)	0	0
			0	0	0	0	0	0	0	0	0
Total Discretionary Budget Authority ……			0	0	0	0	0	0	(4,311)	0	0

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Digital Television Transition and Public Safety Fund
Subactivity: Public Safety Interoperable Communications Grants

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Public Safety Interoperable Communications Grants……	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	2	8,813	3	6,185	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	2	8,813	3	6,185	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Digital Television Transition and Public Safety Fund
Subactivity: Low-Power Television and Translator Upgrade Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Low-Power Television and Translator Upgrade Program	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	3	7,727	3	38,647	2	1,712	2	1,712	0	0
Direct Obligations	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	3	7,727	3	38,647	2	1,712	2	1,712	0	0

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Digital Television Transition and Public Safety Fund
Subactivity: National Alert Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Alert Program……	Pos/BA	0	$0	0	$0	0	$0	0	($4,311)	0	($4,311)
	FTE/Obl.	2	37,304	1	48,658	0	0	0	0	0	$0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	(4,311)	0	(4,311)
	FTE/Obl.	2	37,304	1	48,658	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Digital Television Transition and Public Safety Fund
Subactivity: Tsunami Warning Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Tsunami Warning Program ……	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	206	1	339	1	674	0	674	(1)	$0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	206	1	339	1	674	0	674	(1)	0

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$721	$900	$186	$186	0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	6	20	20	20	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	727	920	206	206	0
12.1	Civilian personnel benefits	187	625	48	48	0
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	9	60	0	0	0
22	Transportation of things	0	5	0	0	0
23.1	Rental payments to GSA	88	100	50	50	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	14	54	0	0	0
24	Printing and reproduction	2	3	0	0	0
25.1	Advisory and assistance services	0	0	0	0	0
25.2	Other services	101	100	0	0	0
25.3	Purchases of goods and services from Government accounts	19,360	31,325	82	82	0
25.7	Operation and maintenance of equipment	0	0	0	0	0
26	Supplies and materials	12	12	0	0	0
31	Equipment	1	1	0	0	0
41	Grants, subsidies and contributions	33,558	60,624	2,000	2,000	0
99	**TOTAL OBLIGATIONS**	$54,059	$93,824	$2,386	$2,386	0
	Prior Year Recoveries/Refunds	(2,596)	0	$0	0	0
	Unobligated balances from Prior Years	(8,696,735)	(8,841,885)	0	(6,697)	0
	Unobligated balance EOY	8,841,885	6,697	0	0	0
	Capital transfer to General Fund	0	8,835,188	0	0	0
	Mandatory Budget Authority	0	0	0	0	0
	Change in mandatory program	0	0	0	(4,311)	0
	Total Mandtory Budget Authority	$196,613	0	$0	$0	0
	Total Discretionary Budget Authority	$0	$0	$0	(4,311)	0

Department of Commerce
National Telecommunications and Information Administration
Digital Television Transition and Public Safety Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	8	9	3	3	0
Other than full-time permanent	0	0	0	0	0
Total	8	9	3	3	0
Authorized Positions:					
Full-time permanent	8	9	3	3	0
Other than full-time permanent	0	0	0	0	0
Total	8	9	3	3	0

Department of Commerce
General Provision
APPROPRIATIONS LANGUAGE AND CODE CITATIONS

Sec. ___. RESCISSION.—Of the amounts made available under section 3010 of the Deficit Reduction Act of 2005 (47 U.S.C. 309 note), $4,311,000 in unobligated balances are rescinded.

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR Level	0	0	$0	$0
plus: Obligations from prior years	0	0	0	0
2012 Base	0	0	0	0
less: Non-recurring Recovery Act	0	0	0	0
2012 Estimate	0	0	0	0

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Broadband Technology Opportunities Program											
Grants and Projects	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	4,248,380	0	0	0	0	0	0	0	0
Program Management	Pos/BA	70	0	0	0	0	0	0	0	0	0
	FTE/Obl.	47	39,447	0	0	0	0	0	0	0	0
TOTALS	Pos/BA	70	0	0	0	0	0	0	0	0	0
	FTE/Obl.	47	4,287,827	0	0	0	0	0	0	0	0
Adjustments to Obligations:											
Recoveries/Refunds			(141)		0		0		0		0
Unobligated Balance, start of year			(4,592,703)		0		0		0		0
Unobligated Balance, end of year			0		0		0		0		0
Unobligated Balance rescinded			302,000								
Unobligated Balance expiring			3,018		0		0		0		0
Financing from transfers:											
Transfer from other accounts (-)			0		0		0		0		0
Transfer to other accounts (+)			0		0		0		0		0
Appropriation			1		0		0		0		0

