

ALASKA STATE LEGISLATURE

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SUMMARY OF: A Special Report on the Department of Military and Veterans Affairs and Department of Administration, Alaska Land Mobile Radio project, September 21, 2005.

PURPOSE OF THE REPORT

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we conducted a performance audit of the implementation of the Alaska land mobile radio (ALMR) project. Our review primarily involved the Department of Military and Veterans Affairs (DMVA) and the Department of Administration (DOA).

REPORT CONCLUSIONS

We were directed to review and assess various issues related to the implementation of the ALMR project. ALMR is a joint project among federal, state, and local governments. For its part, the State has not effectively or consistently managed the ALMR project. The State's uncoordinated and inconsistent management of the project has contributed to the following deficiencies:

- Estimates of project costs appear unsupported and based on funding
- Loan proceeds were inappropriately used to finance purchases made by DOA
- Some costs and contracts were not consistent with funding conditions or the procurement code
- Operating site information is incomplete
- DOA did not specifically identify and allocate expenditures on a site-by-site basis
- There is insufficient data to estimate annual operating costs of the project
- There has been inadequate outreach and recruitment of potential ALMR users
- The scope of the project was changed without approval from the ALMR Executive Council

In recent months, DMVA has made significant effort to improve the State's oversight and control of the project. While we recognize this, we still believe there are important improvements to be made in the way the State carries out its share of responsibilities.

FINDINGS AND RECOMMENDATIONS

1. The ALMR project manager should take steps to develop a more comprehensive, better supported cost estimate for the project.

The project manager should develop a comprehensive cost estimate using actual historical expenditure information now available. This information can then be used to estimate the costs of the approximately 51 remaining sites. It is also necessary to develop a better estimate of radio costs.

2. Department of Military and Veterans Affairs (DMVA) project and administrative support managers should continue making improvements in the oversight of the ALMR project.

In August 2004, responsibility for the project was transferred to DMVA from the Department of Administration (DOA). In March 2005, DMVA appointed a new project manager to oversee the ALMR project. Many of our findings stem from actions or inactions of the prior DOA project managers.

We identified a wide range of deficiencies, such as: (1) unallowable expenditures paid with grant funds, (2) lack of project documentation, (3) incomplete and inaccurate cost information for both individual sites and the project as a whole, and (4) changes to the project scope done without approval by the ALMR Executive Council.

3. The director of DOA's Enterprise Technology Services should ensure that site records are current and complete.
4. The director of DOA's Enterprise Technology Services should establish a tracking method to ensure all costs associated with operations and maintenance of the ALMR system are identified and recorded appropriately.

October 21, 2005

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 of the Alaska Statutes, the attached report is submitted for your review.

DEPARTMENT OF MILITARY AND VETERANS AFFAIRS
DEPARTMENT OF ADMINISTRATION
ALASKA LAND MOBILE RADIO PROJECT

September 21, 2005

Audit Control Number

09-30021-06

This audit addresses various issues pertaining to the implementation of the Alaska land mobile radio project. Specifically the issues included: (1) the project funding and expenditures, (2) the issuance and current status of various federal licenses, (3) the identification of project sites, (4) total project costs, (5) annual operation and maintenance costs, (6) recruitment of prospective ALMR system users, (7) the projected date of project completion, and (8) the overall adequacy of project management.

The audit was conducted in accordance with generally accepted government audit standards. Fieldwork procedures utilized in the course of developing the findings and discussion presented in this report are discussed in the Objectives, Scope, and Methodology.

Pat Davidson, CPA
Legislative Auditor

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OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we conducted a performance audit of the implementation of the Alaska land mobile radio (ALMR) project. Our review primarily involved the Department of Military and Veterans Affairs (DMVA) and the Department of Administration (DOA).

Objectives

The objectives of the audit were to:

- Review past, present, and future funding and expenses to assess if sufficient funding has been obtained for the project costs
- Determine project completion date and identify major milestones
- Review the progress made in obtaining the necessary federal permits and licenses for the project
- Identify the sites selected for the project and the ownership status of any real property including land usage costs
- Determine site preparation and equipment costs for the project
- Estimate recurring annual operation and maintenance costs
- Determine level of local government support for the project and willingness and ability to pay future operating costs
- Evaluate the management as to its effective and efficient oversight of the project

Scope and Methodology

The ALMR project is a joint effort between the State and the Department of Defense Northern Command (DoD). While we have access to state records, we not have the same access to federal records. However, we do not believe any records, material to this audit, were withheld by DoD. Our scope included the implementation of the ALMR project from inception through August 31, 2005. More specifically our field work included the following:

- Review of departmental and division policies and procedures
- Analysis of financial reports from the State accounting system
- Interviews of personnel from state, federal, and municipal agencies
- Test for compliance of the supporting documentation for 53 judgmentally-selected, high dollar ALMR expenditures in the time period of FY 98 through FY 05¹
- Examination of project files for site, funding, and cost documentation
- Analysis of applicable grants and grant applications for compliance with program requirements
- Attendance at the ALMR Executive Council meetings and review of past meeting minutes
- Review a federally funded contractor study of the implementation of the ALMR project

¹ FY 05 expenditures included July 1, 2004 through December 31, 2004.

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ORGANIZATION AND FUNCTION

The Alaska land mobile radio (ALMR) system is a two-way radio system that will provide interoperable,² effective, and secure communication for local, state and federal agencies. These agencies will be able to talk to each other “in instant real time” rather than “one to one” communication.³ The ALMR system uses standards set by and endorsed by the Association of Public Communications Officers for interoperability.

A unique feature of the ALMR project is that it is governed by a cooperative of state, federal, and local government agencies. The ALMR Executive Council steers the course of the project. The council was set up in 1995 and is composed of four representatives⁴ - one of each from the State, the Department of Defense Northern Command (DoD), the Alaska Municipal League, and the Federal Executive Association of Alaska (federal non-DoD agencies). Once the ALMR project is completed the Executive Council will disband. At that time, a users’ council⁵ will assume the leadership. The users’ council will decide operational policies, procedures, and actions. The users’ council will also play a role in outreach to the local communities.

The State and DoD have shared financial responsibility for the project. As a result, these agencies jointly manage the project. Each has a project manager that is responsible for different aspects of the project but both report to the Executive Council. It is anticipated that the representatives of the non-DoD agencies and the Alaska Municipal League will become more active in the project once the sites are operational and the users’ council is formed.

Project management for the State was first assigned to the Department of Administration (DOA), Enterprise Technology Services (ETS).⁶ ETS has the responsibility for and oversight of the State’s automated data processing and telecommunications resources and services. Under state law,⁷ ETS is responsible for the study, design, implementation, and management of the state telecommunications systems and services. ETS is also responsible for the maintenance of the State Telecommunications System (SATS) which ALMR is utilizing as its structural backbone.

In August of 2004, the Office of the Governor moved the management of the ALMR project to the Department of Military and Veterans Affairs (DMVA), Office of the

² Interoperability is defined by the FCC as

...an essential communication link within public safety and public service wireless communications systems which permit units from two or more different entities to interact with one another and to exchange information according to a prescribed method in order to achieve predictable results.

³ Such as talking on a cell phone where only one person can talk at a time.

⁴ The representatives from each of these groups have changed throughout the years due to changes in administration, duty stations, and employment.

⁵ As of March 30, 2005 the Executive Council was in the planning process for the users’ council.

⁶ Prior to December 2003, the Enterprise Technology Services was named the Information Technology Group.

⁷ Alaska Statute 44.21.020(10).

Commissioner/Adjutant General.⁸ The ALMR system was designed as a tool to be used by first responders and public safety officials to aid in public safety. This objective was compatible with the mission of the Division of Homeland Security/Emergency Management, which is housed as well under DMVA.

The transfer of responsibilities for ALMR was documented in the 2004 Memorandum of Agreement (MOA) between DOA and DMVA. The MOA sets out the responsibilities of each department. DOA will continue to operate and maintain SATS. DMVA will assume responsibility for the project completion, funding, and expenditures. However, the most recent appropriations⁹ for the ALMR project were allocated to DOA making it difficult for DMVA to manage the project.

The State project office is budgeted for five positions. The project office staff is composed of a project manager,¹⁰ a program coordinator, a project coordinator, and two communications engineer II positions. The project manager reports to the Deputy Commissioner of DMVA.

Once the installation of ALMR is complete and the system fully operational, the State project office will dissolve. The communications engineer II positions will be absorbed by DOA. At that time, DOA will be responsible for the maintenance and operations of the ALMR system and for administrating the user fees.

⁸ In FY 06, the ALMR project office was moved to a new DMVA division, Alaska Statewide Emergency Communications.

⁹ Ch. 6, SLA 2005 and Ch. 3, FSSLA 2005.

¹⁰ Since DOA hired the initial state project manager in June 2001, the job has changed hands twice. The first project manager was employed from June 2001 to May 2003. The second project manager's employment was from August 2003 to March 2005. The third was hired in March 2005.

BACKGROUND INFORMATION

A highly functional two-way radio system is an essential tool for governmental agencies to respond to emergency situations. Such a system permits efficient, secure, and flexible communications for first responders and public safety officials. Federal, state, and local government emergency response agencies in Alaska are using a wide variety of older radio communication systems as the primary means of emergency response communication.

These communication systems have been built by a variety of manufacturers, have been implemented independently, and utilize different portions of the radio frequency spectrum. This often results in an inability of various government agencies to effectively communicate with one another as necessary when responding to an emergency situation.

It is critical that first responders, public safety officials, and other agencies have interoperability capabilities to effectively operate in today's heightened security environment. Such concerns have become more critical since the attacks of September 11, 2001.

Initiative to establish interoperable statewide radio system began in 1995

The Alaska land mobile radio (ALMR) project began in September 1995 with the creation of the statewide Federal Land Mobile Radio Service Migration Council, currently known as the ALMR Executive Council (council). The council's founding charter set the following objective:

*The [ALMR] Executive Council will define, develop and coordinate a migration plan to provide a cost shared land mobile radio communication service encompassing participating federal users within the state of Alaska. The [land mobile radio] migration plan shall facilitate approved users within the state to access and utilize this service, thus improving the **communications interoperability** and mission support capability **of each user during day to day operations, contingency and disaster response**. [Emphasis added]*

The originating charter was amended in 1997 to include state and local agencies, resulting in a restructured partnership among the U.S. Department of Defense Alaskan Command (DoD), the Alaska Municipal League, and the State of Alaska.¹¹ During April 2001, the council received approval through a memorandum of understanding among the State, DoD, the Federal Executive Association of Alaska,¹² and the Alaska Municipal League to “move

¹¹ Initial management over the implementation of the ALMR system was the responsibility of the Department of Administration's Information Technology Group. During December 2003, the name was changed to Enterprise Technology Services.

¹² The Federal Executive Association of Alaska consists of any and all federal government entities, agencies, and organizations, other than the Department of Defense, that will use the shared ALMR system infrastructure.

forward with implementation of a cooperative solution” that meets the needs of the federal, state, and local agencies for “mutual aid, disaster response and crisis management as well as day-to-day operations.”

State sites were evaluated and selected for inclusion in the ALMR system

It was originally determined in 2001 that 87 existing communication sites, operated by a variety of entities, would be included in the ALMR system. Most of the system would be made up of 70 state-operated sites. The rest would involve 10 sites operated by DoD or another federal government agency, and 7 sites operated by a local government entity or private-sector company.

