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1992-93 Proposed Biennial Budget



Post-Secondary Education

Presented by
GOVERNOR ARNE CARLSON
to the
77th LEGISLATURE
STATE OF MINNESOTA

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Errata
1992-93 Executive Budget Summary

Page 7, line 18: reference to "Minnesota Family Involvement Plan" should read "Minnesota Family Investment Plan" (MFIP).

Page 22: Table 5. Proposed 1992-93 Budget and 1994-95 Baseline, displayed incorrect fiscal data for the 1994-95 biennium. The 1994-95 expenditure number should read "15,024"; the correct ending balance should be " \$575 " (million). A corrected table is reproduced below:

Table 5. Proposed 1992-93 Budget and 1994-95 Baseline (millions)

	General Fund Budget			
	FY1992	FY1993	Biennium 1992-93	Biennium 1994-95
Total Revenues	\$7,204	\$7,381	\$14,585	\$15,599
Total Expenditures	<u>7,413</u>	<u>7,168</u>	<u>14,581</u>	<u>15,024</u>
Ending Balance	(209)	213	4	575
Budget Reserve	550	550	550	550

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1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: HIGHER EDUCATION COORDINATING BOARD

PROGRAM

PAGE

Financial Services to Students

12

Coorination, Planning and Institutional Services

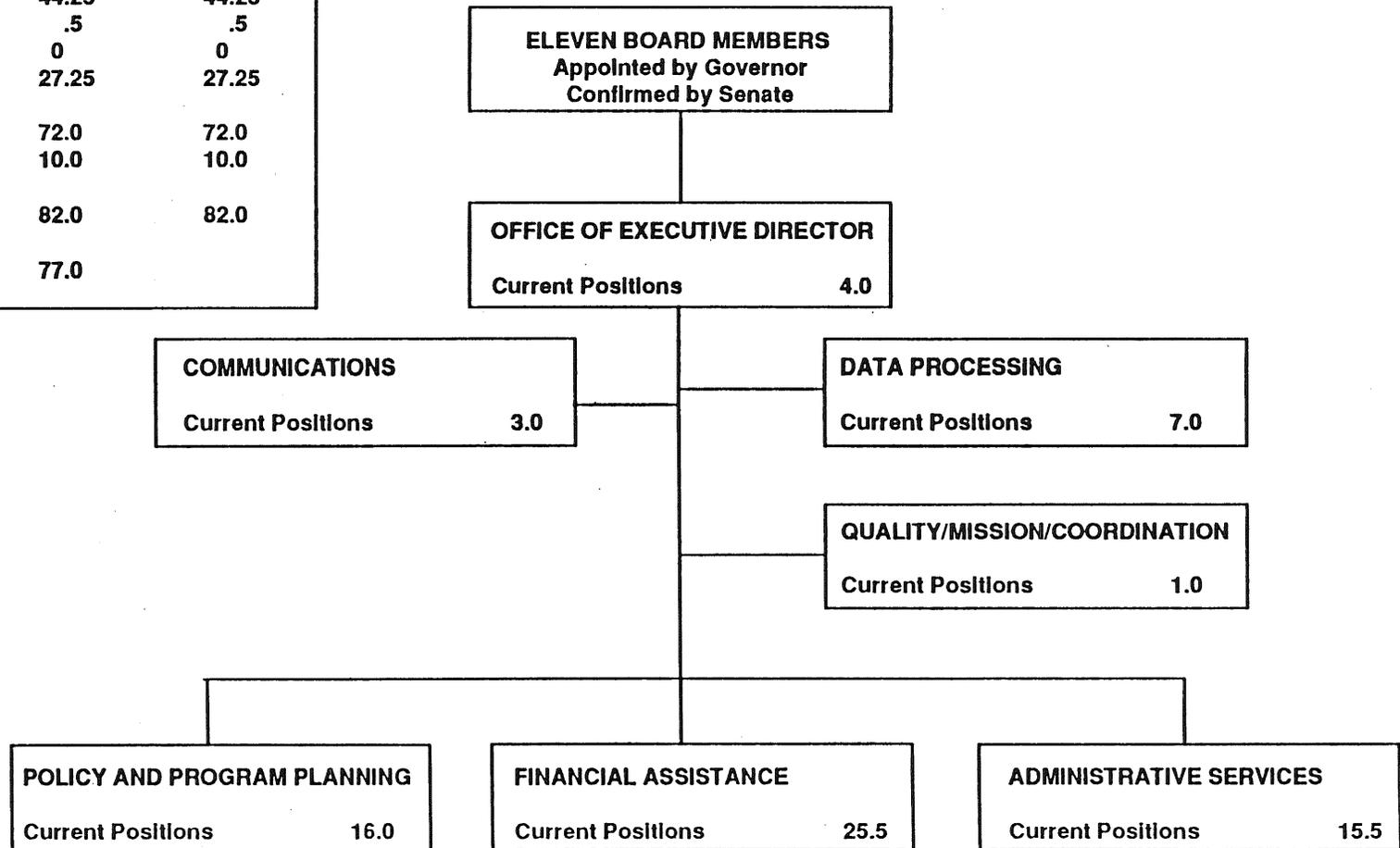
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General Reducation

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HIGHER EDUCATION COORDINATING BOARD ORGANIZATION CHART 11/1/90

Position Reconciliation		
Authority	Current F.Y. 1991	Requested for 6/30/91
Legislative Authority		
General Fund	44.25	44.25
Federal	.5	.5
Special Revenue	0	0
Bond Fund	27.25	27.25
Total Permanent Positions	72.0	72.0
Other Complement	10.0	10.0
Total Authorized Positions	82.0	82.0
Employees on 6/30/90	77.0	



MISSION:

The primary purposes of the Minnesota Higher Education Coordinating Board are to:

- facilitate meeting the needs of Minnesota residents for post-secondary education effectively and with appropriate economy of effort and resources;
- represent the state's interest in post-secondary education; and
- foster improved performance in meeting the state's responsibility for education beyond the secondary school level.

The primary goal of the Coordinating Board is to promote access and quality within the resources made available for post-secondary education. The Board accomplishes this by fostering cooperation and coordination among public and private post-secondary education providers and by providing a continued statewide and long range planning perspective to post-secondary education in Minnesota.

Primary functions through which the Board fulfills its purposes and responsibilities are:

- coordination of post-secondary systems and institutions, with particular emphasis on assuring that the total post-secondary education system provided in the state responds to the needs of students and communities without unwarranted duplication of effort;
- planning, which includes assessments of the status and performance post-secondary education, adoption of realistic and responsive goals and objectives, projection of educational needs and student enrollments, and analysis of alternative methods for meeting the post-secondary needs;
- formulation and advocacy of state policies that reflect the state's responsibility for post-secondary education and provide a realistic frame of reference to guide the actions of the governor, the legislature, and the institutional governing boards;
- management of state and federal programs that are statewide in nature or contribute to better coordination and planning in post-secondary education.

BUDGET STRUCTURE:

The Higher Education Coordinating Board is presenting its 1992-93 Biennial Budget Request in the same format as the public post-secondary systems. In this format, it has 2 primary programs--Financial Services to Students and Coordination, Planning and Institutional Services.

Figures 1 and 2 below show the allocation of the costs of the support programs to the primary programs. Figure 1 shows state appropriated funds only while Figure 2 shows all funds.

MAJOR POLICY DRIVERS:

As demands increase both to maintain access to post-secondary education and to improve quality with limited resources, the Coordinating Board's mission and perspective become increasingly important in the development of state policy and the operation of state programs. Minnesota higher education must be in a position to respond to rapidly changing economic, demographic, social, and technological changes. In order to accomplish this, Minnesota more than ever needs a foundation of efficient and effective state policies and services for an increasingly diverse student population.

The Coordinating Board provides an objective, long-range, statewide perspective. Because the Board's purview includes concern for all aspects and sectors of post-secondary education, it has the capacity to raise issues and propose solutions that no one entity can address individually. It can evaluate existing policies, and propose, analyze, and test new approaches. Moreover, the Board speaks for the residents of the state who are potential consumers and who provide funds to support post-secondary education through taxes and family contributions.

In this context, the Coordinating Board's 1992-93 budget reflects the following themes:

1. Commitment to Ensuring Educational Opportunity and Choice for Minnesota Residents.

One of the state's foremost goals for higher education is to help ensure that all residents, regardless of their economic situation, have an equal opportunity to pursue a post-secondary education that can best meet their educational needs.

Minnesota's need-based financial aid policy--Shared Responsibility--was established in 1983 to help fulfill this goal and has become a national model. In recent years, however, students have had to assume a larger financial burden because funding has not kept pace with the program policy. Continued erosion of the state's student aid policy could threaten financial access to post-secondary education, which is particularly alarming during a time of economic uncertainty.

The Coordinating Board has developed, promoted, and implemented the state's student financial assistance programs. Increased funding to stem the recent program erosion is a priority in the 1992-93 budget request.

2. Continued Leadership in Promoting Quality.

For the last 4 years, the Coordinating Board has led the state's efforts to encourage the post-secondary systems and institutions to assess their performance and to use the results to improve teaching and learning.

The state's post-secondary education systems have recognized that the consumers of post-secondary education expect and deserve, a quality experience, and have initiated major quality improvement programs.

As increased emphasis on quality spreads throughout post-secondary education, the Coordinating Board proposes to build on its own work in coordinating quality assessment, in the following ways: enhancing the systems' activities by completing, evaluating, and disseminating information on pilot projects begun this biennium; exploring applications of the Total Quality Management approach used in business to post-secondary education; and providing opportunities and incentives for faculty development.

3. Maintaining and Enhancing Library Resources.

As demands for the state's limited resources increase, higher education must develop ways to use its resources more efficiently than in the past. A model approach being copied in many states is the MINITEX Library Information Network, a system of sharing at low cost services and resources among higher education and other libraries.

Maintaining and enhancing a strong foundation of library resources accessible through MINITEX is essential at a time when limited funds may preclude support for the documented library needs of post-secondary systems.

Libraries are an essential support service for higher education and integral to a quality higher education. In order to respond to increasing demand for document delivery services, and to ensure a strong base of library service for Minnesota students and faculty, the Board's budget proposes a significant increase for MINITEX.

4. Strengthened Strategic Planning Capacity.

In order to help meet the state's needs for accessible, quality education, Minnesota higher education must be able to identify emerging issues and develop alternative solutions in the context of goals and resources. In short, the state needs a continuous proactive planning capacity for post-secondary education.

The Coordinating Board's legislative mandate assigns it broad authority for short range and long range planning. Because most of the Board's planning staff are assigned to programs and legislatively mandated studies, however, the Board has little capacity and flexibility to engage in proactive strategic planning.

The special funding by the 1988 and 1989 Legislatures for the Minnesota Study of Post-Secondary Access and Needs (M SPAN 2000) provided a special one-time opportunity to evaluate residents future needs for post-secondary education. To be adequately prepared to respond to future conditions, the Coordinating Board will need to strengthen its capacity for proactive planning. Additional funding will be necessary to ensure that the Board can perform this function adequately.

5. Development of Consumer Information.

For the past 6 years, the Coordinating Board has developed several initiatives to help students and parents make informed decisions about their future educations and careers. Much of this effort has come in response to research that shows alarming gaps in citizens' knowledge about higher education's academic expectations and admission requirements, costs, and financial aid.

The Board proposes to continue its leadership role in coordinating efforts by the state's post-secondary education systems to provide information to students and prospective students that will help them assess prospects for employment of graduates in specific occupational institutions and programs.

EXPLANATION OF BUDGET ISSUES AND ALTERNATIVES:

The major budget issues follow from the 5 themes highlighted above.

1. **Commitment to Opportunity and Choice: Realistic Support for the Living and Miscellaneous Expense Allowance and Funding for Interstate Tuition Reciprocity:**

Realistic Living and Miscellaneous Expense Allowance. Funding for the State Grant Program has not been adequate to implement the policy design adopted in 1983. The Design for Shared Responsibility expects students, as the main beneficiaries, to contribute 50% of the cost of attendance (tuition and fees, living and miscellaneous costs), with parents (or independent students) and government meeting the other half of the cost.

Because the state has not been able to adequately fund the living and miscellaneous expense component of the cost of attendance, the student share of the cost of attendance has been closer to 60% than to 50%. Most students are spending more than the already frugal living and miscellaneous expense allowance used in the State Grant Program. If this trend continues, needy students will be denied the opportunity to choose the education that best meets their needs.

Thus, in addition to funding inflationary increases in the State Grant Program, the Board recommends support for a substantial increase in the living and miscellaneous expense allowance so that the program recognizes a realistic student budget. The Board recommends that the stated student share remain at 50%. However, even with the Board's State Grant recommendation, the real student's share will be approximately 55%.

If appropriations are inadequate to fund the State Grant Program, the state could implement the rationing mechanism in statute--add a surcharge to the contribution of the applicant's parents, and apply a percentage increase to the applicant's contribution. Lack of progress in upgrading the living and miscellaneous expense allowance, however would signal a retreat in the state's commitment to helping ensure equal educational opportunity.

Support for Interstate Tuition Reciprocity. Like the state financial aid programs, the interstate tuition reciprocity programs with Wisconsin and the Dakotas have been important mechanisms to increase access and choice for Minnesota residents cost effectively. Increased funding, however, will be needed to fulfill Minnesota's obligation because of changes in the agreement with North Dakota, and changing participation patterns with Wisconsin.

A new agreement with North Dakota, which began in the 1990-91 academic year, requires the state sending

the larger number of students to pay the state educating the larger number of students a payment. Minnesota's payments to Wisconsin have been increasing because more Minnesota students are taking larger credit loads at high cost Wisconsin institutions, while much of the increase in Wisconsin students appears to be for part-time attendance at lower cost schools.

The increased obligation to Wisconsin is estimated to be \$3.1 million for the biennium, while the obligation to North Dakota could be up to \$850,000.

Because reciprocity is an integral part of state's commitment to access and opportunity and because of the program's economic effectiveness, this request is a high priority. Since F.Y. 1992 funding supports program activity in 1990-91, the state must meet its F.Y. 1992 obligation. A change in the agreements could affect Minnesota's 1993 obligation.

2. **Promotion of Quality.**

Minnesota's pilot efforts during the past 2 years in assessing quality and using the results for educational improvement have heightened the importance of quality among policymakers and the post-secondary education community. Recent initiatives by the state's public and private systems build upon or complement the Coordinating Board's leadership in coordinating and promoting quality assessment.

The challenge in the 1990s is to build upon the foundation set in the late 1980s, and place increased emphasis on quality improvement. Thus, continued funding for quality is a priority in the Board's budget request. The Board proposes 3 areas:

First, the Board will complete, evaluate and disseminate information on the Quality Assessment pilot sites in the post-secondary education community.

Second, the Board will sponsor workshops, seminars, and other activities designed to elevate knowledge about the total quality management approach (TQM) currently being used by business and industry and embodied in the 7 criteria for the national Baldrige Award which is coveted among private sector corporations and businesses. It will explore the feasibility of developing a comparable award in education.

Third, recognizing the key role of faculty in any approach to quality improvement, the Board proposes to encourage greater emphasis upon faculty development through workshops, seminars, and small grants for collaborative efforts that would build upon and complement existing faculty development programs and activities.

3. **Maintenance and Enhancement of MINITEX.**

A substantial funding increase for the 1990-91 biennium enabled MINITEX to reverse some of the service reductions made in the previous biennium. With additional funding during 1990-91 biennium, MINITEX added staff and equipment to respond to the increasing demand for document delivery. However, requests by academic and state agency libraries for document delivery service increased by 14.8% in F.Y. 1990 and are estimated to increase by 18% in F.Y. 1991. Space limitations at the University of Minnesota prevent the continued expansion of the MINITEX central office. Regional delivery sites may be one way to increase the efficiency of MINITEX.

With increased enrollments and decreases in book and monograph purchases by academic libraries, MINITEX, in a time of constrained resources, is an attractive, cost effective way to providing students, faculty, and other Minnesota residents with maximum access to library services around the state and region.

4. **Strengthened Strategic Planning Capacity.**

In its final report on M SPAN I, the study of higher education needs in the metropolitan corridor, SRI International, the Coordinating Board's consultant, recommended the promotion of more proactive higher education planning to prepare Minnesota for the higher education challenges of the 21st century. Although the Board has broad planning authority, its capacity to carry out the authority is limited. With the completion of M SPAN, the Board is requesting support to identify and address emerging trends and issues

that may affect higher education. A modest, added investment in proactive strategic planning would help guide future investments in cost effective higher education services.

5. Development of Consumer Information.

The 1989 Minnesota Legislature directed post-secondary institutions that offer occupational programs to develop placement tracking systems under the coordination of the Coordinating Board. Placement tracking involves the gathering of information on employment of students after they complete instructional programs. The 1990 Legislature expanded on the 1989 mandate, and Congress and the federal government have expressed increased interest in requiring this type of consumer information. Moreover, the interest in placement information is consistent and complementary with recent Board initiatives to provide consumers of higher education with objective information that will enhance their decisionmaking.

The challenge is to develop approaches to gathering and disseminating the information in a way that meets the needs of the the federal and state governments, and most importantly, students and prospective students.

GOVERNOR'S RECOMMENDATION:

The Governor recommends \$185,051,000 in direct state appropriation for HECB programs and activities during the 1992-93 biennium.

Fiscal constraints do not allow augmentation of the state grant program beyond F.Y. 1991 levels. In addition, the Governor recommends a reduction of \$376,000 for the biennium for the agency's non-financial aid programs and activities.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: HIGHER ED COORD BD

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
FINANCIAL SERVICES TO STUDENTS	91,910	109,423	134,502	137,487	137,487	137,487	141,485	141,485	141,485
COORDINATION PLANNING AND INSTITUT	6,310	6,084	6,714	6,348	6,348	6,348	6,343	6,343	6,343
GENERAL REDUCTION						<188>			<188>
TOTAL EXPENDITURES BY PROGRAM	98,220	115,507	141,216	143,835	143,835	143,647	147,828	147,828	147,640
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	68,422	73,374	93,098	92,717	92,717	92,529	92,710	92,710	92,522
STATUTORY APPROPRIATIONS:									
GENERAL	989								
SPECIAL REVENUE	160	80	75	75	75	75	75	75	75
FEDERAL	2,260	2,187	1,881	1,881	1,881	1,881	1,881	1,881	1,881
AGENCY	2,546	2,428	2,679	2,679	2,679	2,679	2,679	2,679	2,679
HECB LOAN FUND	23,843	37,438	43,483	46,483	46,483	46,483	50,483	50,483	50,483
TOTAL FINANCING	98,220	115,507	141,216	143,835	143,835	143,647	147,828	147,828	147,640

BASE RECONCILIATION REPORT
for 1992-1993 Biennium

AGENCY: HIGHER ED COORD BD

	ALL FUNDS		GENERAL FUND		OTHER STATE FUNDS		FEDERAL FUNDS	
	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93
F.Y.91 FUNDING LEVEL	141,216	141,216	93,098	93,098	46,237	46,237	1,881	1,881
BIENNIAL APPROPRIATIONS	150	150	150	150				
APPROPRIATIONS CARRIED FWD	<543>	<543>	<543>	<543>				
SALARY ANNUALIZATION	30	22	30	22				
DOCUMENTED RENT/LEASE INCR.	2	3	2	3				
DEDICATED RECEIPTS AND FUNDS	2,980	6,980	<20>	<20>	3,000	7,000		
TOTAL	143,835	147,828	92,717	92,710	49,237	53,237	1,881	1,881
BIENNIAL TOTAL		291,663		185,427		102,474		3,762

F.Y. 1991 Budget Reductions (Information Only)

The following F.Y. 1991 reductions were implemented in Laws 1991, Chapter 2. These reductions are not reflected as changes to F.Y. 1991 or F.Y. 1992-93 BASE Levels within the budget documents.

Program Name	<u>General Fund</u>
Financial Services to Students	
Activity Name:	
Grants to Students	\$ (3,020)
Total F.Y. 1991 Adjustments	\$ (3,020)

Figure 1
Allocation of Indirect Costs - F.Y. 1991
State Funds Only (Dollars in Thousands)

Primary Programs		Support Programs					
<u>Financial Serv. to Students</u>	<u>Coord., Plng. and Inst. Service</u>	<u>Student Support</u>	<u>Agency Mgmt.</u>	<u>Admin Support</u>		<u>System Support</u>	<u>Total</u>
			Direct Costs				
\$88,243*	\$2,810	\$638	\$635	\$712		\$274	\$93,312*

Allocation of Indirect Costs From Support Program to Primary Programs

\$ 638		(\$638)					Student Support
\$ 233	\$ 402		(\$635)				Agency Management
\$ 570	\$ 142			(\$712)			Administrative Support
\$ 137	\$ 137					(\$274)	System Support
\$89,821*	\$3,491						\$93,312*

*Includes \$214,000 for the Summer Scholarship Program.

Figure 2
Allocation of Indirect Costs - F.Y. 1991
All Funds (Dollars in Thousands)

Primary Programs		Support Programs				
<u>Financial Serv. to Students</u>	<u>Coord., Plng. and Inst. Service</u>	<u>Student Support</u>	<u>Agency Mgmt.</u>	<u>Admin Support</u>	<u>System Support</u>	<u>Total</u>
			Direct Costs			
\$129,139*	\$5,998	\$3,906	\$677	\$1,284	\$426	\$141,430

Allocation of Indirect Costs From Support Program to Primary Programs

\$ 3,906		(\$3,906)				Student Support
\$ 275	\$ 402		(\$677)			Agency Management
\$ 1,107	\$ 177			(\$1,284)		Administrative Support
\$ 289	\$ 137				(\$426)	System Support
\$134,716*	\$6,714					\$141,430

*Includes \$214,000 for the Summer Scholarship Program.

ACTIVITY:

1992-93 Biennial Budget

PROGRAM:

AGENCY: Higher Education Coordinating Board

DECISION ITEM: General Reduction in Non-financial Aid Base

<u>Dollars in Thousands</u>			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations

General Fund	\$ (188)	\$ (188)	\$ (188)	\$ (188)
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Revenues

General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-
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Total Expenditures

General Fund	\$ (188)	\$ (188)	\$ (188)	\$ (188)
--------------	----------	----------	----------	----------

Requires statutory change: _____ Yes X No

Statutes Affected:

ITEM SUMMARY/RATIONALE:

This item reduces the Higher Education Coordinating Board's non-financial aid base by 5% per year for the 1992-93 biennium. The biennial reduction totals \$376,000.

Activities in the agency's non-financial aid budget include agency management and communications, administrative services, information management, MINITEX, mission and quality coordination, policy and program planning, the post-high school planning program, and information for parents. The HECB would be responsible for allocating the reduction among the various budget activities.

ACTIVITY:

1992-93 Biennial Budget

PROGRAM:

SYSTEM: Higher Education Coordinating Board

DECISION ITEM: Financing Inflationary Costs - Informational

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Expenditures				
General Fund	\$ 196	\$ 401	\$ 401	\$ 401
Revenues				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes x No

ITEM SUMMARY:

Inflation was calculated for the Higher Education Coordinating Board at 4.5% per year on the non-financial aid portion of the agency's budget for each year of the 1992-93 biennium.

The Higher Education Coordinating Board did not submit a plan detailing how funds would be reallocated among programs to address anticipated increases in salary and non-salary costs.

PROGRAM: Financial Services to Students
Agency: Higher Education Coordinating Board

1992-93 Biennial Budget

PROGRAM PURPOSE:

Programs and services in the Financial Services to Students Program are designed to:

- remove economic barriers to participation in Minnesota post-secondary education by providing need-based grants to resident undergraduate students attending Minnesota public and private post-secondary institutions. Eligible students are required to contribute 50% of the cost of attendance from savings, loans, earnings and private or institutional assistance. The cost of attendance consists of tuition and fees, (actual tuition at public institutions and a capped figure at private institutions) and a standard living and miscellaneous expense allowance. To the extent that they are financially able to do so, parents of dependent students are expected to contribute the remaining 50% from family earnings and savings. Any remaining amounts which cannot be provided from family resources are provided through state and federal grants. State funded programs include the State Grant Program for students enrolled at least half-time and the Part-Time Grant Program for students enrolled less than half-time.
- assist parents with children under the age of 13 who do not receive AFDC assistance obtain a post-secondary education by assisting in the payment of child care costs. The amount of the award is determined by using the income scale from the Sliding Fee Program administered by Human Services.
- ensure access and choice of post-secondary education by providing work-study opportunities to resident undergraduate students attending Minnesota public and private post-secondary institutions. This program is based on need, after taking into consideration such items as the student's educational cost and the availability of other federal and state aid. Work-study funds can be used to replace the parental contribution in computing State Grant awards.
- reduce economic barriers and ensure access and choice of public post-secondary educational opportunities by entering into reciprocal tuition agreements with neighboring states of Wisconsin, North Dakota, South Dakota, to a limited degree Iowa, and the Canadian province of Manitoba. Only agreements with Wisconsin and North Dakota require the exchange of funds. Minnesota residents, because of the HECB's affiliate membership in the Western Interstate Commission for Higher Education (WICHE) can enroll in selected programs and institutions in participating states at a reduced tuition. Generally, the cost will be 150% of the resident tuition of the participating institution and/or selected program.
- promote educational opportunities for specific groups of Minnesota residents and use financial incentives to promote work opportunities in Greater Minnesota by administering programs assigned to the agency for specific clientele. These include: Dislocated Rural Worker, Safety Officer Survivors, Pre-Nursing Grant, LPN Nursing Grant, RN Nursing Grant, Federal Paul Douglas Teacher Scholarship, Summer Scholarship for Academic Enrichment and the Rural Physician Loan Repayment Programs.
- broaden educational opportunity by assisting Minnesota residents and residents of other states attending post-secondary institutions in Minnesota and Minnesota residents attending post-secondary institutions in other states by providing long-term, low interest loans. To obtain a loan, the student must be enrolled in an eligible institution at least half-time. Current loan programs being administered by the Board are the Student Educational Loan Fund (SELF) Program, and the Graduated Repayment Income Protection (GRIP) Program. The Rural Physician Loan Repayment Program has been assigned to the Board, but was not funded.

PERFORMANCE:

Minnesota's comprehensive set of student financial aid programs have helped make it possible for Minnesota residents to select the post-secondary education that can best meet their needs. The financial aid policy is part of an integrated set of financing policies. The 3 components are average cost funding, which helps establish base funding levels for public post-secondary systems, cost related tuition, which relates price to the cost of providing instructional services, and shared responsibility, which targets financial assistance to needy students.

During the 1980s, Minnesota gained national prominence for its model financial aid policies and its high rankings in support of needy undergraduate students. Because program funding has not kept pace with the Shared Responsibility policy, students have had to assume a larger burden in paying for their educations than previously.

Following is a performance summary of the student assistance programs:

State Grant Program: The State Grant Program continues to be successful in targeting limited funds to needy students. In F.Y. 1990, 46,523 students received \$54.6 million from the State Grant Program. Almost half (48.5%) of the State Grant recipients came from families with incomes under \$20,000. These students received 44.9% of the \$54.6 million. Slightly over a fourth (26.4%) of the 46,523 recipients came from families with incomes between \$20,000 and \$30,000, and they received 27.7% of the money.

The maximum amount of money a student can receive is the combination of the State Grant and federal Pell Grant. In F.Y. 1990, the 46,523 students received a total of \$97.9 million when the Pell is added. Of that total, 56.4% went to students with incomes below \$20,000, and 24.6% was awarded to students with incomes between \$20,000 and \$30,000.

Because the state has not been able to adequately fund the living and miscellaneous expense component of the cost of attendance, students have had to bear a higher share of the cost of attendance than envisioned by the policy.

Further, private college students are affected by the cap placed on the tuition recognized by the program in the cost of attendance.

A standard living and miscellaneous expense allowance was first used in the State Grant Program in F.Y. 1981; it was set at \$2,750 and remained at that figure through F.Y. 1985. In F.Y. 1990, it was \$3,170, and is \$3,465 in F.Y. 1991.

Comparing the living and miscellaneous expense allowance with 4 benchmarks demonstrates the need to move to a more realistic student budget.

- **Consumer Price Index:** From 1981 to 1991, the Consumer Price Index (CPI) increased by 55% while the living and miscellaneous expense allowance was increased 26%. If the State Grant Program living and miscellaneous expense allowance had been increased to keep pace with the CPI since 1981, it would be \$4,253 in 1991, rather than \$3,465.
- **Reported Applicant Expense Allowance:** In 1985 the Coordinating Board surveyed a sample of State Grant applicants. Of those with a household size of one, 16% reported spending \$2,750 or less for the 9 month academic year. This is the 16th percentile that has become a benchmark in the State Grant Program. Eighty-four percent reported spending more than the state allowance. The 1991 allowance of \$3,465 is the 16th percentile.
- **Institution Living and Expense Allowance:** The institution-specified value for F.Y. 1987 was \$4,136. In F.Y. 1991, the inflation adjusted value is \$4,980, or \$1, 515 more than the F.Y. 1991 State Grant Program allowance.
- **Room and Board Charges to Students in Dormitories:** The average room and board charge at 16 private 4-year colleges in F.Y. 1991 is \$3,232, while the State Grant living and miscellaneous allowance is \$3,465. Applying the \$3,232 to room and board leaves \$233, or \$26 a month for nine months, to pay for books and supplies, laundry and dry cleaning, participation in social and cultural events, haircuts, and other personal and educational requirements. At St. Cloud State University, room and board for a student with a double occupancy room is \$2,379 in 1990-91. Subtracting \$2,379 from the \$3,465 state allowance leaves \$1,086, or \$121 a month for all other expenses. At the University of Minnesota, room and board in a dormitory is \$3,150, leaving \$315, or \$35 a month for other expenses.

Although the student share is specified as 50% of the cost of attendance, in reality it has been closer to 60%, due largely to the low living and miscellaneous expense allowance.

PROGRAM: Financial Services to Students
(Continuation)
Agency: Higher Education Coordinating Board

1992-93 Biennial Budget

Part-Time Grant Program: In F.Y. 1990, 5,900 students enrolled less than half time (fewer than 68 credits) received \$2 million, or an annual grant of \$334. Demand for the program has exceeded the \$2 million appropriation the last 2 years. In some cases, students have been able to receive larger Part-Time Grants for taking 3 to 5 credits than they would receive in state grants if they took 6 credits. The Coordinating Board proposes changes in the administration of the program to make it more like the regular State Grant Program.

Non-AFDC Child Care Grant Program: In F.Y. 1990, the first year of the program under the Coordinating Board's administration, 1,126 students received \$1.82 million. However, a Board survey of financial aid administrators revealed a demand of about \$3 million, which may be understated because many schools were not adding students to their waiting lists.

State Work-Study Program: In F.Y. 1990, 6,750 students earned \$6.9 million. Average earnings were \$1,023, and the average wage rate was \$4.80. The state covers 80% of the earnings, and the employer 20%. The work-study program helps students meet their assigned share of the cost of attendance.

Student Educational Loan Fund (SELF): The program, begun in 1985, continues to be an important source of supplemental assistance to students from all income backgrounds. In F.Y. 1990, the program made over 12,000 loans totaling \$33 million. From September 1988 to October 1990, the interest rate for most program borrowers averaged 9.5%, about 3% below the rate on available loans for this clientele.

Because of the program's low default rate (about 4% as of October 1990), the Board has been able to make some changes to benefit borrowers. Until 7-1-89, all borrowers were charged a one-time guarantee fee of up to 6.25% of the loan amount.

Fee proceeds were placed in a reserve fund to cover a portion of the insurance claims in the event of nonpayment of interest and principal amounts by borrowers and co-signers. The fee was nonrefundable and was deducted from each loan amount when it was disbursed. But as of 7-1-89, the guarantee fee was eliminated from the program because of the low default history.

The Board also adopted an optional "Extended Interest Plan." The optional plan allows the borrower to extend the 12 month transition (12 months after graduation or termination of study) an additional 24 months, for a total 3-year transition of monthly interest only payments. While the "Extended Interest Plan" lengthens the transition period by 2 years, it also shortens the repayment period by the same 2 years, making this optional plan slightly more expensive for the borrower.

Graduated Repayment Income Protection Program: The Graduated Repayment Income Protection (GRIP) program assists graduates from specific programs with accumulated debt to repay their outstanding loans on a repayment schedule based on projected incomes for their professions. Graduates of the School of Public Health, Medicine, Dentistry, Pharmacy, and Veterinary Medicine at the University of Minnesota; the Mayo Medical School and Graduate School of Medicine; Northwestern College of Chiropractic; and Minnesota residents who are graduates of the 33 accredited colleges of optometry and osteopathy located throughout the United States are eligible to participate. Currently, 70 of the 106 participants in this program are chiropractors. The Board is also conducting a project to determine if this program should be expanded to other professions. Since there are other loan consolidation programs available, there is a question as to the need for expansion, especially considering that this program is labor intensive. This program is funded from resources of the Board's other loan programs, and, therefore, does not require additional funding from the state.

Interstate Tuition Reciprocity: In the 1989-90 academic year, 17,651 Minnesota residents attended institutions in Wisconsin, the Dakotas, and Iowa, while 12,616 residents from those states attended Minnesota institutions. The number of Minnesota residents attending institutions in reciprocity states increased by 16.8% between 1983 and 1989. Meanwhile, the number of students from neighboring states attending Minnesota

institutions grew by 49.2%. The net outflow from Minnesota to neighboring states declined by 1,617, or 24.3%, during the period.

Minnesota's net cost per student in reciprocity has been increasing, but remains low compared to the cost of subsidizing students in the public systems. The net cost per student to the state for a reciprocity student was about \$1,300 in F.Y. 1991. The average instructional expenditure per full-year student is estimated to range from \$3,989 to \$7,670 in Minnesota's four public systems for 1991.

PROSPECTS:

Following is a summary of the prospects for the student financial assistance programs.

State Grant Program. Enhanced funding for the State Grant Program is the highest priority for the Board in pursuing the commitment to ensure educational opportunity and choice for Minnesota residents. The Board recommends funding to offset inflationary increases in order to maintain the same level of service and funding to enhance the living and miscellaneous expense allowance.

- **Adjustments to Maintain Level of Service:** Maintaining the same level of service would require funding of \$174.2 million for the biennium, an increase of \$25.4 million over the funding base. This estimate is based on a projected decline in the number of applicants in F.Y. 1992-93 as enrollments decrease below 1990-91 levels and assumptions about tuition, costs of instruction, and the effects of inflation on the living and miscellaneous allowance.

- **Living and Miscellaneous Expense Allowance Enhancements:** The current living and miscellaneous expense allowance does not reflect actual living costs incurred by most Minnesota post-secondary students. Thus, the Board recommends support for a more realistic allowance than now used in the program. The State Grant Program goal has been to use a reasonable budget for a frugal student.

One way to define the frugal student is to assume the living and miscellaneous expense allowance equals the spending pattern of the student in the middle of the lower half of the student population ranked by spending amounts, which is the 25th percentile. Under this approach, 75% of students would spend more than the allowance. For F.Y. 1991, using this benchmark, the living and miscellaneous allowance would have been \$4,160 rather than the \$3,465 used in the State Grant Program, currently the 16th percentile.

The state could support funding to reach the 25th percentile benchmark immediately or, alternatively, the state could move toward this goal in phases.

If funding is not available, the state could impose the statutory rationing mechanism which combines a surcharge on the student/parent contribution with an increase in the student share.

If appropriate inflation, living and miscellaneous expense allowance, and tuition adjustments are not made in the 1992-93 biennium, the real student share will continue to increase and move further from the 50% policy. This would increase the cost of attendance for the state's most needy students, and endanger the goal of equal educational opportunity.

- **Federal Pell Grant Funding.** In adopting the federal F.Y. 1991 budget, Congress directed an increase in the federal Pell Grant from \$2,300 to \$2,400 for the 1991-92 academic year. Because Minnesota students receive an award combining the State Grant and federal Pell Grant, an increase in federal funding decreases state spending. The effect of a \$2,400 Pell grant maximum would be a reduction of about \$5 million per year in state spending. However, it is uncertain whether Congress has provided enough funding to support the \$2,400 maximum. The answer will not be available until 1991 when the U.S. Department of Education establishes a Pell Grant payment schedule.

Part-time Grant Program. The proportion of part-time students has continued to increase in Minnesota post-secondary education, from 22% of total enrollment in 1983 to 34% in 1989. Thus, increased demand has been placed on the campus-based Part-time Grant Program. In response to inconsistencies in the calculation of awards between the Part-time Grant Program (under 6 credits) and State Grant Program (6 credits and above), the Board has worked with the higher education community on revisions in award calculation procedures. However, no change in funding is anticipated for the 1992-93 biennium.

PROGRAM: Financial Services to Students
(Continuation)
Agency: Higher Education Coordinating Board

1992-93 Biennial Budget

Non-AFDC Child Care Grant Program. Increased demand is anticipated for this program because Minnesota's student population includes an increasing number of parents who need affordable, quality child care in order to continue their education at a college or university. In 1989-90, for example, more than 30,000 applicants to the State Grant Program reported having dependent children. The State Grant Program living and miscellaneous expense allowance does not now directly cover child care expenses.

State Work-Study Program. The current annual base for the Work-Study Program is \$5,454,000. However, on 1-1-91 the Minnesota minimum wage will increase from \$3.95 per hour to \$4.25 per hour. Therefore, to maintain the same level of effort, an additional \$415,000 would be needed each year. If the request were not funded, the number of students receiving awards would be reduced.

Student Educational Loan Fund (SELF). Because loan volume for SELF has continued to increase at a rate faster than anticipated, the Board will need to enter into a financing arrangement to obtain additional funds for making loans. No state funding is involved; funding is provided through the issuance of revenue bonds or similar financing arrangements, and program earnings in excess of operating expenses and debt service requirements.

Interstate Tuition Reciprocity. Tuition reciprocity continues to be an efficient, cost effective way for providing greater access to a wider range of post-secondary options for Minnesota students than would otherwise be possible. Minnesota's obligation to Wisconsin has been increasing as Minnesota residents take larger credit loads at higher cost institutions than their Wisconsin counterparts attending Minnesota institutions. Since the payment is based on credits and instructional costs, less tuition received, payments to Wisconsin continue to increase. In the 1988-89 biennium, Minnesota paid Wisconsin \$7.1 million, and Minnesota's obligation in the 1990-91 biennium rose to \$10.3 million.

The obligation is expected to increase to \$13.2 million in the 1992-93 biennium. Since the F.Y. 1992 payment is for the 1990-91 academic year, no adjustment is possible until the second year of the biennium. Minnesota would need to explore with Wisconsin options for renegotiating the agreement to reduce costs to Minnesota.

The new reciprocity agreement with North Dakota, begun in the 1990-91 academic year, includes a balance of payments feature. Since more Minnesota students attend North Dakota institutions than North Dakota students attend Minnesota institutions, Minnesota likely will have to pay North Dakota up to \$850,000 in the 1992-93 biennium.

PLAN:

To help ensure that all residents, regardless of their economic circumstances, have access to the post-secondary education that can best meet their needs, the Coordinating Board recommends, as its highest priority, an increase of \$68.3 million in the State Grant Program for the 1992-93 biennium.

Of this increase, \$25.4 million would maintain the program at its current level of service to students. The additional \$42.9 million would raise the living and miscellaneous expense allowance to the 25th percentile benchmark, a frugal but reasonable allowance for students. This level of funding would stem the erosion in the program's funding and return it to a realistic level.

The Board proposes funding for the Part-Time Grant Program at its current level of \$2 million per year. The Board will work with the post-secondary community to revise the award calculation so that it is consistent with the Shared Responsibility policy.

An increase of \$1.5 million is proposed in the Non-AFDC Child Care Program for the biennium. This will enable the program to meet some, but not probably not all, of the unmet demand. A change in legislation will be proposed to make less than half time students eligible for this assistance. This will be necessary because child care will no longer be considered a direct expense in the revised Part-Time Grant Program calculation.

For the State Work-Study Program, the Board is proposing an increase of \$415,000 per year to account for the minimum wage increase. This would maintain the same level of service in the 1992-93 biennium.

For the Interstate Tuition Reciprocity Program, the Board recommends a biennial increase of \$3,964,000 to cover the increased obligation to Wisconsin, the anticipated obligation to North Dakota, and the fee for renewal of affiliate membership in the Western Interstate Commission for Higher Education.

The Board recommends that funding, \$250,000 per year, for the Dislocated Rural Worker Program be discontinued and reallocated within the financial aid budget. Other student financial aid programs as well as funds for displaced workers administered by the Department of Jobs and Training adequately meet the needs of Dislocated Rural Worker recipients. The reallocated money would fund the Safety Officers' Survivors Program, a program created in F.Y. 1991 without additional funding, and shortfalls in the State Grant Program. The reallocated funds also would help support the Akita Scholarship Program, another set aside in the State Grant Program. This program thus far has provided 20 grants totaling \$40,000. Funding needs, however, are expected to increase as participation in the program grows and inflationary costs increase.

Board staff have continued to work with financial aid administrators to promote the decentralized delivery approach. Under decentralized delivery, the post-secondary institutions maintain contact with students and parents, verify information submitted by students and parents on the program application, calculate the state award with policies established by the Board, and notify the student of the award, pay the student the award, process changes to award and payment data, and send detailed reports to the Board, periodically, for entry into the central data base. Meanwhile, the Board coordinates and determines program policy, maintains a central data base for policy development and control, and maintains the audit and compliance function.

Twelve post-secondary institutions joined the decentralized delivery system in the 1990-91 academic year. They were in addition to the original six state universities. Discussions continue with others regarding possible participation.

Increased participation will help increase the efficiency and effectiveness of the State Grant Program and provide better service to students.

GOVERNOR'S RECOMMENDATIONS:

The Governor recommends direct state appropriation of \$179,182,000 for financial services to students during the 1992-93 biennium. The recommendation reflects base level funding for the financial aid programs.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: HIGHER ED COORD BD
PROGRAM: FINANCIAL SERVICES TO STUDENTS

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
GRANTS TO STUDENTS	59,205	61,441	79,868	79,774	79,774	79,774	79,773	79,773	79,773
INTERSTE TUT. RECITY	3,288	4,606	4,744	5,050	5,050	5,050	5,050	5,050	5,050
STATE WORK STUDY	4,588	5,294	5,484	5,454	5,454	5,454	5,454	5,454	5,454
STUDENT LOAN PROGRAMS	21,305	36,059	42,377	45,377	45,377	45,377	49,377	49,377	49,377
AGENCY SUPPORT SERVICES	3,524	2,023	2,029	1,832	1,832	1,832	1,831	1,831	1,831
TOTAL EXPENDITURES BY ACTIVITY	91,910	109,423	134,502	137,487	137,487	137,487	141,485	141,485	141,485
DETAIL BY CATEGORY:									
STATE OPERATIONS	25,207	38,568	45,024	47,833	47,833	47,833	51,831	51,831	51,831
LOCAL ASSISTANCE	3	15	20	20	20	20	20	20	20
AID TO INDIVIDUALS	66,700	70,840	89,458	89,634	89,634	89,634	89,634	89,634	89,634
TOTAL EXPENDITURES BY CATEGORY	91,910	109,423	134,502	137,487	137,487	137,487	141,485	141,485	141,485
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	65,366	70,300	89,607	89,592	89,592	89,592	89,590	89,590	89,590
STATUTORY APPROPRIATIONS:									
GENERAL	980								
SPECIAL REVENUE	27	2	22	22	22	22	22	22	22
FEDERAL	1,724	1,717	1,429	1,429	1,429	1,429	1,429	1,429	1,429
HECB LOAN FUND	23,813	37,404	43,444	46,444	46,444	46,444	50,444	50,444	50,444
TOTAL FINANCING	91,910	109,423	134,502	137,487	137,487	137,487	141,485	141,485	141,485

PROGRAM: Coordination, Planning and Institutional Service
Agency: Higher Education Coordinating Board

1992-93 Biennial Budget

PROGRAM PURPOSE:

The Coordination, Planning and Institutional Service Program is designed to improve the state's effectiveness and efficiency in meeting post-secondary education needs through continuous short-range and long range planning, which provides a sound basis for policy decisions and program actions; establishing and maintaining databases in support of post-secondary education activities; coordinating the several components of post-secondary education to assure that all needs are addressed, resources used judiciously, and unwarranted duplication of effort minimized; and formulating recommendations for state policy and actions in order to assure that efforts to provide post-secondary education are consistent with the state's goals for public investment in post-secondary education as well as cost effective. The desired results of the program are a coordinated and comprehensive state post-secondary education effort, which meets the changing needs of Minnesota residents efficiently and effectively and which is conducted within the framework of responsible policy based on adequate projections and planning.

The Coordination, Planning and Institutional Service Program is conducted by the Policy and Program Planning Division and is supported by the Agency Management, Information Management, and Administrative Services Activities.

The Coordination, Planning and Institutional Service Program serves the legislative and executive branches and post-secondary systems and institutions through the following programs and services:

- performing policy and research studies regarding current issues in post-secondary education and engaging in short and long-term planning activities that serve as a catalyst for state, system, and institution decision making.
- reviewing academic programs to assess whether a program fits within the proposing institution's mission, to determine if an institution is ready to implement a proposed program, to decide if there is a need for a proposed program, and to determine if the proposal represents a needless duplication of effort in Minnesota.
- administering the MINITEX Library Information Network which provides a system of resource sharing among higher education libraries, state agency libraries and other libraries in Minnesota, and North and South Dakota that elect to contract for services. MINITEX services are designed to provide students, faculty, and other residents of Minnesota with maximum access to library resources around the state and region.
- administering the Post-High School Planning Program (PSPP), which provides secondary students and adults with information useful in making post-secondary education and work plans and to provide post-secondary institutions with information useful in the admission, advising, and placement of prospective students.
- administering the Private Institutions Registration Program, which ensures the protection of student records, disclosure of certain information to students and prospective students, financial stability of educational institutions, appropriate curriculum, faculty, and physical facilities for education programs, and adequate governance of educational institutions. The procedures also assist institutions by providing guidelines to private schools offering programs and courses in Minnesota, helping to protect legitimate and authentic institutions from unfair competition, and offering guidelines and assistance to developing institutions and experimental programs.
- administering the Community Service Program, which promotes campus community service projects emphasizing students performing as tutors or mentors to their younger peers. Campus community service projects attempt to instill in students the value of civic involvement and the belief that each student's community service can make a difference in the community.
- administering the federal Eisenhower Mathematics and Science Education Program, which funds state grants for strengthening the economic competitiveness and national security of the United States by improving the

skills of teachers and the quality of instruction in mathematics and science in the nation's public and private elementary and secondary schools.

- assisting and coordinating the efforts of the post-secondary education systems to continue to monitor and refine mission differentiation agreements and identify additional areas for cooperation.
- developing the strategies to encourage and assist campuses and systems to develop ways to assess and continuously improve the quality of the educational experience provided.

PERFORMANCE:

The Coordination, Planning and Institutional Program is central to 4 of the 5 themes in the Coordinating Board's 1992-93 budget request--promotion of quality, maintenance and enhancement of MINITEX, strengthened strategic planning capacity, and development of consumer information. Following is a performance review of the program's activities:

Policy and Research: High quality research and policy analysis are the goals of this activity. Policy and research activities fall into 3 general categories: (1) enrollment analysis, (2) financial analysis, and (3) general policy studies. During 1990, the Coordination, Planning and Institutional Services Program conducted 4 enrollment analyses, 4 financial analyses, and 9 general policy studies.

M SPAN 2000, the Minnesota Study of Post-Secondary Access and Needs, has been the major general policy study. Scheduled for completion in March 1991, it is examining current and future post-secondary education conditions and needs, identifying potential strategies to meet the needs, and evaluating the costs and implications of those strategies.

Program Review: The Coordinating Board reviewed 150 proposals for new instructional programs from public and private post-secondary institutions in F.Y. 1989 and 1990. This is the highest number of programs reviewed by the Board in any 2-year period. Of this total, 142 programs were approved, 1 program was withdrawn from consideration, and seven are still pending. The Coordinating Board recently revised its policy on Program Review/Approval. These changes include the definition of what triggers a grouping of courses to go through the review/approval process. In addition, documentation required of proposing institutions has been updated. Staff also is undertaking a study of existing review and approval criteria as applied to non-traditional program delivery methods such as video cassette and telecommunications.

MINITEX Library Information Network: One hundred thirty Minnesota post-secondary and state agency libraries participate in the MINITEX programs, supported by state appropriations to the Coordinating Board. Ninety-five additional libraries participate, including public libraries in Minnesota through the Office of Library Development and Services, and libraries in North and South Dakota under contracts that provide funding. Within Minnesota, 59% of MINITEX document delivery requests come from Greater Minnesota. Over 60% of document delivery requests are filled from the University of Minnesota/Twin Cities Library collections, the Minneapolis Public Library and Information Center, and the Minnesota Department of Health Library. These items are retrieved by MINITEX staff going to these key Twin Cities library facilities. The remaining requests are referred and filled from other MINITEX participating libraries which absorb the cost of retrieving the materials.

Document delivery, the union list of serials, and on-line catalog are the core MINITEX services, and they continue to be provided at no cost to participating libraries. Periodical exchange and the reference service have been identified as secondary services and are being provided to participating libraries on a reimbursement basis. Only those libraries willing and able to pay have access to reference and periodical exchange services. Because of the decrease in the number of libraries using these services (and consequently, decreases in the number of reference questions and periodical exchanges), the unit costs and fees for these services have increased significantly. In 1990, the MINITEX activity provided 256,473 document deliveries, 3,473 periodical exchanges, completed 1,400 reference requests and served as intermediary for 169 libraries using OCLC services. Of these, 188,138 document deliveries and 96 libraries using OCLC services were supported by state appropriations. The balance was supported by contracts and service fees.

PROGRAM: Coordination, Planning and Institutional Service
(Continuation) **1992-93 Biennial Budget**
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Post-High School Planning Program: This program provides information and services to high school juniors, eighth grade students, parents, post-secondary education institutions, guidance counselors, and state planners and policymakers.

Through its Future Choices component the program provides information to 8th grade students about post-secondary opportunities, academic standards, and financial aid. All 8th graders receive a planning chart and booklet, and schools can obtain 2 videotapes which complement the print materials. The Board's "Get Ready" project, begun in November 1990, informs parents on how they can help their children prepare academically and financially for education beyond high school. The Board has printed 200,000 copies of the 16-page Get Ready booklet for distribution through schools and other locations.

High School Testing provides an assessment for college admission, for career planning, and a plans and background questionnaire. In 1990, approximately 40% of all Minnesota high school juniors participated in this program.

The Minnesota College Admission Application simplifies the application process so counselors and students do not need to keep track of multiple application forms. By listing all the post-secondary institutions in Minnesota, the application also informs prospective students of the choices available to them when selecting a Minnesota post-secondary school. This application form is used throughout the state and is accepted by nearly all Minnesota post-secondary institutions.

A brochure, First Steps for Adults for Adults Beginning or Returning to School, summarizes resources and opportunities to help adults make decisions about their education.

Guidance counselors receive information about the high school testing that helps them advise their students about plans for education and work beyond high school. They also receive from the Board a comprehensive guide containing current information about Minnesota post-secondary education. It includes information on admissions policies of post-secondary institutions and academic program offerings.

Private Institutions Registration: Currently 77 institutions are registered with the Coordinating Board through its Private Institution Registrations Program. Fifty-two were approved to grant degrees, 8 were approved only to use certain terms in their names, and 17 were simply registered. Several institutions have been discouraged from operating in Minnesota or have been denied approval.

Community Service Program: In 1990, the Coordinating Board funded 12 campus community service grants, which emphasize students performing as tutors or mentors to their younger peers. As a condition of the grant, the campus must continue this program using its own funding, after the initial grant period.

Eisenhower Mathematics and Science Program: During 1990, the Coordinating Board approved 20 Eisenhower Mathematics and Science grants to Minnesota post-secondary education institutions. These grants are designed to improve the skills of teachers and the quality of instruction in mathematics and science in the nation's public and private elementary and secondary schools.

Mission Differentiation and Intersystem Cooperation: The Board's role currently monitors existing mission agreements and encourages greater intersystem cooperation. In 1990, the Coordinating Board worked with the systems to develop a coordinated response that builds upon the mission of each system in meeting the needs for undergraduate practitioner-oriented graduate programs in the metropolitan area. In addition, the agency is working to address issues that need greater cooperation. These include transfer and articulation, common approaches to remedial/ developmental education, telecommunications, cooperative planning for libraries, and development of strategies to increase the dialogue and planning between K-12 and post-secondary education.

Quality: The Coordinating Board continues to work with the post-secondary systems to demonstrate uses of outcome assessment to improve post-secondary education. During 1990, pilot projects on outcome assessment

were initiated with each private and public system. Agency staff are designing a seminar for post-secondary educators and policy makers on Total Quality Management to be held in early 1991 and a seminar to disseminate information about the pilot projects in June 1991.

PROSPECTS:

Following is a summary of prospects for the Coordination, Planning, and Institutional Services Program:

Policy and Research: Strengthened strategic planning capacity is one of the Board's highest priorities for the 1992-93 biennium. The Board has broad statutory planning authority, but limited capacity to fulfill this function.

The Board's Policy and Program Planning Division, which is responsible for policy studies, has a professional staff of 12.6 FTE. Of these, 9.6 are assigned to mandated projects and programs, such as Program Review, Data College, Eisenhower Grant Administration, PIR and PSPP. This leaves three full-time staff available for policy studies.

Typically, each session the Board receives several legislative-mandated studies, most without funding. In order to do the legislative-assigned studies, the Board fully uses its existing planning capacity, and often must reallocate resources. For example, the 1989 Legislature assigned 8 studies to the Board in addition to M SPAN project. The combination of legislatively-mandated studies and limited staff capacity leaves the Board with little flexibility to engage in proactive planning. While complimenting the Board for its work in the development of the state's financing policies, the Board's consultant for the first phase of the M SPAN study identified the need for more proactive planning to help higher education prepare and adapt to rapidly changing social and economic changes. The special M SPAN appropriation provided a one-time opportunity to evaluate the state's higher education needs. In the post-M SPAN period, the state would benefit from strengthened, continuous proactive planning to enable the Board to evaluate existing services and address emerging issues. An example is the need to conduct a thorough examination of the state's finance policies, which will be 10 years old in the upcoming biennium.

Program Review: The post-secondary education environment and client base is changing the demand for and the delivery of post-secondary education programs. A projected drop in the number of high school graduates and the broadening of the student body to include Minnesotans from all walks of life, suggests that post-secondary education institutions may narrowly tailor programs to meet the needs of a diverse clientele. Emerging trends suggest that there may be an increase in cooperative programming between post-secondary institutions and employers. Cooperative programming efforts may specifically target programs and/or degrees to employer groups. Technological advances, such as video cassettes and telecommunications, are leading to a proliferation of non-traditional post-secondary education delivery methods. Technological advances in delivery will require new approaches to evaluating instructional programs. The Coordinating Board feels that it can continue to perform the program review function with its current resources, plus inflationary increases. Beginning July 1, 1991, the Board's program review function will be expanded to cover proposals for large-scale or permanent sites of instruction.

MINITEX; With additional funding during the 1990-91 Biennium, MINITEX added staff and equipment to respond to the increasing demand for document delivery. The 1990-91 funding was budgeted to support 6% more document delivery requests during each year of the 1990-91 biennium. However, academic and state agency library requests for document delivery service increased 16.4% in F.Y. 1989 and 14.8% in F.Y. 1990. They are expected to rise 18% in F.Y. 1991 and to continue to rise at the same level for the next biennium. Moreover, expansion of the MINITEX office is constrained by space limitations at the University of Minnesota Wilson Library.

MINITEX does not own books or periodicals itself, but rather it is the network through which libraries share material with each other. MINITEX cannot help libraries share what they do not own. The underlying principle for participating in MINITEX is that 95% of the materials are provided locally, and MINITEX should provide no more than 5% of the information and materials needed by an institution. However, the increase in requests have raised questions whether some two and 4-year academic institutions have adequate library resources to meet typical local user needs. An intersystem planning group staffed by the Coordinating Board has studied the status of academic libraries in Minnesota and found that there has been a decrease in

PROGRAM: Coordination, Planning and Institutional Service
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the purchase of books and other monographs while enrollments have increased. While interlibrary resource sharing and the computerization of libraries have maximized the use of current resources, they cannot substitute for maintaining adequate local collections.

Alternatives:

- **Maintain the current level of service.** The current level of service could not be maintained at the same level of funding plus inflation since the number of requests from libraries supported through the direct MINITEX appropriation in F.Y. 1991 is expected to be 20.6% more than anticipated when the F.Y. 1991 budget request was funded. Moreover, the demand for service supported by the direct state appropriation is expected to increase 17 to 18% per year in the next biennium. If additional funds are not provided, service fees would have to be implemented, or service would deteriorate.

The Board opposes fees to library users of MINITEX. Fees are inequitable because they would deny access to library resources to those least able to pay fees. Further, the Board is concerned about the proliferation of student fees beyond tuition.

- **Enhance the document delivery service.** This includes using regional resources before sending requests to the MINITEX office in the Twin Cities. This would enable MINITEX to increase its ability to respond to more document delivery requests. MINITEX would contract with regional academic libraries in Mankato and St. Cloud and provide them the equipment to handle requests that could be filled in Greater Minnesota. If this proves effective, MINITEX would add 2 additional regional access points in the next biennium. This would enable the MINITEX office to continue to provide efficient access to the highly concentrated library resources in the Twin Cities area. Without this funding, MINITEX would be forced to require reimbursement for document delivery service or to limit service to F.Y. 1991 levels.
- **Renovate space at the University of Minnesota/Twin Cities Campus.** An additional working space is needed to handle the increased volume of requests handled at the University of Minnesota.

