

State of Alaska FY2007 Governor's Operating Budget

Department of Natural Resources Information Resource Management Component Budget Summary

Component: Information Resource Management

Contribution to Department's Mission

Provide information technology services and graphic land records to the Department of Natural Resources, and assure public access to information.

Core Services

1. Create and maintain the state graphic land record - Status Plat Map.

- Maps are used to make decisions on land ownership, authorizations, permit approvals, resource issues.
- Public access to state land records at <http://dnr.state.ak.us/landrecords>.
- Shows current status and location of state lands: ~ 100,000,000 acres = Size of California.
- Public access to information on land title, land sales, leases, mining claims, permits, water rights, state surveys, related federal surveys, etc.
- Annual updates range from 10,000-30,000; ~ 20,000 maps in inventory
- State plats portray state land ownership, classification, disposals, right-of-ways, trust lands, municipal entitlements, and disposition of property rights including state land sales.
- Federal lands information are available and updated from a shared DNR-BLM web site.

2. Create, maintain, and upgrade the DNR resource transaction and revenue receipting system; implement e-Government Systems

- Maintain Financial Software System used to track DNR revenues in excess of \$1.9 billion. \$20 million
- This system is the primary means for DNR to track the status of an individual case-file through the adjudication process, and for assuring timely management of billing, receipting, and distribution of DNR revenues.
- Support major industry groups of Oil and Gas; Mining; Title Companies; and Recreation.
- Support DNR diverse customer base: over 20,000 customers have active case files; ~ 91% are individuals, primarily Alaskans
- DNR IT business systems support tens of thousands of additional customers as reflected by >168,000 revenue receipts for Recording, UCC filing, State Parks Cabin Rentals, over-the-counter permits and purchases. A 12% increase over FY04.
- IRM supports the computer system used by the State Recorder's Office to index and image public property records and uniform commercial code documents. About 280,000 documents were recorded in 2004.
- Offer direct on-line services to the DNR public for improved service, streamlined processes, and lower total cost of operations. Examples are Cabin Reservations on-line with Parks, land sales with Mining, Land and Water, Burn Permits with Forestry, UCC Filings with Recorder's Office.

3. Create and maintain DNR Geographic Information Systems, (GIS) databases and business applications.

- GIS manages the <http://mapper.landrecords.info> site, providing DNR, state employees, and the public with desktop access to the state parcel database and the DNR GIS database: The recently updated site answers questions like: Is this state land? Is this use allowed? Can I stake a mining claim? Who owns oil and gas leases?
- The GIS Unit is working with other state agencies to create a multi-department Internet GIS. AOGCC publication of oil and gas geo-technical data offers GIS interface developed in partnership with DNR.
- The GIS Unit supports department wide GIS business projects, especially Mining; Geological Survey; History & Archaeology, and Forestry. See <http://akgeology.info> as an example that promotes mineral exploration and investment.
- The GIS Unit is responsible for the computer system that operates the automated Status Plat System used by Status Graphics Staff. This system has been integrated with federal systems. See: <http://landrecords.info>
- GIS Unit is helping to redesign the archeological review process at the direction of the Division of Parks, History and Archeology Section. The goal is to streamline permitting and provide better protection of historic sites.
- GIS Unit has the lead role for developing a statewide Cadastral Database of land ownership information. Knowledge of land ownership is essential for resource management and promotes resource development. This is a joint project w/ federal, state, local government and native corporation participants. See <http://cadastral.info>

4. Provide computer support, local area networking, email access, data storage, security, server administration, disaster recovery, help desk and other information technology services to DNR.

- Support over 35 DNR offices from Ketchikan to Nome.
- High ratio of total devices supported to number of staff ~ 130 devices / CIC staff member which indicates highly efficient operations.
- Computer and network services costs are budgeted under the Interdepartmental Information Technology Chargeback Component.

End Results	Strategies to Achieve Results
<p>A: DNR business processes are efficiently automated and easy to use by customers, both internal and external. Productivity increases for staff. A positive environment for economic investment is created; applicants know what is expected.</p> <p><u>Target #1:</u> Raise productivity of DNR staff using business information system upgrades or replacements. <u>Measure #1:</u> Number of on-line business applications.</p> <p><u>Target #2:</u> 99.9% availability of DNR information systems at any time of day or day of the year, excluding scheduled downtime for maintenance. <u>Measure #2:</u> % of time internal networked devices (computers, printers, copiers) fully operational for DNR staff.</p> <p><u>Target #3:</u> Raise productivity per cartographer to 2,000 of cases completed per year reflecting benefits of automation. <u>Measure #3:</u> Average number of cases updated per cartographer per year.</p>	<p>A1: DNR staff have fast, efficient, and well managed Personal Computers to accomplish their jobs.</p> <p><u>Target #1:</u> Provide high quality help desk services to DNR staff at the lowest possible cost. Maintain a ratio of less than 1% of tech support for department customers. <u>Measure #1:</u> Number of full time network and desktop support staff supporting department wide customers as a percent of the total DNR staff numbers being supported.</p> <p>A2: Computerized systems are designed to support and enhance the business processes defined by statute, regulation, and management.</p> <p><u>Target #1:</u> Automate four business processes per year and put on-line for customers and staff. <u>Measure #1:</u> Number of business processes automated.</p> <p><u>Target #2:</u> Incorporate mapping and document management technologies to support the strategy. <u>Measure #2:</u> Number of business applications that use mapping and document management solutions to support the strategy.</p>
End Results	Strategies to Achieve Results
<p>B: State Land Records and data are maintained, protected from natural disaster, and made publicly accessible.</p> <p><u>Target #1:</u> Reduce the total backlog of pending actions at the start of each fiscal year to less than 1000. Assure rapid updates to the public record. <u>Measure #1:</u> Number of pending actions requiring status plat updates at the start of the fiscal year.</p> <p><u>Target #2:</u> A tested disaster recovery plan has been prepared and is ready to execute if so ordered. <u>Measure #2:</u> A disaster recovery plan has been written, approved, and tested.</p>	<p>B1: Automate update processes to DNR land records web site to assure current information is available for staff decision making.</p> <p><u>Target #1:</u> Eliminate duplicate data entry between tabular mainframe system and spatial mapping system. <u>Measure #1:</u> Duplicate data entry eliminated by having the Plat Information Management System in production by December 2005.</p> <p><u>Target #2:</u> Utilize data entry at State Records Office to eliminate duplicate entry into LAS Mainframe System for mining claims, plats (surveys), and state deeds. <u>Measure #2:</u> Number of transactions that are automatically linked to Land Administration System from Recorder's Data Entry, eliminating duplicate data entry.</p>
End Results	Strategies to Achieve Results
<p>C: Public can conduct business or query DNR</p>	<p>C1: Allow the public to complete on-line forms or</p>

