

# **1710-1755 MHz SPECTRUM BAND RELOCATION**

FIRST ANNUAL  
PROGRESS  
REPORT



**U.S. DEPARTMENT OF COMMERCE**

**CARLOS M. GUTIERREZ  
SECRETARY OF COMMERCE**

**MEREDITH ATTWELL BAKER  
ACTING ASSISTANT SECRETARY FOR  
COMMUNICATIONS AND INFORMATION**

**March 2008**

# **RELOCATION OF THE 1710-1755 MHz SPECTRUM BAND: FIRST ANNUAL PROGRESS REPORT**

This report is submitted pursuant to Section 207 of the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), which requires annual reporting on Federal agencies' progress in vacating their affected wireless communications systems, which are being relocated from certain radio spectrum that has been reallocated to commercial use. This is the first such annual report, and it details progress from the commencement of relocation activity in March 2007 through December 2007.

On December 23, 2004, President Bush signed the CSEA into law, thereby creating the Spectrum Relocation Fund (SRF) to provide a centralized and streamlined funding mechanism through which Federal agencies can recover the costs associated with relocating their radio communications systems from certain spectrum bands, which were authorized to be auctioned for commercial purposes. The CSEA appropriated such sums as are required for relocation costs, which are financed by auction proceeds.

In September 2006, the Federal Communications Commission (FCC) concluded an auction of licenses for Advanced Wireless Services (AWS), on radio spectrum in the 1710 megahertz (MHz) to 1755 MHz band, paired with the 2110 MHz to 2155 MHz band. The 1710-1755 MHz band of spectrum used by Federal agencies was reallocated to AWS under the provisions of the CSEA, including the use of the SRF to facilitate relocation of Federal communications systems, while the 2110-2155 MHz band was reallocated to AWS by the FCC and does not require relocation of Federal systems. The AWS auction raised \$13.7 billion in net winning bids, and will facilitate the provision of innovative new wireless services in the commercial market.

In March 2007, the Office of Management and Budget (OMB), in consultation with the National Telecommunications and Information Administration (NTIA), transferred \$1,008,552,502 from the SRF to 12 Federal agencies, in order to relocate their wireless systems from the 1710-1755 MHz band. In January 2008, OMB made another \$35.57 million available to the Department of Homeland Security, consistent with the provisions of the CSEA.

As required by Section 207 of the CSEA, this report describes the progress the federal agencies have made in adhering to relocation timelines. It also details, on a system-by-system basis, the costs estimated, costs incurred, and costs paid from the SRF. The report is based on data submitted by the Federal agencies to the NTIA.

In general, the Federal agencies report that their actual relocation times and actual costs are less than their estimates for most of the systems in the 1710-1755 MHz band. Two Federal entities have indicated that they will need additional time to relocate. They attribute the need for additional time to the short construction season in the remote locations in which these systems are operated; correspondingly, commercial system build-out is not anticipated to be affected due to the remote nature of these Federal systems. Federal agencies have now spent a total of \$25,215,099 from the SRF.

Section 204 of the CSEA provides authority to OMB, in consultation with NTIA, to approve the timelines and cost estimates associated with Federal relocation activity. To the extent that agencies have indicated a possible delay beyond their previously approved project timeframes, OMB and NTIA review those requests to ensure the timely relocation of Federal systems from the 1710-1755 MHz band.

Attachment A to the report provides an overall summary, by department and/or agency for the first year of relocation activity. The summary provides estimated relocation timelines and progress made in adhering to these timelines, estimated and actual relocation costs, and amounts paid from the SRF. Attachment B details this information on a system-by-system basis for each department, agency and/or bureau.

# Attachment A

1710 MHz – 1755 MHz Band

Summary of Relocation Activities

# Summary of Relocation Activities

Department/Agency	Bureau	Estimated Relocation Timeline (Months) <sup>1</sup>	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
Agriculture	Forest Service	36 <sup>2</sup>	No	\$21,578,486	\$21,578,486	\$36,229
Defense	Air Force	48	Yes	\$106,753,481	\$106,753,481	\$0
Defense	Army	36	Yes	\$15,933,043	\$15,933,043	\$194,482
Defense	Navy	36	Yes	\$134,465,000	\$134,465,000	\$606,701
Defense	DOD Wide Support	72	Yes	\$98,200,000	\$98,200,000	\$4,922,872
Defense	Subtotal			\$355,351,524	\$355,351,524	\$5,724,055
Energy	National Nuclear Security Administration	24 <sup>3</sup>	No	\$10,900,000	\$10,900,000	\$221,421
Energy	Bonneville Power Administration	72	Yes	\$48,627,399	\$48,627,399	\$1,386,876
Energy	Southwestern Power Administration	24	Yes	\$8,091,360	\$8,091,360	\$118,607
Energy	Western Area Power Administration	36 <sup>4</sup>	No	\$108,202,200	\$108,202,200	\$1,195,972
Energy	DOE Wide Support	72	Yes	\$1,000,000	\$1,000,000	\$137,704
Energy	Subtotal			\$176,820,959	\$176,820,959	\$3,060,580

<sup>1</sup> All timelines indicated in the tables represent the approved timeframes for full relocation from the band for each agency, as noted in the February 2007 report to Congress from the Office of Management and Budget (OMB).

