

State of Alaska FY2008 Governor's Operating Budget

Department of Natural Resources Interdepartmental Information Technology Chargeback Component Budget Summary

Component: Interdepartmental Information Technology Chargeback**Contribution to Department's Mission**

Provide DNR staff secure and reliable access to state telecommunications, data resources, and network computing services at the lowest total cost; and support public access to public data.

Core Services

This component secures DNR access to the State Wide Area Network with Internet services, local area network services, voice and data communications (phones, email, shared calendar, employee directory, video-conferencing, and networks); mainframe business applications, Oracle databases, Enterprise ETS-servers, DNR servers with production software, state security infrastructure; radio communications & dedicated circuits for fire and parks management; help desk services; asset management services for hardware and software; IT standards & procurement control; and a technical support staff of specialists and technicians for helpdesk, network, and systems administration.

These Core Information Technology Services enable DNR to:

- Process DNR's land, resource, and revenue tracking activities.
- Access the statewide communications network for data and voice transmissions.
- Access the state enterprise email, employee directory, and calendar communication system.
- Access and update the DNR web pages.

- Access the state mainframe for data storage, computation, backup, and retrieval services.
- Access the state's accounting, budget, payroll, and personnel systems.
- Access local and long distance telephone service.
- Access Internet and Intranet web sites to support DNR job requirements.
- Access shared file & print system

- Conduct electronic commerce with customers.
- Access to statewide video-conferencing facilities
- Support field radio and paging services for fire management and state parks administration
- Support >1000 network devices for including desktop PC's, printers, plotters, switches, routers

- Securely transfer confidential business information.
- Support emergency communication requirements from Forestry and Parks.
- Access other State computer systems, eg. DOT vehicle inventory system, Public Safety ASPIN system for Park Rangers, and P-card systems.
- Maintain productive desktop software and hardware per state and DNR standards.
- Maintain state standards for DNR Web Sites
- Contribute to state standard building process via various Functional Work Groups.

This project funds DNR staff and the general public direct use or access to the following DNR data processing systems:

Land Administration System (LAS) - The Land Administration System is used to manage nearly 250,000 resource cases covering more than 106,000,000 acres of uplands and ~65,000,000 acres of tide and submerged lands.

<http://dnr.state.ak.us/las>

Recorder's Office System for document indexing and imaging; process over 600,000 pages in 270,000+ documents per year. <http://dnr.state.ak.us/recorder>

Revenue and Billing System - This system automates the receipting, accounting, and billing of resource revenues collected by DNR. Support mainframe and web components.

DNR Home Page is the web portal to DNR business activity. Public usage continues to grow at a brisk pace. See <http://dnr.state.ak.us> Average annual increases of 30% growth.

Status Plat System – is the public record of state land ownership and disposition of state lands. Both web server and database server are used to distribute plats and their updates to DNR staff and the public. About 10,000 plat updates were processed last year.

Geographic Information System - provides maps, data, and analysis of issues that are used to support DNR decision-making. GIS products of land ownership and mineral resources are also popular with the public. The system uses PC's, servers, and web servers. An example GIS system supports public access to both state and federal mining claims: <http://akmining.info>

FY2008 Resources Allocated to Achieve Results

FY2008 Component Budget: \$1,606,300	Personnel:	
	Full time	7
	Part time	0
	Total	7

Key Component Challenges

- Issue 1: Implementing State IT Standards: The Microsoft Network Operating System The MS/NOS state standard is a significant change from what DNR currently uses. DNR may need new positions to install and maintain the Microsoft servers and the file and print system - the actual staffing model will be negotiated with DOA after the detailed implementation plans are completed.
- Issue 2: Voice Over Internet Protocol Project (VOIP). DOA has the lead on this project with DNR will continue to coordinate the migration off the PBS infrastructure to a shared data-voice IP network. The Atwood Building is complete, FY08 will involve support work in more remote sites across the state.
- Issue 3: Radio Communications: Two-way radios are extensively used by Forestry, Parks and others to help manage wildland fires, support public safety, provide law enforcement, support natural resource management and emergency response. A key issue relates to the migration plans from the existing analog radio systems to an integrated digital system as envisioned by the Alaska Land Mobile Radio initiative. A continuation capital budget request is proposed to execute the radio migration for Forestry and State Parks.
- Issue 4: Interagency receipts increment of \$18.0 is budgeted to cover increased operating costs for technical support. DNR staff totals have increased due to the Governor's Executive Orders and other changes. The new staff require support. Overall DNR Micro-computer network technicians and specialists support > 130 network devices/person.

