State of Alaska
FY2009 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 Technology Services (ETS)-servers, DNR servers with production software, state security infrastructure; radio communications and dedicated circuits for fire and parks management; help desk services; asset management services for hardware and software; Information Technology (IT) standards and 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 and 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 Personal Computers (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. Department of Transportation (DOT) vehicle inventory system, Public Safety ASPIN system for Park Rangers, and Purchasing Card (P-card) systems.
- Maintain productive desktop software and hardware per state and DNR standards.
- Maintain state standards for DNR Web Sites.
- Contribute to state standards 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 over 105,000 active resource cases covering more than 106,000,000 acres of uplands and ~65,000,000 acres of tide and submerged lands. http://dnr.alaska.gov/las

Recorder's Office System - for document indexing and imaging; process over 600,000 pages in 270,000+ documents per year. http://dnr.alaska.gov/recorders

Revenue and Billing System - This system automates the receipting, accounting, and billing of resource revenues collected by DNR. Supports 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.alaska.gov 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 9,000 plat updates were processed last year. http://plats.landrecords.info .

Geographic Information System (GIS) - 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. Visit an example GIS system, dynamically updated, that supports public access to both state and federal mining claims: http://akmining.info

FY2009 Resources Allocated to Achieve Results

FY2009 Component Budget: $1,664,000

Personnel:	
Full time	8
Part time	0
Total	8

Key Component Challenges

- Issue 1: Active Directory (AD) Conversion Effort: New directory services using Microsoft AD are required to implement security and routing requirements in new software applications tied to permit streamlining . DNR is actively participating on the Technical Advisory Committee and has staff assigned to migration efforts.

- Issue 2: Document Management Implementation: DNR needs to digitize case file documents to support search and processing efficiencies. Computer Information Center (CIC) Staff have key role in hardware and software procurement and installation.

- Issue 3: GIS Deployment within DNR and Within Executive Branch: GIS technologies for decision support and transaction processing offer rich opportunity for DNR. Advances are planned within both Unified Permit Project and the Statewide Digital Mapping Initiative.

- Issue 4: Alaska Land Mobile Radio System (LMRS): This project creates a digital standard for emergency response and resource management land mobile radios for the Division of Parks and Division of Forestry. Project was partially funded in FY07; replacement planning and implementation is underway.

- Issue 5: State Security Project: Transition to the Enterprise Security Standard for Internet Services as required by ETS will be a significant project for IT staff. Highest risks are un-covered costs, resulting in lost productivity for DNR IT tasks; and the possible decrease in performance for DNR business systems.

Significant Changes in Results to be Delivered in FY2009

FY08 changes include implementation of Microsoft Outlook for all DNR. DNR met all schedule deadlines, at the cost of placing end-user computer support in a two month deficit.

Utilized the standard LANdesk software to manage and secure desktops at lower total cost.

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

Initiated contract to implement a virtual server environment using VMware, saving power, space, and cooling requirements.

Provided technical support to DNR Fire Managers throughout the FY07-FY08 fire season.

Implemented new backup plan for Anchorage Servers, began work for Fairbanks.

Major Component Accomplishments in 2007

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

Enterprise Email Transition and Migration Completed - From May 16th 2007 through July 10th, DNR's IT staff deployed the new State's Email Enterprise System. The team worked over 160 hours of overtime to meet the deadline. Most remote transitions and migrations were done over the phone with end-users or by using LANDesk's Remote Control software. Due to the critical nature of Forestry's fire season, CIC staff made a special trip to Palmer to expedite Forestry's Palmer office.

Oracle Database Migrates to 10-G – To improve database reliability and total up-time services, Oracle 10G, a Real Application Cluster was installed with IT Support. The advanced architecture provides live fail-over capability, (two servers, if one goes down, the other will cover), and eliminates the need to take the database off-line for backups. RAC offers improved mapping support, and doubles DNR Enterprise Oracle computing capacity.

