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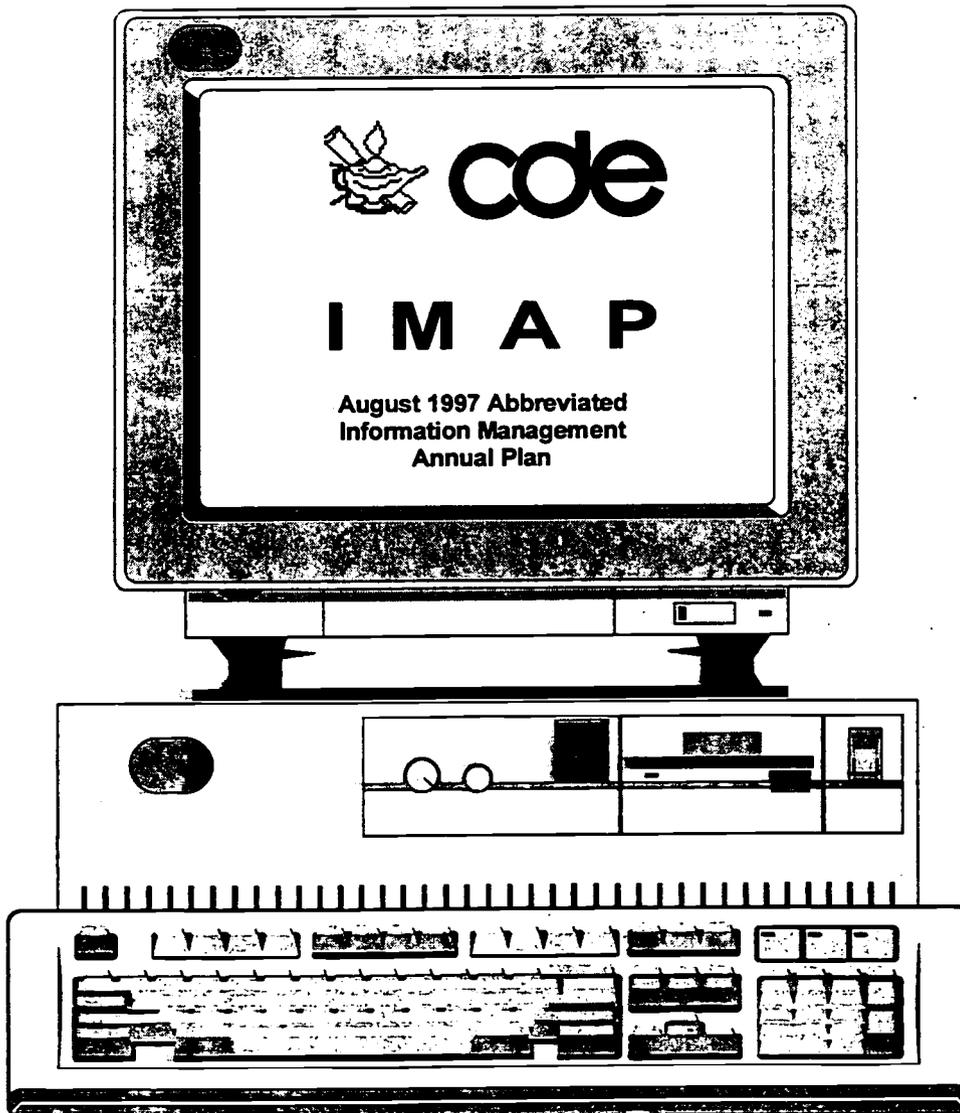
ABSTRACT

The Colorado Department of Education (CDE), including Access Colorado Library and Information Network (ACLIN) and the Colorado School for the Deaf and the Blind, provides state-level guidance and resources for Colorado's local school districts, local and regional libraries, and special populations. Technology is the enabler that offers basic, consistent, easily accessible information to all different types of learning communities. Through technology, CDE can gather, store, and analyze data, enabling the department to offer information with quality and integrity. To establish a baseline for the current status of technology integration and to help chart the future, CDE surveyed all schools, districts, BOCES, public libraries, and regional library service systems. This report provides information on: fiscal year 1996-97 accomplishments; information systems plans for fiscal years 1997-98 and 1998-99; technical architecture of the state network; hardware and software inventories; staff requirements; brief summary of base budget projects--Automated Information Systems, Automated Data Exchange, Enterprise Network, and Access Colorado Library and Information Network; cost analysis worksheets; project details; and Schedule 2D Decision Items. Appendices include a description of the Computer Replacement Plan and proposed replacement dates and costs; and a progress report on the Automated Data Exchange Project. (SWC)

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COLORADO DEPARTMENT OF EDUCATION

Technology Goal
Students, educators, and Colorado residents will have access to and use of technology for student achievement, communication and informational needs.



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OUR VISION - SERVING OUR CUSTOMERS

The Colorado Department of Education (CDE) is committed to serving its stakeholders with Quality, Integrity, Innovation and Equity in an atmosphere that respects the individual within a diverse customer base. CDE functions as the administrative arm of the Colorado State Board of Education. Through its services, including ACLIN and the Colorado School for the Deaf and the Blind, the department provides state-level guidance and resources for Colorado's local school districts, local and regional libraries, and special populations.

Technology is the enabler that offers basic, consistent, easily accessible information to all different types of learning communities. Through technology CDE can gather, store and analyze data enabling the department to offer information with quality and integrity.

Customers for this data include:

- members of the State Board of Education to assist them in making informed decisions
- lawmakers at the state and federal levels to assist them in making informed policy and funding decisions
- decision makers at the state and federal level to provide us with standards by which we can measure the progress of educational system
- school districts to have access to comparable data for educational policy needs
- professional educators to assist them in obtaining professional certification
- members of the public especially residents of remote areas of the state seeking information that would otherwise be difficult for them to obtain

To establish a baseline for the current status of technology integration and to help chart the future, CDE surveyed all schools, districts, BOCES, public libraries and regional library service systems.

In addition, the CDE Website will become a resource of improved communication between CDE and the public.

A key element in the Department's Strategic Plan uses technology, information and communication as tools to improve student learning and enhance public access to information.

Toward this end, CDE intends to:

- advocate public right to have access to public records
- advocate maintaining confidentiality of individual records
- develop, maintain and add educational resources to the CDE Web site
- promote interagency and public-private partnerships supporting technology
- advocate innovation and quality learning environments through technology
- support equal access to technology
- establish technology standards
- coordinate distance learning activities throughout the state
- develop, maintain, and add library and public information resources to ACLIN
- promote equal access to information resources
- advocate the establishment of a statewide telecommunications network which will interconnect institutions across the state

FY 96-97 Accomplishments

- **Automated Data Exchange (ADE) Project**
 - Distributed money to school districts
 - Met with school districts organizations to present project status and update file layout information
 - Installed and Documented Secure Netscape Commerce Server
 - Designed and built Detail Database for Financial and Human Resource data collections
 - Modified Staging Database for Financial
 - Developed front end user interface which includes:
 - User authentication
 - File status tracking
 - Electronic file transfer
 - File editing and verification procedures
 - Error and information report generation
 - E-Mail notification process
 - Report download process
 - District file approval process
 - Developed back-end process including custodial screens and reports
 - Trained school district staff for Financial data collection pilot
 - Piloted the Automated Data Exchange (Financial)
 - Met with the Financial Policy and Planning subcommittee to develop new reporting requirements
 - Wrote user documentation for Automated Data Exchange
 - Met with Human Resource pilot districts to define and detail data elements
 - Planned steps for implementation of Human Resource Pilot (Fall of 1997)
 - Defined process for Human Resources data collection
 - Further refined edit specifications for Human Resources
 - Defined necessary Status, Error, Mail Message and Data Summary reports for Human Resources
 - Completed formal training in the following ORACLE products: Forms, Reports, Database Administration
 - Completed formal training in SQL, and SQL*PLUS
 - Completed formal training in HP-UX Administration and HP-UX 10.0
 - Systems/Network Administration for Experienced User
- **Implemented School Finance Changes**
 - Implemented state equalization (HB 96-1354) for FY98
 - Implemented auditors state equalization for FY97
 - Made modifications to state equalization programs for previous budget years (1995, 1996, 1997)
- **Implemented Licensure Changes**
 - Developed report of entire applicant history
 - Developed utility to merge data for 2 Social Security Numbers and document the change
 - Developed Report and Mailing Labels for current Provisional License holders who need to convert to a Professional License
 - Developed license re-print program to system
 - Completed special requests for reports of licensure/certification data
- **Implemented Special Education Changes**
 - Modified the End-of-Year System to include detail regarding per pupil expenditure variances
 - Modified the End-of-Year System to enable summary level reporting for non-certificated staff

- Modified the End-of-Year System to change salary matrix calculation methodology for all certificated staff
 - Modified Federal Application System to enable summary level staff reporting
 - December Staff and Pupil work papers expanded to include Agencies
 - Created Administrative Unit screen for adding and changing setting codes
 - Developed and updated documentation for Special Education Systems
- **Year 2000**
 - Determined the scope the Y2K problem
 - Identified automated systems programs and databases
 - Created detailed reports of the problems identified
 - Established standard methodology and timelines for conversion of recognized problems
 - Worked with the State Wide Y2K team
 - Identified hardware that will not accommodate the change to Jan 1, 2000
- **CDE's Public Access Website**
 - Organized website subcommittee to plan and evaluate website maintenance
 - Added Financial Revenues/Expenditure Data to School District Profile Pages
 - Modified program to automatically FTP District Profile Pages to the web server
 - Drafted a redesign of the first 2 levels of menus for easier and clearer access
 - Added or increased content for several program areas within CDE
- **Disaster Recovery Plan**
 - Worked with the contract services to complete the Disaster Recovery Plan
 - Continued using procedures that can be accomplished with current resources
 - Revised Systems Operation and Administration Documentation for the HP 3000 minicomputer
- **Improved existing automated information systems**
 - Developed utility for the Child Nutrition System to automatically generate and load reimbursement rates
 - Modified Colorado Talking Books Library weekly check out system to process books Wednesday through Friday
 - Prepared reports for the Common Core Data
 - Modified Colorado Bureau of Investigation's retrieval process
 - Created High School graduate and fall membership reports for the Commission on Higher Education
 - Updated financial revenues and expenditures reporting for School Finance
 - Maintained existing base budget systems and provided user assistance
 - Responded to ad-hoc client requests
- **Maintain or improve existing level of service for CDE's enterprise network and Internet services**
 - Developed and implemented new Help Desk procedures including a call tracking system
 - Responded to approximately 1200 Help Desk calls
 - Installed 71 new desktop and laptop machines.
 - Continued migration from Windows 3.1 to Windows 95
 - Completed migration from Mac OS 6.x to 7.x
 - Installed communications server
 - Maintained World Wide Web presence
 - Maintained 10 listservers
 - Installed Right Angle's Lan Auditor to complete CDE hardware and software inventory
 - Completed Banyan Certified Specialist Training

- Installed Compaq ProLiant 1500 Banyan Vines Server
 - Upgraded Banyan Vines network operating system from version 5.54 to 6.3
 - Began installation of Eagle Raptor firewall on a HP 700 series workstation
 - Installed Power Trust system on HP9000 K210
 - Upgraded HP3000 Applications Software
 - Ordered and Installed QEDIT for HP-UX on the HP9000 K210 Minicomputer
 - Patched NRJE software after GGCC upgrade of operating system
- **Access Colorado Information Library Network (ACLIN)**
 - Maintained ACLIN dial access services through a contract with SuperNet Inc.
 - Provided subgrants for connecting approximately 30 libraries to the Internet through a variety of methods: 56k, wireless, shared, etc.
 - Installed the following at the ACLIN Technical Operations: NT Server, Cold Fusion, T1 connection, 800# service
 - Provided subgrants to implement Z39.50 servers on all ACLIN participating library computer systems that were ready
 - Selected, purchased, installed, and tested a Z39.50 client (OCLC WebZ) which will provide the basis (along with the Z39.50 servers) for implementing broadcast (rather than sequential) search of ACLIN library catalogs
 - Selected, purchased, installed, and tested a Web search engine (OpenText LiveLink) to improve access to ACLIN's html-based information resources
 - Revised ACLIN menus to achieve better organization of new information resources, and to reflect the new ACLIN Collection Development Policy
 - Added approximately 20 new information resources to ACLIN, primarily from non-profit organizations.
 - Completed a pilot to demonstrate how volunteer librarians can help develop various content areas on ACLIN, in this case, Health and Medicine.
 - Developed tools to assist with designing and maintaining content on Web sites, such as ACNews.
 - Completed a study for an ACLIN Interlibrary Loan System.
 - Initiated the Model Libraries Program to test both public relations materials and techniques for promoting and supporting ACLIN in libraries, resulting in the *ACLIN Model Library Project Notebook*
 - Developed the training notebook, *Passing It On: Internet Training Workshop*, to be used in training libraries that received Internet connections with grant funds.
 - Developed and distributed the ACLIN PR Kit to libraries
 - Completed the U. S. Department of Commerce portion of the grant project, including the narrative, evaluative, and fiscal reports
 - **Colorado School for the Deaf and the Blind**
 - Established community partnerships with Education MCI, Denver Technical College, Pikes Peak Education Connection, and Pikes Peak Technology Consortium, to leverage opportunities in a variety of ways of applying technology to CSDB's needs
 - Refurbished donated equipment to upgrade computers of CIMC, improving their ability to perform outreach services to Colorado's blind population.
 - Submitted a grant application to Cisco Systems, Inc. Virtual Schoolhouse Grant program
 - Created one full time network analyst position from existing FTE
 - Conducted technology training workshops for CSDB staff, using other CSDB staff
 - Prepared a formal educational technology master plan
 - Completed a requirements analysis of technology needs, which was used to develop the detailed network design and accompanying standards
 - Began the CSDB network installation project by:
 - Establishing a procedure plan

- Developing contacts with certain state employees representing key technology areas impacting the network project
- Identifying requirements to replace the obsolete IBM System 36 computer for GGCC access
- Installing full-time U.S. West circuit to an Internet service provider which will replace inefficient individual dialup access accounts being used and starting the process to contract installation of the network fiber optic and copper cable plant
- Conducted tests with recently developed application software, to test the feasibility of making the CSDB library catalog accessible via the Internet and web browser software thereby saving money and improving CSDB's ability to keep the library catalog current
- Began development on the CSDB Internet home page, which will be an extension to the CDE home page

FY 97-98 INFORMATION SYSTEMS PLAN

The FY 97-98 information systems have not been prioritized or approved by the State Board of Education. The projects to be submitted to the Office of State Planning and Budgeting (OSPB) and the Joint Budget Committee (JBC) will be determined at the State Board of Education meeting in August.

• Automated Data Exchange Project (ADE)

- Distribute money to school districts and BOCES
- Pilot Human Resource data collection. Includes the following:
 - Define and create database users
 - Finalize edit specifications
 - Finalize report specifications (error and information reports)
 - Define crosswalk to HP3000 Certificated Personnel data (processes to sum and transfer data to legacy system)
 - Complete necessary modifications to database
 - Load code tables
 - Create Respondent Information Form
 - Identify collection period opening/closing dates
 - Define and implement front end process (user interface)
 - Define audit requirements
 - Design and implement file submission process procedures (edit specifications, file status tracking, system messages, edit reports, information reports and e-mail messages)
 - Design and implement CDE custodian processes (table maintenance screens, error and information reports, database utilities, file approval process, user interface)
 - Develop internal maintenance of management tables
 - Complete user and system documentation for the Human Resources data collection (district respondents and CDE custodians)
 - Implement crosswalk to HP3000 Certificated Personnel data
 - Provide user training (district respondents and CDE custodians)
 - Install CDE custodian client software
 - Define summary database
 - Identify archive requirements
- Begin implementation of Human Resource Special Education data collections
- Pilot districts transmit financial data for further testing of Financial System - Fall '97
- Provide training for all districts in preparation for full implementation of Financial System Fall '98
- Convene pilot districts dealing with student data collection to develop comparable data definitions
- Begin development of Student System

• Year 2000

- Compile list of Y2K compliant applications software (including version numbers) for the HP3000 and HP9000 minicomputers
- Begin upgrading software and operating systems
- Complete hardware testing for year 2000 compliance
- Begin flash bios upgrades for hardware

• CDEs Public Access Website

- Research web-based ad-hoc reporting software for Oracle Database.

• Improve existing automated information systems

- Child Nutrition - Requested modifications include:

- Eliminate Attendance Adjusted Eligible edit specification
- Reimbursement calculations for School Lunch Program will change for 1997-1998 (eliminate base rate and add a second paid rate)
- Change system to natural rounding
- Combine SL-4 and SL-11 into one program
- Allow for multiple adjustments to a reimbursement claim
- Modify the calculation for Severe Breakfast Program reimbursement rate
- Licensure - Requested modifications include:
 - Add Master Certificate as a valid license type
 - Allow for renewals of Provisional Licenses
 - Add Video Assessment
 - Modify the layout of the information screen
 - Research public phone access to data and document imaging.
- Budget Reporting System - Requested modifications include:
 - New report of Budgets and Expenditures sorted by GBL
- Federal Applications
 - Expand screens and reports to include excess costs
- Special Education TTE
 - Expand database to include new fields
 - Modify screen and reports on End-of-Year, Federal Applications and December systems
- School Finance
 - Change database, screens and reports for budgeted expenditure reporting
- GED
 - Change layouts of forms and reports to match laser formats
- CTBL
 - Convert to new system

• **Maintain existing automated information systems as necessary**

• **Responded to special requests for data as necessary**

• **Disaster Recovery Plan**

Complete User and System Documentation for the Disaster Recovery Document

• **Maintain or improve existing level of service for CDE's Enterprise Network**

- Complete Eagle Raptor firewall training
- Complete reconfiguration of network for firewall implementation
- Complete installation and configuration of firewall
- Implement HP Omniback
- Implement HP Network Node Manager
- Implement new backup plan for CDE servers
- Evaluate UNIX servers to ensure they meet current and future demands
- Upgrade to Banyan Vines version 7.0 NOS
- Complete CDE hardware and software inventory
- Plan hardware replacement scheme
- Implement plan for standardization of applications across all hardware platforms
- Complete migration from Windows 3.x to Windows 95
- Begin migration from Mac OS 7.x to 8.0
- Develop network and security policies
- Implement a user training program
- Begin migration from Banyan Vines to Windows NT NOS.
- Assist with CSDB LAN installation phase

- Automation of Help Desk call tracking system
- Assist school districts will pilot data transfers
- Begin planning phase of CDE Intranet
- Begin planning of physical network upgrades to meet current and future needs
- HP3000 and HP9000 Systems Administration
 - Upgrade HP3000 operating system to MPEi/X 5.0.
 - Upgrade applications software as necessary
 - Install Omniback on the HP9000 minicomputer and change backup media to tape
 - Install Private3000 security software on the HP3000 minicomputer
 - Install Predictive Support software on all HP minicomputers
 - Install Oracle/Image Gateway software
 - Document system startup/shutdown procedures for the HP9000 K210
 - Document backup/recovery procedures on the HP9000 K210
 - Research performance monitoring software on the HP9000 K210

- **Access Colorado Library and Information Network (ACLIN)**
 - Maintain, and upgrade as needed, ACLIN Technical Operations to support existing and improved services
 - Contract with SuperNet Inc. for the provision of telecommunications services, including local dial access nodes, 800# service, and the ACLIN Web site T1 connection
 - Establish and assess an independent ACLIN 800# service
 - Follow up with Regional Systems on implementation of the Model Library Program and training for libraries that received Internet connections
 - Provide press releases, training, and documentation on new ACLIN services, as needed
 - Provide trouble-shooting and phone support for ACLIN users
 - Implement broadcast search on ACLIN using Z39.50 and the WebZ client
 - Implement the Web search engine on ACLIN, and investigate methods for using it to improve subject access to information resources
 - Work with the ACLIN Collection Development Committee to apply policy and procedures in improving and expanding content in the areas of business, government, children, and history
 - Assist the Health and Medicine volunteers in moving to the next phase of content development
 - Provide support to current ACLIN information providers in maintaining their information on ACLIN, migrating their resources to the State Web site, or terminating their association with ACLIN
 - Perform a pilot on the first phase of the ACLIN ILL system
 - Disseminate to the library community ACLIN's experience and software tools for information resource development
 - Pilot a local library working with its community and non-profits in implementing information resources in support of community activities (to be done by a VISTA volunteer)
 - Complete the requirements of the U. S. Department of Education grant, including narrative, evaluative, and fiscal final reports

- **CSDB**
 - Complete installation of the campus network, to include:
 - Finishing installation of the fiber optic and copper cable plant throughout the campus
 - Procuring and configuring network infrastructure equipment, file servers, CD-ROM servers, remote access servers, network based applications, email server, web server, and SNMP management software
 - Training network users in the use of its services
 - Preparing teachers to allow them to teach the students in using the network
 - Developing policies and procedures for securing network based data

- Develop an "Acceptable Use Policy", a policy that will dictate how all staff and students will use the network and consequences of misuse
- Pursue the potential benefits of the Universal Services fund as an avenue to purchase network components at discounted rates
- Provide greater opportunities for staff to become proficient in computer technologies offered by CSDB
- Incorporate the network to improve the ways Individual Educational Plans are prepared, thereby improving their effectiveness
- Identify areas where information can be shared and database applications developed to improve efficiency and information accuracy. Begin development where appropriate.
- Develop plan to replace obsolete equipment and software in phases.