Significant Changes in Results to be Delivered in FY2008

FY07 changes include the support required to migrate to the Microsoft standards created for Active Directory, Outlook Email, Internet Explorer Browser, and other Microsoft related changes.

Worked with ETS on switch changes to support Voice Over Internet Protocol phones.

Other changes include a much needed upgrade to the DNR server room to assure adequate power, battery backup, and redundancy for essential databases is provided.

Major Component Accomplishments in 2006

CORE SERVICES: ASSURING DNR NETWORK SERVICES; HELPDESK, SYSTEM ADMINISTRATION

DNR Storage Capacity Grows Seven terabytes (7000 gigabytes) of raw disk storage space was added to the new Network Appliance Filer, a network storage device, raising the current storage capacity to 14 terabytes. This is a file repository for Web server files, land ownership documents, land use maps and ownership maps and satellite ortho-images. A real application cluster architecture with 4 terabytes of storage was added to the Oracle servers to assure 24*7 availability and server redundancy. Outcome: centralized data storage lowers total cost, improves data protection.

Managed DNR server environment with goal of 99.9% availability. Performance measure rated at 99.0%. Increased downtime tied to increased Internet worm and virus activity. Led major portions of the migration to the Oracle 10g RAC enterprise RAC environment. Outcome: Stable computing environment raises productivity of DNR staff.

Maintaining Desktop Computers in over 35 offices, 1000 computers, 900 staff; processed over 3000 Technical Help requests in 2005. Logged over 16,000 requests. Most are hardware and software updates or error reports. Outcome: Employees have little downtime throughout the course of the year, software updates are efficiently coordinated, and the productivity of DNR Staff strengthened.

DNR Web Statistics – DNR web sites average over 4500 visits per day; with over 2 terabytes of data downloaded per year. Outcome: DNR reaches more customers with less impact on staff; public has self-service options without staff intervention, public assured access to high demand public information that promotes the mission of the department.

Assure Secure Network: Installed new Anti-Virus software with automated updates per state standards, (Symantec), lowering infection rates; installed new Asset Management and Software Control Software - LanDesk - another state standard to build inventories of hardware and software, and also to provide automated software updates via controlled licenses; lastly, installed DOA security standard software - Cisco Security Agent (CSA) on every desktop using LanDesk to provide 'Zero Day' virus protection (i.e. covers timeframe between virus release and anti-virus antidote)., Outcome: Higher Security Standards ward off the constant Internet Attacks maintaining DNR ability to conduct business; using automated update processes saves much staff time, increases protection levels. Net outcome is higher DNR staff productivity.

Continue to update DNR State IT Standards and Other Updates to CIC Home Page. DNR continues to update the department standards. DNR adopted Oracle as the standard database and Java as the standard programming environment within a Service Oriented Architecture that includes existing infrastructure. IT standards, and other updates, are posted to the CIC internal web page. Outcome: Policies and procedures, new and improved 'help' features, drive mappings, user Email/LDAP/USD logins and passwords, DNR wide e-mail lists, virus information, Corporate Time documentation, are all available for DNR staff.

Maintain home and shared directories for DNR employees: Support and maintain over 900 employees home and departmental shared directories on key servers.