Support for New DNR Web Sites - IT Support infrastructure for all DNR web sites. In calendar '06 DNR combined web sites had over 17 million hits from 180,000 unique customers. IT Staff provided support for Forestry's advanced GIS mapping web site; and the Division of Mining, Land and Water web sites for portrayal of easements, trails, and other public access to state lands.

LanDesk Software Leveraged - LANDesk was used to manage the email transition and migration in remote offices, savings substantial time and expense, and used to monitor and inventory network hardware and software.

IT Support for Fire Management - Forestry's Fire Management offices was supported throughout the fire season by IT staff per the terms of a Service Level Agreement.

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 12 terabytes. This is a file repository for Web server files, land ownership documents, land use maps and ownership maps and satellite ortho-images. It is also used for Atwood building employees home directories and a shared directory for all DNR offices. 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%. I think our overall uptime on servers was higher than 99.0 but I don't have hard facts to back this up, deleted statement about worm and virus activity, we have not incidents with servers being infected only computers. 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, 1300 computers, 900 staff; processed over 3814 Technical Help requests in 2006 Logged over 24,000 requests to date. Most are hardware and software updates or trouble 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 Asset Management and Software Control Software - LanDesk - a state standard to build inventories of hardware and software, provide automated software updates, and to provide remote control by IT staff of employees computers.. Installed Department of Administration (DOA) security standard software - Cisco Security Agent (CSA) on every desktop 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, 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 Oracle 10G Real Application cluster database; protects the department, minimize risk of downtime.
- Mass Storage: Deploy additional 7 terabytes of centralized raid protected disk storage), raising the current storage capacity to 12 terabytes.
- Using the helpdesk software, 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.
- 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.

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 email transition and migration.

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

	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	612.7	652.6	688.0
72000 Travel	6.0	2.5	2.5
73000 Services	948.0	936.9	970.0
74000 Commodities	25.6	3.5	3.5
75000 Capital Outlay	23.6	0.0	0.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	**1,615.9**	**1,595.5**	**1,664.0**
Funding Sources:			
1004 General Fund Receipts	1,292.5	1,198.9	1,267.4
1007 Inter-Agency Receipts	323.4	379.5	379.5
1061 Capital Improvement Project Receipts	0.0	17.1	17.1
Funding Totals	**1,615.9**	**1,595.5**	**1,664.0**

Estimated Revenue Collections

Description	Master Revenue Account	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		**0.0**	**0.0**	**0.0**
Restricted Revenues				
Interagency Receipts	51015	323.4	379.5	379.5
Capital Improvement Project Receipts	51200	0.0	17.1	17.1
Restricted Total		**323.4**	**396.6**	**396.6**
Total Estimated Revenues		**323.4**	**396.6**	**396.6**

Summary of Component Budget Changes
From FY2008 Management Plan to FY2009 Governor

All dollars shown in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2008 Management Plan	**1,198.9**	**0.0**	**396.6**	**1,595.5**
Adjustments which will continue current level of service:				
-Correct Unrealizable Fund Sources for Salary Adjustments: GGU	17.8	0.0	-17.8	0.0
-ETS Chargeback Redistribution	33.1	0.0	0.0	33.1
-FY 09 Bargaining Unit Contract Terms: General Government Unit	17.6	0.0	17.8	35.4
FY2009 Governor	**1,267.4**	**0.0**	**396.6**	**1,664.0**

Interdepartmental Information Technology Chargeback
Personal Services Information

Authorized Positions			Personal Services Costs	
	FY2008 Management Plan	FY2009 Governor		
Full-time	8	8	Annual Salaries	436,748
Part-time	0	0	COLA	32,795
Nonpermanent	1	1	Premium Pay	0
			Annual Benefits	239,728
			Less 3.00% Vacancy Factor	(21,271)
			Lump Sum Premium Pay	0
Totals	**9**	**9**	**Total Personal Services**	**688,000**

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	2	0	0	0	2
Micro/Network Tech II	2	1	0	0	3
Totals	**8**	**1**	**0**	**0**	**9**