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ABSTRACT

This plan brings common purpose and effective statewide coordination to video telecommunications activities in Washington State. The Department of Information Services (DIS) is designated the lead agency in the statewide coordination of video telecommunications through its enabling legislation. The plan outlines a structure to link and measure agency planning with the statewide vision for video telecommunications. The mission is to implement a successfully shared statewide video telecommunications system by 1997 to integrate multiple resources to serve state government and the public. Strategies that will be used are divided into the major components of planning and funding, program development, human resources, and technical infrastructure. Eight appendixes describe each strategy and its supporting activities as follows: (1) planning and funding; (2) program development; (3) human resources; (4) technical infrastructure; (5) legislative intent; (6) budget proviso; (7) state video telecommunications demonstration projects, downlink networks, and systems; and (8) glossary of terms. (SLD)

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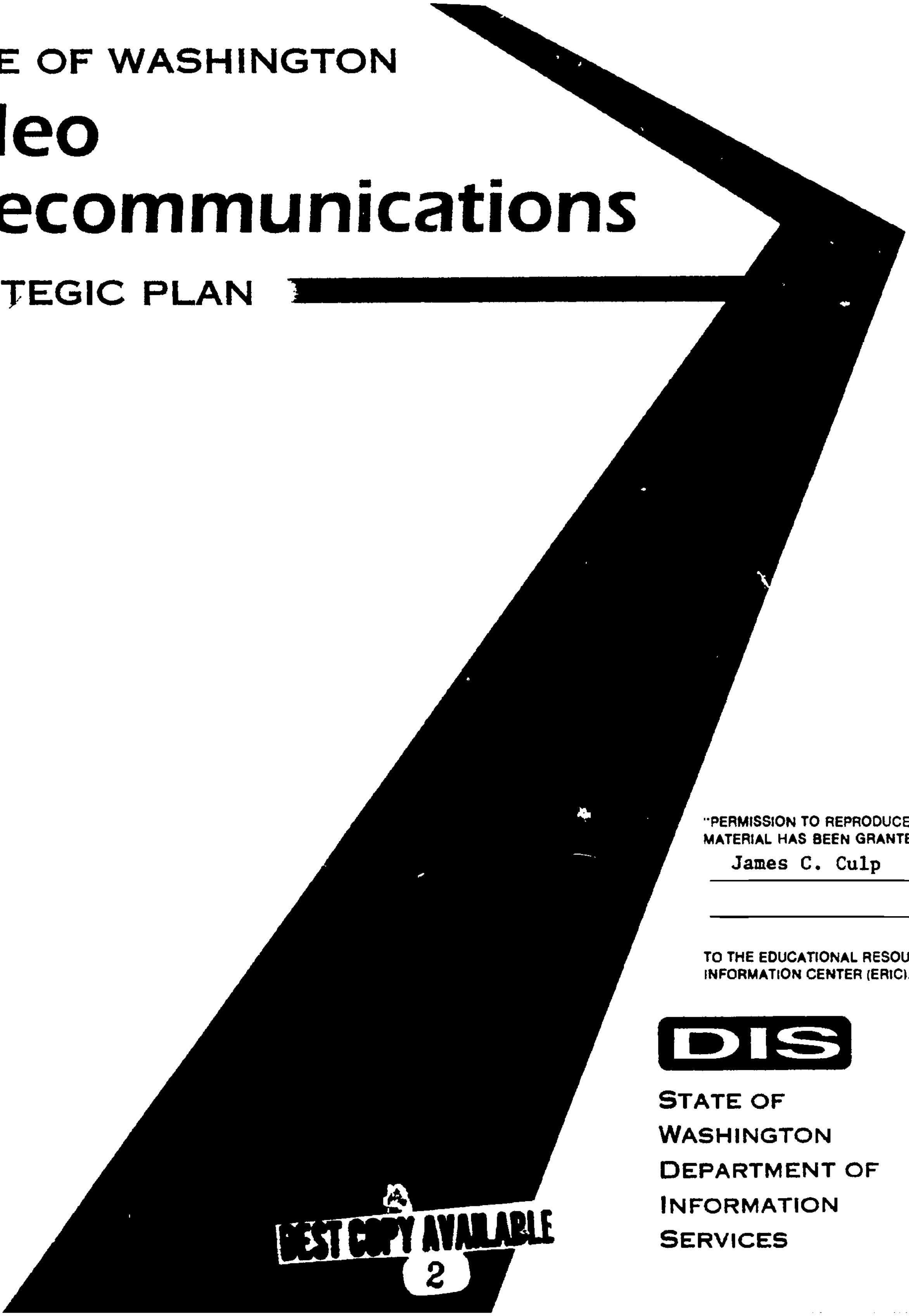
ED 365 298