<sup>2</sup> United States Department of Agriculture (USDA) indicates a possible six-12 month delay due to the need to relocate several mountain-top systems that have short three-month summer installation windows. Lengthy administrative processes may require the installation of ten mountain-top systems in a single installation season (summer 2009), which may be difficult to accomplish. USDA does not anticipate the potential delay having an impact on the development of commercial wireless services due to the remote nature of the systems in question.

<sup>3</sup> Department of Energy (DOE)/National Nuclear Security Administration (NNSA) indicates a possible six- month delay in completing relocation activity due to the unanticipated unique nature of systems operating in the band, as well as the unique nature of the SRF funding mechanism. DOE/NNSA indicates that the impacted systems are in remote areas and will have no impact on commercial wireless services.

<sup>4</sup> DOE/ Western Area Power Administration (WAPA) indicates a possible 12-month delay due to the need to relocate several systems that have a limited summer installation window. DOE/WAPA was unable to initiate relocation activity in the summer of 2007 as previously anticipated. DOE/WAPA indicates that the impacted systems are in remote and isolated areas and will have no impact on the development of commercial wireless services.

# Summary of Relocation Activities

Department/Agency	Bureau	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
Homeland Security	Customs and Border Protection	12	Yes	\$74,349,990	\$74,349,990	\$0
Homeland Security	Immigration and Customs Enforcement	12	Yes	\$3,559,281	\$39,129,281 <sup>5</sup>	\$3,559,185
Homeland Security	Secret Service	12	Yes	\$105,800	\$105,800	\$105,800
Homeland Security	DHS Overhead	12	Yes	\$11,979,761	\$11,979,761	\$0
Homeland Security	Subtotal			\$89,994,832	\$125,564,832	\$3,664,985
Housing and Urban Development	Inspector General	24	Yes	\$21,115	\$21,115	\$0
Interior	Bureau of Reclamation	36	Yes	\$4,550,000	\$4,550,000	\$2,838,643
Interior	Geological Survey	36	Yes	\$6,158,949	\$6,158,949	\$460,667
Interior	National Park Service	36	Yes	\$14,703,000	\$14,703,000	\$68,132
Interior	Subtotal			\$25,411,949	\$25,411,949	\$3,367,442
Justice	Bureau of Alcohol, Tobacco, Firearms, and Explosives	36	Yes	\$48,024,000	\$48,024,000	\$2,443,072
Justice	Federal Bureau of Investigation	36	Yes	\$139,225,000	\$139,225,000	\$1,558,792
Justice	Drug Enforcement Administration	36	Yes	\$74,772,000	\$74,772,000	\$1,029,000
Justice	DOJ Wide Support	36	Yes	\$800,000	\$800,000	\$226,626
Justice	Subtotal			\$262,821,000	\$262,821,000	\$5,257,490

<sup>5</sup> As indicated in the November 16, 2007 Congressional notification from OMB, a subsequent transfer of \$35.57 million from the Spectrum Relocation Fund (SRF) was made to the Department of Homeland Security (DHS)/Immigration and Customs Enforcement (ICE) in accordance with the provisions of the Commercial Spectrum Enhancement Act.

# Summary of Relocation Activities

Department/Agency	Bureau	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
Transportation	Federal Aviation Administration	46 <sup>6</sup>	Yes	\$58,062,020 <sup>7</sup>	\$58,062,020 <sup>5</sup>	\$2,123,940
Treasury	Internal Revenue Service	28	Yes	\$4,409,000	\$4,409,000	\$13,618
Treasury	Inspector General for Tax Administration	28	Yes	\$892,000	\$892,000	\$0
Treasury	Subtotal			\$5,301,000	\$5,301,000	\$13,618
National Aeronautics and Space Administration	National Aeronautics and Space Administration	24	Yes	\$740,000	\$740,000	\$0
Tennessee Valley Authority	Tennessee Valley Authority	48	Yes	\$10,687,857	\$10,687,857	\$265,000
United States Postal Service	Inspection Service	12	Yes	\$1,761,760	\$1,761,760	\$1,701,760
<b>TOTAL</b>				<b>\$1,008,552,502</b>	<b>\$1,044,122,502</b>	<b>\$25,215,099</b>

<sup>6</sup> The estimated relocation timeline listed in the February 2007 OMB report was 48 months.

<sup>7</sup> \$58,062,020 has been made available to the Federal Aviation Administration (FAA) from the SRF, consistent with the National Telecommunications and Information Administration report to the Federal Communications Commission and Congress dated December 2005, and the Congressional notification from OMB dated February 16, 2007. In providing information for this report, the FAA estimated relocation costs of \$58,062,027, and appears to be rounding individual systems costs differently. Therefore, FAA totals may not add due to rounding. See Appendix B at B-15 for details.