FY 98-99 Information System Plan

- **Automated Data Exchange (ADE)**

- Planned steps for implementation during Fiscal Year 1998-99:
 - Evaluate work from Fiscal Year 1997-98
 - Update and continue work from Fiscal Year 1997-98
 - Complete implementation of Human Resource Data Collections
 - Pilot Student Data Collection
 - Begin coding Special Education Data Collection System
 - Implement summary database

For further detail please refer to Appendix A.

- **Maintain or improve existing level of service for CDE's Enterprise Network**

- Complete migration from Banyan Vines to Windows NT NOS.
- Complete migration from Mac OS 7.x to 8.x
- Implement CDE Intranet
- Implement hardware replacement plan
- Upgrade physical network, if necessary, to meet current and future needs

- **Disaster Recovery Plan**

- Implement and test disaster recovery plan
- Establish CSBD as CDE's disaster recovery hot site

- **Maintain or improve existing automated information systems**

- **Year 2000**

- Begin work with contractors to implement coding changes to insure systems will be Y2K compliant

- **Access Colorado Library and Information Network**

- Maintain and improve the ACLIN technical infrastructure to realize maximum efficiency and reliable service, and to reflect new developments in Internet and library networking technology
- Provide support to ACLIN users, and prospective users
- Improve the ACLIN interface so that it will be easier for the user to identify and retrieve desired information
- Develop content on ACLIN according to the ACLIN Collection Development Policy and associated procedures
- Implement an ACLIN ILL system

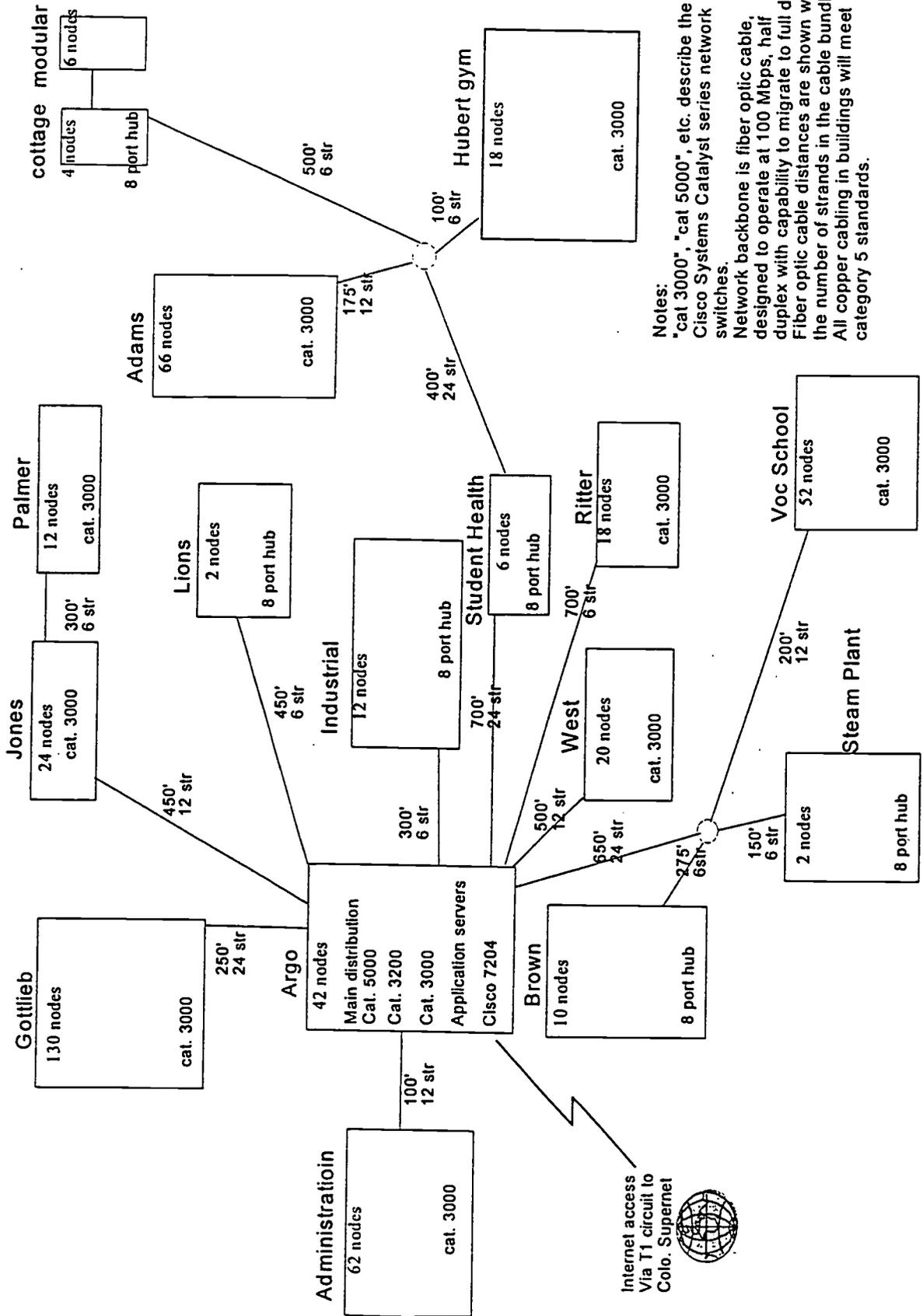
- **CSDB**

- Reassess priorities for achieving basic network goals:
 - Outreach services will be easier to access and extended to more people statewide
 - Students will improve proficiency in technology through greater access to technology in the dormitories and classrooms
 - Adaptive technologies will be incorporated to give students with sight or hearing impairments full access to technology oriented learning resources

- Students will have greatly improved opportunities to become proficient in computer technology that is commonly being used in business, allowing them to become more competitive in obtaining jobs or advanced education
- Students will use network based tools like ACLIN and Internet resources to access a wider range of information resources
- Continue identification of shared information and development of network-based applications to improve effectiveness and efficiency
- Begin implementation of plan to replace obsolete equipment
- Acquire, install, configure technologies not purchased previously that will enable CSDB to meet the goals of its technology plan. Acquisition of some technologies were not practical during the first year of funding due to lack of maturity of the technology and high expense. An example is video conferencing via local area network and possibly the wide area network, Internet

*TECHNICAL
ARCHITECTURE*

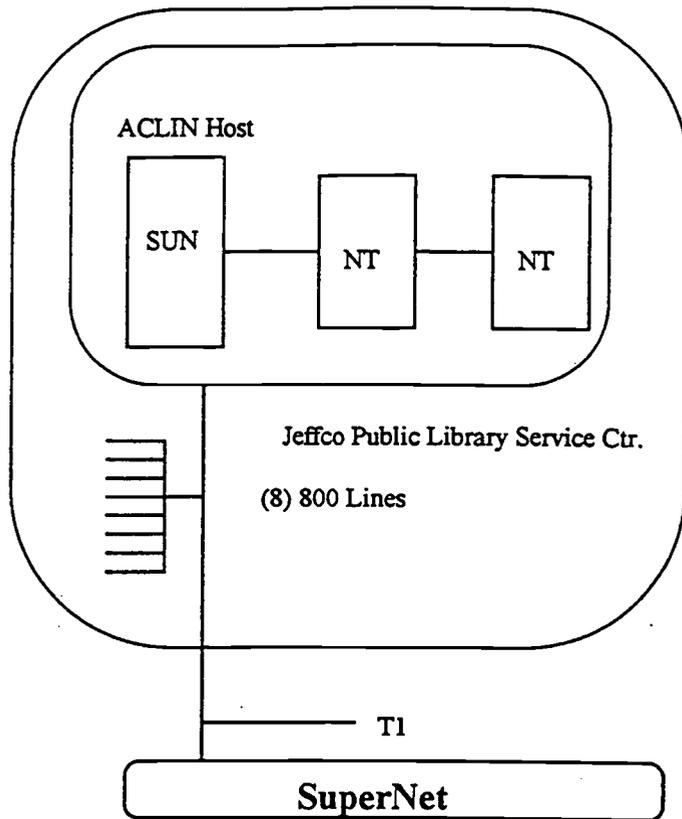
CSDB Network Diagram



Notes:
 cat 3000, *cat 5000*, etc. describe the Cisco Systems Catalyst series network switches.
 Network backbone is fiber optic cable, designed to operate at 100 Mbps, half duplex with capability to migrate to full dpx. Fiber optic cable distances are shown with the number of strands in the cable bundle. All copper cabling in buildings will meet category 5 standards.



ACLIN Network Diagram/Description



Dial access nodes are provided at 15 sites in a statewide network. Users located within the toll-free calling area of one of these numbers can use the appropriate number at no cost. 800 service is provided for those not located within any of these calling areas. Those with local node service are blocked using the 800 service. Dial access nodes and the number of lines provided at each site are listed below:

SITE	# MODEM	SPEED	CONNECT
Alamosa	8	14.4	56k
Boulder	112	14.4	2 T1
	48	28.8	
Colorado Springs	20	28.8	T1
Durango	8	14.4	T1
Ft. Collins	24	28.8	T1
Glenwood Springs	12	28.8	T1
Grand Junction	12	14.4	T1
Greeley	12	28.8	T1
Gunnison	8	14.4	56K
Pueblo	8	14.4	T1
Salida	8	28.87	T1
Steamboat Springs	12	28.8	2 56K
Sterling	12	14.4	56K
Copper Mountain	8	28.8	T1
Telluride	8	28.8	56K
800 Service	8	28.8	T1

Dial access users of the network require a microcomputer, modem, telecommunications software, and phone line to access the network via one of these nodes. Dumb terminals can also be used. A generic logon is used (username: AC) so that no individual accounts or passwords are required.

**INVENTORIES
HARDWARE
AND
SOFTWARE**

**State of Colorado
Department of Education
Hardware Inventory Summary**

Date 6/30/97

Hardware	Count
PCs	
808X class Machines	0
80286 class Machines	0
80386 class Machines	6
80486 class Machines	64
Pentium class Machines	70
Pentium Pro class Machines	1
Portable PCs	41
WANG PCs	0
Other PCs	0
Macintoshes	107
Network Computers	0
TOTAL	289
Larger Machines	
LAN Servers	2
Mid-Range Systems*	5
Mainframe class Machines	0
Peripherals	
Personal Printers	40
Work Group Printers	40
Production Printers	8
Terminals (3270 Type, etc.)	4
Prepared by: Corey Kispert Phone #:866-6834 Approved by:	

*Please specify each operating system by type.

- Banyan Vines
- HP-UX
- MPE

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State of Colorado
Department of Education
Colorado School for the Deaf and the Blind
Hardware Inventory Summary

Date 7/11/97

Hardware	Count
PCs	
808X class Machines	0
80286 class Machines	5
80386 class Machines	21
80486 class Machines	10
Pentium class Machines	25
Pentium Pro class Machines	0
Portable PCs	5
WANG PCs	0
Other PCs	0
Macintoshes	76
Network Computers	0
TOTAL	142
Larger Machines	
LAN Servers	0
Mid-Range Systems* (IBM System 36)	1
Mainframe class Machines	0
Peripherals	
Personal Printers	82
Work Group Printers	0
Production Printers	1
Terminals (3270 Type, etc.)	0
Prepared by: Tim Martin	Phone #: 719-578-2110 Approved by:

*Please specify each operating system by type.

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State of Colorado
 Department of Education
 ACLIN
 Hardware Inventory Summary

Date: 7/11/97

Hardware	Count
PCs	
808X class Machines	
80286 class Machines	
80386 class Machines	
80486 class Machines	
Pentium class Machines	1
Pentium Pro class Machines (intergraph Web 300/NT)	2
Portable PCs (486)	1
WANG PCs	
Other PCs	
Macintoshes	
Network Computers	
TOTAL	4
Larger Machines	
LAN Servers	
Mid-Range Systems* Sun Sparc 20, model 71/Sun OS**	1
Mainframe class Machines	
Peripherals	
Personal Printers	
Work Group Printers	
Production Printers	
Terminals (3270 Type, etc.)	
Scanner (HP) 1	
Prepared by: SusanFayad Phone #: 866-6907 Approved by: Karen Stroup	

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**State of Colorado
Department of Education
Software Inventory Summary**

Date 6/30/97

Software (by product name and version)	Number of Licenses in Use
Operating Systems	
MS/PC-DOS version 3.x or earlier	
MS/PC-DOS version 4.x to 7.x	81
Windows 3.x	81
Windows 95	83
Other PC Operating System or GUI	2
Mac System 6.x or earlier	
Mac System 7.x	123
Novell 3.x or earlier	
Novell 4.x	
Banyan	260
LAN Manager	
Windows NT AS	
Other Network Operating System	
Word Processing	
Word for DOS	
WordPerfect for DOS	
Other DOS Word Processors	
Word for Windows	270
WordPerfect for Windows	50
Other Windows Word Processors	
Spreadsheets	
Lotus 123 for DOS	
Quattro Pro for DOS	
Other DOS Spreadsheets	
Excel for Windows	270
Lotus 123 for Windows	50
Quattro Pro for Windows	
Other Windows Spreadsheets	
Databases	
dBase for DOS	
Paradox for DOS	
Other DOS Data Bases	
dBase for Windows	
Paradox for Windows	
Access	100
Other Windows Data Bases	
Prepared by: Corey Kispert Phone #: 866-6834 Approved by: Dianne Kress/Karen Stroup	

State of Colorado
 Department of Education
 Colorado School for the Deaf and the Blind
 Software Inventory Summary

Date 7/11/97

Software (by product name and version)	Number of Licenses in Use
Operating Systems	
MS/PC-DOS version 3.x or earlier	2
MS/PC-DOS version 4.x to 7.x	40
Windows 3.x	70
Windows 95	25
Other PC Operating System or GUI	0
Mac System 6.x or earlier	31
Mac System 7.x	43
Novell 3.x or earlier	0
Novell 4.x	0
Banyan	0
LAN Manager	0
Windows NT	1
Other Network Operating System	0
Word Processing	
Word for DOS	3
WordPerfect for DOS	0
Other DOS Word Processors	1
Word for Windows	55
WordPerfect for Windows	0
Other Windows Word Processors	0
Word for Macintosh	58
Spreadsheets	
Lotus 123 for DOS	0
Quattro Pro for DOS	0
Other DOS Spreadsheets	0
Excel for Windows/Mactintosh	84
Lotus 123 for Windows	1
Quattro Pro for Windows	0
Other Windows Spreadsheets	0
Databases	
dBase for DOS	0
Paradox for DOS	0
Other DOS Data Bases	0
dBase for Windows	0
Paradox for Windows	0
Access	31
Other Windows Data Bases: FileMaker, Macintosh	11
Prepared by: Tim Martin	Phone #: 719-578-2110
Approved by:	

State of Colorado
Department of Education
ACLIN
Software Inventory Summary

Date: 7/11/97

Software (by product name and version)	Number of Licenses in Use
Operating Systems	
MS/PC-DOS version 3.x or earlier	
MS/PC-DOS version 4.x to 7.x	
Windows 3.x	1
Windows 95	1
Other PC Operating System or GUI	
Mac System 6.x or earlier	
Mac System 7.x	
Novell 3.x or earlier	
Novell 4.x	
Banyan	
LAN Manager	
Windows NT AS	2
Other Network Operating System-SunOSrtoSolaris)	1
Word Processing	
Word for DOS	
WordPerfect for DOS	
Other DOS Word Processors	
Word for Windows	2
WordPerfect for Windows	
Other Windows Word Processors	
Spreadsheets	
Lorus 123 for DOS	
Quattro Pro for DOS	
Other DOS Spreadsheets	
Excel for Windows	1
Lorus 123 for Windows	
Quattro Pro for Windows	
Other Windows Spreadsheets	
Databases	
dBase for DOS	
Paradox for DOS	
Other DOS Data Bases	
dBase for Windows	
Paradox for Windows	
Access	
Other Windows Data Bases-MicroSoft SQL	1
Prepared by: SusanFayad	Phone #:866-6907
Approved by: KarenStroup	

OTHER:

- Graphics: AdobePhotoshop
- Middleware: Allaire ColdFusion
- Z39.50 Client: OCLCWebZ
- Web Search Engine:OpenText LiveLink

Staff Requirements

State of Colorado
Department of Education - IMS
Staff Requirements for Period 97-00

PROJECT	CURRENT STAFF			1999-00 STAFF		
	TOTAL	TOTAL	NEW FTE TO BE REQUESTED	TOTAL	NEW FTE TO BE REQUESTED	TOTAL
I. Maintenance and Development - Programmer/Analysts	4	4		4		
II. Network and Operations Support	2	2		2		
IV. IS & Project Management	1	1		1		
Total Staff	7	7				
Total New FTE to be Requested						
Prepared By: Dianne Kress				Phone #: 866-6823		Approved by: Karen Stroup

*The Total New FTE to be Requested quantities should tie directly to the FTE requested on Format 7000EZ or 7000 and Schedule 2D.
Format 3040

State of Colorado
 Department of Education - Colorado School for the Deaf and the Blind
Staff Requirements for Period 97-00

CURRENT STAFF				1999-00 STAFF			
PROJECT	Network Analyst	TOTAL	Network Analyst	NEW FTE TO BE REQUESTED	Network Analyst	TOTAL	NEW FTE TO BE REQUESTED
I. Maintenance							
II. Project Category I							
Local Area Network	1	1	2	1.0	2	2	
III. Project Category II							
IV. Project Category III							
Total Application	1	1	2	1.0	2	2	
IS Management							
Operations		.8			.8	.8	
System Programmers							
Total Staff		1.8			2.8		
Total New FTE to be Requested				1.0		2.8	
Prepared By:	Tim Martin, Larry Akers	Phone #: 719-578-2110	Approved By:	Date:			
Format 3040							

*The Total New FTE to be Requested quantities should tie directly to the FTE requested on Format 7000EZ or 7000 and Schedule 2

State of Colorado
 Department of Education - ACEIN
 Staff Requirements for Period 97-99

CURRENT STAFF		1997-98 STAFF		1998-99 STAFF	
PROJECT	TOTAL	TOTAL	NEW FTE TO BE REQUESTED	TOTAL	NEW FTE TO BE REQUESTED
I. Maintenance				6.0	
II. Project Category I					
III. Project Category II	5.75	2.5	0	2.5	0
IV. Project Category III					
Total Application					
IS Management					
Operations					
System Programmers					
Total Staff	5.75			2.5	
Total New FTE to be Requested	.0		.0		0
Prepared By: Susan Fayad		Phone #: 866-6907		Approved By: Karen Stroup	
Format 3040					

*The Total New FTE to be Requested quantities should tie directly to the FTE requested on Format 7000EZ or 7000 and Schedule 2

* This includes a Project Director, Support Librarian, and part-time Administrative Assistant; technical operations, including programming and system operator services are contracted out.

Base Projects

Brief Summary of Base Budget Projects

I. Automated Information Systems

A. School Finance

Colorado's school finance act allocates more than \$2.6 billion in state aid and property taxes for school districts. On average, nearly 80% of school district operating revenue is generated as a result of this financing mechanism.

Colorado public schools are financed from local, state and federal sources. Revenues and expenditures are budgeted in four basic "funds" or groups of accounts. These four funds are the General Fund, the Capital Reserve Fund, the Bond Redemption Fund, and the Insurance Reserve Fund.

Additionally, special operating funds such as those for pupil activities and governmental designated purpose grants can be established at the discretion of the local school district. School district budgets are based on a fiscal.

The general fund can be used for all lawful expenditures of the district but generally is considered the "operating budget" of the district and includes salaries, supplies, utilities, and related day-to-day costs.

Under Senate Bill 428 enacted into law during the 1981 session, school districts and approved on-ground schools may be entitled to bill the Colorado Department of Education for the state average per pupil operating revenue for certain pupils enrolled in their schools. See CRS 22-53-104(3).

