State of Alaska
FY2002 Governor's Operating Budget

Department of Natural Resources
Interdepartmental Data Processing Chargeback
Component

Component: Interdepartmental Data Processing Chargeback

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Component Mission

To increase staff productivity by providing DNR's connections to essential computing and data communications infrastructure; including the State mainframe systems, the State wide-area-network (WAN), and all of the DNR local area networking, servers, and desktop support systems; and to assure public access to information.

Component Services Provided

Funding from this component is used to secure essential computing and network services for the department. These services enable DNR to:
- Process DNR's land, resource, and revenue tracking activities with automated systems.
- Support electronic public access to DNR on-line databases.
- Access DNR servers that provide status plats, royalty accounting computations, GIS maps, database service, Internet web servers, DNR Intranet service.
- Support 949 network devices including PC's, Unix workstations, printers, plotters, switches, routers all sharing the transmission control protocol, internet protocol (TCP/IP) network foundation.
- Transfer information electronically between DNR's statewide operations.
- Access Internet and Intranet web sites to support DNR job requirements.
- Access the state's electronic mail, accounting, and payroll/personnel systems.
- Transfer information electronically between DNR's statewide operations.
- Deliver public commerce solutions with electronic credit card system.

This project funds usage of the following DNR data processing systems:

Land Administration System (LAS) - The Land Administration System is used to manage 115,000 active resource cases covering more than 106,000,000 acres of uplands and 65,000,000 acres of tide and submerged lands.

Recorder's Office System required to process over 600,000 pages in 200,000+ documents.

Revenue and Billing System - This system automates the receipting, accounting, and billing of resource revenues collected by DNR, over $1 billion in FY00. Support mainframe and web components.

Royalty Accounting System - provides computing resources to process monthly royalty and operator reports, send RIK Invoices, and provide Division of Oil & Gas staff with essential computational and record keeping capability.

Customer Information System - This system tracks present and past ownership of all state resources that are being sold or leased.

Status Plat System - This Unix system produces the State Status Plat. The mainframe tracking system identifies the pending actions affecting state land on more than 9,900 geographic townships. A web server is used to distribute plats and their updates to DNR staff and the public. About 20,000 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.

Title Subsystem - tracks the status of land conveyances from the Bureau of Land Management (BLM), and provides automated support to the Title Unit for adjudicating ownership of state lands. Accelerated land conveyance is now a goal of the BLM.

Fire Reporting System - tracks status and resource assignments on forest fires. Provides input to management decision making on fire control.

DNR Internet Services - provides the web pages and database connectivity to deliver services to the pubic via the Internet. Today the public can make on-line credit card payments for bills DNR sends (excluding land sales); can research land records and view maps on-line accessing major databases; can access forms for applications; view regulations, assess available land for sale, download data files using file transfer protocol (ftp), and several other functions.

Component Goals and Strategies

Strategies
To maximize use of cost effective technology to meet DNR mission and expand services to the public; to pay DOA-Information Services Fund our contractual obligation for wide area network services; to deliver local area network services and help desk to all DNR staff in over 30 offices.

Goals
To procure DOA's computing services. Department information system staff provides chargeback usage analyses to assure accuracy, detect impacts, project future use, and report mainframe usage to DNR divisions.
Outcome: Staff and the public have ability to run statewide DNR mainframe applications to support business goals.

To procure DOA network services. This is the largest cost center of this component. Emphasis is placed on managing this cost center.
Outcome: DNR staff have access to the Wide Area Network, Enterprise Email, Internet, and state mainframe.

To procure DNR System Administration; to keep DNR servers operational and updated at minimal total cost. Servers are located in Fairbanks, Juneau, Palmer, and Anchorage.
Outcome: Computing services from DNR supported servers are provided to all staff at least cost.

To support DNR Staff at the Computer Desktop Assure local area network aligns with wide area network, assure DNR staff have fully functional desktop and mobile computers with access to DNR information systems. To help DNR staff better understand how to put the technology to work for themselves.
Outcome: DNR computer users receive technical support via standards and procedures.

To assure public access to DNR Internet based systems by providing 7*24 access to web services via the DNR home page.

Key Component Issues for FY2001 – 2002

The rapidly expanding role of technology within the department has put major demands on the network support staff. DNR supports 949 network device in more than 30 offices, with only 4 (four) full-time people to service 766 of these devices. Staff workloads greatly exceed industry averages. This means staff are not able to always provide timely solutions to either system administration issues or desktop networking support issues. The result is a cut to DNR staff productivity, and reduced services to the public, because staff do not have properly working computers or access to the networks necessary for their jobs.

Increment for Palmer, Mat-Su Technician: This problem of short staffing is most acute in the Palmer Mat-Su area. An increment is needed to staff one technician in the Valley. Palmer Mat-Su now has ~100 DNR network devices with the majority of these located in the new Forestry facility. Agriculture, Parks, Plant Material Center, and the State Recorder also have offices in Palmer that require support. A technical support position in the valley will bring these offices to the standards necessary to become fully operational. Lack of support transfers work to the Anchorage staff who are often unable to allocate the time. Local support that is closely coordinated with the Anchorage Office will assure DNR Palmer Mat-Su staff with the ability to maintain their service levels to the public.