# Attachment B

1710 MHz – 1755 MHz Band

Department/Agency/Bureau

Relocation Summary

On A System-By-System Basis



# United States Department of Agriculture (USDA)

## Forest Service

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
USDA 001	Apache-Sitgreaves MW	18	Yes	\$960,000	\$960,000	\$0
USDA 002	Ashley MW	24	No <sup>2</sup>	\$397,000	\$397,000	\$0
USDA 003	Boise MW	24	No <sup>1</sup>	\$442,000	\$442,000	\$0
USDA 004	Challis MW	24	No <sup>1</sup>	\$746,000	\$746,000	\$0
USDA 005	Cibola MW	24	Yes	\$843,000	\$843,000	\$0
USDA 006	Coconino MW	24	Yes	\$527,000	\$527,000	\$0
USDA 007	Coronado MW	24	Yes	\$92,000	\$92,000	\$0
USDA 008	Dixie MW	0 <sup>3</sup>	Yes	\$0	\$0	\$0
USDA 009	Fishlake MW	24	Yes	\$675,000	\$675,000	\$0
USDA 010	Gila MW	24	Yes	\$1,049,000	\$1,049,000	\$0
USDA 011	IPNF MW	36	Yes	\$1,138,900	\$1,138,900	\$0
USDA 012	Kaibab MW	24	Yes	\$509,000	\$509,000	\$0
USDA 013	Lagrande MW	24 <sup>3</sup>	Yes	\$241,000	\$241,000	\$0
USDA 014	Lassen MW	36	No <sup>2</sup>	\$818,000	\$818,000	\$0
USDA 015	Los Padres MW	36	No <sup>1</sup>	\$107,000	\$107,000	\$0
USDA 016	Manti-Lasal MW	24	Yes	\$416,000	\$416,000	\$0
USDA 017	Ochoco MW	36 <sup>3</sup>	Yes	\$235,000	\$235,000	\$0
USDA 018	Payette MW	36	Yes	\$418,000	\$418,000	\$0
USDA 019	Plumas MW	36	No <sup>2</sup>	\$1,925,000	\$1,925,000	\$0
USDA 020	Salmon MW	24	No <sup>1</sup>	\$354,000	\$354,000	\$0
USDA 021	Sierra MW	36	No <sup>2</sup>	\$1,072,000	\$1,072,000	\$0
USDA 022	Stanislaus MW	36	No <sup>2</sup>	\$733,000	\$733,000	\$0
USDA 023	Toiyabe MW	24	No <sup>2</sup>	\$448,000	\$448,000	\$0
USDA 024	Tonto MW	36	Yes	\$672,000	\$672,000	\$0
USDA 025	Uinta MW	24	Yes	\$636,000	\$636,000	\$0
USDA 026	Wasatch MW	24	Yes	\$1,206,000	\$1,206,000	\$0
USDA 027	Winema MW	0 <sup>3</sup>	Yes	\$0	\$0	\$0
USDA 028	Overhead/Management Costs	36	Yes	\$4,918,586	\$4,918,586	\$36,229
<b>Total</b>				<b>\$21,578,486</b>	<b>\$21,578,486</b>	<b>\$36,229</b>

<sup>1</sup> USDA indicates a possible six-month delay due to the need to relocate mountain-top systems that have short three-month summer installation windows. Lengthy administrative processes may require the installation of ten mountain-top systems in a single installation season (summer 2009), which may be difficult to accomplish. USDA does not anticipate any potential delay having an impact on the deployment of commercial wireless services due to the remote nature of the systems in question.

<sup>2</sup> USDA indicates possible 12-month delay due to the need to relocate mountain-top systems that have short three-month summer installation windows. Lengthy administrative processes may require the installation of ten mountain-top systems in a single installation season (summer 2009), which may be difficult to accomplish. USDA does not anticipate any potential delay having an impact on the deployment of commercial wireless services due to the remote nature of the systems in question.

<sup>3</sup> USDA indicates system has been relocated.

# Department of Defense

## United States Air Force (USAF)

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
USAF 0001	Precision Guided Munitions - Aircraft Procurement	48	Yes	\$40,000,000	\$40,000,000	\$0
USAF 0001	Precision Guided Munitions - Missile Procurement	48	Yes	\$60,000,000	\$60,000,000	\$0
USAF 0002	Edwards Microwave	36	Yes	\$157,100	\$157,100	\$0
USAF 0003	Luke Microwave	36	Yes	\$1,212,000	\$1,212,000	\$0
USAF 0004	Nellis Microwave	36	Yes	\$600,000	\$600,000	\$0
USAF 0005	Eastern Range	36	Yes	\$2,810,381	\$2,810,381	\$0
USAF 0006	Eglin Microwave	36	Yes	\$1,974,000	\$1,974,000	\$0
<b>Total</b>				<b>\$106,753,481</b>	<b>\$106,753,481</b>	<b>\$0</b>

<sup>1</sup> The February 2007 report to Congress from the Office of Management and Budget (OMB) lists the USAF having 36 systems. The correct number should be six systems, which encompass the assignments that the USAF previously reported as 36 systems. One system is funded through two treasury accounts. There is no impact on the total resources acquired to vacate the band since the number of frequency assignments to be vacated remains unchanged from the February report.

