

HB

402

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: Applied Telecommunications Center

Agency Affected: University of Alaska
BRU: _____

Sponsor: Red Boucher
Requestor: House Finance Committee

Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	440.8	544.3	544.3	544.3	544.3	544.3
TRAVEL	25.0	25.0	25.0	25.0	25.0	25.0
CONTRACTUAL	98.0	288.0	288.0	288.0	288.0	288.0
SUPPLIES	43.0	43.0	43.0	43.0	43.0	43.0
EQUIPMENT	333.5	40.0	40.0	40.0	40.0	40.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	940.3	940.3	940.3	940.3	940.3	940.3
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND	940.3	940.3	940.3	940.3	940.3	940.3
FEDERAL FUNDS	59.7	59.7	59.7	59.7	59.7	59.7
OTHER						
TOTAL	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

See attached.

Prepared by: House Finance Committee

Phone: 465 - 3757

Division: Co-Chairman Ron Larson *Ronald Larson*

Date: _____

Approved by Commissioner Lyman Hoffman

Date: _____

Agency: _____ *Lyman Hoffman*

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

<u>GIS(UAF)</u>	<u>YEAR 1</u>	<u>YEAR 2 & THEREAFTER</u>
1 Faculty	66.0	66.0
1/2 Time Technician	15.0	15.0
Equipment Maintenance	10.0	10.0
Start-up GIS Equipment (2 GIS workstations)	50.0	-0-
Commodities	<u>2.0</u>	<u>2.0</u>
Subtotal GIS-UAF	146.0	96.0
 <u>GIS(UAA)</u>		
1 Faculty/Analyst	59.0	59.0
Faculty Support Staff	50.0	50.0
Equipment Maintenance	25.0	25.0
Commodities	<u>5.0</u>	<u>5.0</u>
Subtotal GIS-UAA	139.0	139.0
 TOTAL	 940.3	 940.3

GIS components for both UAF and UAA will be transferred into and accounted for as part of departmental budgets and not as part of the continuing center operations.

HB 402 BUDGETS

<u>ITEM</u>	<u>YEAR 1</u>	<u>YEAR 2 & THEREAFTER</u>
A. Center Staff (UAA)		
Director	85.0	85.0
Administrative Assistant	36.0	36.0
Info. Resources Manager	50.0	50.0
Secretary	24.0	24.0
B. Research Fellows		
Visiting Research Fellow	55.8	70.0
Jr. Research Fellows	-0-	60.0
Student Assistants	-0-	4.3
Interviewers for Special Projects	-0-	25.0
C. Equipment		
Office Equipment	150.0	-0-
9 Station LAN System	13.5	-0-
Remote CAD/GIS Workstation	25.0	-0-
D. Maintenance		
Computer Equip. Maintenance	15.0	15.0
E. Contract Research		
Funds to target specific studies	-0-	100.0
F. Commodities	33.0	33.0
G. Travel	25.0	25.0
H. Space Rental	48.0	48.0
I. Software Development/Equipment	<u>95.0</u>	<u>40.0</u>
Subtotal CIT (UAA)	655.3	705.3

FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: Applied Telecommunications
Center
 Sponsor: Boucher
 Requestor: _____

Agency Affected: _____
 BRU: _____
 Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
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REVENUE	-0-	-0-	-0-	-0-	-0-	-0-
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FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

Please refer to HB 403, which is an appropriation bill for an Applied Telecommunications Center.

Prepared by: House State Affairs Committee Phone: 465-4963
 Division: _____ Date: Feb 02, 1990
 Approved by Commissioner: H. A. "Red" Boucher, Chair Date: Feb 02, 1990
 Agency: _____

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

FISCAL NOTE

CC

REQUEST:

Revision Date: _____
 Title: Applied Telecommunications Center

Agency Affected: Administration
 BRU: Information Services

Sponsor: Rep. Boucher
 Requestor: State Affairs

Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
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REVENUE	0	0	0	0	0	0
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FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

See Attached.