<p>databases without requiring staff intervention; lower the cost of doing business with DNR via automation.</p> <p><u>Target #1:</u> Record over 50 million hits per year, provide over one terabyte of data downloads, and service an average of 4000 visits per day.</p> <p><u>Measure #1:</u> Total count of web statistics for visits per day, volume of downloads (bandwidth); and total hits per year.</p>	<p>make reservations and submit with payment at their convenience; save DNR staff time by reducing data entry requirements.</p> <p><u>Target #1:</u> 50% of all Burn Permits issued via the Internet System.</p> <p><u>Measure #1:</u> Percentage issued via the Internet System.</p> <p><u>Target #2:</u> 10% Reduction in UCC paper filings by implementing on-line Uniform Commercial Code interactive process.</p> <p><u>Measure #2:</u> Percentage of total UCC filings posted via the self-help Internet based system.</p> <p><u>Target #3:</u> Execute 90% of State Parks Cabin Reservations over the self-help Internet web site.</p> <p><u>Measure #3:</u> Percent of cabin reservations used Internet self-help system.</p>
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End Results	Strategies to Achieve Results
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<p>D: Multiple agency databases (i.e. federal, state, local government sources) that support DNR business are interconnected via the Internet and other shared IT systems.</p> <p><u>Target #1:</u> Implement one non-duplicating Web Services Solutions for cooperative agencies with DNR mission overlap per year.</p> <p><u>Measure #1:</u> Number of external partners with mission overlap who have web-services models in place with DNR.</p>	<p>D1: Logically join disparate databases to present an integrated solution for DNR customers.</p> <p><u>Target #1:</u> Electronically connect one local government parcel mapping and property records public web sites to the State Recorder's Office indexing and imaging system per year.</p> <p><u>Measure #1:</u> Number of local government property record web sites linked to the State Recorder's Office Web site at the parcel level.</p> <p><u>Target #2:</u> Attain 60,000 visits per year to the joint DNR Land Records and BLM Federal Land Records to provide an integrated view of public lands.</p> <p><u>Measure #2:</u> Number of visits to the Joint DNR - BLM Land Records Web Site</p>
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Major Activities to Advance Strategies
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<ul style="list-style-type: none"> • Strategic planning for IT projects for DNR • Leveraging staff and technology across projects • Collaboration with other State, Federal, Local Government, and Native groups • Position DNR as a leader in GIS applications as the most basic layer is land ownership 	<ul style="list-style-type: none"> • Provide central desktop support through use of standards and remote software applications • Provide business applications through WEB based technologies • Set standards for classifications and legends for Status Plats • Provide data base management and reduction of duplication
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FY2007 Resources Allocated to Achieve Results

FY2007 Component Budget: \$3,122,600	Personnel:	
	Full time	30
	Part time	0
	Total	30

Performance Measure Detail

A: Result - DNR business processes are efficiently automated and easy to use by customers, both internal and external. Productivity increases for staff. A positive environment for economic investment is created; applicants know what is expected.

Target #1: Raise productivity of DNR staff using business information system upgrades or replacements.
Measure #1: Number of on-line business applications.

Analysis of results and challenges: At the end of FY05, DNR had 15 on-line business services. See the web site below for a cumulative view of progress toward the goal.

Target #2: 99.9% availability of DNR information systems at any time of day or day of the year, excluding scheduled downtime for maintenance.

Measure #2: % of time internal networked devices (computers, printers, copiers) fully operational for DNR staff.

ESTIMATED HOURS OF SYSTEM UPTIME

Year	HRS UPTIME	% UPTIME	DAYS UP
2000	8,640	98.6%	360
2001	8,660	98.8%	361
2002	8,680	99.1%	361
2003	8,680	99.1%	361
2004	8630	98.5%	359
2005	8610	98.3%	358

Increased worm and virus activity led to some decline in 04 and 05.

Analysis of results and challenges: FY 2005 Increasing number of power outages, increased inter-dependencies on Oracle and associated DNR data center infrastructure (vs. ETS data center which has 24*7 coverage) led to a slight increase in overall system unavailability. Impact of viruses and worms continued trend from 2004.

Need to tie DNR data center to building backup generator to raise uptime, need to implement DOA-ETS security plan.

