

**Department of Commerce  
National Telecommunications and Information Administration  
Fiscal Year 2011 Budget  
As Presented to Congress**

**Executive Summary**

The National Telecommunications and Information Administration (NTIA) is responsible for the development of domestic and international telecommunications and information policy for the Executive Branch, for ensuring the efficient and effective use of the Federal radio spectrum, and for performing state-of-the-art telecommunications research, engineering, and planning. In addition, Congress has assigned to NTIA significant roles in the transition to digital television, the development of public safety interoperable communications, and most recently the deployment of broadband services, under the authority of the American Recovery and Reinvestment Act of 2009. NTIA operates within the structure and context of the following goals.

<p><b>Department of Commerce Strategic Goal 1</b> Maximize U.S. competitiveness and enable economic growth for American industries, workers, and consumers</p> <p><b>General Goal/Objective 1.1</b> Foster domestic economic development as well as export opportunities</p> <p><b>NTIA Goals/Outcomes</b> Ensure the effective implementation of the Broadband Technology Opportunities Program</p>	<p><b>Department of Commerce Strategic Goal 2</b> Promote U.S. Innovation and Industrial Competitiveness</p> <p><b>General Goal/Objective 2.3</b> Advance global e-Commerce and enhanced telecommunications and information services</p> <p><b>NTIA Goals/Outcomes</b> Ensure that the allocation of radio spectrum provides the greatest benefit to all people  Promote the availability and support new sources of advanced telecommunications</p>
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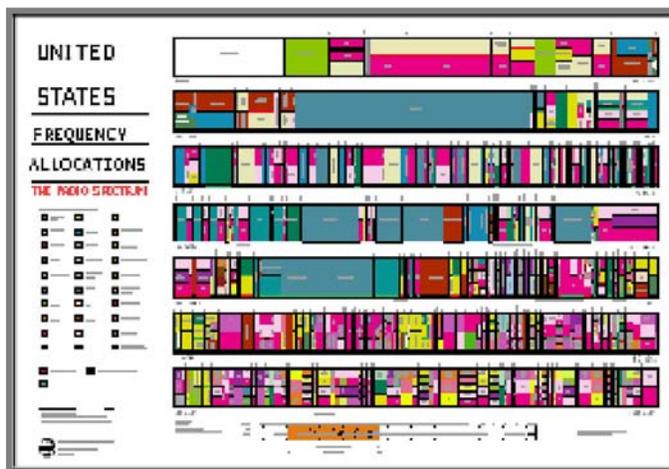
NTIA's policy, spectrum management, research, and grant programs support emerging technologies and uses of spectrum resources for affordable, alternative communications services. Promising technologies and services have the potential to drive economic growth and create jobs, if given the opportunity to succeed. The Administration and NTIA support the advancement of information technologies and have moved aggressively to create an economic and regulatory environment in which innovations in information and communications technologies can flourish. The Broadband Technology Opportunities Program (BTOP), for example, is a vital component in the President's initiative to stimulate economic activity and to use technology to drive the economy.

**The budget for FY 2011 is \$95.6 million:**

- Discretionary appropriations – \$21.8 million
- Legislative Proposal appropriation - \$23.7 million
- Reimbursable – \$40.7 million
- Mandatory -- \$9.4 million

NTIA's budget includes the following:

- Establish a research program to identify techniques that can provide efficient, effective sharing of radio spectrum through the use of intelligent radios.
- The programs funded by the American Recovery and Reinvestment Act in FY 2009 will be winding down as well, although more time and resources are necessary to monitor and close the BTOP grants.



- Provide for the authority and resources for NTIA to manage and administer the execution of the BTOP grants awarded in FY 2010.
- Much of the work authorized by the DTV Act will be winding down.
- The Public Telecommunications Facilities Program will be discontinued in FY 2010/2011 and will no longer require appropriations. The Administration proposes to support public broadcasters through the Corporation for Public Broadcasting.



### Salaries and Expenses

The **Salaries and Expenses budget (\$21,825,000 and 106 FTE)** focuses on its core programs for domestic and international policy development, Federal spectrum management, and related research. In addition to adjustments to the base necessary to maintain the buying power of existing resources, NTIA requests \$1 million and 3 FTE to bolster our research capabilities in spectrum sharing techniques that will enable the efficient use of radio frequencies currently occupied by traditional frequency assignments, and to avoid harmful interference from secondary users using spectrum dynamically to the primary users with static assignments.