1992

STATE OF WASHINGTON

Video Telecommunications

STRATEGIC PLAN



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DIS

State of Washington
Department of Information Services
Policy and Regulation Division
1110 Jefferson Street SE, MS: 2440
Olympia, Washington 98504-2440
(206) 664-9254
SCAN 366-9254

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ACKNOWLEDGEMENTS

Video Telecommunications Advisory Committee

Sharon E. Babcock	KTCS 9
Mike Bigelow	Office of Financial Management
Ron Crossland	State Board for Community College Education
Don Hanna	Washington State University
Marilyn Freeman	Department of Information Services
Cheryl Lemke	Office of the Superintendent of Public Instruction
Katrina Meyer	Higher Education Coordinating Board
Rich Morgan	Communications Technology Center
Steve Plunkett	Department of Information Services
Mike Reed	Department of Ecology
Dale Putnam	Department of Corrections
Dave Workman	Department of Wildlife
Ellen Renner	Western Washington University
Jim Johnson	Council of Presidents
Brian Talbott	Educational Service District 101
Scott Turner	Department of Personnel
Karen Lichtenstein	Department of Social and Health Services

Video Telecommunications Planning Project Systems Management Task Force

Betty Boushey	Triad Project
Cathy Cook	Western Washington University
Mike Emans	Department of Information Services
Clinton Kruiswyk	Educational Service District 101
Muriel Oaks	Washington State University
Ann Suter	University of Washington
Marlena Scordan Weglin	Communications Technology Center
Joan O'Brien	University of Washington

Video Telecommunications Strategic Plan

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Situation Assessment

This plan brings common purpose and effective statewide coordination to video telecommunications activities in Washington state.

The Department of Information Services (DIS) is designated the lead agency in the statewide coordination of video telecommunications through the DIS enabling legislation (RCW 43.105) and provisos in the biennial budgets 1989–1991 and 1991–1993. DIS is directed to assure the cost-effective development and incremental implementation of a shared statewide video telecommunications system.

Purpose

The intensifying need to do more with less is changing the way government does business in Washington. This plan will help meet that need.

The purpose is to provide a cohesive strategic framework for Washington's successful and efficient use of video telecommunications for the delivery of education and training, teleconferencing, and information dissemination within state government. This plan outlines a structure to link and measure agency planning with the statewide vision for video telecommunications.

Ultimately, this plan will serve to improve Washington state's quality of public service and increase the productivity and effectiveness of government through the efficient use of video telecommunications technology.

Mission

Implement, by 1997, a successfully shared statewide video telecommunications system that will integrate multiple technologies and existing resources to serve the legislature, government agencies, education, and the general public.

Opportunities

Implementation of a shared statewide video telecommunications system is a key step toward increasing efficiency in government; integrating text, sound, graphics, and video, and enabling the effective use of these multimedia technologies. This technology can be used to increase access to information, improve delivery of services and education, enhance policy development and support broader state objectives. Here are some examples of how video telecommunications can be used:

ACCESSING INFORMATION

- To enable education without walls by capturing the talents of our most gifted instructors and delivering them directly to students anywhere in the state.
- To make information resources accumulated by a government agency more readily shared with other agencies and the public.
- To electronically explore society's accumulated knowledge base through libraries of digital images.

IMPROVING DELIVERY OF SERVICES AND EDUCATION

- To allow place-bound and time-bound students and employees to receive classroom instruction and degrees through satellite, cable, and other television delivery systems.
- To enhance research, health care, and every existing instructional program.
- To improve government responsiveness. Services that require letters, phone calls, or visits to government offices can be conducted through multimedia. Services can be delivered 24 hours a day, seven days a week, at convenient locations without additional government staff.

ENHANCING POLICY DEVELOPMENT

- To allow government to provide public affairs programming such as televised legislative sessions.
- To encourage direct communication between the public and the government by providing interactive town hall type forums.