Every school district shall report to the Colorado Department of Education by district of residence, the number of pupils not included in the district's pupil enrollment but who are receiving education services in residential child care facilities, community centers, regional centers, the school for the deaf and the blind, and other group care facilities or homes designated by the state board within the district's boundaries. The department of education shall annually withhold an amount equal to the district of residence's per pupil operating revenues for each such child counted by local school districts but not actually attending classes in the district of residence and included on the roll of out-of-district placed children. The department shall forward to the district or state institution or facility delivering the education, on a monthly basis, the proportional amount of the state average per pupil operating revenues. Approximately \$800,000 is distributed monthly to sponsoring agencies.

The system was automated using the HP 3000 minicomputer and personal computers. The automated system supports the equalization program funding, the pupil counts for the funding formula, the actual and budgeted revenues and expenditures, the

recalculation of the equalization program funding due to an audit, the reimbursement for transportation expenditures and the recalculation of transportation due to an audit. Additionally, the system does monthly billing and all reporting for out-of-district placed pupils.

B. Special Education

Special Education data are required by the State Exceptional Children's Educational Act, Public Law P.L. 94-142 and Federal rules and regulations (P.L. 91-230). The Colorado Exceptional Children's Educational Act (ECEA) states "The department shall submit to the governor and the education committees and the joint budget committee of the general assembly an annual report of the type and number of handicapped children served and not served, what educational services are provided to them, and the total costs incurred for the services, whether state, federally, locally, or privately funded. The report shall include a measurable qualitative evaluation of the educational services rendered. The audit performed by the school district shall certify the number of pupils enrolled in special education programs and the numbers and salaries of reimbursable personnel." It further states "To comply with this section, the department shall maintain a data and information system on children, personnel, costs and revenues".

P.L. 94-192 - The Education for All Handicapped Children Act states "each State shall . . . provide certification of the actual number of handicapped children receiving special education and related services in such state". It further requires states to report the number of handicapped children, within each disability, who required special education and related services; those receiving a free appropriate public education and those who are not receiving a free appropriate public education; who are participating in regular educational programs, the number placed in separate classes or separate school facilities, or who have been otherwise removed from the regular education environment; the number of handicapped children who are enrolled in public or private institutions in each State; the amount of Federal, State, and local expenditures for special education and related services; the number of personnel, by disability category employed in the education of handicapped children, and the estimated number of additional personnel needed to adequately carry out the policy established by this Act.

The Education of the Handicapped Regulations (reg. 300.750 - Annual report of children served - report requirement) state "The State educational agency shall report to the Commissioner no later than February 1 of each year the number of handicapped children aged three through 21 residing in the State who are receiving special education and related services." Regulation 300.751 - Annual report of children served - information required in the report stipulates additional data that is required. Approximately \$70 million is distributed annually to public schools and state supported programs. The automated system is designed for aiding the distribution of federal and state funds. The system was automated on the HP 3000 minicomputer

and 100% of the data is currently collected electronically.

The End Of Year (EOY) and Federal Application data collection systems ensures accurate data collection and more timely submission of the required data by the administrative units.

C. Educator Licensure (formerly Teacher Certification)

The rules for the Administration of the Educator Licensing Act of 1991 were adopted by the State Board of Education on May 12, 1994 and December 8, 1994. Effective July 1, 1994, this Act reflects the move from the traditional process of certifying and recertifying educators with specific courses and clock hour requirements to a licensing system in which educators demonstrate skills and competencies.

The automated licensure system on the HP 3000 was developed primarily to assist in the application process from the initial recording of the application fee through the issuance or rejection of the license, and the final production of license information on microfilm. Data from the old Teacher Certification System is integrated into this system.

This system tracks the initial application and fees, required assessment scores, application deficiencies, rejected applicants, fingerprint and background checks and currently certified or licensed applicants. Licenses and mailing labels are printed on a daily basis. Status and management reports are available on line. Assessment results are received on magnetic tape from the testing center and uploaded into system. A diskette containing information of all nationally revoked certificates and licenses is uploaded monthly into the system. A magnetic tape of all license renewals is generated monthly and sent to the CBI for background checks.

An inquiry program is used internally to respond to 70% of the questions asked by applicants regarding the status of their license. A separate inquiry program is used by School District personnel to determine if potential teacher or administrative candidates are licensed or certified to teach or administer in the State of Colorado and to check background clearance on all staff.

Other units in the department access licensure/certification data. The Field Services Unit can print report employed district staff that do not have the proper license, certificate or endorsements. Special Education uses a similar report for funding purposes.

D. Certificated Personnel

In accordance with C.R.S. 22-2-112(k) the Commissioner of Education is mandated by HB 1251, "To submit to the governor and the general assembly, not later than the first day of September of each year, a report which shall discuss educational issues in Colorado and such other subjects as the Commissioner may deem appropriate Statistical data by school district regarding dropout rates, teacher-pupil ratios, number

of courses offered, teacher turnover rates, reading and achievement scores will be available upon request." Some of these data also must be reported annually to the federal government.

To meet a portion of these requirements the Certificated Personnel automated system collects data on all educators employed within Colorado's public schools. In addition, data is also collected for non-certificated staff employed in Colorado school districts. The data are collected annually from September through November.

Approximately 75% of the data collection has been automated using an MS-DOS collection system and magnetic tape. The MS-DOS collection system downloads last year's personnel file for each school district, allows them to update and report the data, and then upload the updated data to the minicomputer.

E. Student Counts - Funded Pupil Counts, Graduates, Dropouts, Pupil Counts by Service Area, Fall Membership, End of Year Membership, Free Lunch Counts and Test Scores.

As part of the Public School Finance Act of 1988, each district counts pupils in membership as of the school day nearest October 1. The count is used in the formula for the following calendar year funding. Kindergarten pupils are counted as half-time pupils. Preschool pupils with special needs may be counted half-time if enrolled in the approved pilot program. Full time equivalent counts and head counts are collected for the following areas:

- o Half-time kindergarten and other part-time pupils
- o Out-of-district placed pupils
- o Approved second chance centers - in district of residence and district of attendance
- o Pilot preschool
- o Nonresident pupils
- o Resident pupils attending an out-of-district education Program

Colorado law (22-2-114.1, C.R.S.) requires the State Board of Education to "develop and implement in cooperation with local boards of education a model student accounting method and data collection system on dropouts in grades seven through twelve." The department collects dropout data at the school building level for grades 7 - 12, by sex and ethnic/racial group.

The Public School Finance Act of 1988 requires each district to provide for the measurement of graduation rates. The State Board of Education has set a goal of improving the graduation rate from 76% to 90% by the year 1995. The department collects graduation data for high school graduates, other high school completers, and general education development (GED). These data are collected at the school building level, by grade, sex and ethnic/racial group.

The Public School Finance Act of 1988 also created a commission to oversee and evaluate the implementation of the Act. As a part of the commission's requirements the department was mandated to collect pupil counts by service area. This data is also used in the equalization program funding formula for calculating categorical buyout. Pupil counts are collected at the school building level for a variety of service areas.

C.R.S. 22-2-11-2(k) mandates the collection of data on the educators and other staff employed in Colorado's public schools, it also mandates the collection of pupil data in those same schools. This membership data is used to report the number of pupils by grade level, ethnic group and sex. These data are also used to calculate and report pupil teacher ratios. The federal government also requires that much of these data be reported to them annually on magnetic tape. These data are used by the U.S. Department annually to allocate federal program dollars to states.

This statute also requires the reporting of group achievement test results and end of year membership counts. The end of year pupil counts are incorporated into the dropout system since both are collected in an end of year instrument. A separate system allows for the entering of group achievement test data for each school district for selected grades in Math, Reading and Language. Information reports are generated from this data.

The automated system collects the data and reports information. Several publications are produced from the information reports. The data can be downloaded to personal computers for use with LOTUS 1-2-3. Extensive ad-hoc reporting is done by the user.

A data collection system was developed to collect the graduate and dropout counts on diskette (MS-DOS). The districts that use this system are able to generate graduation and dropout rates immediately.

F. Colorado Talking Book Library

In cooperation with a network of regional and sub-regional libraries, the Library of Congress provides a free library service to persons who are unable to read or use standard printed materials because of visual, physical or learning disabilities. Established by an act of Congress in 1931 to serve blind adults, the program was expanded in 1952 to include children, in 1962 to provide music materials, and again in 1966 to include individuals with other impairments that prevent the reading of standard print materials.

Books and magazines in recorded form (talking books) or in Braille are delivered to eligible readers by postage-free mail and are returned in the same manner. Specially designed phonographs and cassette players are also loaned free to persons borrowing talking books.

The Library's collection of recorded books is similar to that found in any public library, including both fiction and non-fiction on a wide variety of subjects. Each year about 2,000 titles are mass-produced for distribution through network libraries. Another 1,000 titles recorded on tape or transcribed into Braille are circulated in more limited quantities. A limited number of titles are produced in foreign languages.

Approximately eighty magazines in recorded and Braille forms are offered through the program. Current issues are mailed to readers at the same time the print issue appears, or shortly thereafter. The CTBL's collection currently contains more than 70,000 titles and over 195,000 volumes.

Commercial record and tape machines will not play the Library's recorded reading materials. Specialized playback equipment is loaned free to readers as long as library materials are being borrowed. Available accessories for playback equipment include head phones and pillow phones. Physically disabled persons can obtain cassette machines with extension levers for operation controls. An auxiliary amplifier for hearing impaired persons is also available.

The Colorado Department of Education's Colorado Talking Book Library (CTBL) Unit currently has over 11,400 persons and institutions registered and referred to as patrons. Patrons may select recorded books from a catalog and/or have the computer system automatically select books for them. Recorded books are automatically selected for patrons based on reading level, language preference, rough language preference, narrator sex, and reading interest subject areas. Recorded books selected from catalogs, referred to as requests, have a higher priority of being distributed than recorded books selected by the computer. At this time, all processing is accomplished in an on-line-interactive environment on the HP3000. This is a shared environment with other units of the CDE.

Although the HP3000 has provided adequate service in the past, our increasing demand for service is not being met. In the past ten years the CTBL's patron levels has increased over 100% and the demand for additional services has also increased proportionately. As a result of this, we are investigating the purchase of a computer circulation system that will allow for less duplication of effort, increased speed, and greater patron accessibility. There are two different dedicated circulation systems currently being considered; Data Research Associates Circulation System and the Keystone Library Automated System. Both systems are designed for talking book libraries.

Funding for this new system is currently available through the CTBL and its Friends Organization. We are not requesting any funding for this project.

G. GED

The Colorado Department of Education GED Testing program is mandated by the

following sections in the Colorado School Law: 22-2-106(a) and 22-2-107(c). The responsibilities of the program include:

- o Supervision of over 40 GED Testing Centers
- o Issuance of Colorado High School Equivalency Diplomas and Transcripts
- o Maintenance of permanent records of those examinees taking the Tests of General Educational Development (GED) in Colorado
- o Collecting of data on GED examinees for an annual statistical report required by the GED Testing Services, Washington D.C.
- o Collecting and reporting of data on passing GED examinees to school districts

The automated system was developed on the HP 3000 and personal computer to accomplish the above responsibilities. Testing centers can submit data on diskette for issuance of GEDs. Because all data is stored on the HP 3000, inquiry of data on the new system, as well as issuance of transcripts and duplicate GEDs is done online, no longer requiring searching paper files.

The automated system works in conjunction with GEDware, a third party PC program used by the testing centers. Using GEDware, the testing centers can submit test data on diskette for issuance of GEDs. Ninety percent of GEDs are issued in this manner, eliminating the associated manual entry by department staff.

Summary reports are prepared automatically as diskette data is received and documents are printed. Diplomas, transcripts and most reports are printed on the personal computer. A few reports are printed on the HP 3000.

H. Budget Development and Monitoring System/Accounting System

The State of Colorado Fiscal Rules state that each department head "is responsible for the agency accounting function which is an integral part of the statewide Central Accounting System." The department of Education converted from the Central Accounting System (CAS) to COFRS - Colorado Financial and Reporting System. Implementation of COFRS in the department required additional communication lines to GGCC and additional hardware. COFRS replaced the front-end accounting system on the HP 3000, but a new budget monitoring system (BMS) had to be developed for tracking grants on the HP 3000. The data is extracted from COFRS, processed on the HP 3000 and printed at GGCC. Voucher data from the Child Nutrition system is automatically transferred to COFRS from the HP 3000.

The BMS is used to compare actual expenditures with planned expenditures and identify the difference in order to alert managers to potential problems. An encumbrance report is also produced.

The position-cost system is used to determine the cost and report the funding of any position in the Department. The system gives the user the capabilities to change

existing records, print reports and maintain account information and tables. A monthly tape from CPPS is used to load current information in the minicomputer. It is anticipated that COFRS will replace this system.

I. Child Nutrition

CDE assists local school districts with child nutrition programs through activities which focus upon:

- a) administration of food service programs;
- b) training of school personnel in program management;
- c) assistance in nutrition education program development and implementation.

To comply with the National School Lunch Act, the National School Lunch Program and the Child Nutrition Act of 1966, CDE reimburses sponsoring agencies to the extent of funds available, at assigned rates of reimbursement in connection with breakfasts, lunches, and milk. Approximately \$33 million is distributed annually to sponsoring agencies. The disbursement of federal money designated for feeding various groups of school children by the Department has been automated on the HP 3000 minicomputer.

J. Directory

The Colorado Education and Library Directory is published each fall as a service to schools and other members of the education community. It contains information on Colorado Department of Education staff, school district/school addresses and key personnel, district calendars, Boards of Cooperative Educational Services (BOCES), institutions of higher education, and educational groups and professional organizations. Colorado public, special, institution, and academic libraries are also included. Approximately 8,000 books are distributed to Colorado schools and libraries, nationwide businesses, and individuals interested in educational issues. Information pertaining to the directory is extracted from a data base on the HP 3000 minicomputer in the form of turnaround documents. These documents are sent to the appropriate organizations for updating and returned to the Department of Education. The data base on the HP 3000 is then updated using these documents. After all changes have been made, the original directory listings are produced on the HP 3000 and printed on the department's Hewlett Packard LaserJet IID printer.

II. Automated Data Exchange

CDE is in the process of developing an interrelated automated education data exchange system that is composed of public school district student, financial and human resource data. This will allow school districts to electronically submit edited data rather than reports on paper or diskette. Over time, this system will replace some of the data collection/reporting systems described above in the Automated Information Systems section.

VISION: The legislature, school districts, libraries, CDE and others interested in education will have ready access to accurate and reliable information for decision making to improve the quality of education.

Goal 1: *Establish a statewide education data base that is responsive to the information needs of policy makers, the education community and the public.*

- Objectives:**
- o Increase data accuracy and comparability through improved data definitions and a standard data dictionary. The new data definitions will be compatible with the most recent federal handbooks so that Colorado state data can be compared to national data and trends.
 - o Create a data base that fulfills educational policy needs and state and federal reporting requirements.
 - o Increase responsiveness by making data electronically available to all users.
 - o Reexamine the need for all data currently collected from school districts.
 - o Establish an ongoing review process for analyzing data needs.

Goal 2: *Create an efficient, electronic data transfer system that minimizes the reporting burden of data providers.*

- Objectives:**
- o To the extent possible, eliminate paperwork in data collection.
 - o Transfer data electronically to eliminate data entry errors.
 - o Integrate data collection to eliminate duplicate reporting.
 - o Increase timeliness of data by reducing the need for extensive CDE editing of data. Make standard edit programs available for districts to utilize before transmitting their data to the state.
 - o Create a standard student record format that will enable school districts to exchange student records electronically.

Based on a pre-defined collection schedule, districts would transmit data sets (as defined in the CDE data dictionary) to CDE. Data sets would be electronically transferred to CDE's HP 9000. Upon receipt of the data CDE would run automated edit/verification programs to verify data parameters are valid. Once this process is complete, aggregate data would be extracted and loaded onto the CDE reporting server. Only financial,

aggregate staff and aggregate student data would be made available on the reporting server. The reporting server would be accessed by users such as school districts, state agencies, legislators, and CDE program staff via Internet.

III. Enterprise Network

CDE's network provides an infrastructure for a multi-platform local area network, connecting all computer systems on one homogeneous cable plant that allows file sharing, electronic mail, network applications and print services. Users of this network are not bound by computer type to receive or send E-Mail internally or to the Internet. Also, users now have access to a greater library of information and resources on the Internet not previously accessible. The Enterprise Network also allows us to connect to our remote sites and more effectively share data and pass information than was possible. The network will also allow school districts, other state agencies and the federal government to contact the CDE directly and pass files or input information directly into one of the various applications that will be available to them.

IV. Access Colorado Library and Information Network(ACLIN)

ACLIN is the only statewide public access information network in Colorado. Through ACLIN, every resident of the state receives free access to the databases housed on library computers around the state, as well as those on the ACLIN computer. This includes approximately 165 library catalogs, and over 50 other information resources, including the Colorado Legislative Database, information resources of many state agencies, and those of various non-profit organizations.

ACLIN services consists of 3 basic technical components that are reflected in the project objectives: 1) access to the information resources contained on ACLIN, 2) content that is useful to the residents of the state, 3) menus that organize the information and guide the user to what is requested.

Currently access to ACLIN is available free from anywhere in the state with a microcomputer and modem by dialing-up to one of 16 dial-access nodes. If the user does not live in the local calling area, an 800# is available for access. These telecommunications services are contracted to an Internet service provider in what has proved to be a successful private/public partnership.

Content is provided through two main avenues: library computer systems, and Web site resources. The majority of information resources on ACLIN are those contained on library computer systems linked to ACLIN via the Internet. Other resources are contained on Web sites, including ACLIN's own Web site. This has made it possible to expand the resources available to Colorado residents to include those of state government, non-profit organizations, as well as some commercial resources paid for by Colorado libraries.

The menu system on ACLIN makes it simple for the user to identify and connect to various information resources available on the network. This is currently done using a series of Web Home Pages. As with any good service, it is deceptively simple to the user, but has a lot of hardware, software, and programming dedicated to making it look that way. This is a function of the ACLIN Web site mentioned above. While ACLIN is currently managing this service itself, with its own programmer, it expects to contract this to another library organization in the future, to share the costs of the programming support needs.

Though not an actual component of ACLIN, the development of a statewide information infrastructure has become an important activity associated with ACLIN services. The ultimate plan is to incorporate ACLIN into whatever statewide network infrastructure is developed for public use. Therefore, State Library staff not only participate in, but encourage, efforts to plan and develop a state information infrastructure.

ACLIN has brought an important new dimension to information delivery in Colorado by:

- positioning Colorado to take advantage of developing local, state, and national networking programs, including the Information SuperHighway;
- ensuring that information is a resource readily available to all Colorado residents for enhancing all aspects of life: education, business, health, social services, personal growth;
- providing a model, the first of its kind in the state, for statewide delivery of information to school, office, home, or library, in a manner that avoids creating information "haves and have-nots";
- establishing an infrastructure upon which Colorado can further develop information delivery services for its residents; (The Colorado State Home Page is an example of this.)
- creating an enhanced framework for statewide resource sharing among Colorado libraries, ensuring that library materials purchased with public dollars receive the greatest and widest possible use to meet the information needs of residents.