Target #3: Raise productivity per cartographer to 2,000 of cases completed per year reflecting benefits of automation.

Measure #3: Average number of cases updated per cartographer per year.

Average Updates Per Cartographer Per FY

Year	# Updates	Target
2000	1368	2000
2001	2542	2000
2002	1559	2000
2003	1456	2000
2004	1715	2000
2005	1773	2000

FY01 had large backlog of mining claims and prospecting sites processed. One time clean-up.

Analysis of results and challenges: Results show continued steady increase in productivity per cartographer. The high number in 2003 was the result of a very intense effort to catch-up with the back log.

A1: Strategy - DNR staff have fast, efficient, and well managed Personal Computers to accomplish their jobs.

Target #1: Provide high quality help desk services to DNR staff at the lowest possible cost. Maintain a ratio of less than 1% of tech support for department customers.

Measure #1: Number of full time network and desktop support staff supporting department wide customers as a percent of the total DNR staff numbers being supported.

Network and Desktop Support Staff

Fiscal Year	DNR Full-Time Staff	Tech CIC Staff	Percent Tech
FY 2004	691	6	0.9%
FY 2005	722	6	0.8%
FY 2006	766	7	0.9%

Network and desktop staff in the Computer Information Center support all divisions except DGGs, Oil and Gas, and Joint Pipeline Office. Percents below 1% are well below industry standards.

Analysis of results and challenges: The ratio of IT network and desktop support staff to full time staff is about 1%. This low cost ratio is made possible by DNR and State IT Standards. The ratio will need to increase (more tech staff) if state adopts the more complex Microsoft Network Operating System.

A2: Strategy - Computerized systems are designed to support and enhance the business processes defined by statute, regulation, and management.

Target #1: Automate four business processes per year and put on-line for customers and staff.

Measure #1: Number of business processes automated.

Business Processes Automated

Fiscal Year	DNR Process On-Line	Target
FY 2004	3	4
FY 2005	3	4
FY 2006	1	4

See analysis for specific processes.

Analysis of results and challenges: 2006: Q1 One new automation: All DNR recorded transactions automatically linked into Land Administration System, saves staff time, provides access to electronic recorded documents.

2005: 1) Cabin Reservations on-line; > 85% all rentals now done over the Internet; 2) register commercial recreation On-line; 3) updated land sale bidding and over the counter sales system (joint project with Mining, Land and Water)

2004: 1) Uniform Commercial Code on-line; ~ 15% of all UCC filings. 2) Burn Permits on-line. 3) New Credit Card System for Internet payment.

Target #2: Incorporate mapping and document management technologies to support the strategy.

Measure #2: Number of business applications that use mapping and document management solutions to support the strategy.

New Document and Mapping Systems

Year	Doc Systems	Map Systems	YTD Total	Target
2004	1	1	2	2
2005	1	2	3	3
2006	1	1	2	4

Document systems use in-house software developed for specific application. DNR now working to deploy a Stellent based Case-management solution.

Mapping systems are open for other departments to access. DNR and AOGCC share a common data system that assures consistency and does not duplicate data.

Analysis of results and challenges: 2006: Updated platting system, Alaska Mapper Released.

FY06 Q3 Projection: Coastal Project Questionnaire on-line w/ map analysis.

2005: New state status plat designed. New bibliographic doc system for minerals data. New mapping front end for minerals data.

2004: State Recorder's doc system expanded. High growth rate.

DNR-AOGCC Web Site for oil and gas technical data.

B: Result - State Land Records and data are maintained, protected from natural disaster, and made publicly accessible.

Target #1: Reduce the total backlog of pending actions at the start of each fiscal year to less than 1000. Assure rapid updates to the public record.

Measure #1: Number of pending actions requiring status plat updates at the start of the fiscal year.

Status Graphics Workload Analysis

Fiscal Year	Beginning Balance	New Casework	Cases Updated	Ratio Updated / New Work
FY 2000	16790	13684	19154	140%
FY 2001	11320	30355	33042	109%
FY 2003	8633	12001	17151	91%
FY 2004	3483	15132	13717	91%
FY 2005	4817	11651	10640	91%
FY 2006	6232	0	0	0

A low beginning balance of pending cases at the start of each fiscal year means the information on the status plat is being kept current. The target is 1000.

Analysis of results and challenges: In FY2006 DNR will place a new state platting system into production introducing many efficiencies such as automatically updating the plat when only case status changes. Currently, the oldest pending action is about 12 months, and is ~4 months for townships of highest activity.

Target #2: A tested disaster recovery plan has been prepared and is ready to execute if so ordered.

Measure #2: A disaster recovery plan has been written, approved, and tested.

B1: Strategy - Automate update processes to DNR land records web site to assure current information is available for staff decision making.

Target #1: Eliminate duplicate data entry between tabular mainframe system and spatial mapping system.

Measure #1: Duplicate data entry eliminated by having the Plat Information Management System in production by December 2005.

Analysis of results and challenges: Target for System on-line December 2005.

Target #2: Utilize data entry at State Recorders Office to eliminate duplicate entry into LAS Mainframe System for mining claims, plats (surveys), and state deeds.

Measure #2: Number of transactions that are automatically linked to Land Administration System from Recorder's Data Entry, eliminating duplicate data entry.

Analysis of results and challenges: DNR-LRIS programmers have automated linkage of the following transactions:

Document Recorded (DR)

Plat Filed (PF)

Conveyance Recorded (CR)

These transactions have generated automated links to over 60,000 transactions in the Land Administration, primarily in Title and Mining Case Files.