SUPPORTING STATE OBJECTIVES

- Strategic Information Technology Plan — To directly support the goals and implementation of the State Strategic Information Technology Plan.
- Workforce Training — To effectively capture the sight, images, and sounds making workforce training (or retraining) more available and accessible through various modes of distribution.
- Transportation Demand Management — To offer savings of time and money as an environmentally and economically sensitive alternative to travel.

Strategies

The strategies that implement this plan are divided into four major components:

- Planning and funding
- Program development
- Human resources
- Technical infrastructure

PLANNING AND FUNDING STRATEGIES

Strategy #1: An interagency advisory committee will develop recommendations to coordinate statewide planning, implementation, and access to video telecommunications resources.

Strategy #2: Streamlined policies and procedures for video telecommunications will be developed by the Policy and Regulation Division (PRD) of DIS, with participation of the video advisory committee, for Information Services Board (ISB) approval.

Strategy #3: Methods to fund coordinated video telecommunications activities will be developed and implemented.

PROGRAM DEVELOPMENT STRATEGIES

Strategy #4: Programs that are developed and implemented by agencies and institutions that use existing video telecommunications resources will be encouraged and supported.

Strategy #5: Information dissemination to the general public, interactive public affairs presentations, and a public forum for state issues will be facilitated and supported by assuring that accessible production and distribution facilities exist.

Strategy #6: Development and support of technology-based distance education and training will be continued.

HUMAN RESOURCE STRATEGIES

Strategy #7: A "video smart culture" within state government will be cultivated, thereby creating a greater awareness of the applications for, and benefits of, video telecommunications.

Strategy #8: Continuous training for public employees will be initiated, supported, and coordinated to foster video telecommunications expertise and use.

Strategy #9: A state video telecommunications resource service will be established that provides reference data to state employees, including but not limited to: general information about state video human and physical resources, telecommunications conferences and associations, reference books, periodicals, and tapes.

TECHNICAL INFRASTRUCTURE STRATEGIES

Strategy #10: State resources will be optimized by interfacing existing and future systems, coordinating greater accessibility, and sharing resources among educational communities and state agencies.

Strategy #11: Facilities and resources will be added to the technical infrastructure, leveraging existing resources and further stimulating the efficient use of video telecommunications in response to user needs.

Strategy #12: The state's aggregate purchasing power, when utilizing common carrier circuits for video telecommunications, will be optimized (when cost effective) by consolidating backbones to reduce unnecessary redundancies and expense. PRD will examine initiatives that involve utilizing common carrier circuits in accordance with the Information Technology Budget Instructions published by DIS and the Office of Financial Management (OFM) effective with the 1993–1995 Biennium.

Linkage

The following appendices describe each strategy and supporting activities. Many of the activities are listed more than once because they support more than one strategy. Video telecommunications proposals and requests in the state should be initiated in support of these strategies and activities to ensure that efforts are focused on the implementation of Washington's statewide video telecommunications mission.

Appendices

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Appendix A

PLANNING AND FUNDING STRATEGIES AND ACTIVITIES

Strategy 1: An interagency advisory committee will develop recommendations to coordinate statewide planning, implementation, and access to video telecommunications resources.

- A Video Telecommunications Advisory Committee (VTAC) will develop recommendations to coordinate the implementation of this strategic plan. The committee will include representatives of major state-operated and educational video systems, state agencies, higher education, and the public schools. The committee is accountable to DIS and the ISB.
- Within the charter of the VTAC, specific work teams will focus on, but will not be limited to: solving access problems, sharing resources, developing quality and technical standards, planning interfaces within the technical infrastructure, identifying user needs and opportunities, and coordinating funding requests. The teams will be led by members of the VTAC and may include many individuals in addition to VTAC members.
- The benefits and improved methods of sharing video telecommunications resources within Washington will be proven through the state's demonstration projects, existing systems, and networks. The demonstration projects, systems, and networks are listed in Appendix G. (Also supports Planning and Funding Strategy #3, Program Development Strategies #4 and #6, and Human Resource Strategy #7.)
- Technical standards, including compatibility standards for emerging video telecommunications technologies, will be proposed to the ISB for adoption and implementation, and integration into the Technical Reference Guide of the Strategic Information Technology Plan. (Also supports Planning and Funding Strategy #2 and Technical Strategy #11.)