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Broadband Technology Opportunities Program
Subactivity: Broadband Technology Opportunities Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Broadband Technology Opportunities	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
Program Grants (Infrastructure)……	FTE/Obl.	0	3,484,645	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	3,484,645	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Broadband Technology Opportunities Program
Subactivity: Public Computer Center Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2011 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Public Computer Center Program											
Grants……	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	200,967	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	200,967	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Broadband Technology Opportunities Program
Subactivity: Sustainable Broadband Service Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2011 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Sustainable Broadband Service	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
Program Grants……	FTE/Obl.	0	250,738	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	250,738	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Broadband Technology Opportunities Program
Subactivity: Broadband Inventory Mapping Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2011 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Broadband Inventory Mapping											
Program Grants……	Pos/BA	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	312,030	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	312,030	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Broadband Technology Opportunities Program
Subactivity: Program Management

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Management……	Pos/BA	70	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	70	39,447	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	70	0	0	0	0	0	0	0	0	0
	FTE/Obl.	70	39,447	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	2010 Actual	2011 Estimate	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$7,450	$0	$0	$0	$0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	490	0	0	0	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	7,940	0	0	0	0
12.1	Civilian personnel benefits	1,937	0	0	0	0
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	163	0	0	0	0
22	Transportation of things	2	0	0	0	0
23.1	Rental payments to GSA	398	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	109	0	0	0	0
24	Printing and reproduction	132	0	0	0	0
25.1	Advisory and assistance services	0	0	0	0	0
25.2	Other services	1,748	0	0	0	0
25.3	Purchases of goods and services from Government accounts	45,058	0	0	0	0
25.7	Operation and maintenance of equipment	3	0	0	0	0
26	Supplies and materials	111	0	0	0	0
31	Equipment	292	0	0	0	0
41	Grants, subsidies and contributions	4,229,934	0	0	0	0
99	**TOTAL OBLIGATIONS**	4,287,827	0	0	0	0
	Prior Year Recoveries/Refunds	(142)				
	Unobligated balances from Prior Years	(4,592,703)				
	Unobligated balance EOY	0				
	Unobligated balance rescinded	302,000				
	Unobligated balance expiring	3,018				
	Total Budget Authority	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Broadband Technology Opportunities Program, Recovery Act
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Enacted	2011 Estimate	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	47	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	47	0	0	0	0
Authorized Positions:					
Full-time permanent	70	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	70	0	0	0	0

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Digital-To-Analog Converter Box Program, Recovery Act
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR Level	0	0	$0	$0
plus: Obligations from prior years	0	0	0	0
2012 Base	0	0	0	0
plus: Non-recurring Recovery Act	0	0	0	0
2012 Estimate	0	0	0	0

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Digital-To-Analog Converter Box Program……	Pos/BA	0	($239,500)	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	1,258	0	0	0	0	0	0	0	0
TOTALS	Pos/BA	0	(239,500)	0	0	0	0	0	0	0	0
	FTE/Obl.	0	1,258	0	0	0	0	0	0	0	0
Adjustments to Obligations:											
Recoveries/Refunds			(85,806)		0		0		0		0
Unobligated Balance, start of year			(161,054)				0		0		0
Unobligated Balance, end of year			0				0		0		0
Permanently not available			239,500		0						
Unobligated Balance expiring			6,102		0		0		0		0
Financing from transfers:											
Transfer from other accounts (-)			0		0		0		0		0
Transfer to other accounts (+)			0		0		0		0		0
Appropriation			0		0		0		0		0

This page left blank intentionally

Department of Commerce
Digital-To-Analog Converter Box Program, Recovery Act
Digital-To-Analog Converter Box Program, Recovery Act
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Digital-To-Analog Converter Box Program
Subactivity: Digital-To-Analog Converter Box Program

