

To: Members of the Legislative Audit Committee

From: Kunding, Corder & Engle, P.C.

Date: May 10, 2004

Re: Public Safety Communications Trust Fund

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## **Background**

The Public Safety Communications Trust Fund (Fund) was established pursuant to House Bill 98-1068 to purchase and maintain public safety radio communications systems for use by state agencies including, but not limited to, the Departments of Public Safety, Transportation, Natural Resources, and Corrections. Monies appropriated to the Fund come primarily from state capital construction funds and are being used to pay for the installation of a new digital trunked radio system, replacing the State's analog radio system. Replacement of the State's analog radio system was prompted by obsolescence issues, interoperability concerns, and coverage problems. Colorado's actions to replace its analog radio system parallel those being undertaken by other federal, state, and local public entities throughout the United States. The purpose of the new system is to provide a statewide wireless system that allows direct communications among agencies that must share information during an emergency. All Colorado state agencies and any local government agency desiring to participate will share the Digital Trunked Radio System once it is completed.

The Fund is administered by the Department of Personnel & Administration. When authorizing distributions from the Fund, the Executive Director of the Department of Personnel & Administration is directed by statute to consider the following factors:

- The need for achieving functional interoperability among local, state, and federal public safety radio communications systems by acquiring equipment that meets emerging technical standards for systems interoperability and open network architecture.
- The needs of local government entities that have recently invested in new radio systems, particularly with regard to interoperability.
- The promotion of an orderly transition from analog-based to digital-based radio systems.

Statutes also direct the Executive Director to keep an accurate account of all activities related to the Fund, including its receipts and expenditures. The State Auditor is further authorized to investigate the affairs of the Fund, severally examine the properties and records relating to the Fund, and prescribe accounting methods and procedures for rendering periodical reports in relation to disbursements and purchases made from the Fund.

## Digital Trunked Radio System

Planning for a digital radio system first began in 1991 in response to a Long Bill footnote and a performance audit of the Division of Telecommunications that was conducted by the Office of the State Auditor. In the Long Bill footnote, the Joint Budget Committee requested that the Division of Telecommunications, the Information Management Commission, and the Colorado State Patrol develop a statewide telecommunications plan to replace and update their existing communications systems. The 1991 audit of the Division found that the public safety radio system that existed then was “old, costly, and inefficient” and was “based on analog technology, which does not allow simultaneous interagency communications or sharing of resources.” These factors, as well as anticipated changes in the Federal Communications Commission’s rules aimed at making better use of the radio frequency spectrum, led to the changes that are under way.

A users’ group comprising state and local representatives developed the plan that is being used to govern system implementation. The plan, as updated in December 2003, includes seven phases, which are described in the following table.

<b>Digital Trunked Radio System Implementation Phases As of December 2003</b>			
<b>Fiscal Year</b>	<b>Project Phase</b>	<b>Counties</b>	<b>Status</b>
1999	I	Arapahoe, Denver, Douglas, Jefferson	Completed in Fiscal Year 2000.
2000	II	Adams, Boulder, Clear Creek, Gilpin	Completed in Fiscal Year 2000.
2001	III	Elbert, Weld, Morgan, Larimer, Phillips, Sedgwick, Yuma, Washington, Kit Carson, Cheyenne, Lincoln, Logan	Completed in Fiscal Year 2001.
2002	IV	El Paso, Pueblo, Fremont, Teller, Custer, Otero, Las Animas, Huerfano, Baca, Prowers, Bent, Kiowa, Crowley, Park, Chaffee	Some build-out; completion date to be determined.
	V	Mesa, Garfield, Rio Blanco, Routt, Moffat, Grand, Jackson, Pitkin, Lake, Eagle, Summit	Some build-out; completion date to be determined.
	VI	Archuleta, San Juan, Hinsdale, Montrose, Gunnison, Ouray, La Plata, San Miguel, Dolores, Montezuma, Delta	Some build-out; completion date to be determined.
2004	VII	Costilla, Conejos, Saguache, Alamosa, Rio Grande, Mineral	Received Homeland Security grant. Construction will start Summer 2004; completion date to be determined.
<b>Source:</b> Department of Personnel & Administration.			
<b>Note:</b> Completion dates for Phases IV through VII depend upon the availability of future funding.			