C: Result - Public can conduct business or query DNR databases without requiring staff intervention; lower the cost of doing business with DNR via automation.

Target #1: Record over 50 million hits per year, provide over one terabyte of data downloads, and service an average of 4000 visits per day.

Measure #1: Total count of web statistics for visits per day, volume of downloads (bandwidth); and total hits per year.

DNR Web Sites Usage

Year	Visits / Day	Downloads - GB	Hits / Yr
1999	1025		
2000	1707 +66.54%		
2002	3257 +90.80%		
2003	5456 +67.52%		
2004	3468 -36.44%	641	44,507,108
2005	4319 +24.54%	1612 +151.48%	46,882,838 +5.34%

Total hits and download data are not available prior to 2004.

2005 Data are totals through Sept.

Analysis of results and challenges: DNR web site continues to grow in use as on-line applications provide convenient answers to users, and saves staff time from phone calls and independent research for customers. Amount of data being downloaded from the site continues to grow.

C1: Strategy - Allow the public to complete on-line forms or make reservations and submit with payment at their convenience; save DNR staff time by reducing data entry requirements.

Target #1: 50% of all Burn Permits issued via the Internet System.

Measure #1: Percentage issued via the Internet System.

Burn Permits Issued Via the Internet

Year	# of Permits	%
2004	3000	38%
2005	3500	45%

Analysis of results and challenges: FY2005: Over 3500 permits issued using the new Internet system. Mat-Su, Palmer, and Kenai are areas of highest use.

FY2004: Over 3000 burn permits total, 38% were Internet based. Savings to Div. of Forestry ~ 200 hours;

customer satisfaction higher because of convenience.

Target #2: 10% Reduction in UCC paper filings by implementing on-line Uniform Commercial Code interactive process.

Measure #2: Percentage of total UCC filings posted via the self-help Internet based system.

UCC Filings Made Over the Internet

Year	Percent of Filings	YTD Total
2004	5%	0
2005	12%	0

Target #3: Execute 90% of State Parks Cabin Reservations over the self-help Internet web site.

Measure #3: Percent of cabin reservations used Internet self-help system.

Percent of Cabin Reservation Made On-Line

Year	% of Reservations	Target
2004	70	90
2005	85 +21.43%	90 0%

Analysis of results and challenges: Average projected savings to DNR is about 4 days of labor per month. Significant savings to public reduces travel time and scheduling constraints (24 hr availability for Internet).

D: Result - Multiple agency databases (i.e. federal, state, local government sources) that support DNR business are interconnected via the Internet and other shared IT systems.

Target #1: Implement one non-duplicating Web Services Solutions for cooperative agencies with DNR mission overlap per year.

Measure #1: Number of external partners with mission overlap who have web-services models in place with DNR.

Analysis of results and challenges: Shared web mapping has great capacity to help the state grow and provide critical information to first responders working on public safety matters. DNR GIS databases connected to other reliable sources are strategic to meet those needs. DNR Successfully tested link of Web Mapping Service with Univ. Alaska Fairbanks (GINA); with a planned move to production FY06-07.

D1: Strategy - Logically join disparate databases to present an integrated solution for DNR customers.

Target #1: Electronically connect one local government parcel mapping and property records public web sites to the State Recorder's Office indexing and imaging system per year.

Measure #1: Number of local government property record web sites linked to the State Recorder's Office Web site at the parcel level.

Local Government Property Links to Recorders

Year	Connectors
2005	2
2006	0

Linking with Municipality of Anchorage is next objective.

Analysis of results and challenges: Mat-Su Borough first to link to State Recorder at parcel level. Fairbanks North-Star Borough Linked in FY2005. Next objectives include Municipality of Anchorage, Kenai Peninsula Borough, and Haines Borough.

Target #2: Attain 60,000 visits per year to the joint DNR Land Records and BLM Federal Land Records to provide an integrated view of public lands.

Measure #2: Number of visits to the Joint DNR - BLM Land Records Web Site

Number of Visits to Joint Land Records Website

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD Total	Target
2005	12946	14593	12849	0	40388	60000
2004	24481 +89.10%	10728 -26.49%	17872 +39.09%	N/A	52740 +30.58%	60000 0%
2003	22381 -8.58%	23266 +116.87%	24060 +34.62%	21055 0%	90762 +72.09%	60000 0%

Corresponding 2005 data volumes are Q1=4.4 gigabytes downloaded, Q2=4.9 gigabytes downloaded, Q3=4.6 gigabytes downloaded. Translated: this is a popular site used by many to access state and federal land records.

Analysis of results and challenges: Federal legal constraints prevent electronic connection of the databases. DNR receives monthly updates from BLM and posts these to the shared web site.

Key Component Challenges

Information Resource Management

Top Issues

Issue #1. Maintaining New Technologies: The adoption of the Oracle standard within DNR increases annual costs to pay for database administration services. Combined with costs for administration of the Land Administration System, and the Data Administrator for resource GIS data base funding of \$220,000 is needed. Federal funds used to create and support DNR systems are expiring.

Issue #2. Basemap Information for DNR Land Managers is Poor: The **Alaska Basemap Project** would acquire detailed ortho-imagery of high-interest state lands to support the department’s mission. Ortho-imagery creates a detailed basemap that supports land management decision making, helps to reduce monitoring costs, supports emergency management response, and improves the overall state permit and stipulation process by providing land use information. Existing basemaps from USGS are general and outdated. The project will leverage all existing detailed ortho-imagery available.