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
DTV Converter Box coupon program……	Pos/BA	0	($239,500)	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	1,258	0	0	0	0	0	0	0	0
Direct Obligations.....	Pos/BA	0	(239,500)	0	0	0	0	0	0	0	0
	FTE/Obl.	0	1,258	0	0	0	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Digital-to-Analog Converter Box Program, Recovery Act
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		2010 Actual	2011 Estimate	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	355	0	0	0	0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	0	0	0	0	0
11.8	Special personnel services payments	33	0	0	0	0
11.9	**Total personnel compensation**	388	0	0	0	0
12.1	Civilian personnel benefits	92	0	0	0	0
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	10	0	0	0	0
22	Transportation of things	0	0	0	0	0
23.1	Rental payments to GSA	32	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	50	0	0	0	0
24	Printing and reproduction	2	0	0	0	0
25.1	Advisory and assistance services	0	0	0	0	0
25.2	Other services	999	0	0	0	0
25.3	Purchases of goods and services from Government accoun	262	0	0	0	0
25.7	Operation and maintenance of equipment	0	0	0	0	0
26	Supplies and materials	10	0	0	0	0
31	Equipment	1	0	0	0	0
41	Grants, subsidies and contributions	(588)	0	0	0	0
99	**TOTAL OBLIGATIONS**	1,258	0	0	0	0
	Recoveries/Refunds	(85,806)				
	Unobligated balances from Prior Years	(161,054)				
	Unobligated balance EOY	0				
	Unobligated balance rescinded	239,500				
	Unobligated balance expiring	6,102	0			
	Total Budget Authority	0	0	0	0	0

Department of Commerce
National Telecommunications and Information Administration
Digital-to-Analog Converter Box Program, Recovery Act
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	2011 Estimate	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0
Authorized Positions:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Public Safety Broadband Network
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Annualized 2011 CR level	0	0	$0	$0
less: Obligations from prior years	0	0	0	0
plus: 2012 adjustments to base	0	0	0	0
2012 Base	0	0	0	0
plus: 2012 program changes	67	50	1,400,000	1,400,000
2012 Estimate	67	50	1,400,000	1,400,000

Comparison by activity/subactivity		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Public Safety Broadband Network											
Program support ……	Pos/BA	0	$0	0	$0	0	$0	0	1,330,000	0	$1,330,000
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Program management	Pos/BA	0	0	0	0	0	0	67	70,000	67	70,000
	FTE/Obl.	0	0	0	0	0	0	50	0	50	0
TOTALS.....	Pos/BA	0	0	0	0	0	0	67	1,400,000	67	1,400,000
	FTE/Obl.	0	0	0	0	0	0	50	0	50	0
Adjustments to Obligations											
Recoveries/Refunds.....			0		0		0		0		0
Unobligated Balance, start of year.....			0		0		0		0		0
Unobligated Balance, end of year.....			0		0		0		0		0
Unobligated Balance expiring.....			0		0		0		0		0
Financing from transfers:											
Transfer from other accounts (-).....			0		0		0		0		0
Transfer to other accounts (+).....			0		0		0		0		0
Appropriation.....			0		0		0		1,400,000		1,400,000

This page left blank intentionally

Department of Commerce
National Telecommunications and Information Administration
Public Safety Broadband Network
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Comparison by activity	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Total Obligations	**$0**	**$0**	**$0**	**$1,400,000**	**$1,400,000**
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries/Refunds	0	0	0	0	0
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance expiring	0	0	0	0	0
Budget Authority	**0**	**0**	**0**	**1,400,000**	**1,400,000**
Restoration of unobligated balance, rescission	0	0	0	0	0
Financing:					
Transferred from other accounts (-)	0	0	0	0	0
Transferred to other accounts (+)	0	0	0	0	0
Appropriation	**0**	**0**	**0**	**1,400,000**	**1,400,000**

Department of Commerce
National Telecommunications and Information Administration
Public Safety Broadband Network
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Public Safety Broadband Network
Subactivity: Public Safety Broadband Network

Comparison by line item		2010 Actual		Annualized 2011 CR Level		2012 Base		2012 Estimate		2012 Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program support……	Pos/BA	0	$0	0	$0	0	$0	0	$1,330,000	0	$1,330,000
	FTE/Obl.	0	0	0	0	0	0	0	0	0	
Program management.....	Pos/BA	0	0	0	0	0	0	67	70,000	67	70,000
	FTE/Obl.	0	0	0	0	0	0	50	0	50	
Direct Obligations.....	Pos/BA	0	0	0	0	0	0	67	1,400,000	67	1,400,000
	FTE/Obl.	0	0	0	0	0	0	50	0	50	

APPROPRIATION ACCOUNT: PUBLIC SAFETY BROADBAND NETWORK

BUDGET ACTIVITY: PUBLIC SAFETY BROADBAND NETWORK

As part of the Wireless Innovation and Infrastructure Initiative (WI3), NTIA requests $7,000,000,000 in mandatory funding over the next 10 years to build a public safety broadband network. The Administration will propose legislation to implement this program.

SUBACTIVITY: PUBLIC SAFETY BROADBAND NETWORK

The objectives of the Public Safety Broadband Network are to:

- build a nationwide communication network that permits interoperability of public safety equipment;
- efficiently use spectrum dedicated to public safety; and
- ensure accountability through Federal monitoring and oversight of funded entities.