### American Recovery and Reinvestment Act (ARRA) Programs

The **Broadband Technology Opportunities Program budget** was funded in FY 2009 and focuses on grant support that will enable broadband access for consumers in unserved and underserved areas as well as stimulate demand and facilitate greater use of broadband services. NTIA is on pace to put in place all grant awards by the end of FY 2010.

There is no mechanism currently in place, however, to authorize and fund NTIA's continued monitoring and administration of the open grants, which in some cases will have three years to complete. **A new appropriation will be required in FY 2011 (\$23.7 million and 50 FTE)** to enable management of the grants beyond the expiration of ARRA authority at the conclusion of FY 2010.

The **Digital-to-Analog Converter Box Coupon Program** also was funded in FY 2009 to provide additional funding to support the demand for coupons through the extended digital television transition deadline, which occurred on June 12, 2009. After expiration of the last coupon issued, and following rescission of unobligated program balances in the FY 2010 omnibus appropriations bill, approximately \$113 million is expected to remain in this account. Most of the program costs have been incurred, and remaining funds will be transferred to the Treasury following program closure.

### Programs Authorized by the Deficit Reduction Act of 2005

The **Digital Television Transition and Public Safety Fund**, created by the Deficit Reduction Act of 2005, as amended, received offsetting receipts from the auction of electromagnetic spectrum recovered from discontinued analog television signals, and provides funding for several one-time programs from these receipts. Most of these programs will be substantially complete by FY 2011, including the DTV converter box coupon program. The Public Safety Interoperable Communications (PSIC) grant program required more time than authorized to allow for grantees to make full use of the grants awarded in September 2008. This authority has been provided through FY 2012.



The Deficit Reduction Act, as amended, also provided borrowing authority to the Department of Commerce to commence specified programs prior to the availability of auction receipts. Amounts borrowed from the Treasury have been repaid using earned revenues from the auction. By September 30, 2009, NTIA had deposited in the General Fund \$7.4 billion of the earned revenues (receipts) for deficit reduction purposes, as required by law.

(Additional deposits of revenues to the General Fund will be initiated as program activities are completed and the DTTSPF and its receipts account are closed.)

After program activity is completed, over \$16 billion of auction proceeds will be available for deficit reduction.

### Public Telecommunications, Facilities, Planning and Construction

The **Public Telecommunications Facilities Program (PTFP) (no appropriation)** is to be discontinued in 2011. In recent years, most PTFP funds have supported public broadcasters' transition to digital broadcasts. This transition is largely complete, so funds are no longer necessary.

### Performance

NTIA's plan for assessing performance is organized under three performance goals that call for the **effective implementation of NTIA's BTOP to stimulate economic activity**, the **efficient use of the radio spectrum**, and the **availability of advanced services to the public**. Our activities, a cornerstone in the Department's efforts to provide the infrastructure for innovations in technology, will continue to address impediments to the development of innovative telecommunications services by the private sector. Please reference the Performance section of the budget presentation for additional information on NTIA's program assessment.

### Context

The U.S. telecommunications market – estimated at \$999.6 billion in 2009 – is critical to our social and economic growth as telecommunications enable all other sectors, including education, healthcare and national security. Representing 29 percent of the global market, the U.S. telecommunications sector is a powerful force in leading U.S. innovation and technology development. In the U.S. telecommunications market, total revenues rose to \$1.1 trillion in 2008 – up 19.2 percent over 2006 – and despite the current economic downturn are projected to grow another 20.9 percent by 2011. [Telecommunications Industry Association (TIA) 2008 Telecom Market Review and Forecast] Wireless service revenues are projected to surpass local landline revenues in 2009. [TIA 2008 Industry Playbook]



Broadband access is driving demand for new technologies and applications, and consumers are benefitting from the new products; such as VoIP, Wi-Fi, WiMax, and advanced wireless services. The President's recovery package has emphasized a commitment toward accelerating broadband development, in order to spur economic growth and job creation.

#### President's Broadband Goals

*"The state of our economy calls for action, bold and swift. And we will act, not only to create new jobs, but to lay a foundation for growth. We will build the roads and bridges, the electric grids and digital lines that feed our commerce and bind us together."*

-- Inaugural Address, January 20, 2009

*"Here, in the country that invented the Internet, every child should have the chance to get online... That's how we'll strengthen America's competitiveness in the world."*

-- January 8, 2009

Broadband deployment is a top priority for the Obama Administration and is critical to America's future as the world's economic leader because of its impact on increasing our productivity and improving American's quality of life – through economic growth, job creation, public safety, tele-medicine, distance learning, and tele-work.