Post-High School Planning Program: Participation in the Post-High School Planning Program is likely to increase as American College Testing becomes the recommended college entrance and advising instrument for Minnesota institutions. As high school students shift from taking college entrance tests in their senior year to their junior year, Post-High School Planning Program participation will increase. Increased flexibility in administration of the program to fit individual school needs will translate into increased participation.

Information and guidance about career and post-secondary education are being targeted to a wider spectrum of students and parents. While the program initially focused on the needs of high school juniors, it now is responding to increased needs of junior high students, parents, prospective adult students, and guidance counselors. Given the limited resources available, the Board believes it can maintain these efforts within the current level of resources plus inflation.

Consumer Information: Building upon initiatives in the Post-High School Planning Program above, the Board believes that students and prospective students need information to help them assess prospects for employment of graduates in specific occupational programs and institutions. The 1990 Minnesota Legislature expanded on its 1989 mandate directing the public post-secondary education systems, and private colleges and occupational and technical institutions that enroll recipients of state grants to develop a consumer information system for occupational programs. The system is to be based on student placement and include all programs that lead to an occupation requiring certification, licensure, or testing for entry. The first phase of the system is to include all subbaccalaureate occupational programs. The Coordinating Board is coordinating the development of the system. Consumers and the federal government also are pursuing efforts to require the collection and publication of placement information.

The Coordinating Board has contracted with non-agency personnel for portions of this effort, and established

an advisory group to examine alternative approaches to collecting and displaying data. The major emphasis will be to provide consumers with meaningful and comparable information on which they can make enrollment decisions for the various institutions that offer programs of interest to them. Major items of consumer interest are the completion rate of students who enter a program of study and the employment probability of program graduates.

Private Institution Registration: Many private liberal arts colleges have moved into graduate education and are applying to grant graduate degrees. Applications to offer graduate degrees have required additional Private Institutions Registration staff resources to review and evaluate each new degree being proposed. For example, where 6 graduate degrees that were approved between 1-1-89 and 9-30-90 for institutions previously approved by the Board compared to 1 application for the same period 2 years earlier.

An increasing number of institutions have the capacity to transmit programs and courses into Minnesota using electronic technologies (such as, video tape and satellite broadcast). Institutional registration, and approval if called for, is required when the student is not required to leave Minnesota to complete the programs or courses. However, there is no effective means for the Coordinating Board staff to be kept informed if institutions offer programs or courses using electronic technologies or the postal service. Currently, contact is initiated only after staff learns of a program or course through an inquiry from a resident or institution.

Coordinating Board staff is undertaking 2 initiatives related to distance education: an inventory of off-campus sites in Minnesota and the development of standards for distance education. These efforts will help to identify the extent to which distance education is being offered in Minnesota and how to evaluate it. However, it will not address the need for identifying non-Minnesota institutions that are sending education to Minnesota residents without the knowledge of the Board. Minnesota residents remain at risk from illegitimate or inadequate distance education from non-Minnesota institutions. Funding for this program is provided through licensing fees. The Coordinating Board feels that the current fee level provides for the necessary funding requirements.

Community Service Program: The initial community service grant legislation called for the program to be phased out at the end of the 1990-91 biennium. The intent was to have recipient institutions replace the grant with institutional resources. The Coordinating Board is seeking to build on the 1990 grants for integration of the service learning into courses and curricula. This would consist of a grant program to allow faculty and campus program directors develop or redesign existing classes. If additional funds are not provided, the Coordinating Board would request that campuses continue this effort on existing resources. However, it does not believe that all campuses will agree to do this.

Eisenhower Mathematics and Science Program: The federal government have recommended increases in the Eisenhower Mathematics and Science Education Program, so the Coordinating Board does not believe the state resources are necessary to continue this program at its current level.

Mission Differentiation and Inter-System Cooperation: The mission differentiation effort has evolved into a focus on increased intersystem planning and cooperative effort. To enhance cooperative activities and recognize that cooperation often requires additional resources, the Board proposes to undertake a regional planning approach and to provide modest grants for cooperative activities. The Coordinating Board believes that it can continue its role in this effort within existing resources plus inflation.

Quality: The promotion of quality is one of the major themes of the Board's 1992-93 request. In addition to working with and monitoring the pilot projects, the agency continues to staff and provide leadership to the Task Force on Post-Secondary Quality Assessment, monitor quality activities in other states, and participate in national and regional efforts on quality assessment. The Coordinating Board will focus its effort on the continuation of the quality assessment initiative by disseminating information about the pilot projects, exploring the Total Quality Management approach to post-secondary education and promoting and enhancing faculty and staff development, a key ingredient in improving quality. The Coordinating Board believes that it can accomplish this with the same resources, plus inflation, as received in the current biennium.

PLAN:

To continue the proactive planning and research capability initiated during the current biennium with the M

PROGRAM: Coordination, Planning and Institutional Service
(Continuation)
Agency: Higher Education Coordinating Board

1992-93 Biennial Budget

SPAN projects, the Board is requesting an additional \$150,000 a year. This would allow the Coordinating Board flexibility to respond to emerging post-secondary policy and planning issues and enhance its capabilities as being the catalyst for post-secondary education decision making. These funds would be used to obtain the services of experts in a given area and would not be used for additional permanent staff. This would also allow the Coordinating Board to respond to legislative policy and research mandates, and initiate other comprehensive studies such as providing equitable access to post-secondary education to students with disabilities.

The program review function continues to be an important part of the Board's role in coordinating post-secondary education. The Board proposes to continue this function with the current level of resources.

The demand for use of MINITEX library service requests continues to expand at a level greater than what the current level of resources can provide. Therefore, the Coordinating Board is requesting that the funding for MINITEX be increased by \$457,000 in F.Y. 1992 and \$575,000 in F.Y. 1993 to better meet the demand for document delivery requests. This would provide for MINITEX services at the F.Y. 1990 level.

To provide consumers of Minnesota post-secondary education more information on their probability of success upon completion of a program of interest to them, the Board is requesting \$60,000 for each year of the biennium to examine approaches to collecting and displaying data such as completion rate of students who enter a program of study and the probability of employment for program graduates. This funding would enable the Board to fulfill its legislative mandate to coordinate the development of placement tracking by the state's post-secondary education systems.

The Board feels it's important to build on the current community service initiative for faculty and campus program directors to integrate service learning into courses and curricula. The Board is recommending an additional \$150,000 during the biennium to facilitate this effort.

GOVERNOR'S RECOMMENDATION:

The Governor recommends direct state appropriation of \$5,869,000 for Coordination, Planning, and Institutional Service during the 1992-93 biennium. The recommendation reflects a general reduction of \$376,000 for the biennium in the agency's non-financial aid programs and activities.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: HIGHER ED COORD BD
PROGRAM: COORDINATION PLANNING AND INSTITUT

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
POLICY AND PROGRAM PLANNING	2,282	1,680	1,955	1,582	1,582	1,582	1,578	1,578	1,578
MINITEX LIBRARY	3,305	3,473	3,762	3,762	3,762	3,762	3,762	3,762	3,762
QUALITY AND MISSION COORDINATION	183	395	281	356	356	356	356	356	356
AGENCY SUPPORT SERVICES	540	536	716	648	648	648	647	647	647
TOTAL EXPENDITURES BY ACTIVITY	6,310	6,084	6,714	6,348	6,348	6,348	6,343	6,343	6,343
DETAIL BY CATEGORY:									
STATE OPERATIONS	5,483	5,157	6,084	5,634	5,634	5,634	5,629	5,629	5,629
LOCAL ASSISTANCE	827	927	630	714	714	714	714	714	714
TOTAL EXPENDITURES BY CATEGORY	6,310	6,084	6,714	6,348	6,348	6,348	6,343	6,343	6,343
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	3,056	3,074	3,491	3,125	3,125	3,125	3,120	3,120	3,120
STATUTORY APPROPRIATIONS:									
GENERAL	9								
SPECIAL REVENUE	133	78	53	53	53	53	53	53	53
FEDERAL	536	470	452	452	452	452	452	452	452
AGENCY	2,546	2,428	2,679	2,679	2,679	2,679	2,679	2,679	2,679
HECB LOAN FUND	30	34	39	39	39	39	39	39	39
TOTAL FINANCING	6,310	6,084	6,714	6,348	6,348	6,348	6,343	6,343	6,343

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: HIGHER ED COORD BD
PROGRAM: GENERAL REDUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
GENERAL REDUCTION						<188>			<188>
TOTAL EXPENDITURES BY ACTIVITY						<188>			<188>
DETAIL BY CATEGORY:									
STATE OPERATIONS						<188>			<188>
TOTAL EXPENDITURES BY CATEGORY						<188>			<188>
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL						<188>			<188>
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING						<188>			<188>

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: BLUE RIBBON COOMMISSION

PROGRAM

PAGE

Blue Ribbon Commission

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MISSION:

General Fund operating expenditures for post secondary education represent nearly 19% of total state General Fund expenditures. Minnesota provides direct funding for students attending 67 public post secondary institutions in four higher education systems: 34 technical college campuses, 21 community college campuses, 7 state universities, and 5 University of Minnesota campuses. Public post secondary institutions are located within 50 miles of more than 95% of all Minnesota homes. Only Alaska, North Dakota, and Wyoming have more public campuses per state resident than Minnesota. Also unlike many states, Minnesota supports two fully developed, independent, state-funded two-year post secondary systems.

The state's post secondary participation rate is among the highest in the country. The Research Department of the Minnesota House of Representatives estimates that about 70% of all high school graduates enroll in some form of post secondary education within three years of graduation. The number is especially significant in the context of Minnesota's high school graduation rate - the highest in the country. Despite high participation and relatively high enrollment (per capita), average enrollment is low at Minnesota campuses. With campuses spread across the state, Minnesota has among the lowest average enrollment per campus in the nation at 3,100. The national average is 6,500.

Growing demand for state services in a time of shrinking fiscal resources and opportunities requires Minnesota to examine and develop new approaches to service delivery. Despite its commitment to higher education, the state must begin to ask whether it can continue to sustain (at current or improved levels) the current post secondary delivery system. Minnesotans must assess trade-offs between quality and quantity in an environment of continuing fiscal restraint. Policy makers must address questions of efficiency and effectiveness:

- Can and should Minnesota continue support of 67 public postsecondary institutions?
- Should the citizens of Minnesota continue to support two systems dedicated solely to lower division education?
- How can education delivery be modified to ensure access and maximum resource use?

These questions represent only a few of the issues on Minnesota's policy agenda for post secondary education.

The Governor recommends that a Blue Ribbon Commission on Higher Education be established to review and make recommendations on the future structure of Minnesota public post secondary education. The commission will assess three broad areas for action and reform:

- Mission Differentiation. What are the missions of the post secondary systems, and to what extent do they overlap? What opportunities exist to combine or realign system missions?
- Governance. Can Minnesota's post secondary missions and objectives be achieved with fewer systems or redesigned systems? What opportunities exist for expanded resource sharing and cooperation?
- Geographic Access. How can higher education delivery be geographically consolidated or reformed?

The Blue Ribbon Commission will begin its work immediately and present its recommendations for reform to the Governor and legislature in time for the 1992 legislative session. The Governor invites post secondary and legislative participation and input in the Commission decision making process. The final recommendations should elicit broad ownership as they seek to provide a blueprint for

change.

The Governor anticipates that Commission recommendations will result in savings of direct state appropriation of \$10,000,000 in F.Y. 1993. The recommendations resulting in those savings, as well as their distribution among the post secondary systems, are contingent on both the specific nature of the recommendations and the systems' response to them.

As an incentive for action, the Governor recommends that 10% of each system's F.Y. 1993 instructional appropriation be put in reserve in a non-operating account and subject to legislative reallocation during the 1992 legislative session. The amount to be set aside totals \$65,286,000 of which \$55,286,000 would be reallocated to the systems.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: BLUE RIBBON COMMISSION-POST SEC
PROGRAM: HIGHER ED COMMISSION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
HIGHER ED COMMISSION									55,286
TOTAL EXPENDITURES BY ACTIVITY									55,286
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE									55,286
TOTAL EXPENDITURES BY CATEGORY									55,286
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL									55,286
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING									55,286

1992-93 Biennial Budget

PROGRAM: Blue Ribbon Commission - Post Secondary Education

AGENCY: Blue Ribbon Commission - Post Secondary Education

DECISION ITEM: Restructuring Target

Dollars in Thousands			
F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995

GOVERNOR'S RECOMMENDATION:

Direct Appropriations

Transfer from Post Secondary Systems	\$	-0-	\$ 65,286	\$	-0-	\$	-0-
General Fund Reduction	\$	-0-	\$ (10,000)	\$	(25,000)	\$	(25,000)

Total Expenditures

General Fund	\$	-0-	\$ (55,286)	\$	(25,000)	\$	(25,000)
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Requires statutory change: Yes No

ITEM SUMMARY:

The Governor recommends that 10% of each system's F.Y. 1993 instructional appropriation be set aside in a general fund non-operating account and subject to legislative reallocation during the 1992 legislative session upon approval of the restructuring recommendations of the Blue Ribbon Commission of Higher Education. The amount to be set aside totals \$65,286,000, of which \$55,286,000 would be reallocated to the systems. The Governor anticipates that the commission's recommendations will produce \$10,000,000 of savings in F.Y. 1993 and \$50,000,000 in the 1994-95 biennium.

Reallocation of the appropriation will be subject to legislative and gubernatorial approval as well as each system's acceptance of the approved commission recommendations.

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

System: TECHNICAL COLLEGE SYSTEM

PROGRAM

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Instruction

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Non-Instruction

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State Council

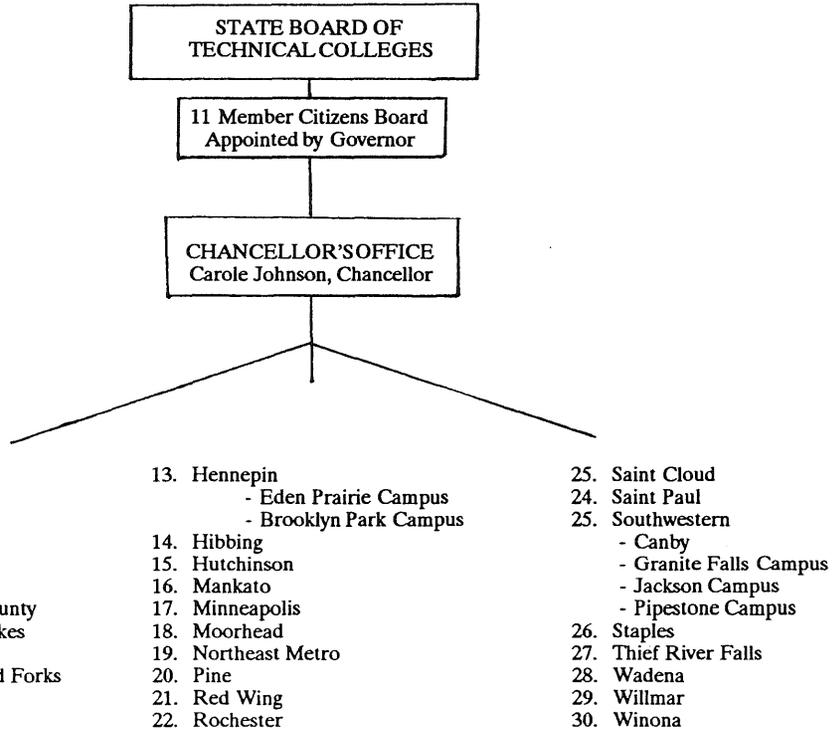
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MINNESOTA TECHNICAL COLLEGE SYSTEM

ORGANIZATIONAL CHART
1-1-91

MEMBERS

1. Don Ingram - First Congressional District
2. Patricia Allinder - Second Congressional District
3. Gary Mohrenweiser - Third Congressional District
4. JoAnn Cardena Enos - Fourth Congressional District
5. Frank Adams - Fifth Congressional District
6. John O'Conner - Sixth Congressional District
7. Doug Knowlton - Seventh Congressional District
8. Lenore Quick - Eighth Congressional District
9. F.B. Daniel - (At Large)
President
10. Donna Anderson - (At Large)
11. Jerry Mullen - (Student Rep)



MISSION:

Minnesota operates a post-secondary vocational technical education system with 30 Technical Colleges at 34 campuses. Programs are provided in approximately 230 occupational areas which, together with adult extension programs on campus and in approximately 400 local school districts, are designed to meet the current and future needs of business, industry and agriculture.

The following mission statement was approved by the State Board of Technical Colleges in 1989, and reaffirmed in 1990.

MISSION STATEMENT

The mission of the Minnesota Technical College System is to serve individuals and society by providing occupational education and technical expertise which enhance personal development, increase economic opportunity, and contribute to the global community.

The Technical College System:

- Is dedicated to developing a competent workforce, to providing the highest quality instruction and services that accommodate individual learning needs, and to working collaboratively with business, industry, labor, agencies, organizations, or institutions.
- Values accessibility, adaptability, flexibility, sensitivity, responsiveness, integrity, accountability, and equity in education.
- Will conduct its responsibilities with the highest ethical standards as a national leader in occupational education.

During the last several years, the SBTC has participated in extensive discussions with representatives of other Minnesota higher education systems in an ongoing effort to delineate the missions of the systems and to establish cooperative arrangements with the other systems, as appropriate. As a result of this process, the Minnesota Technical College System has entered into agreements with the Minnesota Community College System (December, 1986) and the Minnesota State University System (February, 1988) that particularly differentiated mission with respect to the granting of associate degrees. A major provision specifies that new occupational programs leading to the Associate of Applied Science (A.A.S.) degree are to be offered jointly by cooperating colleges or universities and Technical Colleges. This cooperation has led to the approval of associate of applied science degrees in 150 programs throughout Minnesota. These programs combine high quality occupational education offered at Technical Colleges with the transfer credits in general education offered by the Community Colleges or State Universities in a ratio of 2/3 occupational and 1/3 general education. Students are the benefactor of this cooperative effort.

Underlying the proposal is the premise that access, quality, and efficiency are critical to the accomplishment of mission, but they can only be achieved, and a system made accountable for that achievement, if the missions of other systems are complementary to, rather than in competition with that mission.

Post-secondary vocational programs of the 34 campuses plus extension programs are conducted on a fiscal year budget cycle with classroom operation generally occurring on a school year basis, September to June. Technical Colleges are increasing their hours of service to the public by offering classes on weekends and evenings. The change to a course/credit based system has made a tremendous change in the amount of part-time enrollment.

Governance of the day-to-day college operation, employment decisions, budget management, and other local policy matters are the responsibility of locally elected elementary/secondary or

intermediate school board members. Technical College instructors and administrators are covered by the terms and conditions of a locally negotiated employment contract through the Public Employee Labor Relations Act (PELRA) process. The same contract covers the elementary/secondary staff.

Actions of the 1985 legislature created a third governance alternative for the Technical Colleges. The law permits 1 or more independent school districts which operated a Technical College to join together and create a Joint Vocational Technical Education District. The new district is governed by an elected or appointed board and would not be related to the former independent school district in any formal way. All staff at the Technical colleges are transferred to the new board and become employees of the new district without loss of benefits.

Four districts (Granite Falls, Jackson, Pipestone, and Canby) passed formal resolution, forming a joint vocational technical education board, and are operating a four-campus Technical College. Several other groups of Technical Colleges are considering this alternative form of governance. The State Board has provided research funds to those districts choosing to discuss the option.

Prior to 1-1-84, all statewide decisions effecting the system were the responsibility of the State Board of Education/Board of Vocational Education. Management activities of the system were conducted by the Department of Education acting under the authority of the State Commissioner of Education. The Vocational Division of the Department of Education was responsible for administering all vocational programs.

Major governance changes in the Technical Institute and adult vocational system were adopted by the 1983 legislature in Chapter 258, 1983 Session laws of the State of Minnesota, creating a separate State Board of Vocational Technical Education. The new state board was given state agency status.

Beginning 1-1-84, the new State Board of Vocational Technical Education was designated by state statute, the sole state agency with respect to receipt and disbursement of federal vocational funds.

In 1987 the Area Vocational Technical Institutes were renamed "Technical Institutes," by statute (M.S. 1987, Chapter 258., Sec. 12). This change was proposed by the Board in order to provide a standard name for each campus. The name change has assisted in promoting the Technical Institute System and has been a positive change for the system.

Technical Institutes were again renamed by the 1989 legislature to "Technical Colleges" by statute (M.S. 1989, Chapter 246). This change was proposed by the State Board to provide students with the opportunity to attend and graduate from higher education institutions which in other states in the United States are titled colleges or comprehensive colleges. The change was supported by employers, students, parents, and the system.

Actions of the 1990 legislature completed the change in titles by renaming the State Director to "Chancellor," the local director to "President," and the State Board of Vocational Technical Education to "State Board of Technical Colleges" by statute (M.S. 1990, Chapter 375).

MAJOR POLICY DRIVERS:**Restructuring to Courses and Credits**

The single largest initiative in the systems 40 year history is in the final stages of implementation on all campuses. Three years ago the colleges began a total system overhaul of teaching curriculum from a clock-hour base to a course/credit base.

Programs in the Technical College System had traditionally been offered in a 6-hour-per-day, 175-days-per-year format. Today many students can not afford to attend in the 6-hour format. Complex schedules and personal commitments require most students to work part-time, and the traditional program delivery model was not serving those students. The change to courses is nearly complete at all 30 Technical Colleges. The benefits to the students are: the opportunity to attend on a part-

time basis, increasing transferability between campuses and between systems, and more flexibility in class schedules. The system has experienced tremendous growth in the number of part-time students as a result of curriculum restructuring.

North Central Association Accreditation (NCA)

The majority of Technical Colleges do not meet the accreditation standards of the North Central Association as higher education institutions, but they are accredited as post-secondary institutions by the State Board under authority granted by the U.S. Secretary of Education. Students are eligible for the full amount of guaranteed loans, grants and scholarships. All Technical Colleges are moving forward toward the goal of becoming NCA accredited by 1995. The decision to pursue accreditation has resulted in improved credit transfer discussions with the universities in Minnesota. To become accredited by North Central, the colleges must meet rigorous standards and these will create the need for priority resources and in most cases additional funding. Student support services such as libraries, counseling, financial aid assistance will need improvement.

Part-time Student Enrollment

The movement to a credit based system was initiated in great part to accommodate the needs of part-time students. They now can enroll in courses which are specific to their career needs and at times which are convenient to their schedules. Consequently, student head count in the Technical Colleges has increased at an extraordinary rate. In 1987 the number of part-time students was 1,400, and 3 years later the number of part-time students has reached 14,000. This extraordinary increase has created a wholesale change in the student profile. Student head count has increased this year by 11% and these students need more counseling time, registration support, financial aid information, and other support services. The Technical Colleges have experienced this major restructuring into credits and enrolled thousands more students while the full-time equivalent number of students has remained the same. Average cost funding does not recognize part-time enrollment and compensate the system for services which are based more on head count than full year equivalents. A good example would be the college registration process, where the same amount of administrative support is necessary to register a student for 3 credits as 15 credits. No other higher education system has experienced this fundamental change in instruction within their base level funding. The legislature has supported the change to credits and careful consideration should now be given to a base level adjustment to recognize the impact restructuring has made on the student support needs of each campus.

EXPLANATION OF BUDGET ISSUES AND ALTERNATIVES:

1. Base Level Funding and Inflation Adjustments - Enrollment at the Technical Colleges has undergone a tremendous shift from full-time to part-time while the total full year equivalent number of students have remained stable for the last 8 years. Consequently, the resources available to operate the system have not increased in proportion to student head count. It has been extremely difficult to maintain a quality program with resources that have not been adjusted for fixed costs of education including fuel and utilities, insurance, and basic maintenance. Instructional expenditures allocated for staff are 75-80% of the budget in all colleges and these costs have risen each year due to salary negotiations. If base funding and inflation adjustments are not available to the system the campuses will have a difficult time adjusting. All financial expenditure decisions are made at the local school district level and the State Board has no authority to approve expenditures by local elementary/secondary school boards. Additionally, a decision made at the end of the 1991 legislative session in May 1991, will not provide colleges with the opportunity to make necessary adjustments in time to comply with the provisions in the Public Employee Relations Act (PELRA), which call for April notifications of any staffing adjustments.

Calculating the inflationary adjustment necessary to finance the base level of operations in the Technical Colleges for the next 2 years is extremely difficult. Not only determining the amount of inflation each year but attempting to determine what level of inflation will be provided by the local school boards during the negotiations process. If the calculation estimate of 4.5% each year provided by the department of finance holds true, then the inflationary adjustment needed would be \$32,285.0 for the biennium. This increase would require \$10,550 in F.Y. 1992 and \$21,735 in F.Y. 1993.

2. Instructional Quality - Changing needs within business and industry have led to development of new programs in the technical college. Colleges have worked with advisory committees of professionals within each area to assess the industry need, determine employment opportunities, and design appropriate curriculum. These programs are approved by the Higher Education Coordinating Board and are ready to be implemented. The only problem with offering these new programs is obtaining start-up costs from the legislature.
3. North Central Association Accreditation (NCA)/Library - Continued development of quality instruction in the Technical College System will include having each college accredited by the North Central Association as higher education institutions. Currently, only 4 of the 30 colleges are accredited by NCA. The State Board has established 1995 as the date by which all 30 colleges would be accredited. Our lack of accreditation by NCA has adversely affected the student transfer negotiations on mission delineation with other post-secondary systems. This high priority of the Board will require additional funds for meeting NCA standards. Library resources are significantly below standard as are student support services. It will take an estimated \$3 million in the next biennium to bring the colleges into compliance with NCA standards.

A significant portion of these funds would be utilized to upgrade the library resources in the system. A survey completed by the system in 1989-90 indicated that 59% of our library services are below standards set by the State Board.

4. Instructional Technology - Currently, Technical Colleges undertake a basic skills assessment of all incoming students. The testing indicates a significant need for remediation of basic skills or a refresher course in math or reading. Special funding will be requested to develop an integrated computer assisted and computer managed instructional system designed to rapidly bring students to skill levels needed in each program area. An investment in this type of system will provide a significant long term savings to the Technical Colleges by reducing remedial education costs, increasing the efficiency and effectiveness of student learning, and reducing the time it takes students to brush up on skills required in their chosen major of study.
5. Student Information System - Quality of student data continues to be an issue within the Technical College System. Each of the campuses has developed a student enrollment data management system, but these systems are not compatible across the colleges. A uniform system will provide more efficient student registration, accurate grading and transcribing, and quicker access to financial aid for students. Administrative costs will be reduced, increased efficiency in data management and accountability and most importantly improved to students will result.
6. Equipment - Technical education programs require major commitments of system resources to maintain quality. A State Board priority of \$18 million has been made each year of the current biennium, which is approximately 9% of the system's annual budget. The 1989 legislature provided a base adjustment of \$3,200.0 which assisted in partially compensating for a backlog of instructional equipment. This appropriation was designated as non-recurring and these funds will be removed from the 1991-93 base amount. Restoring the base amount would permit the colleges to continue the progress on the backlog of instructional equipment.
7. Cultural Diversity - Technical Colleges have a significant commitment to serving the diverse needs of students who are part of a rapidly changing demography in Minnesota. Technical Colleges enroll the most diverse population of any post-secondary education system with approximately 9% of the student population being minority. The Minnesota percentage of

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$311,382,000 for the Technical College System in the 1992-93 biennium. The Governor's 1992-93 recommendations for the System include marginal cost funding adjustments for projected enrollment growth during the biennium, a general reduction in both the instructional and non-instructional programs, and elimination of appropriation subsidies for non-resident/non-reciprocity students enrolled in technical colleges. The recommendation assumes that tuition will increase by no more than the rate of inflation for the biennium - projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the rate of inflation would partially offset the reduction in instructional appropriations. The Governor recommends that the legislature include a rider in the appropriation to the Technical College System to clearly limit the amount of the tuition increase to no more than these amounts. In addition, the Governor recommends withholding 10% of the System's F.Y. 1993 instructional appropriation for redistribution by the Governor and legislature pending the recommendations of the Blue Ribbon Commission on Higher Education and the System's response to those recommendations.

The Governor also recommends removing the Technical Colleges from the 85/15 method of funding which has been used in making appropriations since the early 1980s (when Technical College funding was part of the K-12 omnibus appropriation bill). This change would effectively provide additional funding of \$458,000 for the biennium. It would not, however, retire any part of the accrued receivable of \$24,060,000 attributable to the original funding shift. This amount represents the current value of funds lost when the funding shift was instituted a decade ago.

The recommended total spending authority for the Technical College System (direct appropriation plus tuition and other income) is \$446,735,000.

minorities in the general population is 3.5%. To continue and expand the commitment to servicing a cultural diverse population, the State Board will be requesting funds for special initiatives on each campus.

8. Telecommunications - Technical Colleges have been a leader in development and implementation of telecommunication systems in higher education. Networks of 2-way interactive fiber optic connect campuses, and the State Board operates an up-link/down-link satellite communication network in cooperation with the World Trade Center in St. Paul and the St. Paul Technical College. These networks greatly expand the communication opportunities for instruction in the system and are part of proposed STAR network of the Department of Administration. Additional funds are requested to complete the regional networks within the STARS system.
9. Repair and Replacement Funds - Maintaining the physical plant at 34 campuses requires a significant commitment of system resources. The type of instructional space utilized by technical education is also significantly more expensive to maintain than space utilized for general education purposes. The formula utilized to allocate repair funds to each higher education system is a good formula, but funding has been limited to only 32% of the predicted need.
10. Health Insurance - Spiraling costs of health insurance across the system have resulted in a significantly greater proportion of instructional funds being allocated to this activity. There are approximately 4,500 employees covered under the 30 plans negotiated by local school boards. There is considerable variation in the health insurance packages negotiated by each of the 30 colleges. Most of the insurance contracts are for terms beginning at the start of the fiscal year beginning 7-1-91. A survey of the colleges indicates an expected increase of 15-20% which results in an additional expenditure increase of between \$800.0 and \$2,000.0 for the biennium.

REALLOCATION ALTERNATIVES- The opportunity to reallocate internal funding from Technical Colleges to meet expected inflationary pressures of 9% for the biennium will be an very difficult challenge. Technical Colleges have not increased in enrollment for the last 6 years, consequently, the revenue available to operate the system has not increased, and no marginal cost revenue or additional growth funds have been provided. The net affect of stable enrollment is no additional growth funds. As inflation erodes the buying power of base funding the colleges have an exceedingly difficult time maintaining their instructional quality.

Colleges are governed by local school boards and staff are paid through a contract negotiated by the local school board. In the negotiation process, revenue available to the elementary/secondary education system is the overriding factor affecting the expenditures in the Technical College. There is no legal authority for the system to control expenditures of the local school board and the authority to balance the local budget belongs to the school board.

This combination of no increase in instructional funds in the base level for the Technical Colleges together with the inability to control expenses which are tied to K-12 education, will make it impossible to continue providing the same level of service. Programs will be eliminated on each campus because funding will not be available. Student support services will be eliminated, counsellors and financial aid assistance to students will not be readily available. There will be pressure to shift funding from equipment purchases to staffing expenditures to maintain the instructional staff, which will lead to industry complaints for additional and upgraded equipment.

In spite of operating the system without base adjustments for growth for the last 6 years, Technical Colleges have dramatically changed the method of instruction from a program base where everyone was a full-time student to a course credit system which accommodates part-time students. The original base of expenditures calculated 1983 for the system was based on the student support system necessary to accommodate only full-time students. Serving part-time students requires a major

Reconciliation of F.Y. 1991 Spending to F.Y. 1992-93 Base

	FY 1992			FY 1993			Biennium		
	Inst	Non-Inst	Total	Inst	Non-Inst	Total	Inst	Non-Inst	Total
FY 91 Direct Appropriation	167,787	6,263	174,050	167,787	6,263	174,050	335,574	12,526	348,100
FY 91 Pension/Sal Suppl	12	5	17	12	5	17	24	10	34
FY 91 Changes (1990 Leg)	(1,634)	50	(1,584)	(1,634)	50	(1,584)	(3,268)	100	(3,168)
Appr Adjustment: 85/15	978	0	978	978	0	978	1,956	0	1,956
FY 90 Carryforward	3,481	9	3,490	3,481	9	3,490	6,962	18	6,980
Legislative Intent Tuition	60,714	0	60,714	60,714	0	60,714	121,428	0	121,428
Tuition Changes (1990 Leg)	(311)	0	(311)	(311)	0	(311)	(622)	0	(622)
Excess Tuition Receipts	1,441	0	1,441	1,441	0	1,441	2,882	0	2,882
Local Revenue Intent	993	0	993	993	0	993	1,986	0	1,986
FY 91 Base	233,461	6,327	239,788	233,461	6,327	239,788	466,922	12,654	479,576
Adjust out Excess Receipts	(1,441)	0	(1,441)	(1,441)	0	(1,441)	(2,882)	0	(2,882)
Adjust out Carryforward	(3,481)	(9)	(3,490)	(3,481)	(9)	(3,490)	(6,962)	(18)	(6,980)
Adjust out Non-rec Approp	(1,589)	(2,000)	(3,589)	(1,589)	(2,000)	(3,589)	(3,178)	(4,000)	(7,178)
Other Approp Adjustments	3	(2,226)	(2,223)	7	(2,772)	(2,765)	10	(4,998)	(4,988)
FY 89 Estimation Adjustment	5,855	0	5,855	5,855	0	5,855	11,710	0	11,710
ACF Adjustment	(4)	0	(4)	1,717	0	1,717	1,713	0	1,713
Total Adjusted Base Level	232,804	2,092	234,896	234,529	1,546	236,075	467,333	3,638	470,971

F.Y. 1991 Budget Reductions (Information Only)

Laws of Minnesota 1991, Chapter 2 reduced the F.Y. 1991 appropriation to the Technical College System by \$1,800,000. This reduction is not reflected as a change to F.Y. 1991 or F.Y. 1992-93 BASE Levels within the budget documents.

ALLOCATION OF INDIRECT COSTS FY90

	Primary Locations		Academic Support	Student Support	Institutional Support	Physical Plant	Total
	Instruction	Non-Instruction					
Direct Costs:	130,655,363	18,235,133	11,049,881	13,295,999	36,307,799	27,969,833	237,514,008
Support Costs Allocations:							
Physical Plant	19,102,122		1,615,519	1,943,906	5,308,286	(27,969,833)	
Institutional Support	35,079,491		2,966,768	3,569,826	(41,616,085)		
Student Support	17,342,987		1,466,744	(18,809,731)			
Academic Support	17,098,912		(17,098,912)				
TOTAL	219,278,875	18,235,133	0	0	0	0	237,514,008

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: TECHNICAL COLLEGE

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604
NON-INSTRUCTION	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
STATE COUNCIL	88	96	113	99	99	99	99	99	99
TOTAL EXPENDITURES BY PROGRAM	218,619	225,755	238,810	234,896	234,896	229,685	236,075	236,075	217,050
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	161,090	166,936	175,973	172,624	172,624	163,356	173,363	173,363	148,026
STATUTORY APPROPRIATIONS:									
GENERAL	57,529	58,819	62,837	62,272	62,272	66,329	62,712	62,712	69,024
TOTAL FINANCING	218,619	225,755	238,810	234,896	234,896	229,685	236,075	236,075	217,050

ACTIVITY:
PROGRAM:
SYSTEM: Technical College System

1992-93 Biennial Budget

DECISION ITEM: Financing Inflationary Costs - Informational

	Dollars in Thousands			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Direction Appropriation				
General Fund	\$ 7,709	\$ 15,831	\$ 15,831	\$ 15,831
Tuition				
General Fund	\$ 2,817	\$ 5,802	\$ 5,802	\$ 5,802
Total expenditures				
General Fund	\$ 10,526	\$ 21,633	\$ 21,633	\$ 21,633

Requires statutory change: _____ Yes x No

ITEM SUMMARY:

Inflation was calculated for the Technical College System at 4.5% per year for each year of the 1992-93 biennium. The inflation factors were applied to the system's adjusted instructional and non-instructional base, less non-tuition income.

The Technical College System did not submit a plan detailing how funds would be reallocated to address anticipated increases in salary and non-salary costs. However, under current law, the Technical College Board has authority to make allocative decisions among campuses and programs.

ACTIVITY:
PROGRAM: Instruction
AGENCY: Technical College System

1992-93 Biennial Budget

DECISION ITEM: Blue Ribbon Commission/System Restructuring

Dollars in Thousands

<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
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GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$	-0-	\$ (16,287)	\$	-0-
Total Expenditures					
General Fund	\$	-0-	\$ (16,287)	\$	-0-

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

The Governor recommends that 10% of the Technical College System's F.Y. 1993 appropriation be set aside in a General Fund non-operating account and subject to legislative reallocation during the 1992 Legislative Session upon approval of the restructuring recommendations of the Blue Ribbon Commission of Higher Education. The amount to be set aside from the System totals \$16,287,000.

Reallocation of the appropriation back to the Technical College System will be subject to legislative and gubernatorial approval and dependent on the System's acceptance of the approved Commission recommendations.

ACTIVITY:
PROGRAM:
AGENCY: Technical College System

1992-93 Biennial Budget

DECISION ITEM: Elimination of Appropriation Subsidy for Non-Resident/Non-Reciprocity Students

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation					
General Fund	\$	(654)	\$	(654)	\$ (654)
Tuition					
General Fund	\$	654	\$	654	\$ 654
Total Expenditures					
General Fund	\$	-0-	\$	-0-	\$ -0-

Requires statutory change: Yes No
Statutes Affected: M.S. 135A.03, Subd. 3

ITEM SUMMARY:

This item eliminates the appropriation subsidy for students from states with whom Minnesota does not have reciprocity agreements. The reduction in state direct appropriation totals \$1,308,000 for the 1992-93 biennium. The appropriation reduction is offset by assumed increases in tuition for non-resident/non-reciprocity students.

The Technical College System estimated non-resident/non-reciprocity enrollment of 155 FYE (full year equivalent) for the 1989-90 academic year.

RATIONALE:

Fiscal constraints prohibit future funding subsidies for undergraduate non-resident/non-reciprocity students in the Technical College System. In making this recommendation, the Governor intends that the State Board of Technical Colleges maintain its authority to set differential tuition rates for non-resident/non-reciprocity students. Though undergraduate non-resident/non-reciprocity students currently pay higher tuition than resident students, their tuition charge is less than full instructional cost. The Technical College System is encouraged to reallocate other resources to encourage and/or assist non-resident/non-reciprocity students to enroll in Minnesota technical colleges.

PROGRAM: Instruction
System: Technical College System

1992-93 Biennial Budget

PROGRAM PURPOSE:

The purpose of the instructional program is to provide basic classroom and laboratory instruction to students who are enrolled in classes leading to a career in 230 different occupations. Students attend classes at 34 technical college campuses which are organized into 30 technical college governing boards. Funds provided in this program are for instructor salary, supply costs, equipment, fuel and utilities and administration. Courses are offered leading to a certificate, diploma, or associate of applied science degree, and are designed to range in length from 9 months to 24 months. There are over 40,000 full time equivalent students attending courses in Minnesota Technical Colleges.

Services to Minnesota's business, agricultural, and industrial economy are also provided through extension services. These services are offered either through a clock hour or credit format and are available through each campus as a support to business and industry in their area.

The instructional program also contains necessary administrative expenditures for management of the system.

Enrollment: Enrollment in the Technical Colleges has remained stable during the last several years. However, there are major shifts in the courses students are attending, plus a tremendous change in the number of part-time students. Prior to offering students the opportunity to enroll in courses, every student was essentially forced to enroll on a full-time basis. The system's restructuring to a course/credit delivery system has enabled the number of part-time students to increase from 1,400 to 14,000 in just the last 3 years. Three years ago the average student enrolled was attending 98% full time, while today the ratio has dropped to 80% full time. Consequently, to stay level on enrollment each campus has needed to increase the head count enrollment. Preliminary indications for F.Y. 1991 show an increase of 11% in head count.

TABLE 1
Technical College Enrollment
Full Year Equivalent

	<u>F.Y.</u> <u>1985</u>	<u>F.Y.</u> <u>1986</u>	<u>F.Y.</u> <u>1987</u>	<u>F.Y.</u> <u>1988</u>	<u>F.Y.</u> <u>1989</u>	<u>F.Y.</u> <u>1990</u>
Albert Lea	660	698	777	758	609	657
Alexandria	1,728	1,828	1,741	1,856	1,995	1,831
Anoka	1,716	1,739	1,681	1,650	1,844	1,974
Austin	731	874	913	961	1,028	934
Bemidji	519	659	837	885	959	931
Brainerd	833	878	921	933	921	933
Dakota Cty	2,014	2,064	2,089	2,051	2,237	1,824
Detroit Lks	686	711	763	829	887	876
Duluth	1,326	1,316	1,408	1,310	1,331	1,344
East Grand Fks	562	591	591	625	676	787
Eveleth	398	420	429	429	410	417
Faribault	471	495	554	546	588	591
Hennepin	3,999	4,051	4,089	4,131	3,986	4,468
Hibbing	714	725	726	696	669	698
Hutchinson	704	672	708	732	772	787
Mankato	1,466	1,632	1,756	1,615	1,483	1,644
Minneapolis	2,584	2,319	2,425	2,172	2,287	2,285
Moorhead	1,085	1,060	1,121	1,109	1,096	1,143
NE Metro	2,320	2,255	2,256	2,159	1,955	1,950

	<u>F.Y.</u> <u>1985</u>	<u>F.Y.</u> <u>1986</u>	<u>F.Y.</u> <u>1987</u>	<u>F.Y.</u> <u>1988</u>	<u>F.Y.</u> <u>1989</u>	<u>F.Y.</u> <u>1990</u>
Pine	414	396	376	398	412	568
Red Wing	532	493	470	495	546	598
Rochester	958	977	994	1,031	1,016	1,015
Southwestern	2,165	2,388	2,551	2,548	2,421	2,370
Staples	807	1,032	950	988	988	1,032
St. Cloud	1,772	1,800	1,765	1,710	1,730	1,570
St. Paul	3,167	3,337	3,255	3,167	3,326	3,313
Thief River Fls	654	806	890	896	936	973
Wadena	626	705	724	754	730	715
Willmar	1,536	1,840	1,811	1,707	1,691	1,632
Winona	606	557	544	592	681	683
	<u>38,929</u>	<u>39,317</u>	<u>40,116</u>	<u>39,732</u>	<u>40,209</u>	<u>40,545</u>

A second issue affecting enrollment is the continued growth in the Minnesota economy. Research indicates that enrollment is inversely correlated to the availability of jobs. Often potential students go directly to work, rather than to a technical college. If the economic condition's worsen, enrollment will increase at the Technical Colleges. Enrollment at the Technical Colleges is shown in table 1, and table 2.

TABLE 2
Enrollment

	<u>Cont/Mgmt</u>	<u>Extension</u>	<u>Total</u>
1978	31,400	4,045	35,445
1979	31,003	4,682	35,685
1980	31,713	5,058	36,771
1981	34,363	6,186	40,549
1982	34,977	5,396	40,373
1983	35,442	5,904	41,346
1984	36,876	4,566	41,442
1985	34,573	4,356	38,929
1986	33,788	5,721	39,509
1987	33,272	6,844	40,116
1988	32,260	7,472	39,732
1989	32,394	7,815	40,209
1990	32,185	8,360	40,545
1991	32,328	8,517	40,845
1992	32,857	8,517	41,374
1993	33,592	8,517	42,109

Tuition: Tuition at Technical Colleges was free to students under age 21 until the 1978-79 school year. Legislative decisions in 1976 adopted a tuition requirement of \$2.00 per day for residents and \$5.00 per day for non-residents. Alot has changed since the first tuition amount was computed and today students pay \$33.25 per credit or approximately \$1,500 per year for a full-time student. The history of tuition is shown in Table 3.

PROGRAM: Instruction
 (Continuation)
 System: Technical College System

1992-93 Biennial Budget

TABLE 3
 Technical College Tuition

Year		Resident Rate	Total
F.Y. 1979	\$2.00/day	11,357,600 \$360/academic year	
F.Y. 1980	\$2.13/day	11,712,500 \$384/academic year	
F.Y. 1981	\$2.13/day \$384/academic year	12,769,800	
F.Y. 1982	\$2.50/day \$450/academic year	15,461,100	
F.Y. 1983	\$3.20/day \$576/academic year	19,066,200	
F.Y. 1984	\$4.44/day \$777/academic year	25,436,100	
F.Y. 1985	\$5.60/day \$980/academic year	37,945,400	
F.Y. 1986	\$6.11/day \$1070/academic year	40,774,600	
F.Y. 1987	\$6.66/day \$1166/academic year	45,079,978	
F.Y. 1988	\$7.26/day \$1271/academic year	52,355,000	
F.Y. 1989	\$29.00/credit \$1271/academic year	54,434,127	
F.Y. 1990	\$31.00/credit \$1395/academic year	58,107,121 (estimate)	
F.Y. 1991	\$33.25/credit \$1496/academic year	61,844,126 (estimate)	

Average Cost Funding Matrix: Legislative policy adopted in 1983 have outlined the procedures for determining the agency requests for instructional programs in all post-secondary education systems. The Technical College System has utilized this procedure and combined extension programs into the overall funding system rather than to request a specific amount for those programs. The request also incorporates funding for state administration, State Board, and repair and replacement expenditures.

There approximately 230 different instructional programs in the Technical College system which are grouped into high, medium and low cost cells, according to the actual instructional costs reported through the Uniform Financial Accounting and Reporting System (UFARS).

Table 4 provides the cell values and FYE counts used in the budget process. The average cost cells are derived by utilizing adjustment for enrollment as described in the average cost funding methodology. To determine the cell values, the expenditures for each program were divided by the FYE in each program.

After computing the average program cost, the average support cost was added to each FYE to determine the total instructional cost. Each cell contains approximately 70 programs.

TABLE 4
 Average Cost Funding Matrix

		F.Y. 1992		F.Y. 1993			
CELL	VALUE	FYE	EXPEN	CELL	VALUE	FYE	EXPEN
LOW	4,938	22,151	109,379	4,938	22,396	110,589	
MED	6,440	14,531	93,582	6,440	14,500	93,383	
HIGH	8,257	3,614	29,840	8,257	3,700	30,550	
Total		40,296	232,802		40,596	234,522	

State level administrative costs to the system have been included as part of the support cost to each program. These costs include all contracted services by agencies in state government.

Federal funds for the system have been provided through various programs since 1917. Because the average cost funding methodology only applies to state funding, federal expenditures were deducted from the cells and reported separately as a non-instructional expenditure.

PERFORMANCE:

Job Placement: The mission of technical colleges is to serve individuals by providing occupational education leading to employment. Recent state and federal laws require each higher education system to monitor and report job placement of graduates in occupational programs. Approximately 4 years ago the Technical Colleges redesigned a placement tracking and graduate follow-up system to monitor each program major and assess the job market. The system requires each campus to send a list of program graduates to an independent auditor chosen by the State Board. Each graduate is contacted, after 6 months, by the auditor to verify their employment status. The auditor then records the job title and other relevant information and state agency staff establish criteria to determine if the job is related to the major area of study. Programs which fail to place 51% of their graduates in jobs related to their training for three consecutive years are suspended by the State Board.

This performance standard is a major accountability measure for the system. The objective of the graduate follow-up system is to insure that jobs are available in occupations where students are educated. If there is a low number of graduates in a particular major this data is also analyzed. Reports on placement are provided to each new student so they are familiar with the previous classes employment status. No job guarantees are made but students do obtain valuable consumer information which can aid them in making a career decision.

Vocational Accreditation: A quality measure for the Technical College system is the accreditation of each Technical College by the State Board as part of a 5-year evaluation process. Federal law permits the State Board to become the accrediting agency for vocational programs. This accreditation allows students that enroll to be eligible to receive grants and loans.

All Technical College programs are evaluated once each 5 years by a citizens' evaluation team which is knowledgeable and experienced in all aspects of vocational administration and programs. Each instructional program is evaluated to determine if the curriculum, content, placement of graduates, equipment, and numerous other criteria are satisfactory to existing industry standards. The evaluation also is conducted in the areas of administration, business practices, library, audio visual

PROGRAM: Instruction
(Continuation)
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equipment, related instruction, vocational equity, programs for the disadvantaged and handicapped, extension programs and minority recruitment. Throughout the year, the system utilizes approximately 400 private evaluators and they are reimbursed for expenses, meals and travel. The complete evaluation is done at the site of the Technical College and requires approximately 3 days to complete. Results of the evaluations are provided to the State Board to determine whether to reaccredit the college.

The evaluation process is accepted by the North Central Association of Colleges and Schools as the equivalent of their on-site examination.

Advisory Committees: Each major program of study on every campus is required by State Board policy to have an advisory committee made up of professionals in the field. The purpose of the advisory committee is to advise the faculty and administration on curriculum, equipment, and employment skills to be taught in the courses. Each committee meets quarterly and sometimes more often, to review the program and recommend adjustments. This process utilizes over 700 citizen committees and thousands of people who keep the curriculum relevant and insure the program quality, placement opportunity, and skills of faculty. Advisory committee members serve without compensation and are part of the partnership Technical Colleges have with business and industry in Minnesota.

Faculty Licensure: Each faculty member of a Technical College has industry experience necessary prior to obtaining a teaching license in Minnesota. A requirement of 3,000 hours of industry experience is used to initially qualify instructors, who apply to the State Board for a license to teach in the system. This initial occupational experience requirement insures instructors have work experience that is necessary in today's rapidly changing work environment. Once the work experience is verified an instructor is given a provisional license which is later converted to a full license upon completion of a "teacher education" sequence of classes at a University. The quality of instructors in the Technical Colleges and the licensure process is part of the quality assurance process.

Faculty Retraining: Each year the State Board allocates funds which will permit approximately 20% of the faculty to return to their industry for a 2 week orientation and refresher course. This schedule allows every instructor to have an industry internship every 5 years. Major benefits of this program are for faculty to develop new skills, modernize curriculum, develop new relationships, and operate new equipment. This program was started in 1987 and has proven to be both exceptionally popular and extremely valuable in maintaining quality instruction for our system.

PROSPECTS:

Classroom and lab instruction is the primary outcome of Technical College activities. Over 40,000 FYE students are enrolled in the 34 colleges in major fields of study leading directly to employment. Since the system of Technical Colleges was created in 1983, curriculum and instructional delivery has undergone the most significant revolution in the systems 40 year history. Students may now enroll part-time where prior to 1986 it was virtually impossible to be a part-time student. The base calculation of expenditures in 1983 captured the "program delivery style," where students needed less counseling, less financial aid assistance, less scheduling and transcript support, and fewer library and student support facilities. Technical Colleges have attempted to be accommodating and flexible in their delivery, which is why the restructuring to a credit based system was implemented. Students can now enroll part-time, can accelerate their learning, or can take classes in only the skills they need.

Restructuring to credit base delivery has fundamentally changed the way Technical Colleges offer instruction, market courses, and look to the public. These changes have been difficult for the faculty and administrators to implement but the process is nearly complete. Each course has instructional

goals, and a syllabus of student outcomes. Each year of instruction has been divided into courses equalling 45 credits and specific classes and labs are provided according to a master college schedule.

A major difficulty for the system is to offer these added student services and additional flexibility with base funding calculated through the old program delivery model. As the state board moves to full implementation of a restructured system a base level adjustment of funding should be made available to provide the same level of student support as was provided in the initial base for the other higher education system.

There are major signs of strengthening enrollment in the system. Preliminary indications of F.Y. 1991 enrollment show an increase of 11% over F.Y. 1990 head count. The combination of restructuring which permits part-time students, together with an apparent worsening economy are the likely causes. These students will need additional support to make proper educational decisions regarding their major study area.

PLAN:

1. Base Level Funding Adjustment - Allocations to the 30 colleges from the State Board are made each year by using various formula. Most of the formula measure the number of students attending the college, and provide funds accordingly. If the base level funding to the system is not adjusted for inflation, the amount the State Board will have to allocate will be essentially the same as F.Y. 1991. Due to the governance in the system the expenditure authority is vested in local school boards. Consequently, the state board cannot dictate how funds are utilized on the campuses. There are certain exceptions to this rule regarding funding for equipment, where the amount for equipment on each campus is protected by the State Board but no decisions regarding the type of equipment purchased locally, are permitted.

If the school boards negotiate contracts at the 4.5% per year estimate by the Department of Finance, the amount of reallocation necessary on the campuses will be approximately \$32,285.0 for the biennium. It will be impossible to reduce expenditures by this amount and maintain the quality and level of instruction currently offered in the colleges. A majority of the expenditures are for instructional and support staff, and this level of budget reallocation will likely cause major reductions in the staffing at each college. It is unlikely that the school boards will be able to negotiate an expenditure amount less than the school district budget for elementary/secondary education, since the teachers are in the same bargaining unit.

One legislative change to assist school boards in expenditure management would be to change the Public Employees Labor Relations Act to require a differential contract settlement or a separate contract for the Technical College faculty. This legislative change would require the school board to negotiate expenditures for the Technical College staff that are commensurate with revenues provided from the State Board of Technical Colleges.

Tuition from students and a reduction of equipment expenditures are both alternatives to balance a budget with no adjustment for inflation. The State Board is opposed to either of these alternatives. Tuition in the Technical Colleges is already beyond the financial reach of many students and the part-time grant allowance is insufficient for the increasing number of students enrolled on a part-time basis. The legislature has adjusted the tuition expectation in both 2 year post secondary education systems so that students attending the same program will pay essentially the same amount. Increasing the tuition at Technical Colleges will change this state policy and cause a significant shift in enrollment. Decreasing the commitment for equipment, even on a 1 year basis, would reduce quality in the instructional programs and shift the allocation to staffing. Unless the State Board were willing to make a permanent shift, this measure would only delay a reduction in staff for 1 year.

Base level funding in the Technical Colleges has not been sufficient to accommodate many of the initiatives that are now needed in the system. The rapidly changing instructional needs, industry requests for new programs and student requests for additional services are all placing additional financial pressures on colleges. There has been no enrollment growth funding for

these services, as has been the case in other higher education systems. Therefore the State Board has requested the Governor and Legislature to provide additional funding in the next biennium. The requested expenditure increase for inflation, estimated at 4.5% each year, is \$32,154.0 for the 1991-93 biennium.

2. Instructional Program Funds - Changing needs within business and industry have led to the development of new programs within the technical colleges. These new programs are designed to prepare Minnesotans for these new, updated or emerging job opportunities. The State Board and HECB have approved these new program offerings, the colleges are prepared to deliver them, and there are waiting lists of students ready to enroll. However, funds are not available to address the start-up and initial costs of operations. This appropriation would allow these programs and sections to begin with continued support provided in the next biennium through the normal average cost funding method. Approximately 10 new programs and 15 new sections would be started during the biennium with this appropriation. The requested expenditure increase for instructional programs is \$3,000.0 for the 1991-93 biennium.
3. North Central Association Accreditation/Library Funding - Twenty campuses in the system (59%) do not have a library collection or facilities that meet State Board guidelines for start-up. These funds would bring campuses up to the minimum national standards and permit the Technical Colleges to proceed with accreditation by the North Central Association. Additionally, the colleges would be able to link into the Minnesota PALS on-line automated system that would provide students with the access to 1.5 million unique titles. Improving quality in the Technical Colleges is a major initiative of the State Board and the Colleges, and this critical need for library resources will assist in achieving that goal. The requested expenditure increase for library services is \$3,000.0 for the 1991-93 biennium.
4. Instructional Technology - Currently, the colleges undertake a basic skills assessment of all new students. Special funding is needed to develop an integrated computer assisted and managed instructional system which is designed for rapidly bringing students with diagnosed skill deficiencies up to the literacy and numeracy levels necessary for success in their chosen program. An investment of these funds will provide a significant long term benefit to the system by 1) reducing, over the longer term, the remedial education costs associated with the level of students as well as technical requirements of many programs, 2) increasing the efficiency and effectiveness of student learning, and 3) reducing the time it takes for students to master or brush up on higher order skills. The requested expenditure increase for instructional technology is \$2,000.0 for the 1991-93 biennium.
5. Student Information System - Data from Technical College campuses continues to be a concern with the system. Each of the campuses has developed a student data management system, but these systems are not compatible across the campuses. Funds in this initiative would develop a data management system for each college and provide for movement of information to the State Board. A uniform system would provide for efficient registration, accurate grading and transcribing and quicker access to financial aid for students. Quarterly enrollment reporting would be very helpful in identifying trends and student characteristics and relieve the colleges of manually sending report disks to the state. Administrative costs will be reduced, increased efficiency in data management and accountability and, most importantly, improved service to students will result. The requested expenditure increase for a student information system is \$1,250.0 for the 1991-93 biennium.
6. Equipment - Occupational education requires a major investment in equipment in order to maintain quality programs. The State Board has invested approximately 9% of the system budget in annual equipment allocations. Inflation, new program needs, and replacement of old equipment have led to an ever increasing need in the technical colleges. In the 1990 Legislative session each higher

education system received an adjustment in the equipment allocation. However, these funds were for one biennium only and were designated as nonrecurring. This request is to restore equipment funding to the level authorized in the current biennium. The requested expenditure increase for equipment is \$3,200.0 for the 1991-93 biennium.