# Department of Defense

## Army

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
AR0001	1-11 <sup>th</sup> Aviation, Ft Rucker	24	Yes	\$752,000	\$752,000	\$0
AR0002	Army Material Command	24	Yes	\$1,185,000	\$1,185,000	\$0
AR0003	DCIS	36	Yes	\$128,000	\$128,000	\$0
AR0004	USACE - Kansas City District	36	Yes	\$65,043	\$65,043	\$0
AR0005	USACE - New England District	36	Yes	\$161,000	\$161,000	\$0
AR0006	USACE - Portland District	36	Yes	\$5,484,000	\$5,484,000	\$0
AR0007	USACE - Sacramento District	18	Yes	\$7,032,000	\$7,032,000	\$0
AR0008	USACE - Tulsa District	36	Yes	\$32,000	\$32,000	\$0
AR0009	White Sands Missile Range	24	Yes	\$464,000	\$464,000	\$0
AR0010	PEO EIS - PM DWTS	36	Yes	\$630,000	\$630,000	\$194,482
<b>Total</b>				<b>\$15,933,043</b>	<b>\$15,933,043</b>	<b>\$194,482</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists Army as having 31 systems. The correct number should be nine systems, which encompass the assignments that Army previously reported as 31 systems, plus one account for shared program management and engineering costs, as reported. There is no impact on the total resources acquired to vacate the band since the number of frequency assignments to be vacated remains unchanged from the February report.

# Department of Defense

## Navy

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
USN0025 <sup>1</sup>	CLASSIFIED	36	Yes	\$44,146,000	\$44,146,000	\$523,000
USN0025 <sup>1</sup>	HERP/HERO	36	Yes	\$1,235,000	\$1,235,000	\$4,091
USN0025 <sup>1</sup>	CLASSIFIED	36	Yes	\$60,692,000	\$60,692,000	\$0
USN0001	C,AYDST402S	36	Yes	\$134,000	\$134,000	\$0
USN0002	C,AYDST-400 SERIES	36	Yes	\$13,938,047	\$13,938,047	\$0
USN0003	C,PADVTL-2A	36	Yes	\$3,121,449	\$3,121,449	\$0
USN0004	C,AVKDRC-96	36	Yes	\$296,000	\$296,000	\$17,008
USN0005	C,CNCCTM-UHF-10V	36	Yes	\$21,000	\$21,000	\$0
USN0006	C,CNCCTM-UHF-10V	36	Yes	\$446,208	\$446,208	\$0
USN0007	C,AVKDR2C-96	36	Yes	\$446,208	\$446,208	\$0
USN0008	C,AAC-AT3620LV	36	Yes	\$1,338,621	\$1,338,621	\$0
USN0009	C,MOT-MTG1010A	36	Yes	\$271,000	\$271,000	\$0
USN0010	C,ERDEVT-3	36	Yes	\$892,414	\$892,414	\$0
USN0011	S,SMWVTX-36L20ADP	36	Yes	\$21,000	\$21,000	\$0
USN0012	G,HORACE VIDEO LINK	36	Yes	\$21,000	\$21,000	\$0
USN0013	C,PADVTL-2A	36	Yes	\$892,414	\$892,414	\$0
USN0014	G,HORACE VIDEO LINK	36	Yes	\$249,400	\$249,400	\$0
USN0015	C,CNCCTM-UHF-10V	36	Yes	\$21,000	\$21,000	\$0
USN0016	C,AYD T400	36	Yes	\$997,600	\$997,600	\$0
USN0017	C,AYD T400	36	Yes	\$891,397	\$891,397	\$0
USN0018	C,AYD T400	36	Yes	\$446,207	\$446,207	\$0
USN0019	C,AYD T400	36	Yes	\$446,207	\$446,207	\$0
USN0020	C,AYD T400	36	Yes	\$446,207	\$446,207	\$0
USN0021	C,AYD T400	36	Yes	\$446,207	\$446,207	\$0
USN0022	C,AYD T400	36	Yes	\$892,414	\$892,414	\$0
USN0023	C,ACTMDR-5402	36	Yes	\$587,000	\$587,000	\$62,602
USN0024	C,MOT MR-200	36	Yes	\$229,000	\$229,000	\$0
USMC0001	C,LOE LMC-402D2	36	Yes	\$232,000	\$232,000	\$0
USMC0002	C,LOE LMC-402D2	36	Yes	\$468,000	\$468,000	\$0
USMC0003	C,LOE LMC-402D2	36	Yes	\$100,000	\$100,000	\$0
USMC0004	C,TBNTBT200LV	36	Yes	\$100,000	\$100,000	\$0
<b>Total</b>				<b>\$134,465,000</b>	<b>\$134,465,000</b>	<b>\$606,701</b>

<sup>1</sup> One system funded through three treasury accounts.