Analysis Worksheets

State of Colorado
Base Budget Analysis Worksheet (CDE & ACLIN)
Department of Education

Date: 7/21/97

Cost Components		FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services								
Labor:								
State Employee		349,872	400,465	420,928	431,451	442,238	453,294	2,498,248
Contract & Consulting		7,590						7,590
Other								
Total Personal Services		357462	400465	420928	431451	442238	453294	2505838
Total FTE		7	7	7	7	7	7	7
II. Operating Expenses								
Materials and Supplies		1,460	1,460	1,460	1,460	1,460	1,460	8760
Maintenance:								
Equipment:								
Large Systems		12,300	12,300	12,610	12,920	13,245	13,575	64650
LAN Systems								
Desktops								
Network								
Software:								
Large Systems		39,390	40,374	41,384	42,419	43,480	44,566	212223
LAN Systems		9,609	10,000	10,000	12,000	13,000	14,000	59000
Desktops			5,000	5,000	5,000	5,000	5,000	25000
Network								
Non-Capitalized Equipment								
Processing at State Computer Ce		19,500	19,500	19,500	19,500	19,500	19,500	117000
Communications Services								
From Division of Telecommunication:								
Voice		1,200	1,230	1,261	1,292	1,325	1,358	6465
Data		5,900	6,048	6,199	6,354	6,512	6,675	31788
From Outside Source								
Voice								
Data		6,000	6,150	6,304	6,461	6,623	6,788	32326
Prepared by: Dianne Kress			Telephone #: 866-6823		Approved by:	Karen Stroup		Date: 7/21/97

Base Budget Analysis Worksheet

Department of Education

Cost Components		FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent								
Administrative Expenses								
IT/IS Training	594			32,000	32,000	32,000	32,000	128,594
Travel	1,200	200	1,200	1,200	1,200	1,200	1,200	6,200
Other Purchased Services	5,482							5,482
Total Operating Expenses	10,265	10,226	13,691	14,066	14,334	14,612	14,612	77,187
III. Capital Outlay								
Equipment:								
Purchased								
Large Systems								
LAN Systems	21,160	25,000	27,000	30,000	33,000	36,000	36,000	172,160
Desktops								
Network								
Leased								
Large Systems								
LAN Systems								
Desktops								
Network								
Software:								
Purchased								
Large Systems								
LAN Systems	10,000	10,000	10,000	12,000	13,000	14,000	14,000	59,000
Desktops								
Network								
Leased								
Large Systems								
LAN Systems								
Desktops								
Network								
Total Capital Outlay	21,160	35,000	37,000	42,000	46,000	50,000	50,000	231,160
Grand Total Costs	48,125	53,727	59,484	61,407	63,583	64,916	64,916	350,885
Prepared by: Dianne Kress			Telephone #: 866-6823					
								Approved by:

State of Colorado
New Funds Analysis Worksheet - CDE & ACLIN
 Department of Education

Date: _____

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee							
Contract & Consulting	162,075	115,038	451,781	142,880	10,000	10,000	891,774
Other							
Total Personal Services	162075	115038	451781	142880	10000	10000	891774
Total FTE							
II. Operating Expenses							
Materials and Supplies							
Maintenance:							
Equipment:							
Large Systems		6,080	6,450	6,782	7,110	7,466	33888
LAN Systems			15,000	16,000	17,000	18,000	66000
Desktops							
Network							
Software:							
Large Systems	13,253	21,232	24,350	25,558	26,178	27,587	138158
LAN Systems							
Desktops							
Network							
Non-Capitalized Equipment							
Processing at State Computer Center							
Communications Services							
From Division of Telecommunication:							
Voice							
Data			1,600	1,600	1,600	1,600	6400
From Outside Source							
Voice	270						270
Data	3,063						3063

Prepared by: Dianne Kress

Telephone #: 866-6823

Approved by: Karen Stroup

Date: 7/22/97

New Funds Analysis Worksheet - CDE AND ACLIN

Department of Education

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent							
Administrative Expenses	2,005	6,885					8890
IT/IS Training	10,936	12,850	15,000	15,000	15,000	15,000	83786
Travel	231	2,000	1,000	1,000	1,000	1,000	6231
Other Purchased Services		20,500					20500
ACLIN GRANT	90,417						
Total Operating Expenses	120175	69547	63400	65940	67888	70653	367186
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems	47,741		20,500				68241
LAN Systems		7,800	3,500				11300
Desktops	254,292	355,750	49,600	27,800	46,600	31,000	765042
Network							
Leased							
Large Systems							
LAN Systems							
Desktops							
Network							
Software:							
Purchased							
Large Systems							
LAN Systems							
Desktops	302,000						709750
Network		407,750					
Leased							
Large Systems							
LAN Systems							
Desktops							
Network							
Total Capital Outlay	604033	771300	73600	27800	46600	31000	1554333
Grand Total Costs	886283	955885	588781	236620	124488	111653	2813293

Prepared by: Dianne Kress

Telephone #: 866-6823

Approved by: Karen Stroup

Date: 7/19/97



State of Colorado
Total Funds Analysis Worksheet
 Department of Education

Date: 7/16/97

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 00-02	Total
I. Personal Services							
Base Budget	357462	400465	420928	431451	442238	453294	2505838
New Funds	162,075	115,038	451,781	142,880	10,000	10,000	891774
Total Personal Services	519537	515503	872709	574331	452238	463294	3397612
II. Operating Expenses							
Base Budget	102,635	102,262	136,917	140,606	143,345	146,122	771887
New Funds	120,175	69,547	63,400	65,940	67,888	70,653	457603
Total Operating Expenses	222810	171809	200317	206546	211233	216775	1229490
III. Capital Outlay							
Base Budget	21,160	35,000	37,000	42,000	46,000	50,000	231160
New Funds	604,033	771,300	70,100	27,800	46,600	31,000	1550833
Total Capital Outlay	625193	806300	107100	69800	92600	81000	1781993
Grand Total Costs	1367540	1493612	1180126	850677	756071	761069	6409095
Source of Funds							
General Funds							
Cash Funds							
Federal Funds							
Other							
Prepared by: Dianne Kress	Telephone #: 866-6823			Approved by: Karen Stroup		Date: 7/19/97	

BEST COPY AVAILABLE

State of Colorado
Base Budget Analysis Worksheet
 Department of Education, Colorado School for the Deaf and the Blind

Date: 7/11/97

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee	43,604	91,606	96,499	101,710	104,252	106,858	544,529
Contract & Consulting	16,668	0	0	0	0	0	16,668
Other	0	0	0	0	0	0	
Total Personal Services	60,272	91,606	96,499	101,710	104,252	106,858	561,197
Total FTE	1	1.8	1.8	1.8	1.8	1.8	1.8
II. Operating Expenses							
Materials and Supplies							
Maintenance:							
Equipment:							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	4,500	4,500	4,500	4,500	4,500	4,500	27,000
Network	0	0	0	0	0	0	0
Software:	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Non-Capitalized Equipment	0	0	0	0	0	0	0
Processing at State Computer Center	0	0	0	0	0	0	0
Communications Services	0	0	0	0	0	0	0
From Division of Telecommunication:	0	0	0	0	0	0	0
Voice	0	0	0	0	0	0	0
Data	0	0	0	0	0	0	0
From Outside Source	0	0	0	0	0	0	0
Voice	0	0	0	0	0	0	0
Data	0	0	0	0	0	0	0

Prepared by: Tim Martin / Larry Akers Telephone #: 719-578-2110

Approved by: _____ Date: _____

Base Budget Analysis Worksheet

Department of Education, Colorado School for the Deaf and the Blind

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent	0	0	0	0	0	0	0
Administrative Expenses	0	0	0	0	0	0	0
IT/IS Training	10,834	1,000	1,000	1,000	1,000	1,000	15,834
Travel	0	0	0	0	0	0	0
Other Purchased Services	0	0	0	0	0	0	0
Total Operating Expenses	15,334	5,500	5,500	5,500	5,500	5,500	42,834
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	5,000	5,000	5,000	5,000	5,000	5,000	30,000
Network	0	0	0	0	0	0	0
Leased	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Software:							
Purchased	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Leased	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Total Capital Outlay	5,000	5,000	5,000	5,000	5,000	5,000	30,000
Grand Total Costs	80,606	102,106	106,999	112,210	114,752	117,358	634,031

Approved by: _____ Date: _____

719-578-2110

Tim Martin /

State of Colorado
New Funds Analysis Worksheet
 Department of Education, Colorado School for the Deaf and the Blind

Date: 7/11/97

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee	0	0	43,077	45,231	47,492	49,866	185,666
Contract & Consulting	0	10,000	10,000	10,000	10,000	10,000	50,000
Other	0	0	0	0	0	0	0
Total Personal Services	0	10,000	53,077	55,231	57,492	59,866	235,666
Total FTE	0	0	1	1	1	1	1
II. Operating Expenses							
Materials and Supplies							
Maintenance:							
Equipment:							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	10,500	10,500	10,500	10,500	42,000
Desktops	0	0	5,000	5,000	7,500	7,500	25,000
Network	0	0	0	0	0	0	0
Software:	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	4,500	4,500	4,500	9,500	23,000
Desktops	0	0	5,000	5,000	5,000	5,000	20,000
Network	0	0	0	0	0	0	0
Non-Capitalized Equipment	0	0	3,000	3,000	3,000	3,000	12,000
Processing at State Computer Center	0	0	0	0	0	0	0
Communications Services							
From Division of Telecommunication:							
Voice	0	0	0	0	0	0	0
Data	0	0	0	0	0	0	0
From Outside Source							
Voice	0	0	0	0	0	0	0
Data	0	0	11,000	11,000	11,000	11,000	44,000
Tim Martin /	Approved by:						Date:
	719-578-2110						

New Funds Analysis Worksheet

Department of Education, Colorado School for the Deaf and the Blind

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total	
Utilities/Rent	0	0	500	500	500	500	2000	
Administrative Expenses	0	0	0	0	0	0	0	
IT/IS Training	0	0	5,000	5,000	5,000	5,000	20000	
Travel	0	0	1,500	1,500	1,500	1,500	6000	
Other Purchased Services	0	0	1,500	1,500	1,500	1,500	6000	
Total Operating Expenses	0	0	47,500	47,500	50,000	55,000	200,000	
III. Capital Outlay								
Equipment:								
Purchased								
Large Systems	0	0	0	0	0	0	0	
LAN Systems	0	0	0	0	0	0	0	
Desktops	0	100,000	25,000	26,250	27,563	28,941	207,754	
Network	0	280,000	5,000	5,000	55,000	5,000	350,000	
Leased	0	0	0	0	0	0	0	
Large Systems	0	0	0	0	0	0	0	
LAN Systems	0	0	0	0	0	0	0	
Desktops	0	0	0	0	0	0	0	
Network	0	0	0	0	0	0	0	
Software:								
Purchased								
Large Systems	0	0	0	0	0	0	0	
LAN Systems	0	0	0	0	0	0	0	
Desktops	0	39,000	20,000	20,000	20,000	20,000	119,000	
Network	0	10,000	13,000	13,000	13,000	13,000	62,000	
Leased								
Large Systems	0	0	0	0	0	0	0	
LAN Systems	0	0	0	0	0	0	0	
Desktops	0	0	0	0	0	0	0	
Network	0	0	0	0	0	0	0	
Total Capital Outlay	0	429,000	63,000	64,250	115,563	66,941	738,754	
Grand Total Costs	0	439,000	163,577	166,981	223,055	181,807	1,174,420	
Tim Martin /	719-578-2110						Approved by:	Date:

State of Colorado
Total Funds Analysis Worksheet
 Department of Education, Colorado School for the Deaf and the Blind

Date: 7/11/97

Cost Components	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 00-02	Total	
I. Personal Services								
Base Budget	60,272	91,606	96,499	101,710	104,252	106,858	561,197	
New Funds	0	10,000	53,077	55,231	57,492	59,866	235,666	
Total Personal Services	60,272	101,606	149,576	156,941	161,744	166,724	796,863	
II. Operating Expenses								
Base Budget	15,334	5,500	5,500	5,500	5,500	5,500	42,834	
New Funds	0	0	47,500	47,500	50,000	55,000	200,000	
Total Operating Expenses	15,334	5,500	53,000	53,000	55,500	60,500	242,834	
III. Capital Outlay								
Base Budget	5,000	5,000	5,000	5,000	5,000	5,000	30,000	
New Funds	0	429,000	63,000	64,250	115,563	66,941	738,754	
Total Capital Outlay	5,000	434,000	68,000	69,250	120,563	71,941	768,754	
Grand Total Costs	80,606	541,106	270,576	279,191	337,807	299,165	1,808,451	
Source of Funds								
General Funds	80,606	541,106	270,576	279,191	287,807	349,165	1,808,451	
Cash Funds							0	
Federal Funds							0	
Other								
Tim Martin /	719-578-2110						Approved by:	Date:

Project Details

Format 7000 -- Year 2000 Project

Format 7000 -- Computer Replacement Project

Format 7000 -- Automated Data Exchange Project

Format 7000 -- Disaster Recovery Project

Format 7000 -- Network Maintenance and Support

Format 7000 -- Colorado School for the Deaf and the Blind
Networking Project

Format 7000 -- Intranet Project

Format 7000 -- ACLIN Project

Format 7000 -- Training Project

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State of Colorado
Department of Education
Project Detail

Date: 7/7/97

Project Title: Y2K Programming Support	Category: II	New: XX	Completed:	Budget Decision Item Request: XX	Supplemental:
		Continuing:	Future:	Capital Construction Request:	

Business Requirements:

To ensure that CDE will meet the following statutory mandates, it's systems must be modified to support the Year 2000 date change. State Leadership for Education and Library Services. Prepare and distribute report forms, curriculum and instructional guides and other materials as may be beneficial to personnel and pupils of the public schools (22-2113(1)(e) C.R.S. Information Collection and Dissemination. Collect and disseminate information about Colorado education and libraries to state and federal policy makers, the public and other interested parties (22-2-112(1)(h) C.R.S..

Project Description:

In order to ensure that the Department of Education's systems are Y2K compliant, contract programmers will need to be hired to assist with the coding changes for 26 systems. Each of CDE's programmer/analysts will oversee the contractor assigned to their systems. The CDE analysts have done extensive analyses detailing the specific data elements, by name, to assist the contractor in his/her work. The analysts will also work with the contractor to complete the testing phase. The schedule for the completion of each system has been designed so that conversion will occur prior to the running of the last cycle in this century. This will allow a window for additional modifications, if needed. Scheduling consideration has also been given to systems that have codependencies with other systems. Additional considerations have been made so that each analyst will be dealing with only one contractor at a time. Backfilling contractors for new development has been eliminated as an option since the CDE staff has recently undergone extensive training in the tools they are using for the Automated Data Exchange development. It is important they not lose what they have learned. The director of the system's unit will oversee the project. The state Y2K Committee has given the Department of Education a Confidence Factor Rating of 90% in the preparation for this project.

Technical Architecture:

Contractors will be needed to complete programming changes using the following languages: COBOL, QUIZ, QUICK, QTP, SPEEDWARE, SUPRTOOL, VISUAL COBOL, and FORTRAN.

State of Colorado
Department of Education
Project Detail

Date: 7/7/97

Project Title: Y2K Programming Support	Category: II	New: XX	Completed:	Budget Decision Item Request: XX	Supplemental:
		Continuing:	Future:	Capital Construction Request:	

Benefits:

\$418,881/

CDE has a programming staff of 4 FTEs. These FTEs support the 18 legacy systems at CDE. These systems are in need of continual maintenance in order to comply with changing federal and state requirements.

In 1994, HB 1213 was passed stating that CDE "shall implement a statewide financial, student management and human resource electronic data communications and reporting system..." This system is currently under development and will be into the next century. This additional development is being done with existing staff.

With the maintenance of the current legacy systems and the development of the Automated Data Exchange systems, the staff is currently overextended. The programming modifications needed in order for the legacy systems to become Y2K compliant cannot be handled by the existing staff. Outside consulting programming support is mandatory. The ability to distribute appropriate funding to the school districts, issue licenses to teachers, and complete reporting requirements to federal agencies will all be affected.

Note: Backup documentation regarding dollar calculations are available from the Y2K committee.

Project Management:

The project will be under the director of IMS, Dianne Kress. The IMS director reports to the Chief of Staff for CDE, Karen Stroup. The four programmer/analysts will provide the work direction for the contractor hired to convert each of their particular systems. The analysts have specifically defined the work as part of the state Y2k project analyses. The schedule has been designed so that each CDE analyst will have no more than one contractor on-site at a time. The CDE analyst will participate in the testing phase with the contractor as well as updating documentation for these systems.

Stakeholders/Communities of Interest:

School districts, teachers, CDE, legislators, other governmental agencies, citizens

Prepared by: Dianne Kress Telephone #: 866-6823 Approved by: Karen Stroup Date: 7/7/97

PROJECT DETAIL

Department of Education

Project Title: Y2K Programming Support

A	B	C	D	E	F	G	H
Phase/Milestone Description	Est FTE	Actual FTE	Est Start Date	Actual Start Date	Est End Date	Actual End Date	Percentage Completed
Special Projects System	148 h		9/7/99		10/1/99		0
Position Cost System	120 h		7/1/98		7/21/98		0
Funded Pupil Count System	68 h		7/1/98		7/13/98		0
Special Education TTE System	12 h		7/1/98		7/2/98		0
Special Education End-of-Yr System	436 h		7/6/98		9/18/98		0
Free Lunch Count System	72 h		7/14/98		7/24/98		0
Child Nutrition System	164 h		8/4/98		9/1/98		0
Budget Reporting System	264 h		9/2/98		10/16/98		0
District Profile System	40 h		9/2/98		9/8/98		0
Special Education Fed. Appl. System	460 h		9/18/98		12/8/98		0
Pupil Count By Service Area System	49 h		9/22/98		9/30/98		0
Directory System	40 h		10/26/98		10/30/98		0
State Equalization System	259 h		11/17/98		12/31/98		0
Cohort	160 h		12/7/98		1/1/99		0

PROJECT DETAIL

Department of Education

Project Title: Y2K Programming Support

A	B	C	D	E	F	G	H
Phase/Milestone Description	Est FTE	Actual FTE	Est Start Date	Actual Start Date	Est End Date	Actual End Date	Percentage Completed
Special Education Dec. Ct. System	732 h		12/9/98		4/15/99		0
Auditors State Equalization System	103 h		1/1/99		1/19/99		0
Direct Certification System	104 h		1/4/99		1/20/99		0
Licensure/Certification System	640 h		2/10/99		6/1/99		0
Graduates/Dropouts/EOY Disk System	121 h		4/2/99		4/23/99		0
Graduates/Dropouts/EOY HP System	197 h		2/26/99		4/1/99		0
GED System	176 h		6/1/99		6/30/99		0
Non-Public School System	24 h		6/29/99		7/1/99		0
Transportation & Auditors System	116 h		7/12/99		7/30/99		0
Out-of-District Pupil System (HP&PC)	244 h		7/21/99		9/1/99		0
Fall Membership System	95 h		5/17/99		6/1/99		0
CDE18 System	24 h		8/30/99		9/1/99		0

Phone #: 866-6823

Prepared By: Dianne Kress

Approved by: Karen Stroup

Date: 7/9/97

Format 7000, page 2 of 5

PROJECT DETAIL

Department of Education

SUMMARY

Date: 7/15/97

Project Title: Y2K Programming Support	Category: II	New: XX Continuing:	Budget Decision Item Request: Capital Construction Request:	Supplemental:
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Expected Life of Components (hardware/software)
Five years.

IS Unit/Division : IMS
Department Priority ___ of ___
IS Unit Priority 1

Strategic Business Objective(s):

Bringing CDE's systems into compliance with the millennium change will meet our service objective to our clients of "assisting community and school districts in collecting, analyzing, and reporting data..." as well meeting our business requirements relative to funds distribution, reporting requirements, and the issuing of licenses.

Strategic System Objective(s):

To provide programming support to the Department so that it can meet federal and state funding and reporting requirements.

Prepared by: Dianne Kress Phone: 866-6823

Approved by: Karen Stroup

Date: 7/15/97

State of Colorado
Department of Education
Project Detail

Date: 7/24/97

Project Title: IT Computer Replacement Plan	Category: II	New: XXX	Completed:	Budget Decision Item Request: XX	Supplemental:
		Continuing:	Future:	Capital Construction Request:	

Business Requirements:

The Department of Education needs to maintain the same level of technology as its customers to maintain effective business relationships. As personal computers get older, they tend to have more user problems. In addition, they may not satisfactorily execute current applications needed for the day to day conduct of business. Because of the rapidly changing technology, computers purchased over 4 years ago are not able to accommodate CDE's current department standard software, and are aging past the point of economical repair. There has been a significant increase in the number of help desk calls due to inoperative equipment, or the inability of the end-user to perform certain tasks such as the seamless electronic exchange of documents.

Older PCs are not equipped with the Desktop Management Interface (DMI) making remote resolution of PC problems possible. A Gartner Group study has found that the annual total cost of ownership (TCO) of network based PCs can be reduced as much as \$2,000 annually per PC by purchasing DMI enabled equipment.

Unlike some start up costs for furniture, computers and operating software need to be updated in order to maintain functionality. If there were only a few PCs involved, CDE could absorb the costs (and has done so in the past), but we find we can no longer delay replacement of critical equipment nor does CDE have all of the necessary funds for replacement needs

Project Description:

This project is for replacing hardware; MacIntosh, PCs, servers, and printers over a four-year cycle. To maximize the quality of each person's productivity at CDE, customers should spend their time at their job rather than solving computer problems. A replacement schedule has been created based on non-supported hardware, obsolescence, age, and repair costs. Equipment replaced under this project, but still serviceable for limited use will be reallocated to other users in CDE whose equipment is in need of immediate replacement.

