Congressional Research Service

MEMORANDUM March 18, 2011

To: Congressional Distribution Memo

From: Linda K. Moore, Specialist in Telecommunications Policy, 7-5853

Subject: **Federal Funding of State and Local Emergency Communications Projects.**
This memorandum is intended for distribution to more than one congressional office.

This memorandum provides an overview of information about federal grants to states and communities for improving emergency communications, especially interoperable communications. Interoperability in public safety communications refers to the capability for seamless communications across different jurisdictions and multiple communications networks, especially wireless networks.[1] This memorandum was prepared in response to numerous requests from Congress regarding federal investment in interoperable communications and public safety infrastructure.

To prepare this document, the Congressional Research Service (CRS) focused on grant programs provided through the Departments of Justice and Homeland Security, historically the two major sources of grants to public safety agencies. CRS found that available data was limited in scope and difficult to analyze because of vague or dissimilar terminology. For example, for the Public Safety Interoperable Communications (PSIC) program, the largest single grant program for interoperable communications, allowable costs include: planning and coordination; acquisition; equipment; deployment; operations and maintenance; construction and renovation; training; and management and administration.[2] Many grants that are available to states and communities to fund interoperable communications are now listed under the much broader category of emergency communications, further complicating the identification of grants intended to improve interoperability.[3] Actual and planned grant totals attributed to interoperable communications have been reported erratically in federal public records, as documented in this memorandum. Few details on federal grants were available on public web sites and, so far, none have been provided to us by the two federal agencies contacted directly.[4] Furthermore, there are numerous earmarks in different appropriations bills, over a number of fiscal years, that are designated for

[1] One frequently cited definition of interoperability has been provided by the government agency SAFECOM: "In general, interoperability refers to the ability of public safety emergency responders to work seamlessly with other systems or products without any special effort. Wireless communications interoperability specifically refers to the ability of public safety officials to share information via voice and data signals on demand, in real time, when needed, and as authorized."

[2] Public Safety Interoperable Communications Grant program, "Allowable Cost Matrix," at http://www.ntia.doc.gov/psic/CostMatrix.pdf.

[3] A summary of federal programs that offer grants for emergency communications expenditures is at http://www.safecomprogram.gov/NR/rdonlyres/132003E7-6C43-4E15-97D6-A2A4E5A2704F/0/GrantProgramsforSAFECOMWebsite.pdf.

[4] These were Department of Homeland Security, Federal Emergency Management Agency and Department of Justice, Office of Community Oriented Policing Services.

interoperable communications, but that CRS could not readily match with a specific goal for nationwide interoperability for first responders.

Based on the research conducted by CRS, there appear to be few federal sources that provide information on specific expenditures for interoperable communications. Information on actual equipment purchases, expenditures for planning, and other uses of federal grant money is primarily available at the state, county, or local level. Planning for interoperability at the federal level is primarily through goal-setting, such as in the *National Emergency Communications Plan.*[5] There does not appear to be any planning within the Department of Homeland Security for funding specific infrastructure goals, such as radio tower construction, that would contribute to the development of interoperable network connectivity nationwide. According to documents such as the "Audit Information and Preparation Toolkit" provided by FEMA for the PSIC program,[6] the effectiveness of invested dollars is judged by compliance with meeting program goals, or technology goals such as "adopts advanced technological solutions," "improves spectrum efficiency," and "uses cost-effective measures." This perspective is not likely to require specific tallies of expenditures by category and may explain the dearth of available information.

Following is a summary of the research undertaken and the information uncovered.

Department of Justice

In response to a query from CRS, the Department of Justice provided a spreadsheet showing total dollar amounts $399 million for grants made through the Office of Community Oriented Policing Services (COPS). This included grants from the Interoperable Communications Program for FY2003 through FY2006 and for the Technology Grants Program for FY2007. No grants were made from these programs in FY2008 through FY2010, but there were numerous earmarks for interoperability projects and technology grants.

Department of Homeland Security

In 2005, CRS obtained a summary from the Office of Domestic Preparedness at DHS that gave grant totals for an "Interoperable Communications Equipment Funding Report," by state, for 2004. The cumulative total was $925 million. Expenditures were through the Office of Domestic Preparedness, State Homeland Security Program, Law Enforcement Terrorism Program, Citizen Corps Program, Urban Areas Security Initiative, and Transit Security program; Texas and the District of Columbia were not included in the total.

An April 2007 report from the Government Accountability Office (GAO) stated that, "according to DHS, $2.15 billion in grant funding was awarded to states and localities from 2003 through 2005 for communications interoperability enhancements."[7]

Since fiscal year 2008, Congress has appropriated $50 million each year for the Office of Emergency Communications (OEC). These funds may be used for capital expenditures but, according to the OEC

[5] DHS, *National Emergency Communications Plan*, July 2008 at http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf

[6] Available at http://www.ntia.doc.gov/psic/content/AuditInformationPreparationToolkit_4%20pager.pdf.