In order to be utilized for ALMR purposes, the infrastructure at the sites had to be upgraded. Responsibility for these infrastructure upgrades was shared between the State and DoD. In general, infrastructure costs fell into two categories: (1) site preparation and (2) equipment purchase and installation. The State was initially responsible for the site preparation work at the 70 sites it operated. DoD was responsible for buying and installing the equipment at 57 sites, with the State being initially responsible for the remaining sites. However, over time, the number of sites and responsibilities has changed. (Refer to the Subsequent Event section of this report.)

The ALMR equipment manufacturer was selected through a Request for Information (RFI)

With the approval of the council, the Department of Administration’s (DOA) Information Technology Group sent out a Request for Information (RFI) in June 2002 to determine if any competition existed for ALMR-compliant equipment. The RFI required the communication vendors to

. . . provide all equipment, project management and system engineering services in support of the final design, implementation, acceptance testing, training and maintenance support. . . .

The RFI was sent to 11 communication vendors involved with manufacturing or selling communication equipment.¹³ Five responded to the RFI, and it was determined that Motorola, Inc., was the only vendor capable of both providing and installing equipment required for ALMR.

¹³ ALMR RFIs were sent to the following communications companies:

Bendix/King	Daniels Electronics, Ltd.	E.F. Johnson Company
Ericsson, Inc.	ICOM America, Inc.	JPS Communications, Inc.
Kenwood Corporation, Inc.	M/A-COM	Motorola, Inc.
Relm Wireless Corporation	Thales Communications, Inc.	

Accordingly, project managers sought award of a sole-source contract, under the authority of a Request for Alternate Procurement (RAP). A contract was let with Motorola, Inc. under the RAP to cover procurement and installation of equipment.

The State started work on a group of seven sites in September 2002. In February 2003, the work on these sites (plus an eighth site added at the request of DoD) was completed. In March 2003, a demonstration training exercise, Northern Edge, was conducted in Valdez that successfully demonstrated interoperability of the land mobile radio system concept.

To make sure there was compatibility within the ALMR system, DoD has also contracted with Motorola, Inc., for the manufacture and installation of communication equipment. Further, DoD contracted with Motorola, Inc. for system management and maintenance for the sites for which DoD is responsible.

Completion deadline is set by the Federal Communications Commission (FCC) waiver

In order to achieve interoperability, ALMR managers had to get a waiver from the FCC. Such a waiver was necessary to permit the varied users to share radio frequencies. ALMR initially submitted a waiver request in September 2002. The waiver was approved in August 2003.

In September 2002, the State's project management office began submitting the necessary FCC applications for each of the 92 licenses that it was responsible to obtain. (See Appendix A for detail.) As of March 2005, the project office had obtained these FCC licenses. As to the requested waiver, if the sites are not completed prior to December 31, 2006, the waiver expires. However, DMVA plans to file for an extension. (See the Subsequent Event section of this report.)

The total cost estimate for the ALMR project has repeatedly been set at \$151 million

Since 2001, the ALMR project cost estimate has repeatedly been put at \$151 million. While the overall total has remained constant, both the composition of the costs and the estimated share of the costs contributed by each level of government users have fluctuated.

Specifically:

1. Composition of costs. The project's cost estimate is divided between two major components - infrastructure and radios. As discussed, the infrastructure component can be divided between preparatory construction work at various communication sites and the costs involved with acquiring and installing the necessary equipment. The radio component represents the costs involved for prospective users to convert to radios that are operable with the new ALMR system technology.

The infrastructure component was originally estimated at about \$60 million in September 2001. Most recently, in March 2005 this component was estimated at

\$100 million. The cost estimate for the infrastructure component has ranged from \$50 million to \$100 million over the last three years.

Development of interoperable communications will require all users to acquire radio communication gear that will meet ALMR operating standards. The cost estimates for the radio units have also varied, but generally were put at the value necessary to make up the balance of the \$151 million total estimate. The September 2001 estimate for projected total radio replacement and upgrade costs, for all users, was \$94 million. The most recent March 2005 estimate puts these radio costs at \$51 million.

One factor in the declining radio cost estimates is that the electronics involved have become less expensive over time. Since the ALMR project involved a relatively new technology, the price of the new radios to work with the system was higher than other radios. Initially, only Motorola, Inc. was able to provide ALMR-compliant radios. In recent years, other telecommunication companies are manufacturing ALMR-compliant radios, which results in more competitive pricing for the units. Further, as the market continues to expand and more vendors manufacture the ALMR-compliant radios, it is anticipated the cost for the radios will continue to drop.

2. Federal grants provide the funding for much of the local and state government share of the project costs. The most recent project cost estimates allocate the costs among local, state, and federal governments. Although funding will be coming from various local governments for the project, it is important to realize that the source of much of this funding is expected to be federal grant funds received by the communities involved.

Likewise, a substantial amount of the State's contribution to the ALMR project is expected to eventually come from federal funds routed through the state treasury. As discussed further in this report, currently general fund (GF) appropriations make up the bulk of the State's contribution.

Currently, the source of most funding for the State's share of costs comes from the General Fund

As summarized in Appendix D to this report, appropriations for the State's share of ALMR project costs began in 1997. By 2000, the legislature had appropriated \$1.6 million. In 2001, state project managers sought over \$16.6 million in legislative appropriations for ALMR. The project was identified as critical to improving Alaska's security and emergency response readiness.

The request was further made more attractive by the amount of federal funding participation, which made up almost \$15 million of the funding request. At the end of the 2001 legislative session, the State's GF and other state contributions to the ALMR project, as measured by appropriations, stood at about 17 percent of the State's total contribution.

Even though they had little federal funding in hand and the State needed to start work on ALMR sites, project managers made no request for funding from the 2002 legislature—apparently intent on waiting for receipt of anticipated federal funding.

By the 2003 legislative session, the State had received only \$2 million of the almost \$15 million in federal fund appropriations. Project managers were still not actively seeking out federal funding; they appeared to believe that funding would be “earmarked” for the project in an upcoming federal appropriation from the U.S. Congress.

In 2003 and 2004, the legislature appropriated a total \$811,000 from the General Fund for the project to cover administrative costs. In 2005, the legislature appropriated funding of more than \$16 million in GF and other state funds authority to meet state construction obligations.

At the start of FY 06, GF and other state funds made up about 75 percent of the more than \$22.8 million of available ALMR appropriations. Project managers still anticipate receiving over \$5.2 million in various federal grant funds. These funds, if received, would lower the State’s contribution to just over 60 percent of available appropriations for the project. Also, project managers continue to anticipate a \$13 million federally-earmarked appropriation for ALMR. Receipt of these earmarked funds would reduce the State’s contribution to 41 percent of available appropriations. The history and source of the appropriated funding and received revenues are summarized in Appendix D.

Federal funding to the State for ALMR has been received in lesser amounts and more slowly than originally anticipated. The impact of these delays was offset by the stepped-up work by DoD. The delay in lining up federal funds shifted a large part of the work, and associated cost, to DoD. When it became clear the State was going to be delayed in its site construction work at various sites, DoD managers took on the responsibility of performing this work at more sites than originally planned. Essentially, rather than fund project work through the federal funds flowing through the state treasury, the federal government funded much of the work directly.

With federal funding not available, state managers began work using loan proceeds

Although the ALMR project had received over \$14 million in federal funding authorization in 2001, by mid-2002 no federal funds had yet actually been collected. A \$2 million grant from the U.S. Department of Justice’s Community Oriented Policing Services (COPS) program had been allocated and awarded for ALMR-related equipment, but had not yet been actually received by the State.

Even though ALMR managers needed to purchase and install equipment at seven sites for which the State was responsible, no application for any other federal funds had been made by mid-2002. However, project managers did have plans to seek a grant from the National Institute of Justice (NIJ). The cost for equipping the seven sites was \$4.2 million.

Since the COPS funding was not yet in hand and the NIJ grant had not even been applied for, project managers sought the advice of the ALMR Steering Committee. This committee is made up of the commissioners of the Departments of Administration, Public Safety, Military and Veterans Affairs, and the director of the governor's Office of Management and Budget. In early June 2002, the steering committee decided to borrow the funds, through a capital lease agreement,¹⁴ necessary to buy and install the equipment. Proceeds from the COPS and NIJ grants would then be used to pay the loan off as it came due.

¹⁴ The loan was obtained under a Master Financing Contract between the Department of Revenue and Key Municipal Finance, a division of Key Corporate Capital Inc.

REPORT CONCLUSIONS

We were directed to review and assess various issues related to the Alaska land mobile radio (ALMR) project. ALMR is a joint project among federal, state, and local governments. For its part, the State has not effectively or consistently managed the ALMR project. The State's uncoordinated and inconsistent management of the project has contributed to the following deficiencies:

- Estimates of project costs appear unsupported and based on funding
- Loan proceeds were inappropriately used to finance purchases made by Department of Administration (DOA)
- Some costs and contracts were not consistent with funding conditions or the procurement code
- Operating site information is incomplete
- The DOA did not specifically identify and allocate expenditures on a site-by-site basis
- There is insufficient data to estimate annual operating costs of the project
- There has been inadequate outreach and recruitment of potential ALMR users
- The scope of the project was changed without approval from the ALMR Executive Council

In recent months the Department of Military and Veterans Affairs (DMVA) has made significant efforts to improve the State's oversight and control of the project. While we recognize this, we still believe there are important improvements to be made in the way the State carries out its share of responsibilities. Each of our conclusions is discussed further, as follows.

Estimates of project costs appear unsupported and based on funding

From the beginning of the ALMR project, state managers have not had a reliable estimate of the project's total costs. Project managers have repeatedly set the total cost of the project at \$151 million, although closer examination of this estimate raises questions as to its basis and underlying accuracy.

Exhibit 1

Changing Composition of the \$151 Million ALMR Project Cost Estimate (in Millions)					
Date of Estimate	Infrastructure Costs (each user group's "share"[†])				Radio Costs
	Local	Federal	State	Total	Total cost estimate for all users
September 2001	\$ 0	\$25	\$32	\$ 57	\$ 94
September 2002	(estimate not allocated among user groups)			\$ 67	\$ 84
October 2003	\$ 0	\$25	\$25	\$ 50	\$101
December 2004	\$20	\$35	\$21	\$ 76	\$ 75
March 2005	\$14	\$63	\$23	\$100	\$ 51

[†] Much of the funding categorized as state and local shares is very likely, to a substantial extent, to be made up of federal funding flowing through the state or local government entity.

Source: ALMR presentations for 2001 through 2004 and Total Cost of Ownership Report dated March 2005.

The \$151 million estimate is most recently set out in a Department of Defense (DoD) consultant study. In this March 2005 estimate, infrastructure costs are put at just over \$100 million—twice the amount estimated for this component in October 2003 (See Exhibit 1). The balance of \$51 million is estimated to be needed to cover the cost of switching to new radio equipment. Earlier cost estimates, while still pegging the total project cost at \$151 million, varied in the amount allocated for radio costs. This component was estimated at \$84 million and \$101 million at various times over the last four years.

With the exception of the September 2001 and 2002 cost estimates, all projections, including the most recent one, were developed from actual and projected available funding. The September 2001 and 2002 estimates do appear to have been developed, in part, from site-by-site estimates of how much equipment would be needed at each site, and how much it would cost to buy and install. Additionally, there were cost estimates, by site, for site preparation construction. When we compared actual costs for selected sites,¹⁵ as reflected in state and federal contracts, with the 2002 estimated cost for each site, the estimates were found to be understated by more than two-thirds.

While this analysis is consistent with the doubling of the infrastructure component estimate from \$50 million in October 2003 to \$100 million in March 2005, we hesitate to estimate how much the final cost of the infrastructure component of the project will be. Likewise, it is unclear how the estimate for radio costs has been developed. It appears that the estimate for

¹⁵ Forty-eight site preparation, equipment, and installation costs identified in the DoD and state contracts were compared against cost estimates.

these costs has essentially been the difference between the \$151 million overall cost figure and the latest amount allocated for infrastructure.