- This state strategic plan for video telecommunications will be continually improved, refined, and re-evaluated. (Supports all of the strategies.)

Strategy 2: Streamlined policies and procedures for video telecommunications will be developed by the Policy and Regulation Division of the Department of Information Services, with participation of the video advisory committee, for Information Services Board approval.

- A process that ensures agency participation in video telecommunications policy development will be established and will leverage the VTAC.
- Technical standards, including compatibility standards for emerging video telecommunications technologies, will be proposed to the ISB for adoption and implementation, and integration into the Technical Reference Guide of the Strategic Information Technology Plan. (Also supports Planning and Funding Strategy #1, and Technical Strategy #11.)
- Use of existing resources will be maximized by establishing and implementing policies that ensure sharing and making resources easily accessible. (Also supports Program Development Strategy #6, and Technical Strategy #10.)
- Connectivity with national and worldwide information infrastructures will be supported and encouraged. (Also supports Program Strategy #6, Human Resource Strategy #9, and Technical Strategy #10.)
- State master agreements for appropriate video telecommunications technologies will be established. (Also Supports Technical Strategy #11.)

Strategy 3: Methods to fund coordinated video telecommunications activities will be developed and implemented.

- Existing investment criteria will be applied, re-evaluated and revised if appropriate.

  Contract for services rather than invest in static systems. Rather than building large organizations and investing in static technical platforms, the state should contract for needed services whenever possible.

Lease rather than purchase equipment. The short technical life spans created by major changes in technology make it imperative the state not make large capital investments in equipment.

Buy equipment with a fast payback in relation to technical life cycle. Some equipment, like satellite downlink antenna dishes, should be purchased rather than leased because of "fast paybacks" and long-term applicability to video telecommunications projects.

- Cost benefit analysis for specific video telecommunications activities will be developed in accordance with requirements for funding for information technology projects as defined in the biennium operating budget instructions and the PRD feasibility study guidelines.
- Strategies and activities within this plan will be prioritized for incremental investment decisions.
- The proposals and initiatives supporting this strategic plan, and requiring legislative funding, will be fully coordinated.
- Specific work teams will be chartered under the auspices of the VTAC to focus on funding issues.
- The benefits and improved methods of sharing video telecommunications resources within Washington will be proven through the state's demonstration projects, existing systems, and networks. The demonstration projects, systems, and networks are listed in Appendix G. (Also supports Planning and Funding Strategy #1, Program Development Strategy #4 and #6, and Human Resource Strategy #7.)

Appendix B

PROGRAM DEVELOPMENT STRATEGIES AND ACTIVITIES

Strategy 4: Programs that are developed and implemented by agencies and institutions that use existing video telecommunications resources will be encouraged and supported.

- Functional and technical video telecommunications requirements will be defined for state agencies to meet identified needs and specific uses through in-depth case studies. Opportunities to implement applications among state agencies will be identified. A user-requirements database from the results of this process will be developed to facilitate sharing resources and determine needed facilities. (Also supports Program Development Strategies #5 and #6, Human Resource Strategy #7, and Technical Strategies #10 and #11.)

- The benefits and improved methods of sharing video telecommunications resources within Washington will be proven through the state's demonstration projects, existing systems, and networks. (Also supports Planning and Funding Strategies #1 and #3, Program Development Strategy #6, and Human Resource Strategy #7.)

- Statewide distribution of programming to cable television systems will be coordinated as appropriate. (Also supports Program Development Strategy #5.)

Strategy 5: Information dissemination to the general public, interactive public affairs presentations, and a public forum for state issues will be facilitated and supported by assuring that accessible production and distribution facilities exist.

- Statewide distribution of programming to cable television systems will be coordinated as appropriate. (Also supports Program Strategy #4.)

- Access to existing public, educational, and government cable channels will be coordinated for statewide distribution of programs as needed.

- Functional and technical video telecommunications requirements will be defined for state agencies to meet identified needs and specific uses through in-depth case studies. (Also supports Program Strategies #4 and #6, Human Resource Strategy #7, and Technical Strategies #10 and #11.)
- Negotiation of additional cable television channels for public agencies and institutions on a statewide level will be coordinated.
- Distribution of programming statewide, by satellite or other distribution methods, to cable television systems utilizing access and/or basic channels will be supported and encouraged. (Also supports Program Development Strategy #6.)