[7] GAO, *First Responders: Much Work Remains to Improve Communications Interoperability*, April 2007, GAO-07-301.

website[8] and testimony before Congress,[9] the funds have been used primarily for planning purposes. Awards through the OEC appear on USAspending.gov.[10] Information on awards for 2009 is available; information for 2010 was not posted at the time this memorandum was being prepared. In 2009, $48.6 million was awarded for "Pilot Demonstration or Earmark Project" to agencies in: New York, California, Texas, Illinois, Florida, Pennsylvania, New Jersey, Ohio, Washington, Virginia, Georgia, Michigan, Massachusetts, North Carolina, Maryland, Arizona, Louisiana, Indiana, Missouri, and Minnesota. Details on how the funds were used are not provided.

Department of Commerce

The most detailed public federal record found by CRS regarding the funding of interoperable communications programs is descriptive information provided by each state as part of the PSIC grant application process.[11] The PSIC grant program is the product of several pieces of legislation.[12] Although the National Telecommunications and Information Administration (NTIA) was given responsibility by Congress to administer the grant program, the NTIA and the Department of Homeland Security (DHS) agreed to manage the program jointly; DHS supervises the grants but the grant information is available on the NTIA website.[13]

Grants through the NTIA's Broadband Technology Opportunities Program (BTOP) have also been used in part for interoperable communications. Appropriations for BTOP were part of the American Recovery and Reinvestment Act (P.L. 111-5).

Public Safety Interoperable Communications Grant Program

The end of FY2007 was established by Congress as the deadline for distributing PSIC grants from a fund of nearly $1 billion. To meet this deadline, a total amount was allocated to each state. The states were required to submit brief descriptions of envisioned projects and how grant requirements and guidelines would be met. One of the requirements was that states must have a State Communications Interoperable Plan that has been approved by DHS's Office of Emergency Communications. Actual expenditure amounts are reported as states tap their allocations. Under current law, the states and eligible territories have until the end of FY2011, with a possible extension to 2012, to use the funds made available to them.[14]

In the aspirational program descriptions states provided for PSIC grants in 2007-2008, they did not use standardized descriptions of planned expenditures. Some states, for example, identified projects by name,

[8] OEC website at http://www.dhs.gov/xabout/structure/gc_1189774174005.shtm.

[9] For example, Field Hearing on Cross-Border Interoperability Issues, House of Representatives, Committee on Homeland Security, Subcommittee on Emergency Communications, Preparedness, and Response , Statement for the Record, Chris Essid, Director, Office of Emergency Communications, U.S. Department of Homeland Security, February 19, 2008.

[10] CFCDA Program Number 97.055 at http://www.usaspending.gov/.

[11] PSIC grants by state at http://www.ntia.doc.gov/psic/awardsmap.html.

[12] For a history of the PSIC program, see CRS Report R40859, *Public Safety Communications and Spectrum Resources: Policy Issues for Congress*, by Linda K. Moore.

[13] A 2007 DHS Fact Sheet from 2007 provides a link to an NTIA web site for PSAIC grant updates: "Fact Sheet: Public Safety Interoperable Communications Grant Program" at http://www.dhs.gov/xnews/releases/pr_1184784268336.shtm..

[14] FEMA, Grants Program Directorate, Information Bulletin No. 337, November 23, 2009 at http://www.ntia.doc.gov/psic/IJ/wv.pdf.

such as the Los Angeles Regional Interoperable Communications System; other program descriptions gave a category for expenditures, such as "700 MHz networks" or "P25 upgrades." A spreadsheet on drawdowns provided by DHS gives only the amounts disbursed to single contact points for distributing grant monies – the Virginia Department of Emergency Management, for example.

In 2010, an audit by the Office of the Inspector General (OIG), Department of Commerce, provided PSIC grant amounts and drawdowns by state through March 31, 2010. At that time the drawdowns amounted to 31% of the $968.4 million made available through the PSIC program.[15] According to a spreadsheet provide to CRS by DHS/Federal Emergency Management Agency (FEMA), as of December 8, 2010, $436.5 million, roughly 45%, has been distributed to the designated state agency.[16]

The OIG has completed audits of PSIC grants in nine states that provide some information on how the grant money is being used.[17] Upon request from Congress, DHS can provide some additional information on the grants.[18] Determining how much of the PSIC grant dollars or any other grant monies went for specific items can probably only be realized by close examination of state, county, and other non-federal budget reports to local taxpayers.

Broadband Technology Opportunities Program Grants

Recipients of BTOP grants designated for interoperable communications include Los Angeles Regional Interoperable Communications System ($154.6 million), Adams County (CO) Communications Center, Inc. ($12.6 million), and Motorola, Inc. ($50.1 million) for a network serving the San Francisco Bay Area. Other BTOP grants are designed to fund broadband networks that will support public safety networks as well as other users.[19] In December 2010, representatives from each of the seven programs designated specifically as wireless public safety communications projects joined 300 other stakeholders at a public safety network technology conference at the Department of Commerce Research Laboratory in Boulder, CO. The program was sponsored by the Public Safety Communications Research program, a joint effort between the National Institute of Standards and Technology's Office of Law Enforcement Standards and the NTIA.[20]

[15] NTIA, *Second Annual Assessment of the Pubic Safety Interoperable Communications Grant Program*, Final Report No. OIG-11-001-A, October 7, 2010 at http://www.oig.doc.gov/oig/reports/2010/OIG-11-001-A.pdf.