Initially, statewide installation of the Digital Trunked Radio System was expected to be completed by the end of Fiscal Year 2004 at a cost of nearly \$79 million. As shown in the table above, completion of the project has been delayed. According to the Department, the delay is due to funding constraints under the current budget environment. Installation continues but a final completion date has not yet been determined due to funding uncertainties. The Department anticipates that the final cost will not increase from what was originally planned.

## **Purpose and Scope of Review**

This review was conducted under the authority of Section 24-30-908.5, C.R.S., which authorizes the Office of the State Auditor (OSA) to review the activities of the Public Safety Communications Trust Fund. The OSA completed a financial and performance audit of the Public Safety Communications Trust Fund in January 2002, and the Department of Personnel and Administration provided a status report on the implementation of the recommendations from that report in January 2003.

The present review covers the period from December 1, 2001 to March 31, 2004, and was conducted by Kunding, Corder & Engle, P.C., under contract with the Office of the State Auditor. Kunding, Corder & Engle, P.C., was engaged to perform certain agreed upon procedures including interviewing Department staff to determine how the Department monitors and accounts for Fund activities; performing procedures to evaluate the adequacy of internal controls applicable to receipts and expenditures; and testing samples of receipts and expenditures to determine compliance with internal policies and contractual agreements. For the expenditures tested, we verified that the payments agreed to the supporting invoices or other documentation, were properly classified, that evidence of receipt of goods or services was obtained, and that the expenditure was consistent with Fund objectives. In addition we assessed the implementation status of the three recommendations from the January 2002 Financial and Performance Audit related to financial issues.

Appendix A contains a status report from the Department, updated as of August 2004, on its assessment of the implementation status of the seven recommendations from the January 2002 audit related to performance issues.

## Financial Overview

As stated previously, the total cost for the Digital Trunked Radio System is estimated to be approximately \$79 million. The Fund is primarily funded through capital construction appropriations. From Fiscal Year 2000 through March 31, 2004, a total of \$46.9 million has been expended for the Digital Trunked Radio System.

The following is a summary of revenue and expenditures for Fiscal Years 2002, 2003, and 2004 (July 1, 2003 through March 31, 2004 only):