The current cost estimate for the radio component is \$51 million. This estimate is approximately half of the \$101 million estimate made in 2003. As discussed previously, there are commercial factors that likely have resulted in radio electronics becoming less expensive. However, we cannot estimate if these savings are great enough to account for the cutting in half of the cost estimate for radio electronics. As with the infrastructure component, no detailed needs assessment has been done that includes cost information related to various types of radio configurations as well as overall cost calculations generated from this information. See Recommendation No. 1 for further discussion.

Loan proceeds were inappropriately used to finance equipment purchases made by DOA

Project managers, with upper-management approval, financed the State's first ALMR system equipment acquisition and installation through the use of a capital lease. Although such lease agreements are common when acquiring large capital items to be eventually paid for with bond proceeds; in this instance, the use of such financing was done to compensate for inadequate financial planning. The standard agreement requires state agency managers to certify that funding is in place to repay the loan, and if necessary, the agency involved will seek legislative appropriations to pay the loan in the future.

At the time the \$4.2 agreement was signed in September 2002, the State only had a grant commitment for \$2 million. The application for National Institute of Justice (NIJ) grant funding had not yet been completed. Such a situation was inconsistent with the financing agreement's requirement that the DOA "*reasonably [expected]*" to have on hand "*legally available*" funds to repay the loan.

Some costs and contracts were not consistent with funding conditions or procurement code

When the NIJ funding was eventually awarded, most of the project expenditures paid for with the funds were not covered by the agreement's specific conditions.¹⁶ The NIJ agreement lists specific sites and allocates the funds to each site for equipment. As of March 2005, over \$1.7 million of the NIJ funds were used to make capital lease payments and to purchase equipment for sites other than those listed in the cooperative agreement. Subsequent to the inappropriate expenditure of the NIJ cooperative agreement funds, DMVA requested an amendment to the agreement to cover the actual sites that received the equipment. The request was approved by NIJ on September 16, 2005.

The former project manager did not follow the state procurement code when making ALMR-related purchases. Although the project manager requested authority to use an alternative

¹⁶ NIJ has elected to enter into a cooperative agreement, rather than a grant, based on its programmatic responsibilities to assist and coordinate projects that deal with technology development and assessment.

procurement procedure through the RFI, the eventual contract between the State and Motorola, Inc. had multiple deficiencies.

Specifically, the contract was: (1) not approved by a contracting or procurement officer; (2) not reviewed, as required, by the attorney general for legality; and (3) not reviewed by DOA Risk Management to ensure contract language regarding insurance requirements was in compliance with state law. Essentially, although limited to a purchasing authority of \$2,500, the former project manager committed the State to a \$433,100 contract. Motorola, Inc. was notified during September 2004 of the invalid State of Alaska contract dated August 2004. A new contract was reviewed and signed by the necessary personnel during November 2004.

Operating site information is incomplete

File information for ALMR sites is incomplete. DOA and the DMVA project office still cannot produce a current list of all ALMR sites, including related information such as site owners, land use agreements,¹⁷ and land use costs for each site. (See the Subsequent Event section of the report.) In 2003 DOA, with the assistance of Department of Natural Resources,¹⁸ initiated a review of the site files for completeness. The review identified many deficiencies in the files, such as expired agreements; no agreements; missing documentation; unclear documentation; and, in some instances, no site file was available.

We conducted a follow-up review of the files. For some sites we were unable to identify the owners of the land, any existing land use agreements, and costs associated with the use of the property involved. Several rights-of-way, leases, and cooperative agreements in the files had expired. Site information was neither centrally located nor monitored through the use of an electronic database.

Up-to-date, well-documented site files and listings are important first steps in the management of the project. As written in the contracts, the State will provide site access for the contractors. Without knowing all the ALMR sites and the status of the land use agreements (leases, permits, or rights-of-way), the project management is placing the State at risk for liability. See Recommendation No. 3 for further discussion on site information.

DOA did not specifically identify and allocate expenditures on a site-by-site basis

DOA is responsible for administering the State telecommunications system (SATS). With the advent of ALMR, many of the SATS sites were included in the mobile radio project. It is important that costs associated with ALMR be identified separately from those related to SATS operations. During the time that DOA managed the project, ALMR costs were not identified and allocated on a site-by-site basis. Therefore, no comparison of actual costs incurred could be made with the 2001 or 2002 individual site cost estimates in order to validate a total estimated project cost.

¹⁷ Land use agreements include leases, permits, cooperative agreements, and rights-of-way.

¹⁸ Department of Natural Resources provided its expertise on the necessary land use agreements.

In August 2004, oversight of the project office transferred from DOA to DMVA. The administrative office at DMVA realized the necessity to track site costs, and has set up its accounting structure to do so. However, expenditures prior to that time were not specifically identifiable by site.

Because prior expenditures were not tracked in the state accounting system, actual site costs are unknown. Since most of the ALMR sites are also SATS sites, work performed on sites has not been monitored to ensure costs are being allocated to the appropriate communication component. Verification of work performed through contracts on the sites was not possible because specific tasks were not recorded on invoices or as backup for the invoices. This results in actual project and site costs being distorted.

It is important that project costs be tracked and summarized for each ALMR site. This is necessary not only to comply with specific grant or cooperative agreement requirements, but also for the effective management of the project and for accurate state property records.

There is insufficient data to estimate annual operating costs of the project

In 2002, ongoing maintenance work at SATS sites was provided through a contract with Alaska Communication Services (ACS), a private telecommunications company. ACS carried out the maintenance work as part of a comprehensive five-year telecommunications contract with the State. In 2003, the agreement was rescinded just prior to the cancellation of the comprehensive contract. In December 2003, DOA entered into a contract with General Communication, Inc. (GCI) for maintenance work, although the services were provided on an as-needed basis and billed based on time and materials used,¹⁹ rather than as ongoing scheduled maintenance.

The department still utilizes the GCI contract and has hired seven technicians in the past six months to also carry out ongoing maintenance at the State's communication sites. Additionally, DoD has hired contractors for maintenance of its sites that are part of the ALMR system.

Even though current maintenance costs are being effectively addressed, there is insufficient historical data to estimate a recurring annual operating cost for the ALMR system. The limited historical data was due to DOA's lack of effective tracking of SATS operations and maintenance (O&M) costs.

¹⁹ The term "time and materials" refers to repairs being done on an as-needed basis: essentially, when something breaks GCI is called to fix it.

There has been inadequate outreach and recruitment of potential ALMR users

Most state-affiliated entities and agencies²⁰ and DoD service units²¹ are committed to participating in the ALMR system. Some of the state agencies and organizations have expressed interest in participating, but are concerned about being able to obtain funding for the necessary radio equipment. Additionally, it is important that local communities be recruited to participate in using and, to a lesser extent, funding the project.

While there has been some outreach, state project managers have not provided the local communities with enough specific information to allow them to make an informed decision. The primary reason that effective outreach has been limited stems from the project office's inability to develop a reliable estimate of what the prospective cost to the user will be. Local communities are hesitant to commit to participating in using ALMR because of concerns about the lack of sufficient funding, including paying up-front radio equipment costs as well as knowing how much it will cost in ongoing user fees.

Out of seven communities we contacted, three (see Exhibit 2) expressed a reluctance to commit without knowing what the user fee will be.

DoD has funded a consultant study to develop some user cost estimates, but because of the insufficient state O&M cost data, the consultant has had to rely on O&M costs from another state as a basis for its study. The federally-funded study will provide various options for O&M procedures to be performed, a rate methodology for the system, and scenarios for DOA to recoup the O&M

Exhibit 2

Level of Participation		
Community	Committed	Subject to Costs Involved
City of Ester		✓
City of Kenai	✓	
City of Steese		✓
City of Wasilla	✓	
Fairbanks North Star Borough		✓
Matanuska-Susitna Borough	✓	
Municipality of Anchorage	✓	

costs through user fees. The lack of an accurate, workable project cost estimate, coupled with the lack of accumulating maintenance costs on a site-by-site basis, has limited the State's project office from providing critical information to prospective users. See Recommendations Nos. 1 and 4 for further discussion.

²⁰ As of March 31, 2005, the Alaska Railroad Corporation and the Alaska Marine Highway System have not committed to becoming participants.

²¹ Department of Defense service units refer to the U.S. Air Force, Army, Navy, and National Guard.

The scope of the project was changed without approval from the ALMR Executive Council

The initial scope for the ALMR project was for the construction and installation of 87 sites. In 2004, the former project manager felt there were insufficient sites for effective radio coverage and added four additional sites. Two of the sites were not existing SATS sites and required extensive work to become an ALMR site. The addition of the four sites cost the State an estimated \$2 million and increased the number of ALMR sites to 91.

The change in project scope was done without the approval of the ALMR Executive Council. The April 2003 council charter states:

The Project Team consists of members appointed by the Executive Council to carry out key roles in the system development and implementation process, to include defining the operations, maintenance and management life-cycle processes. The Executive Council is the final approval authority over these processes.

There was no indication in the council meeting minutes that the expansion of the scope to include the four additional sites was formally reviewed and approved by the council. See Recommendation No. 2 for further discussion.

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SUBSEQUENT EVENT

Subsequent to our fieldwork date of September 21, 2005, the Department of Military and Veterans Affairs, Alaska land mobile radio (ALMR) project manager, provided a more complete listing of the ALMR sites. This listing is included in the report as Appendix A.

As of September 30, 2005, there are now 105 ALMR sites, including controllers, consoles, bi-directional antennas, and key management facilities that require 94 Federal Communications Commission (FCC) licenses. The State has obtained 92 of the 94 FCC licenses it needs to obtain under the FCC waiver. Due to the State not obtaining sufficient funding, DOD did the site preparation, with some State assistance, on 11 sites that the State was originally responsible to complete.

As of September 30, 2005, there were 57 sites operational, leaving 48 to be completed before the FCC waiver deadline of December 31, 2006. In view of the work yet to be completed, the ALMR project manager stated that he is planning to apply for an extension of the FCC waiver deadline.

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FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

The Alaska land mobile radio (ALMR) project manager should take steps to develop a more comprehensive, better supported cost estimate for the project.

As reflected in the Report Conclusions section of this report, the ALMR project, at least on the part of the State, has not been planned or managed in a coordinated and consistent manner. Implementation of what appears to be a very worthwhile project has been impeded by the lack of planning, ineffective communication with other stakeholder groups, and inattention to developing an accurate accounting of costs on a site-by-site basis. In past years, funding needs for the project have not been clearly communicated to the legislature or the general public. Coordination of construction activities with partnering federal project managers has been lacking.

The first step in improving the planning of and communication about the project is to develop a better cost estimate. As discussed in the Report Conclusions section, the cost estimates for ALMR do not appear to have been developed from the projected costs involved with bringing the project on line. The project manager under the Department of Military and Veterans Affairs (DMVA), with the cooperation of the Department of Administration (DOA) staff,²² should develop a comprehensive cost estimate using actual historical expenditure information now available. By looking at expenditures incurred for construction at various sites and applying those costs to the approximately 51 remaining sites,²³ managers can develop a better documented, better supported, and presumably more accurate cost estimate of infrastructure construction.

Likewise, project administration-overhead should be easier to estimate given the last few years of management activity. It is also necessary to develop a better estimate of radio costs. Project managers should begin with an extensive needs assessment for each participating state agency, and should determine what costs will be involved to meet those needs.