Strategy 6: ***Development and support of technology-based distance education and training will be continued.***

- The benefits and improved methods of sharing video telecommunications resources within Washington will be proven through the state's demonstration projects, existing systems, and networks. The demonstration projects, systems, and networks are listed in Appendix G. (Also supports Planning and Funding Strategy #3, Program Development Strategy #4, and Human Resource Strategy #7.)
- Use of existing resources will be maximized by establishing and implementing policies that ensure sharing and making resources easily accessible. (Also supports Planning and Funding Strategy #2, and Technical Strategy #10.)
- Functional and technical video telecommunications requirements will be defined for agencies to meet identified needs and specific uses through in-depth case studies. (Also supports the Program Development Strategies #4 and #5, Human Resource Strategy #7 and Technical Strategies #10 and #11.)
- In-service training within the education community will be supported. (Also supports Human Resource Strategy #8.)
- Interaction with telecommunication providers to improve access to existing systems and to improve capability to deliver state video programs directly to the home and workplace will continue. (Also supports Technical Strategy #10.)

- Connectivity with national and worldwide information infrastructures will be supported and encouraged. (Also supports Planning and Funding Strategy #2, Human Resource Strategy #9, and Technical Strategy #10.)
- Interface existing and future systems where appropriate; e.g., including the interface of the Washington Higher Education Telecommunication System (WHETS) with Satellite Telecommunications Educational Programming (STEP), Triad, and the DIS state digital transport backbone. Descriptions of systems and demonstration projects are listed in Appendix G. (Also supports Technical Strategy #10.)
- An electronic bulletin board that displays information about available programming for statewide users will be established. (Also supports Human Resource Strategy #9 and Technical Strategy #11.)

Appendix C

HUMAN RESOURCE STRATEGIES AND ACTIVITIES

Strategy 7: ***A "video smart culture" within state government will be cultivated, thereby creating a greater awareness of the applications for and benefits of video telecommunications.***

- Video-related job classifications for state personnel will be developed. (Also supports Human Resource Strategy #8.)
- Functional and technical video telecommunications requirements will be defined for agencies to meet identified needs and specific uses through in-depth case studies. (Also supports Program Development Strategies #4, #5, and #6, and Technical Strategies #10 and #11.)
- Attracting and retaining a cadre of highly skilled personnel in the video telecommunications industry will be encouraged for public agencies and educational institutions.
- Materials that clearly define and illustrate Washington's evolving video telecommunication infrastructure will be developed.
- Washington's national public image will be enhanced with regard to its successful use of video telecommunications.
- The benefits and improved methods of sharing video telecommunications resources within Washington will be proven through the state's demonstration projects, existing systems, and networks. The demonstration projects, systems, and networks are described in Appendix G. (Also supports Planning and Funding Strategies #1 and #3, and Program Development Strategies #4 and #6.)
- Public employees will be educated about video telecommunications and television techniques. Education may include such topics as basic definitions and descriptions of video telecommunications, producing events and programs, presentation

styles, downlink surveys, installations and operations, two-way videoconferencing, strategic planning for video telecommunications, and other appropriate subjects. (Also support Human Resource Strategy #8.)

Strategy 8: ***Continuous training for public employees will be initiated, supported, and coordinated to foster video telecommunications expertise and use.***

- Video-related job classifications for state personnel will be developed. (Also supports Human Resource Strategy #7.)
- Public employees will be educated about video telecommunications and television techniques. Education may include such topics as basic definitions and descriptions of video telecommunications, producing events and programs, presentation styles, downlink surveys, installations and operations, two-way videoconferencing, strategic planning for video telecommunications, and other appropriate subjects. (Also supports Human Resource Strategy #7.)
- In-service training within the education community will be supported. (Also supports Program Development Strategy #6.)

Strategy 9: ***A state video telecommunications resource service will be established that provides reference data to state employees, including but not limited to: general information about state video human and physical resources, telecommunications conferences and associations, reference books, periodicals and tapes.***

- A detailed inventory database of video telecommunications resources will be developed and maintained. (Also supports Technical Strategy #10.)
- A user-requirements database will be developed from the results of defining functional and technical video telecommunications requirements to meet identified needs. This user database will be coordinated with the inventory database to facilitate shared use of state resources.