Some Summary Facts:
Computer Information Center Network & Desktop support: Four Positions

Ratio of Devices to Support: 192 Devices Per PERSON
Industry Average: 75 Devices Per support person
DNR computer network staff have about 2.5 times the industry average workload for support.

System Administration: This includes work on DNR servers that house our software and data - mission critical applications like email connectivity, Internet, mapping, status plats, user file systems, Geographic Info Systems, data warehouse, and imaging. We are more than Four Times BELOW the Industry Average in this category. Taken together, the short staffing in network services and system administration translates into bottlenecks elsewhere in the organization. Projects are often held up because they cannot receive essential network support. In some cases, mission critical systems such as fire management are unnecessarily over-exposed. Staff turn-over has been higher than normal, due to the imbalance between work load and support levels. The increment for a Palmer Position will free resources to address department wide system administration issues such as backups, software updates, new software applications, web development, and server maintenance.

Manage rising ITG wide area networking costs. DNR staff are required to use the state network, but the cost is expensive. Before the Internet, $160. / month paid for a single controller that handled about 40 users on dumb terminals, an average cost of $4.00 / user / month. Now each user has a bill of $29.00 per month for their personal computer, and about $16.00 per month for their portion of shared devices like networked printers, plotters, and scanners, a total of $45.00 / user / month.   This is a jump of over 10 times the cost - during a time when budget support for wide area networking for departments has declined. This forces divisions to pay the difference out of normal operating budgets that were used to support land sales, timber sales, parks management, and all the other DNR business functions. This compromises the department's ability to meet its goals and serve the public.

Expanding WAN connections to remote offices. Network access for remote offices continues to be an expensive but required application. Without access to the state network, staff ability to participate in enterprise business applications is compromised because they are logically located outside the state firewall.   WAN connections are expensive to create and maintain. Lower cost network system solutions, especially for remote areas of Alaska, needs better support. In FY02, the challenge will be to consolidate the Division of Parks outlying offices onto the state network.

Major Component Accomplishments for FY2000

- Maintained DNR mainframe systems costs within budget
- Minimized network costs across department budget structures
- Supported over 600 network users with enterprise systems and 949 IP addressable devices.
- Upgraded servers and software in DNR core server environment
- Completed successful move of Frontier Building users to Atwood Building - no network downtime.
- Installed and setup new Web Server for the Department.
- Installed and setup help-desk software system for tracking user help requests and managing workload
- Established network connectivity to Forestry's new Palmer office.
- Inventoried and documented DNR network devices for ITG rate assessments

Retired majority of old SNA (mainframe controller) network devices

Statutory and Regulatory Authority

This component operated under AS 44.21.160; AS 09.25.110,115; and 6 AAC Chapter 96.

Key Performance Measures for FY2002

Measure: To account for the annual chargeback allocations against system usage to ensure expenditures match system usage.
(Not yet addressed by Legislature.)

Benchmark:
Benchmark is FY01 $536.6 of GF funding and $213.3 of I/A funding, and $50.0 of Statutory Designated Program Receipts.

Background and Strategies:
Contractual chargeback network costs have continued to rise. Mainframe costs appear to be holding steady. The DNR strategy is to reduce or contain cost for FY02 by limiting network devices and maximizing mainframe program efficiency. Statutory Designated Program Receipts is being discontinued.

Measure: To assure that DNR servers provide core services on a 7X24*365 basis with a 99% availability, excluding scheduled outages.
(Not yet addressed by Legislature.)

Benchmark:
For FY00 DNR servers obtained a 98% availability status for uptime, but struggled with implementation new server hardware and software updates.

Background and Strategies:
DNR staff rely on information systems throughout an entire day, seven days a week. DNR server strategy utilizes Sun Enterprise servers to consolidate functions and assure dependability. Limited system administration staff produced bottlenecks for implementing software updates and hardware updates. This limits staff productivity, including the productivity of the programming staff in the IRM component. The increment for one position will free some resources to address the short-comings in this benchmark.

Measure: To assure timely response to DNR customer requests for PC support, and thereby maintain staff productivity. Goal is to resolve 95% of user service requests within 4 hours.
(Not yet addressed by Legislature.)

Benchmark:
No DNR statistics are available at this time. A new help desk software system called Helpstar is starting to accumulate statistics.

Background and Strategies:
Industry standards for desktop support require prompt resolution of customer computer problems. With limited staffing at DNR the goal is to satisfy the majority of user requests within four hours. The DNR strategy is to utilize the new Helpstar system where users enter problems and search a database for solutions. A technician to support DNR computer needs is being requested through a GF increment. Customer feedback on the new system has been very positive, and has help track issues to full resolution.