<b>Public Safety Communications Trust Fund Revenue and Expenditure Summary For Fiscal Years 2002, 2003, and 2004</b>			
	<b>Fiscal Year 2002<sup>1</sup></b>	<b>Fiscal Year 2003</b>	<b>Fiscal Year 2004<sup>2</sup></b>
<b>Revenue</b>			
Capital construction appropriation	\$21,933,395	\$5,143,400	\$2,932,250
Federal grants	-	-	802,547
Interest income	1,116,417	355,235	92,193
<b>Total Revenue</b>	<b>\$23,049,812</b>	<b>\$5,498,635</b>	<b>\$3,826,990</b>
<b>Expenditures</b>			
Capitalized equipment <sup>3</sup>	\$21,396,849	\$4,741,555	\$1,608,557
Transfers out <sup>4</sup>	-	444,753	-
Noncapitalized equipment <sup>5</sup>	209,898	12,258	9,333
Equipment maintenance and repair <sup>6</sup>	116,792	160,630	122,203
Travel <sup>7</sup>	8,734	954	475
Construction expenses <sup>8</sup>	106,801	140,870	-
Professional services <sup>9</sup>	65,306	83,036	193,250
Miscellaneous operating expenditures <sup>10</sup>	29,015	4,096	10,717
<b>Total Expenditures</b>	<b>21,933,395</b>	<b>5,588,152</b>	<b>1,944,535</b>
<b>Excess of Revenue Over (Under) Expenditures<sup>11</sup></b>	<b><u>\$1,116,417</u></b>	<b><u>\$(89,517)</u></b>	<b><u>\$1,882,455</u></b>
<b>Source:</b> COFRS reports and Department of Personnel & Administration. Revenue and expenditures reflect adjustments identified during review of Fiscal Years 2002, 2003, and 2004, performed by Kunding, Corder & Engle, P.C. under contract with the Office of the State Auditor.			
<sup>1</sup> July 1, 2001 through November 30, 2001 amounts were reviewed by the Office of the State Auditor; December 1, 2001 through June 30, 2002 amounts were reviewed by Kunding, Corder & Engle, P.C.			
<sup>2</sup> Through March 31, 2004 (nine months of Fiscal Year 2004).			
<sup>3</sup> Includes items such as antennas and power supply equipment.			
<sup>4</sup> Payments to the General Fund for salaries related to the Fund.			
<sup>5</sup> Includes items such as connectors and cables.			
<sup>6</sup> Includes system parts and payments to Motorola, Inc. for maintenance and monitoring services.			
<sup>7</sup> Includes employee lodging and per diem reimbursements.			
<sup>8</sup> Includes construction to house part of the Digital Trunked Radio System.			
<sup>9</sup> Includes payments for engineers.			
<sup>10</sup> Includes items such as advertising, equipment rental, communication services, freight, software, vehicle leases and rentals, utilities, office supplies, dues and memberships and other purchased services.			
<sup>11</sup> The cumulative excess of revenue over expenditures remains in the Fund and does not revert to the General Fund per Section 24-30-908.5, C.R.S.			

## Comments and Recommendations

### Status of Prior Recommendations

The January 2002 Financial and Performance Audit report contained three recommendations related to financial issues. As of May 10, 2004, two of these recommendations have been implemented and one has not been implemented, as discussed below:

***Inventory Policy.*** The Office of the State Auditor recommended that the Department of Personnel & Administration establish a cost-effective internal policy governing the periodic inventory of components for the Digital Trunked Radio System (System). State statutes (Section 24-17-102, C.R.S.) direct state agencies to institute and maintain systems of internal accounting and administrative control that assure the proper safeguarding of state assets. State Fiscal Rules further require state agencies to ensure that all equipment owned by the State is properly accounted for when acquired, inventoried, and safeguarded through its useful life, and properly accounted for at the time of disposal. Completed parts of the System include, among other things, low-cost purchased components such as cable, which would be very time consuming to inventory. Neither the State Fiscal Rules nor the State Controller's Fiscal Procedures Manual requires agencies to inventory every item purchased for a project such as the Digital Trunked Radio System. Rather, agencies may develop their own inventory policies for situations such as this. The inventory protocol should balance the need for safeguarding assets with the time and effort needed to conduct a physical inventory. The 2002 audit stated that the policy was to include inventorying any items that are at high risk of theft, regardless of cost, such as radios.

*Partially implemented.* During the current review we found that the Department has developed informal policies and procedures related to tracking certain equipment. However, a physical inventory was not performed for some high-risk assets.

The Digital Trunked Radio System consists of a variety of equipment and infrastructure located throughout the State, totaling about \$46.9 million, as of March 31, 2004. Permanent fixtures, such as towers and antenna, total about \$23.4 million. A detailed listing of the radio towers and infrastructure is maintained and updated regularly by the Department's Business Service staff for parts when they are damaged and replaced. There are also detailed site documents provided by Motorola, Inc.

Portable and mobile radios account for about \$23.5 million, or 50 percent, of the \$46.9 million invested in the Digital Trunked Radio System as of March 31, 2004. A detailed Subscriber Inventory listing is maintained by staff that shows the location, manufacture, description, model, and serial number of all radios owned by the Department.

