Telecommunications Equipment Improvements

FY2002 Request: Reference No: \$1,875,000 34508

AP/AL: Appropriation

Project Type: Information Systems

Category: University

Location: Statewide **Contact:** Pat Pitney

House District: Statewide (HD 1-40) **Contact Phone:** (907)474-5889

Estimated Project Dates: 07/01/2001 - 06/30/2006

Brief Summary and Statement of Need:

The essential telecommunication equipment needs of the UA system were evaluated using the following BOR criteria (listed in order of importance): Impact on Daily Business Functions, Supports a Strategic Initiative/Demonstrates Responsiveness to State Needs, Impact on Students and Impact on Programs. The items presented within this project are those IT needs assessed as the highest priority.

Funding:	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Gen Fund	\$1,875,000						\$1,875,000
Total:	\$1,875,000	\$0	\$0	\$0	\$0	\$0	\$1,875,000

☐ State Match Required ☐ One-Time Project	✓Phased Project	☐ On-Going	
0% = Minimum State Match % Required	Amendment	Mental Health Bill	

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

The individual items are as follows: Replace Primary Admin. Host Computing Systems-UA, Technology Integration-UA.

Project Description/Justification:

Maintaining a Solid Foundation - Essential Instructional and Telecommunications Equipment Improvements

Replace Primary Admin. Host Computing Systems-UA

\$1,500.0 GF \$1,500.0 FY03 \$3.000.0 TPC

This project has not been reviewed and approved by the TIC/TAC committee. This funding will upgrade the computing system for University of Alaska administration. By thoughtfully building and enhancing UA's administrative computing capacity, UA is better able to serve students and provide timely information for both internal and external constituents. The funding will be used to upgrade and build redundancy in the present system to ensure the information requirements of today and of the future will be met.

Currently, the primary UA administrative host computing systems are:

- (1) Glacier: DEC Alpha Server 8400; 8cpu @622mhz; 12gb memory
- (2) Summit: DEC Alpha Server 4100: 3cpu @466mhz: 2ab memory
- (3) Nugget: DEC Alpha Server 2100A; 3cpu @291mhz; 2048mb memory
- (4) Coffee: DEC Alpha Server 2100; 3cpu @190mhz; 1280mb memory

In next 2 fiscal years, replace these 4 boxes with:

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FY02: \$1.5m

- ? New composite box, incorporating current processing of Glacier/Summit/Nugget/Coffee.
- ? Add 1st Compaq Alpha Server GS320; 32cpu (each: @731mhz/4mb cache/16gb memory).

FY03: \$1.5m

- ? Provide full redundancy for new composite box in a 7x24 production environment.
- ? Add 2nd Compaq Alpha Server GS320; 32cpu (each: same as 1st box).

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If this project is not funded, the current, primary UA administrative host computing systems equipment will continue to be utilized. The impact to students and programs will be to use old technology computing equipment that minimally meets current needs, but not future ones. In addition, new initiatives for students and programs may not be accomplished due to insufficient computing capacity.

Technology Integration-UA

\$375.0 GF \$375.0 TPC

This project has been reviewed and approved by the TIC/TAC committee. This project responds to a statewide need to efficiently deliver academic programs throughout the state by leveraging the university's ability to take the best programs from every MAU and deliver those when and where needed across the state. It reduces barriers to such delivery by integrating services and providing better coverage. The equipment needs are as follows:

- 1. Voice over IP: In FY02 install Voice over IP hardware on the UAA and UAF campuses and one community campus, to be determined. This hardware will allow an interface and voice traffic between Fairbanks and Anchorage utilizing existing campus PBX. FY03 would include installing a test bed of 100 to 150 IP phone instruments, deployment of IP voice equipment, deployment of IP phone instruments and IP trunk hardware as needed by community campuses. The extent of this deployment will depend on the cost of those units and their success in the test bed. Successful installation of IP phone instruments will accelerate with technology over a matter of time.
- 2. Video IP services: In FY 02 the IP video bridge currently installed in Anchorage will be increased to handle multiple simultaneous videoconferences. IP video bridges will be installed in Fairbanks, Juneau and four to six community campuses based on program need and current technology cost. Hardware installation of IP video with Anchorage, Fairbanks and Juneau. In FY03 video bridge equipment will be installed at all remaining campuses. Local video conferencing between a campus and local schools can also be accomplished. The specific number will depend on the current cost.
- 3. Wide area Bandwidth: In FY02 upgrade existing circuits to all community campuses to minimum of 1024 Kbytes. This will effectively double the bandwidth available to every community campus. If a campus needs more bandwidth, it may need to seek separate funding for that. Install network hardware sufficient to handle the bandwidt, with redundancy at each campus. Monitor bandwidth usage to determine needs for additional bandwidth in future years. This assumes the contribution of fiber optic bandwidth from GCI will be in place between Fairbanks, Anchorage and Juneau.