Prepared by: Paul Monette, Director
 Division: Information Services

Phone: 465-2220
 Date: 01/22/90

Approved by Commissioner: Frank S. Baxter
 Agency: Administration

Date: 1/25/90

Distribution (by preparer) :

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Department of Administration
Division of Information Services

HB 402 - - FISCAL NOTE

*An Act Relating to Center For Information Technology
at the University of Alaska, Anchorage*

HB 402 is not expected to have any fiscal impact on the Division of Information Services, either during FY 90 or in succeeding fiscal years.

STATE OF ALASKA
THE LEGISLATURE

POUCHY, STATE CAPITOL
JUNEAU, ALASKA 99811
907 465 3800

LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

April 29, 1990

SUBJECT: Funding of the Center for Information
Technology (CSHB 402 (SA))

TO: Senator Tim Kelly
President of the Senate

FROM: Teresa B. Cramer *TBC*
Legislative Counsel

You have asked whether the legislature could reappropriate money from the endowment of the Science and Technology Foundation to the Center for Information Technology created by CSHB 402 (SA). In my opinion, the answer is yes.

Under AS 37.17.020(a), the endowment of the foundation consists of money appropriated to it by the legislature. As long as this money has not been encumbered or spent, it is available to the current legislature through a reappropriation. The initial appropriation from the general fund to the foundation was made in sec 290, ch. 173, SLA 1988. In the reappropriation bill last year the legislature attempted to reappropriate money from the foundation, but the governor vetoed the section. See sec. 196, ch. 117, SLA 1989.

If I may be of further assistance, please advise.

TC:lmb
L10/092



APR 2 1990

Representative H.A. "Red" Boucher

Chairman House Committee on State Affairs • Special Committee on Telecommunications
Member Labor & Commerce Committee • Chairman Commission on the Future of the Permanent Fund

MEMORANDUM

TO: Senator Paul Fischer

FROM: Representative H.A. "Red" Boucher

RE: **HB 402: Center For Information Technology**

HB 402 establishes a **university-wide Center for Information Technology**.

- All University of Alaska campuses support this legislation;
- The Center creates a multi-disciplinary program bringing information sciences to students in a number of interrelated fields. That means more students can remain in Alaska, and that means more support goes to our university system;
- The Center brings together the expertise that exists within the university system; it does not "build" a center, rather it brings minds together to find solutions to Alaska's information needs;
- Alaska's economy must develop essential infrastructure to compete nationally and internally; the private sector and government will look to the university system for leadership and resources - the Center can provide both; and
- The state has an enormous investment in information technology; that investment can be enhanced by the Center bringing new ideas and expertise in the management of that technology.

The attached "Backgrounder" gives an indication of the excellent interest in information technology, I hope you find it informative.

I would appreciate your consideration in scheduling this legislation.

Thank you.



Backgrounder

BG039001

States Information Center
The Council of State Governments
Iron Works Pike
P.O. Box 11910
Lexington, KY 40578-1910
(606) 231-1939

Date: March, 1990
Topic: TELECOMMUNICATIONS AND ECONOMIC DEVELOPMENT
Infokey: Communications

TELECOMMUNICATIONS AND STATE ECONOMIC DEVELOPMENT

Introduction

According to a report by the Council of State Governments on economic development, better information and better information delivery¹ systems determine whether a state survives in the growing global economy. Several state government-sponsored studies have identified telecommunications as an important economic development issue. This has prompted a number of states to take action to attract telecommunication-reliant businesses and create telecommunications infrastructure.²

Background

In the past, companies generally checked to be sure that the local phone company had the capacity to handle a projected level of voice communications traffic when relocating. However in today's business climate, companies depend as much on data as voice transmissions. Technological advances, declining unit costs, and federal regulatory policies have all contributed to a rise in the importance³ of telecommunications infrastructure in business expansion decisions.

Telecommunications is being transformed from a simple basic service, a telephone in every house, into a piece of economic development infrastructure as vital as roads or schools. "It's becoming increasingly obvious," says Richard Silkman, Maine's planning director, "that if you don't have a sound telecom system, you can be shut out of economic development opportunities."⁴

Role of Telecommunications in Economic Development

Company managers select site locations where advanced digital telecommunication services are offered. The electronic information industry is growing at an annual rate of 20 percent and is more likely to locate in areas

*This CSG Backgrounder was compiled by Simani Price, Research Assistant, Management and Administration, CSG Headquarters Office.