PROGRAM CHANGES:

Public Safety Broadband Network (Base Funding: $0 and 0 FTE; Program Change: (+$7,000,000,000): NTIA requests an increase of $7,000,000,000 in mandatory funding, over a period of 10 years, to establish a program within to develop a nationwide interoperable public safety broadband network in the 700 MHz band.

For FY 2012 $1,400,000,000 and 50 FTE would be required for implementation. The program would begin in FY 2012, would be administered over several years, and would be offset by new spectrum auctions. In this endeavor, NTIA will collaborate with the Departments of Homeland Security and Justice. The program will be fully funded from the proceeds of anticipated spectrum auctions to be conducted by the Federal Communications Commission (FCC).

Base Resource Assessment:

There is no base funding because this is a new program.

End Goals

- Establish an interoperable public safety broadband network
- Enhance public safety communications capability, including voice and broadband transmission
- Maximize network's efficient use of spectrum
- Leverage commercial wireless broadband infrastructure

PROGRAM CHANGE PERSONNEL DETAIL

(Dollar amount in thousands)

Activity: Public Safety Broadband Network *
Subactivity: Public Safety Broadband Network

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Deputy Associate Administrator	Washington, DC	SES-IV	1	155,500	155,500
Communications Program Specialist	Washington, DC	GS-15	8	123,758	990,064
Management and Program Analyst	Washington, DC	GS-15	8	123,758	990,064
Communications Program Specialist	Washington, DC	GS-14	45	105,211	4,734,495
Grants Specialist	Washington, DC	GS-14	4	105,211	420,844
Secretary	Washington, DC	GS-9	1	51,630	51,630
Subtotal			67		7,342,597
Less lapse		25.00%	(17)		(1,835,649)
Total full-time permanent (FTE)			50		5,506,948
2011 Pay Adjustment (0%)					0
2011 Pay Adjustment (0%)					0
TOTAL					5,506,948

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	50
2011 Pay Adjustment	0
Total	50
Authorized Positions:	
Full-time permanent	67
Other than full-time permanent	0
Total	67

* The administrative functions may be housed at another entity; therefore these position levels are shown to describe the level of effort anticipated for this program.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Public Safety Broadband Network
Subactivity: Public Safety Broadband Network

	Object Class	2012 Increase
11	Personnel compensation	
11.1	Full-time permanent	5,507
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	5,507
12	Civilian personnel benefits	2,460
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental Payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25.1	Advisory and assistance services	0
25.2	Other services	27,033
25.3	Purchases of goods & services from Gov't accounts	35,000
25.4	Operation and maintenance of facilities	0
25.5	Research and development contracts	0
25.6	Medical care	0
25.7	Operation and maintenance of equipment	0
25.8	Subsistence and support of persons	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	1,330,000
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total obligations	1,400,000

Department of Commerce
National Telecommunications and Information Administration
Public Safety Broadband Network
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$0	$0	$0	$0	0
11.3	Other than full-time permanent	0	0	0	5,507	5,507
11.5	Other personnel compensation	0	0	0	0	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	**Total personnel compensation**	0	0	0	5,507	5,507
12.1	Civilian personnel benefits	0	0	0	2,460	2,460
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	0	0	0	0	0
22	Transportation of things	0	0	0	0	0
23.1	Rental payments to GSA	0	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	0	0	0	0	0
24	Printing and reproduction	0	0	0	0	0
25.2	Other services	0	0	0	27,033	27,033
25.3	Purchases of goods and services from Government accounts	0	0	0	35,000	35,000
25.7	Operation and maintenance of equipment	0	0	0	0	0
26	Supplies and materials	0	0	0	0	0
31	Equipment	0	0	0	0	0
41	Grants, subsidies and contributions	0	0	0	1,330,000	1,330,000
99	**TOTAL OBLIGATIONS**	$0	$0	$0	$1,400,000	$1,400,000
	Recoveries/Refunds					
	Unobligated Balance SOY					
	Unobligated balances from Prior Years					
	Unobligated balance EOY					
	Unobligated balance, rescission					
	Total Budget Authority	$0	$0	$0	$1,400,000	$1,400,000

Department of Commerce
National Telecommunications and Information Administration
Public Safety Broadband Network
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	2010 Actual	Annualized 2011 CR Level	2012 Base	2012 Estimate	2012 Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	0	0	0	50	50
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	50	50
Authorized Positions:					
Full-time permanent	0	0	0	67	67
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	67	67