7. Cultural Diversity - Technical Colleges are trying to serve the needs of students whose demographic and social profile is changing rapidly. The colleges enroll the most diverse population of any higher education system. Approximately 9% of the students are minorities while the population in Minnesota is approximately 3.5%. To meet the challenges of instruction and support services the State Board must provide additional leadership for the colleges. These funds would provide for cultural diversity initiatives on each campus and initiate a system of training for collage staff. The requested expenditure increase to develop cultural diversity programs is \$500.0 for the 1991-93 biennium.
8. Telecommunications - These funds would allow the technical Colleges to continue linkage expansion on a phased timeline. It is important to the connectivity goal of the system to complete the analog regional networks in order to improve communications capability within a region as well as facilitate communications that utilize the STARS network. The requested expenditure increase for telecommunications development is \$1,000.0 for the 1991-93 biennium.
9. Repair and Replacement - The system continues to attempt to repair and replace components of its infrastructure through efficient utilization of repair and replacement funds. These funds are allocated by the legislature on a formula that has only been partially funded. Because of the substantial change in programmatic delivery as well as the aging facilities, it is critical that resources be made available to maintain the facilities. The requested expenditure increase for repair and replacement funding is \$1,000.0 for the 1991-93 biennium.
10. Health Insurance - Spiraling costs of health insurance across the system has resulted in a significantly greater proportion of instructional funds being allocated to fixed costs of health insurance for employees. The system was asked to project health insurance cost increases for the next 2 years and report these amounts to the Commissioner of Finance. We are in the process of compiling the results, and from initial observation, increases of 15-20% are common. The requested expenditure increase for health insurance is \$406.0 for the 1991-93 biennium.

TABLE 5
Expenditure Request

	F.Y. 1992	F.Y. 1993	TOTAL
1. Base Inflation	10,523.0	21,631.0	32,154.0
2. Instructional Programs	1,000.0	2,000.0	3,000.0
3. Library Services	1,250.0	1,750.0	3,000.0
4. Instructional Technology	750.0	1,250.0	2,000.0
5. Student Information System	250.0	1,000.0	1,250.0
6. Equipment	1,600.0	1,600.0	3,200.0
7. Cultural Diversity	250.0	250.0	500.0
8. Telecommunications	500.0	500.0	1,000.0
9. Repair & Replacement	500.0	500.0	1,000.0
10. Health Insurance	203.0	203.0	406.0
Total Instructional Initiatives			15,356.0

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$307,945,000 in the 1992-93 biennium for the Technical College System's instructional program. The recommendation includes marginal cost funding for enrollment growth anticipated during the biennium totalling \$3,064,000 in state direct appropriation, a general reduction \$19,874,000 for the biennium, and elimination of appropriation

PROGRAM: Instruction
(Continuation)
System: Technical College System

1992-93 Biennial Budget

subsidies for non-resident/non-reciprocity students enrolled in technical colleges. The recommendation assumes that tuition will increase by no more than the rate of inflation for the biennium - projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the cost of inflation would partially offset the reduction in instructional appropriation. The Governor recommends that the legislature include a rider in the appropriation to the Technical College System to clearly limit tuition increases to no more than these amounts. The Governor also recommends that 10% of the System's F.Y. 1993 instructional appropriation be withheld for redistribution pending the restructuring recommendations of the Blue Ribbon Commission on Higher Education. Recommended total instructional spending authority for the biennium (direct appropriation plus local revenue and tuition) is \$443,297,000. Despite fiscal constraints, in making this recommendation, the Governor reaffirms the role of the Technical College System as a "port of entry" system for students seeking a technical education and/or initially ineligible for entry into a baccalaureate program.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: TECHNICAL COLLEGE
PROGRAM: INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:				FY 1992			FY 1993		
	FY 1989	FY 1990	Est. FY 1991	Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604
TOTAL EXPENDITURES BY ACTIVITY	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604
DETAIL BY CATEGORY:									
STATE OPERATIONS	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604
TOTAL EXPENDITURES BY CATEGORY	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	154,570	160,460	169,646	170,532	170,532	161,364	171,817	171,817	146,580
STATUTORY APPROPRIATIONS:									
GENERAL	57,529	58,819	62,837	62,272	62,272	66,329	62,712	62,712	69,024
TOTAL FINANCING	212,099	219,279	232,483	232,804	232,804	227,693	234,529	234,529	215,604

ACTIVITY:
PROGRAM: Instruction
AGENCY: Technical College System

1992-93 Biennial Budget

Marginal cost funding is intended to relieve fiscal pressure during the period of enrollment growth. The Governor also intends that the two year systems remain the "port of entry" systems for students seeking a technical education and/or initially ineligible for entry into a baccalaureate program.

DECISION ITEM: Marginal Cost Funding Adjustment for 1992-93

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations				
General Fund	\$ 1,423	\$ 1,641	\$ 1,641	\$ 1,641
Revenues				
General Fund	\$ 1,003	\$ 1,158	\$ 1,158	\$ 1,158
Total Expenditures				
General Fund	\$ 2,426	\$ 2,799	\$ 2,799	\$ 2,799

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item provides marginal cost funding to the Technical College System for each year of the 1992-93 biennium. Marginal cost funding provides funding at 65% of average instructional cost. The recommendation reflects projected enrollment growth of 1% per year over F.Y. 1991 enrollment in the Technical College System. F.Y. 1992 enrollment is projected to be 41,195 FYE, an increase of 650 FYE over lag funded enrollment for F.Y. 1992. F.Y. 1993 enrollment is projected to be 41,595, an increase of 750 over lag funded enrollment for F.Y. 1993. Funded enrollment growth for the 1992-93 biennium is capped at 3% per year over F.Y. 1991.

RATIONALE:

The average cost funding formula establishes BASE level instructional funding using enrollment from the academic year two years prior to the year for which appropriations will be made (e.g. F.Y. 1991 instructional funding was based on 1989 enrollment). Marginal cost funding, estimated at 65% of average instructional cost less tuition, was provided by the 1988 and 1989 legislatures to reduce pressures on systems experiencing enrollment growth during the two year period prior to average cost funding formula recognition of the enrollment.

Changes in mission and entrance requirements in the University of Minnesota and State University System are expected to impact enrollment demand in both the Community College System and the Technical College System. As the baccalaureate systems reduce their undergraduate enrollment, more students seeking postsecondary education are expected to enroll in community colleges and technical colleges. Because the average cost funding formula provides funding only for lagged students, the Technical College System may experience financial pressure trying to accommodate the anticipated enrollment increases during the 1992-93 biennium.

ACTIVITY:
PROGRAM: Instruction
AGENCY: Technical College System

1992-93 Biennial Budget

DECISION ITEM: General Reduction/Tuition Adjustment

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (9,937)	\$ (9,937)	\$ (9,937)	\$ (9,937)
Tuition				
General Fund	\$ 2,400	\$ 4,500	\$ 4,500	\$ 4,500
Total Expenditures				
General Fund	\$ (7,537)	\$ (5,437)	\$ (5,437)	\$ (5,437)

Requires statutory change: _____ Yes X No
Statutes Affected:

ITEM SUMMARY:

This item reduces state direct appropriation to the Technical College System's instructional program by \$19,874,000 for the 1992-93 biennium. Pursuant to current law, the State Board of Technical Colleges would be responsible for allocating the reduction among programs and/or institutions.

In addition, the Governor recommends that tuition increases for resident students in the system be limited to the rate of inflation. Increases in the Technical College System tuition base of \$2,400,000 in F.Y. 1992 and \$4,500,000 in F.Y. 1993 would limit average tuition increases to the cost of inflation and offset a portion of the appropriation reduction.

RATIONALE:

Under current law, instructional appropriations are made generally to the Technical College System; the system does not receive appropriations for specific instructional activities and programs. The State Board of Technical Colleges has statutory responsibility to set academic and program priorities and to allocate resources to campuses and programs accordingly. Academic priorities and expenditure patterns vary by institution within the system.

Instructional expenditures represent approximately 99% of the system's total General Fund expenditures. However, fiscal constraints require that the system focus its academic priorities, contain costs, and seek alternative methods and approaches of service delivery. In addition to cost containment, the Technical College System is encouraged to develop and implement cooperative and resource sharing plans (e.g. regional course delivery and management, equipment sharing, etc.) with the other postsecondary systems in order to maximize higher education access and resource use.

PROGRAM: Non-Instruction
System: Technical College System

1992-93 Biennial Budget

PROGRAM PURPOSE:

The non-instructional program contains the system resources not provided in the instructional program. In the Technical College system these activities are a small portion of the overall operation and the amount of resources allocated to non-instruction is decreasing each year due to the type of activities. According to the Average Cost Funding methodology these resources are not computed in the instructional base allocation and therefore do not require tuition support from students.

Activities in the non-instruction program are: 1) debt service, 2) financial aid work study, 3) F.I.R.E. Research Center, and 4) Federal Funding.

1. Debt Service

To retire the debt service bonds issued before 1-1-79, according to the Legislature payment schedule.

State funds are needed to provide debt service payments to local school districts for Technical College buildings financed with local district bonds issued before 1-1-79. These funds support the state share of bond payments. For construction occurring after 1979, all Technical Colleges are required to levy for 15% of the total of the construction costs, with the state assuming the remaining 85% of costs. Debt service aid cannot be claimed for bonds issued after 1-1-79, and consequently will eventually phase out in 1999.

The amount of debt service aid remaining to be paid is listed in Table 6.

TABLE 6
Technical College Debt Service

	<u>Total</u>	<u>Local</u>	<u>State</u>
F.Y. 1989	6,443,440	1,718,193	4,725,247
F.Y. 1990	4,882,978	1,309,762	3,573,216
F.Y. 1991	4,471,104	1,209,578	3,261,526
F.Y. 1992	1,412,846	355,854	1,056,992
F.Y. 1993	655,264	144,378	510,886
F.Y. 1994	578,057	140,935	437,122
F.Y. 1995	533,300	137,405	395,895
F.Y. 1996	401,030	184,636	216,394
F.Y. 1997	105,925	25,157	80,768
F.Y. 1998	100,463	23,861	76,602
F.Y. 1990	0		

2. Financial Aids (Work Study)

This activity exists to provide qualified students with the opportunity to earn additional financial resources while attending a post-secondary program.

Students are able to work in Technical College supervised work study jobs. Federal and state funds are available for the program under a matching requirement formula. State funds are requested for the system share. Each Technical College submits a request for their total program costs. System funds are requested for 20% of the total state work study, 30% of federal work study allocation, and 5% of Supplemental Educational Opportunity Grands (SEOG). If a student worker is employed in an off-campus position, the non-profit organization employer must contribute the matching amount.

3. F.I.R.E. Research Center

This activity exists to improve the level of fire protection for all citizens by working with fire departments, local and state officials, educators, industry, and citizens groups.

The 1985 legislature transferred the Fire, Information, Research, and Education (F.I.R.E.) Center from the University of Minnesota to the State Board effective 7-1-86. The fire center's activities include research functions, maintenance of the state library, formulation of a year training plan, and coordination of fire service communications. Technical Colleges provide training for fire service personnel throughout Minnesota and the F.I.R.E. Center adds the research component to the program.

4. Federal Funding

The State Board has received funds authorized by the Carl D. Perkins Act of 1984 to conduct vocational technical programs and services. These resources have enhanced the services available throughout the system and the Board will continue to apply for all available federal funds.

There are several federal programs for which Minnesota receives funds. These resources are distributed according to the regulations prescribed in each specific program. These regulations have become prescriptive in the last several years and the amount of State Board flexibility has decreased.

Federal funding activities may include, but are not limited to guidance and counseling, vocational student follow-up, staff development, curriculum development, and research priorities.

A second source of federal funds available to the State Board is through the Job Training Partnership Act (P.L. 97-300). This program provides for job training opportunities in vocational programs throughout Minnesota. The Technical College System qualifies for funds by offering educational services to students who are defined as economically disadvantaged. Secondary programs and other post-secondary systems, including private sector institutions, are also eligible to receive federal funds under this law. Use of funds is determined by the Governor's Job Training Council, which coordinates their decisions with the state Job Training Office.

The amount of funds received through the Carl D. Perkins Act in F.Y. 1989 were \$14,133,904. These funds have been decreasing due to cutbacks at the federal level and may cause a reduction of services in Minnesota if the amount continues to decline.

PERFORMANCE:

Performance in the non-instructional area is measured with several criteria, each designed for the individual component. For example, debt service payments in the system are paid according to the schedule outlined in the bond sales of local colleges. Each of these payments was made to the colleges on time and they in turn paid the financial institution.

Work study funds were available to students during the previous biennium in an amount sufficient to meet the student need. This funding method assists the students in meeting their instructional expenses and also provides the colleges with a source of labor at a reduced rate for many of the maintenance jobs on campus.

F.I.R.E. Research materials are provided to citizens in Minnesota who have questions or need information concerning fire related issues. Often these questions are judicial inquiries related to cases that are pending or insurance related issues. The F.I.R.E. library is the only depository of information in Minnesota of this nature and quality.

Federal Funds are available to the State Board acting as the sole state agency for distribution to the department of Education and the Technical Colleges. The use of these funds is audited each year according to a state plan approved by the State Board of Education and the State Board of Technical Colleges. The legislature also comments on the state plan each year.

PROGRAM: Non-Instruction
(Continuation)
System: Technical College System

1992-93 Biennial Budget

PROSPECTS:

The amount of funding in the non-instructional area is decreasing each year primarily due to the reducing mortgage debt service payments. Payments in this area will end in 1999, but are significantly reduced in this current biennium. Other items in the non-instructional area are based on formula such as work study and the F.I.R.E. Center, and will be base funded. Federal funding depends on the Congressional appropriation and the allocation for the next biennium is scheduled to remain about the same as this current biennium.

PLAN:

Resources in the non-instructional area are allocated according to the rules of the specific category. Fewer funds are requested than in the previous biennium, because the base is reducing. There are no funds being requested for the Veteran's Farm Management Program this biennium because remaining instructional program is being phased out. The reduction in base is part of the spending plan approved by the State Board.

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$3,438,000 in the 1992-93 biennium for the Technical College System's non-instructional program. This recommendation includes a general reduction of \$200,000 from the F.Y. 1991 base for the biennium.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: TECHNICAL COLLEGE
PROGRAM: NON-INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
NON-INSTRUCTION	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
TOTAL EXPENDITURES BY ACTIVITY	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
DETAIL BY CATEGORY:									
STATE OPERATIONS	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
TOTAL EXPENDITURES BY CATEGORY	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	6,432	6,380	6,214	1,993	1,993	1,893	1,447	1,447	1,347

ACTIVITY:
PROGRAM: Noninstruction
AGENCY: Technical College System

1992-93 Biennial Budget

DECISION ITEM: General Reduction - Noninstruction

Dollars in Thousands
F.Y. 1992 F.Y. 1993 F.Y. 1994 F.Y. 1995

GOVERNOR'S RECOMMENDATION:

Direct Appropriation								
General Fund	\$	(100)	\$	(100)	\$	(100)	\$	(100)
Total Expenditures								
General Fund	\$	(100)	\$	(100)	\$	(100)	\$	(100)

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item reduces state direct appropriation to the Technical College System's noninstructional program by \$200,000 for the 1992-93 biennium. Pursuant to current law, the State Board of Technical Colleges would be responsible for allocating the reduction among programs and/or institutions.

RATIONALE:

Noninstructional activities include any activities not directly related to credit-granting instruction. Community service, research, intercollegiate athletics, and financial aids are among the items classified as noninstructional. Like instructional appropriations, noninstructional appropriations are made generally to the Technical College System. The State Board of Technical Colleges sets program priorities and allocates resources to each of the seven system universities.

Noninstructional expenditures represent less than one percent of the system's total General Fund expenditures. The Technical College System's General Fund noninstructional budget reflects only a portion of the system's total non-instructional activities and funding. Constrained state resources require that the Technical College System refocus its noninstructional priorities or seek alternative financing.

PROGRAM: State Council
System: Technical College System

1992-93 Biennial Budget

PROGRAM PURPOSE:

The state established the State Council on Vocational Technical Education to receive federal vocational dollars. The Council was initially established in 1969 in response to the federal Vocational Education Amendments of 1968. The legislature established the Council as a state agency in 1985 and charged it to carry out the duties of state councils as prescribed by the Carl D. Perkins Vocational Education Act and "such other purposes as may be necessary to improve vocational technical education." At the same time, the legislature directed the State Board of Technical Colleges to serve as the council's fiscal agent.

Recently reauthorized through F.Y. 1996, the Perkins Act left the provisions regarding state councils essentially untouched except to expand their responsibilities, including the mandate for a comprehensive report on the state's vocational education delivery system once every 2 years.

The Council has 13 members appointed by the Governor to 4-year terms. Persons representative of the private-sector interests of agriculture, business, industry, and labor constitute the majority of the membership. The Council membership also includes representation of secondary and postsecondary institutions, career guidance and counseling organizations, special education, and special populations. The Council elects its president from the private sector representatives and appoints an executive director.

The Council advises the State Board of Education and the State Board of Technical Colleges on policies and programs to improve the quality and delivery of vocational technical education in Minnesota's high schools and technical colleges. To meet specific mandates of the Perkins Act, the Council participates in the development of the annual state plan for vocational technical education and reviews and comments on the completed document. The Council also conducts a biennial evaluation of the coordination of programs funded under the Perkins Act and the Job Training Partnership Act (JTPA).

In addition, the Council conducts research and offers recommendations on a range of issues, including program improvement, notably the restructuring of secondary vocational education; curricular integration of vocational, general, and academic education; linkages between high school and postsecondary institutions; business-education partnerships; continuous curricular development and the effective operations of program advisory committees; access, equity, and cultural diversity; and services to traditionally underserved populations, including persons with disabilities.

PERFORMANCE:

During the 1989-91 biennium, the Council developed reports and made recommendations on specific aspects of the state plans developed during that period and completed a biennial Perkins-JTPA evaluation with findings and recommendations to improve program coordination. The Council also studied issues and concerns related to serving persons with disabilities; the coordination of apprenticeship and vocational programs; the distribution of state and federal funds for secondary and postsecondary vocational education; the status and practices of high school career guidance and counseling programs; and the development of learner outcomes for technology competence. The latter two projects directly complemented the legislative initiative to restructure secondary vocational education and to develop a learner outcome based education system.

The Council's effective advisory committees project augmented not only this legislative initiative for the high schools but also the technical college movement to restructure the programs from a clock hour to a credit base. Both delivery systems need to improve the operations of their industry-based program advisory committees to ensure a current and accurate industry-validated curricula. For all practical purposes, the effective advisory committees project is 2 projects--1 for the high schools and the other for the Technical Colleges.

The effective advisory committees project has 4 primary components: 1) advisory committee evaluations, 2) resource material development, 3) workshops and other technical assistance, and 4) policy development. At the end of the 1990-91 school year, the Council will have completed its first 5-year cycle of on-site evaluations of advisory committees at all 34 Technical College campuses. Using 2 task forces of teachers and administrators--1 for the high schools and 1 for the Technical Colleges--the council is developing leadership guides and member handbooks for the 2 delivery systems. Workshops for the high school and Technical Colleges are offered regularly upon request for committee members, teachers and administrators. The policy development component is an activity slated for the next biennium.

To collect and disseminate information on policy questions and practices regarding vocational technical education in the state, the Council conducts town meetings for the general public to speak, vocational student forums specifically to hear from students, and leadership forums to provide Technical College and high school administrators an opportunity to speak to the Council. The yearly Council roundtable focuses on new and emerging issues in vocational education, the most recent addressing cultural diversity in the Technical Colleges. In addition to studies and other documents, the Council publishes an issues-oriented quarterly newsletter to report its work. Distribution includes the state's education community as well as the broader community interests of agriculture, business, industry and labor.

PROSPECTS:

Several trends and other developments appear to hold a significant impact on the Council's work during the next few years. Implementation of the newly-reauthorized Perkins Act presents new challenges, particularly with the focus on tech prep, program performance standards, and improved coordination among programs to meet a range of education and training needs. The key federal directives to consult on the development of the state plan, to conduct the Perkins-JTPA evaluations, and to conduct a comprehensive biennial report on the state's vocational education delivery system will require a major commitment of Council resources.

Continuing demands for new ways to teach and to run the public schools will keep reform issues before the Council--the issues of restructuring secondary vocational education and of integrating academic, general, and vocational curricular in particular.

The continuing long-term workforce participation of females and the ever growing recognition of the need to better prepare females and traditionally underserved populations for employment presents 2 broad issues the Council must examine. The establishment of a culturally diverse educational environment and an expanded definition of appropriate and necessary student support services.

Fed by these trends also, the issues of improving linkages not only between high schools and postsecondary institutions but also between school and work require Council attention as the demands for new workers, more highly skilled and broadly educated, continues to grow. The quality movement is steadily promoting new measures and processes for the way we run our schools and colleges as well as for the content of the curricula and the delivery of instruction. This movement clearly presents the opportunity to address the question of what would have to change and what would be gained by implementing the principles of quality in the Technical Colleges.

At the same time, the on-going need to keep the curricula current and to improve working relationships between education and business heightens and significance of the Council's effective advisory committees project as well as its information gathering and disseminating activities, the majority of which involve the public as a whole and especially the private economic interests of agriculture, business, industry, and labor.

PLAN:

Key federal mandates--including providing consultation on the state plan and conducting the Perkins-JTPA evaluations and comprehensive studies of the state's vocational education delivery system--will be carried out in a timely fashion. However, reduced resources may mean limiting the scope

PROGRAM: State Council
(Continuation)
System: Technical College System

1992-93 Biennial Budget

of these reports significantly. While meeting the federal mandates, their usefulness to the state might be less than satisfactory.

The effective advisory committees project would be significantly impaired. While the on-site evaluations would continue, the distribution and use of the newly-developed leadership guides and member handbooks would be limited. These publications would either not be printed or sold for a fee to the high schools and colleges. A fee for workshops may be required. Further development and dissemination of resource materials, including videos and other instructional materials, to augment the leadership guides and member handbooks would not be done.

Other research and development projects would be limited and possibly eliminated. These include new projects on quality initiatives, technology competence, school to work transitions, and student support services. Continuing efforts would also be limited relative to restructuring secondary vocational education and integrating academic, general, and vocational curricula in the high schools. These continuing efforts represent several years of work, some of which have been directly reflected in legislative initiatives.

The work of the Council is labor intensive. The staff is 3.5 FTE including an executive director, research analyst, secretary, and student worker. Student interns augment the Council research and evaluation activities. Careful management of office expenses and personnel costs will generate some savings to live within the base. However, productivity would be significantly lowered with fewer products and services provided to the Council's statewide clientele.

GOVERNOR'S RECOMMENDATION:

The Governor concurs with the agency's plan.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: TECHNICAL COLLEGE
PROGRAM: STATE COUNCIL

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
STATE COUNCIL	88	96	113	99	99	99	99	99	99
TOTAL EXPENDITURES BY ACTIVITY	88	96	113	99	99	99	99	99	99
DETAIL BY CATEGORY:									
STATE OPERATIONS	88	96	113	99	99	99	99	99	99
TOTAL EXPENDITURES BY CATEGORY	88	96	113	99	99	99	99	99	99
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	88	96	113	99	99	99	99	99	99
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	88	96	113	99	99	99	99	99	99

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: COMMUNITY COLLEGE SYSTEM

PROGRAM

PAGE

Instruction

62

Non-Instruction

73

COMMUNITY COLLEGE SYSTEM

Position Reconciliation		
	<u>Current</u>	<u>Same Level 6/30/93</u>
General Fund		
Instruction	2,501	2,601
Non-Instruction	<u>81</u>	<u>81</u>
Total	2,582	2,682
Employees on 6/30/90 - 2,841		

Community College Board

9 members

Chancellor

COLLEGES

Instruction - Direct

Current Positions 1,339

Instruction - Support

Current Positions 1,162

Non-Instruction

Current Positions 81

Additional Same Level

FY 1992	40
FY 1993	40

Additional Same Level

FY 1992	10
FY 1993	10

MISSION:

The Minnesota Community College System's mission is to provide access to meaningful, affordable, quality post-secondary educational opportunities for the citizens of Minnesota.

Quality instruction in the Community College System means excellence in teaching, attention to individual learning styles, and support services which are responsive to individual student needs.

The System, through 18 colleges and 3 centers located throughout Minnesota, provides:

1. General Education
2. Transfer Education in the Liberal Arts and Sciences
3. Career Education
4. Continuing Education
5. Developmental Education
6. Cooperative Programs and Services
7. Articulation with Secondary Schools
8. Student Support Services
9. Student Life Programs
10. Community Services
11. Economic Development

The System is dedicated to providing Minnesotans with opportunities for lifelong learning which will enable them to realize their potential and improve their lives. As equal opportunity institutions, Community Colleges serve people of varying interests, aspirations, and abilities, many of whom would not otherwise have the option to pursue higher education. The System maintains a policy of open admissions to state residents who are high school graduates.

Through cooperative relationships with other post-secondary education systems and school districts, the System is able to improve the educational opportunities it offers throughout the state.

The programs and services offered by the Community Colleges are designed to meet the needs of individuals, local communities, institutions and organizations, and the state as a whole. The colleges thus contribute to the development of well educated citizens so essential to a strong democracy and a vital economy.

MAJOR ISSUES:

Several critical factors are interrelating to shape the public policy issues facing the Community Colleges and higher education in Minnesota.

Participation in Higher Education

Minnesota has the highest high school graduation rate and nearly the highest participation rate in post-secondary education in the country. The increase in post-secondary participation has been gradually occurring for the past decade. But public policy, particularly public financing of post-secondary education, has not fully addressed this phenomenon.

Minnesota is a geographically large state with roughly half the population concentrated in the seven-county metro area and the other half dispersed widely throughout the remaining 80 counties. This geographic and demographic pattern creates unique challenges for providing access to quality postsecondary education. The seven large Community Colleges in the metro area and Rochester operate much more cost effectively than their smaller Greater Minnesota counterparts which do not benefit from the same economies of scale. Nevertheless, if reasonable access is to be provided, especially for placebound adults, it will be necessary to maintain smaller operations in key locations throughout the state.

Minnesotans have been very willing to support higher education. In 1988-89, the people of Minnesota ranked 15th in the nation in taxpayer support per capita, according to the Minnesota Taxpayers Association.

But the higher proportion of the state's population participating in post-secondary education (4th in the nation) requires that these dollars be spread over a very large number of students. As a result, state support per student in Minnesota ranks 20th nationally and is 8% below the national average, based on the most appropriate source of comparative data on state support for postsecondary education.

Increased Participation Equals Diversity

Increasing participation in higher education in Minnesota come from 2 groups. First there has been a significant increase in the percentage of high school graduates going on to college, off-setting the impact of the declining number of total recent high school graduates. In addition, community colleges in particular, have had a great increase in the participation of non-traditional students, principally older students and women.

The practical impact of this change in participation, in addition to the increase in sheer numbers, is the increasing diversity these new students represent. This diversity requires support services to provide these students, many of whom did not anticipate their participation in post-secondary education, with a quality education. They often require additional assessment, counseling and advising, developmental/remedial assistance, study skills help, financial aid guidance and assistance, peer support, and child care.

Enrollment Growth and Lagging Funding

A dominant factor affecting Minnesota's Community College's remains record high enrollments during a period when significant enrollment decline was predicted across higher education. Enrollments have increased 48% since 1984 in the Community Colleges.

The state's post-secondary education funding methodology since 1983 has been based on the assumption of enrollment decline. Funding is provided based on enrollments from 2 years earlier. The record-breaking enrollment growth in the Community Colleges was not recognized in the formula until a marginal funding was provided by in the 1988 legislature.

In spite of that adjustment, funding has continued to lag behind enrollment. From 1984 through 1991, the Community Colleges have educated over 20,000 full year equivalent students with no or only partial state appropriation. The fact that funding has not kept pace with the combined effects of increasing participation, growing enrollments and student diversity has made management and innovation in the Community Colleges a significant challenge.

The Changing Workforce

A major reason for the increasing participation in higher education is the realization by Minnesotans that the world of work is changing. Individuals and businesses are recognizing that post-secondary education and continuing, life-long education are critical for both personal success and also to build and maintain an effective workforce.

Current demographic trends, in particular the aging of the baby boom generation, will have an important impact on the state's work force in the future. According to various economic reports, the rate of growth in the labor force is expected to slow down significantly over the next several years. In addition, the workforce is aging. The proportion of young, inexperienced workers is shrinking while the proportion of older workers is growing. As the nature of work changes because of technology, product innovations, and foreign and domestic competition, there will be a greater emphasis on retraining an existing work force. Minnesota will need this pool of workers, operating at their highest potential, if it is going to compete in this new economic environment.

Reorienting Missions and Organization

The social and economic changes facing Minnesota in turn are impacting the missions and organization of the higher education enterprise.

(Continuation)

SYSTEM: Minnesota Community College System

1992-93 Biennial Budget

The University of Minnesota is continuing to implement its strategic plan, "Access to Excellence," to focus its mission and devote more resources to improving the quality of its programs. This plan entails reducing undergraduate enrollments, increasing preparation standards, shifting some enrollments from lower to upper division, and increasing the share of resources to upper division and graduate programs. In the process, the Community Colleges are expected to prepare more lower division students with a solid foundation for transfer to upper division work at the University.

More recently, the State University System has unveiled its plan, "Q7," which includes some similar goals--increasing preparation standards, limiting enrollment to the level of state funding, and redirecting resources to ensure quality. Again, a shift in undergraduate emphasis to upper division programs is based on the premise that Community Colleges will serve the lower division needs of many Minnesota students.

The success of both "Access to Excellence" and "Q7" are dependent on a quality Community College System.

This new relationship raises three critical policy issues:

- Will state funding be available to maintain an open admissions policy for Community Colleges to insure access for all qualified Minnesotans?
- Will there be sufficient program opportunities available at the upper division level to accommodate Community College students who are ready to transfer?
- Will appropriate transfer policies and curriculum articulation be in place to insure a smooth transfer experience for students?

Concurrent with these changes at the university level are changes in the Technical College System. Programmatic changes --- restructuring from program to credit-based instruction, application for collegiate accreditation, the significant increase in joint associate of applied science degree programs, the development of general studies; efforts to develop transfer of credit arrangements --- as well as nominal changes -- technical institute to "college," state director to "chancellor," campus directors to "presidents" -- all tend to increase the operational similarities between the Technical Colleges and the Community Colleges. This convergence in administrative operations and programs can increase the ability of the 2 systems to work cooperatively and offer improved instructional and support services to students across Minnesota.

EXPLANATION OF BUDGET ISSUES AND ALTERNATIVES:

This biennial budget request is developed according to the statutory funding guidelines and the System's strategic planning process.

Base Funding

The Community College System's base funding request is calculated according to the average cost funding methodology. This method bases funding on the enrollment level of 2 years earlier. This "2-year lag" policy was designed to accommodate anticipated enrollment decline, a phenomenon which has not occurred in the Community College System.

To the contrary, over the past 6 years, Community College headcount enrollments have increased 48 percent, and full year equivalent enrollments increased 47 percent. The result has been a chronic lag in per student appropriations and a serious threat to the quality of the instruction offered.

Marginal Cost Funding

For the fiscal years 1989, 1990, and 1991, the Legislature modified the average cost funding approach by providing "marginal cost funding." For those years, funding for projected enrollment was provided in addition to funding for enrollment from 2 years earlier. This funding was not at the full "average

cost" per student level, but instead at 65 percent of the average cost level. Since tuition remains at 33 percent of instructional cost, the state appropriation constitutes 32 percent or less than half of the full funding level.

The current budget guidelines do not include provisions for marginal cost funding. In order to determine how much money the Community College System loses if marginal cost funding is not provided, projected enrollment figures for F.Y. 1992 and F.Y. 1993 must be established. Such projections are difficult because they depend on so many volatile factors: further enrollment reductions by the University of Minnesota, a possible enrollment freeze by the State University System, a potential economic downturn which in the past has led to increased enrollments, changes at Metro State, improved transfer and articulation agreements, changes in direction by reciprocity states, and improvements in student retention.

Below are 2 scenarios for enrollment growth and marginal cost funding:

	FYE	MARGINAL FYE	MARGINAL FUNDING
FY 90	32,860		\$1,307/FYE
FY 91	33,961		
(projected based on 10th day fall)			
<u>Scenario I: 3% Growth Each Year</u>			
FY 92	34,980	2,120	\$2,770,840
FY 93	36,030	2,069	\$2,704,183
<u>Scenario II: 5% Growth Each Year</u>			
FY 92	35,659	2,799	\$3,658,293
FY 93	37,442	3,481	\$4,549,667

Without at least marginal cost funding for additional students in the next biennium, there is a strong fiscal disincentive to allow enrollments to increase. Given the dynamic nature of enrollment trends and the pattern of Community College enrollment growth in the past several years, the 5% scenario is a very realistic projection. The Community College System requests that the marginal cost funding policy be retained and funding be provided to insure access to postsecondary education across Minnesota.

Inflationary Increases

In recent years, budget practices have recognized the impact of inflationary increases on costs. After the average cost per student was determined, an inflation factor was applied to recognize cost-of-living changes on salaries, equipment, library acquisitions, utilities, etc.

The current budget guidelines do not include provisions for an inflation increase. Recent practice has been to have agencies leave the inflation factor blank in their requests. The Governor's final recommendation to the Legislature then inserts an inflation factor.

In preparing the base funding request, no inflation has been applied. However, if the Department of Finance guideline of 4.5 percent per year is applied to the base funding request it would generate an appropriation in excess of \$14 million. Accommodating a reasonable inflation increase through internal reallocation is not possible without drastically reducing or eliminating basic services.

Successive record enrollment increases over the past six years coupled with a funding formula that fails to keep pace with actual enrollment has already forced the System to reallocate internally to a severe degree. Employee bargaining units will expect reasonable cost-of-living increases, and to ignore this inevitable cost is highly unrealistic.

(Continuation)

1992-93 Biennial Budget

SYSTEM: Minnesota Community College System

■ <u>Maintaining Teaching Excellence:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$ 650,000	\$ 650,000

For these reasons, a request is made that a reasonable inflation factor be applied to both personnel and non-personnel costs within the base funding request.

New Funding Requests

The inability of funding to keep pace with enrollment has limited the possibility of establishing new programs in the Community College System. Similarly it has left little capability for additional reallocation of existing resources.

Should additional funding be available, the following new funding requests are made:

■ <u>Cambridge College Status:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$1,045,000	\$1,270,000

As teaching-learning institutions, Community Colleges are dedicated to providing students with strong academic preparation. To maintain excellence in teaching, it is essential that the System recruit and hire well-prepared faculty, provide opportunities for on-going professional development, and develop new avenues for recognizing exemplary programs and teachers.

For the past 5 years, the Community College System has received major grants from the Bush Foundation to carry out faculty development programs. "Writing Across the Curriculum" and "Computing in Instruction" have been highly successful and nationally recognized programs for enhancing the use of both writing and computers by Community College faculty. This request will allow the most successful elements of those grant programs to continue across the System.

This request would also begin to establish a Center for Teaching and Learning. This Center would provide new and veteran faculty with various opportunities for professional development and collegial interaction.

The 1990 Legislature instructed the Community College System to submit, as part of the 1991 budget process, recommendations for the appropriate administrative structure for converting Cambridge Center to full college status.

<u>Improving Library Resources:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$3,000,000	\$ 500,000

This request would fund Cambridge as a small college rather than a center.

■ <u>Instructional Equipment:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$1,300,000	\$1,300,000

Insufficient funding across all of higher education has resulted in declining attention to library resources. An intersystem library study recently outlined the severity of the problem. This request has three components. First is a \$2.1 million one-time request for F.Y. 1992 for catch-up on library acquisitions. Second is a F.Y. 1993 base adjustment request of \$500,000 for on-going maintenance of library acquisitions. And third is the perennial request to complete phase II of PALS (Project for Automated Library System).

The combination of rapid changes in technology and severe funding constraints have prevented the Community Colleges from procuring and maintaining up-to-date instructional equipment. While the current biennial appropriation was extremely beneficial, it was non-recurring.

Each of these requests are described in more detail in the Instruction Program section.

This request will allow the Community Colleges to continue to replace obsolete equipment and purchase new classroom and laboratory equipment.

In addition to these Community College requests, the System also supports the HECB request for funding to carry-out a statewide needs assessment of disabled students.

■ <u>Student Success Model:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$1,600,000	\$1,600,000

GOVERNOR'S RECOMMENDATION:

The growth in enrollment and increasing post-secondary participation by Minnesotans have challenged the Community College mission of providing access. But simply providing access is not enough. The imperative for the future is to maintain and improve the quality of education available to an increasingly diverse student body. Without a guarantee of high quality educational services, the state cannot expect to maintain a competitive position in an increasingly complex, international economy.

The Governor recommends a direct state appropriation of \$182,823,000 for the Community College System in the 1992-93 biennium. The Governor's 1992-93 recommendations for the System include marginal cost funding adjustments for projected enrollment growth during the biennium, a general reduction in both the instructional and non-instructional programs, and elimination of appropriation subsidies for non-resident/non-reciprocity students enrolled in community colleges. The recommendation assumes that tuition will increase by no more than the rate of inflation for the biennium--projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the rate of inflation would partially offset the reduction in instructional appropriations. The Governor recommends that the legislature include a rider in the appropriation to the Community College System to clearly limit the amount of the tuition increase to no more than these amounts. In addition, the Governor recommends withholding 10% of the System's F.Y. 1993 instructional appropriation for redistribution by the Governor and legislature pending the recommendations of the Blue Ribbon Commission on Higher Education and the System's response to those recommendations. The recommended total spending authority for the Community College System (direct appropriation plus tuition and other income) is \$299,214,000.

During the current biennium, the Community College System initiated the Student Success Model. This model is designed to provide increased services to incoming students and increase retention. It includes the following elements: mandatory student assessment; improved counseling and advising; measuring student outcomes; and a strong probation-suspension policy.

■ <u>Cultural Diversity:</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$ 500,000	\$ 500,000

Projections of continuing growth in the proportion of minority students requires that the Community Colleges give increased attention to attracting, supporting, and retaining these students. Funding is requested to help meet System goals to improve minority student recruitment, increase minority faculty and staff, diversifying the curriculum and expanding cultural awareness for all students.

MINNESOTA COMMUNITY COLLEGE SYSTEM
 Reconciliation of FY 1991 Spending
 To FY 1992 & 1993 Same Level

	FY 1992			FY 1993			Biennial		
	Instruction	Non-Instruction	Total	Instruction	Non-Instruction	Total	Instruction	Non-Instruction	Total
1 FY 91 Direct Appropriation - FY 89 Leg	88,819	10,781	99,600	88,819	10,781	99,600	177,638	21,562	199,200
2 FY 90 Carryforward to FY 91	4,914	741	5,655	4,914	741	5,655	9,828	1,482	11,310
3 FY 91 App. Reductions - FY 90 Leg	(1,016)	(61)	(1,077)	(1,016)	(61)	(1,077)	(2,032)	(122)	(2,154)
4 FY 91 Intent Tuition/Receipts	46,120	1,700	47,820	46,120	1,700	47,820	92,240	3,400	95,640
5 FY 91 Intent Tuition Reduct. - FY 90 Leg	(230)		(230)	(230)		(230)	(460)	0	(460)
6 Excess Tuition/Receipts	721	2,100	2,821	721	2,100	2,821	1,442	4,200	5,642
7 FY 91 Pension Bill Appro. - FY 89 Leg	133	15	148	133	15	148	266	30	296
8 FY 1991 Base - All State Funds	139,461	15,276	154,737	139,461	15,276	154,737	278,922	30,552	309,474
9 FY 89 Enrollment Est. Adjustment	285		285	285		285	570	0	570
10 FY 1990/91 Marginal Adjustment	1,685		1,685	0		0	1,685	0	1,685
11 Adjust Out Excess Receipts	(721)		(721)	(721)		(721)	(1,442)	0	(1,442)
12 Adjust Out Carryforward	(4,914)	(741)	(5,655)	(4,914)	(741)	(5,655)	(9,828)	(1,482)	(11,310)
13 FY 92/93 ACF Enrollment Adjustment	10,391		10,391	14,888		14,888	25,279	0	25,279
14 Adjust Out Non-Recurring Approp.	(1,340)		(1,340)	(1,340)		(1,340)	(2,680)	0	(2,680)
15 Deduct FY 91 MCF Adjustment	(8,951)		(8,951)	(8,951)		(8,951)	(17,902)	0	(17,902)
16 TOTAL SAME LEVEL FUNDING	135,896	14,535	150,431	138,708	14,535	153,243	274,604	29,070	303,674

F.Y. 1991 Budget Reductions (Information Only)

Laws of Minnesota 1991, Chapter 2, reduced the F.Y. 1991 appropriation to the Community College System by \$1,190,000. This reduction is not reflected as changes to F.Y. 1991 or F.Y. 1992-93 BASE Levels within the budget documents.

SYSTEM : Minnesota Community College System

ALLOCATION OF INDIRECT COSTS - F.Y. 1989

Primary Programs			Support Programs				Total
Instruc- tional	Community Service	Other General Fund	Academic Support	Student Support	Institu- tional Support	Physical Plant	
Direct Costs							
52,147	3,609	5,026	15,174	11,164	19,523	11,501	118,144

Allocation of Indirect Costs from Support Programs to Primary Programs

	3,591		(950)	(699)	(1,222)	(720)	Community Services
		425	(112)	(83)	(145)	(85)	Financial Aids
		1,468	(388)	(286)	(500)	(294)	Intercoll. Athletics
51,878			(13,724)	(10,096)	(17,656)	(10,402)	Instruction
	(1,566)						Remove Off-Budget Receipts
104,025	5,634	6,919	0	0	0	0	116,578

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: COMMUNITY COLLEGE BD

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320
NON-INSTRUCTION	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938
TOTAL EXPENDITURES BY PROGRAM	116,578	134,190	154,737	150,432	150,432	150,957	153,243	153,243	148,258
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	76,432	87,602	104,326	102,342	102,342	94,294	103,669	103,669	88,529
STATUTORY APPROPRIATIONS:									
GENERAL	40,146	46,588	50,411	48,090	48,090	56,663	49,574	49,574	59,729
TOTAL FINANCING	116,578	134,190	154,737	150,432	150,432	150,957	153,243	153,243	148,258

ACTIVITY:
PROGRAM:

1992-93 Biennial Budget

SYSTEM: Community College System

DECISION ITEM: Financing Inflationary Costs - Informational

	Dollars in Thousands			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Direct Appropriation				
General Fund	\$ 4,530	\$ 9,540	\$ 9,540	\$ 9,540
Tuition				
General Fund	\$ 1,993	\$ 4,212	\$ 4,212	\$ 4,212
Total Expenditures				
General Fund	\$ 6,523	\$ 13,752	\$ 13,752	\$ 13,752

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

Inflation was calculated for the Community College System at 4.5% per year for each year of the 1992-93 biennium. The inflation factors were applied to the system's adjusted instructional and non-instructional base, less non-tuition income.

The Community College System did not submit a plan detailing how funds would be reallocated to address anticipated increases in salary and non-salary costs. However, under current law, the Community College Board has authority to make allocative decisions among campuses and programs.

ACTIVITY:
PROGRAM:
AGENCY: Community College System

1992-93 Biennial Budget

DECISION ITEM: Elimination of Appropriation Subsidy for Non-resident/non-reciprocity students

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (3,166)	\$ (3,166)	\$ (3,166)	\$ (3,166)
Tuition				
General Fund	\$ 3,166	\$ 3,166	\$ 3,166	\$ 3,166
Total Expenditures				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: X Yes No
Statutes Affected: M.S. 135A.03, Subd. 3

ITEM SUMMARY:

This item eliminates the appropriation subsidy for students from states with whom Minnesota does not have reciprocity agreements. The reduction in state direct appropriation totals \$6,332,000 for the 1992-93 biennium. The appropriation reduction is offset by assumed increases in tuition for non-resident/non-reciprocity students.

The Community College System estimates non-resident/non-reciprocity enrollment of 1,157 FYE (full year equivalent) for the 1990-91 academic year.

RATIONALE:

Fiscal constraints prohibit future funding subsidies for undergraduate non-resident/non-reciprocity students in the Community College System. In making this recommendation, the Governor intends that the Community College Board maintain its authority to set differential tuition rates for non-resident/non-reciprocity students. Though undergraduate non-resident/non-reciprocity students currently pay higher tuition than resident students, their tuition charge is less than full instructional cost. The Community College System is encouraged to reallocate other resources to encourage and/or assist non-resident/non-reciprocity students to enroll in Minnesota community colleges.

PROGRAM PURPOSE:

The primary purpose of this program is to offer quality instruction at the lower division (freshman and sophomore) level which is geographically and financially accessible to state residents who are high school graduates (holders of diplomas or equivalency certificates), responsive to the educational needs of students and the state, and conducive to students gaining and/or maintaining employment opportunities, as well as opportunities for educational advancement beyond the lower division level.

Funding for this program includes the direct costs related to instruction, as well as applicable indirect costs. Indirect costs include such areas as academic support (e.g., libraries), student support (e.g., counseling), institutional support (e.g., general administration) and physical plant (e.g., maintenance).

The legislative intent relative to tuition is calculated as a portion of instructional costs. This program accounts for approximately 90 percent of the Community College System operating budget.

PERFORMANCE:

Minnesota's Community Colleges have been providing increasing numbers of Minnesotans in recent years with affordable postsecondary education. From 1984 to 1990, enrollments (headcount) increased 48 percent. The System operates at a low cost level as a result of efficient operations and because of a historically frugal funding base and a funding formula that has not kept pace with the enrollment growth. There may not be a more efficient, quality postsecondary education system in the country.

The following table highlights the enrollment history since 1986.

<u>Fiscal Year</u>	<u>Actual FYE</u>	<u>% Increase from Prev. Year</u>	<u>Fully Funded FYE</u>	<u>Partial Or Unfunded FYE</u>	<u>% Not Fully Funded</u>
1986	24,235	4.9%	24,438	(203)	---
1987	25,495	5.2%	23,265	2,230	8.8%
1988	27,592	8.2%	24,237	3,511	12.7%
1989	30,350	10.0%	25,337	5,013	16.5%
1990	32,860	8.3%	27,592	4,634	14.1%

While it is relatively simple to demonstrate the per-student cost efficiency of Minnesota's Community Colleges relative to other institutions in Minnesota or in the other 49 states, it is much more difficult to measure success based on student outcomes. As open access institutions serving an extremely diverse student body with a wide range of both goals and abilities, Community Colleges across the country find it difficult to quantify the successes of their students. No single standard -- graduation rate, number of transfers to 4-year universities, job placement -- adequately measures the "value added" by a Community College education.

What is clear is that performance must be measured first and foremost in the context of the individual students' goals. The best available evidence shows that roughly half of Minnesota Community College students enroll with the intention of completing a 2 year degree program and transferring to a 4-year institution. But many of these students for a variety of personal reasons will make the decision to transfer before they have completed the entire associate degree program. Thus failure to graduate is not necessarily a negative outcome.

In addition to students intending to transfer, another approximately 25 percent attend Community Colleges seeking a 2 year program that prepares them to go immediately to work in such areas as

nursing and allied health fields, various business positions, data processing, or law enforcement. The remaining one-quarter of Community College students have a variety of diverse, individual educational objectives. Many are simply taking a course or a few courses to improve their opportunities for career advancement or to prepare for a career change. Some of these students already hold baccalaureate degrees but wish to strengthen themselves in a particular area. And many are people, often non-traditional age students, who did not consider themselves college-bound earlier in their lives but now believe a college education is important to their personal and economic well being. They come to Community Colleges to "try their hand" at postsecondary education.

For each of these groups, the measure of success is different. Students intending to transfer to a 4-year institution can be evaluated on whether or not they successfully completed their associate degree program, on the successful transfer of their Community College credits, on their comparative grade point average at the 4-year institution, and on their successful completion of a baccalaureate degree program over a reasonable period of time.

If students come with the goal of obtaining an associate degree and immediately going to work, the success of these students must be measured differently. The success rate for nursing programs, for example, can be judged on the basis of those students who pass the national licensure examination, the job placement record of nursing graduates, and the satisfaction of both graduates and their employers with the education provided.

For the remaining quarter of the students who do not fit neatly into the 2 categories above, the measurement of success is extremely difficult and will continue to be difficult. Their goals are diverse and often changing, presenting a major challenge for measuring the extent to which they achieved their educational goals.

In spite of limited resources, the Community College System has been working in the current biennium to improve its ability to measure student outcomes and provide clearer evidence of the quality of the Community College enterprise in Minnesota.

At the heart of this effort is the Student Success Model. Through the mandatory assessment of incoming students, the educational goals of individual students can be identified and baseline academic skill levels determined. And through the student outcomes tracking portion of the model, the various appropriate measures of success can be monitored, relative to student objectives.

Based on the limited history of this effort, what are some examples of performance indicators for Minnesota's Community Colleges?

- In a University of Minnesota study of Community College students who transferred to the University in 1984, 53 percent had earned a bachelor's degree within 5 years, compared with 49 percent for other transfers.
- A recent report from the University of Wisconsin - River Falls reveals that transfer students from Minnesota Community Colleges consistently achieve grade point averages that exceed those of students who start out directly at the River Falls.
- Minnesota's Community Colleges have supplied two-thirds of the registered nurses who passed licensing exams and entered the health care field in the last 6 years. Community College nursing grads have passed the national R.N. licensing exam at a 92 percent rate over the 6 year period. The Community College student pass rate on the intensive 2-day test is the same as that for graduates of 4-year nursing programs who take the same exam.
- The University of St. Thomas accepts about 500 transfers a year, one third of them from Community Colleges. St. Thomas reports that Community College transfers do as well as those who begin at the university. Research at St. Thomas shows that a key to success is that Community College students tend to plan early and receive good advising about transfer requirements while enrolled at Community College.

PROGRAM: INSTRUCTION
(Continuation)

1992-93 Biennial Budget

System: Community College System

- Rochester Community College ranked first in transfer rates in a national study of 25 similar community colleges, all from other states. Quality instruction and student advising were major factors in Rochester's high score.

PROSPECTS:

Maintaining Access with Quality

Minnesota's Community Colleges have always been "open door" institutions, providing access to higher education for people across Minnesota. Minnesotans have taken advantage of this opportunity in record numbers in recent years. But state funding has not kept pace, straining the ability to insure quality across all aspects of community college operations.

The University of Minnesota and the State University System have both embarked on efforts to focus their missions and to redirect spending. If the Community Colleges are to assist in these initiatives by accepting more lower division students, funding must recognize enrollment growth.

If the Minnesota economy is to remain healthy, it must continue to build a strong workforce. Community Colleges provide a major gateway to higher education across the state.

The following budget requests are critical to maintain open access to Minnesota's Community Colleges:

1. **Full Funding of the Base:** Since 1983, the average cost funding methodology has been the key policy for higher education funding. That policy, while flawed by a basic assumption of projected enrollment decline, must be honored for Community Colleges in the 1992-93 biennium. The 2-year lag funding policy has forced Community College budgeting into a deferred spending mode. That is, colleges have been forced to defer spending on important discretionary items in order to insure that the basic elements of the instructional program are in place.
2. **Marginal Cost Funding:** By all indications, Community College enrollments will increase in the next biennium. Providing marginal cost funding is essential to insuring open access and quality services. For the past three fiscal years, the marginal cost funding methodology was adopted in recognition of the continuing fiscal strain caused by enrollment growth exceeding funding. As the lowest cost public higher education system, community colleges can very cost effectively be the vehicle for insuring that postsecondary education remains accessible

Enhancing Quality

The educational quality of the Community College experience for students can be enhanced significantly through several initiatives, described below:

- **Cambridge-College Status**

	F.Y. 1992	F.Y. 1993
	\$1,045,000	\$1,270,000

In the fall of 1978, the Cambridge Community College Center (then called East Central Community College Service Center) began offering classes. Starting out in a wing of a local hospital, the operation moved in 1981 into a modest new facility which was further expanded in 1984.

Beginning with 240 students in 1978, enrollments exceeded 1400 in the fall of 1990. Full time equivalent enrollment for the same period grew from 65 to 671, making it larger than 4 other colleges.

State demographic data have projected significant growth for the Cambridge service area. At the same time, educational participation by residents of the region has lagged behind the general population of Minnesota, and the illiteracy rate is one of the highest in the state. The Cambridge Center has been a positive force for improving postsecondary educational opportunities throughout the Cambridge area.

The growth in enrollment, especially under the lagged funding policy, has created pressures for a more complete array of college services and programs. The demand for a full service college operation led to a 1990 legislative proposal to designate Cambridge as a college rather than a center, as well as a request to construct a new college campus. Planning funds for a new facility were provided in the 1990 bonding bill. However, while there was considerable legislative support for the college status proposal, the lack of funding to accompany and implement the status change postponed the authorization. The System was instructed to bring recommendations to the 1991 Legislature for the appropriate administrative structure for a full college.

Having reviewed the regional operations for the Arrowhead and Clearwater Community College Regions, as well as the historical relationship between the Cambridge Center and Anoka-Ramsey Community College, it is the recommendation of the System that Cambridge remain affiliated with Anoka-Ramsey. Anoka-Ramsey will continue to provide institutional leadership and various administrative services. Cambridge will continue to be accredited as a unit of Anoka-Ramsey.

This request will provide funding for full college services at the small college level under the System allocation policy. Additional funding will allow improvements in instructional and student services, developmental programs, student life programs, and administrative and clerical services. More specifically, the addition of a full-time dean's position will provide academic leadership and coordination. An expanded, more complete curriculum will be offered as additional faculty are employed. An additional counselor will provide assessment testing, placement and career assessment and advising to new and non-traditional students. Library materials and services will be strengthened. Additional classified staff will improve registration, financial aid, and business office services. And the student life program will expand to offer students valuable extracurricular experiences (with the exception of intercollegiate athletics).

- **Instructional Equipment**

	F.Y. 1992	F.Y. 1993
	\$1,300,000	\$1,300,000

The explosion in computer, electronics, and telecommunications technologies have affected every area of modern life. If Minnesota's Community Colleges are going to effectively use these technologies to teach students about the most modern technologies, major improvements must be made in the replacement of outdated equipment and the purchase of new equipment. At the same time, the Community Colleges will need the resources to participate in the development of telecommunications networks designed for the delivery of 2-way interactive television courses.

The 1989 Legislature appropriated \$1,280,000 in FY90 and \$1,340,000 in FY91 for the purchase of instructional equipment. This appropriation was in response to a request to use the state master lease program to obtain \$13 million in new classroom equipment. The final appropriation was for direct procurement of equipment rather than through the master lease approach. It was also non-recurring. A supplemental report on the expenditure of the current appropriation will be submitted as part of the budget process.

A significant backlog of need for new and replacement equipment remains. This request is intended to restore to the base for each year the approximate amount of funding appropriated in FY91.

- **Student Success Model**

	F.Y. 1992	F.Y. 1993
	\$1,600,000	\$1,600,000

Limited resources have restricted the Community College System from providing the array of

student support services necessary to serve an increasingly diverse student population. Base adjustment funding in the current biennium allowed the initial steps to be taken in implementing the Student Success Model, a significant quality initiative. This model is designed to provide various support services which are expected to increase student academic success and satisfaction, to improve retention, and to provide outcomes data useful for curriculum design, course scheduling, and improving institutional effectiveness.

The Student Success Model includes the following elements:

Mandatory Student Assessment: Starting fall quarter, 1990, all students who registered for eight or more credits are required to take a placement exam. The purpose of the tests in reading, writing and mathematics is to assist students in determining the appropriate level of coursework for which to register.

Improved Counseling and Advising: Using the results of the assessment testing, college staff are able to provide improved academic guidance to students.

Increased Developmental Services: Many students enrolling in Community Colleges, whether traditional age or non-traditional students, have not had all the necessary academic preparation for success in the college classroom. Assessment testing can determine student needs and recommend appropriate developmental programs when necessary. (Program placement is voluntary.) Strong developmental programs can provide the instruction necessary to prepare most students to achieve collegiate-level success.

Measuring Student Outcomes: In addition to measuring student capabilities as they enter Community Colleges, it is important to measure performance during their coursework and to track their success when they leave the institution. This model will develop various criteria for monitoring student outcomes and will provide the on-going capability to track and analyze outcomes data.

Strong Academic Suspension Policy: Given limited resources, it is essential that state funds not be used to support students unable or unwilling to meet basic academic standards. Enforcement of a fair and clear academic suspension policy insures that every student is motivated and performing. Those who are not should be removed to make way for more serious students.

The elements of the Student Success Model that have been implemented to date focus mainly on the mandatory assessment program. This funding request will allow the System to fully implement the additional elements.

With the start of fall quarter 1990, 16,427 first year students took part in student assessment testing. The full results of that testing are still being analyzed. But the preliminary results point to major benefits if the entire model can be implemented as designed.

■ <u>Cultural Diversity</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$ 500,000	\$ 500,000

The Community College System has for many years been supporting programs for underserved populations. In the current year, \$500,000 has been allocated to extend these efforts even further.

But as with so many areas, changing conditions and insufficient funding are not keeping up with the need. Population projections and workforce demographics point to increasing numbers of minorities as a proportion of the population and of the entry level workforce. Minnesota higher education institutions are all committed to improving services to minority students.

From fall 1989 to fall 1990, minority enrollment in Minnesota's Community Colleges increased 22 percent, from 2,285 to 2,778. Minority students constituted 5.1 percent of System enrollment in fall 1990, up from 4.3 percent in fall 1989.

State employment figures for 1990, however, report that only 4 percent, only 43 out of 1,015, full-time faculty are minorities. Nine percent of administrators and 6 percent of other support staff are minorities.

The Community College System has established the following goals for its Cultural Diversity initiative in the metro area:

1. Increase minority student enrollment by 100% by 1995.
2. Improve the campus/community climate as it relates to minority students and staff.
3. Diversify the curriculum with special efforts to include courses and topics of study about minorities and non-white cultures.
4. Increase minority staffing by 100% by 1995.
5. Increase the retention of minority students by 50% by 1995.

This request will provide the means to accomplish these goals.

■ <u>Maintaining Teaching Excellence</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>
	\$ 650,000	\$ 650,000

The Community College instructor is first and foremost a teacher, unfettered by the demands of research. Faculty are interested in pedagogy and in the sharing of ideas. But the pressures of classroom teaching can limit the ability and enthusiasm for professional upgrading and collegial interaction.