Note: *Backgrounder* information is the latest available at the time of publication, but for updates, you should contact the appropriate state or federal agency directly. This material does not represent the position of The Council of State Governments. Information is included based on relevance to the topic. Some material, as noted, is copyrighted and may not be reproduced further without permission of the original publisher. Contact the States Information Center or the writer at CSG.

CSG Backgrounder -- Communications

where advanced telecommunications services already exist. However, telecommunications growth in a state is determined by the demand for these services in the state. The role of state governments is to create a demand for these telecommunications services.

Building a mass of communications-intensive enterprises in a state is a key to gaining an economic development advantage. State governments can use state activities to promote the development of telecommunications-reliant applications. States should look for applications which:

- provide state government agencies with opportunities to deliver and manage government services more effectively;
- allow private information-related businesses the opportunity to repackage, add value, and sell state government information; and
- focus on building a base of state government-related telecommunications intensive applications so that advanced digital networks will be introduced in a number of locations throughout the state.

Electronically filing and transferring high-volume transactions such as invoices, purchase orders, and tax forms are ways states can promote advanced telecommunications. In using automated technology, a demand for a telecommunications infrastructure can be created. This in turn can promote other telecommunications-intensive firms to expand their services in the state.

State Activities

States can initiate joint ventures with universities and the private sector to encourage economic development. One such example is the University of Louisville and South Central Bell's joint public/private partnership in the development of a new Telecommunications Research Center in Kentucky. The Kentucky Economic Development Cabinet assisted by providing the financial resources to initiate this project. The University is providing a building, furnishings, faculty and staff involvement, graduate assistants and student participation. South Central Bell assists by providing the funding to maintain the center. The new facility became operational in January 1990, and is designed to:

- offer opportunities for interdisciplinary research in the development and application of telecommunications technology;
- provide a telecommunications infrastructure in the state, which is the key to the economic growth and development of for the area; and

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- stimulate economic development in Kentucky for high technology firms.

The Buffalo County Economic Development Council in Nebraska thought that telecommunications was significant enough to invest \$36,000 into luring a branch of WATS Marketing, a large Omaha telemarketing firm owned by American Express, to Kearney. The WATS effort will do more than provide a few \$4.50 per hour jobs. It will occupy a downtown building and provide an internship program for the telecommunications degree now taking on a marketing flavor at Kearney State College. The presence of WATS has brought in MCI as a long-distance carrier. The result is thousands of jobs for people who are willing to sell things over the phone or take orders on 800 numbers. The pay ranges from about \$8 an hour in Omaha to \$4.50 in smaller towns.

Rural communities can especially benefit from a telecommunications infrastructure in the state. In Colorado, a joint project by U S WEST and the Small Business Administration (SBA) has created "information gateways" in remote towns. These gateways are electronic connections between rural areas and larger cities that enable business in small towns to communicate with vendors and clients around the world. Gateways provide information to rural communities and create opportunities for existing firms to be more productive by accessing market information, consultants and orders from anywhere in the United States.¹⁰ State governments can enter into joint ventures with the private sector to provide rural communities with funds to initiate such projects. Faxes, modems, and low-cost long distance service can make rural businesses more competitive vis-a-vis urban counterparts by allowing them to take advantage of low rural wage scales and still provide good service to customers. Farmers now use desktop computers and modems to track commodities prices.¹¹

The Appalachian Computer Services (ACD) in London, Kentucky is another example of a rural community that is competitive nationally through the use of advanced telecommunications. This firm handles credit card data processing for banks in Atlanta, Oakland, Philadelphia and San Francisco. It also provides services to the U.S. Department of Immigration and to many major companies. The information is transmitted from rural Kentucky to clients around the country through fiber optic phone lines.¹² One of the reasons it has succeeded is through grants and low interest loans from the Kentucky Development Finance Authority over the years. According to Bill Denton, ACD's executive director, ACD was able to provide 300 jobs in Monticello, Kentucky because of loans from the state. ACD now has offices nationally but the headquarters remains in London, Kentucky.