State of Colorado

Department of Education

Project Detail

Date: 7/24/97

Specifically, this project goals are to:

- Replace equipment on a four-year schedule in an orderly manner.
- Keep all software current within two revisions.
- Keep equipment within three revisions
- Continuously reallocate resources within CDE as new computers are received. Since the majority of CDE users have similar workloads, the reallocation (or "trickle-down") of resources will be limited to only one cycle.
- Salvage or donate PCs that are no longer usable.

The effectiveness of the program will be measured by the avoidance of downtime, and the ability of the CDE staff to work in a positive computer environment. This environment will also reduce the amount of help desk calls due to problems with older equipment. CDE employees will also be able to transfer between units without costly retraining.

Technical Architecture:

Macintosh or IBM compatible PCs with current processor technology and DMI enabled where possible, sufficient hard disk and memory to satisfactorily execute current and known future programs.

Benefits:

Fewer computer problems and flexibility in producing/accessing information in addition to the reduction of the Total Cost of Ownership. It will also allow CDE to keep reasonable pace with industry standards without being on the "leading edge" of technology and jeopardizing CDE users' productivity and efficiency.

Project Management:

The project is led by the IMS manager with guidance from the assistant commissioners and the IMS network staff

State of Colorado
Department of Education
Project Detail

Date: 7/24/97

Stakeholders/Communities of Interest:

CDE users; school districts; federal government; vendors; citizens of Colorado

Prepared by: John Christopher

Telephone #: 866-6895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

Project Detail							
Project Title: IT Computer Replacement Plan			Department of Education				
Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee							
Contract & Consulting							
Other							
Total Personal Services							
Total FTE							
II. Operating Expenses							
Materials and Supplies							
Maintenance:							
Equipment:							
Large Systems							
LAN Systems							
Desktops							
Network							
Software:							
Large Systems							
LAN Systems							
Desktops							
Network							
Non-Capitalized Equipment							
Processing at State Computer Center							
Communications Services							
From Division of Telecommunication:							
Voice							
Data							
From Outside Source							
Voice							
Data							
Prepared by: John Christopher		Telephone #: 866-6895		Approved by:		Date: 7/3/97	

<p align="center">Project Detail Department of Education</p>							
Project Title: <u>IT Computer Replacement Plan</u>							
Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent							0
Administrative Expenses							0
IT/IS Training							0
Travel							0
Other Purchased Services							0
Total Operating Expenses							0
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems							0
LAN Systems							0
Desktops	177,500	189,000	211,500	157,000	204,000	220,000	1,159,000
Network							0
Leased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Software:							
Purchased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Total Capital Outlay	177,500	189,000	211,500	157,000	204,000	220,000	1,159,000
Prepared by: John Christopher		Telephone #: 866-6895		Approved by: Karen Stroup		Date: 7/3/97	

Project Detail

Department of Education

Date: 7/3/97

SUMMARY

Project Title: IT Computer Replacement Plan	Category:	New: XXX		Completed:		Budget Decision Item Request: XX		Supplemental:	
		Continuing:	FY 98-99	FY 97-98	Future:	FY 99-00	FY 00-01		FY 01-02
Cost Components	Total Costs Thru 6/30/97								
GRAND TOTAL PROJECTED COSTS	177,500		211,500	189,000	157,000	204,000	220,000	1,159,000	
Base Budget Cost	62,500		35,000	35,000	35,000	35,000	35,000	237,500	
New Funds Required	0		49,600	0	27,800	46,600	31,000	155,000	
Federal Cost	105,000		126,900	132,000	94,200	122,400	132,000	712,500	
Other Cost	10,000			22,000			22,000	54,000	
Benefit Components	Total Costs Thru 6/30/97								
Tangible Benefits:									
\$2,500 Decrease in Total Cost									
of Ownership	177,500		236,000	184,000	172,500	227,500	230,000	1,227,500	
GRAND TOTAL PROJECTED BENEFITS	177,500		236,000	184,000	172,500	227,500	230,000	1,227,500	
Benefits Less Costs (subtract Total Costs from Total Benefits)	0		(24,500)	5,000	(15,500)	(23,500)	(10,000)	(68,500)	
Expected Life of Components (hardware/software):									
4 years									
Strategic Business Objective(s):									
Licensing									
Promulgation of rules and regulations									
Maintain communication with the citizens of Colorado									
Strategic System Objective(s):									
To provide computer support services ensuring reliable and secure access to technology resources									
IS Unit/Division IMS									
Department Priority of _____									
IS Unit Priority 2 of _____									
Approved by: John Christopher	Telephone #: 866-6895	Approved by:						Date: 7/3/97	

State of Colorado
Department of Education
Project Detail

Date: 7/1/97

Project Title: Automated Data Exchange System	Category: III	New:	Completed:	Budget Decision Item Request: XX	Supplemental:
		Continuing: X	Future:	Capital Construction Request:	

Business Requirements:

Allows the Colorado Department of Education (CDE) to implement HB-1213 which stated that "...the State Board of Education...shall establish and implement a statewide financial, student management and human resource electronic data communications and reporting system that is based on a redesigned standard chart of accounts, a standard student information system, and a standard personnel classification system." 22-44-105(4)(a)C.R.S.

Project Description: CDE is in the 3rd year of development of an interrelated automated education data exchange system to allow school districts and Boards of Cooperative Educational Services to electronically submit edited data rather than reports on paper or diskette. The overall goal is to establish one interrelated automated education data exchange system composed of public school district student, financial, and human resource data. This will allow school districts to electronically submit edited data rather than reports on paper or diskette. To accomplish this, CDE, school districts, and Boards of Cooperative Educational Services (BOCES) are re-engineering the process for submitting required data to CDE. The 1st phase of the financial system was implemented fall of '96 with 4 school districts submitting test data. The test indicated additional development needed to be done to make the financials "whole". This will be completed in the summer of '97. Fall of '97 25 more districts will submit data with all districts scheduled to submit their CDE-3 financial data in the fall of '98. Programming for the Human Resource System will begin summer of '97 with pilot districts submitting data in the fall of '97. All districts will submit their fall HR data in the fall of '98. The Student System is anticipated to be piloted in the fall of '98. The design of this system is awaiting a decision from the State Board of Education as to the use of student identifiers.

Additional funding is being requested for on-going maintenance costs for the hardware and software associated with the ADEP that was not included or not adequately covered in the original request. A Decision Item requesting maintenance costs was submitted in FY '98 for maintenance and turned down. Since that time maintenance costs have again increased due to the fact that some of the hardware and software maintenance costs were included in the initial purchase for the first year. We are now past that first year. It, therefore, is imperative we receive funding for the on-going maintenance.

Technical Architecture: CDE is using an ORACLE database management system on an HP9000 (model K210) UNIX hardware platform. The Internet services will be provided through a an HP B160 workstation configured with a Raptor Eagle firewall. School districts and/or BOCES that do not currently have the software or hardware in place to retain the student, financial, and staff data elements required for CDE reporting would need to acquire these systems. CDE has been actively working with vendors that provide hardware and software to school districts to ensure compliance with CDE's new standards.

Benefits: This project was initially projected to cost 2 million dollars spread over 3 fiscal years. CDE received an additional \$291,828 funding for FY97-98 above the 2 million dollars initially projected.

Original budget request:	Decision Item:
FY9596	\$755,333
FY96-97	648,333
FY97-98	<u>596,334</u>
Total	<u>\$2,000,000</u>
	<u>291,828</u>
	<u>\$2,301,828</u>

Note: The Decision Item was needed to obtain additional funding for the DOCES. When the feasibility study was completed, the projected cost did not include money to be distributed to Boards of Cooperative Educational Services (BOCES) and ongoing operating costs for the hardware and software at the state level to implement the project. The feasibility study also underestimated the actual number of districts required to purchase hardware and/or software. An additional Decision Item for \$30,800 is being submitted for FY '99 to request the funding needed for on-going hardware and software maintenance which was not covered in the initial request.

Maintenance. On-going maintenance costs are as follows.

ORACLE Database Maintenance	14,130
HP9000-K210 Software	7,000
HP9000-K210 Hardware	4,500
HP9000-E25 Software	1,200
HP9000-E25 Hardware	1,950
SQR Software	2,000
TOTAL	<u>30,800</u>

By adequately funding the Automated Data Exchange Project including on-going maintenance costs the benefits include:

- School districts will have a more efficient means of transmitting data allowing for more effective management of resources.
- State level data will be integrated, allowing reports to be generated at the state level rather than at the local level.
- School districts will be able to eliminate costly specialized requests for information by outside agencies by having data in electronic format. Information can be transferred easily to the requesting agency.
- Implementation of HIB-1213
- Increased accuracy and consistency of data. Improved timeliness of data collection.
- Resources can be used to analyze data rather than inputting data or typing reports.

Project Management:

The project is under the direction of Karen Stroup, CDE Chief of Staff. The IMS Director, Dianne Kress, is responsible for all technical aspects of the project. Judith Burnes, Director of Research and Evaluation, is responsible for the coordination of the project. Judith Burnes leads an internal data integration team, made up of IMS staff and CDE program data managers, who are planning the phases of the integration and automation of the data. The data integration team also works with committees of school district staff and vendors that serve school districts. Both Dianne Kress and Judith Burnes report directly to Karen Stroup.

The CDE will manage all data in the new system in accordance with the following laws:

- Family Educational Rights and Privacy Act, 20 U.S.C.1232g, (FERPA), and implementing regulations, 34 C.F.R. Part 99,
- Colorado Public Records Act, Section 24-72-201 et.seq. C.R.S., and,
- Commissioner of education - office -records Statute, Section 22-2-11(3), C.R.S. and a policy regarding data confidentiality that is currently under consideration with the State Board of Education.

Stakeholders/Communities of Interest:

Education, Government, and Colorado Residents

Prepared by: Dianne Kress

Telephone #: 866-6823

Approved by: Karen Stroup

Date: 7/1/97

Project Detail
Department of Education

Project Title: Automated Data Exchange							
A	B	C	D	E	F	G	H
Phase/Milestone Description	Estimated FTE	Actual FTE	Estimated Start Date	Actual Start Date	Estimated End Date	Actual End Date	Percentage Complete
Human Resource System							
Finalize Design/Generate Production DB	84 h		8/4/97		8/18/97		0
Configure Host	225 h		8/4/97		12/5/97		0
Load Code Tables	24 h		8/4/97		8/7/97		0
Program District Edits	272 h		8/11/97		10/3/97		0
Develop/Program File Submission Process	24 h		8/5/97		8/7/97		0
Develop/Program Front-end Process	104 h		8/25/97		10/7/97		0
Develop/Program District Reports	168 h		8/22/97		9/19/97		0
Finalize/Program State Edits	64 h		10/6/97		10/17/97		0
Develop/Program State Reports	176 h		10/9/97		10/31/97		0
Define/Program HP3000 Crosswalk	88 h		10/27/97		11/10/97		0
Define/Program Custodian Processes	480 h		7/22/97		1/30/97		0
Custodian Installation and Training	56 h		11/17/97		12/8/97		0
Pilot District Submission			12/8/97		12/19/97		0
System Documentation	40 h		12/15/97		12/19/97		0
Analyze/Develop Directory Coll. Process	360 h		6/1/98		7/3/98		0
Design/Build Summary Database	440 h		1/5/98		5/8/98		0
Design/Develop Archive Procedures	240 h		7/6/98		8/28/98		0
Full District Submission of Fall HIR data			12/1/98		12/1/98		0
Prepared by: Dianne Kress Telephone #: 866-6823 Approved by: Karen Stroup Date: 7/24/97							



Project Detail

Department of Education

Project Title: Automated Data Exchange

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee							
Contract & Consulting	87,642	56,000		0			143,642
Other							
Total Personal Services	87,642	56,000	0	0	0	0	143,642
Total FTE							
II. Operating Expenses							
Materials and Supplies							
Maintenance:							
Equipment:							0
Large Systems		6,080	6,450	6,772	7,110	7,466	33,878
LAN Systems							
Desktops							
Network							
Software:							
Large Systems	17,620	21,232	24,350	25,558	26,835	28,178	143,773
LAN Systems							
Desktops							
Network							
Non-Capitalized Equipment							
Processing at State Computer Center							
Communications Services							
From Division of Telecommunication:							
Voice							0
Data							0
From Outside Source							
Voice							0
Data							0

Prepared by: Dianne Kress

Telephone #: 866-6823

Approved by: Karen Stroup

Date: 7/24/97

Project Detail
Department of Education

Project Title: Automated Data Exchange		Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Cost Components								
Utilities/Rent								0
Administrative Expenses	7,463	6,685						14,148
IT/IS Training	15,840	12,850						28,690
Travel	231	2,000						2,231
Other Purchased Services		20,000						20,000
Total Operating Expenses	41,154	68,847	30,800	32,330	33,945	35,644		242,720
III. Capital Outlay								
Equipment:								
Purchased								
Large Systems	122,223							122,223
LAN Systems	5,712							5,712
Desktops	469,756	355,750						825,506
Network								0
Leased								0
Large Systems								0
LAN Systems								0
Desktops								0
Network								0
Software:								
Purchased								
Large Systems	14,666							14,666
LAN Systems								0
Desktops	662,328	407,750						1,070,078
Network								0
Leased								0
Large Systems								0
LAN Systems								0
Desktops								0
Network								0
Total Capital Outlay	1,274,685	763,500	0	0	0	0	0	2,038,185

Prepared by: Dianne Kress
 Telephone #: 866-6823
 Approved by: Karen Stroup
 Date: 7/24/97

**State of Colorado
Department of Education
Project Detail**

Date: 7/10/97

Project Title: Disaster Recovery Plan Implementation		Category: II	New: Continuing: XX	Completed: Future:	Budget Decision Item Request: XX Supplemental: Capital Construction Request:
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Business Requirements:

Many of CDE's applications affect the functioning of the school districts within Colorado and, in certain situations, need to be functioning at an alternate site within 72 hours of a disaster occurring. CDE has selected the Colorado School for the Deaf and Blind (CSDB) in Colorado Springs as the alternate processing site. This site is removed from the Denver area and offers sufficient facilities to house CDE's data operations.

Most of CDE's critical applications reside on a HP 3000. Although these applications are scheduled for migration to newer equipment, CDE must insure that there is an alternate HP3000 available within the required 72-hour time frame. Because the HP3000 is an older computer, it is more economical to purchase a used computer rather than depend on the availability of a rental or new purchase.

Project Description:

A used HP3000/947 will be bought and placed at CSDB. Rental agreements will be established with vendors to insure a HP 9000/K210 and other peripheral equipment is available within necessary time frames. These agreements will be implemented semi-annually as the plan is tested. Asynchronous communications services would be linked to the HP3000 through CSDB supplied phone lines. Once the infrastructure is in place, the plan will be put into an actual practice with a "real world" test. This plan is based upon the plan developed by consultants in FY 96-97.

Technical Architecture:

HP 3000 and HP 9000/K210 to support current applications. Network services to access this equipment will be situated at the Colorado Talking Book Library (CTBL) or CSDB if CTBL is unavailable for use due to the nature of the disaster. Recovery will be accomplished from backup tapes kept at Colorado State Archives.

Benefits:

Recovery of critical educational data within an acceptable time frame to avoid significant interruption to business of the school districts

State of Colorado
Department of Education
Project Detail

Date: 7/10/97

Project Management:

IMS Manager and personnel assigned to the IMS unit along with the advice of the Commissioner's Policy Council, Department of Education

Stakeholders/Communities of Interest:

CDE Users, School Districts, Citizens of Colorado

Prepared by:
John Christopher

Telephone #:
866-6895

Approved by:
Karen Stroup

Date:
7/10/97

Project Detail

Department of Education

Project Title: Implement Disaster Recovery Plan

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee		5,000	20,000	21,000	22,000	23,000	91,000
Contract & Consulting	24,000		22,900				46,900
Other							
Total Personal Services	24,000	5,000	42,900	21,000	22,000	23,000	137,900
Total FTE							
II. Operating Expenses							
Materials and Supplies							0
Maintenance:							
Equipment:							
Large Systems			15,000	16,000	17,000	18,000	66,000
LAN Systems							0
Desktops							0
Network							0
Software:							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Non-Capitalized Equipment							0
Processing at State Computer Center							0
Communications Services							0
From Division of Telecommunication:							
Voice							0
Data			1,600	1,600	1,600	1,600	6,400
From Outside Source							
Voice							0
Data							0

Prepared by: John Christopher

Telephone #: 866-5895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

Project Detail
Department of Education

Project Title: Implement Disaster Recovery Plan

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent							0
Administrative Expenses							0
IT/IS Training		1,000	1,000	1,000			0
Travel						1,000	5,000
Other Purchased Services							0
Total Operating Expenses	0	1,000	17,600	18,600	19,600	20,600	77,400
III. Capital Outlay							
Equipment:							
Purchased			20,500				20,500
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Software:							0
Purchased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Total Capital Outlay	0	0	20,500	0	0	0	20,500

Prepared by: John Christopher

Telephone #: 866-5895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

SUMMARY		Project Detail		Date: 7/24/97	
Implement Disaster Recovery Plan		Department of Education		Supplemental:	
Project Title:		Category:		Budget Decision Item Request: XX	
		I		Capital Construction Request:	
		New:		Future:	
		Continuing: XX		FY 99-00	
		FY 97-98		FY 00-01	
		FY 98-99		FY 01-02	
		FY 99-00		Total	
Cost Components		Total Costs Thru 6/30/97		Total	
GRAND TOTAL PROJECTED COSTS	25,000	6,000	81,000	22,000	23,000
Base Budget Cost	25,000	6,000	20,000	22,000	23,000
New Funds Required			61,000		
Federal Cost					61,000
Other Cost					0
					0
Benefit Components		Total Costs Thru 6/30/97		Total	
Tangible Benefits:		FY 97-98	FY 98-99	FY 00-01	FY 01-02
Full operational Capability in the event of a disaster					
		1,000,000		1,000,000	1,000,000
GRAND TOTAL PROJECTED BENEFITS	0	0	1,000,000	1,000,000	4,000,000
Benefits Less Costs (subtract Total Costs from Total Benefits)	25,000	6,000	(919,000)	(978,000)	(3,822,000)
Expected Life of Components (hardware/software):					
6 years					
Strategic Business Objective(s):					
IS Unit/Division IMS					
Department Priority ___ of ___					
IS Unit Priority 4 of ___					
Strategic System Objective(s):					
Full Recovery of System					
Licensing					
Promulgation of rules and regulations					
Maintain communication with the citizens of Colorado					
Prepared by: John Christopher		Telephone #: 866-5895		Approved by: Dianne Kress/ Karen Stroup	
				Date: 7/24/97	

State of Colorado
Department of Education
Project Detail

Date: 07/28/97

Project Title: Network Maintenance and Support	Category:	New:	Completed:	Budget Decision Item Request:	Supplemental:
		Continuing: XX	Future:	Capital Construction Request:	

Business Requirements:

CDE's network provides multi-platform support for the internal storage and manipulation of data as well as inter-office communication. In addition, the network allows connection to external sources, as well as school districts, other state agencies, and the Federal Government to pass data. Users need a centralized information and problem-solving area that can resolve computer related problems quickly and efficiently, thereby increasing user effectiveness. In addition, school districts have a single point of contact for problems relating to the Automated Data Exchange system. A firewall is in place to protect the internal network from hostile attacks by external users.

Project Description:

The network requires continual maintenance, which involves upgrades, reconfiguration, and user maintenance. Customers require support for hardware, software, and network related problems within the Department of Education while external customers, libraries and school districts require assistance in data access and in relation to the automated transfer of data.

Technical Architecture:

The principle network operating system in use for data storage, e-mail, and printing services is Banyan VINES. Due to the expense and lack of technical support for maintaining a VINES environment, there is a planned migration to Windows NT 4.0 during FY 98. Two HP 9000/800 servers running HP-UX support e-mail, world wide web access, and the Automated Data Exchange project. This network is protected by a HP 9000/700 workstation running HP-UX and a Raptor Eagle firewall. External access to the network is through an OCIN connection or a communications server. All of the above network components are attached through ethernet connections. Eighteen legacy applications are maintained on an HP 3000 Server running MPE/iX which is connected through 100 serial connections to users within the department. Dial-In connections are provided to this server for external users.

Benefits:

Insures the network is maintained at a level that business can continue without undue interruption. Improves productivity of users; monitoring of IT vendor performance; higher return on technology investment; decreased user downtime; efficient service of external customers



State of Colorado
Department of Education
Project Detail

Date: 07/28/97

Project Management:

Information Management Services Network Support Team through the direction of the Information Management Services Manager.