The Community College System has been successful in obtaining Bush Foundation support over the period from 1985 to 1991 totalling nearly \$1.9 million, matched with over \$520,000 in System funds. This \$2.4 million was used for 3 specific programs designed to upgrade and renew the skills of existing faculty: "Writing Across the Curriculum" programs over the six years helped over 2,000 faculty and 128 administrators to develop writing as a teaching tool in all disciplines and career programs.

As part of this effort, a nationally recognized longitudinal study was carried out. This evaluation program involved 115 faculty members and 1350 students and demonstrated the positive impact of this program on students' writing and learning ability.

Bush funding has also supported efforts to assist 1,680 faculty and 30 administrators in the "Computing in Instruction" program. Through this program improvements in teaching and curriculum were made as faculty in all disciplines and career programs developed competency in the use of computers as a teaching tool. Again, evaluations have proven highly positive.

The third element of the program provided small grants to 336 faculty to develop new teaching strategies, curriculum revisions, and applications of technology to teaching.

The System has a commitment to the Foundation to make every effort to continue key elements of these successful ventures into the future. As senior faculty retire and new faculty are hired, it is important to pass on the valuable lessons of these programs. This request includes \$100,000 each year to continue these efforts on a modest level.

The second component of this request is for \$550,000 each year to establish a Center for Teaching and Learning. This Center would organize and administer a variety of faculty professional development activities and programs, such as:

PROGRAM: INSTRUCTION
(Continuation)

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System: Community College System

- **Discipline Conferences:** In-depth summer conferences that are discipline specific and allow faculty to receive new information and share materials and techniques in their fields.
- **Collaborative Conferences:** Community College faculty work together with State University and University of Minnesota faculty, as well as high school teachers, on curriculum articulation and development.
- **New Faculty Orientation:** Current faculty and administrators assist new faculty in adapting to their new duties.

The changes in technology, the explosion in information, the growth in the System, the increasing intersystem cooperation, and the aging of the faculty are all factors which underscore the need for additional funding in this area.

- Improving Library Resources F.Y. 1992 F.Y. 1993
\$3,000,000 \$ 500,000

Libraries are extremely vital parts of the higher education experience. Concern about the condition of academic libraries resulted in an intersystem study and report prepared by HECB and the public postsecondary systems. That study "Academic Library Resources in Minnesota - the 1990s and Beyond" concluded that Minnesota's academic libraries are beginning to show the strain of inattention. That inattention is tied directly to the lack of funding.

Rapid enrollment growth, a more diverse student body, major advances in library technology, and tremendous inflationary costs have all contributed to an erosion in Community College libraries and their ability to meet student information needs.

The intersystem study demonstrated that Community College library collections have aged dramatically as measured by the publication dates of holdings:

<u>Publication Dates</u>	<u>Percent of Holdings</u>
Pre - 1960	22.1%
1960-1969	30.8%
1970-1979	29.4%
1980-1989	17.4%

An incredible amount of cooperation between libraries occurs in Minnesota, aided by computer and communications technologies. Interlibrary loan requests from Community College students have soared, resulting in college libraries trying to borrow materials from other postsecondary libraries, all of whom are suffering from deteriorating collections.

At the same time, some Community College libraries have become the information resource centers for 4-year universities offering off-campus classes in their communities, but do not have adequate materials, staff, or space.

Because the cost of books has escalated much more rapidly than the general inflation indices, libraries have stretched dollars by purchasing less durable paperbacks and fewer hardcover books, audio and video tapes, and computer software materials.

This request includes a one-time appropriation of \$2.1 million the first year to upgrade existing collections and a base adjustment of \$500,000 in the second year to maintain a more acceptable

level of funding for libraries into the future. The first year request was developed by reviewing the level and percent of instructional expenditures going for library collections over the past decade, as reported in the intersystem library study:

<u>Year</u>	<u>Total Instructional Expenditures</u>	<u>Collections</u>	<u>Collections as % of Instructional Expenditures</u>
1979	\$ 39,364,000	\$ 410,015	1.04
1982	\$ 54,608,900	\$ 412,183	0.76
1985	\$ 71,196,000	\$ 514,603	0.72
1988	\$ 90,245,000	\$ 623,132	0.69

The \$2.1 million first year request provides sufficient funding to restore expenditures for collections to the 1.04% level for the 10 year period from 1980-1989. The second year request will increase the funding base for library collections to that level also.

In addition to funds for improving collections, \$900,000 is requested in the first year to finally complete the phase II/circulation module of the automated library system, known as PALS.

The System first requested funding to implement a computerized library system in 1985. Rather than create its own system, the Community Colleges agreed to piggyback on the State University's PALS program. While the 1985 Legislature fully funded both phase I (catalogue module) and phase II (circulation module) for the state universities, it provided funding for phase I only for the Community Colleges, with a message to return later to request the remaining funding. In spite of repeated requests, funding has not been forthcoming.

The phase I module basically allowed the Community Colleges to transfer all card catalog information to a computer base and to make this information available to all institutions on the PALS system. Without phase II, the on-line circulation system, borrowers must go through a much more lengthy, staff intensive process to order materials from remote libraries. The advantages to both the library and the patron are significant.

In addition to limits on new book purchases, funding constraints have prevented the acquisition of on-line data bases and periodical indexes. Several colleges still are without electronic security systems to protect existing collections. Various non-print media and teaching technologies which are effective with non-traditional and developmental students are not available. And additional professional and technical staff to extend library services to evenings and weekends are necessary to serve working adults. Eleven Community Colleges have only one professional librarian to meet these extended hours when a minimum of 2 is required. This request does not address any of these additional needs at this time.

PLAN:

As noted earlier, funding constraints place serious limitations on the ability to reallocate existing base level funding.

Once final appropriation levels have been established for the next biennium, the State Board for Community Colleges will establish a budget, including tuition rates, for fiscal years 1992 and 1993. At that time the System will also be participating with the State Negotiator in collective bargaining with the Minnesota Community College Faculty Association and monitoring the negotiations with other employee groups. Enrollment projections will be finalized for the coming 2 years. In the end, the Board will have to weigh the many competing factors for the existing resources and balance the System budget.

To assist with strategic planning and responsible management, a number of internal evaluations and studies are currently underway. They include:

PROGRAM: INSTRUCTION
(Continuation)
System: Community College System

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- **Review of Regional Structures:** In the early 1980's, 2 regional administrative structures were created in the Community College System. The Arrowhead Region reorganized five northeastern colleges under one regional administration. The Clearwater Region was created shortly after to consolidate some administrative functions for the three colleges in Northwestern Minnesota.

An effort is currently underway to review the continued effectiveness of the regional approach and to determine whether additional administrative functions can be regionalized.

- **Review of Course Scheduling:** Direct Instructional costs dominate the Community College System budget. How and when classes are scheduled, the mix of classes, the size of classes all affect the cost efficiency of campus operations. This review is designed to assist campuses in making wise decisions about resource allocations.
- **Human Resource Planning:** Over the past year the Community College System has been conducting a major human resource planning study. Community Colleges are highly labor intensive operations, and the human resources -- faculty, staff and administrators -- obviously drive the enterprise. Potential shortages and competition for faculty and administrators, the need to upgrade employee skills, and funding constraints that demand increased efficiency all increase the need for effective human resource development. This human resource development effort involves matching human resources with strategic plans, improving recruitment and retention of employees, and increasing the investment in the development of individual staff.
- **Review of Occupational Programs:** The Community College presidents have been advised to thoroughly review various above average cost occupational programs to determine whether, given limited fiscal resources, the cost per-student to provide the program is justified.
- **Leadership Reorganization:** Two key System leadership positions have been reorganized. The current vice chancellor for instruction position and the vice chancellor for student services position are being combined into a single vice chancellor for instruction and student services. A new position, vice chancellor for development, has been created to give focus and attention to the search for new funding from non-state sources.

Alternatives

Since major reallocation is not a viable option for supplying funding for existing operations or new initiatives, the impact of limited or no funding in each the following areas is described briefly below:

Inflation Allowance: Without a reasonable inflation allowance, the potential for personnel costs exceeding available funding is very high, as is the prospect of employee layoffs. Similarly, the costs of equipment, supplies and expenses will increase beyond budgeted dollars and force reductions in purchasing.

Marginal Funding: Without marginal funding, there is a disincentive to allow enrollments to increase over current levels. The System's commitment to maintaining an open access policy is strong. But without the necessary resources to insure quality, it will be extremely difficult to continue open access.

Cambridge College Status: Without new funding, Cambridge will remain a center and continue to offer a limited array of services.

Instructional Equipment: Current law removes the FY90 and FY91 equipment funding from the base. The result is a return to a System budget in which annual allocations for classroom equipment do not keep pace with demand. Reinstatement of a specific appropriation for

equipment will help prevent funding in this discretionary area from being reallocated to other

Student Success Model: Lack of new funding will postpone the development of this model, thereby reducing quality because some students will enter classes for which they are not fully prepared. Retention rates will not improve and some students will take longer to complete their programs.

Cultural Diversity: With or without additional state funds, the System will seek private funding to carry out this important agenda. Without new funding, the System's goals will not be met in the timeline established.

Maintaining Teaching Excellence: The ability to provide veteran and new faculty with opportunities for professional development will be seriously curtailed and will reduce the quality of classroom instruction and slow efforts to improve articulation and credit transfer between high schools, community colleges and 4-year institutions.

Improving Library Resources: New funding is essential to bring Community College libraries to a level of quality necessary to serve students' academic needs. Without sufficient funding to upgrade collections, Community College students will continue to borrow materials from other institution's libraries, adding further to the problem.

Instructional Funding Matrix

Based on a FY 1989 cost study, actual direct instructional costs were determined for each of the Community Colleges' twenty-seven program categories. Indirect costs were allocated to each of the programs, resulting in fully allocated program costs. The number of student credit hours earned in each program, divided by forty-five, resulted in the number of full-year equivalent (FYE) students in each program. In order to identify the high, medium and low cost programs, the fully allocated program costs were divided by the FYE in each program, resulting in an average program cost per FYE. The nine highest cost programs became the "high cost cell," the next nine highest cost became the "medium cost cell," and the last nine programs became the "low cost cell." Each of the three cells contain the total FYE of the nine programs, the total of fully allocated costs of the nine programs, and an average cost per FYE (the cell value).

The FY 1989 cell values were adjusted to the FY 1991 legislative intent according to the average cost funding methodology. The results of this process are the FY 1991 average costs displayed in the following matrix:

	<u>FY1991</u>	<u>FY1992</u>		<u>FY1993</u>			
	<u>Average Cost</u>	<u>Funded Average Cost</u>	<u>FY1990 FYE Enrollment</u>	<u>Funded Instruct. Expendit.</u>	<u>Funded Average Cost</u>	<u>FY1991 FYE Enrollment</u>	<u>Funded Instruct. Expendit.</u>
High Cost	\$ 5,991	\$ 5,991	3,144	\$ 18,837	\$ 5,991	3,249	\$ 19,466
Medium Cost	\$ 4,191	\$ 4,191	13,391	\$ 56,125	\$ 4,191	13,840	\$ 58,007
Low Cost	\$ 3,629	\$ 3,629	<u>16,325</u>	<u>\$ 59,249</u>	\$ 3,629	<u>16,872</u>	<u>\$ 61,235</u>
Totals			32,860	\$134,211		33,961	\$138,708

PROGRAM: INSTRUCTION
(Continuation)
System: Community College System

1992-93 Biennial Budget

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$162,547,000 in the 1992-93 biennium for the Community College System's instructional program. The recommendation includes marginal cost funding for enrollment growth anticipated during the biennium totalling \$5,475,000 in state direct appropriation, a general reduction of \$10,742,000 for the biennium, and elimination of appropriation subsidies for non-resident/non-reciprocity students enrolled in community colleges. The recommendation assumes that tuition will be increased by no more than the rate of inflation for the biennium - projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the cost of inflation would partially offset the reduction in instructional appropriation. The Governor recommends that the legislature include a rider in the appropriation to the Community College System to clearly limit the amount of the tuition increase to no more than these amounts. The Governor also recommends that 10% of the System's F.Y. 1993 instructional appropriation be withheld for redistribution pending the restructuring recommendations of the Blue Ribbon Commission on Higher Education. Recommended total instructional spending authority for the biennium (direct appropriation and tuition) is \$271,338,000. Despite fiscal constraints, in making this recommendation, the Governor reaffirms the role of the Community College System as a "port of entry" system for students seeking a technical education and/or initially ineligible for entry into a baccalaureate program.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: COMMUNITY COLLEGE BD
PROGRAM: INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320
TOTAL EXPENDITURES BY ACTIVITY	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320
DETAIL BY CATEGORY:									
STATE OPERATIONS	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320
TOTAL EXPENDITURES BY CATEGORY	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	67,000	76,934	92,850	91,607	91,607	84,156	92,934	92,934	78,391
STATUTORY APPROPRIATIONS:									
GENERAL	37,025	42,807	46,611	44,290	44,290	52,863	45,774	45,774	55,929
TOTAL FINANCING	104,025	119,741	139,461	135,897	135,897	137,019	138,708	138,708	134,320

ACTIVITY:
PROGRAM: Instruction
AGENCY: Community College System

1992-93 Biennial Budget

DECISION ITEM: General Reduction/Tuition Adjustment

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Director Appropriation				
General Fund	\$ (5,371)	\$ (5,371)	\$ (5,371)	\$ (5,371)
Tuition				
General Fund	\$ 2,550	\$ 4,200	\$ 4,200	\$ 4,200
Total Expenditures				
General Fund	\$ (2,821)	\$ (1,171)	\$ (1,171)	\$ (1,171)
Requires statutory change: _____ Yes <u> X </u> No				
Statutes Affected:				

ITEM SUMMARY:

This item reduces state direct appropriation to the Community College System's instructional program by \$10,742,000 for the 1992-93 biennium. Pursuant to current law, the Community College Board would be responsible for allocating the reduction among programs and/or institutions.

In addition, the Governor recommends that tuition increases for resident students in the system be limited to the rate of inflation. Increases in the Community College System tuition BASE of \$2,550,000 in F.Y. 1992 and \$4,200,000 in F.Y. 1993 would limit average tuition increases to the cost of inflation and would offset a portion of the appropriation reduction.

RATIONALE:

Under current law, instructional appropriations are made generally to the Community College System; the system does not receive appropriations for specific instructional activities and programs. The Community College Board has statutory responsibility to set academic and program priorities and to allocate resources to campuses and programs accordingly. Academic priorities and expenditure patterns vary by institution within the system.

Instructional expenditures represent 90% of the system's total General Fund expenditures. However, fiscal constraints require that the system focus its academic priorities, contain costs, and seek alternative methods and approaches of service delivery. In addition to cost containment, the Community College System is encouraged to develop and implement cooperative and resource sharing plans (e.g. regional course delivery and management, equipment sharing, etc.) with the other postsecondary systems in order to maximize higher education access and resource use.

ACTIVITY:
PROGRAM: Instruction
AGENCY: Community College System

1992-93 Biennial Budget

DECISION ITEM: F.Y. 1991 Marginal Cost Funding Adjustment

<u>Dollars in Thousands</u>			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Expenditures					
General Fund	\$ (1,685)	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes X No
Statutes Affected:

ITEM SUMMARY:

This item eliminates the F.Y. 1990-91 marginal cost funding adjustment for additional enrollment growth beyond what was projected during the 1989 legislative session for the Community College System. The reduction totals \$1,685,000 in F.Y. 1992.

RATIONALE:

The average cost funding formula establishes BASE level instructional funding using enrollment from the academic year two years prior to the year for which appropriations will be made (e.g. F.Y. 1991 instructional funding was based on 1989 enrollment). Marginal cost funding, estimated at 65% of average instructional cost less tuition, was provided by the 1988 and 1989 legislatures to reduce pressures on systems experiencing enrollment growth during the two year period prior to average cost funding formula recognition of the enrollment.

Laws of Minnesota 1989, Chapter 293, provided \$5,483,000 in F.Y. 1990 and \$4,407,000 in F.Y. 1991 to the Community College System for projected enrollment growth in those years. The appropriation was based on projected system enrollment of 32,000 in F.Y. 1990 and 33,500 in F.Y. 1991. Actual system enrollment for those years was 32,860 and 33,961, respectively. Laws, Chapter 293, requires the Commissioner of Finance to calculate the effect on the General Fund of the difference between actual enrollment and projected enrollment and include an adjustment in the budget for the next fiscal year.

Marginal cost funding adjustments are not used in the derivation of "cell" values for the average cost funding instructional matrix for the 1992-93 biennium. However, because the State University System's 1992-93 instructional funding base is based on enrollment from 1990 and 1991, the system will receive full average cost funding for those same students for whom a marginal funding adjustment would also be made. It is inconsistent with average cost funding to provide both a marginal cost and average cost funding adjustment for the same students in the same year. In addition, pursuant to the requirements of Chapter 293, the original marginal cost funding appropriation and tuition adjustments have already been deducted from the system's base as non-recurring.

ACTIVITY:
 PROGRAM: Instruction
 AGENCY: Community College System

1992-93 Biennial Budget

Marginal cost funding is intended to relieve fiscal pressure during the period of enrollment growth. The Governor also intends that the two-year systems remain the "port of entry" systems for students seeking a technical education and/or initially ineligible for entry into a baccalaureate program.

DECISION ITEM: Marginal Cost Funding Adjustment for 1992-93

	Dollars in Thousands			
	F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995

GOVERNOR'S RECOMMENDATION:

Direct Appropriations				
General Fund	\$ 2,771	\$ 2,704	\$ 2,704	\$ 2,704
Revenues				
General Fund	\$ 2,857	\$ 2,789	\$ 2,789	\$ 2,789
Total Expenditures				
General Fund	\$ 5,628	\$ 5,493	\$ 5,493	\$ 5,493

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item provides marginal cost funding to the Community College System for each year of the 1992-93 biennium. Marginal cost funding provides funding at 65% of average instructional cost. The recommendation reflects projected enrollment growth of 3% per year over F.Y. 1991 enrollment in the Community College System. F.Y. 1992 enrollment is projected to be 34,980 FYE, an increase of 2,120 FYE over lag funded enrollment for F.Y. 1992. F.Y. 1993 enrollment is projected to be 36,030, an increase of 2,069 over lag funded enrollment for F.Y. 1993. Funded enrollment growth for the 1992-93 biennium is capped at 3% per year over F.Y. 1991.

RATIONALE:

The average cost funding formula establishes BASE level instructional funding using enrollment from the academic year two years prior to the year for which appropriations will be made (e.g. F.Y. 1991 instructional funding was based on 1989 enrollment). Marginal cost funding, estimated at 65% of average instructional cost less tuition, was provided by the 1988 and 1989 legislatures to reduce pressures on systems experiencing enrollment growth during the two year period prior to average cost funding formula recognition of the enrollment.

Changes in mission and entrance requirements in the University of Minnesota and State University System are expected to impact enrollment demand in both the Community College System and the Technical College System. As the baccalaureate systems reduce their undergraduate enrollment, more students seeking postsecondary education are expected to enroll in community colleges and technical colleges. Because the average cost funding formula provides funding only for lagged students, the Community College System may experience financial pressure trying to accommodate the anticipated enrollment increases during the 1992-93 biennium.

ACTIVITY:
 PROGRAM: Instruction
 AGENCY: Community College System

1992-93 Biennial Budget

DECISION ITEM: Blue Ribbon Commission/System Restructuring

	Dollars in Thousands			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$ -0-	\$ (\$ 8,710)	\$ -0-	\$ -0-	\$ -0-
Total Expenditures					
General Fund	\$ -0-	\$ (\$ 8,710)	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes X No
 Statutes Affected:

ITEM SUMMARY:

The Governor recommends that 10% of the Community College System's F.Y. 1993 appropriation be set aside in a general fund non-operating account and subject to legislative reallocation during the 1992 legislative session upon approval of the restructuring recommendations of the Blue Ribbon Commission of Higher Education. The amount to be set aside from the System totals \$8,710,000.

Reallocation of the appropriation back to the Community College System will be subject to legislative and gubernatorial approval and dependent on the System's acceptance of the approved Commission recommendations.

PROGRAM: Non-Instruction
System: Community College System

1992-93 Biennial Budget

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$20,276,000 in the 1992-93 biennium for the Community College System's non-instructional program. This recommendation includes a general reduction of \$1,194,000 from the F.Y. 1991 BASE for the biennium.

PROGRAM PURPOSE:

Under the average cost funding methodology, the Non-Instruction Program generally includes activities not directly related to credit-granting instruction. Community services, intercollegiate athletics, financial aids, other miscellaneous items, and some repair and replacement projects are the general categories included as non-instructional. The common element in these activities is that, under the methodology, spending authority for these areas is not used to determine assumptions about tuition revenues.

The various activities in this program are described briefly as follows:

Community Services: To provide quality non-credit instructional and cultural opportunities, and services to the citizens of Minnesota that are geographically and financially accessible, responsive to state and/or local needs, meet the appropriate continuing education requirements of various professional groups, and foster community use of the facilities of the System's colleges.

Financial Aids: To provide needy students with the financial assistance necessary to attend college through 3 specific programs: college work-study, national direct student loans (Perkins Loans), and supplemental educational opportunity grants (SEOG). This activity provides the state matching dollars required to receive the federal funds.

Intercollegiate Athletics: To provide a program of intercollegiate athletics which contributes to the educational experience of men and women in the following areas: basketball, football, wrestling, softball, golf, tennis, hockey, volleyball and track. This activity provides only the staffing portion of the athletics programs. All other costs are covered by student fees.

Other Miscellaneous: This "catch-all" includes "flow-through" funds and capitalized repair and replacement. "Flow-through" funds include application and late fees paid by students and numerous other minor categories of receipts. The fees "flow-through" because, if not collected, the corresponding expenditure is not made. No state appropriation is involved.

It should be noted that the calculation of indirect costs in each of these areas is done on a simple and arbitrary formula basis and may not represent actual costs for those programs.

PLAN:

This program contains several disparate activities assigned to it in the initial development of the average cost funding methodology. No new funding, other than a reasonable inflation factor, is requested in this program.

Community Services program are expected to continue at the present level. Fees for non-credit offerings may need to increase if they are to continue.

Two of the three financial aid programs, work study and SEOG, have had the state matching increase recently or are seeing it happen now. The work study matching contribution increase from 20 to 30 percent in FY91. The SEOG match went from 0 to 10 percent in FY91 and increases to 15 percent in FY92. Without new dollars, the only way to accommodate the increased matching costs is to reduce the number of students served.

Intercollegiate Athletics programs are undergoing some changes as a result of a major System review of campus student life programs and funding. New System policies on Student Life programs emphasize achieving a balance in student activities between academic and non-academic, those aimed at traditional as well as non-traditional students, and those serving men as well as women.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: COMMUNITY COLLEGE BD
PROGRAM: NON-INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
NON-INSTRUCTION	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938
TOTAL EXPENDITURES BY ACTIVITY	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938
DETAIL BY CATEGORY:									
STATE OPERATIONS	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938
TOTAL EXPENDITURES BY CATEGORY	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	9,432	10,668	11,476	10,735	10,735	10,138	10,735	10,735	10,138
STATUTORY APPROPRIATIONS:									
GENERAL	3,121	3,781	3,800	3,800	3,800	3,800	3,800	3,800	3,800
TOTAL FINANCING	12,553	14,449	15,276	14,535	14,535	13,938	14,535	14,535	13,938

ACTIVITY:
 PROGRAM: Noninstruction
 AGENCY: Community College System

1992-93 Biennial Budget

DECISION ITEM: General Reduction - Noninstruction

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$	(597)	\$	(597)	\$ (597)
Total Expenditures					
General Fund	\$	(597)	\$	(597)	\$ (597)

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item reduces state direct appropriation to the Community College System's noninstructional program by \$1,194,000 for the 1992-93 biennium. Pursuant to current law, the Community College Board would be responsible for allocating the reduction among programs and/or institutions.

RATIONALE:

Noninstructional activities include any activities not directly related to credit-granting instruction. Community service, research, intercollegiate athletics, and financial aids are among the items classified as noninstructional. Like instructional appropriations, noninstructional appropriations are made generally to the Community College System. The Community College Board sets program priorities and allocates resources to each of the seven system universities.

Noninstructional expenditures represent 10% of the system's total General Fund expenditures. Though noninstructional activities are not financed with tuition, many are subject to client charges or user fees. In addition, the General Fund noninstructional budget reflects only a portion of the system's total non-instructional activities. Constrained state resources require that the Community College System refocus its noninstructional priorities or seek alternative financing.

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: MINNESOTA STATE UNIVERSITY SYSTEM

PROGRAM

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Instruction

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Non-Instruction

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MINNESOTA STATE UNIVERSITY SYSTEM ORGANIZATIONAL CHART

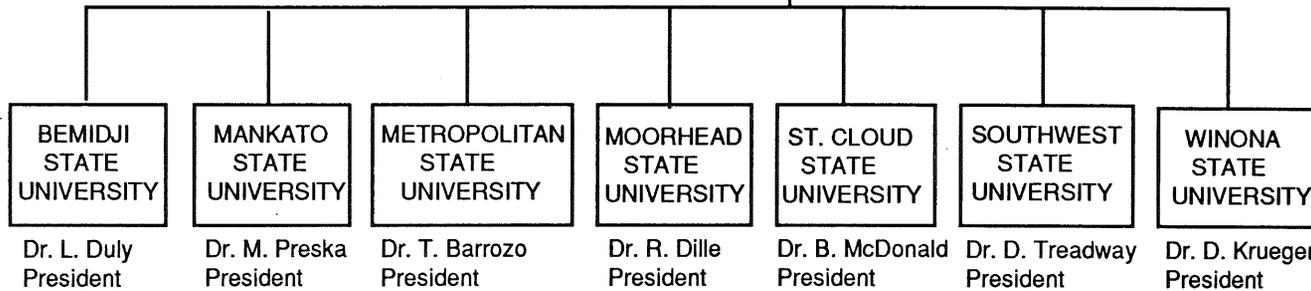
POSITION RECONCILIATIONS	
Authority:	Current
Legislative Authorized General Fund	4,909
TOTAL PERMANENT POSITIONS	4,909
Other complement (FTE)	-0-
Total Positions	4,909
Employees on 6/30/90	4,782 *
*Employees counted as one regardless of the amount of time they are employed.	

Minnesota State University Board
 Nine member citizen board
 appointed by the Governor

Rod Searle, President
 Elizabeth Pegues,
 Vice President
 Nellie Stone Johnson,
 Secretary
 Jerry Serfling, Treasurer
 Julie Bleyhl
 Dan Danford
 Paula Dykstra
 Frank Furlan
 Erin McCabe

Office of the Chancellor
 Dr. Robert L. Carothers
 Chancellor

 FY 91 Budget \$4,626,000
 No. of Employees 45



FY 91 Budget	\$26,770,000	\$69,167,000	\$12,678,000	\$39,346,000	\$70,638,000	\$16,978,000	\$34,815,000
No. of Employees	423	1,254	155	747	1,281	308	696
Enrollment- Est. FYE.	4,797	14,593	2,862	8,333	14,832	2,750	6,916

MISSION:

Minnesota's State Universities were originally created to produce teachers for the public schools. The impulse of this movement was deeply democratic, designed to provide the benefits of education for Americans. During the last century, as these schools evolved into colleges and then comprehensive state universities, their missions became broader and more complex.

The mission of the Minnesota State Universities today is to provide the citizens of the State with a quality education which:

- cultivates a capacity for critical thinking,
- fosters global awareness,
- confers scientific and quantitative literacy,
- encourages responsible citizenship by building in students heightened intellectual, social, historical and cultural sensitivities,
- insures readiness for purposeful careers, and
- enriches lives by instilling in students the importance of values and purpose in life.

The Universities offer a comprehensive range of baccalaureate and master's degree instructional programs in the liberal and fine arts, business, natural sciences, engineering, social and behavioral sciences, health sciences, education and many other areas.

In recent years the Minnesota State University Board has placed a stronger emphasis on the development of international programs to help enlarge students' global understanding. This new emphasis has resulted in the development of overseas study programs in such countries as England, Denmark, China, France, Germany and most recently in the development of a campus in Akita, Japan.

A total of 64,258 students enrolled at State Universities in the fall of 1990; for budget purposes that number translates to 55,083 Full Year Equivalent (FYE) students for F.Y. 1991.

The actual and projected FYE totals for the five year period 1989 through 1993 are summarized below.

	Actual F.Y. 1989	Actual F.Y. 1990	Projected F.Y. 1991	Est. F.Y. 1992	Est. F.Y. 1993
Bemidji	4,582	4,762	4,797	4,866	4,893
Mankato	13,909	14,302	14,593	14,613	14,597
Metropolitan	2,204	2,598	2,862	3,291	3,784
Moorhead	7,755	8,159	8,333	8,335	8,335
St. Cloud	14,203	14,525	14,832	15,089	15,224
Southwest	2,361	2,554	2,750	2,875	3,001
Winona	6,397	6,875	6,916	6,874	6,749
	<u>51,411</u>	<u>53,775</u>	<u>55,083</u>	<u>55,943</u>	<u>56,583</u>

MAJOR POLICY AND BUDGET ISSUES:

Importance of Quality Education

Issue: Minnesotans are asking if the State's budget can continue to fund the growth in social service programs, maintain roads and bridges, fund rising enrollments in elementary and secondary education, reduce property taxes, create new programs and still maintain quality instruction in higher educational institutions while allowing unlimited access?

There are also Minnesotans who feel that an undergraduate education based on high expectations and high quality is too difficult (or too expensive) for students who enroll in State Universities. But

Dear Governor and Legislators:

Around our globe, 1990 has been a year of profound change. It has been a year in which choices were made, choices for democracy and for leadership. In America, we have begun to renew ourselves through a growing commitment to achieving enhanced quality in everything we do. In Minnesota, momentum for transforming change has grown, creating an environment which has allowed us to make decisions, decisions which only months ago seemed beyond us.

In 1991, Minnesota will have the opportunity to decide again, to decide what is the kernel of its future and what is chaff. We will be asked to decide whether it is more important to feed our appetite for luxury cars and winter condos or to feed and house our children, too many of whom are now cold and hungry, both in body and in spirit. We will be asked whether it is more important to fund various and sundry development schemes or to build the fundamental infrastructure we know our children and grandchildren must have. In 1991, we will not lack for the opportunity to choose.

I believe that high quality education for all our children is the choice we must make. In an emerging economy based on the creation, processing and distribution of knowledge, high quality education is the sine qua non for success. In an increasingly complex culture, it is high quality education that makes democracy and civility possible.

The Minnesota State University System is embarked on a critical mission to define and improve the quality of education in our state. Our Q-7 initiative, shaped by leaders of business, agriculture and labor as well as by educators, sets new standards for higher education, both at the point of entry and at graduation. Q-7 tells Minnesotans what they have a right to expect from our universities and from our graduates. Q-7 makes us accountable as never before, an accountability we fully accept.

The 1991 legislative session will be a time in which our values, our priorities will be tested. We ask both the Governor and the Legislature to support efforts throughout state government and particularly within the education community to achieve enhanced quality. We ask you to support our commitment to high expectations and high standards, to support Q-7 as a symbol of what Minnesota and America must do for all its people. Quality, we believe, cannot be reserved for the few. Quality must be infused throughout our nation, not just, as William Faulkner said, that we may survive but that we may prevail. If not in Minnesota, where can it begin?

Robert L. Carothers
Chancellor

(Continuation)

1992-93 Biennial Budget

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

the Board, the faculty and staff, students and administrators of the State Universities believe profoundly in the potential of students, in their intelligence, their character and values. We believe that every Minnesota should have access to high quality education and we are committed to providing that. We look forward to alumni whose degrees will signify quality around the nation and whose skills and knowledge will allow them to lead us to a better world.

Response - The Q-7 Initiative: It is precisely for these reasons, and to meet these challenges, that the Board created a special Blue Ribbon Commission on Access and Quality in the Minnesota State University System to examine the System and to suggest improvements.

The Commission was created in January of 1990 by the Minnesota State University Board. The seventeen commissioners represented a wide range of perspectives including those of corporate executives, labor leaders, farmers, public school teachers, former legislators, civil rights' advocates, foundation officers, and recent graduates of the universities. This cross-section of citizens took a critical look at the System to assist the Board in striking a balance between its historic commitment to access and today's need to improve quality. Their task was to speak on behalf of the people of Minnesota on the question of balance to develop the standards of excellence necessary in higher education to prepare students for the challenges of the next century.

In conducting their evaluation the commissioners visited campuses, talked to students, faculty, staff and citizens, read reports and position papers, listened to national experts, and participated in convocations, retreats, and meetings. The result of this extensive examination is a plan for enhancing the quality of the Minnesota State University System.

The Commission identified what it believed should be the goals of the System and the individual universities and proposed indicators of a high quality education. It is expected that these goals can be achieved by the end of the decade if they are kept clearly in the fore and if resources are targeted toward their implementation. The indicators are "student-centered" and "future-oriented" and anticipate what students graduating from the State Universities should know and be able to do if they are to be prepared to serve themselves, their families, their communities and the world in the next century.

To the Commission, "quality" means:

- Students Who Come Prepared For College
- Graduates Who Can Think Critically And Solve Problems
- Graduates Who Have A Global Vision
- Graduates Who Have A Multicultural Perspective
- Graduates Who Are Scientifically Literate
- Graduates Who Are Ready To Work
- Graduates Who Are Good Citizens And Who Behave Ethically

The Board accepted the Commission's recommended goals and charged the universities and their faculties, administrators, and students to develop plans, establish priorities, and design strategies for achieving the Q-7 goals. These plans are to be completed and reported to the Board in May of 1991.

It is apparent even at this point in our planning that changes are needed to overcome the deficiencies that have developed in university libraries, instructional equipment and in the development of faculty and staff during the past decade of decline in per student support.

Libraries: While enrollment increased between 1979 and 1988, the number of books and other library materials added by the libraries actually decreased. The decline in the purchasing power of library budgets combined with the rapidly increasing cost of books and periodicals, has taken a heavy toll on the ability of the State Universities' to put books in the hands of students. The average cost of a book has increased 38.7% since 1983, and the average periodical subscription has soared by 61.3%.

- Less than 20% of the books in the collection of the six State Universities were purchased between 1980 and 1988.
- Based on the average cost of books in academic libraries, Minnesota public college and university libraries purchased .49 books per FYE student in 1988 compared with .73 in 1978.
- Between 1979 and 1988, the public colleges and universities reported a 16.4% decline in expenditures for books (in constant dollars) while enrollments increased by 19.7%.

The ongoing deterioration and aging of the library collection deprives students and faculty access to resources that are essential to effective teaching and learning.

Instructional Equipment: The impact of higher costs for a broader range baccalaureate education and the decline in per student funding has been particularly devastating in the area of instructional equipment. The Legislature in the last session recognized that the quality and condition of instructional equipment had been eroding throughout all of the higher education systems and attempted to provide some limited assistance. For the State Universities, this resulted in a special non-recurring appropriation of \$2,080,000. As this is a one-time appropriation it does not stay in the base budget for the next biennium.

The decline in per student funding has prevented institutions from replacing worn and obsolete items and from purchasing new instruments and equipment. As a result equipment in the basic sciences is often more historic than useful. The System has 1 computer for every 20 students when national standards recommend a ratio of 1 to 10. Valuable faculty and technician time is spent repairing worn-out equipment. Graduates often have to undergo training in the use of up-to-date equipment once they are on the job, wasting valuable employer orientation time. Students need operationally sound and technologically advanced laboratory and studio equipment if we expect them to function effectively in an increasingly technical and complex marketplace.

Faculty Development: The forces of change are also putting new demands on faculty - demands that are altering both the content of the course work and the method of instruction. Knowledge is expanding exponentially - yet limited resources and full teaching loads make it difficult for faculty members to stay current with rapid changes in their disciplines. The great majority of faculty completed their formal education more than twenty years ago. Staying current is important in all fields but it is especially critical in high technology fields and also in teacher preparation and business.

The most recent research on how students learn best calls for changes in teaching methods. Each university needs sufficient funds to provide support to faculty and staff who wish to change or improve the quality, currency and content of instruction.

Budget Impact: The Minnesota State University Board in approving this budget request for the F.Y. 1992-93 biennium believes that the Legislature as well as the System needs to take action to immediately improve the funding of educational programs. Through internal reallocation the System has since 1980 increased funding of direct instruction by 23% to accommodate the 15,641 FYE growth in enrollment. Additionally, students have assumed a greater responsibility for paying the cost of their education - an increase of 55% in constant dollars. It is the state that has not kept up

(Continuation)

1992-93 Biennial Budget

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

its end. While enrollments and tuition increased and funds were reallocated, the state's direct appropriation per FYE students actually declined by \$930 since 1978.

Although tuition will continue to increase and further sharpening of priorities will result in additional reallocations, there is a need for the state to reverse the decline in direct appropriations and begin restoring those funds.

The Board requests that the Legislature undertake a 6-year phased effort to support the improvement of instructional quality at the State Universities. This would involve increasing spending on a per student basis by approximately \$1,100 per FYE student - a 22% increase and would bring per capita spending closer to but still below the level found at comparable universities across the country as well as the University of Minnesota undergraduate colleges.

This would require an increase in the System's spending level of \$7,581,000 in F.Y. 1992 and \$15,162,000 in F.Y. 1993 - a total of \$22,743,000 for the biennium. These funds will be used primarily to put books in the hands of undergraduates, to purchase and maintain laboratory equipment and to increase the ability of the faculty to meet the needs of the students.

While the planning and preliminary work toward improving the quality of education goes forward at the universities, several other major related policy and budget issues remain to be addressed by the Legislature.

Societal, Economic and Demographic Change

Issue: In every aspect of our lives we must be prepared to live with and work with change. Two decades ago a single wage earner could support a family. The reduction in the number of relatively high-paying manufacturing jobs while accompanied with a rise in the number of lower paying service jobs, means that today two wage earners are required just to stay even with what one could provide twenty years ago. The rise in the number of single parent households makes this loss in family income particularly serious. We have also witnessed an increase in the potency, variety and availability of drugs that are eroding the social order of our society.

Among the most obvious changes that occurred in the eighties was the growth in population. Minnesota recorded the highest rate of population growth in the 12-state Midwest region. The state now has 4.36 million residents, an increase of 6.9% over the past ten years. Minnesota's nonwhite and Hispanic populations account for roughly one-third of the State's population growth, this despite the fact that the minority population base in Minnesota is still small in relative terms when compared to most other states (4% versus 24% nationally). In the last ten years minority enrollment in the State's K-12 system has almost doubled and now comprises over 9.2% of total enrollment. For example, in the Minneapolis school district, minority enrollment grew during the last decade from less than 33% to more than 50%. In St. Paul minority enrollment now exceeds 40%.

The shift in population from rural parts of the state to urban centers, most especially to the seven county metro area, continues. While these demographic changes are expected to persist, the economic contribution of the nonmetropolitan area to the overall vitality of the state remains of great importance. Agriculture, wood products, mining, tourism and the recent tendency for the concentration of manufacturing and retail businesses in regional centers when taken together is an important part of the State's economy. Development along the I-94 corridor between Minneapolis and St. Cloud is changing the character of the landscape and the relationship between those cities and the smaller communities between. Likewise, Rochester which continues to build upon its health care technology and manufacturing base is becoming a leader for change in the upper Midwest.

The challenges posed by a changing society can neither be avoided nor postponed. In serving the

public interest, education policy in Minnesota should anticipate change and respond swiftly. Often there is a stiff price for failure to anticipate change. It is estimated, for example, that Minnesota pays about \$40,000 per year to keep one person in prison - about three times the current cost of providing a four-year undergraduate education at one of the State Universities. As a society we appear to be at the point where choices about priorities must be made. If the choices are wise, the State could avoid the kinds of social problems urban centers in other parts of the country are experiencing.

Response: The State Universities are responding to the change by developing programs, re-allocating resources, raising private funds for the purpose of improving participation of under-represented groups in our society and by expanding Metropolitan State University.

Investment in Cultural Diversity: Three years ago the Board authorized a cultural diversity plan which provides strong economic incentives to the Universities to increase minority enrollment and employment. Since F.Y. 1989 more than \$5.8 million has been internally reallocated for this purpose. The Presidents and the Chancellor are, in part, evaluated on the basis of demonstrable progress toward cultural diversity goals. The System's objective is to substantially increase the number of minority faculty and staff and to double minority student enrollment by the fall of 1993.

The State Universities have already made considerable progress toward the goal of increasing the number of minority faculty and staff. By the fall of 1990 the System has realized a net gain of 140 minority faculty and staff - a threefold increase in three years. There has also been substantial progress regarding minority student enrollment. In the Fall of 1988 there were 1280 students of color enrolled throughout the System - in the fall of 1990 that number is estimated to be at 1900. This is more than half way to the goal of doubling minority enrollment by 1993. At its October 1990 meeting, the Board approved a continuation of the policy of reallocating resources to further increase the participation of people of color in all facets of university life.

Expansion of Metropolitan State University: The growth in the number of traditional, non-traditional, minority and placebound students and their changing educational expectations has been the impetus for recent program development and structural modifications at Metropolitan State University. In the last decade, the FYE enrollment has grown by 258%, from 1,107 FYE in F.Y. 1982 to 2,862 FYE in F.Y. 1991. It is expected that as the enrollment at the six metropolitan community colleges continues to increase, so will the number of students who wish to transfer to the University to complete their baccalaureate degrees.

The Minnesota State University Board has designated Metropolitan State University as the System's primary provider of undergraduate and graduate education in the seven-county metropolitan area. The Board has underscored that commitment by approving a change in the internal allocations that will over a period of four years result in Metro being funded on the same basis as the other universities.

The University plans to introduce two new undergraduate majors and one graduate major each year over the next five years. The University is also planning, in collaboration with the other State Universities an urban centered teacher education program which will provide courses, seminars and internships for students from all of the Minnesota State Universities in the urban area.

The Minnesota State University System also plans to establish a Graduate/Professional Development Center in the Twin Cities which will allow all the State Universities, as well as the University of Minnesota and the private colleges to bring new post graduate programs to placebound metro residents. The Center will be coordinated by Metropolitan State University.

Metropolitan continues to consolidate classroom sites in the interest of improving the quality of teaching, accessibility and security. At one time, located at more than 50 locations in the Twin Cities area, Metro has made good progress toward the goal of concentrating operations at several hub locations. Major steps taken were the authorization by the Legislature for the construction of an Administrative/Student Services Center in St. Paul on Dayton's Bluff and the leasing of a

(Continuation)

1992-93 Biennial Budget

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

new expanded facility in Minneapolis. These sites, along with two new consolidated locations proposed for the northwest and southwest suburbs in the Twin Cities and the proposed Graduate Center will ultimately comprise the major hubs of Metropolitan State University.

Budget Impact: Over the past two years \$1.2 million was reallocated to fund Metropolitan State's expansion. Even after an estimated increase of \$2.0 million, as a result of enrollment growth and reallocation in F.Y. 1992-93, it will not be possible for the university to grow rapidly enough to meet student demand unless additional funding is provided in the amount of \$577,000 in F.Y. 1992 and \$2,625,000 in F.Y. 1993.

The Increasing Demand for Higher Education

Issue: Minnesotans are eager consumers of education. The State boasts the highest high school graduation rate in the nation at 90.9%, and with 85% of high school graduates enrolling in some form of post-secondary education within five years of graduation, the State has one of the highest participation rates in the country.

Although earlier predicted to decline, enrollment at the State Universities have since 1985 increased by 13,298 FYE student or 32%. In total there are now more than 55,000 FYE students attending the Universities. Projections for F.Y. 1992 and 1993 enrollment show the increase could be expected to continue. Recent high school graduates, adults returning to earn a baccalaureate or an advanced degree and others needing to update their knowledge and skills have all contributed to this unexpected, extraordinary growth. The underlying cause of this growth, as numerous surveys have shown is that more and more Minnesota citizens believe that a college or university education is essential to their being able to earn an adequate income.

The Average Cost Formula (ACF) was introduced in 1983 in the anticipation of a significant enrollment decline - that assumption was dead wrong. When the large increase in students is combined with ACF and the "bulge" formula which preceded it, the result is that the State's per student appropriation has dropped by approximately \$930 since 1978. This change is illustrated by the graph on the following page.

Viewed in another way, between 1985 and 1991 more than 31,000 FYE students were admitted with only partial or no state support. In most years the number of students who are not fully funded equaled the enrollment of a medium size college. The cumulative total of state appropriations that have not been available to meet student needs is substantial - \$71.2 million.

Fiscal Year	FYE with No State Approp.	FYE with 65% Approp.	Total FYE W/O Full State Approp.	Unrealized Approp.
1985	4,317	---	4,317	\$ 7,900,110
1986	1,366	---	1,366	3,409,536
1987	4,104	---	4,104	10,666,296
1988	5,236	---	5,236	14,618,912
1989	1,299	5,201	6,500	11,126,505
1990	2,040	3,319	5,359	11,352,464
1991	3,085	1,236	4,321	12,103,131
			31,203	\$71,176,954

The primary reason for this loss is that under the "lag" provision of ACF, the System does not receive any additional state appropriation for added enrollment until the third year in which students are enrolled. During the first two years, the only money available to support the education of the new students is the tuition generated, which is 1/3 of the cost of instruction. In 1989 the impact that the large continuing growth was having on the Universities' capacity to provide students even basic services and classes was generally apparent. To partially offset the negative effect of the two-year lag, the Legislature moved to provide 32% of full funding for at least a portion of new growth.

The practice of enrolling students without state funding has persisted over so many years, and has involved such large numbers, that there is now clear evidence that the quality of instruction and support systems has eroded. Funds have had to be diverted away from equipment and support services to enable institutions to put faculty in front of the students who were showing up in record numbers year after year.

Response: Only through the significant internal reallocation of resources has it been possible for the System to provide sufficient class sections to accommodate the additional students while the state appropriation per FYE student declined. For example; in F.Y. 1980 the System spent 46% of its resources on direct instruction. The recently completed cost study for F.Y. 1989 shows that the 56% of available funds went to direct instruction - a shift of 10 percentage points. Applying this percentage to the F.Y. 1991 budget, indicates that a reallocation of \$27.5 million - in current dollars has occurred over the past 10 years. This shift in spending to direct instruction illustrates the point: as enrollment has grown the State Universities have raised the proportion of the System's resources allocated to faculty and staff with the result that the amount available for instructional equipment, library, and other support has diminished.

The combination of the major reduction in buying power that will result from implementation of the Department of Finances' "no-growth" budget plan, the two-year delay in funding under the ACF formula, and increased enrollment makes stabilization or improvement of per student funding an unattainable objective.

To begin overcoming the deficiencies in the investment of equipment, books and people, as a first step of achieving the objectives of Q-7, the Minnesota State University Board has authorized holding F.Y. 1992-93 enrollments at the current level of 55,083 FYE. The purpose of this action is to ensure that in the second year of the biennium, F.Y. 1993 all FYE students will be fully funded by the State. By that time the funding lag will have caught up so that there will be no "unfunded" or "marginally" funded enrollment.

Under this policy the System as a whole will not admit students above the 55,083 FYE unless the Governor and the Legislature appropriate sufficient new money to fully fund each additional student. Metropolitan State would be permitted to increase enrollment by 400 to 500 FYE per year, but within the System this growth would be tied to reductions at other institutions (those Universities that have been most severely stressed by previous growth).

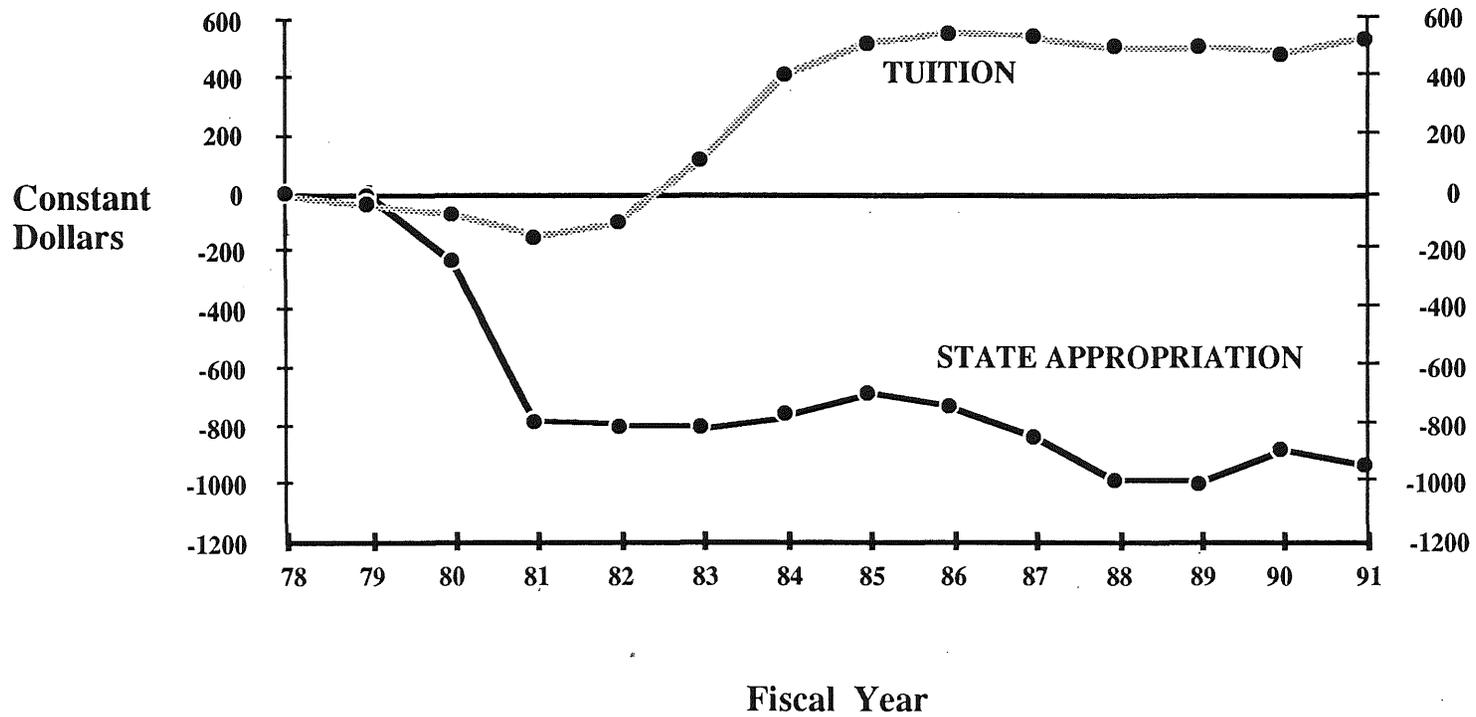
Rising Cost of Student Tuition and Decline in Access to Financial Aid

Issue: Since 1983 the cost of tuition for undergraduate students attending a Minnesota State University has increased from \$17.65 to \$36.30 a credit hour. When measured in 1991 constant dollars, tuition has changed by over 35% - \$26.85 a credit in F.Y. 1983 to \$36.30 in F.Y. 1991.

While tuition rates have outpaced inflation, a recent analysis by the Higher Education Coordinating Board (HECB) indicates that the amount of state-funded education grants awarded to State University students declined from 17.1% of total awards in F.Y. 1987 to 15.3% in F.Y. 1988. Moreover, the average award decreased by 6% from \$808 to \$760. This is contrary to what was intended in 1984 when ACF was adopted and appropriations for the state scholarship and grant program were increased by over \$34 million to help offset the large tuition increases at public post-secondary institutions.

To makeup the decline in state financial aid, Minnesota State University students have increasingly

CHANGE IN STATE APPROPRIATION AND TUITION MINNESOTA STATE UNIVERSITY SYSTEM



SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

relied on loans to finance their education. In the two years from 1987 to 1988, students increased their borrowing from the State Student Educational Loan Fund (SELF) program from 30 to 40% of the total. Funds borrowed from this program - in which the students must begin paying interest almost immediately - doubled from \$5,607,000 to \$11,225,000.

While participation in the relatively expensive SELF program has increased, the availability of the more desirable federal loan fund - the Guaranteed Student Loan Program (GSL) - has actually declined for State University students. This loan program is favored by students because principle and interest payments are delayed until after the student is no longer enrolled. In F.Y. 1981, over 16,400 loans were made to Minnesota State University students totalling \$29,362,000. By F.Y. 1988 the number of State University loans was reduced to 15,890 with total borrowing of \$28,321,000.

Response: The opportunity to work on campus has also eroded over the past several years. Overall, State University students come from middle-income families. They fully expect to contribute to the cost of their education by working. Approximately sixty-five percent of State University students work at any point in time. Increasing the number of on-campus employment opportunities will allow students to make better use of their personal resources, gain work experience in areas related to their academic interest, and provide the universities with a valuable source of laboratory, support and maintenance workers. In addition, dollars for this purpose would increase wages to more closely approximate community wage scales.

Budget Impact: To help offset an increase in costs and the decline in available grants and institutional aid, it is proposed that the Legislature expand student employment opportunities. During the current biennium \$340,000 has been reallocated within the System for this purpose. Over four years the objective is to increase the number of available jobs and raise student wages to the level of prevailing wages for like positions in the surrounding communities. This will require increased state support of \$1.1 million in F.Y. 1992 and \$1.2 million in F.Y. 1993, a biennial total of \$2.3 million.

Authority and Responsibility for Management

Issue: The Minnesota State University Board is perceived as having responsibility and the authority necessary to manage the System. The fact is that the Board has only statutory authority to manage the educational programs of the System. The authority for many policy, administrative, and operational matters is by law vested in the Commissioners of Administration, Employee Relations, and Finance. The Commissioners typically delegate their authority to subordinates who exercise control and influence over the day-to-day management of the universities. This control is exercised without responsibility for results. When instructional programs or support services are adversely affected by delays or errors in filling positions, buying equipment, or completing agreements, the Universities can neither correct the situation or turn to alternative providers.

The members of the Minnesota State University Board, the Chancellor, and the Presidents believe that if they are to be judged and held accountable for the effectiveness of the universities, they should have sufficient authority to control and manage their day-to-day operations.

Response: With the possibility that there will be insufficient revenue to allow for increased funding in the next biennium including the cost of inflation, it will be increasingly important to find ways of working faster and smarter and at less cost. We must find ways to make decisions faster and hold people accountable for those decisions. The current organizational structure with its redundancy and delays limits the individual employee's ability to make contributions, saps their energies, and stifles creativity. We must balance the Board's responsibility with increased authority and also provide an economic incentive for the Chancellor and Presidents to increase efficiency.

It is proposed that the Minnesota State University System's relationship to the Departments of Administration and Employee Relations be materially altered to transfer authority from the agencies to the Minnesota State University Board. The Board would have the option of buying services from the Departments, providing them internally, or purchasing them from third parties depending on lowest cost, timeliness, and highest quality. Personnel management would continue to be governed by the collective bargaining agreements, negotiated by Employee Relations except for the IFO and MSUAASF agreements. Assurance that the System was adhering to regulations, state laws, and policies would be monitored by way of regular compliance audits.

The proposed realignment of the System's relationship to the Departments of Administration and Employee Relations is based on several principles:

- Authority to manage and make decisions should be in balance with responsibility for results and outcomes.
- Decision-making authority should be assigned as close to where the work is accomplished as possible.
- Operating procedures and systems should be designed to emphasize quality of service to the client, timeliness, and reduction of total cost.

Changes of the kind being proposed are occurring throughout business and industry around the world. Increasingly employers and organizations are finding that better decisions are made faster by those who are doing the actual work and are accountable for the results. Even the countries of Eastern Europe and the Soviet Union have recognized that their heavily centralized management impedes effective operation and are having to abandon the centralized management systems.

Budget Impact: Annual savings which would accrue to the departments as a result of having operations transferred to the System would be reappropriated for use by the universities. It is estimated that \$530,000 would be reallocated from the Department of Administration and \$950,000 from the Department of Employee Relations. These amounts are based on 1991 statewide cost allocation analysis prepared by the Department of Finance.

The Minnesota State University System proposes to develop plans for assuming responsibility for the functions currently managed by the Departments of Administration and Employee Relations during the first year of the next biennium, F.Y. 1992. At the beginning of the second year, July 1993, management responsibility would be transferred to the System.

Maintaining the Investment in the Physical Plant

Over the years, the Legislature has placed high priority on assuring that state owned buildings on the State University campuses are safe and in good repair. Likewise, the Board and the employees of the System are dedicated and take pride in the care given to maintaining these facilities.

Four years ago a methodology for projecting repair and replacement funding, the so called Bariether formula, was proposed by the Department of Finance and accepted by the House and Senate divisions on appropriations and finance. Because of insufficient revenue and the relative importance of building repair and replacement among the many demands for state dollars, the Legislature has been able to fund the formula at only 33% of the full value. For the State Universities this provided \$3,046,000 in F.Y. 1991.

Our experience in maintaining the 92 state owned buildings (6.2 million gross square feet) on our campuses plus the 56 residence halls, student union and food service structures (3.8 million square feet) operated by the Revenue Fund has taught us that the current level of state funding is not sufficient to properly care for the physical plant. Many necessary projects have to be carried over 3, 4, and 5 years because of the lack of funds. For the state-owned buildings only 40% of the \$6.8 million in proposed projects could be authorized this year.

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

The current state appropriation provides the equivalent of \$0.49 per gross square foot for repair and replacement projects for state owned buildings on our campuses. With more than 6 million gross square feet, some of these buildings are closing in on their 80th birthday and many of them are 40 years or older. By comparison, the Board authorized expenditures of almost \$3.5 million for repair and replacement projects for the 56 structures with over 3.8 million gross square feet that are operated on fully self-supporting bases by the Systems Revenue Fund. The System spends almost twice as much (\$0.91 per gross square foot) on the self-supported facilities then the Legislature appropriates (\$0.49 per gross square foot) for state owned buildings.