Status of FY2001 Performance Measures

	Achieved	On track	Too soon to tell	Not likely to achieve	Needs modification
• To account for the annual chargeback allocations against system usage to ensure expenditures match system usage.		X			
• To assure that DNR servers provide core services on a 7X24*365 basis with a 99% availability, excluding scheduled outages.		X			

	Achieved	On track	Too soon to tell	Not likely to achieve	Needs modification
• To assure timely response to DNR customer requests for PC support, and thereby maintain staff productivity. Goal is to resolve 95% of user service requests within 4 hours.			X		

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Component Financial Summary

All dollars in thousands

	FY2000 Actuals	FY2001 Authorized	FY2002 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	0.0	269.4	327.3
72000 Travel	0.0	3.5	5.0
73000 Contractual	496.2	531.4	531.4
74000 Supplies	0.0	0.0	0.0
75000 Equipment	0.0	0.0	0.0
76000 Land/Buildings	0.0	0.0	0.0
77000 Grants, Claims	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	**496.2**	**804.3**	**863.7**
Funding Sources:			
1004 General Fund Receipts	353.1	538.8	598.8
1007 Inter-Agency Receipts	143.1	214.4	264.9
1053 Investment Loss Trust Fund	0.0	0.8	0.0
1108 Statutory Designated Program Receipts	0.0	50.3	0.0
Funding Totals	**496.2**	**804.3**	**863.7**

Estimated Revenue Collections

Description	Master Revenue Account	FY2000 Actuals	FY2001 Authorized	FY2001 Cash Estimate	FY2002 Governor	FY2003 Forecast
Unrestricted Revenues						
None.		0.0	0.0	0.0	0.0	0.0
Unrestricted Total		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Restricted Revenues						
Interagency Receipts	51015	143.1	214.4	225.4	264.9	264.4
Statutory Designated Program Receipts	51063	0.0	50.3	0.3	0.0	0.0
Investment Loss Trust Fund	51393	0.0	0.8	0.8	0.0	0.0
Restricted Total		**143.1**	**265.5**	**226.5**	**264.9**	**264.4**
Total Estimated Revenues		**143.1**	**265.5**	**226.5**	**264.9**	**264.4**

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Proposed Changes in Levels of Service for FY2002

Palmer, Mat-Su Position Network Technician Position
A general fund increment of $57.5 is budgeted to meet the computer network service needs of DNR staff in the Palmer, Mat-Su area. This funding will cover the cost of a full time Micro-Computer Network Technician. DNR operations have grown in the Palmer area, particularly with the construction of the new Forestry Fire Facility. The limited Anchorage staff are over-loaded with assignments and cannot properly meet the needs of the Palmer Mat-Su workers.   This is especially a key issue for forestry during the fire season when communication systems become mission critical. This increment is essential for maintaining a basic service level for staff located in Agriculture, Recorder's Office, Parks, Plant Material Center, and Forestry.

$50.0 Decrement, Statutory Designated Program Receipts
This authorization was originally intended to allow the state to charge customers for access to the Recorder's Office indexing system. The public wants access to this public record system through the internet and we are exploring the possibilities.

$50.0 Increment for Interagency Receipts
An increment of $50.0 is needed to offset the rising wide area network costs charged by the Information Technology Group, and for potential increases in the total number of department network devices. This increase provides the authority for DNR to meet its obligation to DOA-ITG within budget. The I/A costs are assumed by the respective divisions who are forced to forgo other essential services to assure their access to email, mainframe applications, Internet, and DNR databases.

Summary of Component Budget Changes

From FY2001 Authorized to FY2002 Governor

All dollars in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2001 Authorized	**539.6**	**0.0**	**264.7**	**804.3**
Adjustments which will continue current level of service:				
-Convert Special FY2001 Labor Cost Fund Sources to GF	0.3	0.0	-0.3	0.0
-Year 2 Labor Costs - Net Change from FY2001	1.4	0.0	0.5	1.9
Proposed budget decreases:				
-Reduce the Level of Anticipated Designated Program Receipts	0.0	0.0	-50.0	-50.0
Proposed budget increases:				
-Palmer/MatSu Area Computer and Network Support	57.5	0.0	0.0	57.5
-Increase Interagency Receipt Authority for DOA DP Chargeback	0.0	0.0	50.0	50.0
FY2002 Governor	**598.8**	**0.0**	**264.9**	**863.7**

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Personal Services Information

Authorized Positions			Personal Services Costs	
	FY2001 Authorized	**FY2002 Governor**	Annual Salaries	248,715
Full-time	4	5	COLA	3,970
Part-time	0	0	Premium Pay	0
Nonpermanent	0	2	Annual Benefits	86,204
			Less 3.42% Vacancy Factor	(11,589)
			Lump Sum Premium Pay	0
Totals	**4**	**7**	**Total Personal Services**	**327,300**

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
College Intern II	2	0	0	0	2
Data Processing Mgr I	1	0	0	0	1
Micro/Network Spec I	2	0	0	0	2
Micro/Network Tech II	1	0	0	1	2
Totals	**6**	**0**	**0**	**1**	**7**