In past years, we do not believe the legislature has been provided a clear, comprehensive picture of: (1) what the scope of the ALMR project entailed—especially in the area of necessary upgrading of radio equipment; (2) what the full costs of the project are likely to be; and (3) the share of costs that will be covered by the State's General Fund, compared with what federal funding may be available to meet the State's obligations.

²² The August 2004 Memorandum of Agreement between DMVA and DOA requires DOA to segregate ALMR expenditures and transfer custody of all records related to ALMR as well as other requirements.

²³ As of August 31, 2005, 41 of the 92 sites for which the State obtained FCC licensure, were completed, leaving at least 51 sites to be completed before the December 31, 2006, FCC waiver deadline.

Improved cost estimates, broken down by site, should allow managers to better project how much funding will be required for each construction season. Further, such cost information will provide a better basis for future funding requests, whether to the legislature or federal agencies.

Recommendation No. 2

Department of Military and Veterans Affairs (DMVA) project and administrative support managers should continue making improvements in the oversight of the ALMR project.

As reflected in the Report Conclusions section of this report, implementation of the State's management of the ALMR project has been neither effective nor appropriately focused. We identified and discussed a wide range of deficiencies, such as: (1) unallowable expenditures paid with grant funds, (2) lack of project documentation, (3) incomplete and inaccurate cost information for both individual sites and the project as a whole, and (4) changes to the project scope done without approval by the ALMR Executive Council.

Both the state and federal stakeholders, such as the Alaska State Legislature, want to know the actual cost of the project; however, it is unavailable. As a result of this ineffective management, a seemingly important and worthwhile project may not be operational by the end of 2006—the effective deadline established by the expiration of the FCC waiver. Further, sustaining ALMR operations through widespread adoption of, and funding for, the system by local government and other prospective users has become problematic.

As discussed in the Background Information section, in August 2004 responsibility for the project was transferred to DMVA from DOA. In March 2005, DMVA appointed a new project manager to oversee the ALMR project. Many of our findings stem from actions or inactions of the prior project managers. While we recognize that the change in project management may result in improvements in the oversight of the ALMR project, we offer the following suggestions for further improvement.

1. Improve recordkeeping. The project office was unable to provide pertinent information regarding the ALMR system, such as site preparation and equipment costs involved with each site and cost of the system as a whole. As stated in the Report Conclusions section, the current total estimated cost of the project according to the project office is \$151 million. Included in this amount is the projection of radio equipment costs²⁴ for federal, state, and local governments. This cost projection has no apparent basis, as the project office has no documentation supporting this cost estimate.

The magnitude of this project necessitates effective management. The project office should retain copies of pertinent documentation for the project. Even with the move of

²⁴ Radio equipment costs include the portable (handheld) and mobile (installed in vehicle) radios each agency will need in order to use the system.

the project office from DOA to DMVA, copies of all documents related to the project should have been kept.

We recommend that the project office, with the assistance of DOA staff, ensure all information related to the project is retained. Tracking of information by site, vendor, or contract would assist to ensure site information is obtained and complete. Records retention also assists with monitoring of funding and expenditures of the project.

2. Make better use of the state accounting system to track costs. As noted in the Report Conclusions section, the project office was not able to provide site preparation and infrastructure costs on a site-by-site basis. The DOA project managers did not utilize the state accounting system to track costs for the ALMR project by site.

Presently, the financial staff at DMVA has established project codes for each specific site. The project office should ensure all contracts entered into for infrastructure and preparation costs are detailed by site location. This allows for appropriate site costs to be allocated to the proper project code in the State accounting system. However, recent funding of \$12.5 million received for the project is being managed and disbursed by the DOA, which has not tracked costs by site. Since DOA received program codes from DMVA for each ALMR site, it is important that DOA track the expenditures of these funds to provide appropriate allocation between the two communication systems: ALMR and the State telecommunications system (SATS).

In order to capture the total cost of the ALMR project, the project office should also track the cost of the radios purchased by the state agencies using the state accounting system. In addition, local communities generally purchase radios with federal grant monies passed through by the State.²⁵ The project office should make an effort to keep track of the amount passed through and used for radios so these costs can be included in the total project cost.

3. Improve outreach and recruitment of local government (communities) users. The memorandum of agreement between the federal Assistant Secretary of Defense for Networks and Information Integration and the commissioner of the Department of Public Safety provides in part:

The state will strongly encourage all state and local entities to use the shared ALMR infrastructure, whenever feasible, to satisfy their radio communication needs.

Making the improvements in recordkeeping and accounting discussed in the preceding items will provide more information to be used in the outreach effort. Accordingly, this should result in a more effective recruiting effort.

²⁵ These grants are awarded to local communities by the Division of Homeland Security within DMVA.

As discussed in the Report Conclusions section, the primary reservation that prospective local government users have about participating in ALMR is costs—both the costs involved with acquiring new radio gear and the ongoing operating cost assessments they will be required to pay in future. The methodology and costs involved in recouping ALMR operation and maintenance costs are being addressed, to some extent, in the current consultant study being done by a U.S. Department of Defense Alaskan Command (DoD) contractor.

ALMR project managers need to develop a better understanding of the concerns of potential participants, and take steps to assemble the cost information necessary for the communities to make an informed decision. Focusing the outreach efforts on communities that currently are not interested will identify what their specific concerns and reasons are for not wanting to participate. The project office needs to conduct outreach efforts to these participants to address their concerns and reasons, further their understanding of the value of the project, and hopefully increase the number of participants.

To perform effective outreach to the communities and to show state government support for the project, it is important to have all appropriate state agencies that use radio communication as participants in the project. The project manager should provide assistance in obtaining grants for the state agencies that are unable to obtain sufficient funding to purchase the necessary equipment. Also, for the undecided state agencies, the project manager should continue recruitment efforts to identify and work to resolve their concerns.

During the initial outreach process, communities should be evaluated based on their level of commitment towards the ALMR project. From our interviews with officials in the communities listed in Exhibit 2, we determined there was still a great deal of ambivalence about getting involved with the ALMR effort. Some communities are strongly committed without knowing what the user fee amount will be, while others are price-sensitive and need that information to make a decision.

4. Changes to the project scope must be reviewed and approved by the ALMR Executive Council. Even though the charter for the ALMR project clearly states that the council has final approval authority over the system development and implementation, the previous project manager added four additional sites to the project without the approval of the council.

Although the current project manager has implemented a change-order process to ensure the appropriate personnel are informed and any dollar-amount change receives the approval of the council, this process does not address the requirement that project scope changes receive the approval of the council.

The project manager needs to establish a process for project scope changes to:

- (1) formally present to the council any project scope change for their approval;
- (2) inform the council of the reason for and necessity of the project scope change; and
- (3) present any additional costs associated with the change. The council's approval needs to be documented in the minutes of the meeting. A project scope-change document should be submitted by the project manager to the council to ensure that approval from all the council members has been received.

The ALMR project will have a major impact on the State. The national security and emergency response implications of the project make it critical that the State's participation is managed in an effective and cost-efficient manner. Implementation of these recommendations would improve the State's participation in making the ALMR project fully operational.

Recommendation No. 3

The director of DOA's Enterprise Technology Services should ensure that site records are current and complete.

As discussed in the Report Conclusions section, site-specific information has not been routinely collected and maintained in an organized manner. DMVA is currently the more active state manager for the ALMR project. However, DOA, in its oversight capacity of the State's communications systems, must also take steps to accumulate and keep track of information related to sites that have been included in the ALMR system. It should be noted that we received numerous lists of sites, purported to be all-inclusive lists of sites in the ALMR system. However, none of these lists agreed in content, and they could not be reconciled to the number of sites presented in management reports.

In 2003, DOA reviewed site files to ensure all information was current and correct—and determined there were numerous deficiencies. No action has been taken to address these identified deficiencies. Information such as ownership status of the land and related land use agreements must be documented and retained. Such information should be updated prior to the completion of the site preparation.

Additionally, especially for ALMR-selected sites, the capital investment and improvements made at each site should be catalogued to include a description of the equipment installed at each site and, as appropriate, state property control tags²⁶ should be used. The information

²⁶ Presently, DOA is utilizing Computer Task Group, Inc. and is receiving assistance from a federally funded contractor to identify and track equipment at the sites. Information generated from this review could potentially serve as a basis for the revamped and restructured site file information.

would be critical to DOA in monitoring the wear and tear on the equipment and developing future schedules for equipment replacement and upgrade.

More specifically, for more effective oversight of the information, we recommend the department reorganize the site data in one central location. Also, the department should develop and maintain an electronic database to better track and monitor the information.

Recommendation No. 4

The director of DOA's Enterprise Technology Services should establish a tracking method to ensure all costs associated with operations and maintenance (O&M) of the ALMR system are identified and recorded appropriately.

The users of the ALMR system will be required to pay fees to fund the O&M costs of the new system. ALMR will be primarily operating through existing, albeit revamped, SATS sites. It is essential that a cost-accounting system is in place to capture O&M costs before ALMR is fully operational. The current memoranda of understanding requires that DOA maintain adequate recordkeeping “*to insure (sic) proper billing is established for ALMR and SATS.*”

In general, DOA has not effectively tracked the O&M costs of state-owned telecommunications. The department, and more specifically Enterprise Technology Services, should begin establishing accounting system structures, along with appropriate processing procedures, to make sure all O&M costs are identified and allocated to various sites and telecommunications functions in a consistent, systematic manner.

Accordingly, we recommend that Enterprise Technology Services establish procedures and the related accounting structures to identify and record expenditures related to operations and maintenance of ALMR-project sites. This is especially critical for those sites that are part of the ALMR project—which have a larger number of non-state agency users. Such procedures are necessary to develop rates for the fees to be billed to these users. Such a process is critical for recapturing the ongoing costs involved in providing ALMR-project services.

APPENDICES

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APPENDIX A

**Alaska Land Mobile Radio
Sites as of September 30, 2005
(Unaudited)**

<u>Location:</u>	<u>FCC</u>	<u>Responsible for</u>		<u>Responsible for</u>		<u>Operational</u> ³
	<u>Licensed</u>	<u>Site Preparation</u> ¹	<u>State</u>	<u>Equipment</u> ²	<u>State</u>	
		<u>DoD</u>	<u>DoD</u>	<u>DoD</u>	<u>State</u>	
<u>Alaska Highway</u>						
1. Beaver Creek	✓		✓		✓	
2. Cathedral Rapids	✓		✓	✓		✓
3. Delta	✓		✓	✓		✓
4. Dot Lake	✓		✓	✓		✓
5. Gerstle River	✓		✓	✓		
6. Tok	✓		✓	✓		✓
<u>City of Cordova</u>						
7. Heney Range	✓		✓		✓	
<u>City of Craig</u>						
8. Mount Sunny Hay	✓		✓		✓	
<u>City of Haines</u>						
9. Haines	✓		✓		✓	
<u>City of Juneau</u>						
10. Auke Lake	✓		✓		✓	✓
11. Juneau Federal Building	✓		✓		✓	
12. Lena Point ⁴	✓		✓		✓	
13. Saddle Mountain	✓		✓		✓	✓
<u>City of Ketchikan</u>						
14. High Mountain	✓		✓		✓	
<u>City of Petersburg</u>						
15. Petersburg	✓		✓		✓	
<u>City of Sitka</u>						
16. Sitka	✓		✓		✓	
<u>City of Skagway</u>						
17. Skagway	✓		✓		✓	
<u>City of Whittier</u>						
18. Whittier	✓	✓		✓		✓
<u>City of Wrangell</u>						
19. Wrangell	✓		✓		✓	
<u>Dalton Highway</u>						
20. Money Knob	✓		✓		✓	

¹ Site preparation means readying the site to ensure adequate room and electrical service are available in existing buildings or shelters, or erecting such structures at the site, prior to equipment installation.