Response: Campus facilities at current levels of funds for repair and replacement will over time deteriorate. There is need for the System and the Legislature to recognize the cost of maintenance and repair of facilities at the time decisions are made to construct additional square footage.

Budget Impact: As a step toward full funding of the repair and replacement formula it is recommended that in the next biennium support be increased from 33% to 60%. This would provide the State Universities an increase of over \$2,500,000 each year of the next biennium and bring support closer to the level that we have found necessary for our self-supporting facilities.

EFFECT OF A NO GROWTH BUDGET

Operating With Inflation

Consistent with its responsibility for educational management, the Minnesota State University Board will determine specifically how to allocate any real reduction in spending power should the Governor and Legislature determine that the System should absorb a projected 4.5% cost of inflation in the next biennium.

If there is no inflation adjustment in the F.Y. 1992-93 appropriation and it is necessary to sustain an actual loss in purchasing power, the System would experience a reduction equivalent to \$12.1 million in F.Y. 1992 and \$25.3 million in 1993. In accommodating a reduction in the System's operating appropriation the Board has a number of options:

- Merge, restructure, or eliminate programs and services in order to achieve reductions in the number of employees and supplies and equipment expenditures.
- Limit enrollment and make a corresponding reduction in expenditures for personnel, services and materials.
- Increase revenues through higher tuition rates and fees.

Depending on the actual severity of the reduction in purchasing power and the amount of any salary increases that may be authorized, it is expected that some combination of these options would be implemented. It is important to recognize that the actual elimination of permanent faculty and professional staff positions requires advance notice to the affected employees prior to March 15, 1991 in order for layoffs to be effective in F.Y. 1993.

Other avenues of achieving savings, such as delaying completion of newly authorized capital projects prior to beginning of the construction phase would also be examined. These are the projects funded by the Infrastructure Development Fund for which the System is responsible for payment of one-third of the debt service cost.

Internal Reallocation of Resources

The Department of Finance's instructions for preparing this biennial budget stressed the importance of funding new program development from reductions in existing ones -- in other words, reallocate dollars from lower priority activities to those judged to be more important. This is a sound principle and the one that the State Universities have used over the last ten years as enrollment increased. Only through such internal reallocation of resources has it been possible for the Universities to continue to provide sufficient class sections to accommodate the additional students. Because of this we believe much of the reallocation that the budget guidelines call for have already been accomplished by the System.

Within just the current biennium, more than \$6.0 million has been reallocated for the purpose of supporting cultural diversity, expanding Metropolitan State University, debt service and for improving library and student employment opportunities, as well as a variety of smaller projects.

In F.Y. 1992-93 the System anticipates making internal reallocations of approximately \$6 million primarily for the purpose of continuing to increase participation of people of color as students and in the workforce, implementing the Q-7 initiative and expanding Metropolitan State University. This projected reallocation is conditioned on the System not having to absorb the cost of inflation.

During the past year the Minnesota State University System began operating a campus in Akita, Japan. A year's study at Minnesota State University - Akita (MSU-A) provides this year 52 Minnesota students an opportunity to become immersed in Japanese culture and to study with Japanese students their language, history, society and business. Next year it is planned that 90 Minnesota students will attend MSU-A. During the first year 20 of the Minnesota students obtained \$40,000 in state grants enabling them to enroll in this program. The expenditure for MSU-A are reflected in the St. Cloud State University budget on the organization chart at the front of this document.

BIENNIAL BUDGET REQUEST

The biennial budget request is the primary mechanism for the post-secondary education systems and the state agencies to bring significant policy issues, fiscal requirements and related program implications before the Governor and the Legislature. For this reason the Minnesota State University Board has an obligation to identify what it considers to be the resources necessary to offer students a quality education.

As submitted, the Minnesota State University System's budget request for the next biennium is summarized below.

Spending Authority

	<u>F.Y. 92</u>	<u>F.Y. 93</u>	<u>Biennial Total</u>
F.Y. 1991 Expenditure Base	\$275,018,000	\$275,018,000	\$550,036,000
Adjustment to 92/93 Base (See Table 1)	2,089,000	805,000	2,894,000
Total Budget	\$277,107,000	\$275,823,000	\$552,930,000

As one can see in the next biennium the System will have little new money over the current F.Y. 1991 spending level.

(Continuation)

1992-93 Biennial Budget

GOVERNOR'S RECOMMENDATION:

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

The following table describes the financing of this budget and is prepared consistent with the language in M.S. 135 outlining the cost-sharing guidelines under Average Cost Funding.

Source of Funding

	<u>F.Y. 92</u>	<u>F.Y. 93</u>	<u>Biennial Total</u>
Total Budget	\$277,107,000	\$275,823,000	\$552,930,000
Financed by:			
Appropriations	192,441,000	188,972,000	381,413,000
Receipts	84,666,000	86,851,000	171,517,000

Proposed Funding Improvements

The biennial budget document is prepared under the "no growth" guidelines as directed by the Department of Finance. The funding priorities of the System as identified throughout the budget narrative include:

	<u>F.Y. 92</u>	<u>F.Y. 93</u>	<u>Biennial Total</u>
Improve Quality of Instruction	\$ 7,581,000	\$15,162,000	\$22,743,000

This request is in support of Q-7 and is the first phase of a six-year effort to bring per student support closer to the level of comparable universities across the country. It will over the six years result in an increase in spending per FYE student of \$1,100. Initially the funds will be used to begin correction of the deficiencies which have developed in recent years in the university libraries, instructional equipment and to increase the Systems capacity to develop and improve its faculty.

Expansion of Metropolitan State	\$ 577,000	\$ 2,625,000	\$ 3,202,000
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Funding for a portion of the costs associated with meeting the needs of metro area students. The University plans to add two undergraduate and one graduate major in each year for the next five years. Of the projected additional costs in the next biennium, \$2,046,000 will be provided through internal System reallocation. (The balance of the funds needed are shown above).

Inflation at 4.5% Per Year	\$12,088,000	\$25,330,000	\$37,418,000
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It is important that the real cost of inflation is recognized, if not the System will have to accommodate the reduction in purchasing power by further reducing expenditures, merging and restructuring programs, limiting enrollment and increasing tuition and fees. Coming after a decade long decline in state appropriation for FYE students, this will reduce the ability of the System to provide educational programs of even adequate quality and also retain the best of our faculty.

Student Employment	\$ 1,115,000	\$ 1,176,000	\$ 2,291,000
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These funds will allow for an increase in the number of student employment positions available and will increase the student hourly wage rate by \$.25 per hour from \$4.25 currently to \$4.50 in F.Y. 1992 and \$4.75 in F.Y. 1993.

Repair and Replacement	\$ 2,531,000	\$ 2,645,000	\$ 5,176,000
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This request is based on the need to protect the State's investment in its physical plant. It increases funds of the State repair and replacement formula from 33% to 60%.

TOTAL	<u>\$23,892,000</u>	<u>\$46,938,000</u>	<u>\$70,830,000</u>
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The Governor recommends a direct state appropriation of \$322,413,000 for the State University System in the 1992-93 biennium. The Governor's 1992-93 recommendations for the System include a general reduction in both the instructional and non-instructional programs and elimination of appropriation subsidies for undergraduate non-resident/non-reciprocity students enrolled in the state universities. The recommendation assumes that tuition will increase by no more than the rate of inflation for the biennium and projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the rate of inflation would partially offset the reduction in instructional appropriations. The Governor recommends that the legislature include a rider in the appropriation to the State University System to clearly limit the amount of tuition increase to no more than these amounts. In addition, the Governor recommends withholding 10% of the System's F.Y. 1993 instructional appropriation for redistribution by the Governor and legislature pending the recommendations of the Blue Ribbon Commission on Higher Education and the System's response to those recommendations. The recommended total spending authority for the State University System (direct appropriation plus tuition and other income) is \$529,442,000.

Table 1
 Reconciliation of F.Y. 1991 Spending to F.Y. 1992/93 Base Level
 Dollars in Thousands (137,500 = 137)

SYSTEM: MINNESOTA STATE UNIVERSITY SYSTEM

ITEM	F.Y. 1992			F.Y. 1993			BIENNIAL		
	INST.	NON INST.	TOTAL	INST.	NON INST.	TOTAL	INSTR	NON INST	TOTAL
F.Y. 1991 DIRECT APPROPRIATION	169,425	10,097	179,522	169,425	10,097	179,522	338,850	20,194	359,044
F.Y. 1990 CARRYFORWARD	8,629	553	9,182	8,629	553	9,182	17,258	1,106	18,364
F.Y. 1991 SUPPL. CHG. (1990 LEG)	(1,833)	(97)	(1,930)	(1,833)	(97)	(1,930)	(3,666)	(194)	(3,860)
TECHNICAL ADJUSTMENT	(3,791)	3,791	0	(3,791)	3,791	0	(7,582)	7,582	0
LEGISLATIVE INTENT RECEIPTS	83,946	815	84,761	83,946	815	84,761	167,892	1,630	169,522
CHANGE RECEIPTS	3,730	(247)	3,483	3,730	(247)	3,483	7,460	(494)	6,966
F.Y. 1991 BASE-ALL STATE FUNDS	260,106	14,912	275,018	260,106	14,912	275,018	520,212	29,824	550,036
F.Y. 1989 ESTIMATION ADJUSTMENT	1,250	0	1,250	1,250	0	1,250	2,500	0	2,500
ADJUST OUT EXCESS RECEIPTS	(3,730)	0	(3,730)	(3,730)	0	(3,730)	(7,460)	0	(7,460)
ADJUST OUT CARRYFORWARD	(8,629)	(553)	(9,182)	(8,629)	(553)	(9,182)	(17,258)	(1,106)	(18,364)
ADJ FOR ENROLLMENT 89/90/91	11,875	0	11,875	18,496	0	18,496	30,371	0	30,371
NON-RECURRING INCOME	(6,029)	0	(6,029)	(6,029)	0	(6,029)	(12,058)	0	(12,058)
LAGGED STUDENT 65% ADJUSTMENT	7,905	0	7,905	0	0	0	7,905	0	7,905
TOTAL SAME LEVEL FUNDING	262,748	14,359	277,107	261,464	14,359	275,823	524,212	28,718	552,930

F.Y. 1991 Budget Reduction (Information Only)

Laws of Minnesota 1991, Chapter 2, reduced the F.Y. 1991 appropriation to the State University System by \$2,130,000. This reduction is not reflected as a change to F.Y. 1991 or F.Y. 1992-93 BASE Levels within the budget documents.

ALLOCATION OF SUPPORT EXPENDITURES TO PRIMARY PROGRAMS
 1992-93 BIENNIAL BUDGET
 POST SECONDARY EDUCATION
 AVERAGE COST FUNDING - ALLOCATION SUMMARY
 (Dollars in Thousands: 137,500 = 137)

MINNESOTA STATE UNIVERSITY SYSTEM - F.Y. 1989

Direct Costs	[- - - - PRIMARY PROGRAMS - - - - -]					[- - - - SUPPORT PROGRAMS - - - - -]				Total
	Instruction & Dept. Research	Budgeted Research	Public Service	Other	Academic Support	Student Support	Institution Support	Physical Plant		
Bemidji	11,451	0	139	440	2,001	1,507	2,845	3,088	21,471	
Mankato	32,023	160	354	1,321	6,882	2,826	5,989	5,093	54,648	
Metropolitan	4,583	17	0	6	847	918	1,563	659	8,593	
Moorhead	18,686	42	281	629	2,448	1,779	3,613	3,795	31,273	
St. Cloud	33,859	162	409	1,424	5,692	2,993	4,105	5,044	53,688	
Southwest	6,183	283	146	388	1,288	1,163	2,599	1,767	13,817	
Winona	14,895	120	84	570	3,105	1,827	3,337	3,083	27,021	
System-Wide Chancellor's Office					2,381	187	2,122	196	4,690	
							3,624		3,820	
TOTAL	121,680	784	1,413	4,778	24,644	13,200	29,797	22,725	219,021	
Support Cost Allocations										
Physical Plant Sub-total	14,086 135,766	91 875	164 1,577	553 5,331	2,853 27,497	1,528 14,728	3,450 33,246	(22,725) 0	0 219,021	
Institutional Support Sub-total	24,297 160,063	157 1,032	281 1,858	954 6,285	4,921 32,418	2,636 17,364	(33,246) 0	0 0	0 219,021	
Student Support Sub-total	13,784 173,847	89 1,121	160 2,018	541 6,826	2,792 35,210	(17,364) 0	0 0	0 0	0 219,021	
Academic Support	33,299	215	387	1,308	(35,210)				0	
FULLY ALLOCATED COSTS	207,146	1,336	2,405	8,134	0	0	0	0	219,021	

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: STATE UNIVERSITY BD

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692
NON-INSTRUCTION	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810
MINNESOTA RESOURCES/LCMR	60	236	396						
TOTAL EXPENDITURES BY PROGRAM	219,081	250,244	275,414	277,107	277,107	268,940	275,823	275,823	260,502
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	144,491	166,662	186,774	192,441	192,441	166,893	188,972	188,972	155,520
MN RESOURCES	60	211	219						
STATUTORY APPROPRIATIONS:									
GENERAL	74,530	83,346	88,244	84,666	84,666	102,047	86,851	86,851	104,982
STATE GOVT SPEC REV		25	177						
TOTAL FINANCING	219,081	250,244	275,414	277,107	277,107	268,940	275,823	275,823	260,502

ACTIVITY:
PROGRAM:
SYSTEM: State University System

1992-93 Biennial Budget

DECISION ITEM: Financing Inflationary Costs - Informational

	Dollars in Thousands			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Direct Appropriation				
General Fund	\$ 8,304	\$ 17,390	\$ 17,390	\$ 17,390
Tuition				
General Fund	\$ 3,785	\$ 7,940	\$ 7,940	\$ 7,940
Total Expenditures				
General Fund	\$ 12,089	\$ 25,330	\$ 25,330	\$ 25,330

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

Inflation was calculated for the State University System at 4.5% per year for each year of the 1992-93 biennium. The inflation factors were applied to the system's adjusted instructional and non-instructional base, less non-tuition income.

The State University System did not submit a plan detailing how funds would be reallocated to address anticipated increases in salary and non-salary costs. However, under current law, the State University Board has authority to make allocative decisions among campuses and programs.

ACTIVITY:

1992-93 Biennial Budget

PROGRAM:

AGENCY: State University System

DECISION ITEM: Elimination of Appropriation Subsidy for Non-resident/non-reciprocity students

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation

General Fund	\$ (6,581)	\$ (6,581)	\$ (6,581)	\$ (6,581)
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Tuition

General Fund	\$ 6,581	\$ 6,581	\$ 6,581	\$ 6,581
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Total Expenditures

General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-
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Requires statutory change: X Yes No

Statutes Affected: M.S. 135A.03, Subd. 3

ITEM SUMMARY:

This item eliminates the appropriation subsidy for students from states with whom Minnesota does not have reciprocity agreements. The reduction in state direct appropriation totals \$13,162,000 for the 1992-93 biennium. The appropriation reduction is offset by assumed increases in tuition for non-resident/non-reciprocity students.

The reduction is for undergraduate non-resident/non-reciprocity students only. The State University System estimates non-resident/non-reciprocity enrollment of 2,070 FYE (full year equivalent) for the 1990-91 regular academic year.

RATIONALE:

Fiscal constraints prohibit future funding subsidies for undergraduate non-resident/non-reciprocity students in the State University System. In making this recommendation, the Governor intends that the State University Board maintain its authority to set differential tuition rates for non-resident/non-reciprocity students. Though undergraduate non-resident/non-reciprocity students currently pay higher tuition than resident students, their tuition charge is less than full instructional cost. The State University System is encouraged to reallocate other resources to encourage and/or assist non-resident/non-reciprocity students to enroll in Minnesota's State Universities.

The essential elements of the State University purpose, its performance in respect to programs and students served, its future prospects and the plan for achieving them have been addressed as a part of the agency narrative and are more fully discussed in the accompanying report recently issued by the Blue Ribbon Commission on Access and Quality and the related background papers.

PROGRAM PURPOSE:

The primary purpose of this program is to provide undergraduate and graduate instruction to students enrolled in academic programs leading to formal degrees or certificates. Instructional services designed to expand job-related skills and general knowledge which are offered in response to identified needs and do not lead to a degree or certificate are included under the Non-instruction program.

BACKGROUND:

Historically, the Minnesota State Universities have served first generation college students who sought advanced education in order to prepare for a career. The Universities have a distinguished tradition of preparing teachers, social workers, accountants, business people, farmers, scientists, journalists and computer scientists. The Universities continue to develop new programs that reflect the needs of the students, the economy, and the State. The Minnesota State University System is committed to maintaining a strong liberal arts program at the core of each State University.

The Universities are primarily baccalaureate-level institutions with 92% of the full-time-equivalent enrollment at the undergraduate level. Graduate enrollment began to increase in 1987. This trend is expected to continue as Minnesota presently ranks considerably below the national average in the production of master's degrees. The Minnesota State Universities have long served a community college function for students who live within 30 to 35 miles of the campuses. Aside from this role, the number of one-year and two-year programs will decline as the Universities seek to implement cooperative arrangements with appropriate community and technical colleges to provide education below the baccalaureate level.

Although the curriculum at each University rests on a strong liberal arts core, students often select baccalaureate-level programs related directly to anticipated careers. Enrollments in occupationally related programs are expected to remain strong and to reflect the needs of the economy. The Universities are responding to this trend by offering career-related programs in areas such as business, accounting, computer science, mass communications and a variety of degrees in the human service field and teacher education. Additionally, enrollments reflect some increases in the proportion of students who are part-time and in those who are older than the traditional college age.

INSTITUTIONAL PROFILES:

The Minnesota State University System is committed to developing distinctive degree programs. Each of the State Universities presently offer some degree programs which are unique in the System or the State.

Mankato and St. Cloud State Universities, the two largest in the System, offer broadly diverse programs in education, business, liberal and fine arts, science, engineering and technology. The two Universities also provide a broad range of professional programs. St. Cloud offers one of two baccalaureate and Masters of Business Administration programs in the State accredited by the American Assembly of Collegiate Schools of Business (AACSB). This program places a strong emphasis on international business. St. Cloud State also has unique graduate programs in accounting,

criminal justice, and early childhood and family studies. At the baccalaureate level, the university has distinctive programs in real estate, mass communication, photographic engineering technology and biology. Mankato State University offers a number of unique graduate programs including theatre arts and urban and environmental studies. Undergraduate programs include astronomy, athletic training, minority and ethnic studies, music management, Scandinavian studies, and women's studies. Mankato also offers baccalaureate degrees in electrical and mechanical engineering.

Bemidji, Moorhead, Southwest and Winona State Universities have each developed special degree programs related to the resources of their regions. Bemidji has earned an international reputation in peat research, and offers the only undergraduate major in aquatic biology in Minnesota, and a distinctive environmental studies program. Bemidji also has a solid commitment to Indian students, expressed through its Division of Student Affairs. All of these programs reflect the institution's basic emphasis on undergraduate education.

Moorhead State University, Concordia College, and North Dakota State University have joined together to form the Tri-College University, the first university consortium in the nation to be accredited for granting of degrees. Avoiding duplication of programs is a primary objective of the Tri-College University. Moorhead State offers unique baccalaureate programs in energy management and industrial chemistry and graduate programs in public and human service administration.

Southwest State University in response to its location has a special commitment to the values and institutions of rural America. In addition to offering a major in rural studies, the general studies curriculum contains a rural component. Southwest State is committed to the integration of career and liberal education. Particular strength in the career programs can be found in agribusiness, mechanical engineering technology, electronic engineering technology and hotel and restaurant administration.

Winona State University has chosen to emphasize high demand programs in accounting, business administration, computer science, nursing, and mass communications. Winona plans to expand its allied health and technology programs as well as materials testing service for regional industry. The university received approval to offer a baccalaureate degree in composite materials engineering, the first of its kind. Winona continues its long tradition of educating teachers, and has strong programs in biology and chemistry and is involved in geological and ecological research studies. Winona State serves the Rochester area with 16 undergraduate and 3 graduate degree programs now offered at the Rochester Center Building.

Metropolitan State University was established with the mission of serving the diverse educational needs of adult learners in the Twin Cities metropolitan area. Metro State's programs are upper-division and graduate level, designed to provide opportunities for individualized degree planning. The university also offers baccalaureate programs in accounting, professional communications, and computer applications and a master's degree in management and administration. A Master's of Science in Nursing and undergraduate programs in business and human services are also being developed. The university plans to continue adding two undergraduate programs and one graduate program each year.

ENROLLMENT:

By definition, all instruction offered in this budget program qualifies for collegiate credit. Such credit may be applied toward:

- a comprehensive array of baccalaureate programs,
- an individualized program,
- a limited number of Master's programs,
- a small number of specialist programs,

PROGRAM: Instruction
(Continuation)

1992-93 Biennial Budget

System: Minnesota State University System

- a decreasing number of two-year programs.

Output is measured in credit hours and converted to Full Year Equivalent (FYE) students. Consistent with the Average Cost Funding Task Force definitions, 45 undergraduate credit hours equals one undergraduate FYE and 30 graduate credit hours equals one graduate FYE.

Enrollment in the State Universities may be segmented into two distinct categories. The summer and off campus portion of the academic year program also serve to:

- allow regular year students to continue or accelerate their academic programs;
- serve individuals who, for a variety of reasons, are not able to attend the Universities during the regular academic year; and
- maximize utilization of University physical plants, libraries, and educational equipment and personnel.

The table that follow summarizes the Universities' enrollment in the categories lined above and shows the enrollment by undergraduate and graduate level.

Academic year instruction is offered both on and off campus during the traditional nine-month academic year.

Summer session instruction is provided during two 5-week, or one 10-week, session(s). Course offerings are generally available at a reduced level with emphasis on upper division and graduate programs.

The summer and off campus portion of the academic year program also serve to:

- allow regular year students to continue or accelerate their academic programs;
- serve individuals who, for a variety of reasons, are not able to attend the Universities during the regular academic year; and
- maximize utilization of University physical plants, libraries, and educational equipment and personnel.

The table that follows summarizes the Universities' enrollment in the categories lined above and shows the enrollment by undergraduate and graduate level.

MINNESOTA STATE UNIVERSITY SYSTEM - Enrollment History

	ACADEMIC YEAR		SUMMER SESSION [-----TOTAL-----]			
	Under Grad.	Grad.	Under Grad.	Grad.	Under Grad.	Grand
Bemidji						
1985	3,610	105	222	130	3,832	235 4,067
1986	3,577	130	216	144	3,793	274 4,067
1987	3,598	152	217	142	3,815	294 4,109
1988	3,643	147	210	148	3,853	295 4,148
1989	4,044	168	224	146	4,268	314 4,582
1990	4,190	174	241	157	4,431	331 4,762
1991	4,209	200	246	142	4,455	342 4,797
Mankato						
1985	10,370	969	786	306	11,156	1,275 12,431
1986	10,472	1,052	785	306	11,257	1,358 12,615
1987	10,789	1,202	760	365	11,549	1,567 13,116
1988	11,370	1,160	718	387	12,088	1,547 13,635
1989	11,446	1,334	734	395	12,180	1,729 13,909
1990	11,766	1,336	789	411	12,555	1,747 14,302
1991	11,974	1,365	828	426	12,802	1,791 14,593
Metro						
1985	1,229	69	0	0	1,229	69 1,298
1986	1,348	106	0	0	1,348	106 1,454
1987	1,488	114	0	0	1,488	114 1,602
1988	1,488	124	275	18	1,763	142 1,905
1989	1,748	132	307	17	2,055	149 2,204
1990	2,065	146	367	20	2,432	166 2,598
1991	2,278	160	402	22	2,680	182 2,862
Moorhead						
1985	5,704	286	389	93	6,093	379 6,472
1986	6,033	294	358	102	6,391	396 6,787
1987	6,363	282	372	113	6,735	395 7,130
1988	6,645	261	385	99	7,030	360 7,390
1989	6,988	280	391	96	7,379	376 7,755
1990	7,398	265	396	100	7,794	365 8,159
1991	7,520	310	417	86	7,937	396 8,333

ACADEMIC YEAR SUMMER SESSION [-----TOTAL-----]

	ACADEMIC YEAR		SUMMER SESSION [-----TOTAL-----]			
	Under Grad.	Grad.	Under Grad.	Grad.	Under Grad.	Grand
St. Cloud						
1985	9,565	495	698	185	10,263	680 10,943
1986	9,930	569	671	215	10,601	784 11,385
1987	10,874	659	714	242	11,588	901 12,489
1988	11,717	737	808	255	12,525	992 13,517
1989	12,268	747	881	307	13,149	1,054 14,203
1990	12,637	718	879	291	13,516	1,009 14,525
1991	12,955	750	845	282	13,800	1,032 14,832
Southwest						
1985	1,776	0	69	0	1,845	0 1,845
1986	1,854	0	93	0	1,947	0 1,947
1987	1,987	0	115	0	2,102	0 2,102
1988	2,009	0	115	1	2,124	1 2,125
1989	2,259	0	99	3	2,358	3 2,361
1990	2,441	0	108	5	2,549	5 2,554
1991	2,625	0	123	2	2,748	2 2,750
Winona						
1985	4,179	176	273	101	4,452	277 4,729
1986	4,334	200	261	130	4,595	330 4,925
1987	4,675	255	292	119	4,967	374 5,341
1988	4,993	277	277	149	5,270	426 5,696
1989	5,637	303	314	143	5,951	446 6,397
1990	6,001	346	366	162	6,367	508 6,875
1991	6,042	345	392	137	6,434	482 6,916
System Total						
1985	36,433	2,100	2,437	815	38,870	2,915 41,785
1986	37,548	2,351	2,384	897	39,932	3,248 43,180
1987	39,774	2,664	2,470	981	42,244	3,645 45,889
1988	41,865	2,706	2,788	1,057	44,653	3,763 48,416
1989	44,390	2,964	2,950	1,107	47,340	4,071 51,411
1990	46,498	2,985	3,146	1,146	49,644	4,131 53,775
1991	47,603	3,130	3,253	1,097	50,856	4,227 55,083

INSTRUCTIONAL FUNDING MATRIX (Dollars in thousands):

Under Average Cost Funding (ACF), the budget for instruction is determined by multiplying the enrollment of two years prior to the budget year by the average rate for that group of Full Year Equivalent students (FYE's) in the budget year. The funding mechanism is intended to reflect cost patterns within level of instruction. In F.Y. 1992 a one-time adjustment is made as part of the ACF formula to provide funding at 65% of total average cost for all students attending in F.Y. 1990 and 1991 who were in excess of the projected F.Y. 1990 and 1991 enrollment made during the 1989 session of the Legislature.

	F.Y.1992				F.Y.1993		
	FY '89 FYE Cost	FY '92 FYE Cost	FY '90 FYE	Total Expend.	FY '93 Cost	FY '91 FYE	Total Expend.
LOWER DIVISION							
Low Range	3,038	\$3,563	10,446	\$37,223	\$3,563	10,642	\$37,921
Mid Range		3,829	4,491	16,029	71,989	4,491	16,332
High Range		4,459	5,230	4,127	21,584	5,230	4,253
							73,350
							22,244
UPPER DIVISION							
Low Range		3,942	4,624	13,478	62,318	4,624	13,996
Mid Range		5,159	6,051	3,462	20,949	6,051	3,539
High Range		8,726	10,235	2,102	21,514	10,235	2,146
							64,713
							21,415
							21,964
GRADUATE							
Low Range		2,646	3,104	1,995	6,192	3,104	1,998
Mid Range		4,978	5,839	1,813	10,586	5,839	1,885
High Range		6,567	7,703	323	2,488	7,703	344
							6,201
							11,006
							2,650
TOTALS			53,775	\$254,843		55,135	\$261,464
65% Lagged FYE (1990-91 Adj.)				7,905			
Total "Base" Level			\$262,748				

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$295,929,000 in the 1992-93 biennium for the State University System's instructional program. The recommendation includes a general reduction of \$21,026,000 for the biennium and elimination of appropriation subsidies for undergraduate non-resident/non-reciprocity students enrolled in the state universities. The recommendation assumes that tuition will be increased by no more than the rate of inflation for the biennium - projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the cost of inflation would offset the reduction in instructional appropriation. The Governor recommends that the Legislature include a rider in the appropriation to the State University System to clearly limit the amount of the tuition increase to no more than these amounts. The Governor also recommends that 10% of the System's F.Y. 1993 instructional appropriation be withheld for redistribution pending the restructuring recommendations of the Blue Ribbon Commission on Higher Education. Recommended total instructional spending authority for the biennium (direct appropriation and tuition) is \$501,822,000.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: STATE UNIVERSITY BD
PROGRAM: INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692
TOTAL EXPENDITURES BY ACTIVITY	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692
DETAIL BY CATEGORY:									
STATE OPERATIONS	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692
TOTAL EXPENDITURES BY CATEGORY	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	133,162	153,679	172,430	178,650	178,650	153,651	175,181	175,181	142,278
STATUTORY APPROPRIATIONS:									
GENERAL	73,984	82,774	87,676	84,098	84,098	101,479	86,283	86,283	104,414
TOTAL FINANCING	207,146	236,453	260,106	262,748	262,748	255,130	261,464	261,464	246,692

ACTIVITY:
PROGRAM: Instruction
AGENCY: State University System

1992-93 Biennial Budget

DECISION ITEM: General Reduction/Tuition Adjustment

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (10,513)	\$ (10,513)	\$ (10,513)	\$ (10,513)
Tuition				
General Fund	\$ 10,800	\$ 11,550	\$ 11,550	\$ 11,550
Total Expenditures				
General Fund	\$ 287	\$ 1,037	\$ 1,037	\$ 1,037

Requires statutory change: _____ Yes X No
Statutes Affected:

ITEM SUMMARY:

This item reduces state direct appropriation to the State University System's instructional program by \$21,026,000 for the 1992-93 biennium. Pursuant to current law, the State University Board would be responsible for allocating the reduction among programs and/or institutions.

In addition, the Governor recommends that tuition increases for resident students in the system be limited to the rate of inflation. Increases in the State University System tuition base of \$10,800,000 in F.Y. 1992 and \$11,550,000 in F.Y. 1993 would limit average tuition increases to the cost of inflation and would offset the appropriation reduction.

RATIONALE:

Under current law, instructional appropriations are made generally to the State University System; the system does not receive appropriations for specific instructional activities and programs. The State University Board has statutory responsibility to set academic and program priorities and to allocate resources to campuses and programs accordingly. Academic priorities and expenditure patterns vary by institution within the system.

Instructional expenditures represent nearly 95% of the system's total General Fund expenditures. The Governor supports the Q7 Plan to improve quality at the State Universities. However, fiscal constraints require that the system contain and/or reduce costs and seek alternative methods and approaches of service delivery. In addition to cost containment, the State University System is encouraged to develop and implement cooperative and resource sharing plans (e.g. regional course delivery and management, equipment sharing, etc.) with the other postsecondary systems in order to maximize higher education access and resource use.

ACTIVITY:
PROGRAM: Instruction
AGENCY: State University System

1992-93 Biennial Budget

DECISION ITEM: F.Y. 1991 Marginal Cost Funding Adjustment

<u>Dollars in Thousands</u>			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Expenditures

General Fund	\$ (7,905)	\$ -0-	\$ -0-	\$ -0-
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Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item eliminates the F.Y. 1990-91 marginal cost funding adjustment for additional enrollment growth beyond what was projected during the 1989 legislative session. The reduction totals \$7,905,000 in F.Y. 1992.

RATIONALE:

The average cost funding formula establishes BASE level instructional funding using enrollment from the academic year two years prior to the year for which appropriations will be made (e.g. F.Y. 1991 instructional funding was based on 1989 enrollment). Marginal cost funding, estimated at 65% of average instructional cost less tuition, was provided by the 1988 and 1989 legislatures to reduce pressures on systems experiencing enrollment growth during the two year period prior to average cost funding formula recognition of the enrollment.

Laws of Minnesota 1989, Chapter 293, provided \$4,964,000 in F.Y. 1990 and \$1,944,000 in F.Y. 1991 to the State University System for projected enrollment growth in those years. The appropriation was based on projected system enrollment of 51,775 in F.Y. 1990 and 51,998 in F.Y. 1991. Actual system enrollment for those years was 53,775 and 55,083 respectively. Laws, Chapter 293, requires the Commissioner of Finance to calculate the effect on the General Fund of the difference between actual enrollment and projected enrollment and include an adjustment in the budget for the next fiscal year.

Marginal cost funding adjustments are not used in the derivation of "cell" values for the average cost funding instructional matrix for the 1992-93 biennium. However, because 1992-93 instructional funding is based on enrollment from 1990 and 1991, the system will receive full average cost funding for those same students for whom a marginal funding adjustment would also be made. It is not consistent with average cost funding to provide both a marginal cost and average cost funding adjustment for the same students in the same year. In addition, pursuant to the requirements of Chapter 293, the original marginal cost funding appropriation and tuition adjustments have already been deducted from the system's base as non-recurring.

1992-93 Biennial Budget

ACTIVITY:
 PROGRAM: Instruction
 SYSTEM: State University System

DECISION ITEM: Blue Ribbon Commission/System Restructuring

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$	-0-	\$ (15,809)	\$	-0-
Total Expenditures					
General Fund	\$	-0-	\$ (15,809)	\$	-0-

Requires statutory change: _____ Yes X No
 Statutes Affected:

ITEM SUMMARY:

The Governor recommends that 10% of the State University System's F.Y. 1993 appropriation be set aside in a General Fund non-operating account and subject to legislative reallocation during the 1992 Legislative Session upon approval of the restructuring recommendations of the Blue Ribbon Commission of Higher Education. The amount to be set aside from the system totals \$15,809,000.

Reallocation of the appropriation back to the State University System will be subject to legislative and gubernatorial approval and dependent on the system's acceptance of the approved commission recommendations.

PROGRAM: Non-Instruction
System: Minnesota State University System

1992-93 Biennial Budget

PROGRAM PURPOSE:

The Non-Instruction Program includes activities not directly related to offering instruction for which academic credit is granted. Research and public service, two components of the historic mission of the Minnesota State University System are for the purpose of this budget defined as non-instruction. The category also includes student financial aid and intercollegiate athletics.

Separately Budgeted Research:

Research undertaken by the Minnesota State Universities is intended to:

- contribute to the economic vitality of the state and the regions in which each university is located by supporting business and industry through the transfer of technology and the development of management services.
- strengthen the instructional program by providing students and faculty with the opportunity to apply theoretical concepts to practical problems.

Many of the research projects link classroom instruction with the work of meeting the needs of local industry. Examples of such programs include biotechnology at Mankato, St. Cloud's electrical engineering program, and the composite materials program at Winona. Each of these applied research projects have both instructional and non-instructional purposes.

Research has not historically been a high priority of the Minnesota State University System. Basic research has been left to the University of Minnesota, consistent with its land grant mission. Applied research has only recently come to the fore in Minnesota's State Universities with the growing strength of science, engineering, and business programs and the expertise of the faculty. As a result, the vast majority of research conducted by the universities has been funded by grants and only small amounts of appropriated dollars have been directly allocated for faculty research activities.

As the expertise and the specialized laboratories and equipment become available at the universities, the institutions can be expected to engage in more numerous and varied kinds of applied research. This will be particularly true as Minnesota SURE (State University Research Enterprise) Access, links researchers with Minnesota businesses, and industries. As the human and physical resources of Minnesota's State Universities become more widely known and more easily accessible, the Universities will increasingly become partners in research that directly address the concerns of business and industry.

Public Service:

Each of the Minnesota's State Universities has long fulfilled a regional service role, serving as a center of learning, culture, recreation, and business/technical assistance and as a catalyst in the economic development of the region it serves. Increasingly, local communities and the businesses and industries that fuel their economies have engaged the State Universities as partners for economic growth. Within its service region, each State University also offers non-credit community education, regional planning assistance, reference and speaker services, facilities for meetings, radio/television programs, special events, and assistance to local units of government, including school districts.

Traditionally, public service activities have represented a function rather than an organizational entity on each campus. As such, appropriated funds have not generally been provided or budgeted specifically for this purpose but rather the services have been extended as "by-products" of the on-going operation of each University. For example, speakers and artists brought onto campus to enhance the learning environment for students have also provided communities with special informational and performance opportunities at no additional cost to the institution.

As with research, however, there are some notable exceptions to this general rule. One is Minnesota SURE Access, whose trained experts, electronic catalogue of resources, and toll-free telephone number are putting State University expertise within ready reach of Minnesotans throughout the state. From engineering to human relations, hotel and restaurant management to international business, and marketing to robotics, nursing to journalism, toxicology to early childhood education, Minnesota State University faculty, students, and programs have much of the knowledge and skill needed to address the diverse challenges faced by today's businesses and community leaders. Designed to help Minnesota businesses and communities remain competitive in an increasingly complex society, Minnesota SURE Access is supported through a modest annual allocation of approximately \$178,500.

Another exception is the system's Cultural Diversity initiative, designed not only to enrich the campus environment by enhancing the diversity of the student body, faculty, and curriculum at each university, but also to actively engage the surrounding community in multi-cultural experiences. Supported through internal allocations and some external funding in the form of grants, the Cultural Diversity initiative offers significant opportunities to bring each University and its host community together to meet the challenges of our global society.

Finally, six of Minnesota's seven State Universities are home to Small Business Development Centers (SBDC's) which help businesses, industries, and individuals by providing training, counseling, research, business and marketing assistance, and resource materials. Operated in cooperation with the U.S. Small Businesses Administration, the SBDC's are funded through federal grant dollars matched by each host University. This network of business assistance programs has helped hundreds of firms, offered more than one hundred workshops and seminars, and in total reached out to more than twenty-five hundred persons seeking their expert help.

Financial Aid:

The purpose of this activity is to provide matching funds for students with demonstrated financial need who require assistance in meeting the cost of their education. The expenditures indicated for the activity consist entirely of funds paid or loaned to students through the campus-based financial aid programs. They do not include the administrative costs of the programs (including federal allowances for such costs). Aids or loan programs under the fiscal control of other agencies or lending institutions are, of course, excluded, as are salaries paid to student employees of the Universities (such employment is not necessarily based on the financial need of the students).

The matching component of the financial aid function consists of the following:
Work Opportunities/Federal Work Study Program
State Work Study Program

Loans/Perkins Student Loan
Supplemental Educational Opportunity Grant

Appropriations to the State University System provide 30% of the Work Study Programs and 10% of the two national loan programs. The State Work Study Program is appropriated to the Higher Education Coordinating Board (HECB) which grants the State University System an annual allotment. These funds are not reflected here--only the money appropriated to the State University System that is used to match the HECB grant is shown.

Intercollegiate Athletics:

This program is intended to provide as many students as possible with a broad range of opportunities to participate in competitive sports. In 1989, 2,456 students participated in intercollegiate athletics - this included 1,674 men and 782 women. On a system-wide basis 3.7% of the students are participating in some form of intercollegiate athletics.

At two universities, Mankato and St. Cloud, both men and women participate in the North Central

PROGRAM: Non-Instruction
(Continuation)
System: Minnesota State University System

1992-93 Biennial Budget

Conference (NCC) which is Division II of the National Collegiate Athletic Association (NCAA). This year for the first time, St. Cloud will compete in the Western Collegiate Hockey Association (WCHA). At the other four universities, the men belong to the Northern Inter-collegiate Conference (NIC), and women athletes participate in the Northern Sun Conference. Since the NIC does not offer hockey competition, Bemidji and Mankato, for that sport only, belongs to the NCHA (Northern Collegiate Hockey Association). Bemidji has placed first or second in the NCAA Division III National Hockey Championship in seven of the past eight years.

In 1989 a total of \$6,806,016 was spent in the direct support of athletics -- M&E funds provided \$3,826,142 of that amount. The sources of income for the remaining \$2,979,874 included student activity fee income, team revenues, and funds raised by the teams themselves or external organizations such as booster clubs, or chambers of commerce. Equity in athletic programs has become a long time priority of the Minnesota State University Board as evidenced by the funding provided for men's and women's sports. Systemwide \$2,813 was expended from all sources for each male athlete and \$2,625 for each female participant.

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$26,484,000 in the 1992-93 biennium for the State University System's non-instructional program. This recommendation includes a general reduction of \$1,098,000 from the F.Y. 1991 BASE for the biennium.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: STATE UNIVERSITY BD
PROGRAM: NON-INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
NON-INSTRUCTION	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810
TOTAL EXPENDITURES BY ACTIVITY	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810
DETAIL BY CATEGORY:									
STATE OPERATIONS	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810
TOTAL EXPENDITURES BY CATEGORY	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	11,329	12,983	14,344	13,791	13,791	13,242	13,791	13,791	13,242
STATUTORY APPROPRIATIONS:									
GENERAL	546	572	568	568	568	568	568	568	568
TOTAL FINANCING	11,875	13,555	14,912	14,359	14,359	13,810	14,359	14,359	13,810

ACTIVITY:
 PROGRAM: Noninstruction
 AGENCY: State University System

1992-93 Biennial Budget

DECISION ITEM: General Reduction - Noninstruction

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$	(549)	\$	(549)	\$
			\$	(549)	\$
				\$	(549)
Total Expenditures					
General Fund	\$	(549)	\$	(549)	\$
			\$	(549)	\$
				\$	(549)

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item reduces state direct appropriation to the State University System's noninstructional program by \$1,098,000 for the 1992-93 biennium. Pursuant to current law, the State University Board would be responsible for allocating the reduction among programs and/or institutions.

RATIONALE:

Noninstructional activities include any activities not directly related to credit-granting instruction. Community service, research, intercollegiate athletics, and financial aids are among the items classified as noninstructional. Like instructional appropriations, noninstructional appropriations are made generally to the State University System. The State University Board sets program priorities and allocates resources to each of the seven system universities.

Noninstructional expenditures represent 5% of the system's total General Fund expenditures. Though noninstructional activities are not financed with tuition, many are subject to client charges or user fees. In addition, the General Fund noninstructional budget reflects only a portion of the system's total non-instructional activities. In some cases the system may receive non-General Fund revenues for activities which are also supported by state direct appropriation. Constrained state resources require that the State University System refocus its noninstructional priorities or seek alternative financing.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: STATE UNIVERSITY BD
PROGRAM: MINNESOTA RESOURCES/LCMR

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
MINNESOTA RESOURCES/LCMR	60	236	396						
TOTAL EXPENDITURES BY ACTIVITY	60	236	396						
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE	60	236	396						
TOTAL EXPENDITURES BY CATEGORY	60	236	396						
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
MN RESOURCES	60	211	219						
STATUTORY APPROPRIATIONS:									
STATE GOVT SPEC REV		25	177						
TOTAL FINANCING	60	236	396						

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: MINNESOTA, UNIVERSITY OF

<u>PROGRAM</u>	<u>PAGE</u>
INSTRUCTION	117
NONINSTRUCTION	131
SPECIAL APPROPRIATIONS, AGRICULTURAL	136
Minnesota Extension Service	
Minnesota Agricultural Experiment Station	
SPECIAL APPROPRIATIONS, HEALTH SCIENCES	140
Public Service	
Indigent Papers	
Hospital Education Offset	
Rural Physicians Associate Program	
Veterinary Diagnostic Laboratory	
Research	
Biomedical Engineering Center	
Human Genetics Institute	
Medical Research	
SPECIAL APPROPRIATIONS, INSTITUTE OF TECHNOLOGY	146
Microelectronics and Information Sciences Center	
Minnesota Geological Survey	
Mineral Resources Research Center	
Productivity Center	
Talented Youth Mathematics Program	
Underground Space Center	
SPECIAL APPROPRIATIONS, SYSTEM	154
Advanced Studies in Biological Process Technology, Institute for	
Bureau of Business and Economic Research	
General Research	
Humphrey Forum, The	
Industrial Relations Education Fund	
Intercollegiate Athletics	

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

(Continuation)

AGENCY: MINNESOTA, UNIVERSITY OF

PROGRAM

PAGE

SPECIAL APPROPRIATIONS, SYSTEM (continued)

154

James Ford Bell Museum of Natural History
Minnesota Sea Grant College Program
Minnesota Supercomputer Institute
Minority and Disadvantaged Graduate Students, Fellowships for
Natural Resources Research Institute
Student Loan Matching Program
Urban and Regional Affairs, Center for

LEGISLATIVE COMMISSION ON MINNESOTA RESOURCES

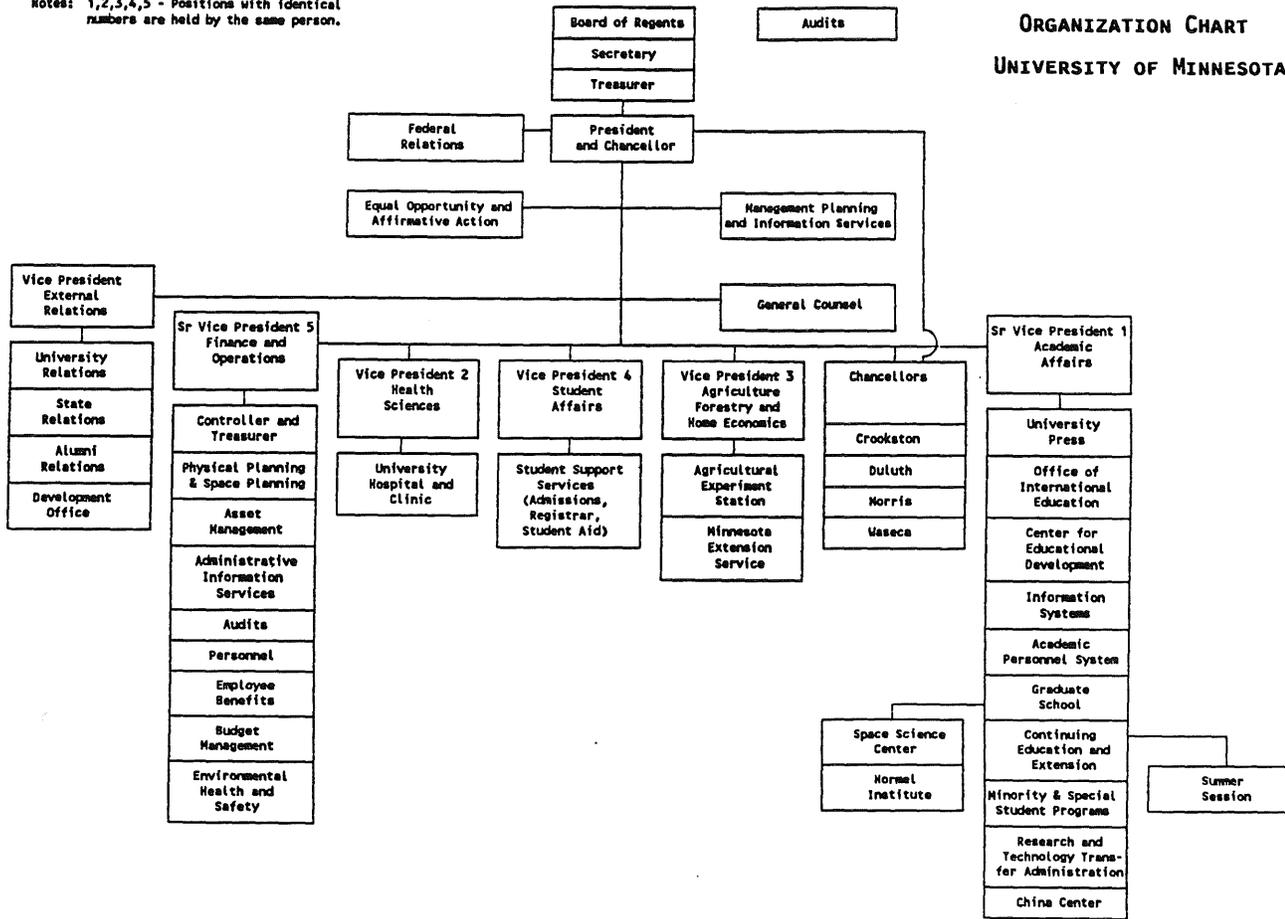
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SPECIAL PROJECTS

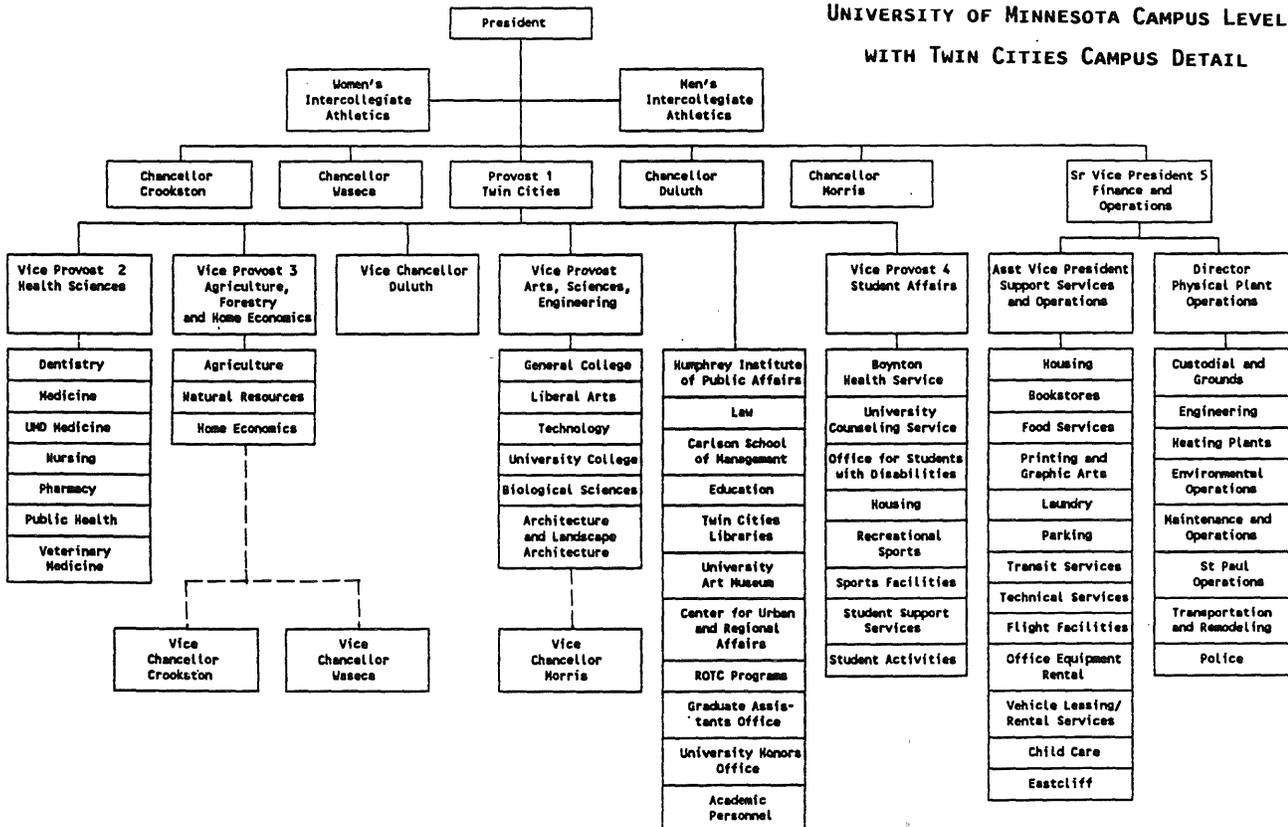
166

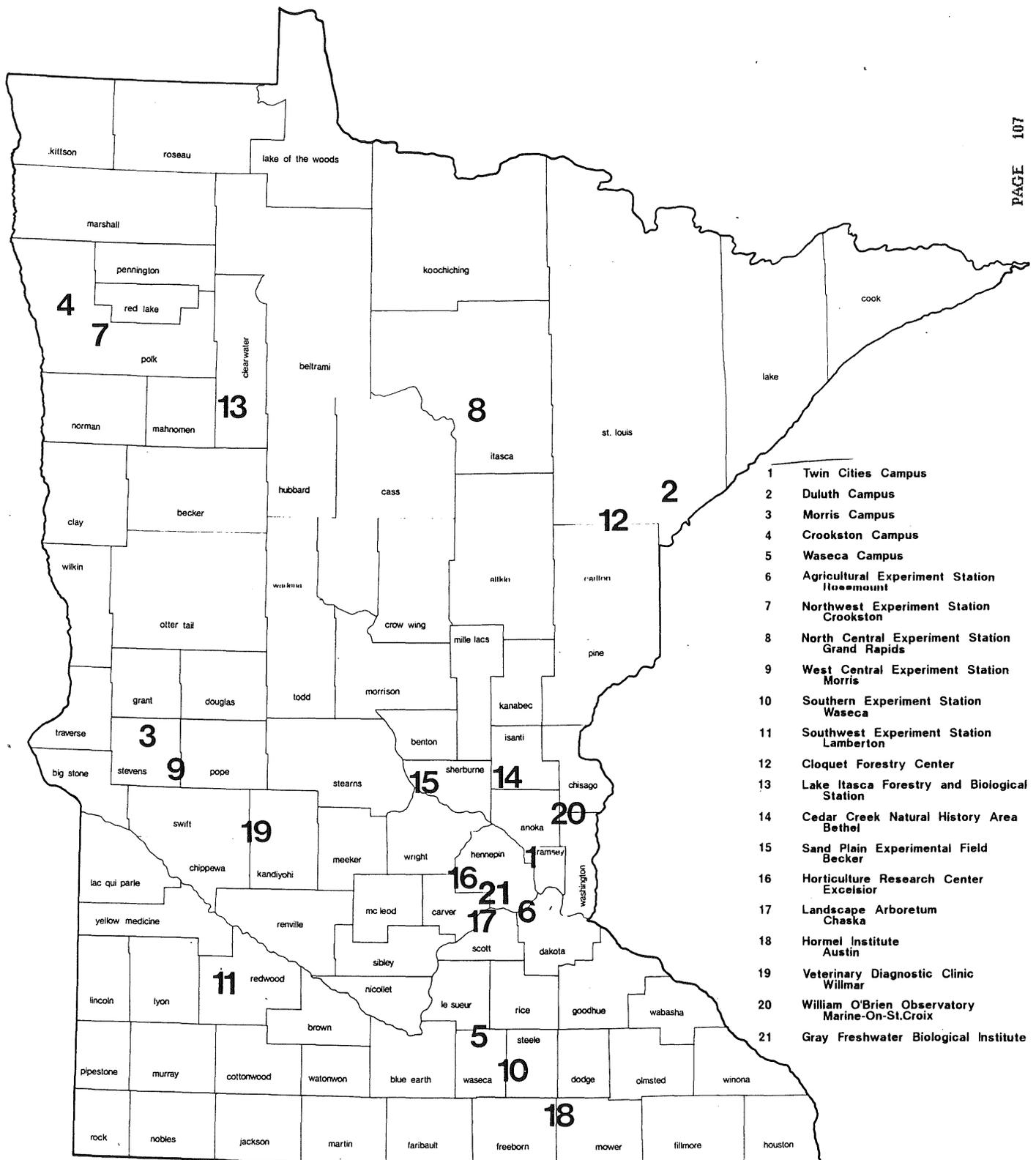
Notes: 1,2,3,4,5 - Positions with identical numbers are held by the same person.

ORGANIZATION CHART UNIVERSITY OF MINNESOTA

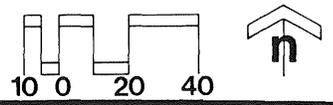


ORGANIZATION CHART UNIVERSITY OF MINNESOTA CAMPUS LEVEL WITH TWIN CITIES CAMPUS DETAIL





- 1 Twin Cities Campus
- 2 Duluth Campus
- 3 Morris Campus
- 4 Crockston Campus
- 5 Waseca Campus
- 6 Agricultural Experiment Station Rosemount
- 7 Northwest Experiment Station Crockston
- 8 North Central Experiment Station Grand Rapids
- 9 West Central Experiment Station Morris
- 10 Southern Experiment Station Waseca
- 11 Southwest Experiment Station Lamberton
- 12 Cloquet Forestry Center
- 13 Lake Itasca Forestry and Biological Station
- 14 Cedar Creek Natural History Area Bethel
- 15 Sand Plain Experimental Field Becker
- 16 Horticulture Research Center Excelsior
- 17 Landscape Arboretum Chaska
- 18 Hormel Institute Austin
- 19 Veterinary Diagnostic Clinic Willmar
- 20 William O'Brien Observatory Marine-On-St.Croix
- 21 Gray Freshwater Biological Institute



ADDENDUM

Withdrawal of Biennial Budget Request

On January 11, 1991, the Regents of the University of Minnesota approved the following resolution, acting on the recommendation of President Nils Hasselmo:

"WHEREAS, the Regents of the University of Minnesota approved the University's 1991-93 biennial request on October 12, 1990, and

WHEREAS, the 1991-93 biennial request included proposals for \$34 million for program improvements, and

WHEREAS, the 1991-93 biennial request was predicated on the University's internal reallocation of funds in support of Academic Priorities for the Twin Cities campus and associated plans for the coordinate campuses, and

WHEREAS, the state of Minnesota faces budget constraints that virtually preclude additional funding for program improvements, and

WHEREAS, the University administration has developed comprehensive internal reallocation proposals totaling 10% of the University's state funding base, to be carried out over the period, 1991-1996, and

WHEREAS, the University's priorities for the 1991 Minnesota Legislature are preserving the state funding base, in order to carry out internal reallocations, and to receive funding for adjustments of faculty and staff salaries, in order to reflect the effects of inflation.

NOW THEREFORE BE IT RESOLVED, that the Regents of the University of Minnesota withdraw the 1991-93 request for program improvements."