The Iowa Network Service, which began operation in May, 1989, is an 850-mile fiber optic system owned by 128 of the state's 170 rural phone companies. Long-distance calls on the network pass through a single digital switching facility. "We watched our urban neighbors get multiple (long-distance) carriers, who were not coming to small communities. We decided one way to attract them was to concentrate rural Omaha telemarketing firms to branch out into rural areas," says Ken Lien, manager of the Winnebago Telephone Cooperative in Lake Mills, Iowa.¹³ The state of Iowa along with the Rural Telephone Finance

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Cooperative assisted in this venture by providing short term loans. The state will be using the fiber optic system to provide state educational programs. According to Ken Lien, several jobs have been created in rural communities by the creation of the network.

State Legislative Impacts

State governments need to be more active in providing rural communities with access to telecommunications. Deregulating the Bell operating companies and providing a more favorable legislative atmosphere is not enough to promote a telecommunications infrastructure in the states. "There is a concern that simply relieving the constraints on the Bell operating companies doesn't have the impact on development policy that we would like unless we have some guidelines to go with that," says Heather E. Hudson, co-author of Rural America in the Information Age.¹⁴ Rural communities are only marginally benefiting from the new technology.

Large, urban businesses generate most of the telecommunications revenue, and that lucrative market remains the focus of a fiercely competitive battle among the Baby Bells, the long-distance companies and a host of more specialized telecom companies.¹⁵

For example, under Nebraska law the Bell operating companies do not have to make any investments in return for reduced prices. In Kearney, Nebraska (population 23,000) EMRG (Electronic Marketing Resource Group) provides software, consulting and data processing services for college financial aid offices and controls 40 percent of the national market. EMRG overwhelms the capacity of the local GTE phone system to connect it to the outside world. It was not designed to handle the demands of a high-volume telecommunications company. In order to connect with long-distance switches 40 miles away in Grand Island, GTE must rely on lines owned by US WEST. However, deregulation did not induce US WEST to expand the capacity of those lines. US Sprint's high-capacity transcontinental line runs two blocks from EMRG, but Sprint wouldn't hook Kearney up to get a customer with a phone bill of "only" \$80,000.¹⁶

Fortunately, Cabela's, a phone order catalog house that handles two million calls a year already was located in Kearney. Cabela's persuaded AT&T to create a direct link between Kearney and the Grand Island switches, bypassing the GTE exchange. As a result, EMRG will be able to piggyback on Cabela's operation.¹⁷

To avoid problems as the one in Nebraska, state regulators have begun incorporating economic development concerns into their dealings with "Baby Bells". In Vermont, the public utilities commission completely deregulated New England Telephone & Telegraph Co.'s prices on all new and advanced services. In return, New England Tel, a subsidiary of NYNEX, agreed to freeze its local basic-service rates for five years and committed itself to a \$280 million capital improvement schedule that will completely digitize even the most remote areas.¹⁸

A study headed by former Gov. Robert Kerry of Nebraska and prepared by

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the Council of State Policy and Planning Agencies (CSPA) concludes that states need to overhaul the way they tax and regulate telephone companies. State governments should consider either subsidizing or providing service directly if small private telephone companies cannot afford telecommunication services in rural areas. The report suggests that governors and state policy makers should play a more active role in shaping telecommunications policy instead of relying on their regulatory commissions to express the state's view on national telecommunications policy. In the past, regulatory commissions have primarily been concerned with the short-run effects of preserving minimum monthly residential charges rather than promoting economic development.¹⁹

Federal Action

In August 1989, the U.S. Senate passed the Rural Partnerships Act. A section of the bill calls for strengthening the lending programs for rural telephone co-ops through the Rural Electrification Administration (REA). The REA now lends about \$238 million a year to telephone companies for capital improvements. According to the Aspen Institute independent phone companies that borrow from REA have used the funds in part to convert 34 percent of their access lines to digital switches, compared to 29 percent for Bell companies. The Senate bill also promotes linking small rural schools and hospitals with central facilities that boast larger staffs and newer equipment.²⁰