² Equipment includes such items as repeaters, routers, and systems-interconnect equipment.

³ Sites completed, tested, accepted, and turned on as of September 30, 2005.

⁴ Sites added in 2004 by former project manager without Executive Council approval.

APPENDIX A

**Alaska Land Mobile Radio
Sites as of September 30, 2005 (continued)**

<u>Location:</u>	<u>FCC</u>	<u>Responsible for</u>		<u>Responsible for</u>		<u>Operational</u>
	<u>Licensed</u>	<u>Site Preparation</u>	<u>State</u>	<u>Equipment</u>	<u>State</u>	
		<u>DoD</u>	<u>State</u>	<u>DoD</u>	<u>State</u>	
<u>Glenn Highway</u>						
21. Bailey Hill	✓	✓	✓ ⁵	✓		✓
22. Blueberry Hill ⁴	✓		✓		✓	✓
23. Lions Head (Sheep Mtn.)	✓		✓	✓		
24. R 1 North	✓	✓		✓		✓
25. Sawmill	✓		✓	✓		
26. Site Summit ⁴	✓		✓		✓	✓
27. Tahnetta Pass	✓		✓	✓		
28. Tolsona	✓		✓	✓		✓
<u>Kenai Peninsula</u>						
29. Rugged Island	✓		✓	✓		
<u>Kenai Spur Road</u>						
30. Kenai Police Department	✓		✓		✓	
31. Nikiski	✓		✓		✓	
<u>Kodiak Island</u>						
32. Pillar Mountain	✓		✓		✓	
33. Woman's Bay	✓		✓		✓	
<u>Municipality of Anchorage(MOA)</u>						
34. Anchorage Fire Station #12 - 800			MOA		MOA	
35. Anchorage Fire Station #12 - VHF	✓		✓		✓	
36. Atwood Building – 800	✓		✓		✓	✓
37. Atwood Building VHF	✓		✓		✓	✓
38. Ted Stevens Airport – 800	✓		✓		✓	✓
<u>Parks Highway</u>						
39. Alcantra	✓		✓	✓		✓
40. Beckwitt's Bluff	✓		✓		✓	
41. Byers Creek	✓		✓	✓		
42. Chulitna	✓		✓	✓		✓
43. Clear	✓	✓		✓		✓
44. Ester Dome	✓	✓	✓ ⁵	✓		✓
45. Garner	✓		✓	✓		✓
46. Gold Creek	✓		✓		✓	
47. Honolulu	✓		✓	✓		
48. Hurricane	✓		✓	✓		
49. Mount SusitnaS	✓		✓		✓	
50. Nenana	✓	✓	✓ ⁵	✓		
51. Reindeer Hills	✓		✓	✓		✓
52. Willow Creek ⁴	✓		✓		✓	✓
53. Yanert	✓		✓	✓		✓

⁵ The State was responsible for the site preparation for 11 additional sites; however, due to a funding shortfall, DoD funded the majority of the site preparation contract.

APPENDIX A

**Alaska Land Mobile Radio
Sites as of September 30, 2005 (continued)**

<u>Location:</u>	<u>FCC</u>	<u>Responsible for</u>		<u>Responsible for</u>		<u>Operational</u>
	<u>Licensed</u>	<u>Site Preparation</u>	<u>State</u>	<u>Equipment</u>	<u>State</u>	
		<u>DoD</u>	<u>State</u>	<u>DoD</u>	<u>State</u>	
<u>Richardson Highway</u>						
54. Black Rapids	✓	✓		✓		✓
55. Canyon Creek	✓		✓	✓		✓
56. Divide	✓		✓	✓		
57. Donnely Dome	✓	✓		✓		
58. Ernestine Mountain	✓		✓	✓		✓
59. Glennallen	✓		✓	✓		
60. Harding Lake	✓		✓	✓		✓
61. Hill 3265	✓	✓		✓		✓
62. Paxson	✓		✓	✓		✓
63. Peger Road	✓		✓		✓	✓
64. Pole Hill	✓	✓		✓		✓
65. Quarry Hill	✓	✓		✓		✓
66. Sourdough	✓		✓	✓		✓
67. Trims	✓		✓	✓		✓
68. Tsina	✓		✓	✓		
69. Valdez	✓		✓	✓		✓
70. Willow Mountain	✓		✓	✓		✓
<u>Seward Highway</u>						
71. Cooper Mountain	✓	✓	✓ ⁵	✓		
72. Girdwood	✓		✓	✓		✓
73. Grandview	✓		✓		✓	
74. Hope	✓	✓	✓ ⁵	✓		✓
75. Hunter	✓		✓		✓	
76. Moose Pass	✓	✓	✓ ⁵	✓		✓
77. Portage	✓	✓	✓ ⁵	✓		✓
78. Rabbit Creek	✓	✓	✓ ⁵	✓		✓
79. Seward	✓	✓	✓ ⁵	✓		✓
80. Silvertip	✓	✓	✓ ⁵	✓		✓
81. Summit Lake	✓		✓	✓		
82. Wolcott Mountain	✓	✓	✓ ⁵	✓		✓
<u>Sterling Highway</u>						
83. Anchor River	✓		✓		✓	
84. Diamond Ridge	✓		✓		✓	
85. Kasilof	✓		✓		✓	
86. Niniichik	✓		✓		✓	
87. Pipeline Hills	✓		✓		✓	
88. Seldovia	✓		✓		✓	
89. Ski Hill	✓		✓		✓	
90. Sterling	✓		✓		✓	
<u>Others Off Highway System</u>						
91. St. Paul Island	✓	✓		✓		

APPENDIX A

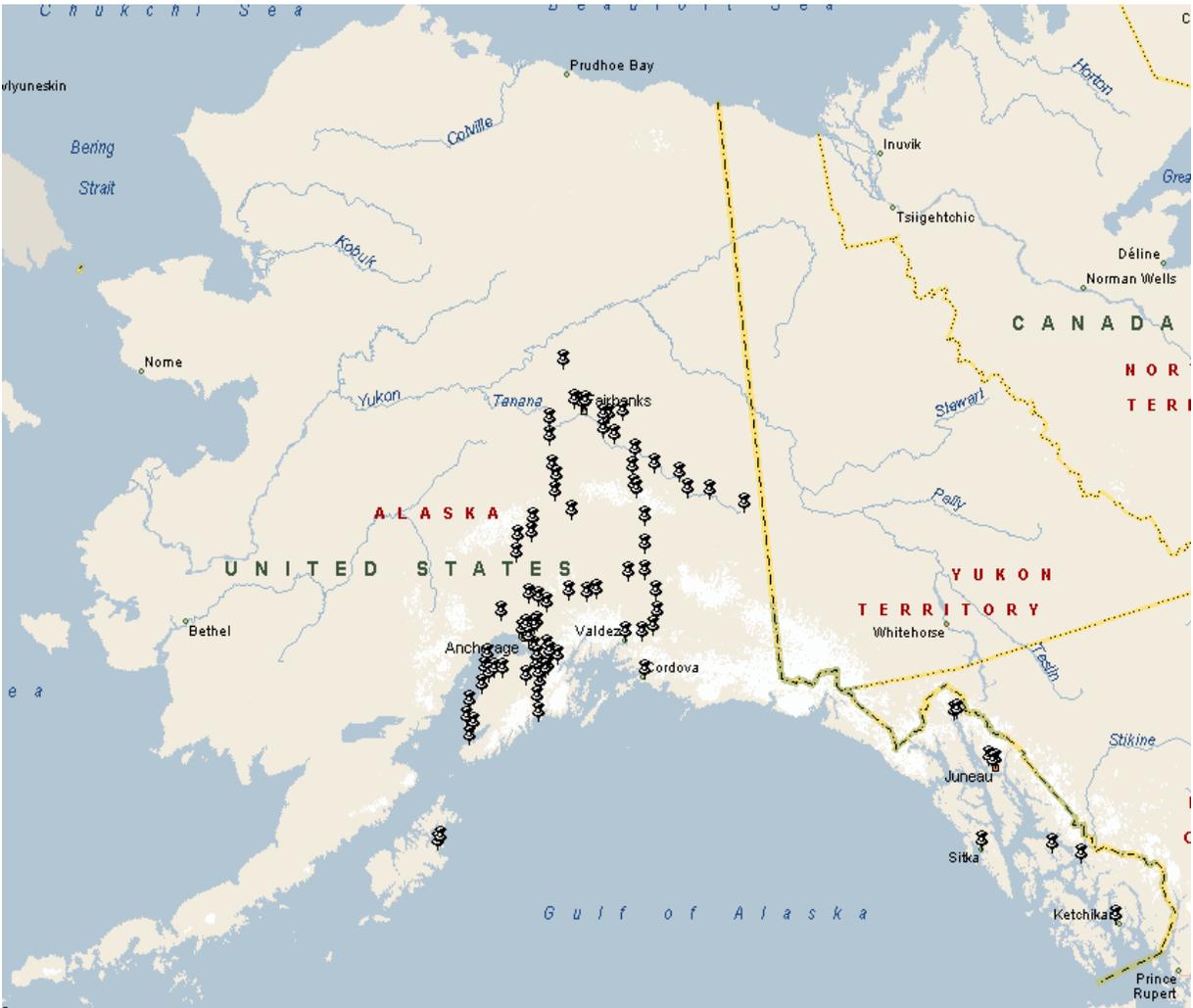
**Alaska Land Mobile Radio
Sites as of September 30, 2005 (continued)**

<u>Location</u>	<u>FCC</u> <u>Licensed</u>	<u>Responsible for</u> <u>Site Preparation</u>		<u>Responsible for</u> <u>Equipment</u>		<u>Operational</u>
		<u>DoD</u>	<u>State</u>	<u>DoD</u>	<u>State</u>	
<u>Controllers, Consoles, Bi-directional Antennas, and Key Management Facilities</u>						
92. Birch Hill	✓	✓		✓		✓
93. City of Fairbanks Police Dept.	N/A	✓		✓		✓
94. City and Borough of Juneau (CBJ)	N/A		CBJ		CBJ	✓
95. City of Valdez (CoVAL) Police Dept.	N/A		CoVAL		CoVAL	✓
96. Eielson Air Force Base	N/A	✓		✓		✓
97. Elemendorf Air Force Base	N/A	✓		✓		✓
98. Fort Greely	N/A	✓		✓		✓
99. Fort Richardson	N/A	✓		✓		✓
100. Fort Wainwright	N/A	✓		✓		✓
101. Ted Stevens Airport – VHF	✓		✓		✓	✓
102. Transportable North	<i>State to obtain</i>	N/A		✓		
103. Transportable South	<i>State to obtain</i>	N/A		✓		✓
104. Tudor Road	N/A		✓		✓	✓
105. Whittier Tunnel	N/A	✓		✓		✓
Totals: State	92		72 ⁵		41	
DoD	N/A		28		61	
Local	N/A		<u>3</u>		<u>3</u>	
Total	<u>92</u>		<u>103⁵</u>		<u>105</u>	<u>57</u>

⁶ Transportable North and South did not require site preparation; therefore, a total of 103 needed site preparation.