Stakeholders/Communities of Interest:

Colorado Department of Education user community; school districts and school libraries; citizens of Colorado

Prepared by: John Christopher

Telephone #: 866-6895 Approved by: Dianne Kress/Karen Stroup Date: 7/24/97

Project Detail

Department of Education

Project Title: Network Maintenance and Support

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee							
Contract & Consulting	7,590						7,590
Other							
Total Personal Services	7,590	0	0	0	0	0	7,590
Total FTE							
II. Operating Expenses							
Materials and Supplies	159	500	500	500	500	500	2,659
Maintenance:							
Equipment:							
Large Systems							0
LAN Systems							0
Desktops	5,058	5,000	5,000	5,500	6,000	7,000	33,558
Network							0
Software:							
Large Systems							0
LAN Systems	9,609	10,000	10,000	12,000	13,000	14,000	68,609
Desktops		10,000	10,000	12,000	13,000	14,000	59,000
Network							0
Non-Capitalized Equipment							0
Processing at State Computer Center							0
Communications Services							0
From Division of Telecommunication:							
Voice							0
Data							0
From Outside Source							
Voice							0
Data	7,478	8,000	8,500	9,000	9,500	10,000	52,478

Prepared by: John Christopher

Telephone #: 866-6895

Approved by:

Date: 7/7/97

Project Detail

Department of Education

Project Title: Network Maintenance and Support

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent							0
Administrative Expenses	594	500	500	500	500	500	3,094
IT/IS Training							0
Travel	5,482	6,000	32,000	32,000	32,000	32,000	139,482
Other Purchased Services							0
Total Operating Expenses	28,380	40,000	66,500	71,500	74,500	78,000	358,880
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems							
LAN Systems	21,160	25,000	27,000	30,000	33,000	36,000	172,160
Desktops							
Network							0
Leased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Software:							
Purchased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							0
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Total Capital Outlay	21,160	25,000	27,000	30,000	33,000	36,000	172,160

Prepared by: John Christopher

Telephone #: 866-6895

Approved by:

Date: 7/7/97

Project Detail

Department of Education

SUMMARY

Date: 7/7/97

Project Title: Network Maintenance and Support	Category:	New: Continuing: XX Future:	Completed:		Budget Decision Item Request:		Supplemental:
			FY 97-98	FY 98-99	FY 99-00	FY 00-01	
Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
GRAND TOTAL PROJECTED COSTS	57,130	65,000	93,500	101,500	107,500	114,000	538,630
Base Budget Cost	57,130	65,000	93,500	101,500	107,500	114,000	538,630
New Funds Required							0
Federal Cost							0
Other Cost							0
Benefit Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Tangible Benefits:							0
25% Improved Network Reliability	14,000	16,000	18,000	20,000	22,000	24,000	114,000
30% Decrease in Help Desk Calls	9,000	10,500	20,000	22,000	24,000	26,000	111,500
10% Increase in User Satisfaction	20,000	54,500	56,500	58,500	60,500	62,500	312,500
GRAND TOTAL PROJECTED BENEFITS	43,000	81,000	94,500	100,500	106,500	112,500	538,000
Benefits Less Costs (subtract Total Costs from Total Benefits)	14,130	(16,000)	(1,000)	1,000	1,000	1,500	630

Expected Life of Components (hardware/software):
Hardware - 4 years, Software - 2 years

IS Unit/Division Information Management Services
Department Priority ___ of ___
IS Unit Priority _5_ of ___

Strategic Business Objective(s):

Strategic System Objective(s):

Promulgation of rules and regulations
Maintain communication with the citizens of Colorado

Continued support of essential network services to all employees
and school districts

Prepared by: John Christopher

Telephone #: 866-6895

Approved by:

Date: 7/7/97

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State of Colorado
Colorado School for the Deaf and the Blind
Project Detail

Project Title: CSDB Network	Category: II	New:	Completed:	Budget Decision Item Request:	Supplemental:
		Continuing: X	Future:	Capital Construction Request:	
				Date: 7/11/97	
<p>Business Requirements: It is necessary to prepare CSDB's students to be able to work with common business tools, allowing them to better succeed in their respective careers. CSDB is working to improve the availability of its library of unique resources to blind and deaf students among Colorado's school districts.</p> <p>Project Description: The project will provide all students at CSDB with access to computers, software and appropriate adaptive equipment. Students accessing this technology will be on an even footing with students in public schools. This will prepare the students to participate in higher education and allow students to compete for jobs that will permit them to succeed in our rapidly changing society. The project will extend outreach services to more Colorado citizens, with quicker response, than now.</p> <p>Technical Architecture: The school intends to install a 10BaseT Ethernet local area network that will utilize a fiber optic cable backbone, which will interconnect seventeen of the eighteen buildings on campus. The backbone will originate from a central location where file servers, remote access servers, network control switches, and a router for Internet access will be located.</p> <p>Benefits: Students who become skilled in the use of modern tools of technology become better prepared for careers as productive citizens. Improved access to CSDB libraries and its outreach services will extend deaf and blind resources to a wider audience across Colorado.</p> <p>Project Management: The project will be supervised by the Information Management Systems unit of CDE. Project plans and execution will be performed by CSDB staff. All of project's first year funding, being \$439,000, is expected to be applied in FY '98 for installation of the network infrastructure. Funding requests for later years are anticipated for the purpose of ongoing expenses attributed to the network and implementing network services.</p> <p>Stakeholders/Communities of Interest: The students and the families of CSDB students will see the first benefits from this project. School districts will benefit from access to resources at CSDB as they serve deaf and blind students.</p>					
Prepared by: Tim Martin / Larry Akers				Approved by: Karen Stroup	
Telephone #: 719-578-2110				Date: 7/22/97	

Project Detail
Colorado School for the Deaf and the Blind

Project Title: CSDB Network		Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services								
Labor:								
State Employee	0	0	43,077	45,231	47,492	49,866	185,666	
Contract & Consulting	2,000	10,000	10,000	10,000	10,000	10,000	52,000	
Other	0	0	0	0	0	0	0	
Total Personal Services	2,000	10,000	53,077	55,231	57,492	59,866	237,666	
Total FTE	0	0	1	1	1	1	1	
II. Operating Expenses								
Materials and Supplies								
Maintenance:								
Equipment:								
Large Systems								
LAN Systems	0	0	10,500	10,500	10,500	10,500	42,000	
Desktops	0	0	5,000	5,000	7,500	7,500	25,000	
Network	0	0	0	0	0	0	0	
Software:	0	0	0	0	0	0	0	
Large Systems	0	0	0	0	0	0	0	
LAN Systems	0	0	4,500	4,500	4,500	9,500	23,000	
Desktops	0	0	5,000	5,000	5,000	5,000	20,000	
Network	0	0	0	0	0	0	0	
Non-Capitalized Equipment	0	0	3,000	3,000	3,000	3,000	12,000	
Processing at State Computer Center	0	0	0	0	0	0	0	
Communications Services								
From Division of Telecommunication:								
Voice	0	0	0	0	0	0	0	
Data	0	0	0	0	0	0	0	
From Outside Source								
Voice	0	0	0	0	0	0	0	
Data	0	0	11,000	11,000	11,000	11,000	44,000	

Prepared by: Tim Martin / Larry Akers Telephone #: 719-578-2110 Approved by: Karen Stroup Date: 7/22/97

Project Detail
Colorado School for the Deaf and the Blind

Project Title: CSDB Network		Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Cost Components								
Utilities/Rent	0	0	500	500	500	500	500	2,000
Administrative Expenses	0	0	0	0	0	0	0	0
IT/IS Training	0	0	5,000	5,000	5,000	5,000	5,000	20,000
Travel	0	0	1,500	1,500	1,500	1,500	1,500	6,000
Other Purchased Services	0	0	1,500	1,500	1,500	1,500	1,500	6,000
Total Operating Expenses	0	0	47,500	47,500	47,500	47,500	55,000	200,000
III. Capital Outlay								
Equipment:								
Purchased								
Large Systems	0	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0	0
Desktops	0	100,000	25,000	26,250	27,563	28,941	28,941	207,754
Network	0	280,000	5,000	5,000	55,000	5,000	5,000	350,000
Leased	0	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0	0
Software:								
Purchased								
Large Systems	0	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0	0
Desktops	0	39,000	20,000	20,000	20,000	20,000	20,000	119,000
Network	0	10,000	13,000	13,000	13,000	13,000	13,000	62,000
Leased	0	0	0	0	0	0	0	0
Large Systems	0	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0	0
Total Capital Outlay	0	429,000	63,000	64,250	115,563	66,941	66,941	738,754

Prepared by: Tim Martin / Larry Akers

Telephone #: 719-578-2110 Approved by:

Date:

State of Colorado
Department of Education
Project Detail

Date: 7/7/97

Project Title: Intranet	Category: II	New: XX	Completed:	Budget Decision Item Request:	Supplemental:
		Continuing:	Future:	Capital Construction Request:	

Business Requirements:

Based on a Communication Plan prepared by consultants commissioned by the Department examining public relations and communications priorities and information delivery methods, it was determined CDE will greatly benefit by installing an Intranet. CDE is a very diverse organization which makes its difficult for CDE to keep its staff informed of all aspects of the organization. The installation of an Intranet will assist the Department in providing clearer, more consistent and authoritative information to its clients by keeping the staff updated in all areas through a central electronic repository. This will assist CDE in speaking with "one voice" and adhering to the CDE's Strategic Plan in all of its communications efforts.

Project Description:

CDE will develop a departmental Intranet. Using a standard browser such as Netscape, CDE staff will be connected to the CDE network. The scope of internal information would include, but not be limited to, the following: directories; bulletin boards; forms and logos for downloading; master calendar; CDE publications, employee procedures and policies; automated forms; CDE databases relating to student, financial, and human resource information. Training of the staff is also part of this project. Hiring of a full time Webmaster is considered instrumental in keeping both the internal and external Web sites current. Past experience has shown that using existing resources for maintaining the Internet has not been effective due to the staff's existing workload.

Technical Architecture:

The office will use PC technology to meet the goals of this project. An additional server will need to be purchased to house the Intranet site. The server configuration is ex with 64M RAM and 2 GIG Hard Drive.

Benefits:

Position Cost	44,100	The benefits will provide the CDE staff with a central electronic repository for current information which will improve staff efficiency and, therefore, improve the quality and consistency of information to its clients. Performance measures include the following:
Intranet Server	3,500	
Server Software	5,500	
Total:	53,100	All units at CDE will be able to provide their clients with clear and consistent information. The Web pages will be updated in a timely manner. The CDE staff will be able to utilize the Intranet effectively.

State of Colorado
Department of Education
Project Detail

Date: 7/7/97

Project Title: Intranet	Category: II	New: XX	Completed:	Budget Decision Item Request:	Supplemental:
		Continuing:	Future:	Capital Construction Request:	

Project Management:

The Webmaster position will be under the director of Information Management Services. All technical aspects of the installation and maintenance of the Intranet will be under the direction of the IMS director. The Webmaster will work in cooperation with the CDE Resource Center and the Communication's Unit to insure the content of the Intranet site expresses the views set forth in the Department of Education's Strategic Plan.

Stakeholders/Communities of Interest:

The Legislature, the media, the education community, and the public.

Prepared by: Dianne Kress Telephone #: 866-6823 Approved by: Karen Stroup Date: 7/8/97

PROJECT DETAIL
Department of Education

Project Title: Intranet

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee		0	44,100	46,305	48,620	51,051	190,076
Contract and Consulting		0	0	0	0	0	
Other							
Total Personal Services		0	44,100	46,305	48,620	51,051	190,076
Total FTE							
II. Operating Expenses							
Material and Supplies							
Maintenance:							
Equipment:							
Large Systems							
LAN Systems							
Desktops							
Network							
Software:							
Large Systems							
LAN Systems							

PROJECT DETAIL
Department of Education

Project Title: Intranet

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Desktops							
Network							
Non-Capitalized Equipment							
Processing at State Computer Center							
Communications Services. From Division. Of Telecommunications Voice							
Data							
From Outside source							
Voice							
Data							
Administrative Expenses							
IT/IS Training							
Travel							
Other Purchased Services							
Total Operating Expenses							

PROJECT DETAIL
Department of Education

Project Title: Intranet

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems							
LAN Systems			3,500				
Desktops							
Network							
Leased:							
Large Systems							
LAN Systems							
Desktops							
Network							
Software:							
Purchased							
Large Systems							
LAN Systems			5,500				
Desktops							
Network							

PROJECT DETAIL
Department of Education

Project Title: Intranet

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Leased:							
Large Systems							
LAN Systems							
Desktops							
Total Capital Outlay			9000				

Prepared by: Dianne Kress

Phone: 866-6823

Approved by: Karen Stroup

Date: 7/15/97

PROJECT DETAIL
Department of Education

SUMMARY

Date: 7/7/97

Project Title: Intranet	Category: II	New: XX Continuing:	Budget Decision Item Request:				Supplemental:	
			Capital Construction Request:				FY 01-02	Total
Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 00-01	FY 00-01	Total
Grand Total Projected Costs								
Base Budget Cost			53100	46305	48620	51051	199076	
New Funds Required								
Federal Cost								
Other Cost								
Benefits Components	Total Costs Thru 6/30/96	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 00-01	Total
Tangible Benefits:								
Grand Total Projected Benefits								
Benefits Less Costs (subtract Total Costs from Total Benefits)								

PROJECT DETAIL
Department of Education

SUMMARY

Date: 7/7/97

Project Title: Intranet

Category: II

New: XX
Continuing:

Budget Decision Item Request:
Capital Construction Request:

Supplemental:

Expected Life of Components (hardware/software)

4 years for hardware and software

IS Unit/Division : IMS

Department Priority ___ of ___

IS Unit Priority

Strategic Business Objective(s):

Macro-Goal V. Resource development and utilization

Macro Objective. Internal Operations

Project Objective. To implement an intranet in order to improve CDE's operational support and the efficient flow of information in the Department thereby improving the quality of its customer service.

Strategic System Objective(s):

Ensure that the Intranet operates efficiently and effectively within CDE's enterprise network.

Prepared by: Dianne Kress

Phone: 866-6823

Approved by: Karen Stroup

Date: 7/7/97

State of Colorado
Department of Education

Project Detail

Date: 7/11/97

Project Title:	ACLIN	Category:	II	New:	Completed:	Budget Decision Item Request:	Supplemental:
				Continuing: X	Future:	Capital Construction Request:	

Business Requirements: ACLIN is the implementation of the Colorado Library Computer Network which derives its statutory authority from Section 24-90-302, C.R.S. which states: "There is hereby created the Colorado computer information network...which shall be a part of the state library system under the charge of the state librarian pursuant to section 24-90-105 (2) (f)." The cited section refers to the powers and duties of the state librarian which reads: "To carry out the functions and responsibilities of the Colorado computer information network... Among the powers and the duties of the state librarian is a section that is intrinsic to the rationale for ACLIN: "To contract for the furnishing of library resources to ensure equal access to information for all Coloradans." (Section 24-90-105 (1) (f), C.R.S.)

Project Description: ACLIN is the only statewide public access information network in Colorado. Through ACLIN, every resident of the state receives "at no charge" access to the databases housed on 30 library computers around the state as well as those on the ACLIN server. This includes approximately 175 library catalogs, and over 50 other information resources. ACLIN uses the non-proprietary infrastructure of the Internet to link these computers together. Web-based menus guide the user to the various information resources. Access is provided in text-only format via dial-up (consisting of 16 local nodes and 800# service for those not within the calling area of one of the local nodes), as well as via the World Wide Web.

ACLIN is an ongoing operation that has been approved by the IMC. Not only does it provide vital information access for the end user, but also supports the extensive resource sharing activities of Colorado libraries, ensuring that information needs of residents are met no matter where they live.

Technical Architecture: The ACLIN web host is a Sun SPARCstation 20 Model 71, configured with 256 MB of RAM and 13 GB of ROM, running on NCSA server with virtual host capabilities, with administrative control of web structures and relational database capabilities on an ethernet linked Intergraph Web 300 NT Server (150Mhz Pentium Pro; 2 GB disk), equipped with Microsoft SQL as a back end database server, and Allaire Cold Fusion for embedded SQL/dynamic database development. In addition to full, dedicated T-1 Internet access, ACLIN operates, through contract with SuperNet Inc., 17 points of presence (16 local dial-up; 1 toll-free 800 line; equipped with from 8 to 160 modems, mixed 14.4 and 28.8/v34 depending on level of activity) around the state for character-based access to its services. In July of 1997 ACLIN is adding its own eight-line 800 number service, which will operate in parallel with its existing 800 service for a few months, then replace it. A second NT server will also be added this summer. One NT server will function as a development machine, and the other as a production machine.

Benefits: ACLIN provides important support for library resources sharing activities and for meeting information needs by:

- positioning Colorado to take advantage of developing local, state, and national networking programs;
- ensuring that information is a resource readily available to all Colorado residents;
- providing a model, the first of its kind in the state, for equitable statewide delivery of information;
- insuring that library materials, and library computer systems, purchased with public funds, receive the widest possible use.



Project Management: The project is administered by the Colorado State Library on behalf of the Colorado library community. The project is staffed by a project director, a support librarian, and a shared administrative assistant. The project director works under the supervision of the Assistant Commissioner for the State Library and Adult Education Office. Technical operations, including housing of the ACLIN Web site and programming services, are done through a partnership agreement with two other library organizations. While the State Library has final decision-making authority, the project is cooperative and relies on the participation and cooperation of the Colorado library community. The library community is represented in this project through a variety of committees that provide guidance to the State Library, including the Colorado Library Resource Sharing and Information Access Board, the ACLIN Advisory Committee, and the ACLIN Technical Committee.

Stakeholders/Communities of Interest: Stakeholders and communities of interest include: the Colorado library community, non-profit public service organizations, educators, health providers, and the general public.

Prepared by:

Susan Fayad

Telephone #:

866-6907

Approved by: Karen Stroup

Date: 7/11/97

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PROJECT DETAIL
Department of Education

Project Title: ACLIN

A	B	C	D	E	F	G	H
Phase/Milestone Description	Estimated FTE	Actual FTE	Estimated Start Date	Actual Start Date	Estimated End Date	Actual End Date	Percentage Completed
1. Initial planning, designing, and fund raising		2		1988		1992	
2. Initial contracting and implementation		2		6/92		12/93	
3. Initial training and promotion		2		1/93		6/94	
4. Securing state funding		2		6/94		7/96	
5. Grant expansion project		6.5		8/94		6/97	
6. Wrap-up of grant expansion project		2.5		6/97	9/97		
7. 97/98 Priorities		2.5		7/97	6/98		
a. Implement ACLIN 800#				3/97	10/97		
b. Implement broadcast search				9/96	12/97		
c. Implement web search engine				3/97	9/97		
d. Expand information resources				7/97	6/98		
e. Pilot ILL system				11/97	6/98		
f. Local community/library pilot				9/97	6/98		

Prepared By: Susan Fayad Phone #: 866-6907 Approved by: Karen Stroup Date: 7/11/97

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PROJECT DETAIL
Department of Education

Project Title: ACLIN

Cost Components	Thru 6/30/97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Total
I. Personal Services							
Labor							
State Employee	825,879	113,231	117,760	122,471	127,370	132,464	1,439,175
Contracting & Consulting	608,307	132,400	127,400	132,496	137,796	143,308	1,281,707
Other	501,095	0	0	0	0	0	501,095
Total Personal Services	1,935,281	245,631	245,160	254,967	265,165	275,772	3,221,977
Total FTE	6.8	2.0	2.0	2.0	2.0	2.0	-
II. Operating Expenses							
Materials and Supplies	692	522	543	565	587	611	3,519
Maintenance:							
Equipment							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	278	0	0	0	0	0	278
Network	0	0	0	0	0	0	0
Software:							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	207	500	520	541	562	585	2,915
Network	0	0	0	0	0	0	0
Non-Capitalized Equipment	15,097	0	0	0	0	0	15,097
Processing at St Computer Ctr	0	0	0	0	0	0	0
Communications Services							
From Div of Telecom:							
Voice	7,893	1,080	1,123	1,168	1,215	1,263	13,743
Data	5,095	600	624	649	675	702	8,344
From Outside Source:							
Voice	2,147	1,416	1,416	1,473	1,532	1,593	9,576
Data	7,299	29,784	29,784	30,975	32,214	33,503	163,560

Prepared by: John Eric Noran Phone: 866-6894
Approved by: Karen Stroup Date: 7/11/97

PROJECT DETAIL
Department of Education

Project Title: ACLIN

Cost Components	Thru 6/30/97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Total
Utilities/Rent	31,193	3,240	3,370	3,504	3,645	3,790	48,742
Administrative Expenses	167,302	385	0	0	0	0	167,687
IT/IS Training	10,556	0	0	0	0	0	10,556
Travel	57,052	3,400	3,536	3,677	3,825	3,978	75,467
Other Purchased Services	78,341	500	520	541	562	585	81,049
Total Operating Expenses	383,152	41,427	41,436	43,093	44,817	46,610	600,534
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	80,454	0	0	0	0	0	80,454
Network	8,655	0	0	0	0	0	8,655
Leased							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Software:							
Purchased							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	30,343	0	0	0	0	0	30,343
Network	0	0	0	0	0	0	0
Leased							
Large Systems	0	0	0	0	0	0	0
LAN Systems	0	0	0	0	0	0	0
Desktops	0	0	0	0	0	0	0
Network	0	0	0	0	0	0	0
Total Capital Outlay	119,452	0	0	0	0	0	119,452

IV. Grants to Libraries	1,418,390	146,188	146,188	152,036	158,117	164,442	2,185,360
Total Grants to Libraries	1,418,390	146,188	146,188	152,036	158,117	164,442	2,185,360

Prepared by: John Eric Noran Phone: 866-6894 Approved by: Karen Stroup Date: 7/11/97

State of Colorado

Department of Education

Project Detail

Date: 07/28/97

Project Title: End-User Training	Category: I	New: XX Completed: Continuing: Future:	Budget Decision Item Request: XX Supplemental: Capital Construction Request:
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Business Requirements:

CDE has many external customers including the citizens of Colorado, school districts, legislators, and other governmental agencies. In order to provide the best possible service to these customers, one of CDE's goals as stated in its Strategic Plan is to maintain a productive and successful staff. Enhancing the staff's computer skills through a training program leads to achieving that objective.