- An electronic bulletin board will be established to display information about available programming for statewide users. (Also supports Program Development Strategy #6 and Technical Strategies #10 and #11.)

- Integration of the information resource service with existing information dissemination structures, such as libraries, educational service districts and college media centers, will be encouraged and supported.

- Connectivity with national and worldwide information infrastructures will be supported and encouraged. (Also supports Planning and Funding Strategy #2, Program Development Strategy #6, and Technical Strategy #10.)

Appendix D

TECHNICAL INFRASTRUCTURE STRATEGIES AND ACTIVITIES

Strategy 10: ***State resources (including satellite origination and downlink sites, microwave systems, the state backbone, and cable television channels) will be optimized by interfacing existing and future systems, coordinating greater accessibility, and sharing resources among educational communities and state agencies.***

- Interface existing and future systems where appropriate; e.g., including the interface of WHETS with STEP, Triad, and the DIS state digital transport backbone. Descriptions of systems and demonstration projects are listed in Appendix G. (Also supports Program Development Strategy #6.)
- A detailed inventory database of video telecommunications resources will be developed and maintained. (Also supports Human Resource Strategy #9.)
- An electronic bulletin board that displays information about available programming for statewide users will be established. (Also supports Program Development Strategy #6, Human Resource Strategy #9, and Technical Strategy #11.)
- Functional and technical video telecommunications requirements will be defined for state agencies to meet identified needs and specific uses through in-depth case studies. (Also supports Program Development Strategies #4, #5, and #6, Human Resource Strategy #7, and Technical Strategy #11.)
- Use of existing resources will be maximized by establishing and implementing policies that ensure sharing and making resources easily accessible. (Also supports Planning and Funding Strategy #2, and Program Development Strategy #6.)
- Interaction with telecommunication providers to improve access to existing systems and to improve capability to deliver state video programs directly to the

home and workplace will continue. (Also supports Program Development Strategy #6.)

- Connectivity with national and worldwide information infrastructures will be supported and encouraged. (Also supports Planning and Funding Strategy #2, Program Development Strategy #6, and Human Resource Strategy #9.)

Strategy 11: ***Facilities and resources will be added to the technical infrastructure in response to user needs, leveraging existing resources and further stimulating the efficient use of video telecommunications. (Example: A land-based videoconference network could utilize the existing DIS state digital transport backbone.)***

- The technical infrastructure will be augmented by incrementally rolling out compressed digital videoconferencing as needed for community and technical colleges, educational service districts, K-12, the six public four-year institutions and the balance of state government, leveraging existing resources where appropriate and cost-effective, i.e., the DIS state digital transport backbone. (Also supports Technical Strategy #12.)

- Affordability and accessibility will be ensured as compressed digital videoconferencing is incrementally launched by different state entities. (Also supports Technical Strategy #12.)

- Explore the feasibility of an Olympia production facility with satellite origination capabilities to state downlinks and cable television distribution.

- State master agreements for appropriate video telecommunications technologies will be established. (Also supports Planning and Funding Strategy #2.)

- An electronic bulletin board that displays information about available programming for statewide users will be established. (Also supports Program Development Strategy #6, Human Resource Strategy #9, and Technical Strategy #10.)

- Technical standards, including compatibility standards for emerging video telecommunications technologies, will be proposed to the ISB for adoption and implementation and integration into the Technical Reference Guide of the Strategic Information Technology Plan. (Also supports Planning and Funding Strategies #1 and #2.)

- Future applications and emerging technologies, including demonstration projects on video-to-the-desktop and multimedia, will be explored.
- Functional and technical video telecommunications requirements will be defined for state agencies to meet identified needs and specific uses through in-depth case studies. (Supports Program Strategies #4, #5, and #6, Human Resource Strategy #7, and Technical Strategy #10.)