APPENDIX B

Alaska Land Mobile Radio Map of Sites



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APPENDIX C

Alaska Land Mobile Radio Major Milestones

September 19, 1995	The Alaska Land Mobile Radio (ALMR) Executive Council is chartered to provide interoperable and cost-effective land mobile radio service that is compliant with federal, state, and local regulations and responsive to federal agency needs in the State of Alaska.
September 1997	The ALMR Executive Council's charter is amended to include state and local agencies, and to broaden the focus to address interoperability across all government public safety and first-responder agencies.
September 1997	A memorandum of understanding (MOU) among the U.S. Department of Defense Alaskan Command, the State of Alaska, the Federal Executive Association of Alaska, and the Alaska Municipal League is signed to develop a combined land mobile radio migration ¹ plan.
January 1999	A request for information is sent to members of the communications industry regarding solutions for an interoperable public safety communications system.
1999	The State Telecommunications Information Council selects Project 25 ² as the standard for digital radio communications used by federal, state, and local public safety agencies to enable interoperability among the agencies.
April 4, 2001	An MOU among the State of Alaska, the U.S. Department of Defense Alaskan Command, the Federal Executive Association of Alaska, and the Alaska Municipal League is signed to provide approval for the ALMR Executive Council to move forward with the implementation of a communications system that is responsive to the needs of federal, state, and municipal agencies for day-to-day operations, mutual aid, disaster response, and crisis management missions.
February 27, 2002	The State of Alaska is awarded \$2 million through a federal Community Oriented Policing Services grant for the purchase of radio equipment.
June 5, 2002	The State of Alaska and Motorola, Inc., ³ enter into a \$7.5 million contract for the purchase of radios, digital repeaters, and base stations.
September 3, 2002	The State of Alaska and Motorola, Inc., enter into a \$4.2 million agreement for the purchase, shipment, installation, and testing of the equipment needed at seven sites for a concept demonstration.
September 23-25, 2002	Applications for Request for Waiver of Federal Communications Commission's Rules regarding shared frequency usage are filed.
October 15, 2002	The State of Alaska signs a \$4.2 million financing contract with Key Municipal Finance for monies to purchase the equipment under the Motorola agreement.
February 2003	Site preparation, installation of equipment, and testing of the system is completed for Fairbanks, Anchorage, and Valdez.
March 11-13, 2003	A demonstration training exercise, Northern Edge, in Valdez successfully demonstrates interoperability of the land mobile radio system concept.

¹ To move approved users within the State of Alaska to accessing and utilizing the ALMR system.

² A set of standards developed by the Association of Public Safety Communications Officials and the Telecommunications Industry Association.

³ Motorola, Inc., is a telecommunications company with a portfolio of public safety and security products for mission-critical integrated communications, information management, regional coordination, and incident command.

ATTACHMENT C

Alaska Land Mobile Radio Major Milestones (continued)

May 9, 2003	The ALMR Governance Project, a study to determine how to govern the system, identifies ALMR's governance requirements and develops a detailed cooperative agreement setting out specific terms and provisions for the partners' joint management of the communications system.
May 21, 2003	The State of Alaska is granted authority to construct and operate several sites of the ALMR system prior to receiving the Federal Communications Commission (FCC) waiver.
July 28, 2003	An MOU between U.S. Department of Defense Alaskan Command and the State of Alaska is filed.
August 7, 2003	A Request for Waiver of Federal Communications Commission's Rules is approved.
September 29, 2003	The State of Alaska is awarded \$1.987 million through a National Institute of Justice cooperative agreement.
November 12, 2003	The State of Alaska and Motorola, Inc., enter into a \$770,000 agreement for the purchase, shipment, installation, and testing of the equipment needed at three sites for the unified defense exercise.
February 2004	Northern Command Unified Defense combines National Guard, Coast Guard, State Trooper, and local police forces to demonstrate the communications interoperability of the ALMR project.
May 19, 2004	The State of Alaska is earmarked \$2.5 million through a federal Community Oriented Policing Services grant for site infrastructure equipment, site upgrades, and installation.
July 12, 2004	A "Beta Period" membership agreement ⁴ is entered into between the City of Valdez Police Department ⁵ and the Department of Administration.
August 15, 2004	A memoranda of agreement between the Department of Administration (DOA) and the Department of Military and Veterans Affairs (DMVA) is signed delegating DOA's responsibilities and duties for the management of the ALMR project to DMVA.
November 23-30, 2004	The State of Alaska and Motorola, Inc., enter into a \$443,000 contract for the purchase of equipment for the Willow Creek and Lena Point sites and a \$792,000 contract for the purchase and installation of equipment at the Blueberry Hill and Site Summit sites.
December 8, 2004	A "Beta Period" membership agreement is entered into between the U.S. Drug Enforcement Administration and the Department of Administration.
January 13, 2005	The State of Alaska is earmarked \$2.5 million ⁶ through a Community Oriented Policing Services grant for the purchase of equipment for the ALMR project.
March 23, 2005	DOA receives a general fund supplemental appropriation in the sum of \$6 million for ALMR infrastructure upgrades.
March 2005	Fifteen ALMR sites are operational.
July 2005	DOA receives over \$6.4 million in state funds for the ALMR project.
August 31, 2005	Forty-one ALMR sites are operational.

⁴ This is an interim agreement for usage while the system is not fully operational.

⁵ This agreement is in draft form and not signed yet.

⁶ As of April 30, 2005, the two federal Community Orientated Policing Services grants, for \$2.5 million each, have not been received.

APPENDIX D

**ALMR Funding and Expenditures
as of August 31, 2005
(in thousands)**

Legislation Appropriation	Appropriations by Funding Source			Total Authorized	Collected Federal Revenue	Expenditures Actual	Encumbrances	Unexpended Unobligated State Funds
	General Fund	Other State Funds¹	Federal Funds					
Ch. 100, SLA 97	\$ 485	\$ -0-	\$ -0-	\$ 485	\$ -0-	\$ 398	\$ -0-	\$ 87
Ch. 135, SLA 00	-0-	850	350	1,200	-0-	850	-0-	-0-
Ch. 61, SLA 01	120	540	14,894	15,554	3,987	5,605	175	(1,133)
Ch. 61, SLA 01	1,033	-0-	-0-	1,033	-0-	1,033	-0-	-0-
Ch. 82, SLA 03	400	-0-	-0-	400	-0-	400	-0-	-0-
Ch. 159, SLA 04	50	-0-	-0-	50	-0-	50	-0-	-0-
Ch. 159, SLA 04	361	-0-	-0-	361	-0-	361	-0-	-0-
Ch. 6, SLA 05	6,000	-0-	-0-	6,000	-0-	1,495	344	4,161
2005 RSA ²	-0-	-0-	1,600	1,600	1,600	670	21	909
Ch. 3, FSSLA 05	4,157	2,248	-0-	6,405	-0-	-0-	-0-	6,405
Ch. 3, FSSLA 05			2,744	2,744	-0-	-0-	-0-	-0-
Ch. 4, FSSLA 05	<u>662</u>	<u>258</u>	<u>-0-</u>	<u>920</u>	<u>-0-</u>	<u>74</u>	<u>65</u>	<u>781</u>
	<u>\$ 13,268</u>	<u>\$ 3,896</u>	<u>\$ 19,588</u>	<u>\$ 36,752</u>	<u>\$ 5,587</u>	<u>\$ 10,936</u>	<u>\$ 605</u>	<u>\$ 11,210</u>

¹Other state funds are: \$850 and \$540 of Internal Service funds, \$2,248 of Student Loan Corporation bonds, and \$258 of Capital Improvement Project funds.

²DMVA, Division of Homeland Security was appropriated these federal funds under Ch. 82, SLA 03. In April 2005, the grant funds were passed through to the ALMR project with a reimbursable services agreement.

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STATE OF ALASKA

DEPARTMENT OF ADMINISTRATION

OFFICE OF THE COMMISSIONER

FRANK H. MURKOWSKI, GOVERNOR

P.O. BOX 110200
JUNEAU, ALASKA 99811-0200
PHONE: (907) 465-2200
FAX: (907) 465-2135

November 28, 2005

RECEIVED

NOV 29 2005

LEGISLATIVE AUDIT

Pat Davidson
Legislative Auditor
Division of Legislative Audit
P.O. Box 113300
Juneau, AK 99811-3300

Dear Ms. Davidson:

This letter is in response to your November 4, 2005 confidential preliminary audit report on the Department of Military and Veterans Affairs and Department of Administration, Alaska Land Mobile Radio Project, September 21, 2005.

Recommendation No. 1

The Alaska land mobile radio (ALMR) project manager should take steps to develop a more comprehensive, better supported cost estimate for the project.

The Department of Administration (DOA) concurs with this recommendation and has worked with the project manager and fiscal staff at the Department of Military and Veteran's Affairs (DMVA) to coordinate the build out of the ALMR system. DOA is committed to continue to support the project manager's efforts in this area.

As discussed on page 6 of your report, the State must upgrade the infrastructure on the 70 state sites on which the ALMR system would reside. The funding to upgrade these sites has been appropriated to Enterprise Technology Services (ETS). ETS maintains cost centers by site to account for this activity, however, historically expenditures have not been consistently recorded to specific sites. DOA recognizes the need to track these costs by site and has worked with the ETS program manager to ensure these costs are charged accordingly.

By capturing these costs by site, DOA will be able to provide the ALMR Project Manager accurate upgrade and related operating costs which can be used to prepare comprehensive cost estimates as recommended.

Recommendation No. 2

Department of Military and Veterans Affairs (DMVA) project and administrative support managers should continue making improvements in the oversight of the ALMR project.

DOA concurs with this recommendation and will continue to work to improve the information available to the project manager and fiscal staff at the DMVA to assist them with the oversight of the ALMR project. As mentioned above DOA has site specific cost collectors to capture financial data by site.

Recommendation No. 3

The director of DOA's Enterprise Technology Services should ensure that site records are current and complete.

The Department of Administration concurs with this recommendation. As discussed in your report DOA reviewed the site files and numerous deficiencies were noted. Furthermore, with incorporation of ALMR into ETS operations, the rate structure must be able to distinguish services provided between two-way radio, ALMR and other services provided over the SATS infrastructure.

As you mentioned in footnote 26, ETS contracted with Computer Task Group, Inc. to capture the current SATS systems and processes and offer strategic recommendations for an approach to asset management supporting SATS equipment, inventory, work requirements and documentation. We are currently reviewing their report.

The FY06 capital appropriation included a component to perform a SATS Network Site Survey. As part of that survey, ETS will incorporate the results from the aforementioned report and will be developing a process and database to ensure we can more effectively manage the site data. The process will address who will ensure that the inventory listing is current and the monitoring of equipment including projected equipment replacement and upgrade.

Recommendation No. 4

The director of DOA's Enterprise Technology Services should establish a tracking method to ensure all costs associated with operations and maintenance (O&M) of the ALMR system are identified and recorded appropriately.

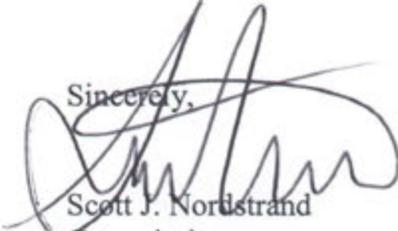
The Department of Administration concurs with this recommendation. SATS must be structured to allow it to be a sustainable service on a cost recovery basis. In order to accomplish this, ETS must quantify the complete cost of SATS service delivery. This should include deferred maintenance and periodic equipment replacement. Furthermore, ETS must establish a tracking mechanism to identify users and quantify usage on the State's SATS system to include all services delivered over the SATS infrastructure.

As discussed on page 16 of your letter the Department of Defense (DoD) has engaged a consultant to develop some user based cost estimates. Your report indicates that due to insufficient state O&M cost data, the consultant has had to rely on O&M costs from another state. Your report however, fails to identify the bigger issue with the O&M cost data. By all accounts the state has not adequately maintained the SATS infrastructure. The funds have not been available to perform the routine maintenance for these sites. Historical costs may provide some insight into future costs of an enhanced SATS system, however, utilizing historical costs of a dilapidated system to determine total cost of

operation of an adequately maintained SATS system would provide an inaccurate basis for establishing rates.