Project Description:

CDE's network has been in for two years and it is apparent that many of the users have not progressed beyond a minimum skill level. In order to maximize the return on investment in Information Technology (IT) resources, we will provide appropriate user training in the use of computer technology. Training will be provided to all department employees regarding the use of PCs-Basic and Advanced and/or appropriate software. This training will be based upon an analysis of help desk problems over the previous two years and user surveys. Management personnel responsible for IT users and/or support personnel will receive appropriate training to enable proper management and utilization of staff resources.

Technical Architecture:

Inexpensive technology utilizing Computer Based Training (CBT) and instructor led classes where appropriate.

Benefits:

The Gartner Group's documented impact of training found that "it takes an untrained user 6 times as long to accomplish the same amount of work done by a trained user". Training will allow CDE to provide more efficient and effective service to its external and internal customers.

Project Management:

The IMS network staff in coordination with the CDE Assistant Commissioners

State of Colorado
Department of Education
Project Detail

Date: 07/28/97

Stakeholders/Communities of Interest:

Internal CDE users, external customers receiving more efficient and effective service including citizens, school districts, legislators, and other governmental entities.

Prepared by: John Christopher

Telephone #: 866-6895 Approved by: Dianne Kress/Karen Stroup Date: 7/24/97

Project Detail

Department of Education

Project Title: End-User Training

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
I. Personal Services							
Labor:							
State Employee		10,000	20,000	20,000	20,000	20,000	90,000
Contract & Consulting							
Other							
Total Personal Services	0	10,000	20,000	20,000	20,000	20,000	90,000
Total FTE							
II. Operating Expenses							
Materials and Supplies							0
Maintenance:							
Equipment:							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Software:							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Non-Capitalized Equipment							0
Processing at State Computer Center							0
Communications Services							
From Division of Telecommunication:							
Voice							0
Data							0
From Outside Source							
Voice							0
Data							0

Prepared by: John Christopher

Telephone #: 866-6895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

Project Detail
Department of Education

Project Title: End-User Training

Cost Components	Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Utilities/Rent							0
Administrative Expenses							0
IT/IS Training	0	0	30,000	30,000	30,000	30,000	120,000
Travel							0
Other Purchased Services							0
Total Operating Expenses	0	10,000	50,000	50,000	50,000	50,000	210,000
III. Capital Outlay							
Equipment:							
Purchased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Software:							
Purchased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Leased							
Large Systems							0
LAN Systems							0
Desktops							0
Network							0
Total Capital Outlay							0

Prepared by: John Christopher

Telephone #: 866-6895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

Project Detail

Department of Education

Date: 7/24/97

SUMMARY

Project Title:	Category:	New: XX		Completed:		Budget Decision Item Request: XX		Supplemental:
		Continuing:	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	
End-User Training	I							
Cost Components		Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
GRAND TOTAL PROJECTED COSTS		0	10,000	50,000	50,000	50,000	50,000	210,000
Base Budget Cost		0	10,000	25,000	25,000	25,000	25,000	110,000
New Funds Required				25,000	25,000	25,000	25,000	100,000
Federal Cost								0
Other Cost								0
Benefit Components		Total Costs Thru 6/30/97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	Total
Tangible Benefits:								0
50% Increase in Productivity			54,000	54,000	54,000	54,000	54,000	270,000
Related to computer training								0
GRAND TOTAL PROJECTED BENEFITS			54,000	54,000	54,000	54,000	54,000	270,000
Benefits Less Costs			44,000	4,000	4,000	4,000	4,000	60,000
(subtract Total Costs from Total Benefits)								

Expected Life of Components (hardware/software):

IS Unit/Division IMS
 Department Priority of
 IS Unit Priority 9 of

Strategic Business Objective(s):

Strategic System Objective(s):

Promulgation of rules and regulations
 Maintain communication with the citizens of Colorado

To provide computer support services ensuring reliable and secure access to technology resources

Prepared by: John Christopher

Telephone #: 866-6895

Approved by: Dianne Kress/Karen Stroup

Date: 7/24/97

Schedule 2D

Decision Items

Year 2000 Project

Computer Replacement Project

Automated Data Exchange Project

Disaster Recovery Project

CSDB Network Project

Training Project

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority: <p style="text-align: center;">1</p>	4. Statutory Authority: State: 22-2113(1)(e)C.R.S.;22-2-112(1)(h)C.R.S. 22-54-115C.R.S. Federal: ECEA(22-20-104(3));ECEA(22-20-104(4));ECEA22-21-14;20 U.S.C.A. 1411(a)(3);1411(5)(A)(ii);1411(c)(1);1411(d);1417(b)
2. Title: <p style="text-align: center;">Y2K PROGRAMMING SUPPORT</p>	
3. Program (Macro-Goals): GOAL IV. Technology, Information and Communication	
Macro Objective:	To provide application development support to the Department of Education so that CDE can meet state and federal reporting requirements.
Project Objective	To hire contract programming support to assist CDE in making the necessary programming changes needed in order to accommodate the millennium change and, therefore, meet its statutory mandates.

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY '99)	Following Year (FY '00)
Personal Services Contract Programming Support	General Fund	418,881	132,880
	Cash Funded*		
	Federally Funded**		
Operating	General Fund		
	Cash Funded*		
	Federally Funded**		
Travel	General Fund		
	Cash Funded*		
	Federally Funded**		
Distribution	General Fund		
	Cash Funded*		
	Federally Funded**		
Total Program		418,881	132,880

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

7A. Problem Statement: CDE has a programming staff of 4 FTEs. These FTEs support the 18 legacy systems at CDE. These systems are in need of continual maintenance in order to comply with changing federal and state requirements.

In 1994, HB 1213 was passed stating that CDE "shall implement a statewide financial, student management and human resource electronic data

	<p>communications and reporting system..." This system is currently under development and will be into the next century. This additional development is being done with existing staff.</p> <p>With the maintenance of the current legacy systems and the development of the Automated Data Exchange systems, the staff is currently overextended. The programming modifications needed in order for the legacy systems to become Y2K compliant cannot be handled by the existing staff. Outside consulting programming support is mandatory.</p>
7B. Goal Statement:	The goal is to obtain outside programming support so that CDE can bring its legacy systems into compliance for Y2K.
7C. Objectives and Performance Measures:	The objective is to complete Y2K coding and testing for each system before each system runs through its last cycle prior to the year 2000. Each system will be able to successfully complete its last cycle prior to Y2K. Testing parameters as set forth by the state Y2K team will be completed prior to the last cycle.
7D. Program Description	<p>Every programmer has identified the specific elements that must be modified for each program for his or her specific system. This has been documented (see State Y2K Committee Inventory). The time lines for completion of coding and testing are based on the time the last cycle must be run prior to Y2K. This will add to the assurance that the coding changes have no adverse affect on the overall system Each programmer/analyst will oversee the contract programmer working on his or her system. No one p/a will be overseeing more than one contractor at a time so adequate time can be spent with the contracting in the startup and testing phases. Scheduling consideration has also been given to systems that have codedependencies with other systems. Backfilling contractors for new development has been eliminated as an option since the CDE staff has recently undergone extensive training in the tools they are using for the Automated Data Exchange development. It is important they not lose what they have learned. The System Manager will act as the Program Manager for the overall project.</p> <p>The State Y2K committee has given CDE a Confidence Rating Factor of 90%.</p>
7E. Assumptions and Calculations:	Every program at CDE was examined in depth to identify the specific elements that will be affected by Y2K. Detailed documentation was prepared identifying program names, date fields, and notes were made relative to the changes. These can serve as detailed guidelines for the contractors. (See Attached)
7F. Justification:	Insufficient funds available.

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority:	4. Statutory Authority:
2. Title: IT Computer Replacement Plan	State: 22-2-112, 22-2-113, C.R.S. E.O. D0002 97
3. Program (Macro-Goals): Technology, Information, & Communication	Federal:
Macro Objective: To provide computer support services, ensuring reliable and secure access to technology resources.	
Project Objective: To replace or upgrade that portion of the currently installed information technology infrastructure which is obsolete, unserviceable, no longer vendor supported, or otherwise in need of replacement or upgrade on a 4 year replacement cycle.	

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY 98-99)	Following Year (FY 99-00)
Personal Services	General Fund		
	Cash Funded*		
	Federally Funded**		
Operating	General Fund	\$49,600	\$27,800
	Cash Funded*		
	Federally Funded**	\$126,900	\$94,200
Travel	General Fund		
	Cash Funded*		
	Federally Funded**		
Distribution	General Fund		
	Cash Funded*		
	Federally Funded**		
Total Program		\$176,500	\$122,000

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

7A. Problem Statement: Over the past several years, CDE has automated many functions by networking PC and Macintosh computers. The LAN infrastructure was funded through capital construction funds, but end-user microcomputers were funded through individual unit funds. Because of the rapidly changing technology, computers purchased over 4 years ago are not able to accommodate CDE's current department standard software, and are aging past the point of economical repair.

There has been a significant increase in the number of help desk calls due to inoperative equipment, or the inability of the end-user to perform certain tasks

such as the seamless electronic exchange of documents. Older PCs are not equipped with the Desktop Management Interface (DMI) making remote resolution of PC problems possible. A Gartner Group study has found that the annual total cost of ownership (TCO) can be reduced as much as \$2,000 annually per PC by purchasing DMI enabled equipment.

Unlike some start up costs for furniture, computers and operating software need to be updated in order to maintain functionality. If there were only a few PCs involved, CDE could absorb the costs (and has done so in the past), but we find we can no longer delay replacement of critical equipment nor does CDE have all of the necessary funds for replacement needs.

7B. Goal Statement:

To provide the CDE staff with the tools necessary to efficiently perform the tasks required to comply with statutory mandates. Moreover, the goal is to continue to improve and enhance our abilities in an on-going effort to maximize our effectiveness in servicing the public school districts and school libraries of Colorado.

7C. Objectives and Performance Measures:

CDE seeks on-going funding to upgrade and replace computer equipment on a regular, organized, and timely basis according to a pre-planned schedule so that CDE employees can rely on an industry standard level of automation that is reliable and efficient. Specifically to:

- Replace equipment on a four year schedule in an orderly manner
- Keep all software current within two revisions.
- Keep equipment within three revisions
- Continuously reallocate resources within CDE as new computers are received

The effectiveness of the program will be measured by the avoidance of downtime and the ability of the CDE staff to work in a positive computer environment. This environment will also reduce the amount of help desk calls due to problems with older equipment. CDE employees will also be able to transfer between units without costly retraining.

7D. Program Description

A replacement schedule has been created based on non-supported hardware, obsolescence, age, and repair costs. This schedule will replace all personal computers and printers over four years old. Equipment replaced under this project, but still serviceable for limited use will be reallocated to other users in CDE whose equipment is in need of immediate replacement. However, because most of CDE's users have similar tasks, the plan does not provide for classifying users into tiers for trickled down PCs.

7E. Assumptions and Calculations:

The attachment to this schedule shows the results of the calculations and the considerations of the forecasting process. This plan will be updated at least annually as the IT environment continues to evolve and CDE managers and staff are challenged to continue to meet the basic business needs of the Department. It is assumed that the replacement cost for the average PC/Macintosh is \$2500, Servers \$10,000 - \$15,000, and printers \$1,500

7F. Justification:

Annual base funding will allow CDE to keep reasonable pace with industry standards without being on the "leading edge" of technology without jeopardizing CDE users' productivity and efficiency.

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority:	4. Statutory Authority:
2. Title: Automated Data Exchange Project (ADEP) On-Going Maintenance	State: 22-44-105, C.R.S.
3. Program (Macro-Goals): Technology Information & Communication; Data Exchange - Public Access to Information	Federal:
Macro Objective:	Goal 1. Establish a statewide education data base that is responsive to the information needs of policy makers, the education community and the public. Goal 2. Create an efficient, electronic data transfer system that minimizes the reporting burden of data providers.
Project Objective	<p>Goal 1 Objectives</p> <ul style="list-style-type: none"> o Increase data accuracy and comparability through improved data definitions and a standard data dictionary. o Create a data base that fulfills educational policy needs and state and federal reporting requirements. o Increase responsiveness by making data electronically available to all users. o Reexamine the need for all data currently collected from school districts. o Establish an ongoing review process for analyzing data needs. <p>Goal 2 Objectives</p> <ul style="list-style-type: none"> o To the extent possible, eliminate paperwork in data collection. o Transfer data electronically to eliminate data entry errors. o Integrate data collection to eliminate duplicate reporting. o Integrate timeliness of data by reducing the need for extensive CDE editing of data. o Create a standard student record format that will enable school districts to exchange student records electronically.

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY 99)	Following Year (FY 00)
Personal Services	General Fund		
	Cash Funded*		
	Federally Funded**		
Operating - Hardware/Software Maintenance	General Fund	30,800	32,340
	Cash Funded*		
	Federally Funded**		
Travel	General Fund		
	Cash Funded*		

	Federally Funded**		
	General Fund		0
	Cash Funded*		
	Federally Funded**		
Total Program	 	30,800	32,340

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

7A. Problem Statement: Funding is requested for on-going maintenance costs for the hardware and software associated with the ADEP that was not included or not adequately covered in the original request. A Decision Item requesting maintenance costs was submitted in FY '98 for maintenance and turned down. Since that time maintenance costs have again increased due to the fact that some of the hardware and software maintenance costs were included in the initial purchase for the first year. We are now past that first year. It, therefore, is imperative we receive funding for this on-going maintenance.

7B. Goal Statement: The goal of this decision item is to provide the funding for on-going maintenance needed to fully implement the ADEP.

7C. Objectives and Performance Measures:
 Objectives of this request:
 To provide for the ongoing operational costs for the hardware and software purchased by CDE for the ADEP project.
 Performance Measures:
 o Districts and CDE will meet the intent of HB-1213.
 o Districts will have a more efficient means of transmitting data allowing for a more effective means of managing resources.
 o Data will be integrated, allowing reports to be generated at the state level rather than submitted at the local level.
 o Districts will be able to eliminate costly specialized requests for information for outside agencies by having data in this electronic format.
 o Increased accuracy and consistency in data.
 o Improved time lines of data collection
 o Resources can be used to analyze data rather than inputting data or typing reports.

7D. Program Description On-going Maintenance for Hardware and Software Purchased for the Program. The original decision item did not include the maintenance cost (hardware and software) for the UNIX Boxes (HP9000-K210 and HP9000-E25), for SQR software or for the ORACLE Database. An additional \$30,800 is needed for this maintenance.

7E. Assumptions and Calculations:

Maintenance. Ongoing maintenance costs are as follows.	
ORACLE Database Maintenance	\$14,130
HP9000-K210 Software	7,000
HP9000-K210 Hardware	4,500
HP9000-E25 Software	1,220
HP9000-E25 Hardware	1,950
SQR Software	2,000
Total Maintenance	\$ 30,800

7F. Justification: Funding for maintenance is not included in the Department's current budget, nor was it included in the original decision item for the ADEP.

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority:	4. Statutory Authority:
2. Title: Disaster Recovery Plan Implementation	State: <u>22-2-112, 22-2-113, CRS</u>
3. Program (Macro-Goals): Technology, Information, & Communication	Federal: _____
Macro Objective: To provide computer support services, ensuring reliable and secure access to technology resources	
Project Objective: To activate and test a recovery site for CDE's disaster recovery plan.	

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY 98 - 99)	Following Year (FY 99 - 00)
Personal Services	General Fund		
	Cash Funded*		
	Federally Funded**		
Operating	General Fund	\$60,000	\$17,600
	Cash Funded*		
	Federally Funded**		
Travel	General Fund	\$1,000	\$1,000
	Cash Funded*		
	Federally Funded**		
Distribution	General Fund		
	Cash Funded*		
	Federally Funded**		
Total Program		\$61,000	\$18,600

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

7A. Problem Statement: During FY 97 CDE, in conjunction with a consulting group, designed a disaster recovery plan which, when properly implemented, will insure reliable recovery of CDE's data and restore limited operations in the event of disaster rendering the current site unusable. Documentation to support this plan will be fully complete in 1998. Many of CDE's applications affect the functioning of the school districts within Colorado and, in certain situations, need to be functioning at an alternate site within 72 hours of a disaster occurring. CDE has selected the Colorado School for the Deaf and Blind (CSDB) in Colorado Springs as the alternate processing site in accordance with the consultant's recommendation. This site is removed from the Denver area and offers sufficient facilities to house CDE's data operations.

Critical applications at CDE run on an HP3000/947 and an HP9000/K210. The

	<p>HP3000 is aging technology and the availability of systems configured to support CDE's needs may not be available within the 72 hour time frame for recovery.</p> <p>In addition, the infrastructure at CSDB needs to be enhanced to support the additional equipment requirements, to include filtered power, data communications, and environmental enhancements.</p>
7B. Goal Statement:	To allow a proactive recovery process when responding to major disruptions to the Computing and Networking environments of CDE.
7C. Objectives and Performance Measures:	<p>Establish the infrastructure and test CSDB as the alternate recovery site for CDE's Disaster Recovery process.</p> <ul style="list-style-type: none"> • Critical applications must be operational within 72 hours of the disaster • Remaining CDE applications will be operational within 2 weeks of a disaster occurring. <p>A semi-annual test will be conducted to insure continued compliance with current disaster recovery procedures.</p>
7D. Program Description	<p>A used HP3000/947 will be bought and placed at CSDB. Rental agreements will be established with vendors to insure an HP 9000/K210 and other peripheral equipment is available within necessary time frames. These agreements will be implemented semi-annually as the plan is tested. Asynchronous communications services would be linked to the HP3000 through CSDB supplied phone lines. Once the infrastructure is in place, the plan will be put into an actual practice with a "real world" test.</p>
7E. Assumptions and Calculations:	<p>CSDB was chosen as the alternative site for the following reasons:</p> <ul style="list-style-type: none"> • The ability to recover quickly • The flexibility to perform recovery testing as needed. • The ability to control the equipment to ensure application compatibility. • The ease of use for the user community • Lower overall cost compared to a commercial disaster recovery facility. • Providing a reciprocal disaster recovery site for CSDB <p>A commercial recovery service was not selected because:</p> <ul style="list-style-type: none"> • Tests often limited • The possibility of conflicts from over subscription or regional disasters • When alternative computer equipment is substituted by a commercial disaster recovery facility, unexpected delays occur due to the differences in system configurations. By placing equipment at CSDB, CDE avoids this. • The annual fee for a recovery would pay for purchasing equipment within three years <p>See attachment for an analysis of the costs associated with this process.</p>
7F. Justification:	Funding for this project will insure the recovery of CDE's critical operations and to continue the service to the school districts of Colorado.