Issue #3. Creating eCommerce Applications for Permit Streamlining: DNR's existing case management system does not support on-line filing or many key steps in the authorization process. Capital Projects have supported design work. DNR is moving into the construction phase and DNR IT staff will be key for building these needed improvements under the Unified Permit Project. The net outcome is to create a lower cost and higher quality regulatory environment for businesses and the public.

DNR System Replacement Issues

The department has identified several software applications that are at the end of their life cycle. Some progress has been made replacing major systems. For others, little or no progress has been made. Size Ranking: <\$100k=small; \$100k-\$1,000k=med; > \$1 Million=Large. See DNR IT Plan.

Application	Replacement Progress	New System	Relative Size
Recorder’s Office System	Done: New data entry system 2000, new Imaging-Web delivery 2001	2001	Med
Uniform Commercial Code	Done: Web replacement System installed for Feb 2004	2004	Med
File Based GIS Mapping System; Shared GIS	Done: Oct 2004, migrated to Oracle Spatial-Web; multi department	2004	Med
Forestry Fire Reporting System, Burn Permits	Done: Web-based replacement	2004	Small
Parks: Cabin Reservations	Done: Need ability to book cabin	2004	Small

Mining Claims Information; LAS Mapper	rentals on-line. Campgrounds next. Done: Web access to state & federal system, revision planned late '05	2005	Large
Status Plat – State Land Ownership Mapping	95% Done: Unified database in production, updated Alaska Mapper Released, Dept Review of new plats underway.	2003-05	Large
Parks: History & Archeology	Partial: New business process designed, new IT system '05	2004-05	Med
Oil and Gas Royalty Accounting	Started FY04, see Oil & Gas Component for details	2007	Medium
Land Administration System	Goal of creating system that better serves the public and makes DNR staff more productive. Early stages	2005-11	Large
Coastal Zone Management (ACMP)	Started, builds system for Coastal Districts and others to utilize.	2006-07	Large
Revenue and Billing System	Will need to replace or upgrade w/ AKSAS and LAS changes	open	Medium
Habitat Title 41 Permit Application	Replacement or update need identified, low priority	open	Small

Significant Changes in Results to be Delivered in FY2007

On-line permitting will expand in FY07 offering the public and industry applicants a more efficient process for submitting resource authorization requests. Land Use Permits, Coastal Project Questionnaire, Commercial Recreation, Coastal Management Grants, and other permits will help to meet the productivity performance measures set in this component.

The new state status plats will be deployed and transformed, creating improved information services for industry, the general public, and the DNR staff who adjudicate requests. The new plats utilize color (vs. black & white) and offer an on-line interactive version called Alaska Mapper. Training at a recent trade show for the mining industry met with an enthusiastic response.

DNR IT Capital State-Federal Projects will continue to advance measurable results under the Alaska Basemap, the minerals related efforts and the land ownership initiatives (Cadastral). These systems bring enhanced data - for example detailed Ortho-Imagery - to the DNR decision making process.

DNR Computer Information Center will deploy new state standards for security and operating systems. These changes will align DNR with a shared IT model for the executive branch, with the goal of increasing the security of the state network, raising uptime percentages, and thus raising productivity of DNR staff.

Major Component Accomplishments in 2005

CORE SERVICES: PROVIDING DNR DATA PRODUCTS

Core Services Data Products include the state status plat; the DNR land parcel database; c) Land Administration System (LAS) data access, quality checks, and data warehouse; d) access to BLM plats and surveys; e) maintenance of the DNR GIS basemap and maps on-line.

Maintaining the State Status Plat: <http://plats.landrecords.info>

FY05 Production Goal: Note 12,000 pending actions updates to the graphic record

Accomplished: 10,640 updates (89% of the goal)

FY05 Currency Goal: 2 month max turn-around time for pending actions.

Start of FY05 – 7/1/04: 4.5 months

Status at 6/30/05: 7 month turn-around time

Both pending action updates and the lag time for getting pending actions posted to the plat slipped at the end of FY05. This slippage was a direct result of assigning staff resources to work on the new color plat design and learn the new

software updates procedures from the Core GIS system. Status graphics also lost two long term staff, volume of updates has increased. Implementing the new plat map and edit system will reduce the backlog.

Process Mining Claims within a maximum 30 days of receipt in Status Graphics. This goal was met. This includes all new claims that are staked and claims that are closed annually. As of 6/30/05 there were 37,800 active mining claims. The total cycle time from Recording date, LAS Posting, and Plat update is running from 30-45 days, mostly a function of the timing of mining rent payments by customers.

Reduced Backlog of Area Plan Classifications requiring notation to the status plat. Developed a new business process to create planning documents and later upload the classification information. All new plans will be submitted electronically per standards. Completed the notation of Central Southeast and Prince of Wales Area Plans.

Developed GIS Data Standards for DNR staff creating Area Plan Classifications, Land Disposal Parcel information, and Oil and Gas Lease boundaries.

Navigability Mapping defined by SB305 for the support of state title beneath navigable waters was launched. Database design and mapping of the Navigable Water-ways is in place.

Assure Public Access to State GIS Database: responded to department and public requests for information via the Alaska State GeoSpatial Data Clearinghouse. Updated metadata records for GIS data layers per national standards; accomplished major goal of migrating DNR GIS vector data into the Oracle Spatial environment; expanded DNR staff access to Oracle GIS data. <http://alaskadata.info>

Assured Access to State Digital Maps Library: public and staff access to pre-compiled maps, Outcome: Efficient self-serve model, high volume monthly downloads per 6AAC96 at low support cost.