Implications for the 1991 Legislative Session

The University's original request for \$34 million in state funds for program quality improvements was based on shared responsibility. The total cost of the quality improvements identified was \$54 million, and the Regents' approval of the biennial budget request included the commitment to find the remaining \$20 million through internal budget reallocation, basing those budget shifts on the five-year institutional planning process that began in 1988.

To ensure that the University can continue to improve quality in a time of limited resources, the administration has proposed a new "Restructuring and Reallocations" plan to the Board of Regents. It sets a new, increased reallocation target of 10% of the University's current state-funded budget

base -- roughly \$60 million -- to be accomplished within the next three years, if possible, but certainly within the next five.

This commitment to self-improvement -- without relying upon increased state appropriations -- may be the most ambitious reallocation target and schedule ever undertaken willingly by a major American university.

Unsolved Problems

This self-help initiative does not mean that current and foreseeable funding needs can be met without help from the state.

- The competition in the national marketplace for talent will continue to grow.
- The shortage of Ph.D.s and faculty will get worse.
- The cost increases for library materials and scientific equipment for instruction and research will continue to exceed inflation.
- Inflation will reduce the purchasing power of faculty and staff.
- Tuition increases will outstrip student financial aid.
- Unmet needs for the operation, maintenance, repair, and replacement of facilities will continue to grow.

This commitment does mean the the University of Minnesota is serious about quality improvement - - serious enough to set academic priorities and make very difficult choices, curtailing or eliminating good programs that have earned the support of the public.

Most Urgent Need

In the 1991 legislative session, the University's most urgent need is to preserve the current funding base. If reallocation is to succeed, the University must be able to reallocate within the current level of spending. If the current base is reduced, the incentive to continue reallocation is lost, and the reallocation decisions being made will be undercut.

Equitable Treatment and the Wisest Investment: Good People

If the legislature is able to increase school aids and provide an inflation adjustment for state employee salaries, the University requests equitable treatment for higher education faculty and staff. Restoring and maintaining the purchasing power of faculty and staff salaries has been a long-standing priority of the legislature and the University, and the University's ability to attract and retain the best people is clearly the most important factor in maintaining and improving the quality that makes the University of Minnesota one of this state's best public investments.

MISSION:

"The mission of the University is to serve the people of the state, wherever they may be, through teaching, research, and public service. It also has an additional obligation to contribute as fully as resources permit to the meeting of national and international needs." Mission and Policy Statement for the University of Minnesota, July 11, 1980.

Instruction:

Minnesota's commitment to higher education is demonstrated in the overall enrollment and funding for F.Y. 1988-89 as Minnesota:

- Was first in high school graduation per capita.
- Adjusted for system mix, was second in FTE public students per capita, 42% above the U.S. average.
- Was 16th in tax capacity and 8th in tax effort, producing the 10th highest total state and local revenue per capita, 12% above average.

but:

- Was 41st in funding allocated to public higher education relative to per capita enrollment, 12% below the U.S. average, and down from 22nd in F.Y. 1984-85.
- Was 29th in tuition as a percentage of gross appropriation, about average.
- Was 40th in available tuition and appropriations per student on a load adjusted basis, 10% below the national average, and down from 20th in F.Y. 1984-85.

The number of campuses compounds the effect of low funding per student; Minnesota provides its public education through small campuses, which generally means high administrative costs. Based on a recent study, Minnesota has an unusually large number of public post-secondary campuses for its population--63, which translates into over 14 campuses for each million residents. Only Alaska, North Dakota and Wyoming, each sparsely populated, have more public campuses per resident. California, with the highest number of campuses (136) has 4.7 per million residents, Wisconsin has 8.8 per million, Iowa 7.4, Illinois 5.2. The average for the entire country is 6.3.

As a consequence, even though Minnesota has an unusually high level of enrollment in post-secondary institutions, the average enrollment on each Minnesota campus is low: 3,100, which ranks 44th of 51 (50 states and the District of Columbia). California, by contrast, has an average campus size of 12,500; Wisconsin has 5,700, Iowa has 5,300, Illinois 7,700; the average nationally is 6,500.

The low and declining expenditures per student are not consistent with the state's overall commitment to higher education and the contribution higher education makes to the state's economy and quality of life. It is essential that the state--educators and policy makers alike--commit to maintaining and restoring the quality of its higher education systems--by wiser allocation of resources where possible, by increased funding per student where necessary. The higher education systems must work to provide better articulation and sharper mission differentiation among systems, and to guard against further expansion in the number of institutions. They must also work to prepare for the faculty shortage that will become increasingly severe by the middle of the 1990s. As the preeminent provider of faculty to all of higher education in the state, public and private, the University of Minnesota will be of central importance in solving the faculty crisis.

The state should also consider the advantages of merging some institutions, eliminating some programs, and improving interstate cooperation in the region through long-term agreements. The University started the state's discussion of mission differentiation in the mid 1980s, and is prepared to work with other systems to identify

further changes to make post-secondary education more effective.

One of the ways in which low funding per student is reflected in the operation of the higher education system is in financial aid. The state has a policy under which students are expected to provide half of their college cost (through work and student loans), and the student's family--to the extent that they can afford it--the other half. For low-income families, state funds will fill in the gap between what the family can afford, what the federal government provides, and the total obligation for 50% of the expense of going to school.

However, the state allocation for financial aid is not adequate to finance this level of funding; the solution adopted is to lower the funding per student "recognized" by the state, leaving students, the institutions they attend, and their families to make up the difference.

Minnesota's enrollment is high relative to its population and its high school graduates; its state funding is high compared to other states, but that high funding is absorbed by its high enrollment, so that funding per student is below average, and falling relative to other states. Access is high both in number of campuses (probably leading to high administrative cost) and number of students served; but the access for low-income students is limited by financial aid that falls short of the state's own calculated need level.

The picture is clear. There is little doubt that quality in post-secondary education has been sacrificed for quantity.

Non-instruction:**Research and Public Service**

All public higher education institutions in the state contribute vitally to the economic and social health of the state through their direct classroom instruction and their outreach programs--preparing students for jobs and transmitting skills directly to the workforce, on the job. Research significantly expands that contribution for some institutions. The following reviews some of the special contributions of the University.

In terms of economic development, the University of Minnesota has been characterized as an engine that powers the state's economy. At the simplest level, the University provides about 21,000 direct nonstudent jobs and attracts nonstate sponsored program funding of about \$265,000,000 annually. The best available estimates are that at least another 31,000 jobs and \$250,000,000 of annual economic activity outside the University are stimulated by its expenditures. Perhaps even more important is the role of the University in the creation of new economic enterprises and the provision of a technologically sophisticated work force.

In the past 3 years, the University of Minnesota has ranked from fourth to seventh in number of patents granted; only MIT, Stanford, and the University of California system have consistently received more. The University is currently licensing about 20 new processes each year. That record is a continuation of decades of technology development and transfer and the resultant stimulation of the state's economy. The development of the taconite process and of ERA wheat are familiar cases but there are many others. Rosemount, Inc. and Medtronics are examples of firms created originally to exploit technology developed at the University of Minnesota. Since 1983 there have been 17 University-based start ups that mirror the way these giant corporations began.

In addition to the economic development contributed through its instruction and research, the University provides direct economic development support through the Minnesota Extension Service (MES), the Natural Resources Research Institute (NRRI), and other units.

The contribution of the University's outreach, through programs for community development, to the well-being of the state is not limited to the narrowly economic. The Center for Urban and Regional Affairs, Continuing Education and Extension, Health Sciences units, the Humphrey Institute of Public Affairs, the Minnesota Extension Service, the School of Music, the University Art Museum, Libraries, and Theatre, as well as other components of the University all make direct contributions to the life quality of individuals and communities.

MAJOR POLICY DRIVERS:

Preservation of the quality of the University's faculty and staff must be its highest priority. This is true for any organization, but is a greater problem for a research University than for others. Top research scholars are both scarce and eagerly sought after in a national market; so are the talented technicians that contribute their unique skills to the work. The University of Minnesota lost 70 faculty members to resignations, and 133 overall in F.Y. 1988-89. However, it is not just the University's research that benefits from preserving faculty quality. That quality is equally important to the instructional program that we are tailoring especially to take advantage of the University's unique resources in research. Faculty quality also sustains the technology transfer that strengthens the state's economic and social development, and assists in sustaining its natural resource base.

The most direct steps that the University can take to retain its strong faculty are to maintain salary and fringe benefits at levels comparable to other research universities, and to provide the support that the faculty need to do their work effectively--support staff, equipment, library collections, laboratories and other facilities.

For the last 3 biennia, the state legislature has worked toward a goal of restoring faculty salaries and fringe benefits to earlier competitive levels, providing funds in addition to the normal state-wide salary increases. The University has also reallocated internally to supplement the legislative effort.

While significant gains have been made in restoring the 1973 buying power of faculty salaries, comparable gains have been made in competing institutions, so that the University still finds itself behind its peers. For example, in F.Y. 1990, the University of Minnesota, Duluth was 8th of 12 in its peer group, 3.5% below the mean and the Twin Cities campus was 3.5% below the Big 10 mean and 1.4% below the mean for AAU public universities. In all cases there has been a loss of competitiveness in the past few years.

There has been a conflict between the need to provide salaries and the need to provide faculty support. Funds reallocated internally for salaries could otherwise have gone to maintain or improve support to make the faculty more effective. The administration's decision to require internal reallocation for salaries for F.Y. 1991 has led to considerable criticism by some faculty members who would rather have seen the funds go to better teaching and research support. Clearly, both items are urgent. In the future, it is unlikely that further significant internal reallocation can be used to augment salaries.

Prospects for salary comparisons over the coming biennium are a major concern. There is every indication that major public universities will continue to keep pace with or exceed inflation in their salary increases. The main reason for the continuing pressure on faculty salaries will be the increasing shortage of faculty members. A combination of circumstances will create an unusually large number of retirements just as the number of students again begins to increase, in the middle to late 1990s. There are already glaring shortages in some fields, particularly those in which universities must compete actively with for-profit employers for qualified faculty members (accounting, agriculture, computer science, engineering, law, management, and some natural sciences).

Protection of the state's investment in the University's physical assets must also be a high priority. For decades repair and maintenance expenditures have been inadequate to maintain quality of an aging Physical Plant. Although the legislature and the University have recognized the problem with increased allocations, we are not keeping pace with the growth of the problem. While the University is not alone in this regard, our situation is exacerbated by an older plant and more expensive programs than other institutions in the state.

Repairs and Replacement (R&R) appropriations of \$9,345,000 were received for F.Y. 1990-91; a list of the projects undertaken has been provided under separate cover. The list is extensive, and certainly the expenditure of more than \$9,000,000 is not trivial. However, to understand the problem we need to review some facts about the University's Physical Plant.

The University has more than 22,000,000 gross square feet of space. At today's replacement cost, this amounts to a capital investment of \$3,000,000,000 or more. The University recently completed a survey of

its buildings that shows a deferred maintenance backlog totaling more than \$300,000,000. The result of this survey is consistent with many other estimates based on the amount, age, and type of building construction. Of the total need, more than \$50,000,000 has been identified as "critical." A need is classified as critical only if a component has already failed and repair has not been done, or if the repair is temporary.

Measuring performance against this objective must encompass more than project lists. To date, the vast majority of our R&R resources have been directed to repair simply because that is all the funding could support. Ideally, we should reach the point where scheduled maintenance and inspection results in early intervention to repair or replace damaged components. Such a program would result in fewer component failures and reduced cost per repair project. Clearly, in many instances, rapid repair of the problem is essential to avoid further damage. In such cases, response time and time to repair are appropriate measures of efficiency and effectiveness.

One of the products of the building survey noted above was an estimate of the "maintenance" cost on a year by year basis. For the 1991-93 biennium, this amount exceeds \$35,000,000; the R&R allocation for F.Y. 1990-91 is \$9,345,000. This allocation has been protected from internal reallocation and the 1990 legislative rescission but the current level of spending does not permit us to gain on the backlog.

Roughly 50% of the University's space is over 30 years old; nearly 25% is more than 50 years old. Maintenance and repair of such buildings is especially difficult; the type of construction, unavailability of component parts, and changes to building codes magnify repair and maintenance costs. In addition to the age of our buildings, the program aspects of the University's endeavors place additional strain on our space.

- Instruction cannot be done effectively in poorly ventilated and poorly lit rooms, with poor sight lines.
- Research requires a lot of space, and research facilities are expensive to maintain. While some new construction incorporates "generic" research space, many older facilities are obsolete, lacking adequate power and ventilation, and subject to vibrations that upset delicate experiments. To work in such facilities lowers faculty productivity as they struggle with inadequate space.

Planning for a comprehensive and effective plant maintenance program is well underway. The survey just completed was a vital first step. The data gathered have been recorded and we are evaluating tools to assist us in scheduling maintenance and inspections. However, the amount of funding will be key to the execution of the plan. Current funding is simply not commensurate with the size of the task; it needs to be increased by more than \$9,000,000 over the biennium. We have protected this allocation in the past and hope to continue to do so in the future. However, reallocations of the magnitude suggested for F.Y. 1991-92-93 coupled with unfunded debt service and operational expense of new space does not suggest the opportunity for adding to the R&R allocation from internal sources.

EXPLANATION OF BUDGET ISSUES AND ALTERNATIVES:

For the F.Y. 1989-90-91 biennium, the University had available \$25,000,000 to allocate centrally for programmatic needs; \$16,000,000 of this came from legislative funds, and \$9,000,000 came from internal reallocation. For the F.Y. 1991-92-93 biennium, the University has identified new funds that it will need to continue the momentum in its program to improve the quality of instruction and for other urgent needs; these amount to \$54,000,000, in addition to funds for salary increases and keeping up with inflation. It also expects to identify resources that can be made available through internal reallocation without further decreasing instructional quality; these amount to \$20,000,000, none of which would be available for salary increases.

In evaluating the amount to reallocate, 3 considerations must be kept in mind:

- The University is reducing undergraduate enrollment in order to improve quality. The extent of that reduction was agreed to in advance with the legislature, and the University is on target with the reduction. The scope is based on what would be needed to raise instructional expenditures per student to a level that is competitive with the University's peers among research universities. The funds were, and continue to be, targeted for improvement in the quality of instruction. Further enrollment reductions below the present agreement would reduce access to programs that are not available elsewhere in the state.

- Faculty tenure regulations severely limit the speed of adjustments that the University can make in reducing components of its instructional programs.
 - A unique feature of the University's faculty appointments, not shared by any other University in the state, is the extent to which job responsibilities combine research and public service with the teaching mission. Even if the instructional component of a faculty position were available for transfer, the research and public service components might be dedicated to programs that are of high priority for the state, making it impossible to transfer the position to another college.
- Funds for internal reallocation can come from 3 sources:
- Normal faculty turnover provides an opportunity to withdraw resources from fields where work demands are not so high as to prohibit it.
 - Nonfaculty expenses can be reduced.
 - Programs can be curtailed or eliminated in order to reduce expenses.

Faculty turnover at the University represents under 5% of faculty per year. Considering that most of the faculty members who leave must be replaced with others in the same department, this is not a significant source for reallocation. The second possible source, reduction of nonfaculty expenses, means reducing the support that the faculty need to do their work effectively--support staff, equipment, library collections, laboratories and other facilities. As mentioned above, this support is considered as important as salaries to retain our faculty, and is at this time inadequate even without further reductions. The third source, program reductions, is being pursued, but, as already indicated, the funds freed up will be totally swallowed up by even minimally required programmatic improvements. Thus, the inescapable conclusion is that the University will not be able to preserve its competitive position without state funds for salary increases. Its needs in that regard include both funds to keep pace with the increase in cost of living, and additional salary increases of at least 2% per year for faculty, to bring the University to a competitive level at the middle of the Big Ten; a 2% per year increase over the biennium would cost \$18,000,000.

The table below shows biennial needs for programs and resources available from internal reallocation. These needs do not include \$18,000,000 for salary increases.

	Objective Summary Additional Biennial Needs (Dollars in Thousands)		
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>1992-93 Biennium</u>
Preserve Physical Assets	\$ 4,517.0	\$ 4,517.0	\$ 9,034.0
Raise the Quality of Instruction and Student Support	12,383.0	15,383.0	27,766.0
Provide Better Access to the University	1,000.0	1,000.0	2,000.0
Continued Growth in Research and Public Service	<u>7,552.0</u>	<u>7,648.0</u>	<u>15,200.0</u>
Total	\$25,452.0	\$28,548.0	\$54,000.0
Available through Reallocation	(7,000.0)	(13,000.0)	(20,000.0)
Funded through Tuition Increase	(<u>3,684.0</u>)	(<u>3,387.0</u>)	(<u>7,071.0</u>)
Net Additional Need	\$14,768.0	\$12,161.0	\$26,929.0

The needed appropriations for the 1992-93 biennium are summarized by program and incorporates the stated objectives and reallocations. Non-appropriation revenue changes (tuition increase and ICR offset decrease) result in the net additional appropriation need. As this summary does not include LCMR and Special Projects funding, the \$610,664,000 appropriations base for F.Y. 1991 can be reconciled to the Biennia Budget System's (BBS) fiscal summary (page 12) by adding the appropriate amount for LCMR and Special Projects. The net additional need is over and above the allowable "Agency Plan" in the fiscal summary.

<u>Program</u>	<u>Requested Appropriations</u> (Dollars in Thousands)			<u>1992-93 Biennium</u>
	<u>F.Y. 1991</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	
Instruction	\$395,931.0	\$411,645.0	\$414,645.0	\$ 826,290.0
Noninstruction	128,339.0	130,462.0	130,462.0	260,924.0
Agriculture Special	44,202.0	44,952.0	44,952.0	89,904.0
Health Sciences Special	17,566.0	17,868.0	17,964.0	35,832.0
Technology Special	3,911.0	3,911.0	3,911.0	7,822.0
System Special	<u>20,715.0</u>	<u>20,778.0</u>	<u>20,778.0</u>	<u>41,556.0</u>
Total	\$610,664.0	\$629,616.0	\$632,712.0	\$1,262,328.0
Base Adjustments		(683.0)	1,741.0	1,058.0
Anticipated Reallocations		(7,000.0)	(13,000.0)	(20,000.0)
Agency Plan per BBS		<u>(\$609,981.0)</u>	<u>(\$612,405.0)</u>	<u>(\$1,222,386.0)</u>
Additional Program Needs		11,952.0	9,048.0	21,000.0
Reduction of ICR Offset		6,500.0	6,500.0	13,000.0
Funded Through Tuition		(<u>3,684.0</u>)	(<u>3,387.0</u>)	(<u>7,071.0</u>)
Net Additional Need		\$ 14,768.0	\$ 12,161.0	\$ 26,929.0

The resources discussed above do not include the \$50,000,000 or more that the University receives annually from private gifts. We expect that donors will agree to support some of the high priorities identified in this document; both the need and the anticipated support for those items are excluded from the discussion.

GOVERNOR'S RECOMMENDATIONS:

The Governor recommends a direct state appropriation of \$846,364,000 for the University of Minnesota in the 1992-93 biennium. The Governor's 1992-93 recommendations for the System include a general deduction in both the instructional and non-instructional programs and elimination of appropriation subsidies for undergraduate non-resident/non-reciprocity students enrolled at the University. The Governor also encourages the University of Minnesota to limit tuition increases for resident students to the rate of inflation.

In addition, the Governor recommends withholding 10% of the University's F.Y. 1993 instructional appropriation for redistribution by the Governor and legislature pending the recommendations of the Blue Ribbon Commission on Higher Education and the System's response to those recommendations.

The Governor supports University plans to reallocate its spending priorities within its current resource base. However, fiscal constraints require that the University develop additional cost containment and reduction measures or alternative methods of service delivery.

ALLOCATION OF SUPPORT EXPENDITURES TO PRIMARY PROGRAMS
1992-93 BIENNIAL BUDGET
F.Y. 1989 EXPENDITURES
(STATE FUNDS)⁽¹⁾
(Dollars in Thousands)

Campus	Primary Programs				Support Programs				Total
	In- struction	Research	Public Service	Other	Academic Support	Student Support	Insti- tutional Support	Physical Plant	
Twin Cities	\$207,830.4	\$60,451.9	\$48,328.1	\$ 3,537.5	\$26,003.6	\$ 4,436.4	\$11,837.9	\$53,935.2	\$416,360.9
Duluth	25,007.3	3,047.2	495.4	948.6	3,625.1	2,060.6	1,943.7	7,072.3	44,200.3
Morris	5,085.5	24.4	5.0	351.9	1,087.3	1,016.7	1,313.9	2,081.8	10,966.6
Crookston	2,807.0	.0	.0	512.3	1,016.6	642.7	567.3	1,615.4	7,161.4
Waseca	2,330.4	.0	.0	18.6	840.4	949.9	531.5	1,407.0	6,077.8
System-wide	.0	.0	.0	18,178.4	1,747.0	9,585.3	17,188.4	.0	46,699.1
Total	\$243,060.6	\$63,523.6	\$48,828.5	\$23,547.4	\$34,320.0	\$18,691.7	\$33,382.6	\$66,111.7	\$531,466.0
Physical Plant	\$ 26,321.9	\$18,756.1	\$ 2,735.2	\$ 263.7	\$ 7,121.8	\$ 4,472.8	\$ 6,440.1	\$-66,111.7	\$.0
Institutional Support ⁽²⁾	13,994.6	10,957.8	12,524.2	82.2	1,396.4	867.5	-39,822.8	.0	.0
Student Support	23,558.9	473.0	.0	.0	.0	-24,031.9	.0	.0	.0
Academic Support ⁽²⁾	39,544.2	1,844.0	1,398.8	51.2	-42,838.2	.0	.0	.0	.0
Total	\$346,480.3	\$95,554.5	\$65,486.7	\$23,944.5	\$.0	\$.0	\$.0	\$.0	\$531,466.0

⁽¹⁾ Excludes LCMR and Special Projects.

⁽²⁾ Allocated to programs on the basis of expenditures from all funds.

RECONCILIATION OF
F.Y. 1991 TO BASE LEVEL

		Base Level (Dollars in Thousands)	
		F.Y. 1992	F.Y. 1993
Instruction:			
Appropriation - O & M		\$410,142.0	
Transfer from Specials	\$ 1,252.0		
Rebudgeting	(15,500.0)	(14,248.0)	
O & M Instruction		395,894.0	
Appropriation - Specials			
1989 Session		1,264.0	
K-12 Carryforward	25.0		
Transfer to O & M	(1,252.0)	(1,227.0)	
Specials Instruction			
F.Y. 1991 Instruction		\$395,931.0	\$395,931.0
Cancellation K-12		(37.0)	(37.0)
Non-recurring		(2,086.0)	(2,086.0)
Carryforward Adjustment		1,345.0	1,345.0
ACF Adjustment		2,642.0	5,066.0
Base Level Instruction		397,795.0	400,219.0
Noninstruction:			
Appropriation - O & M		112,839.0	
Rebudgeting		15,500.0	
O & M Noninstruction			128,339.0
Appropriation - Specials		89,571.0	
Specials Noninstruction		89,571.0	89,571.0
F.Y. 1991 Noninstruction		217,910.0	217,910.0
Carryforward Adjustment - O & M		(1,345.0)	(1,345.0)
Carryforward Adjustment - Specials		(1,202.0)	(1,202.0)
Non-recurring Items		(3,177.0)	(3,177.0)
Base Level Noninstruction		212,186.0	212,186.0
Base Level Total		609,981.0	612,405.0
Recommended LCMR Projects 1992-93		6,584.0	
Per Agency Plan		\$616,565.0	\$612,405.0

F.Y. 1991 Budget Reduction (Information Only):

Laws of Minnesota 1991, Chapter 2, reduced the F.Y. 1991 appropriation to the University of Minnesota by \$8,800.0. This reduction is not reflected as a change to F.Y. 1991 or F.Y. 1992-93 BASE levels within the budget documents.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471
NON-INSTRUCTION	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482
AGRICULTURE	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
HEALTH SCIENCE	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
TECHNOLOGY	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
SYSTEM SPECIALS	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
LEG COMM MN RESOURCES	3,359	2,533	2,492		6,584	6,584			
SPECIAL PROJECTS	618	814	685						
PERM UNIV FUND	185	344	397	397	397	397	397	397	397
TOTAL EXPENDITURES BY PROGRAM	535,628	582,269	614,238	610,378	616,962	593,182	612,802	612,802	565,542
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
ENVIRONMENT TRUST					1,530	1,530			
GENERAL	399,551	437,712	464,427	467,942	467,942	434,610	469,566	469,566	411,754
MN RESOURCES	3,359	2,533	2,492		5,054	5,054			
STATUTORY APPROPRIATIONS:									
GENERAL	132,533	141,680	146,922	142,039	142,039	151,591	142,839	142,839	153,391
AGENCY	185	344	397	397	397	397	397	397	397
TOTAL FINANCING	535,628	582,269	614,238	610,378	616,962	593,182	612,802	612,802	565,542

ACTIVITY:
PROGRAM:
SYSTEM: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: Financing Inflationary Costs - Informational

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Direct Appropriation				
General Fund	\$ 20,996	\$ 43,087	\$ 43,087	\$ 43,087
Tuition				
General Fund	\$ 5,888	\$ 12,113	\$ 12,113	\$ 12,113
Total Expenditures				
General Fund	\$ 26,884	\$ 55,200	\$ 55,200	\$ 55,200

Requires statutory change: Yes No

ITEM SUMMARY:

Inflation was calculated for the University of Minnesota at 4.5% per year for each year of the 1992-93 biennium. The inflation factors were applied to the system's adjusted instructional and non-instructional base, less non-tuition income.

The University of Minnesota did not submit a plan detailing how funds would be reallocated to address anticipated increases in salary and non-salary costs. However, the University's Board of Regents has authority to make allocative decisions among campuses and programs.

ACTIVITY:
PROGRAM:
AGENCY: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: Elimination of Appropriation Subsidy for Non-resident/non-reciprocity students

Dollars in Thousands

	F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995
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GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (6,152)	\$ (6,152)	\$ (6,152)	\$ (6,152)
Tuition				
General Fund	\$ 6,152	\$ 6,152	\$ 6,152	\$ 6,152
Total Expenditures				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: Yes No
Statutes Affected: M.S. 135A.03, Subd. 3

ITEM SUMMARY:

This item eliminates the appropriation subsidy for students from states with whom Minnesota does not have reciprocity agreements. The reduction in state direct appropriation totals \$12,304,000 for the 1992-93 biennium. The appropriation reduction is offset by assumed increases in tuition for non-resident/non-reciprocity students.

The reduction is for undergraduate non-resident/non-reciprocity students only. The University of Minnesota estimates non-resident/non-reciprocity enrollment of 1,413 FYE (full year equivalent) for F.Y. 1991.

RATIONALE:

Fiscal constraints prohibit future funding subsidies for undergraduate non-resident/non-reciprocity students at the University of Minnesota. In making this recommendation, the Governor recognizes the authority of the University's Board of Regents to set differential tuition rates for non-resident/non-reciprocity students. Undergraduate non-resident/non-reciprocity students at the University currently pay higher tuition rates than resident students, though the tuition charges vary by program as percentages of full instructional cost. The University of Minnesota is encouraged to reallocate other resources to encourage and/or assist non-resident/non-reciprocity student enrollment.

PROGRAM: Instruction
Agency: Minnesota, University of

1992-93 Biennial Budget

PROGRAM PURPOSE:

The University mission statement reflects the 3-fold mission of a land-grant University: instruction, research and public service. What makes the institution a University rather than a research institute is in its instructional mission--special kinds of instruction that can be offered only by faculty who are simultaneously advancing the frontiers of knowledge and applying that knowledge in the service of the state. The instructional program is the heart of the University. The focus has been and will continue to be raising the quality of instruction and student support.

Given the array of public post-secondary education institutions in the state, the University must be especially careful to remain true to its own character--for each campus--and to restrict its programs to the kind of instruction that provides the best return to the state on its resources.

While a large research University provides unique educational opportunities that cannot be obtained elsewhere in the state, it also is subject to unique problems that the University and its supporters must work actively and continuously to reduce. The scale of the institution can easily, and inadvertently, subject students to unnecessary bureaucratic requirements. Complexities of scheduling can mean delays in graduation, the multiple mission of teaching, research, and public service can mean difficulty in meeting with busy faculty advisers, and the international character of the institution can create problems of communication between instructor and student.

A central priority for the University during the 1990s is to reduce the disadvantages to students of its size and multiple missions, while retaining and enhancing its advantages. The objective is to raise the quality of instruction as measured by the students and their progress.

Providing financial access to University programs is a continuing priority. The University's purpose in helping students to obtain financial aid is to open its educational programs to all residents who are qualified to take advantage of them. The University's ultimate goal is to have in place programs that will allow every student to meet his or her full financial need through employment, grants and insured student loans.

Reducing inappropriate tuition burdens promotes financial access. Recent analyses have indicated that students are contributing, through tuition, to essential noninstructional activities.

Providing programmatic access to University programs to increase diversity is also a continuing priority. Finances are not the only barrier to access to the University. Physical and program barriers prevent or inhibit access for the disabled; cultural and programmatic barriers inhibit access for minority students. To increase success for these populations is an important need in itself; but to increase diversity of race, culture and physical circumstance does not simply serve the needs of those groups. The University's diversity goals will benefit all students by providing a diversity of cultures, experiences and points of view that can enrich discourse and understanding for all of us.

PERFORMANCE:

The University, by agreement with the state legislature, is operating under an enrollment limitation, with its financing set independently of the average cost funding matrix that would normally reduce funds as enrollment falls. The purpose of the agreement is to permit instructional funds per student to increase in order to finance improvements in the quality of instruction.

The table below demonstrates some specific actions taken to improve instruction, through a combination of internal reallocation and new legislative funds. In addition to these centrally allocated budget items, each individual college and campus has also undertaken significant internal reallocation to help improve the instructional program.

Instructional improvement/actions to date:

	(Dollars in Thousands)	Students
	Annual Expenditures	Affected
Admissions	\$ 215.0	4,000
Teaching Assistant training	129.0	24,500
Large classes	200.0	8,700
Course access	600.0	2,500
Classroom and study renovations	770.0	?
Advising	351.0	?
Instructional equipment	2,086.0	?
Totals	\$4,351.0	

Results of the University's efforts have been gratifying, if not yet dramatic.

Section Size. Since 1986, system-wide, average section size has dropped from 25.2 to 23.3 (8%); at the lower division level, the drop has been from 31.4 to 29.8 (5%). The number of small sections (below 20) has increased 13%, while the number of medium sections (21-50) has decreased 11%, and the number of large sections (50 or more) decreased by 0.25%. The fraction of lower division sections offered in small sizes on the Twin Cities campus has risen nearly 20%; 42% of all Twin Cities lower division instruction now occurs in section sizes below 20. The Twin Cities College of Liberal Arts has reduced average lower division class size by 15%, and now offers over 30% more small sections.

Large Sections. Looking at the 40 largest lecture courses, the average section size fell by 21% over a 4-year period; by Fall, 1989, only 14 sections were 300 or larger, and the largest section contained 602 students (compared to 1,069 in 1986).

Waiting Times. In the late 1970s, students spent an average of 73 minutes in the registration line; by the early 1980s it was 35 minutes; today it is 7 minutes. The time required to process an application for a student loan has been reduced from an average of 2 months in the middle 1980s to 2 days in 1990.

Student/faculty Ratio. System-wide, the ratio has declined by 3% from 1986 to 1989. On the Twin Cities campus, the reduction has been 6%.

Retention and Graduation Rates. Here are the changes from F.Y. 1987 to F.Y. 1989:

	Duluth	Morris	Twin Cities
Retention, 1st year to 2nd year	+ 9%	+ 10%	- 2%
Retention, 2nd year to 3rd year	+ 10%	+ 1%	+ 1%
Graduation 6 years or less after entry	+ 2%	+ 6%	+ 3%

Actual freshman retention rates for the 3 campuses combined have been as follows:

1981	1982	1983	1984	1985	1986	1987	1988
74.1%	74.8%	73.7%	75.5%	76.2%	77.1%	78.3%	78.2%

Tuition comprises approximately 25% of the cost for a student to attend. Thus, holding tuition down does not address the biggest part of the problem of financial barriers to access. In order to maintain access, the University must pursue improved financial aid programs. Unmet financial need appears to be a significant cause of dropout for students who qualify for aid.

Aid is determined by calculating a budget, based on the student's expected expenses. Most realistic is the Federal Student Budget, intended to reflect true average costs; at the University, it approaches \$10,000 for most full-time students. In order to distribute its limited funding among all of the eligible students, the state

PROGRAM: Instruction
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

bases grants on a lower "calculation budget" of about \$6,000 for a full-time student at the University. Grants are based on the concept of "shared responsibility," under which the student's family and the state and federal governments will together contribute half of the calculation budget, and the student is responsible for the other half. Of course the student, the family, or the institution is also responsible for the excess of true costs over the calculation budget; at the University, this may approach \$4,000 per year. To the extent that the student's share of the cost is not met by University grants, work or savings, he or she may borrow from any of several alternative loan programs.

Grants may be exhausted before a student completes the course of study. State grants are available for only 4 academic years (even if a student is enrolled for only part of the year, or is enrolled part-time and receives only a partial grant). Even before grants are exhausted, work-study, grants, and subsidized loans may not meet all of a student's financial need; moreover, work-study can be put into effect only if the student is able to undertake the work and can find a willing University employer; and an available loan will be taken out only if the student can assume the repayment obligation. Unmet need is created if the financial aid office cannot offer sufficient funding, if the student declines available opportunities, or if the student cannot find an employer.

The University has adopted a goal to expand its minority enrollment to 10% by 1994, from the Fall, 1989, level of 7%. A first important step in attaining that goal will be to expand the number of minority faculty who can effectively serve as role models and mentors for minority students and help to create a climate of tolerance and acceptance for cultural diversity.

During the past 2 years the Office of Minority Affairs has made strides in defining our goals and mapping out programs. Faculty recruiting efforts have utilized short-term funding to hire minority faculty when open positions are not available (bridge funds). Special attempts have also been made to ensure that minorities are included in hiring pools and given careful consideration in hiring decisions.

An important part of creating a diverse campus is to ensure that the curriculum reflects an acceptance and celebration of diversity; the Office of Minority Affairs has supported that curricular development. It has also supported direct efforts to attract and retain more minority students, working directly with high schools for recruitment and overseeing monitoring mechanisms for students already here, so that advisers can intervene when a student is in academic difficulty. Funding for these initiatives is uncertain from year to year and smaller in amount than the University needs.

Disabled students are a rapidly growing minority (7%-10% of college populations). At present, the University's Office for Students with Disabilities serves approximately 1,300 students--300 with visual, hearing or physical impairment, and 1,000 with learning or other disabilities. The office provides tutoring, proctors for special examinations, interpreters and note-takers, records texts on audio tape or in braille, provides technical equipment, advocacy services in discussions between instructor and student regarding appropriate student performance and testing methods, and other services. Especially at our smaller campuses these services rely to a large extent on volunteers, and professionally trained staff numbers are limited.

PROSPECTS:

To meet enrollment targets until 1993 will be a challenge for the system. To make sure that the increased funding per student generated by a decline in student numbers will translate into higher quality instruction will require close budgetary management.

Balancing the clear need to improve the quality of education for current students enrolled in traditional programs against demands for expanded access to education for place and time-bound students will be a continuing problem during the coming biennium and beyond.

The biggest challenge for the University, however, as for the other public post-secondary systems, will be to

greatly increase coordination among systems, to assure that responsibilities are assigned most effectively among systems.

Financial aid is expected to continue to be a pressing problem for a large number of students. If the University is to be successful in raising retention rates, particularly for minority students, it must make increased efforts to expand access to student aid funds.

Proposals will continue to be advanced to properly state the instruction and noninstructional bases to allow the appropriate level of tuition to be paid by students.

The University's explicit goal for racial diversity, increasing the number of minority students from its present level of 7% to 10%, also includes doubling the number of minority faculty, from the present level of 7.5%, by 1994. Achieving the faculty goal will be particularly difficult in many colleges, because of the low number of faculty openings as funds are reallocated, and because well qualified minority faculty candidates are in very high demand, commanding salaries that sometimes exceed the University's ability to pay. Nationally, about 10% of faculty in higher education, and fewer than 10% of new Ph.D.'s, are members of minority groups.

Achieving the goal for number of students will require effective outreach to talented students before they reach the University, encouraging them to consider the option of higher education. It will also require financial aid, a welcoming environment, and a system of monitoring progress and intervention when necessary, so that those students who come are retained to graduation. Each of those areas will require funding and careful attention.

For the students with disabilities, new landmark legislation has been passed, the Americans With Disabilities Act of 1990, hailed as a civil rights bill for the disabled. The cost to the University of compliance with this new law is still under evaluation, but it could amount to more than \$1,000,000 over the biennium.

PLAN:

The University's present level of funding for instruction has permitted it to begin a reorganization of undergraduate education. Any reduction in the per-student support would require a reversal of that reorganization--shifting back to larger classes, more students for each adviser to assist, more delays in gaining admission to needed classes. This would be devastating not only for students, but for the faculty who have changed their teaching methods as it has become possible to improve quality. A reversal in the University's present reform could mean a delay of many years before it would again be possible to enlist support for another such effort.

Instead, the University needs to preserve its momentum in improving quality. The amount needed for the coming biennium to continue the momentum to improve the quality of instruction is \$27,766,000. Specific program needs are given in the budget table at the end of this section.

The most appropriate measure of improved outcomes in the University's instruction program over the next biennium is its freshman retention rate, the percentage of Fall freshmen who return in the following Fall. (Most dropouts take place in the first year. Graduate rates give a more appropriate measure in the long term, but 1993 graduation rates will not be affected by actions taken in the 1991-1993 biennium). If the requested new funding is provided, the University commits to producing continuing improvement of freshman retention.

Another important aspect of the University's plan to make its instructional program more effective is the planning already underway among the systems, at a level that is unprecedented within the state. The University's Senior Academic Vice President and the Academic Vice Chancellors of other public systems are now conducting monthly meetings with an action agenda to ease student transfer, cooperate in minority recruitment, and improve the coordination of curriculum in specific fields. This new initiative is intended to supplement the many avenues for communication and cooperation already in existence, with an emphasis on breaking log-jams and moving projects along.

For F.Y. 1990-91, the University allocated \$500,000 of internal funds to increase financial aid. Over the next

PROGRAM: Instruction
 (Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

several years, student financial aid will be a top priority in the University's private fundraising. In addition, the University intends to use funds already available more effectively (e.g., in cases where restrictions on scholarships make them impossible to award). It is expected that the Higher Education Coordinating Board (HECB) will recommend an \$800 increase to the cost that it recognizes for financial aid. The University will support this HECB proposal.

The University recommends that funding be provided as nonrepayable financial aid to professional students, to moderate the high cost of tuition in these programs. The eventual targeted level of funding is \$2,000,000 for the biennium, with \$1,000,000 as a reasonable goal for the first biennium; this approach has been recommended by HECB in the past.

Finally, there is need for increased state funds, \$126,000 over the biennium, to match federal student loan program funds. These funds are requested in accordance with Department of Finance instructions regarding matching fund programs. This is in addition to about \$138,000 directly provided by the University through internal reallocation.

These actions will together make a significant start on reducing the unmet financial need faced by University students.

The University is committed to the principle that recruiting and retaining minority students and faculty is part of its ongoing responsibility; that effort should be financed through reallocation of existing funds and through integration of the actions needed into ongoing programs of the University.

The amount needed to continue the momentum of the University's priority program to improve the quality of instruction is \$27,766,000. This amount is needed for the programs specified below:

	Objective Summary Additional Biennial Needs (Dollars in Thousands)		
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>1992-93 Biennium</u>
Funds to instructional units	\$ 3,500.0	\$ 6,500.0	\$10,000.0
Initiative for commuting students	300.0	300.0	600.0
Instructional equipment	4,000.0	4,000.0	8,000.0
Libraries	2,083.0	2,083.0	4,166.0
Student access to computing	<u>2,500.0</u>	<u>2,500.0</u>	<u>5,000.0</u>
Subtotal	\$12,383.0	\$15,383.0	\$27,766.0
Preserve physical assets	2,394.0	2,394.0	4,788.0
Other student access support	<u>937.0</u>	<u>937.0</u>	<u>1,874.0</u>
Total	\$15,717.0	\$18,714.0	\$34,428.0
Anticipated Reallocations	(4,550.0)	(8,450.0)	(13,000.0)
Additional Needs	\$11,164.0	\$10,264.0	\$21,428.0

The additional needed appropriation for the 1992-93 biennium is summarized by fiscal year and reflects the objectives and reallocations.

	Requested Appropriation (Dollars in Thousands)			1992-93
	<u>F.Y. 1991</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>Biennium</u>
Total	\$395,931.0	\$411,645.0	\$414,645.0	\$826,290.0
Base Adjustments		1,864.0	4,288.0	6,152.0
Anticipated Reallocations		(4,550.0)	(8,450.0)	(13,000.0)
Agency Plan per BBS		<u>(397,795.0)</u>	<u>(400,219.0)</u>	<u>(798,014.0)</u>
Additional Needs		\$ 11,164.0	\$ 10,264.0	\$ 21,428.0

GOVERNOR'S RECOMMENDATIONS:

The Governor recommends a direct state appropriation of \$463,498,000 in the 1992-93 biennium for the University of Minnesota's instructional program. The recommendation includes restoration of the Average Cost Funding base, a general reduction of \$35,336,000 for the biennium, and elimination of appropriation subsidies for undergraduate non-resident/non-reciprocity students enrolled at the University. The Governor encourages the University to limit tuition increases to the cost of inflation - projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Tuition increases limited to the cost of inflation would offset a portion of the reduction in instructional appropriation. The Governor also recommends that 10% of the University's F.Y. 1993 instructional appropriation be withheld for redistribution pending the restructuring recommendations of the Blue Ribbon Commission on Higher Education. Recommended total instructional spending authority for the biennium (direct appropriation plus tuition and other income) is \$745,998,000.

AVERAGE COST FUNDING MATRIX

	F.Y. 1989 Expenditures	Actual F.Y. 1989 FYE	Actual F.Y. 1990 FYE	Estimated F.Y. 1991 FYE	Budgeted Spending Plan F.Y. 1991	(1) Estimation Adjustment	Allowable Spending Plan Per Formula	Adjusted Cell Values	Instructional Funding (based on two year lagged FYE)	
									F.Y. 1992	F.Y. 1993
Lower Division Regular Session	\$ 95,133.7	19,623	19,092	18,459	\$108,718.0	\$(2,203.8)	\$106,514.2	\$5,428	\$103,631.9	\$100,196.0 ^(a)
Upper Division Regular Session	103,500.0	15,923	15,864	15,291	119,419.2	1,074.6	120,493.8	7,567	120,047.3	115,711.2 ^(a)
Graduate All Sessions	51,211.0	7,419	8,142	8,589	57,801.3	9,265.9	67,067.2	9,040	73,603.1	77,644.0 ^(a)
Professional All Sessions	74,236.0	6,615	6,148	6,025	84,987.3	(6,425.1)	78,562.2	11,876	73,015.9	71,555.2 ^(a)
Lower Division CEE and SS	8,075.8	2,829	2,710	2,683	9,031.0	9.6	9,040.6	3,196	8,660.3	8,574.0 ^(a)
Upper Division CEE and SS	<u>14,323.8</u>	<u>3,165</u>	<u>3,003</u>	<u>2,989</u>	<u>15,974.1</u>	<u>.</u>	<u>15,974.1</u>	<u>5,047</u>	<u>15,156.5</u>	<u>15,085.8^(a)</u>
Total	\$346,480.3	55,574	54,959	54,036	\$395,931.0	\$ 1,721.2	\$397,652.2	\$ 7,155	\$394,115.1	\$388,766.2

^(a) Correction of F.Y. 1989 FYE estimate used for funding 1989-1991 biennial budget.

Base Year Spending Plan
Gross ACF Adjustment

(395,931.0)
(1,815.9)

^(a) Capped Cells

(4,458.0)

^(a) Other Cells

2,642.1 5,065.2

HEADCOUNT ENROLLMENTS
TENTH DAY OF INSTRUCTION, FALL TERM

	1988 <u>Actual</u>	1989 <u>Actual</u>	1990 <u>Actual</u>	1991 <u>Planned</u>	1992 <u>Planned</u>
Twin Cities					
Other than Health Sciences					
Agriculture	747	698	751	755	755
Architecture and Landscape Architecture		288	253	270	287
Biological Sciences	315	313	323	320	330
Education	1,928	1,674	1,846	1,887	2,005
General College	2,535	2,251	2,121	1,831	1,542
Graduate School	8,164	8,110	8,300	8,434	8,616
Human Ecology	1,210	1,129	1,099	1,068	1,020
Law	763	796	788	808	830
Liberal Arts	16,510	15,935	15,705	14,864	14,025
Management	1,101	949	964	890	816
Natural Resources	289	336	437	430	430
Technology	5,150	4,718	4,614	4,400	4,300
University College	176	146	127	150	150
Health Sciences					
Dentistry	381	347	326	312	317
Dental Hygiene	51	55	48	54	81
Medical School-MD	917	883	860	847	833
Medical School-Post MD Fellows	1,114	1,147	1,137	1,100	1,100
Medical School-Nurse Anesthetists	24	23	18	25	25
Medical Technology	57	82	73	76	82
Mortuary Science	51	60	68	65	65
Nursing	193	190	182	180	180
Occupational Therapy	79	76	68	75	75
Pharmacy	326	343	343	345	350
Physical Therapy	61	61	60	60	60
Public Health	245	275	264	262	262
Veterinary Medicine	276	256	253	246	246
Duluth					
Business and Economics	1,494	1,538	1,521	1,534	1,527
Education and Human Service Professions	1,402	1,480	1,350	1,334	1,313
Fine Arts	299	313	348	350	349
Graduate School	267	259	250	235	234
Liberal Arts	2,421	2,517	2,451	2,469	2,458
Medicine	87	94	99	98	98
Science and Engineering	1,565	1,619	1,904	1,933	1,940
Morris	2,021	2,041	2,021	1,918	1,810
Crookston	1,221	1,288	1,336	1,350	1,360
Waseca 1,169	1,174	1,042	1,114	1,185	
TOTAL OTHER THAN CEE	54,609	53,464	53,350	52,089	51,056
Continuing Education for Credit					
Twin Cities	18,532	17,552	17,011	16,670	16,350
Duluth	1,988	2,317	2,416	2,416	2,416
Morris	157	152	146	147	147
Rochester	340	221	217	250	280
Independent Study	1,606	1,558	1,597	1,587	1,587
GRAND TOTAL	77,232	75,264	74,737	73,159	71,836

HEADCOUNT ENROLLMENTS
TENTH DAY OF INSTRUCTION, FALL TERM

	1988 <u>Actual</u>	1989 <u>Actual</u>	1990 <u>Actual</u>	1991 <u>Planned</u>	1992 <u>Planned</u>
VARIOUS SUBTOTALS					
Twin Cities Health Sciences	3,775	3,798	3,700	3,647	3,676
Twin Cities Other Than Health Sciences and CEE	38,888	37,343	37,328	36,107	35,106
Total Twin Cities Other Than CEE	42,663	41,141	41,028	39,754	38,782
Total Duluth Other Than CEE	7,535	7,820	7,923	7,953	7,919
Total Duluth	9,523	10,137	10,339	10,369	10,335
Total Morris	2,178	2,193	2,167	2,065	1,957
Total All CEE	22,623	21,800	21,387	21,070	20,780

- Notes: (1) In many of these units qualified applicants exceed numbers admitted. Numbers shown should not be thought of as representing student demand.
 (2) Graduate headcounts are students registered through the graduate school; counts in the other colleges are undergraduates, first professional students, and graduate students registered outside the Graduate School.

FULL YEAR EQUIVALENT STUDENTS
BY INSTRUCTIONAL UNIT AND LEVEL OF INSTRUCTION

	F.Y. 1989 <u>Actual</u>	F.Y. 1990 <u>Actual</u>	F.Y. 1991 <u>Projected</u>	F.Y. 1992 <u>Planned</u>	F.Y. 1993 <u>Planned</u>
Twin Cities					
Agriculture					
Lower Division	314	315	328	288	284
Upper Division	313	308	320	274	272
Graduate	307	253	247	330	329
Total	934	876	895	892	885
Architecture and Landscape Architecture					
Lower Division		100	99	100	100
Upper Division		191	170	175	175
Graduate		60	66	66	66
Total		351	335	341	341
Biological Sciences					
Lower Division	569	527	525	505	492
Upper Division	345	368	370	321	321
Graduate	181	201	223	223	223
Total	1,095	1,096	1,118	1,049	1,036
Dentistry					
Lower Division	20	21	18	21	32
Upper Division	27	29	25	28	42
Professional and Graduate Professional	548	523	498	534	536
Total	595	573	541	583	610
Education					
Lower Division	297	356	302	293	231
Upper Division	1,190	1,070	963	933	919
Graduate	1,156	1,239	1,361	1,363	1,365
Total	2,643	2,665	2,626	2,589	2,515
General College					
Lower Division	1,111	959	911	821	710
Upper Division	82	54	51	58	48
Graduate	1	1	1	1	1
Total	1,194	1,014	963	880	759
Human Ecology					
Lower Division	278	246	240	243	232
Upper Division	466	430	408	398	379
Graduate	261	265	277	286	286
Total	1,005	941	925	927	897
Humphrey Institute					
Upper Division	22	18	11	19	19
Graduate	121	142	162	165	165
Total	143	160	173	184	184
Law					
Professional and Graduate Professional	724	755	746	787	787

FULL YEAR EQUIVALENT STUDENTS
BY INSTRUCTIONAL UNIT AND LEVEL OF INSTRUCTION

	F.Y. 1989 <u>Actual</u>	F.Y. 1990 <u>Actual</u>	F.Y. 1991 <u>Projected</u>	F.Y. 1992 <u>Planned</u>	F.Y. 1993 <u>Planned</u>
Twin Cities, continued					
Liberal Arts					
Lower Division	6,694	6,504	6,398	5,828	5,710
Upper Division	6,148	6,188	6,072	5,313	5,227
Graduate	1,538	1,675	1,792	1,589	1,589
Total	14,380	14,367	14,262	12,730	12,526
Carlson School of Management					
Lower Division	323	329	325	282	276
Upper Division	935	829	812	723	711
Graduate	1,025	1,080	1,143	1,143	1,143
Total	2,283	2,238	2,280	2,148	2,130
Medical School					
Lower Division	35	36	35	32	34
Upper Division	110	113	112	101	99
Professional and Graduate Professional	3,710	3,887	3,801	3,603	3,583
Total	3,855	4,036	3,948	3,736	3,716
Mortuary Science					
Upper Division	43	51	57	55	55
Natural Resources					
Lower Division	27	32	39	29	29
Upper Division	64	79	99	75	75
Graduate	47	58	62	52	53
Total	138	169	200	156	157
Nursing					
Lower Division	1	1	1	1	1
Upper Division	108	124	119	111	111
Graduate	82	72	80	113	113
Total	191	197	200	225	225
Pharmacy					
Lower Division	1	1	1	1	1
Upper Division		1			
Professional and Graduate Professional	314	325	320	335	337
Total	315	327	321	336	338
Public Health					
Lower Division	9	11	11	8	8
Upper Division	72	79	50	40	30
Graduate	513	498	536	580	580
Total	594	588	597	628	618

FULL YEAR EQUIVALENT STUDENTS
BY INSTRUCTIONAL UNIT AND LEVEL OF INSTRUCTION

	F.Y. 1989 <u>Actual</u>	F.Y. 1990 <u>Actual</u>	F.Y. 1991 <u>Projected</u>	F.Y. 1992 <u>Planned</u>	F.Y. 1993 <u>Planned</u>
Twin Cities, continued					
Technology					
Lower Division	3,268	2,977	2,942	2,833	2,708
Upper Division	3,029	2,856	2,785	2,611	2,491
Graduate	1,413	1,326	1,384	1,464	1,490
Total	7,710	7,159	7,111	6,908	6,689
Veterinary Medicine					
Lower Division	3	3	3	3	3
Upper Division	19	21	21	18	18
Professional and Graduate Professional	506	467	460	466	466
Total	528	491	484	487	487
Unattached					
Lower Division	26	23	23	23	22
Upper Division	24	18	18	22	21
Total	50	41	41	45	43
Duluth					
Business and Economics					
Lower Division	390	384	385	407	407
Upper Division	370	364	359	382	381
Graduate	21	18	17	20	20
Total	781	766	761	809	808
Education and Human Service Professions					
Lower Division	462	423	416	479	474
Upper Division	703	585	553	717	703
Graduate	103	139	130	96	98
Total	1,268	1,147	1,099	1,292	1,275
Fine Arts					
Lower Division	570	545	559	600	597
Upper Division	120	124	133	127	127
Graduate	8	7	6	8	8
Total	698	676	698	735	732
Liberal Arts					
Lower Division	1,296	1,331	1,289	1,275	1,264
Upper Division	662	669	649	642	637
Graduate	15	13	12	14	14
Total	1,973	2,013	1,950	1,931	1,915
Medicine					
Lower Division	10	11	11	10	10
Upper Division	7	5	6	7	7
Professional and Graduate Professional	179	191	200	191	191
Total	196	207	217	208	208

FULL YEAR EQUIVALENT STUDENTS
BY INSTRUCTIONAL UNIT AND LEVEL OF INSTRUCTION

	F.Y. 1989 <u>Actual</u>	F.Y. 1990 <u>Actual</u>	F.Y. 1991 <u>Projected</u>	F.Y. 1992 <u>Planned</u>	F.Y. 1993 <u>Planned</u>
Duluth, continued					
Science and Engineering					
Lower Division	1,054	1,098	1,161	1,113	1,117
Upper Division	504	554	630	541	552
Graduate	79	67	63	74	75
Total	1,637	1,719	1,854	1,728	1,744
Unattached					
Lower Division	48	32	33	50	50
Upper Division	10	13	13	11	11
Total	58	45	46	61	61
Morris					
Lower Division	1,285	1,233	1,221	1,170	1,160
Upper Division	660	723	716	601	596
Total	1,945	1,956	1,937	1,771	1,756
Crookston					
Lower Division	797	785	838	776	781
Waseca					
Lower Division	745	809	768	726	727
SUBTOTAL	48,518	48,218	47,991	45,723	45,005
Continuing Education and Extension					
Lower Division	2,409	2,234	2,191	2,229	2,140
Upper Division	2,335	2,166	2,125	2,160	2,074
Graduate	632	696	683	584	561
Total	5,376	5,096	4,999	4,973	4,775
Summer Session					
Lower Division	420	476	492	422	422
Upper Division	830	837	864	834	834
Graduate	430	332	344	432	432
Total	1,680	1,645	1,700	1,688	1,688
GRAND TOTAL	55,574	54,959	54,690	52,384	51,468

FULL YEAR EQUIVALENT STUDENTS
BY INSTRUCTIONAL UNIT AND LEVEL OF INSTRUCTION

	F.Y. 1989 <u>Actual</u>	F.Y. 1990 <u>Actual</u>	F.Y. 1991 <u>Projected</u>	F.Y. 1992 <u>Planned</u>	F.Y. 1993 <u>Planned</u>
Summary by Level--Without SS and CEE					
Lower Division	19,633	19,092	18,882	17,917	17,460
Upper Division	16,033	15,864	15,522	14,303	14,027
Graduate	6,871	7,114	7,562	7,587	7,618
Professional and Graduate Professional	5,981	6,148	6,025	5,916	5,900
SUBTOTAL	48,518	48,218	47,991	45,723	45,005
Summary by Level--Total					
Lower Division	22,462	21,802	21,565	20,568	20,022
Upper Division	19,198	18,867	18,511	17,297	16,935
Graduate	7,933	8,142	8,589	8,603	8,611
Professional and Graduate Professional	5,981	6,148	6,025	5,916	5,900
GRAND TOTAL	55,574	54,959	54,690	52,384	51,468
FYE Subject to Legislative Language Numbers in 1990 Legislative Language	35,666	34,956	34,404	32,220	31,487
		35,679	33,750		31,600

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
INSTRUCTION	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471
TOTAL EXPENDITURES BY ACTIVITY	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471
DETAIL BY CATEGORY:									
STATE OPERATIONS	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471
TOTAL EXPENDITURES BY CATEGORY	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	226,620	243,546	260,250	266,997	266,997	243,177	268,621	268,621	220,321
STATUTORY APPROPRIATIONS:									
GENERAL	119,860	130,018	135,681	130,798	130,798	140,350	131,598	131,598	142,150
TOTAL FINANCING	346,480	373,564	395,931	397,795	397,795	383,527	400,219	400,219	362,471

ACTIVITY:
PROGRAM: Instruction
AGENCY: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: General Reduction/Tuition Adjustment

Dollars in Thousands			
<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>

GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (17,668)	\$ (17,668)	\$ (17,668)	\$ (17,668)
Tuition				
General Fund	\$ 3,400	\$ 4,400	\$ 4,400	\$ 4,400
Total Expenditures				
General Fund	\$ (14,268)	\$ (13,268)	\$ (13,268)	\$ (13,268)

Requires statutory change: _____ Yes X No
Statutes Affected:

ITEM SUMMARY:

This item reduces state direct appropriation to the University of Minnesota's instructional program by \$35,336,000 for the 1992-93 biennium. The Board of Regents would be responsible for allocating the reduction among programs and/or institutions.

In addition, the Governor encourages the University of Minnesota to limit tuition increases for resident students to the rate of inflation, projected at 3.72% in F.Y. 1992 and 3.24% in F.Y. 1993. Increases in the University tuition base of \$3,400,000 in F.Y. 1992 and \$4,400,000 in F.Y. 1993 would limit average tuition increases to the rate of inflation and would offset a portion of the appropriation reduction.