COST ANALYSIS FOR DISASTER RECOVERY EQUIPMENT:

EQUIPMENT ITEM	LEASE	PURCHASE	Lease/ Purchase?
HP3000/947 (Used)	\$1,000 / Mo	\$20,500	Purchase
HP9000/K210 (Used)	\$2,300 / Mo	\$39,995	Lease
HP9000/E25 (Used)	\$650 / Mo	\$8,750	Lease
LAN Server	\$600 / Mo	\$15,000	Lease
Communications Equipment	\$600 / Mo	\$20,000	Lease
Infrastructure		\$23,900	Purchase
Commercial Hot Site (Comparison only)	\$15,000 / Yr		N/A

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority:	4. Statutory Authority:
2. Title: Colorado School for the Deaf and the Blind (CSDB) Network	State: 22-2113(1)(e)C.R.S.: State Leadership for Education in Library Services
3. Program (Macro-Goals): Technology Information and Communication	Federal:
Macro Objective:	To allow CSDB students to have the same opportunities to acquire technology skills as their peers in other school districts. To extend the availability of existing blind and deaf resources to a wider audience of Colorado citizens.
Project Objective	

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY 99)	Following Year (FY 00)
Personal Services	General Fund	53,077	55,231
	Cash Funded*		
	Federally Funded**		
Operating	General Fund	110,500	111,750
	Cash Funded*		
	Federally Funded**		
Travel	General Fund		
	Cash Funded*		
	Federally Funded**		
Distribution	General Fund		
	Cash Funded*		
	Federally Funded**		
Total Program		163,577	166,981

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

7A. Problem Statement: Funds were granted in FY '98 to establish a campus wide network with specific goals, for the benefit of its students, blind and deaf students in Colorado school districts, and other blind and deaf citizens of Colorado. The network goals include:

- Students use of computers as tools in the classrooms and dormitory rooms to enhance schoolwork.
- Expand access to services and resources offered to blind and deaf communities of Colorado
- Students will use educational and standard business software to meet educational goals. Use of the Internet, Access Colorado Library

	<p>Information Network (ACLIN), and similar systems, students will have ready access to a larger scope of information.</p> <ul style="list-style-type: none"> - Provide students opportunities through technology and equipment needed to compete for future employment and college admission. - Provide students and staff with the appropriate adaptive technology to meet the unique needs of each individual. - Provide staff with access to necessary information to meet the changing needs of the student population. - Increase the school's ability to serve as a statewide resource to all districts in Colorado. - Computerize the Individual Educational Plans for each student, permitting greater input and less confusion for parents. - Permit the administrative areas of the campus to perform the tasks assigned more efficiently. <p>These goals cannot be achieved without follow-on funding for maintaining the network.</p>
7B. Goal Statement:	<p>To allow CSDB students to have the same opportunities to acquire technology skills as their peers in other school districts.</p> <p>To extend the availability of existing blind and deaf resources to a wider audience of Colorado citizens.</p>
7C. Objectives and Performance Measures:	<p>Students' progress can be measured and monitored at various grade levels by designing and applying an Internet/computer proficiency checklist and updating it at regular intervals.</p> <p>CSDB will track the access to resources via Internet web page facilities and recording frequency of subsequently loaned materials.</p>
7D. Program Description	<p>Implement the CSDB network design, configure the network components, and apply policies and procedures for using the network. Use the Internet to teach the students and teachers about the information resources available via the Internet. Incorporate use of the network and its services into the curriculum. Use the Internet as a medium for Colorado citizens to access the CSDB library materials.</p>
7E. Assumptions and Calculations:	<p>The 1996 Information Management Annual Plan (IMAP) contains details concerning assumptions used to calculate the requested amounts.</p>
7F. Justification:	<p>This project received initial funding in FY '98 to design, procure, and install the Local Area Network (LAN), which included file, application, and print servers, full time connectivity to the Internet, and some personal services. Previous years' funding do not account for continuing expenses of the LAN. This decision item, for FY '99, represents funding needed to support the LAN, following its installation and first partial year of operation. Funding is needed to cover installation of certain phased components of the original design, continued progress toward database application development, software/hardware maintenance and upgrades, Internet access services, and planned replacement of obsolete hardware.</p>

SCHEDULE 2D - DECISION ITEM (DI)

(No relation to current programs unless it's an expansion of a current item.)

1. Priority:	4. Statutory Authority:
2. Title: End-User Training	State: <u>22-2-112, 22-2-113, C.R.S</u>
3. Program (Macro-Goals): Technology, Information, & Communication	Federal: _____
Macro Objective:	To provide computer support services, ensuring reliable and secure access to technology resources.
Project Objective	Train end-users to utilize technology to reduce the number of help-desk calls experienced.

5. Request Amount

Line Items:	6. Fund Source	Request Year (FY 98 -99)	Following Year (FY 99 - 00)
Personal Services	General Fund	25,000	25,000
	Cash Funded*		
	Federally Funded**		
Operating	General Fund		
	Cash Funded*		
	Federally Funded**		
Travel	General Fund		
	Cash Funded*		
	Federally Funded**		
Distribution	General Fund		
	Cash Funded*		
	Federally Funded**		
Total Program		25,000	25,000

*If cash: Name _____ COFRS Account Number _____
 **If federal: Name _____ COFRS Account Number _____ CFDA # _____

7. Narrative

- 7A. Problem Statement:** CDE's network has been in for two years and it is apparent that many of the users have not progressed beyond a minimum skill level.
- 7B. Goal Statement:** To continue to improve and enhance our abilities in an on-going effort to maximize our effectiveness in servicing the public school districts and school libraries of Colorado
- 7C. Objectives and Performance Measures:** The Gartner Group's documented impact of training found that "it takes an untrained user 6 times as long to accomplish the same amount of work done by a trained user". Training will allow CDE

	to provide more efficient and effective service to its external and internal customers.
7D. Program Description	In order to maximize the return on investment in Information Technology (IT) resources, we will provide appropriate user training in the use of computer technology. Training will be provided to all department employees regarding the use of PCs- Basic and Advanced and/or appropriate software. Management personnel responsible for IT users and/or support personnel will receive appropriate training to enable proper management and utilization of staff resources
7E. Assumptions and Calculations:	Gartner Group estimates approximately \$50 per user for Computer Based Training. An additional \$10K - \$15K per year is allocated for Instructor-led training.
7F. Justification:	This funding will allow CDE to maintain an efficient, effective workforce, to provide maximum service to the citizens of Colorado.

APPENDIX A

COMPUTER REPLACEMENT PLAN

COLORADO DEPARTMENT OF EDUCATION Personal Computer Replacement Plan

It is essential that the Colorado Department of Education (CDE) maintain a level of technology consistent with industry and the school districts of Colorado to maintain effective business relationships. As personal computers get older, they tend to have more user problems, and, they may not satisfactorily execute current applications needed for the satisfactory conduct of business. Because of rapidly changing technology, computers purchased over four years ago are not able to accommodate CDE's current department standard software, and are aging past the point of economical repair. There has been a significant increase in the number of help desk calls due to inoperative equipment, or the inability of the end-user to perform certain tasks such as the seamless electronic exchange of documents.

The purpose of this plan is to provide a means for the replacement of all PCs within a four-year cycle. This will allow the department to maintain technology within reasonable norms and allow CDE users to spend time at their job rather than solving computer problems.

PROCEDURES:

1. The Information Management Services (IMS) unit within the department will maintain an inventory of all hardware and software. Inventories will be conducted as follows:
 - a. A semi-annual inventory will be conducted using Lan Auditor software. The software will be configured to return information on all software maintained on each user's PC in addition to the user's machine configuration.
 - b. All requests for new PCs will be forwarded through the IMS unit for compliance with department standards.
 - c. New machines will be added to the Lan Auditor database as they are received and set up.
 - d. PCs and software returned for surplus disposal will be deleted from the database.
2. Each year during preliminary budget planning, the inventory will be analyzed. PC's reaching the four year life cycle are identified. Additional factors considered in this analysis include, but are not limited to:
 - a. Know future special circumstances and/or business needs which will require replacement or upgrade of some items which are not truly obsolete, but are not capable of delivering the advanced functionality required by the circumstance or business need.
 - b. Opportunities to reassign replaced assets where needed. Because most of CDE's users perform similar functions, this will be limited to replacing those PC's that have not reached the replacement cycle, but are not performing as expected.
 - c. Anticipated or actual software releases *absolutely required for the proper conduct of business* rendering hardware obsolete because of its inability to run the new software.
3. Using the data obtained from the analysis above, candidates are identified for replacement. A budget decision item is generated using the following criteria:

PC's are defined as "IBM Compatible" Desktops, Macintosh, or any laptop

- a. PC replacement cost will be determined using industry standard costs and recommended configurations by Gartner Group.
- b. Server cost will be computed using full replacement cost.

COLORADO DEPARTMENT OF EDUCATION

Type	Dt Purch	Model	System	Unit	STATE					FEDERAL		
					FY 98	FY 99	FY 00	FY 01	FY 98	FY 99	FY 00	FY 01
PC's/Macintosh												
2	2/1/94	LC III	Macintosh	COMM		\$2,500						
2	2/1/94	LC III	Macintosh	COMM		\$2,500						
2	7/1/94	660w	Macintosh	COMM		\$2,500						
2	7/1/94	660AV	Macintosh	COMM		\$2,500						
2	7/15/94	Clone PC/AT 486	PC	COMM		\$2,500						
2	12/23/94	Clone PC/AT 586	PC	COMM		\$2,500						
2	6/16/95	Clone PC/AT 486	PC	COMM		\$2,500						
2	9/1/95	5300/100	Macintosh	COMM		\$2,500						
2	2/1/96	5200/75 LC	Macintosh	COMM		\$2,500			\$2,500			
2	6/19/96	Compaq	PC	COMM		\$2,500			\$2,500			
2	7/1/96	7200/90	Macintosh	COMM		\$2,500			\$2,500			
7	7/1/96	7200/90	Macintosh	COMM		\$2,500			\$2,500			\$2,500
2	11/25/96	Compaq	PC	COMM		\$2,500			\$2,500			
2	11/25/96	Compaq	PC	COMM		\$2,500			\$2,500			
2	6/1/97	7300/180	Macintosh	COMM		\$2,500			\$2,500			
2	6/1/97	1400/117CS	Macintosh	COMM		\$2,500			\$2,500			
7	6/1/97	Powerbook 1400 c/133	Macintosh	COMM		\$2,500			\$2,500			\$2,500
2	3/23/96	Clone PC/AT 486	PC	ED_SVCS					\$2,500			
2	4/19/90	AT&T PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	12/17/93	Clone PC/AT 486	PC	FED_PROG	\$2,500							
2	4/20/95	Clone PC/AT 486	PC	FED_PROG		\$2,500						
7	8/1/95	6100/66	Macintosh	FED_PROG		\$2,500						\$2,500
2	9/13/95	Clone PC/AT 586	PC	FED_PROG		\$2,500						
2	9/13/95	Clone PC/AT 586	PC	FED_PROG		\$2,500						
2	9/13/95	Clone PC/AT 586	PC	FED_PROG		\$2,500						
2	9/13/95	Clone PC/AT 586	PC	FED_PROG		\$2,500						
7	2/1/96	5200/75 LC	Macintosh	FED_PROG		\$2,500						\$2,500

COLORADO DEPARTMENT OF EDUCATION

Type	Dt Purch	Model	System	Unit	STATE			FEDERAL						
					FY 98	FY 99	FY 00	FY 01	FY 98	FY 99	FY 00	FY 01		
2	2/1/94	LC 580	Macintosh	PROF_SVCS		\$2,500								
2	2/1/94	LC 580	Macintosh	PROF_SVCS		\$2,500								
2	8/1/95	LC 580	Macintosh	PROF_SVCS			\$2,500							
2	4/1/96	7200/120	Macintosh	PROF_SVCS					\$2,500					
2	7/1/96	7200/90	Macintosh	PROF_SVCS					\$2,500					
2	7/1/96	7200/90	Macintosh	PROF_SVCS					\$2,500					
2	7/1/96	7200/90	Macintosh	PROF_SVCS					\$2,500					
2	4/1/97	5400/200	Macintosh	PROF_SVCS					\$2,500					
2	1/15/88	Gateway 2500 PC/AT 486	PC	SLAEO	\$2,500									
2	4/19/90	AT&T PC/AT 486	PC	SLAEO	\$2,500									
2	4/19/90	Clone PC/AT 486	PC	SLAEO	\$2,500									
2	2/18/93	Compaq	PC	SLAEO	\$2,500									
2	3/1/93	LC III	Macintosh	SLAEO	\$2,500									
7	3/1/93	II si	Macintosh	SLAEO					\$2,500					
2	3/25/93	Compaq	PC	SLAEO	\$2,500									
2	12/15/93	Clone PC/AT 486	PC	SLAEO	\$2,500									
7	2/1/94	LC III	Macintosh	SLAEO					\$2,500					
2	7/15/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	7/15/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	7/15/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	9/13/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	9/13/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	10/13/94	Clone PC/AT 486	PC	SLAEO		\$2,500								
2	1/3/95	Clone PC/AT 486	PC	SLAEO		\$2,500				\$2,500				
2	4/20/95	Clone PC/AT 486	PC	SLAEO		\$2,500				\$2,500				
2	7/14/95	Clone PC/AT 486	PC	SLAEO		\$2,500				\$2,500				
2	7/14/95	Clone PC/AT 486	PC	SLAEO		\$2,500				\$2,500				
2	8/1/95	6100/66	Macintosh	SLAEO		\$2,500				\$2,500				
7	8/1/95	6100/60 AU	Macintosh	SLAEO		\$2,500				\$2,500				
2	10/10/95	Compaq	PC	SLAEO		\$2,500				\$2,500				
7	1/1/96	7100/80AV	Macintosh	SLAEO		\$2,500				\$2,500				
2	1/10/96	Clone PC/AT 586	PC	SLAEO		\$2,500				\$2,500				\$2,500

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Type	Dt Purch	Model	System	Unit	STATE				FEDERAL					
					FY 98	FY 99	FY 00	FY 01	FY 98	FY 99	FY 00	FY 01		
2	1/10/96	Clone PC/AT 586	PC	SLAEO				\$2,500						
2	6/27/96	Clone PC/AT 586	PC	SLAEO				\$2,500						
7	7/1/96	9500	Macintosh	SLAEO										\$2,500
2	7/25/96	Compaq	PC	SLAEO				\$2,500						
7	9/1/96		Macintosh	SLAEO										\$2,500
2	10/10/96	Gateway 2500 PC/AT 586	PC	SLAEO				\$2,500						
2	12/3/96	Compaq	PC	SLAEO				\$2,500						
2	12/3/96	Compaq	PC	SLAEO				\$2,500						
2	12/3/96	Clone PC/AT 586	PC	SLAEO				\$2,500						
2	10/7/87	IBM PS/2 Model 80 (20Mhz)	PC	SPEC_SVCS	\$2,500									
2	10/7/87	IBM PS/2 Model 80 (20Mhz)	PC	SPEC_SVCS	\$2,500									
7	3/1/91	II CX	Macintosh	SPEC_SVCS						\$2,500				
7	10/1/91	SE/30	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/92	LC	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/92	LC	Macintosh	SPEC_SVCS						\$2,500				
7	8/1/92	Book 140	Macintosh	SPEC_SVCS						\$2,500				
7	2/1/93	II ci	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	II CX	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	II si	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	II si	Macintosh	SPEC_SVCS						\$2,500				
2	3/1/93	LC II	Macintosh	SPEC_SVCS	\$2,500									
7	3/1/93	II si	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	3/1/93	LC II	Macintosh	SPEC_SVCS						\$2,500				
7	6/1/93	Book 145	Macintosh	SPEC_SVCS						\$2,500				
7	8/1/93	Powerbook 160	Macintosh	SPEC_SVCS						\$2,500				
2	1/1/94	Select	Macintosh	SPEC_SVCS			\$2,500							
7	2/1/94	LC III	Macintosh	SPEC_SVCS						\$2,500				



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Type	Dt Purch	Model	System	Unit	STATE				FEDERAL			
					FY 98	FY 99	FY 00	FY 01	FY 98	FY 99	FY 00	FY 01
Printers:												
1	6/1/94	4m Plus	HP LaserJet	COMM		\$1,500						
1	6/1/94	1200C/PS	HP LaserJet	COMM		\$1,500						
8	6/1/95	660C	DeskJet	COMM							\$1,500	
1	6/1/95	4m	HP LaserJet	COMM			\$1,500					
8	6/1/95	4	HP LaserJet	COMM							\$1,500	
8	6/1/95	4	LaserJet	COMM							\$1,500	
8	6/1/95	560C	DeskJet	COMM							\$1,500	
3	6/1/91	LaserJet II	HP	CTBL	\$0							
3	6/1/96	LaserJet 4	HP	CTBL				\$0				
3	6/1/97	LaserJet 5	HP	CTBL				\$0				
1	6/1/94	III	HP LaserJet	ED_SVCS		\$1,500						
8	6/1/94	III	HP LaserJet	ED_SVCS					\$1,500			
8	6/1/95	4MP	LaserJet	ED_SVCS							\$1,500	
1	6/1/96	4	HP LaserJet	ED_SVCS				\$1,500				
8	6/1/96	4 Plus	HP LaserJet	ED_SVCS							\$1,500	
8	6/1/96	Personal	LaserWriter	ED_SVCS							\$1,500	
8	6/1/85	EX-1000	Epson	FED_PROG						\$1,500		
8	6/1/89	LQ 1050	Epson	FED_PROG						\$1,500		
8	6/1/93	5	Laser	FED_PROG						\$1,500		
8	6/1/93	II	LaserWriter	FED_PROG						\$1,500		
8	6/1/93	Personal	LaserWriter	FED_PROG						\$1,500		
8	6/1/94	III	HP LaserJet	FED_PROG						\$1,500		
8	6/1/94	III	HP LaserJet	FED_PROG						\$1,500		
8	6/1/94	III	HP LaserJet	FED_PROG						\$1,500		
8	6/1/94	4 Plus	HP LaserJet	FED_PROG						\$1,500		
8	6/1/94	II	ImageWriter	FED_PROG						\$1,500		
8	6/1/95	2563B	HP	FED_PROG						\$1,500		
8	6/1/95	II	LaserWriter	FED_PROG						\$1,500		
8	6/1/96	4 Plus	HP LaserJet	FED_PROG						\$1,500		\$1,500
8	6/1/96	4 m/Plus	HP LaserJet	FED_PROG						\$1,500		\$1,500
8	6/1/96	4 si	HP LaserJet	FED_PROG						\$1,500		\$1,500



APPENDIX B

AUTOMATED DATA EXCHANGE PROJECT

COLORADO DEPARTMENT OF EDUCATION AUTOMATED DATA EXCHANGE PROJECT (ADEP) PROGRESS REPORT

As was detailed in the draft plan distributed in November of 1995, the ADEP was initiated because of two major concerns. One concern was about the accuracy and comparability of school district data and the other concern was about school district data burden. The ADEP draft plan was disseminated to school district superintendents, hardware and software vendors, and other interested parties.

Following is the ADEP's progress to date:

Financial Data

- FY94-95 At the request of school districts, CDE contracted with an expert consultant to work with FPP to develop a new Chart of Accounts (COA) for school district financial management and reporting.
- FY95-96 Thirteen districts piloted the new COA.
- FY96-97 An additional 52 districts are implementing the COA. (Four pilot districts transferred their FY95-96 end-of-year financial data to CDE using electronic data transfer.)
- Fall 1997 Many districts who used the new COA during FY96-97 will submit that year's financial data electronically.

Human Resources Data

- 1994-1997 The Human Resources Committee was formed to redesign the human resources data collection system. Representatives of this Committee developed new job classification codes; a definition for an administrator, and met with the Financial Policies and Procedures Advisory Committee (FPP) to integrate these definitions in both the human resources and financial reporting systems.
- May 1997 A draft plan of the Human Resource Data Collection System will be mailed to all district human resource and special education directors.
- Fall 1997 Pilot districts will submit their human resource data electronically.

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Student Data

- 1994-95 In order to reduce data burden, both school districts and the feasibility study recommended that the new ADEP system collect student data by individual record containing only those specific elements need to meet state and federal reporting requirements.
- 1995-96 All school districts were invited to participate in reviewing the proposed student record layout.
- May 1996 Commissioner of Education notified school districts that the student data pilot test had been delayed, pending State Board of Education consideration of privacy issues.
- Sept 1996 Commissioner of Education sent a memorandum to local School Board presidents informing them of the project and requesting feedback. CDE received one response.
- 1997-98 Begin working with school districts to pilot student system Fall 1998.
- Aug 1997 General mailing will be made to all districts regarding progress; future plans and time lines for all three systems.

Note: Check our website <http://www.cde.state.co.us> for further information regarding status of ADEP.

May 6, 1997

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