Maintain home and shared directories for DNR employees: Supported and maintained over 800 employees home and departmental shared directories on servers located in Fairbanks, Palmer, Anchorage, and Juneau. Outcome: Staff operational within integrated DNR IT environment.

ORACLE Support: Managed the DNR Oracle database environment, web application cluster, and internal application server. Initiated the migration to a 'real application cluster' environment: Outcome: 24*7 Oracle services for staff and the public, increased data protection.

CORE SERVICES: MAINTAINING DNR SOFTWARE SYSTEMS

Cabin Reservations On The Internet – Starting July 1, 2004, reservations for park's cabin use were possible over the Internet. More than 85% of all cabin reservations are now filed over the Internet. Outcome: major labor savings to the Public Information Center and the general public.

Paperless Reports: Printed reports on financials and land information are being replaced with flexible web based reports that allow user sorts and downloads. Outcome: Lower printing costs, reduced storage space, and lower paper handling and filing costs.

Maintained DNR Recorder's Office production applications for data entry, scanning, document management, backup, and web public access via RSA support. Help with rollout of new barcoding equipment, implement new scanning software for plats. Outcome: 280,000 documents efficiently indexed and scanned, millions of record searches supported, automated daily data flow to Title Companies and others.

Maintain and Support Status Plat Production Environment in GIS: Provided maintenance for the existing plat production environment; and transitioned staff via training and mentoring to support the new system. Outcome: DNR Land Status is current, staff prepared for major migration in 06.

Maintain DNR and Public Access to Land Records System: Outcome: About 2000 users per month and 2 gigabytes of downloads register for this joint DNR-BLM web site at <http://plats.landrecord.info>; a new look and feel was recently implemented. LRIS maintains monthly BLM federal records updates to save staff time.

New Interactive Land Status – Mining Claims On-line: LAS Mapper was advanced to Alaska Mapper with new functionality and direct ties to the new status plat layers and maps. Outcome: Directly supports minerals exploration and investment decisions by identifying mineral property rights throughout the state.

FY05 MAPPING ACCOMPLISHMENTS

Trans-Canada Gas line Mapping –Detailed land status maps of the TransCanada proposed Gasline Route along the Alaska Highway were produced for the Project Manager. Provided detailed land ownership information along the route from Fairbanks to the Alaska Canada border. Outcome: Maps are used to communicate governor's message at public hearings that began the first week in December 2004.

Mapping Fire Perimeters – Status Graphics worked with the Division of Forestry, Statewide Fire Suppression group to map the perimeters of twenty-five fires. The maps include information on ownership and acreage burned for each fire. Outcome: information used to help allocate state and federal fire costs.

Alaska Natural Gas Development Authority Mapping (ANGDA) – Status Graphics delivered Statewide General land Status maps depicting the proposed route of the LNG line from Prudhoe Bay to Valdez and the spur line from Glennallen to Palmer. Outcome: maps used to plan pipeline right of way application route.

M/V Selendang Ayu Oil Spill Mapping – Status Graphics delivered GIS maps of the spill area for initial response and damage assessment work. The maps will provide parcel level mapping of ownership of the uplands and tidelands in the Skan Bay area. Outcome: Better response decisions, improved damage assessment to the environment.

Statewide Land Status Map Updates – Updates to the General Land Status Maps with Mineral Resources and Mining Claims are complete and distributed to the department and at the annual Miners Conference. Outcome: Statewide big-picture of mining activity by land owner & prospect.

GIS Mapping for Fairbanks Airport – Status Graphics is working with a private contractor to develop a map of the northern portion of Alaska will showcase the National Wildlife Refuges and towns and villages served by air service out of Fairbanks. The map will be part of a 16 foot wall mural that will be displayed in the Fairbanks International Airport.

FY05 PROGRAMMING ACCOMPLISHMENTS

Resource Authorization System (RAS) Advances – Reviewed contractor design documents and advanced the design specifications for interfaces to the existing production applications. A new contract was put in place to build the system screens. In April the Project Management duties were assigned to LRIS as we enter the construction phase of the project.

New Credit Card Payment System Completed – A new DNR application for managing on-line credit card payments is complete. The system builds on the DOA Credit Card System (ACCEPTS). Outcome: The public uses this software for cabin reservations, UCC filings, lease payments, land payments, mining claims, and others. About 700 on-line transactions are completed per month.

DGGS Web GeoChem Project – DGGS staff now have a web based system to search for geo-chemical field samples and chemical analyses. The application gives DGGS staff and the interested public an automated tool to track and research the chemical composition of geologic samples. <http://akgeology.info>

Toward a Statewide Parcel Database: Linking Local Government to the Recorder's Office – The Matanuska Susitna Borough and Fairbanks North Star Borough are the first local governments to work with DNR staff to set up parcel specific links into the Recorder's Office System. Outcome: The boroughs and municipalities gain by eliminating duplicate data entry to their assessing systems. The public gains by having seamless information available from local and state sources for a given property. The Recorder's Office gains by having address search capability, and map search capability into their systems. See <http://www.co.mat-su.ak.us/realpropertyquery/> Work is underway to create this service with other local governments who assess property taxes.

Linking LAS and the Recorder's Office – DNR documents that are recorded now have links automatically created with LAS to the recorded index and document image. A 'document recorded' transaction in LAS is triggered when a

recorder enters the file type and file number as part of the index. A 'plat filed' transaction is used for state surveys. Outcome: Eliminate duplicate effort, unites previously isolated systems, and provides better research tools for DNR staff and the public.