Approximately 900 radios, totaling about \$3.2 million, are stored in a locked facility within one of the Department's warehouses. A physical inventory of these radios is performed annually. In addition, an annual comparison is done between a detailed warehouse inventory listing and the Subscriber Inventory listing for these radios and any discrepancies are investigated.

However, the majority of the radios are in the possession of other state agencies. At March 31, 2004, about 5,800 radios totaling about \$20.3 million, had been checked out to other state agencies for their use. Currently, Department personnel depend on the agencies to contact them when a radio is lost, stolen, or damaged. While these radios are included on the internal Subscriber Inventory listing, this listing is only updated at the time a radio is checked out or when the Department is informed of a lost, stolen, or damaged radio. As such, the Department does not obtain adequate evidence that the radios were in the possession of the agencies at month- or year-end.

Since these radios are the property of the State and the Department is responsible for safeguarding these assets, it is important that the Department have adequate controls in place to determine that the capital assets exist and are properly accounted for on the State's records.

**We recommend that the Department of Personnel & Administration implement year-end physical inventory procedures over radios in the possession of other state agencies that include:**

- a. **Obtaining signed reports annually from agencies that have been assigned radios attesting that such radios exist and are in their possession.**
- b. **Comparing the results of the physical inventory with the internal Subscriber Inventory listing and the State's accounting system. Discrepancies should be identified, adequate documentation should be obtained to resolve these discrepancies, and appropriate adjustments should be made to the internal Subscriber Inventory listing and the State's accounting system.**

**Department of Personnel & Administration Response:**

Agree. The Department maintains a listing of all the radios issued to state agencies. Using this listing, we will require agencies at year-end to positively verify that our information is complete and accurate. We will research discrepancies and make necessary adjustments to the Subscriber Inventory listing and the State's accounting system. Implementation Date: June 30, 2005.

***Travel Reimbursement.*** During the January 2002 audit, the Office of the State Auditor noted that two vouchers out of the 25 tested had incorrect per diem rates for out of town travel. The Office of the State Auditor recommended that the Department of Personnel & Administration improve supervisory review of employee travel reimbursement vouchers.

***Implemented.*** All staff is provided with the latest travel and per diem rates. An additional level of review of the expenses was added to ensure compliance with fiscal rules. In our May 2004 review, we noted that the correct per diem rates were used in the items tested.

***Timely Payments to Vendors.*** During the January 2002 audit, the Office of the State Auditor noted that three vouchers out of the 25 tested were not paid in a timely manner (i.e., within 45 days of the date they were incurred). The Office of the State Auditor recommended that the Department of Personnel & Administration ensure that payments to vendors are processed in a timely manner.

*Implemented.* According to the Department, the previous delays were caused, in part, by the retirement of the staff member responsible for processing payables. The duties of the staff member were reassigned and cross-training was provided to minimize future delays. In our May 2004 review, we noted that payments were made in a timely manner for the items tested.

## Appendix A

### **Public Safety Communications Trust Fund Performance and Financial Audit Status Report from Department of Personnel & Administration Update on Performance Recommendations, August 2004**

The Office of the State Auditor (OSA) completed Public Safety Communications Trust Fund Performance and Financial Audit in January 2002. In January 2003 the Department of Personnel & Administration provided the OSA with a status report on all recommendations in the report. During 2004, Kunding, Corder & Engle, P.C., was engaged by the OSA to complete specific agreed upon procedures on the Public Safety Communications Trust Fund (Fund), which included assessing the implementation status of the three financial recommendations contained in the January 2002 report. In August 2004, the OSA requested that the Department provide an updated status report on the performance recommendations from the original audit that the Department had not assessed as implemented in January 2003.

The following is a summary of the performance recommendations from the January 2002 Financial and Performance Audit and the Department's assessment of their implementation status, including the date of the Department's assessment.