**President Obama's comprehensive technology and innovation plan is to:**

- Create a transparent and connected democracy.
- Encourage the deployment of a modern communications infrastructure.
- Employ technology and innovation to solve our nation's most pressing problems, including reducing the costs of health care, encouraging the development of new clean energy sources, and improving public safety.
- Improve America's competitiveness.

The Administration, including NTIA and RUS, will award competitive grants to accelerate broadband deployment in unserved and underserved areas and to strategic institutions that are likely to create jobs or provide significant public benefits. The objectives of BTOP include:

- Broadband access in unserved and underserved areas
- Broadband education, awareness, training, access, equipment and support
- Broadband access and use by public safety agencies
- Stimulate broadband demand, economic growth, and job creation

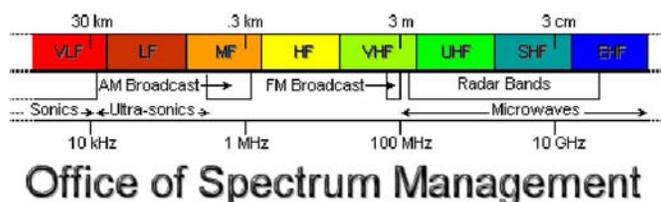
NTIA will also take a leadership role in many broader issues related to the Internet beyond broadband deployment that are also of interest to the Administration. Such issues include privacy, cybersecurity, and internet governance and have domestic and international implications.

With respect to our spectrum management activities, NTIA will continue collaborating on a spectrum sharing test-bed for the testing of the dynamic spectrum sharing capabilities of six technologies in the 410-420 MHz band. NTIA continues its automation of all federal spectrum management activities to produce processes that will provide a rapid response to incoming requests for spectrum use by federal and non-federal entities, as well as support improved data management and analysis capabilities. NTIA will develop and maintain an inventory of Federal spectrum use (beginning with the band 225 MHz-3.7 GHz), providing for the first time a thorough and up-to-date resource for a better understanding of Federal spectrum use.

NTIA oversees federal departments and agencies in their work to relocate systems from the 1710-1755 MHz band under the mechanism established through the Commercial Spectrum Enhancement Act. This mechanism provides a means to accommodate the next generation of wireless services. NTIA has facilitated the transition through promoting dialog between the federal agencies and the commercial license winners. The relocation effort is moving forward rapidly and commercial users have been able to enter many markets earlier than expected. NTIA will continue to explore opportunities for efficiencies and sharing that will enable spectrum to meet future demand; we will continue to pursue foreign policies that allow U.S. companies to supply broadband services and equipment in competitive markets around the world; and we will continue to partner with industry in cooperative research and development agreements and other fora to combine our talents for the advancement of new technologies.

In 2011, a primary focus of NTIA's activities will be on spectrum reform. Specifically, NTIA will examine spectrum sharing approaches to identify the techniques that can provide the most efficient and effective sharing of the radio spectrum through the use of intelligent radios. This research will aid the NTIA, FCC, the telecommunications industry, and other government agencies in the design of dynamic spectrum access schemes for cognitive radio under different communication requirements.

In addition, NTIA will support the Administration's efforts to foster new wireless broadband technologies by making new spectrum available. Specifically, NTIA will collaborate with the FCC to develop a plan to make available 500MHz of spectrum suitable for both mobile and fixed wireless broadband use over the next ten years. The plan will focus on making spectrum available for exclusive use by commercial broadband providers or technologies, or for dynamic, shared access by commercial and government users.



**Office of Spectrum Management**

## NTIA Summary of Resources – FY 2011

(Dollar amounts in thousands)

	[MANDATORY] DTTPSF		Salaries and Expenses		PTFPC		BTOP Admin Expenses		Total, All Accounts	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
FY 2010 estimate	13	\$142,298	103	\$19,999	13	\$20,000	0	\$0	129	\$182,297
Adjustments to the base	0	0	0	776	0	0	0	0	0	776
Program changes	0	0	3	1,050	(13)	(20,000)	50	23,700	34	4,750
FY 2011 budget	NA	NA	106	21,825	0	0	50	23,700	156	45,525
Mandatory programs	7	9,437	NA	NA	NA	NA	0	0	7	9,437
Reimbursable work	0	0	155	40,676	0	0	0	0	155	40,676
FY 2011 budget, all resources	7	9,437	261	62,501	0	0	50	23,700	318	95,638

The Radio Spectrum Measurement System



Telecommunications research far afield