# Department of Defense

## DOD-Wide Support (Research, Development, Test and Evaluation/Operation and Maintenance)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
DOD0001	Spectrum Relocation Management Office	72	Yes	\$21,700,000	\$21,700,000	\$956,793
DOD0002	Spectrum Management Transition Initiative	72	Yes	\$48,500,000	\$48,500,000	\$2,700,425
DOD0003	Spectrum Technology Test Bed	72	Yes	\$28,000,000	\$28,000,000	\$1,265,654
<b>Total</b>				<b>\$98,200,000</b>	<b>\$98,200,000</b>	<b>\$4,922,872</b>

# Department of Energy

## National Nuclear Security Administration (NNSA)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	OST - Remote Keying System, Replacement	24	Yes	\$180,000	\$180,000	\$0
2	SNL - Portable Microwave, System and Laser Tracking Microwave	24	Yes	\$690,000	\$690,000	\$37,190
3	Pantex Admin System	24 <sup>1</sup>	No	\$870,000	\$870,000	\$0
4a	SNL - Laser Tracking Microwave	24	Yes	\$345,000	\$345,000	\$0
4b	SNL - Telecommand Link	24 <sup>1</sup>	No	\$385,000	\$385,000	\$1,740
5	OST - Microwave Link	24 <sup>1</sup>	No	\$385,000	\$385,000	\$0
6	SNL -Remote Control Development Link - Robotics Vehicle	24 <sup>1</sup>	No	\$240,000	\$240,000	\$21,491
7	LANL - Robotic Vehicle (Video / Audio)	24 <sup>1</sup>	No	\$360,000	\$360,000	\$4,000
8	NSO - YMP Microwave System	24 <sup>1</sup>	No	\$840,000	\$840,000	\$8,000
9	NSO - NV Teleoperated System	24	Yes	\$435,000	\$435,000	\$19,000
10	YMP Seismic Link (Shoshone Mtn and Echo Peak, NV)	24	Yes	\$900,000	\$900,000	\$97,000
11	NSO - Helicopter Event Video	24	Yes	\$970,000	\$970,000	\$0
12	NSO - Backbone Microwave Link (Nevada Test Site and Angel Peak)	24 <sup>1</sup>	No	\$770,000	\$770,000	\$12,000
13	NSO - YMP Seismic Link (Yucca Mtn and Sober Peak, NV)	24	Yes	\$830,000	\$830,000	\$21,000
14	LLNL -Research Microwave between Tracy Airport and LLNL	24	Yes	\$360,000	\$360,000	\$0
15	LLNL - Water System Microwave Link (Livermore to Mocho)	24	Yes	\$890,000	\$890,000	\$0
	NNSA Inflation Indexed Reserve		Yes	\$1,450,000	\$1,450,000	\$0
<b>Total</b>				<b>\$10,900,000</b>	<b>\$10,900,000</b>	<b>\$221,421</b>

<sup>1</sup> NNSA indicates a possible six-month delay in completing relocation activity due to the unique nature of the systems operating in the band as well as the unique nature of the Spectrum Relocation Fund (SRF) funding mechanism. NNSA indicates that the impacted systems are in remote areas and will have no impact on the deployment of commercial wireless services.

# Department of Energy

## Bonneville Power Administration

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	2N	36	Yes	\$4,896,239	\$4,896,239	\$121,078
2	4A	48	Yes	\$1,147,111	\$1,147,111	\$32,110
3	4D	60	Yes	\$1,727,645	\$1,727,645	\$47,962
4	D	48	Yes	\$2,815,160	\$2,815,160	\$56,691
5	H	48	Yes	\$767,501	\$767,501	\$21,744
6	I	72	Yes	\$8,913,238	\$8,913,238	\$246,130
7	N	24	Yes	\$8,589,111	\$8,589,111	\$253,645
8	PND AC00	48	Yes	\$4,712,537	\$4,712,537	\$137,031
9	PND D	48	Yes	\$1,975,385	\$1,975,385	\$47,909
10	PND XC00	36	Yes	\$5,063,823	\$5,063,823	\$154,719
11	PND YC00	24	Yes	\$6,441,748	\$6,441,748	\$184,825
12	T	12	Yes	\$288,198	\$288,198	\$57,248
13	U	60	Yes	\$915,458	\$915,458	\$25,784
14	USA <sup>1</sup>	72	Yes	\$374,245	\$374,245	\$0
<b>Total</b>				<b>\$48,627,399</b>	<b>\$48,627,399</b>	<b>\$1,386,876</b>

<sup>1</sup> This system consists of radios that will be used across the remaining 13 systems during catastrophic emergency conditions where timely restoration of mission critical telecommunication traffic is of utmost importance. The estimated relocation timeline is not anticipated to affect commercial access to the band, since this system operates in a backup capacity only.