The State's federal cost negotiator has been engaged to assist ETS with incorporation of the ALMR operation within the federally approved cost allocation plan for the Division. With his assistance ETS will be evaluating the impacts of the new service and analyzing the results of the DOD engagement to develop user based allocation of costs for recovery. The chargeback methodology and operational structure of the SATS system must be structured in a manner that will meld with the existing operation.

The Department of Administration welcomes your timely recommendations regarding State of Alaska's Telecommunications Network. Thank you again for the opportunity to comment on the findings and recommendations presented in your report.

Sincerely,

Scott J. Nordstrand
Commissioner

cc: Kevin Brooks, Deputy Commissioner
Department of Administration

Michael Tibbles, Deputy Commissioner
Department of Administration

Eric Swanson, Director
Division of Administrative Services
Department of Administration

Stan Herrera
Division of Enterprise Technology Services
Department of Administration

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DEPARTMENT OF MILITARY AND VETERANS AFFAIRS

OFFICE OF THE COMMISSIONER

Pat Davidson
Legislative Auditor,
Division of Legislative Audit
P.O. Box 113300
Juneau, AK 99811-3300

December 21, 2005

Subject: DMVA Response to the ALMR Audit (Ref: Legislative Budget and Audit, Preliminary Audit Report, dated September 21, 2005)

The Alaska Land Mobile Radio project is not a recent idea it has roots from the early days of the previous administration. The project originated as a Federal Government initiative in 1995 and was broadened to include the State of Alaska in 1997. Technology selection, adoption of the nationwide P.25 standard and further program broadening to include local governments continued through 1999 when the first intergovernmental cooperative agreement was signed. Motorola was the only respondent to the two invitations to bid and was selected as the infrastructure provider. The implementation phase then began with a successful proof of concept phase. As the project progressed several local and national disasters such as the Millers Reach fire reinforced the need to have a fully interoperable first responder and command and control radio network. Since the audit was concluded Hurricane Katrina reinforced this point on a national scale. The audit report accurately points out that despite its early successes the State portion of the ALMR program historically suffered from continuing management and funding challenges throughout the previous administration.

When Governor Murkowski was elected in 2002 and ushered in a new administration, he recognized both the potential value of the ALMR system and the lack of effective State management. He initiated a period of review and analysis to determine how to correct the shortfalls and deficiencies. At the culmination of that review the Governor determined that the project would be better served by moving the responsibility for system build-out from the Department of Administration (DOA) to the Department of Military and Veterans Affairs (DMVA). The DMVA agreed to provide dedicated full-time project management and aggressive administrative support and oversight. Once the build-out phase is completed the entire program will be transferred back to the Department of Administration for continuing operations and maintenance (July 1, 2006).

The Department of Military and Veterans Affairs has carefully and thoroughly reviewed the subject audit performed by the Legislative Budget and Audit office. The subject audit, in general, is an accurate, fact-based analysis of the past and current state of the ALMR program. After careful reading it is readily apparent that the audit team diligently and thoroughly researched the program. Several of the findings show keen insight into vital corrective actions required for the future success of the program in the accounting, execution, management, and outreach areas. The summary of specific findings from the audit team included:

- ✚ The historical accounting procedures followed by DOA does not provide sufficient generally accepted accounting principle safeguards. These procedures do not track expenses with sufficient granularity to provide object reporting on program costs. Similarly these procedures do not provide sufficient data to make accurate projections of future system costs.

- # Site information, land use permits, frequency information and other critical relevant documents for each site are not correctly maintained. Site information is not maintained in a single location.
- # The current change control process does not provide adequate project scope change controls or safeguards to insure that the Executive committee retains full control over the program.
- # Historically this vital area has not received sufficient attention.

Since restructuring duties associated with ALMR, DMVA and DOA have worked diligently to correct project deficiencies and management practices to provide aggressive executive support. In March of 2005 in an effort to revitalize this effort DMVA hired a new Project Manager with extensive experience in successfully completing technology projects. The DMVA and DOA team has accomplished the following specific achievements:

- # Generally accepted accounting principles for the government have been implemented and reinforced for the project.
- # Past accounting records for the program have been organized and the current expenditures are now tracked properly.
- # The grant accounting and reporting processes have been restructured to the best practices.
- # All members of the DMVA project team have completed procurement orientation training and the team has developed a close working relationship with DMVA's Administrative Services procurement team.
- # During the calendar year the ALMR program has completed 43 sites covering the bulk of the road system between Fairbanks, Anchorage, and Valdez.
- # The program laid the groundwork to reaching beneficial use for the road system from Fairbanks to the Kenai by the end of 2006.
- # ALMR completed an extraordinarily successful proof of concept test for linking ALMR to remote locations via satellite.
- # ALMR completed and tested the first of its kind transportable ALMR site.
- # The system completed a very successful technology concept demonstration during the Alaska Shield/Northern Edge 05 exercise. This was one of three *Exercises of National Significance for Homeland Defense* conducted within the United State for the year. Each of these exercises had a technology demonstration project – ALMR was that demonstration project for the Alaska Shield exercise.
- # Obtained Federal grant funding at twice the historical levels with matching funds provided by the State.

Specific responses to the legislative audit recommendations are as follows:

Recommendation 1: The ALMR Project Manager will take steps to develop a comprehensive, better supported cost estimate for this project.

Though DMVA concurs heartily with this action, it is not currently within the authority of the ALMR Project Manager to accomplish the task. The Department of Administration has historically controlled all funds for this project and continues to do so. The historical cost information has recently been made available to enable the breakdown required for forecasting the costs for the remainder of the implementation program. This audit supports the challenges in this area with the statements: (1) "DOA did not specifically identify and allocate expenditures on a site-by-site basis"; (2) "There is insufficient data to estimate annual operation costs of the project". Starting in July 2005 the grant and SOA Capital Improvement Project (CIP) funds for ALMR will be diverted to DMVA for execution and tracking. As soon as sufficient data is compiled the DMVA Project team will complete the requisite analysis to forecast future capital based costs. The August 2004 memorandum of agreement between DOA & DMVA (Attachment A) states in part that "DOA will document and forward to DMVA on a monthly basis the costs associated with their involvement of maintaining the ALMR Project", and that DOA will further "document and have on file the cost associated with the maintenance and operations of SATS, 2-way radio and Paging." This data is essential in determining the total operations and maintenance cost. An interim projection for site construction and operations costs will be made as soon as the Critical Design Review (CDR) for 2006 activity is completed in January 2006. One of the deliverables from that review is an accurate cost projection for all sites scheduled to be built during the 2006 construction season. The ALMR team has developed 4 categories with cost estimates for each. These numbers can, and will, provide a basis for building cost estimates for the remainder of the project. As an interim measure the DMVA project office provided a copy of a spreadsheet that, when populated, will provide accurate capital expense records by site. The data will be further broken out to show SATS, ALMR, and site preparation costs for each site. A copy of that document is at (Attachment B).

Recommendation 2: DMVA project and administrative support managers will continue making improvements in the oversight of the ALMR project.

DMVA concurs with this recommendation, with the following responses to the itemized observations in the report:

A) Improve Record Keeping:

Concur. Though DMVA concurs with this action, it is not currently within the authority of the ALMR Project Manager to accomplish the task. The Department of Administration historically controlled all funds for this project and continues to do so. These numbers can, and will, provide a basis for construction cost estimates for the remainder of the project. As an interim measure the DMVA project office provided a copy of a spreadsheet that, when populated, would provide accurate expense records by site.

When it is completed that data will be used to refine the estimates for future site construction. The data will be further broken out to show SATS, ALMR, and site preparation costs for each site. (Attachment B)

The project team is now retaining both project and site specific information as part of its current daily routine. As an example, at the end of the project a comprehensive site book will have been created for each site. This book will contain all information on the site including site ownership, lease agreements, frequency licenses, technical specifications, and as built documentation. Copies of these books will be retained by DoD, DOA, and at each site. The project team is using Microsoft Project Server 2003 as a repository of all information related to the project, including schedules, adjustments to schedules, documentation, and lessons learned. This information will be archived at the end of the project as both a "lessons learned" library and a technical reference for similar projects in the future.

B) Make better use of the state accounting system to track costs:

Concur. This fundamental problem has plagued this project since its inception more than ten years ago. At the time that this audit was conducted the responsibility for execution of the ALMR project had been passed to DMVA, but the financial record keeping and spending authorities remained with DOA. This arrangement makes both accurate, detailed accounting records and DMVA control of the project extremely difficult. In every effective management structure the project manager's control over the effort is always based on that individual's control of the finances. That essential element for success is still missing in the ALMR project. In an effort to minimize this disruption, the DMVA project office has developed a system of site-based cost tracking codes within the State accounting system and shared that schema with DOA. An additional measure that DMVA project office also provided a copy of a spreadsheet that, when populated, would provide accurate expense records by site (Attachment B). Using this tool the data for each site would then be further broken out to show SATS equipment costs, ALMR equipment costs, and site preparation costs for each site.

C) Improve outreach and recruitment of local government (communities) users:

Concur. Through the decade of this project's history, prior to the current DMVA project managers' arrival, outreach was an ad hoc, poorly addressed issue. Great strides have been made in this area since the addition of a deputy project officer specifically assigned this responsibility. The inability to give agencies participation cost projections, as pointed out in the audit, remains the principal impediment to progress in this area. Despite this challenge the new deputy has brought several new participants into the system in the last four months, including IRS criminal enforcement, NOAA, and Alyeska Pipeline security Service as the latest groups to make a commitment. The project team will continue to make progress in this area, particularly in the area of understanding concerns of prospective participants within the State of Alaska's Government group.

In an effort to accelerate the adoption of a cost sharing methodology that will answer the agency cost question the DMVA project team developed and presented a "strawman" methodology for apportioning costs. This proposal uses the current DoD maintenance contract with Motorola as an estimate for the costs for ALMR operations and maintenance. The Motorola/DoD contract numbers were used because they are the best available at this time. This proposal was accepted by the Executive Council as a starting point and they have directed a final version be coordinated and brought forward for their approval by the end of February, 2006. The DMVA project office is engaged in that coordination process at this time and a copy of the strawman proposal is also attached for your consideration.

D) Changes to the project scope must be reviewed and approved by the ALMR Executive Council:

Concur. This project has never had a scope control philosophy, or a documented process for making changes. As a result the previous ALMR project manager elected to add four sites to the program without approval of the Executive Council. Since these additional sites consumed the majority of the available funds for the calendar year 2004, the project became woefully under funded for the remainder of that period and into 2005. A clearly written, well understood, and faithfully followed change control process will avoid that type of action.

The DMVA project team has presented a scope change control document to the Executive Council and it was approved as written. This document clearly delineates what constitutes a scope change. It also explicitly states that any scope change, including building any site in a year or location other than originally planned must be approved by the Executive Council. Finally, the scope change document describes the process for submitting scope control level changes to the Executive

Council for approval. This process has been successfully tested with five site construction items that rose to the level of scope changes and the process worked well. A copy of the scope control document is attached for your consideration.

Recommendation Three: The Director of DOA's Enterprise Technology Services should ensure that site records are current and complete.

DMVA concurs with this recommendation and will assist in any way possible.

Recommendation Four: The Director of DOA's Enterprise Technology Services should establish a tracking method to ensure all costs associated with operations and maintenance of the ALMR system are identified and recorded appropriately .