RATIONALE:

Instructional appropriations are made generally to the University of Minnesota; the system does not receive appropriations for specific instructional activities and programs. The Board of Regents sets academic and program priorities and allocates resources to campuses and programs accordingly.

Instructional expenditures represent 65% of the system's total General Fund expenditures. The Governor supports University plans to reallocate its instructional priorities within its current resource base. However, fiscal constraints require that the University develop additional cost containment and reduction measures or alternative methods of service delivery. In addition to cost containment, the University of Minnesota is encouraged to continue development and implementation of cooperative and resource sharing plans (e.g. regional course delivery and management, equipment sharing, etc.) with the other postsecondary systems in order to maximize higher education access and resource use.

ACTIVITY:
 PROGRAM: Instruction
 AGENCY: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: Blue Ribbon Commission/System Restructuring

Dollars in Thousands

F.Y. 1992 F.Y. 1993 F.Y. 1994 F.Y. 1995

GOVERNOR'S RECOMMENDATION:

Direct Appropriations					
General Fund	\$ -0-	\$ (24,480)	\$ -0-	\$ -0-	\$ -0-
Total Expenditures					
General Fund	\$ -0-	\$ (24,480)	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

The Governor recommends that 10% of the University of Minnesota's F.Y. 1993 instructional appropriation be set aside in a General Fund non-operating account and subject to legislative reallocation during the 1992 Legislative Session upon approval of the restructuring recommendations of the Blue Ribbon Commission of Higher Education. The amount to be set aside from the System totals \$24,480,000.

Reallocation of the appropriation back to the University of Minnesota will be subject to legislative and gubernatorial approval and dependent on the System's acceptance of the approved Commission recommendations.

PROGRAM: Noninstruction
 Agency: Minnesota, University of

1992-93 Biennial Budget

Research:

PROGRAM PURPOSE:

Good teaching and good learning depend ultimately on research, both basic and applied. Research is essential to the University's ability to serve society. As a land-grant institution, the University of Minnesota has a lasting obligation to serve society by extending its teaching and research beyond the campus, applying its knowledge to the solution of problems--problems of people, of public bodies, and of industry and agriculture.

PERFORMANCE:

Refer to Research and Public Service.

PROSPECTS:

Refer to Research and Public Service.

PLAN:

Objective Summary
 Additional Biennial Needs
 (Dollars in Thousands)

	F.Y. 1992	F.Y. 1993	1992-93 Biennium
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Continued growth in research and Public Service (ICR offset reduction)	\$6,500.0	\$6,500.0	\$13,000.0
Preserve physical assets	2,123.0	2,123.0	4,246.0
Subtotal	8,623.0	8,623.0	17,246.0
Anticipated Reallocations	(1,470.0)	(2,730.0)	(4,200.0)
Additional Needs	\$7,153.0	\$5,893.0	\$13,046.0

The needed appropriations for the 1992-93 biennium are summarized by fiscal year and incorporates the stated objectives and reallocations. Non-appropriation revenue changes (ICR offset decrease) result in the net additional appropriation need. This does not include LCMR funding or other external initiatives.

Requested Appropriation
 (Dollars in Thousands)

	F.Y. 1991	F.Y. 1992	F.Y. 1993	1992-93 Biennium
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Total	\$128,339.0	\$130,462.0	\$130,462.0	\$260,924.0
Base Adjustments	(1,345.0)	(1,345.0)	(1,345.0)	(2,690.0)
Anticipated Reallocations	(1,470.0)	(2,730.0)	(2,730.0)	(4,200.0)
Agency plan per BBS	(126,994.0)	(126,994.0)	(126,994.0)	(253,988.0)
Additional Program Needs	\$ 653.0	\$ 607.0	\$ 607.0	\$ 1,260.0
Reduction of ICR Offset	6,500.0	6,500.0	6,500.0	13,000.0
Additional Need	\$ 7,153.0	\$ 5,893.0	\$ 5,893.0	\$ 13,046.0

Purpose (objective)

- To maintain the University's competitive position in obtaining research grants for Minnesota.

The research activity of the faculty powers the graduate teaching enterprise, provides the unique spark that makes the undergraduate experience at a research, land-grant University distinctive, and generates the knowledge that is behind technology transfer and other outreach activities. As much of the research enterprise is financed from outside resources through a competitive process, it is essential that the University have the internal funding available to support its participation in this competition. That internal funding has come almost exclusively from indirect cost recovery (ICR) funds returned to the University by the state.

"ICR" is a term that defies short explanations, but in its simplest terms it means money paid by the sponsor of a research grant to reimburse a University for such costs as utilities, space upkeep, processing the business paperwork, and maintaining support services like libraries and computing. Many grants and contracts come in 2 parts: the "direct" costs of doing the work--salaries and benefits for the people doing the work, plus the equipment and supplies for that project--and the kinds of "indirect" costs mentioned above. The amount of indirect costs reimbursed is set as a percentage of the total direct costs. That rate is based on annual studies, by federal auditors, of University's operating costs.

For the most part, those indirect costs are already part of the University's state appropriation. Several years ago, most of the ICR income was deducted (offset) from the total state appropriation to the University, in effect reimbursing the state for those kinds of basic expenditures. In most other states, however, universities are allowed to keep all of their ICR income, mainly to serve as an incentive to researchers and universities to increase their research funding. Over the past several years, the Minnesota legislature has increased the proportion of this income that the University is allowed to keep, with the understanding that the money would be used as just such an incentive. That investment has paid off, with continuing increases in the non-state research money that the University has been able to attract.

At present, the University is allowed to keep approximately 80% of this income. The proposal to keep 100% of ICR income is based on a record of investment pay-off--of an incentive that works.

Performance (results achieved)

With the help of ICR funds, the University has had a remarkable record of increasing its research funds from grants and contracts awarded, while facing tough competition. From 1980 to 1985 funding grew by 50%, from \$97,000,000 to \$146,000,000. Over the next 5 years, the increase was almost 90%, to \$275,000,000. Most of the growth of the past 5 years has in fact come since 1987. In 1987 the University received \$154,000,000. The figure rose to \$178,000,000 in 1988, to \$205,000,000 in 1989, and was up again to \$275,000,000 in 1990 helped significantly by a very large contract to the High Performance Computing Center. Its 1987 funding came from 1,991 grants and contracts awarded of the 3,021 proposals submitted; its 1990 funding came from 2,550 awards of the 3,740 proposals submitted.

The most important pay-off of research projects is the knowledge gained; that is, after all, why a sponsor awards a grant or contract. It is knowledge to be shared in up-to-date teaching and outreach; it is often knowledge that leads to new processes, new products, new businesses, new treatments, and new public policies. However, there are also very important secondary effects on the Minnesota economy. By conservative estimates, \$275,000,000 in grants and contracts translates into 6,000 to 7,300 Minnesota jobs--most of which would be jobs in some other state if the University of Minnesota had not been so successful in attracting research support in a highly competitive climate. And, the economic effects don't stop with those 6,000 to 7,300 salaries; most of those dollars stay in circulation in the state and local economies with important multiplier effects.

PROGRAM: Noninstruction
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

Prospects (future issues)

The success that the University has enjoyed has largely been due to the efforts of a skilled, imaginative and hard-working faculty. It is, however, becoming necessary for the University to make a direct investment from its own funds both to be successful in national competition and to provide space to carry out the research. In order to continue this successful program of growth in research activities, it is necessary to invest additional funds. There are 4 specific needs.

1. The federal government is increasingly asking universities to share costs on research projects, particularly those that are major grants for the establishment of new research centers. For example, the University contributes \$1,000,000 per year toward the costs of the Interfacial Engineering Research Center, as a condition for National Science Foundation funding. It is committed to contributing \$750,000 per year for the High Performance Computing Center; and there are a number of proposals pending with major cost-sharing commitments. This is an effective use of University research money, because there is typically a return of \$3.00 to \$5.00 from the federal government for every \$1.00 invested. In addition to the research center contributions, grants for research equipment--the major source of funds for this purpose--typically call for matches of 30% to 50%. The University needs funding to compete successfully for research grants and research equipment; indirect cost recovery funds returned to the University are the principal source of such funds.
2. It is often necessary for the University to provide seed money to start important new areas of research. Besides this need for seed money for individual investigators, proposals for large projects that bring \$5,000,000 or more into the University are generally team efforts that are expensive to prepare. For example, the proposal that led to the award of the contract for the High Performance Computing Center cost over \$100,000 to prepare. Funds are also needed to set up new faculty so that they can start their research programs, and to facilitate the initial development of new ideas and prepare expensive proposals. Again, ICR funds are the principal source for these initiatives.
3. For the last 2 biennia, the University has not been provided funding to maintain its new space. Maintenance and upkeep of research space can be paid only from research funds; ICR funds need to be made available for that purpose.
4. The University must now provide one-third of the debt service cost for new construction. To the extent that a new building is used for sponsored research, it is appropriate that the University share be taken from its ICR funds, if available. For example, if a new building is to be used 30% for teaching and 70% for sponsored research, it would be appropriate that 70% of the University's one-third share of the debt service be paid from ICR funds.

Plan (decisions)

Funds for research support of the kind described here come almost exclusively from ICR; instruction and public service budgets cannot be diverted to this purpose. Because all of the ICR funds are already used for research support of this kind, there is no opportunity for internal reallocation to these purposes. To enable the University to continue the growth of its research program, elimination by the legislature of the remaining ICR offset (\$13,000,000 for the biennium) is needed.

Because research monies from the Federal Government will become increasingly difficult to get over the next 5 years, to continue the recent rate of growth is unlikely, particularly from the very high base established by the University's extraordinary success in 1990. Nevertheless, the University proposes to use as an outcome measure the total new awards from sponsored research, and commits

to continuing to increase that total in an amount at least equal to the additional indirect cost recovery funds returned.

Public Service:

Purpose (objectives)

- To stimulate economic and social development and provide essential services.

The University has long been a national leader in the development and transfer of technology to strengthen the economy and the society of which it is a part. The best known cases are in agriculture and other programs funded by State Specials, discussed separately below.

Even apart from programs funded by State Specials, outreach programs of the University serve the people of Minnesota in a practical way where they live and work. Continuing education and extension programs educate youth and adults to help them earn a living, cope with problems, and develop into leaders. The Institute of Technology and the Health Sciences develop new technologies for Minnesota industry (e.g., the Productivity Center faculty are working one-on-one with industry representatives to provide solutions to technology-based productivity problems); University Hospitals and other health science programs help provide for the urgent health care needs of many with no means to pay and for residents of greater Minnesota who have difficulty obtaining care locally; the Humphrey Institute and the College of Architecture and Landscape Architecture each provide assistance with planning and community building; the University Art Museum provides travelling art exhibits visited by 150,000 Minnesotans each year; University Libraries share the University's information resources throughout the state by means of interlibrary transfers of materials. These programs represent only a few examples of access to the University for many people, organizations and businesses.

Performance (results achieved)

The University has made important strides in expanding the number of patents applied for and received (41 received in F.Y. 1989), the number of new processes licensed (about 20 per year), and in developing a system of communication to link faculty expertise with organizations outside the University (Minnesota Project Outreach, jointly funded by the University, the Greater Minnesota Corporation, and the Minnesota Department of Trade and Economic Development).

To single out just 1 additional public service program, loans from University Libraries to other libraries have increased by 45%, from 123,000 to 180,000 over the past 5 years. During this 5 year period, the University Libraries led the nation in providing such access to its collections. An estimated 60% of these loans were to libraries within Minnesota; many of the additional loans were to neighboring states.

Prospects (future issues)

Among other notable technology transfer programs, by F.Y. 1993 the Microelectronic and Information Sciences Center will have a full-functioning fabrication line for specialized silicon computer chips, in addition to the fabrication facilities already established. The new facility will be used for industrial collaboration, as well as education and faculty research. In general, the University's technology transfer and outreach programs are developing well and can be projected to provide increasingly effective services to the state.

However, the external funding environment is of increasing concern; the prospect for the coming biennium, given pressures to control the federal deficit, is bleak. Federal science agencies are likely to face stringent budgetary restrictions in the coming biennium; as a result, those programs which depend on federal funds, and which typically obtain several dollars of federal funding with each dollar of state "seed" funding provided, may face a lower yield. The results, however, will still be well worth the investment.

PROGRAM: Noninstruction
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

Plan (decisions)

Opportunities for increased technology transfer and for other service programs with a direct impact on the state economy and the health of its citizen, are compelling, yet the limitations imposed by federal funding cutbacks, and the need to absorb the effect of price level increases within base budgets, could mean that we will reduce services at the very time they are needed most.

The University will commit continually to improve the measurable outcomes of its public service units which receive funding increases. In particular, interlibrary loans will be continually expanded to better serve the needs of the state.

BUDGET REALLOCATION DECISIONS:

(Dollars in Thousands)
F.Y. 1992 F.Y. 1993

1. Reduction of ICR offset. \$ 6,500.0 \$ 6,500.0

The University proposes the remaining offset to appropriation for indirect cost recovery be eliminated. It is further proposed that this elimination not reduce the overall spending plan.

GOVERNOR'S RECOMMENDATIONS:

The Governor recommends a direct state appropriation of \$382,866,000 in the 1992-93 biennium for non-instructional activities at the University of Minnesota, including the non-instructional program and special appropriations. The recommendation represents a general reduction of \$19,024,000 in direct appropriation for the biennium. The Governor recommends that the appropriation reduction be allocated among both the Non-Instructional Program and the four Special Appropriations.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: NON-INSTRUCTION

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
NON-INSTRUCTION	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482
TOTAL EXPENDITURES BY ACTIVITY	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482
DETAIL BY CATEGORY:									
STATE OPERATIONS	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482
TOTAL EXPENDITURES BY CATEGORY	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	96,562	111,777	117,098	115,753	115,753	106,241	115,753	115,753	106,241
STATUTORY APPROPRIATIONS:									
GENERAL	12,673	11,662	11,241	11,241	11,241	11,241	11,241	11,241	11,241
TOTAL FINANCING	109,235	123,439	128,339	126,994	126,994	117,482	126,994	126,994	117,482

ACTIVITY:
 PROGRAM: Noninstruction
 AGENCY: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: General Reduction - Noninstruction

Dollars in Thousands			
F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995

GOVERNOR'S RECOMMENDATION:

Direct Appropriation				
General Fund	\$ (9,512)	\$ (9,512)	\$ (9,512)	\$ (9,512)
Total Expenditures				
General Fund	\$ (9,512)	\$ (9,512)	\$ (9,512)	\$ (9,512)

Requires statutory change: _____ Yes X No

ITEM SUMMARY:

This item reduces state direct appropriation to the University of Minnesota's noninstructional program and special appropriations by \$19,024,000 for the 1992-93 biennium. The Board of Regents would be responsible for allocating the reduction among programs and/or institutions.

The Governor intends that the general reduction be allocated among both the non-instruction program and the four Special Appropriations.

RATIONALE:

Noninstructional activities include any activities not directly related to credit-granting instruction. Community service, research, intercollegiate athletics, and financial aids are among the items classified as noninstructional. The University of Minnesota's non-instructional budget includes both the non-instructional program and Special Appropriations.

Noninstructional expenditures represent 35% of the University's total General Fund expenditures. Though noninstructional activities are not financed with tuition, many are subject to client charges or user fees. In addition, the General Fund noninstructional budget reflects only a portion of the University's total non-instructional activities. In some cases the University of Minnesota receives non-General Fund revenues for activities which are also supported by state direct appropriation. Constrained state resources require that the University of Minnesota refocus its noninstructional priorities or seek alternative financing.

PROGRAM: Special Appropriations, Agricultural
Agency: Minnesota, University of

1992-93 Biennial Budget

Outcomes

PROGRAM PURPOSE:

This special appropriation is the result of the action taken by the 1989 legislature to combine the specials for the Agricultural Experiment Station (AES) and the Minnesota Extension Service (MES). AES and MES are long-standing legislative specials within the University of Minnesota budget. AES and MES have an impressive history of helping fulfill the land-grant mission of the University of Minnesota. That the University of Minnesota recognizes this significant role for AES and MES was illustrated by the fact that they were the only specials targeted for increased funding in the 1988 document, Academic Priorities.

This special appropriation provides core support for units of the Institute of Agriculture, Forestry, and Home Economics; 60% of the faculty members in the 3 major colleges of the Institute (Agriculture, Natural Resources and Human Ecology) are paid by the state special. Through the unique land-grant partnership with federal, state, and local funding, AES and MES conduct mission-oriented research and relevant, research-based informal education that is sharply focused on the issues facing Minnesotans where they live and work.

PERFORMANCE:

Refer to project performance.

PROSPECTS:

Refer to project prospects.

PLAN:

The \$1,500,000 request for the Agriculture and Extension Service Special reflects critical funding needs to address Minnesota's economic competitiveness, human needs and environment.

In addition to new funding, the plan includes a transfer of base funding from DNR - Division of forestry for the Paper Science and Engineering Program (\$400,000) and for the Aspen/Larch Genetics Research Program (\$300,000).

AES and MES research and outreach educational programs have a tradition of focusing on the competitiveness and profitability of Minnesota's agriculture. The economy of Minnesota and the welfare of its citizens are heavily dependent on the agriculture industry. Increased funding will provide for additional research and outreach efforts to address some of the major issues related to agricultural competitiveness and rural economy. Adequate funding is also sought to address the changing research needs and expansion of interest in aquaculture.

A major and growing concern in Minnesota is youth and families at risk. This proposal includes development of a University-wide consortium to address the research issues of children, youth and families at risk and a coordinated, community oriented educational program sharply focused on locally identified problems.

To meet the emerging concerns of Minnesotans and to fulfill continuing expectations for traditional programs, the Minnesota Extension Service must be able to provide adequate staffing and support. Additional funding would help to provide minimal staffing in depleted areas and financial support for salaries and financial support for salaries and fringe benefits.

Environmental quality is a continuing priority concern of Minnesotans. The programs of the Institute of Agriculture, Forestry and Home Economics are uniquely positioned because of the research base, access to other University units, and trained educators in every county, to provide the educational component to help Minnesotans to make responsible, informed decisions. Additional funding will enhance programs in water quality, waste management and sustainable agriculture. Other examples include expanded research and outreach efforts in areas such as Food Safety and Cold Climate Housing.

These new resources will increase and enhance the ability of the University to respond with additional research and educational programs to the critical issues facing Minnesotans. The goal is to combine new resources, continuing internal reallocations, and externally leveraged funding to provide maximum flexibility in dealing with issues such as those outlined above.

Within the Agricultural Experiment Station, the dollars will be allocated through internal competitive granting mechanisms and/or channeled through Centers or Center concepts which focus on the highest priority basic and applied research needs. Within the Minnesota Extension Service, funds will be utilized to provide basic programming and short-term staffing and support for the highest priority issues named above. Without this additional funding, MES will be unable to meet the demand being placed on its staff for these critically important issues.

The ultimate outcome will be reflected in additional research based, outreach educational programs focused on the critical needs of Minnesotans. The specific issues emphasized will be dependent on the relative priority of the issue and the ability to leverage other sources of funding to address the most critical needs.

The transfer of funds from DNR will continue an expanded research program related to increasing the use of recycled paper, modifications to the paper making processes to enhance fiber recycling, and developing fast growing and disease resistant aspen and larch hybrids to support the timber supply needs of Minnesota's expanding forest products industry. The DNR supports the transfer of these funds which were initially appropriated as a result of a Governor's initiative and special legislative action in the 1989 session.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
AES		
State Special	\$28,000.0	55%
State, Other	4,000.0	8%
Federal Appropriation	5,000.0	10%
Federal Grants	5,000.0	10%
Private Gifts, Grants	7,000.0	14%
Income	<u>1,900.0</u>	3%
Total	\$50,000.0	
MES		
State Special	\$17,000.0	44%
Federal	9,000.0	23%
County	9,000.0	23%
Income	<u>5,000.0</u>	10%
Total	\$40,000.0	

PROGRAM: Special Appropriations, Agricultural
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

Listed below by project are the needs for support by special appropriation for the 1991-93 biennium.

	Requested Appropriation (Dollars in Thousands)			1992-93 Biennium
	F.Y. 1991	F.Y. 1992	F.Y. 1993	
Minnesota Extension Service	\$15,867.0	\$15,867.0	\$15,867.0	\$31,734.0
Agricultural Experiment Station	28,261.0	28,261.0	28,261.0	56,522.0
New Initiatives		750.0	750.0	1,500.0
MES Safety Project	74.0	74.0	74.0	148.0
Total	\$44,202.0	\$44,952.0	\$44,952.0	\$89,904.0
Base Adjustments		391.0	391.0	782.0
Anticipated Reallocations	(490.0)	(910.0)	(910.0)	(1,400.0)
Agency Plan per BBS	(44,593.0)	(44,593.0)	(44,593.0)	(89,186.0)
Additional Needs (reductions)		\$ 260.0	(\$ 160.0)	\$ 100.0

PROJECT DETAILS:

MINNESOTA EXTENSION SERVICE (MES)

Purpose (objectives)

The Minnesota Extension Service is a major outreach arm of the University of Minnesota that offers relevant, research-based, informal education to people of all ages throughout the state, in cooperation with county, state, federal and private partners. MES programs educate the people of Minnesota in a very practical way--where they live and where they work. MES educates youth and adults to help them earn a living, cope with problems, tackle tough issues, and develop into leaders.

Minnesota's Extension Service began in 1909, 5 years before the federal Smith-Lever Act of 1914 provided support for extension work in agriculture and home economics at land-grant colleges nationwide through the U.S. Department of Agriculture. Today, MES county and state staff and more than 50,000 extension volunteers teach state residents to turn research-based information into tools for bettering their lives.

MES programs focus on people and aim at the central issues affecting their lives. The framework for focusing and prioritizing programs is prescribed more by the major concerns of the times than by the occupation or location of clients, by subject matter, or administrative boundaries, or by program traditions of the past.

Performance (results achieved)

MES programs are looked upon as a national model for innovative issue-based programming. They address a broad range of issues facing the citizens of Minnesota. These issues emerge from an assessment of needs conducted in each of the 87 counties, in each of the 18 MES clusters of counties, and by state extension faculty and staff. Seven issues were placed at the top of the MES agenda for action in 1990: Preserving Water Quality; Stimulating Community Vitality; Reducing Risks for Youth and Families; Sustaining Agriculture; Developing Leadership; Protecting the Environment; and Improving Nutrition and Health.

MES has been a leader in helping to preserve the state's fresh water supply, providing statewide water quality educational programs designed to help people adapt practices to balance economic considerations with concern for the environment. Educational programs in the area of production of food and fiber continue to be a strength. Tourism and community economic development through educational programs such as Project Future

continue to be requested across the state. Youth and Families at Risk is an issue of critical urgency. MES educational programs in areas such as poverty and nutrition, substance abuse, teen pregnancy, child care, parenting skills, teen stress and depression are making a difference. Educational programs in areas such as yard waste management, recycling, urban forestry, and numerous other areas are examples of the unique role MES plays in bringing research-based educational programs to the people of Minnesota where they live and work.

Prospects (future issues)

MES programs of the future will continue to be directed by the changing issues facing Minnesotans and the role Minnesotans expect their land-grant University to play in helping them deal with those issues.

Changes in demographics will continue to affect the priority setting process as MES continues to target programs to the issues facing Minnesotans. As our population becomes more concentrated in urban centers, traditional approaches and programs will continue to evolve. Increasing disparities in economic well-being will present increasing challenges to MES educational programming, from the standpoint of program design and delivery, as well as public support.

Federal appropriations provide a diminishing proportion of the operating budget for MES. Since 1980, the federal share of MES budget hasn't kept pace with the increased cost of faculty salaries and mandated fringe benefits. State appropriations have attempted to keep up, although increased state appropriations for salary only provide the state's share (44%) of increases. For the first time in the 80 year history of MES, our county partners, in spite of their fiscal constraints, are providing a larger share of the MES budget than the federal appropriation. The net result is that MES has had to reallocate internal funds by cutting back severely in staff and operating funds, amounting to a \$3.5 million net retrenchment, 80 full-time employee (FTE) positions.

Demand for traditional programming in agricultural production, youth development, and family concerns continues to increase. Continuing and emerging issues demand the attention that research-based educational programs can offer. Tremendous opportunities exist for increased efforts in issues such as ground and surface water quality, recycling and solid waste management, youth and families at risk, leadership development, public policy education, tourism, and economic development.

MINNESOTA AGRICULTURAL EXPERIMENT STATION (AES)

Purpose (objectives)

The Minnesota Agricultural Experiment Station is considerably more than the name implies. The Station organizes and supports research on the production, processing, marketing, distribution, and quality of food and other agricultural products. Other significant research efforts focus on forests and forest products, human nutrition, family and community life, recreation and tourism, and overall environmental quality in Minnesota.

The Minnesota Agricultural Experiment Station was established by the state legislature in 1885, 2 years before Congress allocated funds to establish agricultural experiment stations at land-grant universities in each of the states.

The Station's research projects range from the very basic to the highly applied, and all are mission oriented. The emphasis is on quality research that meets the long- and short-term needs of Minnesota and its people.

Station scientists conduct their work in over 30 departments across the colleges of Agriculture, Human Ecology, Natural Resources, Veterinary Medicine, Biological Sciences, and Architecture and Landscape Architecture. In addition, station scientists conduct applied research at St. Paul, Rosemount, the branch stations at Grand Rapids, Crookston, Morris, Lamberton and Waseca, the Cloquet Forestry Center, the Landscape Arboretum, the Horticultural Research Center, and numerous cooperative "off-station" locations.

PROGRAM: Special Appropriations, Agricultural
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

GOVERNOR'S RECOMMENDATIONS:

The Governor does not recommend an increase in the Agricultural Special Appropriation for the 1992-93 biennium. The Governor recommends that the University allocate a portion of the general reduction for non-instructional activities among the Special Appropriations.

Performance (results achieved)

As an integral contributor to the 3-fold mission of the land-grant University system--teaching, research, public service--the Agricultural Experiment Station has helped sustain the development and economic viability of our agriculture, forestry, and related industries. For example, most of the crops grown in Minnesota are derived from genotypes developed at AES. In addition, significant contributions in areas such as aging, youth and families, human nutrition and health, housing, aquaculture, recycling, urban forestry, economic vitality of communities, environment, and other issues facing Minnesotans have been made by scientists funded by the Agricultural Experiment Station. One of the strengths of the Station is the integration of faculty involved in research, teaching, and extension. The AES also provides a unique opportunity to support interdisciplinary approaches to research problems. This legislative special provides the core financial support to carry out our land-grant mission, and the funding leverages a large amount of external funds.

Station scientists contribute to the development of new knowledge within their respective disciplines, as well as to interdisciplinary efforts through Centers. In these settings, scientists from various disciplines bring their collective expertise to bear on current issues. Some notable examples of this approach include the Center for Cold Climate Housing, the Center for Agricultural Impacts on Water Quality, the Center for Youth Development and Research, the Center for Natural Resources Management and Policy, the Center for International Food and Agricultural Policy, Small Business Development Center, Tourism Center, the Center for Alternative Crops and Products, the Swine Center, and the Center for Farm Financial Management.

Prospects (future issues)

Funding is a critical issue facing AES. For the past several years federal funding has steadily declined in real terms. At the same time, salary increases and increases in the cost of fringe benefits (20-29% over 5 years) have outpaced the appropriations received. Since payroll and fringe benefits account for nearly 90% of the total AES budget, the result has been continuing retrenchment and reallocation. In F.Y. 1990-91 further reductions were made to cover the rescission in the state special. This meant retrenching additional positions, as well as further reductions in operating budgets.

An additional challenge is the changing nature of funding. Good basic research requires a long-term effort and financial commitment. More and more research dollars are being shifted to short-term, "soft" funding sources. This puts increased pressure on the system to maintain an appropriate blend of basic and applied research.

Another challenge is from other agencies and organizations seeking to become research institutions. As the only state institution charged with the land-grant mission, the parceling out of research funds to other agencies during periods of state and federal retrenchments is of great concern to us.

There are increasing demands to pay more attention to environmental and social implications of research. Two examples are genetic engineering and Genetic Environmental Impact Statements. Those collaborative efforts require financial support on a continuing basis to make them successful.

New demands and exciting new challenges do not lessen the necessity of on-going maintenance research. Agriculture and Natural Resources involve biological and, consequently, dynamic processes. Continued research and development is even necessary for well-established commodities such as trees, corn, or cattle.

However, opportunities exist for additional basic and applied research in several new and exciting areas such as youth and families, solid waste management, recycling, water quality, public policy and many others. The potential economic and social returns of these research efforts are tremendous. It has been shown that appropriate investment in research will pay handsome dividends.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: AGRICULTURE

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
AGRICULTURE	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL EXPENDITURES BY ACTIVITY	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
DETAIL BY CATEGORY:									

STATE OPERATIONS	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL EXPENDITURES BY CATEGORY	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
SOURCES OF FINANCING:									

DIRECT APPROPRIATIONS:									
GENERAL	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593
STATUTORY APPROPRIATIONS:									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL FINANCING	40,090	43,448	44,202	44,593	44,593	44,593	44,593	44,593	44,593

PROGRAM: Special Appropriations, Health Sciences
 Agency: Minnesota, University of

1992-93 Biennial Budget

Budget
 (Dollars in Thousands)
 F.Y. 1990 F.Y. 1991 (est.)

PROGRAM PURPOSE:

The Health Sciences State Special includes 7 components, 4 of which involve public service, while 3 support research. Several of these have a long history dating back to the early 1900s. The most recent, Biomedical Engineering Center, was established by the 1989 legislature. The intent and purpose of special appropriations has been to support unique projects in areas of research and public service.

PERFORMANCE:

Refer to project performance.

PROSPECTS:

Refer to project prospects.

PLAN:

The Health Sciences Special Appropriation will be distributed to the following projects, resulting in an additional need of \$100,000 for the biennium. The additional need reflects anticipated reallocations.

	Requested Appropriation (Dollars in Thousands)			1992-93 Biennium
	F.Y. 1991	F.Y. 1992	F.Y. 1993	
Indigent Patients	\$ 330.0	\$ 330.0	\$ 330.0	\$ 660.0
Hospital Educational Offset	10,833.0	10,833.0	10,833.0	21,666.0
Rural Physician Associate Program	889.0	889.0	889.0	1,778.0
Veterinary Diagnostic Laboratory	1,816.0	1,816.0	1,816.0	3,632.0
Biomedical Engineering Center	625.0	927.0	1,023.0	1,950.0
Human Genetics Institute	338.0	338.0	338.0	676.0
Medical Research	2,735.0	2,735.0	2,735.0	5,470.0
Total	\$17,566.0	\$17,868.0	\$17,964.0	\$35,832.0
Base Adjustments	(174.0)	(174.0)	(174.0)	(348.0)
Anticipated Reallocations	(210.0)	(390.0)	(600.0)	(600.0)
Agency Plan per BBS	(17,392.0)	(17,392.0)	(34,784.0)	(34,784.0)
Additional Needs		\$ 92.0	\$ 8.0	\$ 100.0

Included in the distribution is an increase of \$700,000 of state support for the 1991-93 biennium would enable the Biomedical Engineering Center to hire additional faculty in 2 major areas--molecular design and engineering. Both areas are critical in solving the problems in biocompatibility and molecular design and engineering of new molecules that will have a beneficial impact on the body's response to materials and implanted devices.

The requested funds would be spend in the following manner:

Structural Chemist	\$ 85.0	\$ 89.0
Fringe	25.0	27.0
Chemical Engineer	50.0	52.0
Fringe	15.0	15.0
Computational Chemist		85.0
Fringe		25.0
Mechanical Engineer	50.0	52.0
Fringe	15.0	15.0
Civil Service Support Staff	25.0	26.0
Fringe	6.0	6.0
Equipment	25.0	
Supplies	6.0	6.0
Total	\$302.0	\$398.0

PROJECT DETAILS:

PUBLIC SERVICE

INDIGENT PATIENTS

Purpose (objectives)

The purpose of these funds is to assist counties paying for medical care for indigent patients by the University Hospital and Clinic. Origins date back to the early 1900s, when the University Hospital was the only tertiary care referral facility for the state. Over the years, with emergence of other federal and state supported social assistance programs, there has been a decline in the number of patients referred and treated under this program.

Performance (results achieved)

This biennium, the University Hospital and clinic will serve 400 inpatients and 1,600 outpatients from 60 counties who do not qualify for medical care under any other social assistance program.

Prospects (future issues)

As a result of declining use in recent years, as well as budget reductions, the legislative appropriation for this program has been reduced to a level that no longer meets the demand. The need to provide medical care to indigent patients who do not qualify under other programs will continue. Because of the research and teaching components, the University Hospital and Clinic has the facilities and staff necessary to deal with unique and difficult cases.

Plan (decisions)

For the past 3 years the number of referrals and cost of providing care have exceeded the available appropriation. The hospital has absorbed an actual loss in excess of \$300,000 per year, and a similar result is projected for the current fiscal year.

As a state supported institution, the hospital is obligated to accept county-referred patients. If additional state support is not available, the hospital will work closely with county social services to review each referral in order to keep losses to a manageable level.

PROGRAM: Special Appropriations, Health Sciences
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$315.0	\$330.0
External - counties	241.0	259.0
Hospital loss	305.0	328.0
Total	\$861.0	\$917.0

HOSPITAL EDUCATION OFFSET

Purpose (objectives)

The University Hospital and Clinic form the core of a complex academic medical center that, in addition to providing patient care, also provides extensive teaching and research programs for the training of nearly 4,600 students enrolled in a number of Health Sciences programs, as well as graduate residency and post graduate medical training. Operating an academic medical center requires providing many expensive programs and services that are not found in a traditional community hospital.

The University Hospital and Clinic serves as a regional and national resource and referral center. Since the additional costs associated with operating an academic medical center cannot be fully recovered through patient charges, the state of Minnesota has recognized and provided support in the form of a special appropriation.

Performance (results achieved)

In F.Y. 1990, the University Hospital and Clinic admitted 18,420 patients and saw a total of 267,000 patients in the outpatient clinics. In addition to the 1,036 residents and 937 medical students, the Hospital and Clinic provides teaching opportunities for more than 600 allied health care students in areas such as occupational therapy, physical therapy, and medical technology. The students enrolled in Health Sciences professional schools of Pharmacy, Dentistry, Nursing and Public Health also utilize the Hospital and Clinic.

Prospects (future issues)

In today's highly competitive health care delivery market, the emphasis is on reducing costs and increasing efficiency. Third party payers are no longer willing to pay for expenditures not directly related to patient care.

Since this is a general, non-designated appropriation, the Hospital uses the funds to support areas of costs not typical of hospitals with whom it must compete. Typically these funds offset costs associated with residency and allied health programs and for programs that, because of low volumes of service, specialized needs, or developmental nature, must be supported to be cost competitive. These programs are essential to the broad based academic mission of the Health Sciences.

Plan (decisions)

If the Hospital is to remain economically viable in an increasingly competitive marketplace, it cannot assume additional burdens associated with educational and research costs. Maintaining base level funding for the coming biennium will require the Hospital to reduce costs or services; every effort will be made to limit the adverse effects on patient care and the training of health care professionals.

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$10,486.0	\$10,832.0
State - O & M	4,939.0	5,024.0
Total	\$15,425.0	\$15,856.0

RURAL PHYSICIANS ASSOCIATE PROGRAM (RPAP)

Purpose (objectives)

The Rural Physician Associate Program was established by the 1970 legislature in response to an acute shortage of family care physicians in greater Minnesota. The purpose of the program is to provide selected third year medical students an opportunity to spend one year of their clinical training in a rural practice setting. This experience has been shown to influence and reinforce choice of a primary care specialty and subsequent practice in rural and geographically isolated communities.

Performance (results achieved)

Since its inception, the program has enrolled 582 medical students. Of these, 413 are currently in medical practice, with a majority in rural communities.

At the present time, a total of 25 third-year medical students are enrolled in the program. In recognition of past success, and in an effort to increase the number of participants to 30, the 1990 legislature increased the appropriation by \$200,000. In addition to providing necessary stipends for 5 new students, the additional funding will allow increasing existing stipends from \$7,000 to \$9,000 per year, as well as a modest increase in faculty, support, and related expenses.

The Department of Family Practice in the Medical School is recognized as one of the most successful in the nation in graduating large numbers of family physicians. Programs such as RPAP are instrumental in that success.

Prospects (future issues)

It is clear that providing quality health care to rural communities continues to be a major problem. In addition to programs such as RPAP, the University will bring new initiatives to address the rural health care issue to the 1991 legislature.

Plan (decisions)

The program is currently recruiting an additional 5 students, as directed by the 1990 legislature. The possibility of base level funding for the coming biennium would require reduction in administrative expenses. It is unlikely that these savings would be at the expense of student stipends or other areas that could jeopardize the goal of increasing participation level to 30 students.

PROGRAM: Special Appropriations, Health Sciences
(Continuation)
Agency: Minnesota, University of

1992-93 Biennial Budget

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$609.0	\$839.1
Private (Hospital)	38.0	38.0
Dept. of Health (contract)	.0	45.0
Total	\$647.0	\$922.1

VETERINARY DIAGNOSTIC LABORATORY (VDL)

Purpose (objectives)

The Veterinary Diagnostic Laboratory was established in 1904 in the Agricultural Experiment station to provide essential animal health services to the state's livestock and poultry industries. Since 1947, the laboratory has been administered by the College of Veterinary Medicine and serves as the official laboratory of the Minnesota Board of Animal Health. The primary goal of the laboratory is to help reduce loss from disease in the state's livestock, poultry, companion animals, and wildlife, and to help protect human health by identifying animal diseases that are transmissible to man through animal contact or food of animal origin.

Performance (results achieved)

Animal specimens submitted by their owners or attending veterinarians are evaluated to identify animal diseases so that control measures can be implemented. The laboratory is certified to conduct official tests for diseases required by other states and foreign nations prior to importation of animals from Minnesota. It is anticipated that during the current year, specimens will be received from about 38,100 cases of animal disease, requiring an estimated 403,500 laboratory procedures.

Prospects (future issues)

The VDL has played a major role in the eradication of several important diseases. The laboratory continues to monitor for occurrence of these diseases in order to protect the animal and poultry industry. It is estimated that the livestock and poultry industry generates annually approximately \$5 billion in gross revenues, contributing approximately \$15 billion to the gross annual product of Minnesota. With the authorization by the 1990 legislature of a new laboratory facility and renovation of existing laboratories, the VDL can look forward to safe facilities to continue these essential services.

Plan (decisions)

Historically, operation of the Veterinary Diagnostic Laboratory has been funded through a combination of the special state appropriation and laboratory service fees. Over the past several years, the Diagnostic Laboratory has been faced with increasing costs that could not be covered through increased fees. The 1989 legislature recognized the problem and increased the state special appropriation.

Limiting the laboratory to a base level budget would cause considerable difficulties. One option would be to explore increasing the fees charged for service. The laboratory periodically monitors its fee schedule to insure that it remains in a competitive position with neighboring states. To the extent that additional revenue can be generated by a fee increase, these funds will not be available for operating budget. In accordance with the 1990 bonding bill, the laboratory must assume obligation for one-third of the debt service associated with the newly authorized laboratory.

Operating under a base line budget will result in limiting the Laboratory's ability to provide services in the most economical and efficient manner.

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$1,612.0	\$1,808.5
Fee Income	793.0	834.0
Total	\$2,405.0	\$2,642.5

RESEARCH

BIOMEDICAL ENGINEERING CENTER (BMEC)

Purpose (objectives)

The Center was established in 1989, with funding provided by the legislature, private industry, and various segments of the University. It represents a multidisciplinary entity that in cooperation with private industry, will advance research and lead to development of new materials and technologies. The Center incorporates the strengths of the University and provides a valuable resource to the more than 300 industrial firms in the state of Minnesota engaged in the development and manufacture of medical devices and equipment. The manufacture of medical devices and equipment, combined with medical care delivery, make this the leading segment of the state's economy.

Performance (results achieved)

Since the 1989 legislative session, the Health Sciences have identified 3,200 square feet of space that has been remodeled into research laboratories to house Phase I of the Center's development. The remodeling cost of \$400,000 was paid from internal sources. Work is currently underway to remodel an additional 4,100 feet for Phase II. Again, the estimated cost of \$700,000 will be funded from internal sources. To date, the private sector has pledged a total of \$2.0 million, with additional resources becoming available as the Center achieves full development.

A director has been appointed, and a number of core faculty have been recruited. A search is underway to fill the endowed Bakken chair, as well as an additional 6 to 8 faculty positions.

Prospects (future issues)

The Center is an inter-departmental program, involving faculty from a broad spectrum of the University, and it presents a unique opportunity for the University to provide meaningful interaction among biological scientists, engineers, and physicians. The general themes of the Center are technology transfer, with emphasis on Biomedical Engineering, development of new materials for implanted medical devices that the body will not reject, and molecular modeling. The Center is expected to serve as a national model for biomedical innovation. The biotechnology industry in Minnesota provides a superb environment for this effort and a rapidly growing demand for graduates who are educated and prepared to assume future roles in this industry. The University, the Medical School, and the Institute of Technology have identified Biomedical Engineering as one of the few priorities for development over the next decade. The resources available to support the core program have permitted a strong start for the Center, but in order to reach its full potential, additional state and private funds will be required.

Plan (decisions)

Biomedical Engineering is a highly competitive and rapidly evolving area. Maintaining the established momentum and delivering the products in research and education that BMEC has promised the community and the legislature will require an increase in state support.

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	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$175.0	\$ 333.0
Non-recurring	600.0	1,365.0
Total	\$775.0	\$1,698.0

HUMAN GENETICS INSTITUTE

Purpose (objective)

The Institute of Human Genetics was established in 1985 to recruit a critical mass of core faculty with expertise in advanced molecular genetic technologies and interests. The Institute's primary goal is to provide the technologies necessary for understanding the structure, function, and expression of human chromosomes and genes for the prevention, diagnosis, and therapy of inborn and acquired genetic disorders. These developments and their applications affect the genetics of human as well as other animal species. The Institute follows an interdisciplinary approach, with a team of faculty members in molecular, clinical, and behavioral genetics working on the development and application of these technologies.

Performance (results achieved)

The first phase of development included locating and remodeling 10,000 square feet of research and support space, recruiting the core academic and support staff, establishing an all-University Microchemical Facility, establishing a clinically oriented Molecular Diagnostic laboratory, forming a Gene Therapy Program, and starting new educational training opportunities for pre- and post-doctoral students. Phase II, which is currently underway, involves remodeling an additional 8,000 square feet of laboratories and support space to house additional faculty being recruited.

Prospects (future issues)

Implementation of Phase II will require additional support in order to expand research efforts and recruit additional faculty. As a part of its mission to work closely with research and clinical departments, the Institute is seeking the necessary resources to add 3 new faculty.

One of the new additions would be a medical oncologist who would work in close cooperation with the Department of Medicine. Another position would work in close collaboration with the Department of Pediatrics in the area of molecular and developmental genetics. The third position is a population geneticist who will work in close collaboration with the Department of Laboratory Medicine. This individual will have expertise in human gene mapping and segregation analysis and will serve an important function in analyzing families for genetic predisposition to a variety of diseases. In addition to these faculty positions, the Institute will hire several junior faculty.

Plan (decisions)

The research programs will continue to expand, including areas directly related to human genetic problems and genes that play a role in aging, cancer, neurological disorders, normal and abnormal behavior and immunological disorders. The technological base that has been developed has improved existing techniques and strategies for diagnosis, management, and repair of disorders of genetic origin. The Institute is continually transferring this technology base to other units at the University to aid in the development of other programs.

The development of the Institute has progressed in a planned and phased manner. The lack of continuing support would delay that schedule. Maintaining a base level budget would prevent initiation of new research

projects and/or require reduction in existing projects.

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$ 598.0	\$ 625.0
External (federal)	1,064.0	1,111.0
Recurring	75.0	120.0
Non-recurring	0.0	1,875.0
Total	\$1,737.0	\$3,731.0

MEDICAL RESEARCH

Purpose (objective)

The Medical Research program consists of 7 distinct subprograms, most of which existed as individual specials prior to their consolidation into a single special by the 1973 legislature. These are cancer research, dental research, psychiatry, neurology, cystic fibrosis, environmental pathology, and the Center for Health Services Research. Although the 7 programs represent a diverse group of disciplines, their common purpose is support of the research mission of the University.

Performance (results achieved)

The medical and cancer research programs administered through the Graduate School will serve to illustrate the benefits of state support for research programs. This portion of the special is used to provide a modest amount of funding to young faculty to assist them with development of promising research proposals. The following figures illustrate the manner in which these funds are applied.

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
Grant proposals received	96	100
Dollars requested	\$1,320.0	\$1,400.0
Grants awarded	49	50
Dollars awarded/available	\$536.0	\$544.0

Although the average grant totals approximately \$11,000, this provides an essential source of support in launching research careers of young faculty members. In some instances, these funds may also be used to provide interim funding for a productive faculty member between conclusion of an existing project and securing funding for a new project. As a result, the returns to the state have been multiplied many times. The same holds true for the other 6 subprograms which also generate a significant amount of outside funding.

Prospects (future issues)

Competition for research grants is becoming increasingly intense, and it is possible that there may be a reduction of research funding at the Federal level. The availability of this research special provides the Health Sciences with a necessary degree of flexibility in responding to major changes in funding.

Plans (decisions)

It is not possible to anticipate what changes may occur in the distribution of these funds. However, maintaining a base level budget would result in reducing the amount or number of start-up grants or reduced

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levels of activity in the other subprograms.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
State Special	\$ 2,533.0	\$ 2,620.0
Federal	6,314.0	7,500.0
Private	1,956.0	2,796.0
Non-recurring	93.0	132.0
Recurring	<u>0.0</u>	<u>200.0</u>
Total	\$10,896.0	\$13,248.0

GOVERNOR'S RECOMMENDATIONS:

The Governor does not recommend an increase in the Health Sciences Special Appropriation for the 1992-93 biennium. The Governor recommends that the University allocate a portion of the general reduction for non-instructional activities among the Special Appropriations.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: HEALTH SCIENCE

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
HEALTH SCIENCE	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
TOTAL EXPENDITURES BY ACTIVITY	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
DETAIL BY CATEGORY:									
STATE OPERATIONS	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
TOTAL EXPENDITURES BY CATEGORY	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	15,278	16,387	17,566	17,392	17,392	17,392	17,392	17,392	17,392

PROGRAM: Special Appropriations, Institute of Technology
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PROGRAM PURPOSE:

The 1989 legislature consolidated those State Specials administered by the University of Minnesota Institute of Technology into a single program appropriation in support of special technological purposes deemed of great interest to the State.

PERFORMANCE:

Refer to project performance.

PROSPECTS:

Refer to project prospects.

PLAN:

Listed below by project are the needs supported by special appropriation for the 1992-93 biennium.

	Requested Appropriation (Dollars in Thousands)			1992-93 Biennium
	<u>F.Y. 1991</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	
Microelectronic and Information Sciences Center	\$ 790.0	\$ 790.0	\$ 790.0	\$1,580.0
Minnesota Geological Survey	1,212.0	1,212.0	1,212.0	2,424.0
Mineral Resources Research Center	981.0	981.0	981.0	1,962.0
Productivity Center	376.0	376.0	376.0	752.0
Talented Youth Mathematics Program	328.0	328.0	328.0	656.0
Underground Space Center	224.0	224.0	224.0	448.0
Total	\$3,911.0	\$3,911.0	\$3,911.0	\$7,822.0
Base Adjustments	(306.0)	(306.0)	(306.0)	(612.0)
Anticipated Reallocations	(70.0)	(130.0)	(200.0)	(400.0)
Agency Plan per BBS	(3,605.0)	(3,605.0)	(7,210.0)	(14,420.0)
Additional Needs (reductions)	(\$ 70.0)	(\$ 130.0)	(\$ 200.0)	(\$ 400.0)

PROJECT DETAILS:

MICROELECTRONICS & INFORMATION SCIENCES CENTER (MEIS)

Purpose (objectives)

The Microelectronic and Information Sciences (MEIS) Center provides the focus for microelectronics and related activities of the University. The mission of the Center is to manage the very modern, ultra-clean new Microelectronics Laboratory housed in the new Electrical Engineering and Computer Science Building for education and research in microelectronics.

Performance (results achieved)

In previous years, the MEIS Center provided research support for faculty of the Institute of Technology, and was extremely successful. Currently, MEIS manages the new Microelectronics Laboratory. It is setting up a Silicon 4" diameter wafer processing line for specialized chips, both for education and research; establishing of a Gallium Arsenide process for the fabrication of very high speed digital and analog devices and circuits,

the fabrication of optoelectronic devices and circuits; the establishment of epitaxial growth systems for semiconductor materials; and providing facilities for particle technology research in microelectronics circuit and device manufacture.

These tasks should be completed by the end of F.Y. 1991. The Center also provides fellowships for undergraduates in the Semiconductor Manufacturing Program (funded by the Semiconductor Research Corporation).

Prospects (future issues)

During the period F.Y. 1992-93, the Center will have a state-of-the-art Microelectronics Laboratory.

We will invite industrial collaboration and structure the use of the new Silicon fabrication line for 4" wafers for the fabrication of specialized chips. We will also develop Silicon-Germanium device technology for very high speed circuits and develop the interface between these circuits and the slower silicon based circuits. We expect to become a very strong research center in the Silicon-Germanium area. Gallium Arsenide and Indium Phosphide device fabrication is currently established, and device and circuit research is expected to gather momentum. The epitaxial growth capability in this area together with the device and circuit fabrication facility provide a unique opportunity for research into high speed digital and high frequency analog circuits, and optoelectronic devices including lasers and integrated optical circuits. We also expect to become one of the major centers of research in these areas of microelectronics.

The Particle Technology Center continues its excellent research into the area of particulates in semiconductor device and circuit manufacture. The ultra-clean laboratory provides the necessary environment for this research, and as the circuit densities increase, this research becomes very important for low particulate generation and establishing testing techniques for particulate monitoring.

Plans (decisions)

The major expenditure to date has been in the acquisition and facilitation of necessary equipment. Since most of the equipment is in place, these costs will decrease considerably. Replacement of obsolete equipment will then become a major priority. The increased running and maintenance costs of the fully equipped laboratory will be offset by increases in user fees and industrial donations. Thus, level funding, together with increased charges will enable us to achieve our mission.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
State Special	\$ 735.0	\$790.2
Private	442.0	100.0
Other	70.0	100.0
Total	\$1,247.0	\$990.2

MINNESOTA GEOLOGICAL SURVEY (MGS)

Purpose (objectives)

The Minnesota Geological Survey is the state's primary geological agency, conducting basic and applied research on Minnesota geology and geophysics, providing information and advisory services and training undergraduate and graduate students in practical earth resources work.

The mission of the Minnesota Geological Survey, established in 1872, is to undertake and promote the scientific study of Minnesota's geology, groundwater, and mineral resources, and to make the results readily accessible to the public. Sound earth science information in understandable form is essential for wise management of natural resources, environmental protection, economic development, and public education regarding the geological environment in Minnesota.

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(Continuation)
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Performance (results achieved)

- In recent years, the Survey program has been extensively redirected to address state needs for technical information in the development and management of water and mineral resources and in environmental protection. The special appropriation provides the base for all MGS activities and is heavily leveraged by external state contracts.
- F.Y. 1991 activity levels represent substantial increases over prior years: 3,500 responses to public requests for geologic, groundwater, and minerals data; 14,000 new waterwell logs (paper copy) received and filed; 4,000 waterwell logs computer-coded for digital retrieval; geophysical logs for 50,000 feet of well sections acquired.
- As of August 1990, MGS had provided detailed technical review and comment for 26 local water plans.
- MGS provided extensive technical assistance in preparing the draft of state criteria and guidelines for assessing geologic sensitivity of groundwater resources in Minnesota.
- Funding from the Groundwater Protection Act of 1989 accelerated completion of the county geological atlases for Washington and Dakota Counties and has co-funded the Ramsey County atlas, begun in F.Y. 1991. Rice County has tentatively indicated support for a second atlas to begin in F.Y. 1991.
- With Legislative Commission Minnesota Resources (LCMR) support, MGS is mapping the geology and hydrogeology in the subcrop areas of the Prairie du Chien Group and the Jordan Sandstone to be used for study of the groundwater sensitivity of this major aquifer.
- MGS is doing geologic mapping and creating a computerized database for geology of the counties in the Anoka sand plain, under funding from the Groundwater Protection Act of 1989.
- With support from the Mineral Diversification Program, MGS is conducting bedrock mapping in Cook County, with scientific shallow drilling program there and in St. Louis County.
- MGS is upgrading the well-log database for the three most recently completed geologic atlases, including revised geologic interpretations made since logs were originally acquired in the 1970s. MGS is assisting counties in using computerized waterwell data.
- Groundwater Protection Act funding supported acquisition of ARC/INFO Geographic Information System (GIS) software and work stations to enable MGS to be fully compatible with state agency GIS activities.
- LCMR funding has supported completion of the state aeromagnetic survey and new gravity map for Minnesota, providing a regional geophysics database that is unique in the nation and that has attracted international acclaim.

Prospects (future issues)

Research and Data Collection. The Groundwater Protection Act of 1989 and the Mineral Diversification Program have led to significant advances in the production of county geologic atlases, regional groundwater sensitivity assessments, and regional geologic maps and scientific drilling. These activities address growing state needs for water management and economic development. They have led to spinoff discoveries, as when a potential buried valley aquifer was discovered during a mineral-related drilling program in southwestern Minnesota. The LCMR has made a preliminary recommendation that MGS receive \$800,000 from the Environmental Trust Fund for accelerated county atlas production in the next biennium, and MGS has proposed a continuation of Mineral Diversification activities in the DNR Minerals base budget. The DNR Waters base budget contains funds for atlas production and sensitivity mapping, but the amount to be allocated by DNR

to MGS in the next biennium is not yet determined.

Technical Assistance to Local and State Agencies, and the General Public. Given Minnesota's commitment to maintaining environmental quality and protecting groundwater supplies, the demand for geotechnical information about water wells and groundwater sensitivity will continue to increase. An "Atlas Service Office" has been included in the LCMR Trust Fund proposal to partially respond to this need, which cannot continue to be met by the special appropriation alone. For a period in F.Y. 1991, local water plan review at MGS was substantially delayed by a shortage of hydrogeologic staff, who were fully occupied with meeting accelerated deadlines for the county atlas program.

Plan (decisions)

In order to support payroll and operating expenses, the Survey is heavily leveraged by external contracts for special projects responding to state and local needs. Even if undergraduate and graduate student salaries are not considered, the cost increases attributable to inflation for MGS salaries and benefits alone are estimated to be \$110,000 for the next biennium. These increased costs will have to be managed by reducing personnel costs, delaying the completion of projects, and reducing services to the public such as waterwell advisory and interpretive services. This situation will also worsen the problems the Survey has already experienced in retaining key experienced staff.

Heavy reliance on external contracts subjects the Survey to substantial budget and programmatic uncertainty.

The Survey plans to meet 1992-93 objectives by obtaining funding from external contracts and by internal cutbacks to meet the lack of inflation increases in the special. However, in the long term, a constant special appropriation that is unadjusted for inflation will eventually create a hazardous imbalance of unpredictable, short-term contract support.

	Budget	
	(Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
O&M	\$ 8.0	\$ 0.0
State Special	1,035.0	1,075.0
Other State (e.g., LCMR)	542.0	1,690.0
Federal Research	20.0	44.0
Other	<u>82.0</u>	<u>59.0</u>
Total	\$1,687.0	\$2,868.0

MINERAL RESOURCES RESEARCH CENTER (MRRC)

Purpose (objective)

The Mineral Resources Research Center was established in 1911 as the Mines Experiment Station to carry out research related to the development of the mineral resources of the state. In 1978 MRRC was designated the Minnesota Mining and Mineral Resources Research Institute (MMMRRI) by Governor Perpich.

The mission of MRRC (including MMMRRI) covers the classical University missions of teaching, research, and service, including: undergraduate, graduate, and extension courses mineral/metallurgical engineers; fundamental research program in minerals; research develop advanced technology for mineral resource development and technology transfer activities to aid the utilization of the mineral resources of the state.

This mission is carried out through the activities of an Academic Group, a Technical Services Group, and a Research Group. The products of this program include trained personnel, technical information, and process technology to support the wise development of the mineral resources of Minnesota.

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(Continuation)
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Performance (results achieved)

In 1989 the Minnesota taconite industry produced approximately 40 million tons of taconite pellets with value over \$1,200,000,000, generating state revenues of approximately \$80,000,000. This industry is based on the taconite process developed at MRRC over the period 1915-1955.

On an annual basis MRRC is responsible for production of the Minnesota Mining Directory and the Minnesota Industrial Minerals Directory; organization of the University of Minnesota Mining Symposium; organization of a pre-Symposium Seminar for the mining industry; and contributions to the Minnesota Minerals Activities Forum.

During 1989 MRRC faculty and staff produced over 60 technical publications and project reports and a patent was filed for a direct smelting technology for iron making which could lead to the production of higher added-value products from Minnesota ore. LCMR has included \$500,000 in its F.Y. 1991-93 budget for further research into the new direct smelting technology.

Following an MRRC proposal to explore the potential for kaolin production, a program was funded by LCMR and managed by MRRC. This study stimulated exploration activities by 4 major kaolin companies. Continuing funding has been provided from the Minerals Diversification Program to explore the potential to produce higher value paper grade products.

The unique QEM*SEM facility was used extensively to support taconite related research both to seek higher quality taconite concentrates, and to identify details of phosphorus contamination. Work also continued in the ongoing QEM*SEM applications development program.

Technical support was provided to a small Minnesota business involved in the production of high purity silica for high tech applications.