## Southwestern Power Administration

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Southwestern	24	Yes	\$7,492,000	\$7,492,000	\$118,607
AD	Corporate Overhead and Reserve		Yes	\$599,360	\$599,360	\$0
<b>Total</b>				<b>\$8,091,360</b>	<b>\$8,091,360</b>	<b>\$118,607</b>

# Department of Energy

## Western Area Power Administration (WAPA)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Sierra-Nevada Region (SNR)	30	No <sup>1</sup>	\$9,846,000	\$9,846,000	\$42,816
2	Rocky Mountain Region (RMR)	28	No <sup>1</sup>	\$5,971,200	\$5,971,200	\$0
3	Desert Southwest Region (DSW)	30	No <sup>1</sup>	\$7,320,000	\$7,320,000	\$132,347
4	Upper Great Plains - Montana (UGP-PT)	36 <sup>2</sup>	No <sup>1</sup>	\$22,275,000	\$22,275,000	\$549,119
5	Upper Great Plains - North Dakota (UGP-ND)	36 <sup>2</sup>	No <sup>1</sup>	\$21,467,000	\$21,467,000	\$261,506
6	Upper Great Plains - South Dakota (UGP-SD)	36 <sup>2</sup>	No <sup>1</sup>	\$26,688,000	\$26,688,000	\$123,699
AD	Corporate Overhead and Reserve <sup>3</sup>	N/A	No <sup>1</sup>	\$14,635,000	\$14,635,000	\$86,485
<b>Total</b>				<b>\$108,202,200</b>	<b>\$108,202,200</b>	<b>\$1,195,972</b>

<sup>1</sup> WAPA indicates a possible 12-month delay due to the need to relocate several systems that have a limited summer installation window. WAPA was unable to initiate relocation activity in the summer of 2007 as previously anticipated. WAPA indicates that the impacted systems are in remote and isolated areas and will have no impact on the deployment of commercial wireless services.

<sup>2</sup> Each system is comprised of multiple assignments. The estimated relocation timeline shown above represents the completion time for the full system (all assignments). A subset of the associated assignments was originally projected to be relocated within 12 months. These will all be relocated using agency funds and not Spectrum Relocation funds, consistent with funding eligibility under the Commercial Spectrum Enhancement Act (CSEA). The "12 month" assignments for these systems may also experience a delay for the reasons cited in footnote 1 above.

<sup>3</sup> AD is not a radio system but rather an administrative designator to capture the overhead expenditures associated with all systems and funds kept in reserve for inflation, collocation, coordination and planning.

## DOE-Wide Support (Departmental Administration)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
N/A	DOE Headquarters	72	Yes	\$1,000,000	\$1,000,000	\$137,704
<b>Total</b>				<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$137,704</b>



# Department of Homeland Security

## Customs and Border Protection (CBP)

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	El Centro	12	Yes	\$9,913,332	\$9,913,332	\$0
2	El Paso	12	Yes	\$21,065,831	\$21,065,831	\$0
3	Yuma	12	Yes	\$9,913,332	\$9,913,332	\$0
4	Rio Grande Valley	12	Yes	\$9,913,332	\$9,913,332	\$0
5	Laredo	12	Yes	\$9,913,332	\$9,913,332	\$0
6	Marfa	12	Yes	\$8,674,166	\$8,674,166	\$0
7	Tucson	12	Yes	\$4,956,666	\$4,956,666	\$0
8	Livermore <sup>2</sup>	12	Yes	\$0	\$0	\$0
9	San Diego <sup>2</sup>	12	Yes	\$0	\$0	\$0
10	Del Rio <sup>2</sup>	12	Yes	\$0	\$0	\$0
<b>Total</b>				<b>\$74,349,990</b>	<b>\$74,349,990</b>	<b>\$0</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists CBP as having 60 systems. The correct number should be (10) systems comprised of 60 point to point links. Fixed microwave systems are unique to the operational areas defined by the Office of Border Patrol sector areas of responsibility. The number of relocating frequency assignments remains constant. This has no impact on the total resources required to vacate the band.

<sup>2</sup> System is fully transitioned from the band.

# Department of Homeland Security

## Immigration and Customs Enforcement (ICE)

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
NA	Components for Portable Systems	12	Yes	\$3,559,281	\$3,559,281	\$3,559,185
NA	Components for Portable Systems	12	Yes		\$35,570,000 <sup>2</sup>	
<b>Total</b>				<b>\$3,559,281</b>	<b>\$39,129,281</b>	<b>\$3,559,185</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists Immigration and Customs Enforcement as having four systems. The correct number should be one. The Department of Homeland Security (DHS)/ICE did not explain the difference in reporting systems. However, in other cases, agencies attributed the difference to a correction based on their understanding of the definition of a “system”.

<sup>2</sup> As indicated in the November 16, 2007 Congressional notification from OMB, a subsequent transfer of \$35.57 million from the SRF was made to DHS/ICE in accordance with the provisions of the CSEA.