DMVA concurs with this recommendation and will assist in any way possible.

Sincerely,

MG Craig E. Campbell
Commissioner, DMVA

CC: Mike Nizich, Deputy Chief of Staff
Scott Nordstrand, Commissioner, DOA
Roger Schnell, Deputy Commissioner, DMVA
John Cramer, DMVA Dir Admin. Services
Mike Callahan, Project Manager, DMVA

ATTACHMENT C

**Memorandum of Agreement
between the
Department of Administration and
Department of Military and Veterans Affairs
Delegation of Responsibility for ALMR Project Management
August 2004**

This Memorandum of Agreement (MOA) serves to establish an agreement regarding the delegation and terms of service, duties, roles and responsibilities of the parties hereto, according to which the Department of Administration (hereafter referred to as "DOA"), by and through its Commissioner, agrees to delegate DOA's responsibilities and duties as to the management of the Alaska Land Mobile Radio Project (hereafter referred to as "ALMR"), to the Department of Military & Veterans Affairs (hereafter referred to as "DMVA").

1. Background:

The Office of the Governor recently announced a decision to initially transfer the management of ALMR, to DMVA from DOA. In addition, the Governor has identified the ALMR project as a priority for the State of Alaska and DMVA. The end result of the delegation under this MOA will be that DMVA will take over responsibility for the day-to-day management of the ALMR project. It is understood that there is integration required between ALMR and the SATS microwave system and the 2-way radio maintenance shop that will require communications with the ALMR Project Manager.

2. Agreement on Roles and Responsibilities:

The following identifies the responsibilities of each party under this MOA:

DOA:

- Will continue to operate and maintain the State of Alaska Telecommunications System (SATS), 2-way radio and paging systems.
- Will transfer management and operation of any and all assets directly related to ALMR to DMVA.
- Will document and forward to DMVA on a monthly basis the costs associated with their involvement of maintaining the ALMR project.
- Will document and have on file the costs associated with the maintenance and operations of SATS, 2-way radio, and Paging.
- Will transfer the following positions to DMVA:
 - ALMR Project Manager, PCN 02-T072
 - ALMR Project Coordinator, PCN 02-133X
 - Communications Engineer II, PCN 02-3029
- Will provide direct support on a charge-back basis to ALMR.
- Will coordinate ALMR related work process through USD requests.
- Will continue to provide space at 5900 E. Tudor for all ALMR staff, equipment, records, electronic work stations, and test bays on a charge-back basis.
- Will allow the ALMR Project Manager to continue to be the Agency Project Manager for the ALMR Project Contract currently under Contract Number WG IT CA99-197-A.
- Will transfer custody of all records, (paper & electronic formats) related specifically to ALMR to the ALMR Project Manager.
- SATS and 2-way radio records will be maintained at 5900 E. Tudor Road and the ALMR Project Manager can coordinate access to these records through the ETS Telecom Deputy Director.

**Memorandum of Agreement
between the
Department of Administration and
Department of Military and Veterans Affairs
Delegation of Responsibility for ALMR Project Management
August 2004**

5. Effective Date of Agreement:

This MOA is effective immediately upon signing.



Ray Matkowsky
Commissioner
Department of Administration

8/12/04
Date



Major General Craig Campbell
Adjutant General/Commissioner
Department of Military & Veterans Affairs

8/15/04
Date

SITE	FUNDING SOURCE			FUNDING SOURCE			FUNDING SOURCE			FUNDING SOURCE			FUNDING SOURCE			FUNDING SOURCE			FUNDING SOURCE		
	NIJ 03 Budget	Actual	Delta	COPS 04 Budget	Actual	Delta	COPS 05 Budget	Actual	Delta	DHS 600,000 Budget	Actual	Delta	DHS 1 Million Budget	Actual	Delta	SOA Capital (12.5 Million) Budget	Actual	Delta	Site Totals Budget	Actual	Delta
Alcantra	\$0	\$0	\$0			\$0			\$0			\$0	\$17,000		\$17,000			\$0	\$17,000	\$0	\$17,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Atwood Repeater	\$382,250	\$382,250	\$0	\$549,506		\$549,506			\$0			\$0			\$0			\$0	\$549,506	\$382,250	\$549,506
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Bailey Hill	\$0	\$0	\$0			\$0			\$0			\$0	\$15,000		\$15,000			\$0	\$15,000	\$0	\$15,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Birch Hill			\$0	\$140,819	\$140,819	(\$0)			\$0			\$0			\$0			\$0	\$140,819	\$140,819	(\$0)
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Blueberry Hill	\$0	\$0	\$0	\$513,220	\$513,220	\$0			\$0			\$0	\$67,000		\$67,000			\$0	\$580,220	\$513,220	\$67,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Byers Creek			\$0			\$0			\$0	\$100,000		\$100,000			\$0			\$0	\$100,000	\$0	\$100,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Chulitna			\$0			\$0			\$0	\$10,000		\$10,000			\$0			\$0	\$10,000	\$0	\$10,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Cooper Mountain			\$0			\$0			\$0			\$0	\$72,000		\$72,000			\$0	\$72,000	\$0	\$72,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Divide			\$0			\$0			\$0			\$0	\$42,000		\$42,000			\$0	\$42,000	\$0	\$42,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Ester Dome			\$0			\$0			\$0			\$0	\$32,000		\$32,000			\$0	\$32,000	\$0	\$32,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Fire Station 12	\$0	\$0	\$0			\$0			\$0			\$0			\$0			\$0	\$0	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Girdwood			\$0			\$0			\$0			\$0	\$127,000		\$127,000			\$0	\$127,000	\$0	\$127,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Gold Creek	\$0	\$0	\$0			\$0			\$0			\$0			\$0			\$0	\$0	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Hope			\$0			\$0			\$0			\$0	\$82,000		\$82,000			\$0	\$82,000	\$0	\$82,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Hurricane			\$0			\$0			\$0			\$0			\$0			\$0	\$0	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Lena Point			\$0	\$194,064	(\$194,064)	\$0			\$0			\$0	\$75,000		\$75,000			\$0	\$75,000	\$194,064	(\$119,064)
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Moose Pass			\$0			\$0			\$0			\$0	\$107,000		\$107,000			\$0	\$107,000	\$0	\$107,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Nenana			\$0			\$0			\$0			\$0	\$50,000		\$50,000			\$0	\$50,000	\$0	\$50,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0
Portage			\$0			\$0			\$0			\$0	\$10,000		\$10,000			\$0	\$10,000	\$0	\$10,000
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0		\$0	\$0

SITE	FUNDING SOURCE																					
	NIJ 03			COPS 04			COPS 05			DHS 600,000			DHS 1 Million			SOA Capital (12.5 Million)			Site Totals			
	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	
SATS		\$0				\$0															\$0	
ALMR		\$0				\$0															\$0	
Rabbit Creek		\$0				\$0							\$17,000		\$17,000				\$0	\$17,000	\$0	\$17,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Reindeer Hills		\$0				\$0									\$0				\$0	\$0	\$0	
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Sawmill		\$0				\$0				\$25,000			\$25,000		\$0				\$0	\$25,000	\$0	\$25,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Seward		\$0				\$0							\$92,000		\$92,000				\$0	\$92,000	\$0	\$92,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Sheep Mountain		\$0				\$0				\$147,000			\$147,000		\$0				\$0	\$147,000	\$0	\$147,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Silvertip		\$0				\$0							\$85,000		\$85,000				\$0	\$85,000	\$0	\$85,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Site Summit		\$0		\$295,714	\$295,714	\$0							\$27,000		\$27,000				\$0	\$322,714	\$295,714	\$27,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Subscriber Equip	\$403,194	\$403,194	\$0			\$0									\$0				\$0	\$0	\$403,194	\$0
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Summit Lake		\$0				\$0							\$42,000		\$42,000				\$0	\$42,000	\$0	\$42,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Tahnetta Pass		\$0				\$0				\$147,000			\$147,000		\$0				\$0	\$147,000	\$0	\$147,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Ted Stevens Repeater	\$83,629	\$83,629	\$0			\$0									\$0				\$0	\$0	\$83,629	\$0
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Tolsona		\$0				\$0				\$90,000			\$90,000		\$0				\$0	\$90,000	\$0	\$90,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Trims		\$0				\$0									\$0				\$0	\$0	\$0	\$0
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Tudor Road	\$916,514	\$916,514	\$0			\$0									\$0				\$0	\$0	\$916,514	\$0
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Whittier	\$0	\$0				\$0				\$81,000			\$81,000	\$6,000	\$6,000				\$0	\$87,000	\$0	\$87,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Willow Creek		\$0				\$0							\$10,000		\$10,000				\$0	\$10,000	\$0	\$10,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Wolcott Mountain		\$0				\$0							\$25,000		\$25,000				\$0	\$25,000	\$0	\$25,000
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	
ALMR		\$0				\$0									\$0						\$0	
Yanert		\$0				\$0									\$0				\$0	\$0	\$0	\$0
Site Prep		\$0				\$0									\$0						\$0	
SATS		\$0				\$0									\$0						\$0	

SITE	FUNDING SOURCE			COPS 04			COPS 05			DHS 600,000			DHS 1 Million			SOA Capital (12.5 Million)			Site Totals		
	NIJ 03 Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta	Budget	Actual	Delta
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Beckwithts Bluff			\$0			\$0	\$0		\$0			\$0			\$0			\$0	\$0	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Peger Road	\$201,413	\$201,413	\$0	\$204,527		\$204,527			\$0			\$0			\$0			\$0	\$204,527	\$201,413	\$204,527
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Saddle Mountain			\$0	\$185,842	\$185,842	\$0			\$0			\$0			\$0			\$0	\$185,842	\$185,842	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Fairbanks EOC			\$0	\$128,249	\$128,249	\$0			\$0			\$0			\$0			\$0	\$128,249	\$128,249	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Money Knob			\$0	\$205,593		\$205,593			\$0			\$0			\$0			\$0	\$205,593	\$0	\$205,593
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Lena Point			\$0	\$194,064	\$194,064	\$0			\$0			\$0			\$0			\$0	\$194,064	\$194,064	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Sterling			\$0	\$210,020		\$210,020			\$0			\$0			\$0			\$0	\$210,020	\$0	\$210,020
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Auke Lake			\$0	\$154,000	\$154,000	\$0			\$0			\$0			\$0			\$0	\$154,000	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Oct Key Bank Pymnt			\$0			\$0			\$0			\$0			\$0			\$0	\$0	\$0	\$0
Site Prep			\$0			\$0			\$0			\$0			\$0			\$0			\$0
SATS			\$0			\$0			\$0			\$0			\$0			\$0			\$0
ALMR			\$0			\$0			\$0			\$0			\$0			\$0			\$0
Funding Source Totals	\$1,987,000	\$1,987,000	\$0	\$2,781,553	\$1,805,972	\$975,582	\$0	\$0	\$0	\$600,000	\$0	\$600,000	\$1,000,000	\$0	\$1,000,000	\$0	\$0	\$0	\$4,381,553	\$3,638,972	\$2,575,582
	Programmed	Grant Total		Programmed	Grant Total					Programmed	Grant Total										
	\$1,987,000	\$1,987,000		\$2,781,553	\$2,473,694	\$0	\$2,466,608	\$600,000	\$600,000	\$1,000,000	\$1,000,000	\$0	\$0					\$4,381,553	\$8,527,302		
Spent to Date		\$1,987,000			\$1,805,972		\$0		\$0		\$0		\$0		\$0					\$0	\$3,638,972
Available		\$0			\$667,722		\$2,466,608		\$600,000		\$600,000		\$1,000,000		\$1,000,000					\$4,888,330	