[16] E-mail, December 21, 2010, from Christopher Rizzuto, Office of External Affairs / Legislative Affairs, DHS/FEMA.

[17] See http://www.oig.doc.gov/oig/reports/natl_telecommunications_inform/. The states are: Texas http://www.oig.doc.gov/oig/reports/2010/OIG-11-007-A_Abstract.pdf; Florida http://www.oig.doc.gov/oig/reports/2010/DEN-19886%20Abstract.pdf; Massachusetts http://www.oig.doc.gov/oig/reports/2010/OIG-11-003-A.pdf; California http://www.oig.doc.gov/oig/reports/2010/OIG-11-002-A.pdf; Pennsylvania http://www.oig.doc.gov/oig/reports/2010/OIG-11-002-A.pdf; Nevada http://www.oig.doc.gov/oig/reports/2009/DEN-19431.pdf; Louisiana http://www.oig.doc.gov/oig/reports/2009/DEN-19427.pdf; New York http://www.oig.doc.gov/oig/reports/2010/DEN-19886%20Abstract.pdf; and Arkansas http://www.oig.doc.gov/oig/reports/2010/DEN-19430%20Abstract.pdf.

[18] Telephone conversation, January 6, 2011, with David G. Turner, Program Analyst, Grant Programs Directorate, DHS/FEMA, 202-786-9646, david.g.turner@dhs.gov.

[19] Information on BTOP grants is reported in NTIA, *The Broadband Technology Opportunities Program*, "Overview of Grant Rewards," posted December 14, 2010 at http://www.ntia.doc.gov/reports/2010/NTIA_Report_on_BTOP_12142010.pdf.

[20] "Report from the Field: Advancing Public Safety Broadband Communications," posted December 30, 2010 at http://www2.ntia.doc.gov/node/695.

National Emergency Management Association

The National Emergency Management Association (NEMA) reported on interoperable communications expenditures in at least two of its biennial reports.[21] These reports provide summaries of responses to questionnaires sent to NEMA's members.

In 2006, NEMA reported that states estimated that it would cost $7 billion to achieve state-wide interoperability nationwide or reach levels required by each state's homeland security strategy. The average expenditure, per state, for states providing estimates of their projected costs, was $160 million. The report for that year also noted that DHS had invested an estimated $11 billion over a five-year period in grants to improve communications systems.[22]

In 2008, NEMA reported that the states' estimates of the cost of providing interoperable communications nationwide had risen to a total of $12 billion since the 2006 report. Obstacles to achieving interoperability that were cited in the report include: rapidly changing technologies that require repeated and costly investments; lack of cooperation among jurisdictions; and a lack of expertise and resources for proper planning.[23]

The 2010 Biennial Report carried no information about interoperable communications.

Estimated Federal Expenditures, 2001-2010

It was not until after September 11, 2001 that federal agencies began to give a high priority to programs that improved emergency communications and interoperability, to direct grants specifically for interoperable communications, and to provide totals for grants directed to these types of programs. Because of the proliferation of grant programs and earmarks, and because of varying levels of details in published information regarding federal grant programs, it seems difficult to prepare an accurate accounting of what has been spent and how, and CRS was unable to locate such an accounting. It is likely however that federal grants to improve emergency communications have exceeded $13 billion over the period 2001-2010, using the $11 billion for 2001-2006 reported by NEMA as the baseline.[24] Of that amount, at least $3.5 billion has been designated for interoperable communications, using the GAO reported total of $2.15 billion from 2003 through 2005, and adding expenditures from PSIC, OEC and BTOP programs. The amount expended through earmarks has not been totaled; although some earmarked funds might have been included in the baseline totals.

To discuss these findings, please contact Linda K. Moore at 202-707-5853, lmoore@crs.loc.gov.

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[21] National Emergency Management Association, biennial reports available through www.nemaweb.org.

[22] *NEMA 2006 Biennial Report*, page 26.

[23] *NEMA 2008 Biennial Report*, page 17.

[24] In FY2004, through an initiative dubbed RapidCom, the Departments of Justice and Homeland Security directed many of their grants to improve emergency communications program in major cities, significantly increasing the cumulative total of grants ascribed to emergency communications in the period 2001-2006. The next major federal grants initiative to improve emergency communications was the PSIC program. Grants for emergency communications in other years have tended to be less, as indicated by the totals provided by DOJ. Because of the different ways that different agencies have chosen to categorize emergency communications and because earmarks may or may not be included in these calculations, CRS chose to provide a low estimate of total federal grants – excluding earmarks – since September 11, 2001. A straight extrapolation of the $11 billion from the five fiscal years of 2001 – 2006 would provide an estimated total of $19.8 billion through FY2010.