Strategy 12: ***The state's aggregate purchasing power, when utilizing common carrier circuits for video telecommunications, will be optimized (when cost effective) by consolidating backbones to reduce unnecessary redundancies and expenses. PRD will examine initiatives that involve utilizing common carrier circuits in accordance with the Information Technology Budget Instructions published by DIS and OFM effective with the 1993–1995 Biennium.***

- DIS state digital transport backbone will offer bandwidth-on-demand and keep pace with emerging technical capabilities.
- The technical infrastructure will be augmented by incrementally rolling out compressed digital videoconferencing as needed for community and technical colleges, educational service districts, K–12, the six public four-year institutions, and the balance of state government, leveraging existing resources where appropriate and cost-effective, i.e., the DIS state digital transport backbone. (Also supports Technical Strategy #11.)
- Affordability and accessibility will be ensured as compressed digital videoconferencing is incrementally launched by different state entities. (Also supports Technical Strategy #11.)

Appendix E

LEGISLATIVE INTENT

Enabling legislation (Chapter 43.105 RCW) for the Department of Information Services (DIS) establishes powers and duties given to the Information Services Board (ISB), which include the charge to assure the cost-effective development and incremental implementation of a shared statewide video telecommunications system to serve: state agencies, public schools, educational service districts, community and technical colleges, universities, state and local governments, and the general public through public affairs programming.

- The intent of the legislature is further established by including provisions that state government use video telecommunications technologies to:
  —Provide for interactive public affairs presentations, including a public forum for state issues.
  —Enhance statewide communications within and between state agencies.
  —Transmit and increase access to live and/or interactive classroom instruction.
  —Facilitate communications and exchange of information among state and local elected officials and the general public.
  —Reduce time loss due to travel to in-state meetings.
- Chapter 43.105, RCW, further directs DIS to adopt policies and procedures that maximize use of existing video telecommunications resources, to coordinate and develop video telecommunications in a manner that is cost-effective, encourages shared use, and ensures the appropriate use of video telecommunications to fulfill identified needs. DIS will negotiate with local cable companies and local governments to provide for connection to local cable services to allow access to public and educational channels in the state.

Appendix F

BUDGET PROVISO

In 1989 the legislature designated the Department of Information Services to be the lead agency in coordinating video telecommunications services for state agencies, higher education, and K-12 education. This designation appears in the 1989–1991 and 1991–1993 biennial budgets.

Appendix G

STATE VIDEO TELECOMMUNICATIONS DEMONSTRATION PROJECTS, DOWNLINK NETWORKS, AND SYSTEMS

Triad Video Telecommunications Demonstration Project:

This is a collaborative project that was initially funded by the 1990 Legislature bringing together public schools, state agencies, and higher education to demonstrate the benefits of sharing video telecommunications resources. An "electronic classroom" was constructed for live interactive productions. The classroom is linked by fiber optics to a satellite uplink (transmission equipment).

Located on the campus of Bellevue Community College, Triad facilities provide video production services, with access to satellite broadcast and cable distribution capabilities. The service is interactive—video and audio are broadcast and receiving locations respond with audio. This state-funded facility started producing and transmitting student and teacher in-service courses during the 1991-1992 academic year.

The project started with representatives from the Community and Technical College Board, the Higher Education Coordinating Board, the Office of the Superintendent of Public Instruction, and DIS. Additional collaborative support is provided through the Communications Technology Center for Washington Community and Technical Colleges (CTC), Puget Sound Educational Service District, Bellevue Community College, Educational Service District 101, and the University of Washington (UW).

Beginning July 1, 1992, CTC and DIS assumed joint funding and management responsibilities for the project for a one year period during which time the future of the Triad Project will be determined.

Community and Technical Colleges Downlink Network:

The community and technical colleges satellite downlink network includes 32 receiving sites statewide. Network management is provided by the Communications Technology Center (CTC). The CTC downlink network serves as a vital state distribution system, particularly for the Triad Project.

Washington State University Cooperative Extension Service Downlink Network:

The Cooperative Extension Service of Washington State University (WSU) has installed satellite downlinks in each county extension location, including 39 sites statewide.

Satellite Telecommunications Educational Programming/Star Schools System (STEP/STAR):

This satellite-based operation was first launched by Educational Service District 101 in 1986, as the Satellite Telecommunications Education Program (STEP), to provide foreign language classes as well as advanced placement math and English classes to rural school districts in the state of Washington.

The Pacific Northwest Star Schools Partnership was later formed including Washington, Idaho, Montana, Oregon, and Alaska. This provided federal funding which helped the project expand from 13 Washington sites to over 724 sites in 14 states. The STEP/STAR system includes a downlink network in Washington state of more than 170 receiving sites.