#### **Recommendation No. 1:**

The Department of Personnel & Administration should improve its efforts to identify, secure, and communicate potential funding sources for Digital Trunked Radio System implementation costs. This should include:

- a. Making a formal request through the budget process for funding to provide loans or other types of financial assistance to local governments desiring to participate in the system. If funding for loans is obtained, the Department should develop detailed procedures for loan administration. If funding for grants is obtained, the Department should work with the General Assembly to ensure it has the proper statutory authority to operate a grant program.
- b. Continuing to investigate potential alternative funding mechanisms for both state and local entities desiring to participate in the system and communicating this information via its Web site and other means such as newsletters and/or email.

#### **Department's Assessment of Implementation Status:**

- a. **Not Implemented.** (August 2004)  
The Department submitted a request for Fiscal Year 2006 for capital construction appropriations of approximately \$21 million to complete the remaining project phases. Due to continued fiscal constraints, it is unlikely that this request will be approved. Given that



the current budget situation will not allow for appropriations to fund build-out of the system, the Department did not specifically seek funding for loans. The Department will continue to work with the Office of State Planning and Budgeting regarding funding for providing financial assistance to local governments desiring to participate in the system.

b. **Implemented.** (August 2004)

This is a continuing and ongoing effort of the Department. The results are shared through the DTR Web site (<http://www.state.co.us/dtr>) and at various meetings with other state, local, and federal government participants.

A formal request for federal money was submitted on February 8, 2002 to Congressman Scott McInnis' office for \$38,388,000. On October 8, 2002, the Department and Office of Scott McInnis developed a formal request to members of the Committee on Appropriations in Washington, D.C. In 2003 the Department was awarded a federal grant of about \$1.5 million specific to construction of DTR in the San Luis Valley. Approximately \$1 million was received from the federal Department of Justice for continued construction on the Western Slope of Colorado. A revised formal request for approximately \$21 million was submitted in early 2004 through the office of Congressman Scott McInnis and the office of Senator Ben Nighthorse Campbell for the project.

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## **Recommendation No. 2:**

The Department of Personnel & Administration should improve its efforts to identify and resolve potential problems with the Digital Trunked Radio System. This should include:

- a. Continuing to test the system to ensure that it is providing 95 percent coverage along all major roads and highways across Colorado and periodically reviewing the cost-benefit of extending that coverage.
- b. Developing a formal approach for handling complaints and other feedback about the system. This approach should include, at a minimum, the following components: a standardized, well-publicized intake process; requirements for logging and periodically monitoring the status of complaints received; a standardized procedure for communicating with individuals who initiate a complaint; and guidelines for the timely investigation and disposition of complaints.

## Department's Assessment of Implementation Status:

- a. **Implemented.** (January 2003)  
Coverage testing for the eastern half of Colorado to 95 percent mobile radio coverage has been completed. A composite map has been provided to the Office of the State Auditor which depicts the areas tested. We did identify several areas that include a portion of the Boulder Canyon where the Digital Trunked Radio (DTR) does not provide coverage. These areas will be addressed with future funding when available.
  - b. **Implemented.** (January 2003)  
A Digital Trunked Radio System Manager was designated on June 1, 2002, supported by four layers of back-up personnel. Customer complaints and issues are routed through Communication Services at 303-866-2341 and the DTR Web site. Issues and complaints are normally resolved in the same business day as they are received. Monthly DTR technical and operational meetings are held to provide additional opportunity to discuss issues and opportunities.
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## Recommendation No. 3:

The Department of Personnel & Administration should develop a fiscal plan that encompasses the life cycle of the Digital Trunked Radio System. This should include:

- a. Estimating the costs for radio and infrastructure maintenance, replacement, and monitoring post-implementation.
- b. Making a formal request through the budgetary process as appropriate to gain ongoing funding for post-implementation needs.
- c. Working with the General Assembly in determining whether user fees should be implemented and, if necessary, in making statutory changes to allow the Department to charge user fees.