Emergency Fire-Fighter Payroll Updated – Programmers worked closely with Forestry personnel on issues that arose under audit of the Emergency Fire Fighter Payroll. EFF provides for data entry and printing of emergency fire fighter payroll timesheets. LRIS staff delivered audit and analysis reports that allowed Forestry staff to identify procedural issues affecting pay to EFF crews. LRIS staff also completed programming changes that allow this system to prevent duplicate time entries, retain previous year timesheet data, and improve data collection edits. Outcome: Reduced time required to pre-process and audit data entry work for Emergency Fire Fighter Timesheets resulting in fewer pay problems and lower overall costs.

Fire Reporting System Upgrade – The early fire season made the Fire Reporting System operational earlier than expected. LRIS staff made requested system changes based on information provided by the Division of Forestry. Outcome: Managers have information needed to allocate resources, and monitor fire status at a statewide perspective.

Burn Permits – On-line system now allows MatSu area office to set-up multiple burn zones. Parts of the MatSu area can be closed to burning without closing the entire area. Outcome: Over 3500 permits have been issued on-line in FY05 fire season; saves staff time, saves customers' time.

Recorder's Office Film Conversion Project – The Recorder's Office has contracted to convert the past 15 or more years of recorded documents to digital images. Archive microfilm is being scanned and images are being delivered. Project will last through FY06. Outcome: Public has either Intranet or Internet access to recorded documents pre-dating July 2001, will no longer need to use cumbersome file retrieval process.

Recorder's Office Plats On-Line

The plat scanning system for all Recorded Plats went into production. The project goal is all Recorded Plats on-line by May 2006 – the Recorder's Office is over 80% complete. Internal efficiencies for survey and LAS users were also being delivered. Outcome: Plats associated with each recorded legal description now available, eliminates duplicate data entry within DNR for state plats.

Improving Recorder's Office Indexing – Staff have updated historical Recorder's Office index information via advance data analysis and quality control methods. The goal was to populate structured data fields- mostly meridian, township, range, and section data – based on information stored in comment fields that are not easily searched. To date more than 1.2 million records have been updated in the database, another 200,000 records need to be processed. Outcome: improved customer searches for records in outlying portions of the state, higher data quality.

Streamlining Recorder's Office via the Internet – Recorder's Office staff now have a tool that allows them to market document images to Title Companies via the Internet. The process to create CDs has been greatly simplified through automation. Outcome: Both deliverables are providing significant labor savings for both Recorder's Office staff and Title Companies.

Upgrade Contract Administration Document System – Staff successfully developed a prototype document management system for Contract Administration using Stellent, the state standard. Work is now underway to grow the application by customizing the application. Outcome: The document management system will reduce the reliance on paper documents.

CoreGIS Project Nears Completion The CoreGIS Project is the vehicle for modernizing the DNR process for producing Status Plats. The main goals are plats that are easier to read, more accurate, more current, and lower cost. A related goal is to eliminate duplicate data between the plat and LAS. Outcome: Department moves to one database, information is consistent and more accurate.

Dept. of Energy Project: DNR Helps AOGCC Publish Oil and Gas Well Maps The Alaska Oil & Gas Conservation Commission (AOGCC) went public with a new and content-rich [web site](#) that provides the general public with access to geo-technical and oil-well related information. DNR GIS provides the underlying mapping database in a manner transparent to end users. Outcome: Eliminates the need for state agencies to duplicate information, and helps to assure that the most current information is made available.

Minerals Data Information Rescue in Alaska (MDIRA) Two new electronic products were made available through the project web portal, <http://www.akgeology.info>. These products are the Alaska Interagency Bibliography, designed to serve publication information contributed by all project participants, and the Alaska Minerals Industry Data Index (AKMIDI), designed to serve information about non-public collections of geologic information. These products were previewed at the MinEXPO 2004 conference in September 2004 and announced as released during the Alaska Miner's Association conference in November. Outcome: increased interest in mineral investment and development within Alaska.

GIS Customer Feedback System Staff developed a web-based system for accepting customer feedback on GIS applications, and routing that feedback to the most appropriate party. Outcome: Employees and the public to have their land status questions answered.

Alaska Coastal Management Program Builds GIS Programming Interface to support mapping and geographic profile requirements tied to Coastal Consistency Review process. The programming team writing the Coastal Project Questionnaire application is now utilizing these GIS interfaces.

History and Archaeology Project Staff completed a document imaging project and migrated the survey report database into Oracle. Two web applications exist for the survey reports and the database records pertaining to the survey reports. One application searches for and displays the scans based on various criteria. The other web application allows OHA to internally add, update and delete survey report records. Outcome: Improved review and permit clearance process to protect archeological resources.

Land Sales & Remote Recreation Cabin Program Updates – Staff worked with Contract Administration to support this year's land auction and add functionality. The land sales software application was extended for use with the Remote Recreation Cabin Sites program. Outcome: On-line auctioning and over-the-counter Internet sales remain popular with the public and help raise revenue.

Update DNR's Web Pages – All of DNR's static web pages have been converted to the state 'look and feel standard'. Most of DNR's web based applications have been converted to the new format. Outcome: Compliance with Governor's mandate for consistent web presence.

DNR Information Technology Plan Updated Department Managers and IT staff updated the Information Technology Plan. The plan includes department strategies, progress toward standards, proposed FY06 projects, and detailed FY05 workplan for the LRIS staff. The plan is available at <http://alaska.gov/itg/plan>. Outcome: Strategic direction and costs of DNR IT efforts made clear.