- Database Contingency Planning: Deploy backup Oracle database server; protect the department, minimize risk of downtime.
- Mass Storage: Deploy additional 7 terabytes of centralized raid protected disk storage), raising the current storage capacity to 14 terabytes.
- Using the helpdesk software, updated the HelpStar, provides improved network and computer support to all DNR users.
- Maintain a backup and disaster recovery system for DNR's data files, consisting of an on site backup inventory for immediate restorations and an off site inventory for disaster recovery for over 7 terabytes of data.
- Maintain network services for authentication of users on the network (NIS) and maintain Internet acceptable naming conventions for DNR's servers (DNS).
- Maintain network services for automatic updates of DNR's Anti-virus software to DNR's desktop computers and automatic updates to the Windows operating systems and other applications to DNR's desktop computers using LanDesk software standard.
- Installed Stellent Content Management system in test and production environments to support DNR's migration from paper to electronic document management.
- Upgraded Computer Monitory for Status Graphics Unit using new Core GIS Software, migration to a dual monitor system for cartographic efficiency.
- CIC and ETS staff replaced the primary Cisco switches in the Atwood building 7th flr as part of Voice over IP telephone switchover, successfully worked with ETS on the transition.

Migrated DNR Computer Training Facility to Mining, Land and Water site on 9th floor of Atwood building via hardware and software upgrades. Expanded use at Mining and other conventions to provide public outreach on DNR information systems. Outcome: Better computer training room for DNR, expands role of GIS training within the department.

- Trained DNR IT Staff. Outcome: A well trained staff is able to utilize the best technical practices for solving DNR problems, and helps to retain a stable technical workforce. Microsoft training was provided to help with the DNR transition.

Statutory and Regulatory Authority

This component operates under AS 44.21.160; AS 09.25.110,115; 6 AAC Chapter 96; and as a support function for the DNR Mission, operates under AS38 and AS41.

Contact Information
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Interdepartmental Information Technology Chargeback Component Financial Summary

All dollars shown in thousands

	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	585.4	577.2	665.1
72000 Travel	3.1	2.5	2.5
73000 Services	786.4	935.2	935.2
74000 Commodities	0.0	3.5	3.5
75000 Capital Outlay	0.0	0.0	0.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	1,374.9	1,518.4	1,606.3
Funding Sources:			
1004 General Fund Receipts	1,011.2	1,198.6	1,268.5
1007 Inter-Agency Receipts	357.7	302.7	320.7
1061 Capital Improvement Project Receipts	6.0	17.1	17.1
Funding Totals	1,374.9	1,518.4	1,606.3

Estimated Revenue Collections

Description	Master Revenue Account	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		0.0	0.0	0.0
Restricted Revenues				
Interagency Receipts	51015	357.7	302.7	320.7
Capital Improvement Project Receipts	51200	6.0	17.1	17.1
Restricted Total		363.7	319.8	337.8
Total Estimated Revenues		363.7	319.8	337.8

**Summary of Component Budget Changes
From FY2007 Management Plan to FY2008 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2007 Management Plan	1,198.6	0.0	319.8	1,518.4
Adjustments which will continue current level of service:				
-Fund Source Adjustment for Retirement Systems Increases	26.2	0.0	-26.2	0.0
Proposed budget increases:				
-Network Position to Support the Federally-Funded Abandoned Mine Lands Program	0.0	0.0	18.0	18.0
-FY 08 Retirement Systems Rate Increases	43.7	0.0	26.2	69.9
FY2008 Governor	1,268.5	0.0	337.8	1,606.3

**Interdepartmental Information Technology Chargeback
Personal Services Information**

Authorized Positions			Personal Services Costs	
	<u>FY2007</u> <u>Management</u> <u>Plan</u>	<u>FY2008</u> <u>Governor</u>		
Full-time	6	7	Annual Salaries	388,124
Part-time	0	0	Premium Pay	1,693
Nonpermanent	2	1	Annual Benefits	281,278
			<i>Less 0.89% Vacancy Factor</i>	(5,995)
			Lump Sum Premium Pay	0
Totals	8	8	Total Personal Services	665,100

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
College Intern III	1	0	0	0	1
Data Processing Mgr I	1	0	0	0	1
Micro/Network Spec I	2	0	0	0	2
Micro/Network Tech I	1	0	0	0	1
Micro/Network Tech II	2	1	0	0	3
Totals	7	1	0	0	8