## Department's Assessment of Implementation Status:

- a. **Implemented.** (August 2004)  
Replacement costs for infrastructure and subscriber equipment are identified and included in the State's contract with Motorola and price agreement number 72500YYY01P. The Department submitted a Fiscal Year 2005 decision item and budget amendment for FTE and associated personal services and operating funding to create a statewide DTR system monitoring team to accommodate 24 by 7 monitoring and support of the system. These costs, current and ongoing, are identified in the aforementioned decision item and budget amendment.

- b. **Implemented.** (January 2003)  
Mandated budget reductions have not supported this request. Sufficient funds remain within the Public Safety Trust Fund for continued operational costs through Fiscal Year 2004.
  - c. **Not Implemented.** (August 2004)  
The Department partially agreed with this recommendation during the audit and was concerned that user fees would prohibit participation from local government users. The Department still believes that, given the current fiscal constraints, assessing user fees would be counterproductive at this time.
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#### **Recommendation No. 4:**

The Department of Personnel & Administration should improve the performance measures for the Digital Trunked Radio System. This should include:

- a. Developing performance measures that address the ongoing performance of the system. These measures should be periodically reviewed and updated throughout the life of the system.
- b. Clearly and formally reporting performance annually to the General Assembly.

#### **Department's Assessment of Implementation Status:**

- a. **Implemented.** (January 2003)  
The Department had identified performance measurements consistent with this recommendation and purchased hardware in 2001 to gather information and generate reports. The hardware was installed in July of 2002. Detailed daily, weekly, and monthly system status reports are now generated. The information from these reports allows Communication Services to proactively manage and maintain the DTR system without interruption in service to our customers.
  - b. **Implemented.** (January 2003)  
Formal detail reporting of performance to the General Assembly will be included beginning with the Fiscal Year 2004 budget request.
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#### **Recommendation No. 5:**

The Department of Personnel & Administration should work with the General Assembly to introduce legislation to eliminate the statutory requirement for the Executive Director to report all Public Safety Communications Trust Fund activity to the State Auditor on an annual basis (Section 24-30-908.5(6), C.R.S.)

## **Department's Assessment of Implementation Status:**

### **Implemented.** (August 2004)

The Department supported Senate Bill 03-052 that eliminated the reporting requirement.

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## **Recommendation No. 6:**

The Department of Personnel & Administration should work with the Digital Trunked Radio System users' group to develop, implement, test, and periodically update a comprehensive disaster recovery plan for the Digital Trunked Radio System.

## **Department's Assessment of Implementation Status:**

### **Partially Implemented.** (August 2004)

The technical aspects of this requirement are implemented. The Digital Trunked Radio System was designed with multiple levels of redundancy to minimize catastrophic failure. The system can assign resources dynamically during natural and man-made disasters to provide communications when you absolutely must have them.

The operational disaster plan is in progress. The Department drafted a basic plan consistent with the original 1995 "Digital Trunked Radio Plan" and will work with all state and local government participants of the DTR users group to finalize this plan.

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## **Recommendation No. 7:**

The Department of Personnel & Administration should establish agreements with all local governments sharing Digital Trunked Radio System infrastructure and/or equipment sites. At a minimum, such agreements should define each party's responsibilities for providing, installing, and maintaining equipment; establish fee schedules for sharing equipment and/or space; and specify procedures for accessing sites.

## **Department's Assessment of Implementation Status:**

### **Implemented.** (January 2003)

An MOU, Memorandum of Understanding boilerplate, was developed and accepted by the Department's legal personnel in January 2002. This boilerplate MOU has been used in the last three communications site infrastructure agreements with local government agencies. These agreements define each party's responsibilities for providing installation and maintaining equipment, schedules for sharing equipment and/or space; and specifying procedures for site access. A copy of one such agreement has been provided to the Office of the State Auditor.

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