Western Connect Demonstration Project:

This is a satellite-based training project through Western Washington University under contract for the Department of Social and Health Services (DSHS). With origination capability in Spokane and Tacoma, there are satellite-receiving stations at 23 community field offices across the state. The federally funded pilot program launched in January 1992, airing 30 hours of programming monthly. Production and portable uplinking support is provided by Bates Technical College/KTPS.

Washington Higher Education Telecommunication System (WHETS):

The Washington Higher Education Telecommunication System (WHETS), launched in 1985, is a microwave system operated by Washington State University (WSU) for the purpose of providing university courses and teleconferences. The system connects the main Pullman campus with the University of Washington (UW) in Seattle as well as WSU branch campuses in Spokane, Vancouver, and the Tri-Cities. A WHETS site will be on-line in Wenatchee by late 1992. WHETS is being upgraded with digital microwave circuits, adding much-needed channel capacity.

The DIS Compressed Digital Videoconference Pilot Project:

This land-based system, using compressed digital video technology for two-way videoconferencing, began service in1993. This service is offered by the DIS Telecommunications Services Division and provides a beneficial video link between Olympia and Spokane. Through the process of developing this service, a state master agreement for videoconference equipment has been established.

Appendix H

GLOSSARY OF TERMS

ACCESS CHANNEL. A local cable television channel programmed by community individuals or groups.

BACKBONE. The part of the telecommunications network which carries the heaviest traffic. In video telecommunications this is typically the terrestrial transmission path. On a campus the backbone includes the wiring between buildings. In a building, the backbone consists of the cables that vertically link telecommunications closets ("riser" cables in multistory buildings).

BANDWIDTH. The amount or "width" of the spectrum resource being used. The higher the speed of information flow, the more bandwidth is needed. Video, for example, when transmitted in standard television format, requires much more bandwidth than audio—by a factor of over one thousand.

BASIC CABLE CHANNEL. A channel that is often advertiser-supported, for which the subscriber does not pay an extra fee or premium.

CABLE TELEVISION. A franchise for distributing television broadcast signals to homes and businesses using coaxial cable technology. Most systems are one-way, with the cables and signals emanating from a central site or "headend" that receives programs either "over-the-air" or via satellite. To obtain the franchise during competitive bid, most operators agree to reserve one or more channels for local programming use. Local programming channels are designated for public, education, or government use. Those channels are frequently referred to as PEG channels.

COMMON CARRIER CIRCUITS. Transmission facilities provided by local and long distance telephone companies.

COMPRESSED DIGITAL VIDEOCONFERENCING. A video and audio signal transmitted digitally over telephone lines.

DISTANCE EDUCATION. Delivery of learning to students who are geographically separated from their instructors. Techniques include the use of video and audio technologies as well as print-based materials.

FEASIBILITY STUDY. A structured, modular, analytical process to facilitate crucial decision making during the early stages of an information technology project.

INFORMATION DISSEMINATION. Delivering knowledge "outward" via one-way media, usually from a single source to a very large number of recipients.

IN-SERVICE TRAINING. Job training for a person to improve performance in their current service. The phrase is often used in reference to teacher training.

MICROWAVE. A generic term for a specific portion of the electromagnetic spectrum. The term is frequently used to denote terrestrial or land-based radio systems, such as WHETS, and to distinguish these ground-based systems from satellite systems.

MULTIMEDIA. The digital integration of text, sound, graphics, and video.

PRODUCTION FACILITY. The space and equipment necessary to produce a television program, i.e., studio or electronic classroom, cameras, microphones, mixing and editing equipment.

SATELLITE. A spacecraft, positioned 22,300 miles above the earth in a geosynchronous orbit, that is capable of both receiving and sending television signals.

SATELLITE DOWNLINK. An earth station that can only receive signals "sent down" from satellites. Also referred to as satellite antenna, receive sites, and dishes.

SATELLITE ORIGINATION SITE. A facility with the capability of transmitting a television signal to a satellite, or "uplinking" to a satellite.

VIDEO SMART CULTURE. A society that understands the benefits, applications and basic technical information about video telecommunications.

VIDEO TELECOMMUNICATIONS. The electronic interconnection of two or more sites for the purpose of transmitting and/or receiving visual and associated audio information.

DIS

State of Washington
Department of Information Services
Brad Blancard, Director

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