

Data and Infrastructure Backup

FY2010 Request: \$175,000

Reference No: AMD 47027

AP/AL: Appropriation

Project Type: Information Systems

Category: Natural Resources

Location: Statewide

Contact: Tom Lawson

House District: Statewide (HD 1-40)

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Estimated Project Dates: 07/01/2009 - 06/30/2011

Brief Summary and Statement of Need:

This amendment reduces the project by \$100,000 due to the State's current economic situation, and removes Juneau from the scope. This amended project provides funding for the purchase of hardware and software for data backup in Anchorage and Fairbanks. The department recently experienced a serious server data loss in its headquarters office. Backup systems were functioning but because of the design, the original data corruption also destroyed the backup. This project request is included in the department's FY10 IT Plan.

Funding:	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>Total</u>
Gen Fund	\$175,000						\$175,000
Total:	\$175,000	\$0	\$0	\$0	\$0	\$0	\$175,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
<u>One-Time Startup:</u>	0	
Totals:	0	0

Additional Information / Prior Funding History:

No prior funding. The data loss the department experienced was caused in large part from a lack of investment in this critical infrastructure. This project will redesign and purchase backup systems to address backup system shortcomings and treat the data resources of the department as the critical assets they are.

Project Description/Justification:

Information Technology Capital Project Review Form FY2010
Data and Infrastructure Backup

1. Has this project been previously approved? No

2. What is the purpose of the project?

The department recently experienced a serious server data loss in its headquarters office.

Backup systems were functioning but because of the design, the original data corruption also

destroyed the backup. Additionally, the inexpensive tape system for off-site storage was not working properly. A review of backup systems in other department hub locations revealed similar or even worse systems.

The data loss the department experienced was caused in large part from a lack of investment in this critical infrastructure. To address backup system shortcomings the department is requesting a new project to purchase backup hardware and consolidate the backup process, thereby treating the data resources of the department as the critical assets they are.

The funds in this project will go toward purchasing hardware to perform data reduplication and backup of system server images and user data. Because the backup consists of more than user files (for example: VMware Snapshots, or Oracle RMAN jobs), and the department's desire for agent-less processes, low end network attached storage units are a good fit for the department's hub offices (Juneau, Anchorage, Fairbanks and Kodiak).

These units are relatively low cost, can perform data deduplication to significantly reduce data traffic and run as part of a backup job, eliminating the need for agents to manage on each server and individual backup jobs as with the case currently or with enterprise backup.

No additional staff resources are required as setup and configuration of the units can be handled in the duties of the current operational network staff. The addition of these hardware units will provide a safe, reliable storage medium and multiple recovery options.

3. Is this a new systems development project? No

Upgrade or enhancement to existing department capabilities? Yes

4. Specifically, what hardware, software, consulting services, or other items will be purchased with this expenditure? (Include a line item breakdown.)

Low end level Network Attached Storage Units (2) capable of data deduplication.

5. How will service to the public measurably improve if this project is funded?

The data and information resources of the department will be protected from permanent loss. Currently, these critical files and databases are at risk.

6. Does project affect the way in which other public agencies will conduct their business? No

7. What are the potential out-year cost implications if this project is approved? (Bandwidth requirements, etc.)

If the state desires to implement full disaster recovery, this equipment will fit into an enterprise solution. However anything beyond this project will likely have bandwidth considerations. Data reduplication features will mitigate that requirement substantially, yet bandwidth is still a factor.

8. What will happen if the project is not approved?

The department risks data loss. It has already occurred and the department was very fortunate to recover as much as it did. The current infrastructure is vulnerable and we appear negligent if we do nothing to mitigate the situation.

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