## Secret Service

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Fixed (Transportable)	12	Yes	\$105,800	\$105,800	\$105,800
<b>Total</b>				<b>\$105,800</b>	<b>\$105,800</b>	<b>\$105,800</b>

## DHS Wide Support (Office of the Chief Information Officer)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
NA	DHS Overhead	12	Yes	\$11,979,761	\$11,979,761	\$0
<b>Total</b>				<b>\$11,979,761</b>	<b>\$11,979,761</b>	<b>\$0</b>

# Housing and Urban Development

## Inspector General

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	GMS Video Transmitter - L Band	24	Yes	\$3,450	\$3,450	\$0
2	GMS Video Receiver - L Band	24	Yes	\$7,315	\$7,315	\$0
3	L-3 Communications Audio/Video Microwave Transmitter	24	Yes	\$3,450	\$3,450	\$0
4	L-3 Communications Audio/Video Microwave Transmitter	24	Yes	\$3,450	\$3,450	\$0
5	L-3 Communications Audio/Video Microwave Transmitter	24	Yes	\$3,450	\$3,450	\$0
<b>Total</b>				<b>\$21,115</b>	<b>\$21,115</b>	<b>\$0</b>

# Department of the Interior

## Bureau of Reclamation

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	North Platte River Project	24	Yes	\$2,805,000	\$2,805,000	\$2,805,000
2	Frying Pan Arkansas	36	Yes	\$1,745,000	\$1,745,000	\$33,643
<b>Total</b>				<b>\$4,550,000</b>	<b>\$4,550,000</b>	<b>\$2,838,643</b>

## Geological Survey

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
3	Earthquake-Seismic Monitoring	36	Yes	\$6,158,949	\$6,158,949	\$460,667
<b>Total</b>				<b>\$6,158,949</b>	<b>\$6,158,949</b>	<b>\$460,667</b>

## National Park Service

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
4	Natchez Trace Parkway	36	Yes	\$8,349,000	\$8,349,000	\$34,066
5	Blue Ridge Parkway	36	Yes	\$6,354,000	\$6,354,000	\$34,066
<b>Total</b>				<b>\$14,703,000</b>	<b>\$14,703,000</b>	<b>\$68,132</b>

# Department of Justice

## Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATFE)

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	L Band COFDM Systems	36	Yes	\$16,777,930	\$16,777,930	\$276,038
2	Long Range Systems	36	Yes	\$10,000,000	\$10,000,000	\$0
3	Video over IP Systems	36	Yes	\$15,854,320	\$15,854,320	\$979,033
4	Covert Systems	36	Yes	\$5,006,500	\$5,006,500	\$973,571
5	Misc/Training & Shipping	36	Yes	\$385,250	\$385,250	\$214,430
<b>Total</b>				<b>\$48,024,000</b>	<b>\$48,024,000</b>	<b>\$2,443,072</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists the Bureau of ATFE as having 1641 systems. The correct number should be five, as reported here. The ATFE system numbers have changed only as a result of reporting modifications associated with implementation management. There is no change to specific equipment counts contained in the systems and related reimbursement costs.

# Department of Justice

## Federal Bureau of Investigation (FBI)

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Airborne Systems	36	Yes	\$2,000,000	\$2,000,000	\$0
2	L/S Band (RF Systems)	36	Yes	\$77,000,000	\$77,000,000	\$204,500
3	Central Receive Systems	36	Yes	\$30,000,000	\$30,000,000	\$0
4	Point to Point (VOIP Systems)	36	Yes	\$27,000,000	\$27,000,000	\$0
5	Misc/ Administrative	36	Yes	\$3,225,000	\$3,225,000	\$1,354,292
<b>Total</b>				<b>\$139,225,000</b>	<b>\$139,225,000</b>	<b>\$1,558,792</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists Federal Bureau of Investigation as having 119 systems plus one video surveillance system. The correct number should be five as reported here. The FBI system numbers have changed only as a result of reporting modifications associated with implementation management. There is no change to specific equipment counts contained in the systems and related reimbursement costs.

## Drug Enforcement Administration

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Video Surveillance	36	Yes	\$74,772,000	\$74,772,000	\$1,029,000
<b>Total</b>				<b>\$74,772,000</b>	<b>\$74,772,000</b>	<b>\$1,029,000</b>

## DOJ-Wide Support (Office of the Chief Information Officer)

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
DOJ	DOJ WIDE SUPPORT	36	Yes	\$800,000	\$800,000	\$226,626
<b>Total</b>				<b>\$800,000</b>	<b>\$800,000</b>	<b>\$226,626</b>