Bell Systems and Rural Development

Recently Bell of Pennsylvania through its parent company, Bell Atlantic, sought court approval to allow gateway services access to rural communities through one central processor. Currently Bell operating companies inter-exchange services are prohibited. A gateway would allow different networks to interface with each other. Rural communities would have access to important up-to-date economic information. Bell of Pennsylvania proposed a central processor in the Philadelphia LATA (LATA is an acronym for Local Access Transport Area, which is identical to a Standard Metropolitan Statistical Area. LATAs were created as a result of the AT&T divestiture to designate geographical areas where Bell operating companies can provide service) 21,22 the Philadelphia processor would be connected with gateway equipment in the remaining four Pennsylvania LATA'S, instead of using separate processors in each of the five LATA'S in Pennsylvania.²³

Bell Atlantic has stated that using a single centralized processor will make gateway service a reality sooner than otherwise would be possible. In addition, the use of one processor instead of five, will result in cost savings making gateway services more affordable.²⁴ Access to a wide variety of information would be possible, including:

- current economic and demographic statistics;
- directories of state business development programs;
- foreign trade opportunity leads;

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- current economic and demographic trend briefs, and
- listings of local economic development organization.²⁵

However, MCI filed objections that this was an unauthorized offering of long distance service through inter-LATA transmission. Inter-exchange carriers are regulated at the federal level and Harold Greene, first district court judge in the District of Columbia, ruled in favor of MCI. Judge Greene presided over the antitrust trial involving the divestiture of AT&T in 1982 and his decision regarding inter-LATA transmission will effect all the states. Regarding Bell Atlantic's proposal in January of 1989, Judge Green wrote:

"..the Court emphasized shortly thereafter that it was not in any way modifying the interexchange prohibition in the transmission of information services. Moreover, the Court has emphasized again and again the reasons for guarding against the erosion of the interexchange restriction. That is what is, at bottom involved here."²⁶

Conclusion

State agencies can promote telecommunications by becoming a larger consumer of advanced telecommunications. If state governments became a consumer of advanced telecommunications not only would efficiency and effectiveness be increased, a market would be created for the advanced telecommunications industry in the state. Joint ventures with the private sector and state universities in telecommunications can promote technology throughout the state and economic development opportunities. The burden of the initial investment is also distributed through joint ventures. States can also seek legislation that would deregulate the telephone companies, but with explicit guidelines incorporated in the legislation to expand phone line to rural areas. Advanced telecommunications is filling in the information gap to key players in economic development.

NOTES

1. Lee Walker, "The Changing Arena: State Strategic Economic Development" Economic Development in the States Part 2, Council of State Government, pp. 14-16.
2. Garry Powers, "Telecommunications and Economic Development Southern Growth Policies Board Alert: Analysis of Emerging Issues, July 1987, pp. 1-3.
3. Powers, pp. 1-3.
4. William Fulton, "Getting the Wire to the Sticks," Governing, August 1989, pp. 34-36.
5. Powers, pp. 1-3.

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6. Ibid.
7. Ibid.
8. Paper presented by Dr. Robert L. Moore, Vice President for Information Technology, "The University of Louisville Telecommunications Research Center," July 24, 1984, p.2. Judi
9. Fulton, pp. 34-36.
10. Hackett, "Hi-tech Goes Country," State Government News, September 1989 p.14.
11. Fulton, pp. 34-35.
12. Hackett, p 14.
13. Fulton, pp. 36-39.
14. Ibid.
15. Ibid.
16. Ibid.
17. Ibid.
18. Ibid.
19. Powers, p. 5.
20. John Vanvig, "Senate Approves Rural Development Measure", Rural Electric News Service, September, 1989, p. 15.
21. North American Telecommunications Association, Industry Basics: Introduction to the History, Structure, and Technology of the Telecommunications Industry. 3rd edition. (Washington D.C.: North American Telecommunications Association, 1989), p.72.
22. Powers, p. 9.
23. Bell Atlantic Reply In Support of its Motion For a Declaratory Ruling on Gateway Services. (November 2, 1988) ("Bell Atlantic Motion"), pp. 1-10.
24. Bell Atlantic, pp. 1-10.
25. Letter from Robert W. Surridge, Director Penn State Data Center to Nancie A. Moebius, Division Manager at Bell Atlantic. October 19, p. 1.
26. Opinion, United State District Judge Harold Greene, January 23, 1989, p.16.
Price -- \$5.00,
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