

**BOARD OF EDUCATION
BEEVILLE INDEPENDENT SCHOOL DISTRICT**

Agenda Item No. _____

Date: January 18, 2005

Subject: **Network Recommended Improve-
ments and Email Services
in BISD**

Submitted By: Nancy Jones
Related Pages: two

ACTION

BACKGROUND INFORMATION: Beeville ISD's network and email services do not meet current user needs and expectations. The attached memorandum supplies additional information. Lawrence Garcia, Director of Technology, has met several times with Dr. Hardwick, Nancy Jones, personnel from M&A technology and SBC to find solutions to these problems. A short presentation on this will be given during the meeting.

ITEMS ADDRESSED:

Network Recommended Improvements and Email Services in BISD

RECOMMENDED ACTION:

Approval of Network Recommended Improvements and Email Services in BISD and Funding for These Improvements

BUDGETARY INFORMATION:

Additional funds are needed outside the current budget. The memorandum supplies additional information.

From: Lawrence Garcia, Technology

January 3, 2005

To: Dr. Hardwick

Subject: *Network Recommended Improvements and Email Services in BISD*

Problem Statement:

Our network and email services do not meet current user needs and expectations. Increased demands for network and internet services have outstripped our current T-1 composite line capacity. As a result, internet access is often slow and unreliable. While our network was state-of-the-art several years ago, it simply cannot keep pace with increased demand any longer. Moreover, the current system will not allow us to implement technology-based solutions for distance learning or internet-based telephony.

In addition, our historical reliance on Education Service Center 2's email services limits our ability to provide high-quality email services to users in the district. We chose ESC 2's email services several years ago because those services were relatively inexpensive and required minimal internal staff support. Mail services are sometimes slow. Moreover, mail-related services (such as resource scheduling and group calendaring) can not be delivered with the current email system.

Recommended Solution: To correct these problems, we must do three things:

1. Replace ESC 2 as our Internet Service Provider (ISP) with services from Southwestern Bell. **Alternatives considered:** 1) remain with ESC 2. This is not feasible given our need for bandwidth that is greater than that offered on a standard basis by ESC 2. ESC 2 gets its Internet access from Southwestern Bell. It is reasonable, therefore to bypass ESC 2 and get our access directly from Southwestern Bell as well.
2. Upgrade our current T-1 composite network service to Gigabit Ethernet. **Alternatives considered:** 1) wireless network service and 2) microwave network service. Both of these are alternatives to the current fiber optic cable-based services we enjoy. However, both are problematic from dependability and cost perspectives, and neither will yield the increased speed and connectivity we require.
3. Replace ESC2-sponsored email service with Microsoft Exchange server email capabilities within BISD, with outsourced server management to avoid additional personnel costs. **Alternatives considered:** It is possible to install and operate Microsoft Exchange mail services without outsourcing support services. This alternative is less desirable, though, because it would require us to add an additional technology staff personnel authorization.

Benefits of these solutions:

1. Faster and more reliable email send-and-receive throughout BISD
2. Group calendaring, scheduling, and resource management for district and campus leaders
3. Faster and more reliable internet throughput. Gigabit Ethernet transfers data at the rate of 1 billion bits per second – more than 650 times faster than our current network. This solution situates us well for the future.

4. Distance learning capability
5. Voice-over-Internet-Protocol (VOIP) telephone capacity

Estimated Costs:

Proposed Solution	Current Cost	Proposed Cost
Replacement of Internet Service Provider (ISP)		
One-time equipment costs and start-up cost	-0-	10,000
Annual recurring cost	21,009	10,000
Gigabit Ethernet conversion		
Set-up charges	34,300	30,000
Annual recurring cost	79,800	120,000
Exchange server email implementation		
Servers (2), licenses, set-up, and network balancing	29,000	29,000
Annual recurring cost	10,000	10,000
Totals		
One-time charges	\$63,300	\$69,000
Annual Recurring charges	\$110,809	\$140,000

Timeline for completion:

Note : This timeline is based on approval to proceed from the Board and Superintendent in mid-January

Milestone	Completion Date
Approval to proceed	01/18/2005
Network balancing	
Email account closeout from ESC 2	
Server installation	
ISP cutover	
GigaMan conversion	
Exchange cutover	
Training for technical staff	
Transition complete	04/01/05