CORE SERVICES: OFFERING DNR TECHNICAL TRAINING

Train DNR Staff in Technical Systems: LRIS puts a high priority on providing technical training directly tied to the production systems that DNR staff use on a regular basis. Outcome: Staff can efficiently use IT systems, can find information needed for decisions.

The following classes were offered:

- Trained 23 DNR employees in the DNR Systems Orientation class on a monthly basis. Introduces employees to scope and relationship of all DNR IT systems.
- Trained 42 DNR employees in the use of the LandRecords Website on as needed basis. Trained in Anchorage, Juneau, and Fairbanks. Offered classes outside DNR for a small fee coordinated through the DNR Public Information Center
- Trained 81 staff on Alaska Mapper, an interactive mapping system based on combined status plat and LAS databases; and trained four staff on the use of the Status Plat Tracking system.
- Work with MLW Staff on GIS Training Plan. Provide Mining, Land and Water staff in Contract Admin; Land Sales; and Resource Analysis and Development sections with GIS training on the use DNR data.
- Land Administration System Training and Support. Hired the LAS Administrator and quickly provided introductory and intermediate classes to DNR staff in all regions.

Statutory and Regulatory Authority

This component operates under Alaska Statutes, 38.05.020; 38.05.035; 38.04.065; 41.08.030; 38.05.030; 09.25.115;

41.08.020; 40.21.060; 37.14.425; 09.25.120; 41.08.035; and Alaska Administrative Codes, 6AAC Chapter 96; 11AAC 05.010.

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**Information Resource Management
Component Financial Summary**

All dollars shown in thousands

	FY2005 Actuals	FY2006 Management Plan	FY2007 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	2,258.6	2,483.9	2,662.5
72000 Travel	3.8	6.0	6.0
73000 Services	217.9	324.7	344.7
74000 Commodities	75.8	109.4	109.4
75000 Capital Outlay	5.7	0.0	0.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	2,561.8	2,924.0	3,122.6
Funding Sources:			
1002 Federal Receipts	103.2	125.4	133.3
1004 General Fund Receipts	1,530.3	1,667.9	2,018.4
1007 Inter-Agency Receipts	117.9	184.5	193.5
1055 Inter-agency/Oil & Hazardous Waste	32.1	32.2	32.2
1061 Capital Improvement Project Receipts	777.1	753.1	580.7
1108 Statutory Designated Program Receipts	1.2	10.9	11.5
1153 State Land Disposal Income Fund	0.0	150.0	153.0
Funding Totals	2,561.8	2,924.0	3,122.6

Estimated Revenue Collections

Description	Master Revenue Account	FY2005 Actuals	FY2006 Management Plan	FY2007 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		0.0	0.0	0.0
Restricted Revenues				
Federal Receipts	51010	103.2	125.4	133.3
Interagency Receipts	51015	117.9	184.5	193.5
Statutory Designated Program Receipts	51063	1.2	10.9	11.5
Capital Improvement Project Receipts	51200	777.1	753.1	580.7
Interagency Recs./Oil & Hazardous Waste	51395	32.1	32.2	32.2
State Land Disposal Income Fund	51434	0.0	150.0	153.0
Restricted Total		1,031.5	1,256.1	1,104.2
Total Estimated Revenues		1,031.5	1,256.1	1,104.2

**Summary of Component Budget Changes
From FY2006 Management Plan to FY2007 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2006 Management Plan	1,667.9	125.4	1,130.7	2,924.0
Adjustments which will continue current level of service:				
-FY 07 Wage Increases for Bargaining Units and Non-Covered Employees	40.2	2.4	3.8	46.4
-FY 07 Health Insurance Cost Increases for Bargaining Units and Non-Covered Employees	4.6	0.2	0.5	5.3
-FY 07 Retirement Systems Cost Increase	71.9	4.5	7.0	83.4
Proposed budget decreases:				
-Delete 2 Non-Perm Positions and CIP receipts associated with federally funded capital projects	0.0	0.0	-172.4	-172.4
Proposed budget increases:				
-Core Services Increment, DNR Technical and Computer Programming Support	220.0	0.0	0.0	220.0
-Risk Management Self-Insurance Funding Increase	13.8	0.8	1.3	15.9
FY2007 Governor	2,018.4	133.3	970.9	3,122.6

**Information Resource Management
Personal Services Information**

Authorized Positions		Personal Services Costs		
	<u>FY2006</u> <u>Management</u> <u>Plan</u>	<u>FY2007</u> <u>Governor</u>		
Full-time	29	30	Annual Salaries	1,709,468
Part-time	0	0	COLA	46,997
Nonpermanent	3	1	Premium Pay	0
			Annual Benefits	957,015
			<i>Less 1.88% Vacancy Factor</i>	<i>(50,980)</i>
			Lump Sum Premium Pay	0
Totals	32	31	Total Personal Services	2,662,500

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Clerk III	1	0	0	0	1
Administrative Manager I	1	0	0	0	1
Analyst/Programmer II	3	0	0	0	3
Analyst/Programmer III	4	0	0	0	4
Analyst/Programmer IV	8	0	0	0	8
Analyst/Programmer V	3	0	0	0	3
Cartographer II	7	0	0	0	7
College Intern III	1	0	0	0	1
Data Processing Mgr III	1	0	0	0	1
Natural Resource Mgr II	1	0	0	0	1
Natural Resource Spec III	1	0	0	0	1
Totals	31	0	0	0	31