# Department of Transportation

## Federal Aviation Administration (FAA)

System Number	System Name	Estimated Relocation Timeline (Months) <sup>1</sup>	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Anchorage	43	Yes	\$6,356,917	\$6,356,917	\$150,272
2	Fairbanks	46	Yes	\$941,755	\$941,755	\$150,272
3	Kenai	21	Yes	\$1,820,471	\$1,820,471	\$150,272
4	Norfolk	42	Yes	\$2,891,072	\$2,891,072	\$150,272
5	Wilkes-Barre	33	Yes	\$932,226	\$932,226	\$150,272
6	Minneapolis	31	Yes	\$922,954	\$922,954	\$150,272
7	Denver-Greeley	32	Yes	\$948,603	\$948,603	\$62,122
8	Grand Junction	26	Yes	\$2,770,354	\$2,770,354	\$62,122
9	Parshall-Red Table	43	Yes	\$2,007,177	\$2,007,177	\$62,122
10	Miller Peak-Missoula	45	Yes	\$1,858,494	\$1,858,494	\$62,122
11	Medford	20	Yes	\$1,803,988	\$1,803,988	\$62,122
12	Pasco-Wallula	28	Yes	\$949,670	\$949,670	\$62,122
13	Atlanta	30	Yes	\$941,691	\$941,691	\$62,122
14	Puerto Rico-Virgin Islands	37	Yes	\$10,661,432	\$10,661,432	\$414,722
15	Albuquerque Airport	30	Yes	\$1,842,874	\$1,842,874	\$62,122
16	Albuquerque-Gallup	40	Yes	\$2,737,380	\$2,737,380	\$62,122
17	Boron-Rand	44	Yes	\$884,982	\$884,982	\$0
18	Guam	28	Yes	\$2,898,490	\$2,898,490	\$62,122
19	Hawaiian Islands	22	Yes	\$11,023,227	\$11,023,227	\$62,122
20	Hilo	42	Yes	\$1,898,923	\$1,898,923	\$62,122
21	American Samoa	37	Yes	\$969,346	\$969,346	\$62,122
<b>Total</b>				<b>\$58,062,020<sup>2</sup></b>	<b>\$58,062,020<sup>2</sup></b>	<b>\$2,123,940</b>

<sup>1</sup> The estimated relocation timeline listed in the February 2007 OMB report was 48 months.

<sup>2</sup> A value of \$58,062,020 was contained in the National Telecommunications and Information Administration report to the Federal Communications Commission and Congress dated December 2005 and the Congressional notification from OMB dated February 16, 2007. This is the amount that was actually transferred to the FAA. In response to a request for data for this report, the FAA reported a value of \$58,062,027 for their total estimated relocation costs based on the summation of individual systems. The difference appears due to rounding.

# Department of Treasury

## Internal Revenue Service

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Covert Video Surveillance	28	Yes	\$4,409,000	\$4,409,000	\$13,618
<b>Total</b>				<b>\$4,409,000</b>	<b>\$4,409,000</b>	<b>\$13,618</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists the Internal Revenue Service as having 100 systems, but that number represented the total number of devices affected by this relocation rather than systems. The aggregate number of devices should be considered part of one system for tracking purposes. The correct number of systems is one as reported.



# Department of Treasury

## Inspector General for Tax Administration

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Covert Video Surveillance	28	Yes	\$892,000	\$892,000	\$0
<b>Total</b>				<b>\$892,000</b>	<b>\$892,000</b>	<b>\$0</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists the Inspector General for Tax Administration as having ten systems. The correct number should be one since the number reported in February 2007 represented the total number of devices affected by this relocation rather than systems. The aggregate number of devices should be considered part of one system for tracking purposes.

# National Aeronautics and Space Administration

## National Aeronautics and Space Administration

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Air-to-Ground Video Telemetry System	24	Yes	\$720,000	\$720,000	\$0
2	Video Surveillance System	12	Yes	\$20,000	\$20,000	\$0
<b>Total</b>				<b>\$740,000</b>	<b>\$740,000</b>	<b>\$0</b>

# Tennessee Valley Authority

## Tennessee Valley Authority

System Number	System Name	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
1	Nashville - Paradise Fossil Plant	48	Yes	\$4,396,600	\$4,396,600	\$53,000
2	Shawnee Fossil Plant - DOE USEC	36	Yes	\$1,993,900	\$1,993,900	\$55,000
3	Weakley - Hickman	48	Yes	\$1,109,300	\$1,109,300	\$53,000
4	Power System Control Center - Bellefonte Nuclear Plant	48	Yes	\$1,875,400	\$1,875,400	\$48,000
5	Oak Ridge - Bull Run Fossil Plant	36	Yes	\$656,330	\$656,330	\$26,000
6	Franklin - Sewanee	36	Yes	\$656,327	\$656,327	\$30,000
<b>Total</b>				<b>\$10,687,857</b>	<b>\$10,687,857</b>	<b>\$265,000</b>

# United States Postal Service

## Inspection Service

System Number	System Name <sup>1</sup>	Estimated Relocation Timeline (Months)	Status (On Time)	Estimated Relocation Cost	Amount Paid from SRF	Actual Costs (Outlays)
USPS001	Video Surveillance	12	Yes	\$1,761,760	\$1,761,760	\$1,701,760
			<b>Total</b>	<b>\$1,761,760</b>	<b>\$1,761,760</b>	<b>\$1,701,760</b>

<sup>1</sup> The February 2007 report to Congress from OMB lists the Inspection Service as having 508 systems. The United States Postal Service/Inspection Service reports it is in fact one system utilizing 508 devices.