Prospects (future issues)

Background: Minnesota provides over 50% of the iron ore fed to U.S. steel industry blast furnaces. However, continued international competition makes it imperative to maintain leadership in productivity and to seek higher added-value products. Minnesota also has a significant geological potential for the production of a wider range of mineral products. The prospects for continued contributions from MRRC are therefore excellent, given adequate support.

The Minnesota Minerals Diversification Plan authorized by the legislature and developed by the Minnesota Minerals Coordinating Committee calls for increased minerals research to: 1) improve and extend Minnesota's iron industry; 2) encourage exploration and development of non-ferrous metallic minerals; and 3) enhance Minnesota's industrial minerals industry. Leadership for the definition of research needs in the mineral sector was provided by MRRC.

Iron Ore: Major contributions have been made in the current biennium to identify the potential to produce higher grade taconite concentrates. Industry has supported site specific research and prospects for increased work for individual taconite operations are good.

An increasing amount of independent test work is anticipated as the industry establishes product specifications to meet transport and blast furnace performance criteria. MRRC can provide technical support at a level not available elsewhere in North America.

There is considerable international activity to seek direct smelting systems for iron making that would avoid

the problems associated with the conventional blast furnace/coke oven route. The University has filed patents on MRRC contributions to this field that address the problem from a regional resource development perspective, rather than from the viewpoint of the steel industry. State support of \$500,000 has been recommended in the LCMR F.Y. 1991-93 biennium budget, and a grant of \$700,000 is under review by the Iron Range Resources and Rehabilitation Board (IRRRB). Some industry funding has been contributed, and the prospects for a major cooperative program lasting several years are excellent.

Non-ferrous Metals: An MRRC discovery of significant platinum-group metal values in an old Duluth Gabbro drill core led to considerable recent industrial activity. MRRC has an ongoing program to identify the occurrence(s) and to carry out research related to concentration and extraction. The prospects for sponsorship for this research are good.

The Duluth Gabbro is host to one of the largest copper/nickel deposits in the world, but the nature of the deposit, relatively limited technical information, and an adverse economic climate precluded development. MRRC has carried out major pilot research on samples from this resource. Recent industrial developments in northeastern Minnesota have improved the potential for establishing a mining operation, and MRRC has excellent prospects for working with industry in this area.

Minnesota has considerable potential for the production of manganese. MRRC has a cooperative research program with the Twin Cities Laboratories of the U.S. Bureau of Mines on novel methods for mining and processing these resources. Prospects for increased support are good.

Industrial Minerals: In 1986 MRRC initiated a program to examine the potential for upgrading known kaolin resources in the Minnesota River Valley of southeastern Minnesota. MRRC currently has state support for further research, and the prospects for continued support are good.

Minnesota has extensive silica sand resources, and prospects exist for industrial support for mineralogical characterization and advanced mineral processing research.

Waste Technology: The management of municipal and industrial waste is a problem of increasing concern to society, and MRRC has established a program to bring the technical skills of mineral processing and extractive metallurgical engineering to bear on the treatment of solid wastes. This program has projects ranging from the development of a process for making synthetic aggregates from municipal sludge ash to the extraction of toxic metals from electronic circuit board wastes. This is a field of increasing importance, and the prospects are excellent.

Plan (decisions)

Cost increases attributable to salaries and supply/expense items will be approximately \$64,000 for the biennium, roughly equivalent to 1 full-time equivalent technical position. These costs will be managed by increased contract research or by attrition.

The plan for the next biennium will be to continue to carry out the teaching, research, and service mission by increasing the leverage of base level funding with contract research.

Budget
(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

O&M	\$ 283.0	\$ 0.0
State Special	792.0	800.0
Other State (e.g., LCMR)	254.0	915.0
Federal Research	380.0	368.0
Federal Other	138.0	145.0
Private Research	204.0	250.0
Total	\$2,051.0	\$2,478.0

PROGRAM: Special Appropriations, Institute of Technology
(Continuation)
Agency: Minnesota, University of

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PRODUCTIVITY CENTER

Purpose (objective)

The Productivity Center objective is to enhance design and manufacturing productivity. The missions of the Productivity Center are to: research relating to increased efficiency in design and manufacture; encourage joint activity by University-industry groups on automation of design and integration of design with manufacture; offer education in advanced methods of design and manufacture including CAD/CAM, robotics, factory automation, and allied topics; and transfer technology.

Performance (results achieved)

- Fueled by technology developed in Twin Cities industries during and shortly after the last world war, Minnesota developed a vigorous electrical, mechanical, and electronic machine building industry. These industries, scientific and medical instrument industries, and tool and die and aerospace machining industries, provided a basis for a strong industrial economy in Minnesota. By the 1980s, the manufacturing sector and its work force had grown to represent about 22% of the state's gross domestic product and some 20-25% of non-agricultural employment.
- The failures of the nation's manufacturing industry to invest in new production processes and to take advantage of new approaches to reduce the concept-to-market leadtime have accelerated the loss of competitiveness of U.S. manufacturing industry.
- Use of advanced manufacturing technologies, have so far received less emphasis in the U.S. manufacturing industry. While Japan, and other countries continue to seek higher production efficiencies and manufacturing economies, U.S. industry invests little in new technology.
- Minnesota, despite its technological and entrepreneurial vigor, is not immune to these national trends. To reverse them, a well-conceived program focussing on technology-based solutions to design and manufacturing productivity problems is essential.
- Smaller and medium-sized enterprises dominate the manufacturing scene. Programs tailored to meet the need of this industry segment are appropriate. The Productivity Center, founded in 1983 with legislative appropriation as a state special, is pursuing this path.

Prospects (future issues)

Instructional Programs. Sixteen new or revised courses have been developed in Computer-Aided Design; Computer-Aided Manufacture; and Control Sciences. Additional growth in course offerings and enrollment is not anticipated, except in areas related to electronic manufacturing and micro-mechanical devices and systems. The Semiconductor Research Program funded program in electronic manufacturing and completion of the Microelectronic Information Services laboratory facilities provide the basis to expand the scope of programs fostered by the Productivity Center.

Research Programs. The state special funding facilitated the development of 4 specialized laboratories: 1) The Computer Graphics/Computer-Aided Design Laboratory, 2) Robotics Laboratory, 3) Intelligent Machines and Computer-Aided Manufacturing Laboratory, and 4) Materials Processing Laboratory. Development of the first two laboratories is virtually complete. Very high equipment and infrastructure costs have prevented full

development of the other two laboratories.

Development of the laboratory resources has led to substantial growth in sponsored research funding. In F.Y. 1989-90, e.g., total research expenditures exceeded \$1,600,000 (including the state special allocation of \$368,000). Base funding from the state special serves to develop and maintain the laboratory resources and to meet the operating costs. Additional increases in sponsored research funding are anticipated when the development of laboratories 3) and 4) is completed.

To help develop laboratories 3) and 4), Productivity Center personnel assisted in the creation of the Minnesota Advanced Manufacturing Technology Centers, Inc. (MAMTC). Initial funding has been secured for the development of a Computer Integrated Manufacturing Instructional and Research Facility (CIMI&R Facility). Research programs carried out by Productivity Center personnel have also led to the creation of copy-righted software and several patents.

Interactions with Industry. A Computer Integrated Manufacturing (CIM) Consortium has been created in close collaboration with Minnesota manufacturing companies. A number of joint programs have been initiated and completed. As further progress requires a physical facility, the CIM program is presently focussing on the design and implementation of the CIMI&R facility. Interactions with MAMTC in order to create the CIMI&R facility and to attract a federally-funded Hollings' Center in Minnesota are receiving greater emphasis.

Productivity Center personnel are active participants in 2 GMC-funded technology development programs. Sponsored research is also carried out to solve design and manufacturing automation problems of direct interest to particular industries.

Technology Transfer. The Productivity Center actively pursues copy-righted software and method and apparatus patents in order to fulfil industry's need for proprietary solutions, processes and processing systems. Licensing and patents create a revenue stream that allows innovative concepts and solutions to be evaluated with "in house" seed funding.

Plan (decisions)

Cost increases attributable to salaries, supplies, and expenses for office operation amount to \$31,000. The anticipated increase in equipment maintenance cost is \$7,400. The expected shortfall of \$38,400 over the biennium will be managed by reducing personnel costs, reducing travel costs by requiring dollar-for-dollar matching, and requiring fair equipment maintenance cost sharing whenever the Productivity Center resources are used to support sponsored research.

The anticipated shortfall is a relatively small fraction of the total cash flow (in F.Y. 1989-90 it was \$1,639,000).

	Budget	
	(Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$ 369.0	\$ 390.0
O&M	155.0	3.0
Other State (LCMR)	155.0	3.0
Federal Research	415.0	106.0
Federal Other	12.0	4.0
Private Research	267.0	430.0
Other Private	62.0	11.0
Other	359.0	157.0
Total	\$1,794.0	\$1,104.0

PROGRAM: Special Appropriations, Institute of Technology
(Continuation)
Agency: Minnesota, University of

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Plan (decisions)

The state special provides 48% of the program's funding. 30% comes from private donors, foundations, and federal grants. These funds provide many of the new services in counseling, support and enrichment. The state special is critical in providing core support, which then enables soft funding to address the particular interests of the funding sources.

With current F.Y. 1991 funding maintained in F.Y. 1992 and anticipating the same number of classes as in F.Y. 1989-90 (23), it would be necessary to consider cutting 2 classes to maintain program quality. Because of the Program commitment to provide a complete cycle of courses once a student starts, the likely candidates would be 2 Algebra classes (1 Twin Cities and 1 outreach), or 1 Algebra and 1 Calculus I class. Anticipating current enrollment levels, this would result in a reduction of 40-50 students, or a program population decrease of 10%-12%.

TALENTED YOUTH MATHEMATICS PROGRAM (TYMP)

Purpose (objective)

The University of Minnesota Talented Youth Mathematics Program is an intense and accelerated program for very talented mathematics students in grades 5-12, operated by the School of Mathematics at the University of Minnesota. Talented students in grades 4-8 identified by their home schools are invited to participate in a qualifying examination. Of 1,400-1,750 students who test annually, 120-130 are invited to participate in the Twin Cities program and 25-40 are invited to the various outreach sites. These students attend a 2-hour class 1 afternoon each week, after school, for 30 weeks with 5-10 hours of homework. The high school component is taught by outstanding certified high school mathematics teachers and college-age teaching assistants. High school mathematics credit is granted for completion.

During the next 3 years (the college component) the students study calculus, linear algebra and differential equations. The students who successfully complete the courses will earn 10 University of Minnesota undergraduate mathematics credits in calculus each year, and pay 50% of the tuition and book costs. Need based scholarships are available.

Performance (results achieved)

The F.Y. 1989-90 TYMP had 402 students--323 in 15 classes (9 at the high school level and 6 at the college level) in the Twin Cities and 79 students in 3 high school and 4 college-level classes in outreach projects located at St. Cloud, Duluth/Iron Range, and Rochester. These students came from 137 different public schools, and 19 private schools. After 14 years this program is strongly supported by the local school districts, and its regional identity has been firmly established.

TYMP has expanded its program to deal with issues of equity and enrichment with support from foundations and federal grants. TYMP has obtained a 3 year grant from the Bush Foundation, St. Paul, to increase the number of girls participating in the program. By 1989, the testing population was 45% female and the entering class was over 40% female, an 83% increase over the 1987-88 academic year. Retention rates from the first year in TYMP to the second year are now equal for girls and boys. In addition, with support from the National Science Foundation's Young Scholars Program, an extensive 2-week residential and commuter summer institute is also offered. This provides enrichment opportunities, career exploration and personal teacher-student contact.

Minority participation is also being increased. 175 minority students (12%) participated in the 1989 Twin Cities qualifying tests. This exceeds last year's level, which was the highest in 13 years.

Prospects (future issues)

Due to improved support funded primarily by the Bush Foundation, enrollment and class coverage continues to grow. Record enrollments are anticipated at all levels, especially in the calculus component. A new sixth year class in upper division mathematics will be established in 1990-91.

TYMP will continue its efforts to deal with issues of equity and enrichment. The Cray Foundation is funding a new technology-based alternative course, addressing different learning styles and backgrounds. TYMP developed an individualized alternative program intended to encourage greater participation by under-represented groups. Implementation of this pilot program will begin in F.Y. 1990-91. Matching funds from the Program will be necessary.

Budget
(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

O&M	\$ 38.0	\$ 42.0
State Special	267.0	310.0
Federal Other (NSF)	22.0	42.0
Other Private	135.0	155.0
Other	90.0	92.0
Total	\$552.0	\$641.0

UNDERGROUND SPACE CENTER (USC)

Purpose (objectives)

The Underground Space Center was established in 1977 for research and information on underground development and construction. The Center's research includes geotechnical, civil, and mechanical engineering, architecture and planning. Much of the research and expertise developed by the center has had broader applications to more conventional structures. The Underground Space Center is part of the Department of Civil and Mineral Engineering.

Underground space offers potential solutions to a wide range of problems related to land use, buildings, and the environment. It provides opportunities for energy conservation, protection and security, low vibration, and other desirable characteristics. Placing some functions underground can contribute to more efficient land use, preservation of the natural environment, and the creation of more surface open space. Also, the subsurface environment can be exploited for such diverse uses as transportation and utility systems, long-term food storage, and energy storage.

The goals of the Underground Space Center are: 1) to serve as a focal point for the planning and coordination of underground space use; 2) to carry out research in areas affecting the use of underground space; 3) to provide an information and referral service on all aspects of underground utilization; and 4) to serve as a base for international cooperation on research and information transfer.

Performance (results achieved)

The Underground Space Center has successfully completed over 30 projects with a total funding value exceeding \$7,000,000. At the same time, the Center has contributed significantly to the educational and public service missions at the University. The Center's books have been translated into Chinese, French, German, Japanese, Russian, and Spanish. Solar Age magazine chose the Center as one of the 3 best organizations in the solar and alternative energy field. The Shimizu Corporation, one of the world's largest civil engineering companies, donated a professorship for studies in underground space utilization. This was the only professorship donated by a foreign corporation during the recent Minnesota campaign. The Center has been emulated in Japan, China, and the Netherlands, and formation of a similar center has been seriously discussed

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in Sweden.

In addition to developing this visibility and reputation nationally and internally, the Center maintains a strong focus on the special opportunities and problems presented in Minnesota. These goals are often complementary. For example, the development of foundation insulation guidelines for the U.S. Department of Energy has allowed the Center to assist the Minnesota Department of Public Service in reviewing its foundation insulation requirements. Similarly, joint work with the Shimizu Corporation on design guidelines for underground facilities provides an excellent interaction with another Center project that is exploring conceptual designs for underground light rail transit stations for the Twin Cities geology.

Joint Study with the Shimizu Institute of Technology

The Center is doing a project with the Shimizu Institute of Technology in Tokyo to study effects associated with windowless, isolated spaces and identify design strategies to alleviate them.

Underground Station Design for Light Rail Transit in the Twin Cities

The Center has been awarded a grant from the Regional Transit Board of the Twin Cities metropolitan area to study underground stations. Issues include station configuration, access and egress, image, psychological perceptions, and relation to the urban environment.

Mined Underground Space Development in Minneapolis

The City of Minneapolis has a unique opportunity to develop mined underground space because of its underlying geologic structure. The Underground Space Center helped develop a mined space master plan for the City of Minneapolis including a pilot life safety code for deep mined space that would apply to other cities.

Foundation Test Facility

To provide an experimental facility that allows direct comparisons of insulation strategies and materials, the Center constructed a Foundation Test Facility to compare efficiency of various insulation and foundation systems.

Aquifer Energy Storage

Several strategies are being developed for the storage of energy in underground facilities. In 1988 the Underground Space Center assumed the operation of an aquifer thermal energy storage test facility for the U.S. Department of Energy. Experiments of hot water injection, storage, and retrieval have been conducted at the site. The project is also being used to improve the understanding of water chemistry, microbiology, and thermal migration within the aquifer.

Low Income Weatherization

A cooperation has been developed over the past several years with the State of Minnesota's Low Income Weatherization program to study the savings realized in the existing weatherization program (approximately 10% in 1985), development of an enhanced weatherization program and the training of weatherization providers. The results of the recently completed pilot study of 200 homes weatherized by several local agencies indicated that savings could be raised to approximately 18%.

Frost Heave Action in Soils

Frost-related changes in soils are an important design factor in cold region structural and geotechnical engineering. The efforts of the Center in this area are concentrated on the engineering of cold climate foundations or retaining structures and roads over frost-sensitive soils. In cooperation with the Central Laboratory for Roads and Bridges in Paris, and the Minnesota Department of Transportation.

Prospects (future issues)

Work will continue to some extent in all of the research areas listed above, but some hold particular promise. One important area of research for the Center in the coming years is expected to concern the maintenance and upgrading of the urban underground infrastructure. A substantial portion of the nation's urban infrastructure is buried below ground. This hidden infrastructure has a special set of characteristics that provide many common problems for the providers of underground services. The Center's unique expertise in underground planning and construction could be effectively applied to these infrastructure problems.

Second, the Center is currently developing a guidebook for the design of underground facilities. This guidebook, which represents one of the joint research activities with the Shimizu Corporation's Institute of Technology in Japan, is expected to establish the framework for a broad future research agenda on underground space in Japan and elsewhere in the world.

Finally, there is potentially increased support for research related to the programs of the National Aeronautics and Space Administration development of lunar bases. Extraterrestrial bases are likely to be underground for protection from solar/cosmic radiation and other hazards. Many underground facility design issues on earth can effectively be applied to lunar base research.

While these broad national and international trends present opportunities for the Underground Space Center, several research areas will receive special emphasis because of their applicability to problems and opportunities in Minnesota. These are:

- Design and construction issues related to the underground portions of the light rail transit system for the Twin Cities region.
- Planning of deep underground facilities in the Twin Cities geology where potential opportunities continue to emerge (i.e., the University, the airport, and the 2 downtown areas).
- Responding to interest and opportunities concerning underground facilities in greater Minnesota.
- Testing of foundation construction alternatives for energy and construction cost savings.
- Refinement of techniques developed to improve energy efficiency in existing homes, while also improving the cost-effectiveness of low-income weatherization programs. An important aspect of this research is the impact of weatherization on radon hazards in homes.

Plan (decisions)

The state special funding for the Underground Space Center has received only inflation increases for several years. For F.Y. 1991, the special funding is \$240,000. Using this as a base, the Center has been able to attract outside research contracts resulting in a total center budget of \$1,036,004.

The state special funding for the Underground Space Center is essential to its operation and survival. This base funding covers basic program support and supports the efforts of the core staff to develop other funding opportunities. The state special money is not replaceable by other research funds, which are available only for specific research activities. If the state special were reduced or eliminated, it would be extremely difficult to operate the Center at its current level of outside funding sources. By not attracting these levels of outside research funding, the Center would not be able to maintain the present high-quality core research staff, support graduate-level research activities, and serve as a resource to state and local agencies. A loss of any inflationary increase for the next biennium would result in either an increase of outside funding or a decrease in staffing levels. The exact result will depend on short- and mid-term funding prospects.

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GOVERNOR'S RECOMMENDATIONS:

The Governor does not recommend an increase in the Institute of Technology Special Appropriation for the 1992-93 biennium. The Governor recommends that the University allocate a portion of the general reduction for non-instructional activities among the Special Appropriations.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: TECHNOLOGY

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
TECHNOLOGY	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
TOTAL EXPENDITURES BY ACTIVITY	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
DETAIL BY CATEGORY:									
STATE OPERATIONS	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
TOTAL EXPENDITURES BY CATEGORY	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	3,298	3,224	3,911	3,605	3,605	3,605	3,605	3,605	3,605

PROGRAM: Special Appropriations, System
Agency: Minnesota, University of

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PROJECT DETAILS:

ADVANCED STUDIES IN BIOLOGICAL PROCESS TECHNOLOGY, INSTITUTE FOR (BPTI)

PROGRAM PURPOSE:

The 1989 legislature combined 26 State Special appropriations into 4. This program is an aggregation of those special appropriations that could not reasonably be assigned to the Agricultural, Health Sciences, or Technology Specials. Its components represent a variety of purposes discussed below.

PERFORMANCE:

Refer to project performance.

PROSPECTS:

Refer to project prospects.

PLAN:

Listed below by project are the needs supported by special appropriation for the 1992-93 biennium.

	Requested Appropriation (Dollars in Thousands)			1992-93 Biennium
	F.Y. 1991	F.Y. 1992	F.Y. 1993	
Advanced Studies in Biological Process Technology, Institute for Bureau of Business and Economic Research (*)	\$ 898.0	\$ 898.0	\$ 898.0	\$ 1,796.0
General Research	2,568.0	2,568.0	2,568.0	5,136.0
Humphrey Forum, The	160.0	160.0	160.0	320.0
Industrial Relations Education Fund	913.0	913.0	913.0	1,826.0
Intercollegiate Athletics	3,536.0	3,536.0	3,536.0	7,072.0
James Ford Bell Museum of Natural History (*)				
Minnesota Sea Grant College Program	437.0	437.0	437.0	874.0
Minnesota Supercomputer Institute	8,816.0	8,816.0	8,816.0	17,632.0
Minority and Disadvantaged Graduate Students, Fellowships for	71.0	71.0	71.0	142.0
Natural Resources Research Institute	2,923.0	2,923.0	2,923.0	5,846.0
Student Loan Matching Program	393.0	456.0	456.0	912.0
Urban and Regional Affairs, Center for (*)				
Total	\$20,715.0	\$20,778.0	\$20,778.0	\$41,556.0
Base Adjustments		(1,113.0)	(1,113.0)	(2,226.0)
Anticipated Reallocations		(210.0)	(390.0)	(600.0)
Agency Plan per BBS		(19,602.0)	(19,602.0)	(39,204.0)
Additional Needs (reductions)		(\$ 147.0)	(\$ 327.0)	(\$ 474.0)

(*) Amounts for these programs are included in General Research figures.

Purpose (objectives)

The Institute for Advanced Studies in Biological Process Technology is a cross-disciplinary academic program with a research, graduate training, and service mission. Over the past five years, the Institute has remodeled space to establish fermentation, cell culture and protein production and isolation facilities available to all faculty as well as industrial scientists. Its five faculty supervise graduate students, conduct research related to biotechnology, and collaborate with State biotechnology-related industries. Over 40 faculty outside the Institute also use BPTI facilities for research.

The BPTI administers the Microbial Engineering Graduate Program (MicE), which combines academic training in biochemical engineering, microbiology and molecular biology. This is one of only a very few programs in this country that combine chemical engineering and advanced biology to train graduates for the biotechnology industry. This special appropriation supports 12 Microbial Engineering students.

Performance (results achieved)

The Institute attracts over \$750,000 per year in federal and industrial research contracts, industrial fellowships and equipment donations. This outside support is expected to increase as the faculty laboratories expand and as more Minnesota industries learn about the research programs, short courses, and symposia sponsored by the Institute.

Minnesota companies that have recently collaborated with the Institute include: 3M, the Blandin Foundation, Biotrol, General Mills, Land O' Lakes, Endotronics, Molecular Genetics, Ecolab, Applied Membrane Technology, DCI, Pillsbury, R & D Systems, Rosemount, Solvay Animal Health, the Agricultural Utilization Research Institute of the Greater Minnesota Corporation, and the Upper Minnesota Valley Regional Development Commission. In addition, research collaborations have been established with numerous companies outside the state.

Prospects (future issues)

Because of the expanded role of the Institute as a service to the developing state biotechnology industry, an Associate Director and one additional faculty member with research interests related to the separation of biological molecules or biocatalysis are needed. In addition, a full-time Manager of the Central Research Facility is needed to expand outreach to state biotechnology industries and to coordinate the academic and service roles of the core research facilities.

Plan (decisions)

Renovation of laboratories for molecular biology and process technology research is still not complete. Additional remodeling and staff support are now needed to establish a critical mass of expertise that will attract new industries to Minnesota and expand collaborations with existing industrial biotechnology research in Minnesota companies.

Interruption in the current level of support will almost certainly ensure that this developing program will not reach the critical mass of faculty expertise needed for the most positive impact on cross-disciplinary biotechnology education and the development of a biotechnology industry in Minnesota.

PROGRAM: Special Appropriations, System
 (Continuation)
 Agency: Minnesota, University of

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	Budget	
	(Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$ 992.0	\$1,026.9
Grant, contract and industrial support	765.0	920.0
Other University support (est.)	0.0	75.0*
Total	\$1,757.0	\$2,021.9

*Additional funds originally requested as an increase in the base of the Special appropriation to support the Associate Director and Central Research Facilities Manager will be obtained from internal reallocation, but planning for the F.Y. 1991 reallocation is not complete.

BUREAU OF BUSINESS AND ECONOMIC RESEARCH (BBER)

Purpose (objectives)

Established at the University of Minnesota, Duluth (UMD) in 1968, the Bureau of Business and Economic Research has three major missions. It collects and publishes information regarding Duluth, Northeast Minnesota, and the state economy. It helps the Center for Economic Development to identify and help treat important business and economic issues in the region. It helps generate research activity in the UMD School of Business and Economics.

Performance (results achieved)

The Bureau provides information through publications, consulting on business projects and research. Publications include: Duluth Business Indicators (DBI), a monthly published for more than 25 years, distributed to more than 1,000 subscribers; selected Economic Data for Duluth and Northeastern Minnesota (annual); and several others relating to construction, retail sales, and banking. Its research was instrumental in establishing the UMD Natural Resources Research Institute, the Lake Superior Paper Company, and the expansion of the Blandin Paper Company. Conservatively, this research helped to establish over 2,000 jobs over the last decade.

Prospects (future issues)

The Bureau will continue its present activities seeking external funding to expand selected areas. However, it needs new state seed money to be fully successful in its expansion efforts.

Plan (decisions)

The Bureau's help to diversify the region's economy will require the development of economic data on new and expanding industries (tourism, research and medical services). The Bureau is striving to expand its activity to include a regional business index, and a regional tourism index.

	Budget	
	(Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$38.0	\$ 42.0
External Sources	12.0	12.0
Internal Reallocation	43.0	47.0
Total	\$93.0	\$101.0

GENERAL RESEARCH

Purpose (objective)

The General Research Fund was started 50 years ago to encourage the research, scholarship, and artistic productivity of the permanent faculty at the University. It can be thought of as an investment by the state in the vitality of the faculty, by helping them to initiate new projects, and by helping them bridge gaps in federal funding of their programs. In these areas, the General Research Fund is the most important source of University support to the faculty and is one of the programs most appreciated by the faculty for the encouragement of their scholarship and research. This fund is used to solve problems that can arise when special, temporary needs arise, and it is highly successful in leveraging funding outside the state.

Performance (results achieved)

A respected faculty committee approves about 65% of the proposals submitted and cuts their budgets by 25% each year.

Many faculty members credit this fund with the initiation of successful programs that have brought in much larger federal support. It enables faculty whose programs are temporarily cut off from federal funds, an increasingly common occurrence, to retain their trained personnel during the hiatus, thereby avoiding a lengthy rebuilding effort when they are again funded. In areas where external funding is difficult to obtain, such as the arts and humanities, this source of support helps the faculty obtain scholarly materials. Through this fund, equipment that could not be acquired by a single investigator is made available as a common facility used by several, enhancing the work of many.

The research enterprise at the University has grown rapidly over the last several years, bringing resources into the state, and improving the health of the University and the state. While this should be attributed primarily to the excellence of the faculty, the existence of the General Research Fund and Indirect Cost Recovery funds used for start-up expenses of new faculty and matching funds for proposals are two supporting factors of greatest importance. These funds are the venture capital required for a successful research enterprise.

Prospects (future issues)

The General Research Fund has not kept pace with need, even though the University has supplemented it with other funds. The research enterprise has grown faster than state support. If the health of research programs is to be maintained, permitting the University faculty to compete in an increasingly competitive funding environment, the support structure provided to the faculty must be maintained and, if possible, improved.

Plan (decisions)

The program is working well and has a high degree of support from the whole University community. However, current funding levels do not meet the needs of existing programs, let alone new initiatives that could be promising investments. The University has been committed, since early 1989, to assigning a portion of any additional Indirect Cost Recovery offset funds awarded by the legislature to the Graduate School to supplement General Research. Should the full offset be returned, this program could be expanded. Increased University support in such areas as equipment purchases, research workshops, and special proposal preparation costs would greatly increase the strength and visibility of the research enterprise and increase its competitiveness for grants and contracts.

PROGRAM: Special Appropriations, System
(Continuation)
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HUMPHREY FORUM, THE

Purpose (objective)

The Humphrey Forum describes the accomplishments and promotes the ideals of Hubert Humphrey through a commemorative exhibit at the University of Minnesota's Humphrey Institute of Public Affairs. Three specific objectives drive the Forum's planning and program. The Forum offers a teaching program emphasizing the values of personal responsibility, citizen participation, and reflective leadership. The Forum is a center of social studies education, developing materials and services for elementary and secondary teachers and students. The Forum is also an exhibit describing the events, people, and ideas of 20th Century American history.

Performance (results achieved)

Specific projects serve each of those objectives. The teaching program offers students in grades 4 through 12 a menu of 25 different lessons. Each lesson is based on a series of concepts, skills, and teaching activities in the exhibit. Nearly 8,000 students have participated in the program since November, 1989. In addition, Forum staff members have made presentations in classrooms throughout the state. Workshops, meetings, and instructional materials have been prepared for teachers.

The Forum has initiated two significant outreach programs. It publishes a current affairs newspaper for middle and junior high school students. A television program, written, directed, and performed by senior high school students is produced. The program began telecasting on state-wide cable networks in July 1990.

Since opening in November 1989, the Forum has offered seminars, lectures, panel discussions, and special presentations to community education groups, college and university students, tourists, neighborhood organizations, and the general public.

Prospects (future issues)

The Humphrey Forum exhibit is open to the public 50 hours each week. Demand for museum lessons and special programs has grown rapidly. Our teaching program was fully scheduled from July 25 through September 25. Reservations for the remainder of the year are filling-up. Beginning in March 1991, the Forum will offer regularly scheduled programs for adults. Additional pressure on our museum teaching program will come in 1991 when the Minnesota Historical Society suspends its teaching program until construction is complete on the new History Center in 1993.

Plan (decisions)

Teaching programs will be expanded to 12,000 elementary and secondary students in F.Y. 1990-1991. Additional programs and conferences will be offered. Circulation of the newspaper will be expanded, and the television program will be continued. Regularly scheduled programs for adults will be continued. A national conference on Hubert Humphrey is planned for F.Y. 1992 (in cooperation with Institute faculty and the University's history department).

	Budget	
	(Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State Special	\$125.0	\$129.4
Endowment Income	16.0	96.0
External Funds and Reallocations	143.0	31.0
Total	\$284.0	\$256.4

INDUSTRIAL RELATIONS EDUCATION FUND (IREF)

Purpose (objective)

1. To define the education and training needs of Minnesota's employers and workers.
2. To publicize developing employment, legal, and public policy shifts affecting employment relationships.
3. To identify areas requiring policy interpretation and the development of training materials.
4. To continue expansion of Employer Education Service (EES) and Labor Education Service (LES) program offerings in greater Minnesota, while continuing metropolitan area programs at their present level, with special attention to government and non-profit agencies and new programs for working women, executives, managers, support staff, and labor representatives.

Performance (results achieved)

The Industrial Relations Education Fund supports the Industrial Relations Center's (IRC) community outreach activities of specialized training, materials development, and applied studies in industrial relations, to meet the educational needs of workers, employers, and leaders from the State's labor, management, and public communities, in labor relations, human resources, and professional development. Moreover, the Center strives to advance equitable standards for labor and management relations in the state. While meeting the training and education needs of labor and management respectively, the LES and EES also bring together the state's labor and management communities to discuss ways to enhance their mutual welfare. Programming in health care cost containment, arbitration, and labor-management cooperation are examples of this activity. Initiated in 1945, these community outreach activities are vital elements of the mission of the IRC and the University. LES produces 17 videotapes per year in addition to serving 2,600 participants through 80 plus programs; EES reaches 3,700 participants from 1,000 organizations with 140 programs.

Prospects (future issues)

LES and EES will continue to attract non-traditional students to the University. The programs are growing each year. The issue of partnership for labor and management has never been more sharply defined. Working cooperatively to help deal with a global economy, health care benefits and product improvements are only a few of the areas where LES and EES can provide forums for discussion and problem solving.

Plan (decisions)

To continue to deliver high quality adult education on campus and off. We also plan to deliver educational programs over regional cable television stations, with a possibility of tapping into the PBS network to reach an even larger audience. Project plans include: utilization of new telecommunications technology and filling program "gaps" (for example, in women's programs and joint labor/management workplace, health and safety programs, and programs for the HR executive; shaping the Policy Studies and Development Service better to address policy questions, and increasing the scope of the IRC's telecommunication services. Attainment of the targets projected is dependent on the availability of sufficient resources.

INTERCOLLEGIATE ATHLETICS

Purpose (objective)

Provide opportunities for women that are equal to men in intercollegiate athletics at the University of Minnesota; provide financial accommodation for the University to meet the mandates of Title IX federal regulations as well as meet the demands of conference expansion.

Performance (results achieved)

Nine intercollegiate sports: basketball, cross country, golf, gymnastics, softball, swimming and diving, tennis,

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track and field, and volleyball compete in the Big Ten Conference and National Collegiate Athletics Association (NCAA) Division I. Necessary support service programs including academic advising and counseling, athletic training/medical treatment, supervision and rehabilitation, athletic scholarship development/fund raising, sports information services, promotions, marketing and public relations, event management/ticket sales, weight training and conditioning, educational seminars/programs for student athletes, community service programming, and administrative support are provided.

Prospects (future issues)

Provide opportunities for 170 to 190 student athletes in both F.Y. 1991 and F.Y. 1992. Specific goals are:

- Maintain graduation rates of student athletes at least above the average of the general student population.
- Achieve academic excellence by maintaining more than 50% of student athletes with grade point averages (GPA) of 3.0 and above.
- Achieve national ranking (2 for F.Y. 1991 and 3 for F.Y. 1992) and within the Big Ten Conference (6 in top 5 for F.Y. 1991 and 8 in top 5 for F.Y. 1992).
- Community service by interactions of student athletes and staff with 4,000 youth and community members in F.Y. 1991 and 4,500 in F.Y. 1992.
- Minnesota outreach serving at least 540 youth in sport camps with 10% minority and underprivileged attendance and recognize at least 10 Minnesota towns in Hometown Day campaign in F.Y. 1991 and 560 youth, 20% minority and underprivileged in F.Y. 1992.

Plan (decisions)

Reduce erosion and address 5 year progressive plan towards Title IX compliance by meeting the 88 goals of at least the first 2 years during the 1991-92 biennium.

Fiscal goals involve meeting inflationary costs and deficit reduction, along with supporting mandated Big Ten costs for officiating, travel and membership increases.

Measure in 5 year segments, the status of alumina student athletes, in terms of career and community contributions during the past 15 years.

JAMES FORD BELL MUSEUM OF NATURAL HISTORY

Purpose (objective)

The Bell Museum of Natural History consists of 2 sub-units, Comparative Biology and Public Programs. The Division of Comparative Biology includes 7 academic curators whose responsibilities include, in addition to teaching and training of graduate students, maintenance and development of the Museum's 5 research collections and participation in the Museum's Public Programs. Public Programs include Public Education and Exhibits to provide education regarding nature, especially biological processes, the scientific process, and values.

Performance (results achieved)

Collections. Research collections include the disciplines of Herpetology, Ichthyology, Invertebrates,

Mammalogy, and Ornithology. In addition to regular research use by the curators and their students, specimens are regularly loaned to other scientific institutions, and used in teaching.

Public Education. Public education at the Bell Museum falls into 7 categories. 1) Guided educational tours. 25,000-30,000 persons per year. 2) Touch and See Room. (25,000-30,000). 3) Call-in information on wildlife and natural history questions, provided without charge. (3,000). 4) Professional development workshops for teachers, interpretive naturalists, and other interested professionals. (300). 5) Noncredit workshops and field trips for the general public. (3,000). 6) Special education programs for families and children. (3,000). 7) The JASON Project, a national educational activity to bring K-12 students into contact with ongoing scientific research. (8,500 from approximately 100 schools). Approximately \$115,000 in private funds augmented state funds to support Public Education in 1989. In addition, \$375,000 is the target for private funding for continued support of the JASON Project.

Exhibits. This program consists of 4 sub-units: Temporary Exhibitions; National Travelling Exhibitions; In-state Travelling Exhibitions; and Imprint, the Museum's quarterly publication. Recent exhibitions include AIDS and Intimate Choices, Pioneers of Bird Illustration, The Net Result, and Many Faces in Science. Total visitors to all exhibitions, especially those on display outside the Museum, are not recorded precisely, but surveys indicate that the number exceeds 500,000 per year. Approximately \$80,000 in private funds helped to support this program in 1989.

Prospects (future issues)

General. Present state funding of the Bell Museum is inadequate. No money from the State Special is available to support the Museum's collections, despite their unique importance to the state and its citizens. Public Education is presently curtailing programs due to lack of funding, and if present rates of spending were to continue, Exhibits would exhaust all State Special funds by February 15, 1991.

Collections. Collections require far more resources than presently are available. Each collection needs a 50% time student curatorial assistant. Support of collections is the Museum's top priority.

Public Education. This program seeks to broaden its audience and the range of subject matter that it makes available to the public. Continuing retrenchments of funding may necessitate the temporary slowing of growth and perhaps even cuts in service to the public.

Exhibits. Even though state funds are nearly exhausted, several exhibition projects are funded, in large part by private monies, including complete funding to revise the Many Faces in Science exhibit into poster format and place it in every 4-6 grade classroom in Minnesota.

Plan (decisions)

Efforts to attract non-state funding for support of the Museum's collections will continue. Collection care, especially computerization, is a high priority of the Museum. Both Public Education and Exhibits have full slates of educational activities planned for the coming year, including programs in The Significance of Natural Selection, Wetlands, and Water Issues, and an international collaboration with the Soviet Union on Comparative Environmental Issues Facing Lakes Baikal and Superior.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991</u> (est.)
State Special	\$186.0	\$191.0

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MINNESOTA SEA GRANT COLLEGE PROGRAM

Purpose (objective)

Sea Grant programs exist to preserve and enhance our nation's ocean, coastal, and Great Lakes resources. Like Land Grant, Sea Grant addresses these needs through research, education, and technology transfer. Minnesota Sea Grant supports research directly; outreach is subcontracted to the Minnesota Extension Service. Extension faculty work in Duluth and the Twin Cities.

Sea Grant is the only organization supporting research, educational, and extension programs on issues of importance to Lake Superior. Subjects include: 1) assisting the state's emerging aquaculture industry, 2) preventing the spread of zebra mussels and other exotic species into Lake Superior, 3) developing new techniques to clean up pollution, 4) improving genetic engineering of fish 5) researching contaminants in the lake and its fish 6) helping Minnesota businesses be more competitive, especially in charter fishing, and tourism, and 7) making Great Lakes ports, harbors, agribusiness, and shipping competitive with those on both coasts.

Performance (results achieved)

The National Sea Grant College Program provides federal funds to the university and the state to work on issues of local and regional concern. However, these funds must be matched by \$1 for every \$2 given by the federal government. Money invested in Sea Grant provides an excellent return for the state; businesses assisted by Sea Grant realize a return of \$6.60 for each federal or state dollar. In turn, these funds generate \$230 million of revenue to private industry each year.

Through research, education, and extension, Sea Grant's work serves the needs of these groups: 1) State agencies, including the DNR and the PCA; 2) International groups, such as the International Joint Commission, which helps manage Great Lakes water quality; 3) Federal agencies, such as the Environmental Protection Agency (EPA); and 4) emerging industries in the state.

Performance (results achieved)

Expected results include: Research findings to better manage and eventually solve problems of Lake Superior's fisheries, development of new industries in the state and region, protection of Minnesota's water quality, more competitive shipping industries, and expert information to assist statewide businesses.

Plan (decisions)

The major issue for the future relates to funding. If both federal and state dollars are stabilized at current levels, inflation will lead to a gradual reduction in funded research and a layoff of outreach staff. The 31 national Sea Grant directors are fighting for increased federal appropriations. The national program has been essentially level-funded since 1980 at about \$40 million per year.

The ability of the program to match federal monies with the legislative State Special is especially important. The history of the program shows that we have just reached our required match of \$1 state per \$2 federal during F.Y. 1990.

F.Y. 1985	F.Y. 1988	Budget (Dollars in Thousands)		
		F.Y. 1989	F.Y. 1990	F.Y. 1991
Federal support	\$560.0	\$883.0*	\$706.0	\$726.0
State Legislature support	\$121.0	\$393.4*	\$332.7	\$346.0
Ratio, Federal:State	4.6:1	2.2:1	2.1:1	2.1:1

*15-month fiscal year

No alternative to state funds to meet the required match is currently feasible. It is highly unlikely that private foundations would provide matching funds. Experience shows that undesignated research funds are difficult to obtain from industry.

The currently approved agreement with National Oceanic Atmospheric Administration (NOAA) requires \$346,000 and \$352,000 in matching funds from the state for F.Y. 1990, F.Y. 1991.

	Budget (Dollars in Thousands)	
	F.Y. 1990	F.Y. 1991 (est.)
State funds	\$ 346.0	\$ 357.2
External Federal funds	<u>726.0</u>	<u>706.0</u> or more
Total	\$1,072.0	\$1,063.2

MINNESOTA SUPERCOMPUTER INSTITUTE (MSI)

Purpose (objective)

The Minnesota Supercomputer Institute is an interdisciplinary research program of the University of Minnesota. The MSI supports the usage of the supercomputers and other resources of the Minnesota Supercomputer Center, Inc. (MSC) by researchers at the University of Minnesota and other colleges and universities. The Institute also supports a visitors program and maintains additional resources to create a more favorable supercomputing environment. MSI also provides leadership in education related to supercomputing and scientific computing. It is the focal point for collaborative research and education in supercomputing within the University and the state.

Performance (results achieved)

The Supercomputer Institute's program continues to make excellent progress. The number of research reports by year is as follows:

1984	2	1985	20	1986	64
1987	143	1988	157	1989	221

Beyond the growth in numbers, however, it is clear from reviewing the reports in detail and from the outstanding reputation that MSI has achieved that the quality of the research is excellent.

MSI currently supports 227 principal investigators and 569 additional users. The principal investigators are mainly faculty at Minnesota institutions of higher education, other researchers are typically students and postdoctoral associates. Our success in providing cross-disciplinary access to cutting-edge facilities is illustrated by the distribution of our principal investigators across fields, campuses, and institutions. The currently active investigators include 206 faculty from virtually all colleges on the Twin Cities campus, 8 more from Duluth and Morris, plus 13 from: Mankato State University, Abbott Northwestern Hospital, Mayo Foundation, Gustavus Adolphus College, St. Cloud State University, St. Olaf College, and 3M (University-Industry Collaborative Fellow).

External funding for MSI-supported research includes 110 grants from 37 sources, totalling \$9.4 million per year. The largest single sources of support were 34 grants from the National Science Foundation, totalling \$2.7 million annually, and 15 grants from the U.S. Department of Energy, totalling \$2.4 million annually. Not included in the above total is the recent grant for an Army High-Performance Computing Research Center, which brings over \$10 million annualized. The success of MSI was critical in attracting the Center to Minnesota.

Our workshops and symposia have also been singularly successful. We have provided 157 scholarships to 10

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supercomputer user workshops held since September 1988, and 10 international and 2 national symposia have attracted 1,392 registered attendees, including 118 foreign participants, 547 non-Minnesota Americans, and 132 non-U-of-M Minnesotans. The Institute also provides highly leveraged seed funding for numerous visitors who collaborate with Minnesota researchers and contribute to the excellence of our program. In the past year we have attracted 4 senior scientists in applied mathematics and computer science to the University faculty and the availability of our resources is a strong magnet to many other faculty, students, and research associates throughout the University, as well as a significant factor in faculty retention.

Prospects (future issues)

We intend to continue to build on the strengths that have led to the successes enumerated above. In addition, we are initiating an undergraduate internship program that focuses on graphics and scientific research. A new graduate minor in computational science was coordinated by MSI. We will have to work hard to fulfill the educational objectives of these two critical initiatives. We also hope to add new faculty leadership in the area of medicinal chemistry.

Plan (decisions)

The state is faced with several decisions:

1. The University of Minnesota has the world's most outstanding academic supercomputer program. But other states are trying to narrow the gap between their programs and ours. Minnesota is challenged to reverse the trend toward increasingly less competitive faculty salaries, benefits, and research set-up funds that are hurting faculty recruitment and retention very severely.
2. How will the University acquire and manage the space and new-generation supercomputing resources necessary to maintain leadership in supercomputing? The present opportunities to anchor the Technology Corridor with improved, world-class facilities require far-sighted management decisions and unwavering commitment to academic and technology transfer objectives. In light of the increasing competition, we must take decisive steps to make high-technology academic excellence a permanent focus, or the present opportunities will be squandered.

MINORITY AND DISADVANTAGED GRADUATE STUDENTS, FELLOWSHIPS FOR

Purpose (objectives)

The objective of this program is to recruit, more adequately support, and graduate minority students in graduate programs, particularly in those programs where minorities are underrepresented (science, mathematics, and engineering).

Performance (results achieved)

This program permits the University to recruit and attract talented minority students and leverage its funds against other sources of funding (graduate assistantships, internal and external fellowships). Offers are made to the students which insure their financial condition throughout their graduate career. Using this leveraging technique, the Graduate School will use the special appropriation of \$61,800 to contribute to the support of 8 minority students although the average stipend level is \$9,600 plus tuition.

Prospects (future issues)

In the mid-1990s, universities will face an increased demand for faculty members as those hired in the 1960s

begin to retire. All academic disciplines will be affected but especially those in science, engineering and mathematics. The task facing universities is to replace those faculty and to give special encouragement to members of minority groups.

Plan (decisions)

In 1989 the University entered 2 new fellowship programs (Graduate Education for Minorities and the Physical Science Consortium for Women and Minorities). It also entered into agreements with a number of Historically Black Colleges and Universities aimed partly at increasing the number of Black graduate students in science, engineering and mathematics at the University of Minnesota. Continuation of the funding for Fellowships for Minority and Disadvantaged Graduate Students will permit the University to continue to be proactive in its identification and recruitment of minority students, exploit its current initiatives and enter into new agreements such as the National Consortium for Educational Access.

NATURAL RESOURCES RESEARCH INSTITUTE (NRRRI)

Purpose (objective)

A major challenge to the University is to apply its base of knowledge to solving pressing problems in natural resource-dependent areas of the state and to environmental problems in general. The Natural Resources Research Institute was established in 1983 to assist the University in meeting this challenge. Specifically, formation of the Institute was catalyzed by the decline of the taconite industry, the resulting loss of jobs in Northeastern Minnesota, and the consequent need for environmentally sound economic diversification. The NRRRI mission is: "To foster economic development of Minnesota's natural resources in an environmentally sound manner to promote private sector employment." To accomplish this mission, the Institute has adopted three goals: 1) involvement in near-term economic development efforts to promote private sector job creation and retention; 2) to do applied research in focused natural resources areas to develop product, processes, and services that will benefit Minnesota; and 3) to do research that will improve the knowledge base required for sound future economic and environmental decisions.

Performance (results achieved)

The first few years have been dedicated to developing the Institute. Growth has been very rapid, from an initial operating budget of \$1,400,000 per year to more than \$7,000,000 per year at present. The staff is merging into an effective team that has gained NRRRI a reputation for quality. The Institute has been able to build effective working relationships with private companies; state groups (DNR, LCMR, MPCA, the Greater Minnesota Corporation) regional groups, (the Northeastern Minnesota Growth Alliance), and Federal agencies (NSF and EPA). The Institute building renovation has proceeded in a phased, planned manner at a reasonable cost of about \$60 per square foot and is on a national architectural award citation. External facilities such as the former U.S. Steel Coleraine laboratory have been added to improve NRRRI research capabilities further. The NRRRI model is proving to be very effective in achieving its mission and goals. Business and technical assistance have been given to numerous entrepreneurs and small companies. Partridge River, Inc., is an example. The Institute was instrumental in recruiting the company, assisting with technical evaluations for conversion to Minnesota wood species, development of the business plan, and introduction to regional economic development entities. The company has grown from 12 to 47 employees. An example of near-term assistance given a larger company is a study, for Cyprus Minerals Co., to improve taconite pellet quality and implement process efficiencies prior to a decision to buy the Reserve operations and to employ about 400 persons. Non-ferrous minerals research by NRRRI was instrumental in catalyzing a recent business partnership in which more than a million dollars will be expended in further development of a deposit. Research programs in landscape ecology and environmental chemistry continue to be funded well through federal grants and form a central part of the NRRRI environmental efforts.

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Prospects (future issues)

NRRI's base is now largely in place and should help the Institute be even more responsive to its mission and constituents in the future. A \$2.5 million capital appropriation by the legislature should allow for continued expansion of the 120,000 square foot NRRI facility and meet needs for further growth, primarily in the areas of wood products, water, and the environment. Efforts to establish a wood pilot development capability, along with early research in the area of composites, for example, have resulted in new product ideas that should be of value to industry. A major Canadian company developing a new plant in Minnesota has indicated a desire to work with NRRI in this area. The state has engaged NRRI to research the important issue of forest biodiversity, and aspen thinning studies are gaining increasing interest by state and industry officials. Emerging interest in using mineral beneficiation technique for soil and sediment clean-up represents a new area, and NRRI has developed a proposal at the request of EPA. The Institute has become known for its chemical toxicology models, and an industrial consortium is developing, based on our expertise. The Institute expects to assist the University with its Lake Superior Initiative, to continue its leading roles in GMC, and grow in its ability to assist the important taconite industry.

Plan (decisions)

NRRI plans to continue its development and operation with the support of the State Special. This funding is the backbone of the NRRI effort. It provides support for the management of the Institute, including support services such as accounting and the library. It provides seed money for project areas that have merit, and it provides resources to respond in a timely fashion to the needs of constituents, whether state agencies, local groups, entrepreneurs, or companies. Without the backing of its State special, NRRI could not function in the same effective manner.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
State Special	\$2,647.0	\$2,740.1
GMC	800.0	1,200.0
Other State	900.0	1,000.0
Federal	1,100.0	1,400.0
Industry	500.0	700.0
Foundation	<u>100.0</u>	<u>100.0</u>
Total	\$6,047.0	\$7,140.1

STUDENT LOAN MATCHING

Purpose (objectives)

Compliance with federal regulations governing Title IV student financial aid programs requires the institutional contribution of matching funds to the Supplemental Educational Opportunity Grant (SEOG), Perkins Student Loan and Nursing Student Loan (NSL). Continuing participation in these programs is dependent upon compliance with the regulations.

The Supplemental Educational Opportunity Grant award requires a 15% match of the federal award from the institution. The Perkins Loan Federal Capital Contribution (FCC) requires a one-ninth match. The Nursing Student Loan federal capital contribution also requires a one-ninth match.

Federal regulations requiring the matching funds are as follows: 34 CFR 676.21, 42 CFR 57.302 and 34 CFR 674.8.

Performance (results achieved)

The funds have been awarded to eligible financial aid applicants for payment of educational expenses including tuition and fees, books and supplies, and living costs.

In the current biennium the University received \$5,567,507 in new funds from the Department of Education for 3 programs. Approximately \$481,277 was provided in matching funds. These funds were awarded and paid to students who needed financial assistance to enroll at the University. Thousands of students were recipients of these aid funds in a broad spectrum of undergraduate, graduate and professional academic programs. These campus based programs are included with many other programs supported by Title IV and Title VII legislation. Annually, over \$80,000,000 from all federal, state, University and outside agencies is disbursed to students to help pay educational costs.

Prospects (future issues)

The matching requirements continue to be a part of the Title IV and Title VII regulations. Funding levels are projected to increase slightly over the next biennium, requiring an additional \$126,000 of state matching funds to generate over \$700,000 of new Federal funds.

Plan (decisions)

The University of Minnesota Office of Student Financial Aid will continue to participate in these programs and comply with the regulations. We will also continue to request federal funds at a level to meet the needs of all eligible applicants.

URBAN AND REGIONAL AFFAIRS, CENTER FOR (CURA)

Purpose (objective)

The Center for Urban and Regional Affairs was established to help focus University attention and resources on the wide range of urban-related issues and problems confronting the people and communities of Minnesota. CURA encourages and supports University faculty and graduate students who work on research projects and applied technical assistance programs growing out of major issues in the state. These issues have included community economic development, housing, education, minority populations, environment, transportation, neighborhoods and communities, land use, and social and human services. In virtually all cases, CURA's projects are carried out in conjunction with--and frequently with matching support from--persons, agencies, or community groups outside the University, often from the public sector.

Performance (results achieved)

The emphases in CURA's programs change as community problems and needs change. Examples of major current research projects include analyzing changes in retail trade centers in the Upper Midwest, demonstrating the effectiveness of experimental elementary remedial reading programs, studying accumulated toxins in Duluth Harbor, developing geographical information systems (GIS) for Minnesota's state and local governments, creating a community-based data system for neighborhoods in the Twin Cities, and examining the transportation problems on Minnesota Indian reservations. In addition, CURA provides technical assistance to state agencies, local governments, and community organizations dealing primarily with minority communities.

Typically, CURA's projects will, each year, link University research resources with community agencies and organizations involving at least 160 faculty from 80 university units, 130 graduate students from 40 different

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units, 20 state agencies, 30 local governments, and 125 nonprofit community-based organizations.

In addition, CURA directs the Minnesota Center for Survey Research, supports the Center for Community and Regional Research in Duluth, the University's Southeast Asian Refugee Studies Project, its All-University Council on Aging, its Conflict and Change Center (developing knowledge about mediation and arbitration), and its Center for State and Regional Economic Research.

Most CURA projects result in reports, many in widely-circulated publications, including the CURA Reporter.

Prospects (future issues)

The urban-related issues of the state change and CURA's programs adjust accordingly. Important emerging issues making this an especially critical time for strong support for faculty and student research include: the renewal of the debate between energy costs and environmental concerns; continuing the analysis of economic change in the state, especially between the metropolitan region and greater Minnesota; studying the problems associated with providing low income housing, particularly as it concerns the homeless; examining the causes and consequences of rapidly increasing concern about crime; improving understanding of the rapid diversification of the state's population, particularly in the Twin Cities; and understanding the implications of the data generated by the 1990 Census.

Plan (decisions)

CURA's research and assistance programs will continue to be responsive to changes in urban-related issues in Minnesota. In particular, CURA's programs will focus on community economic development, environmental concerns, increasing population diversity (especially in our central cities), and problems associated with maturing suburban regions.

Typically, CURA has not requested increases in the special appropriation, preferring to reallocate resources internally and generate resources externally as conditions change. Maintaining the base support is critical, however, because it represents the major means by which the University has been able to address the wide range of urban-related issues confronting communities all across the state.

	Budget (Dollars in Thousands)	
	<u>F.Y. 1990</u>	<u>F.Y. 1991 (est.)</u>
State Special	\$1,038.0	\$1,075.0
Internal	365.0	399.0
Other	<u>1,051.0</u>	<u>875.0</u>
Total	\$2,454.0	\$2,349.0

GOVERNOR'S RECOMMENDATIONS:

The Governor does not recommend an increase in the System Special Appropriation for the 1992-93 biennium. The Governor recommends that the University allocate a portion of the general reduction for non-instructional activities among the Special Appropriations.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: SYSTEM SPECIALS

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
SYSTEM SPECIALS	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
TOTAL EXPENDITURES BY ACTIVITY	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
DETAIL BY CATEGORY:									
STATE OPERATIONS	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
TOTAL EXPENDITURES BY CATEGORY	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	17,085	18,516	20,715	19,602	19,602	19,602	19,602	19,602	19,602

PROGRAM: Minnesota Resources, Legislative Commission on
Agency: Minnesota, University of

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PROGRAM PURPOSE:

Provide research and public service support in accordance with legislative initiatives in the areas of recreation, water, education, agriculture, forestry, fisheries, wildlife, land management, minerals, waste, and energy.

PERFORMANCE:

The University has a strong history of incorporating legislative initiatives into its on-going missions.

PROSPECTS:

The final recommendations issued by Legislative Commission on Minnesota Resources have assigned \$6,584,000 over a variety of projects for the 1992-93 biennium.

PLAN:

1992-93
Biennial Recommendation
(Dollars in Thousands)

Reclamation of Recreation Systems and Environmental Resources	\$ 200.0
Co-Geologic Atlas/Groundwater Sensitivity Mapping	1,400.0
Development and Application of Aeration Technologies	148.0
Lake Superior Initiative/Institute for Research	400.0
Continuing Education in Outdoor Recreation for Natural Resources Managers	125.0
Community Gardening Program	110.0
Nutrient Cycling and Tree Species Suitability	220.0
Means for Producing Lignin-Based Plastics	100.0
Aspen Hybrids/New Tissue Culture Techniques	70.0
Aquaculture Facility Purchase and Development	1,200.0
Microbial/Genetic Strategies for Mosquito Control	150.0
Data Base for Plants of Minnesota	130.0
Black Bear Research in East Central Minnesota	100.0
Establish Northern Raptors Rehabilitation/ Education Facility	75.0
Effect of Avian Flu Virus in Wild Waterfowl	16.0
Accelerated Soil Survey	1,270.0
Pedestrian Pocket-Land Use/Design Strategies	100.0
Model Residential land Use Guidelines	150.0
Surface Greenstone Belts in SW Minnesota	120.0
Direct Smelting	500.0
Total	\$6,584.0

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: LEG COMM MN RESOURCES

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
LEG COMM MN RESOURCES	3,359	2,533	2,492		6,584	6,584			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL EXPENDITURES BY ACTIVITY	3,359	2,533	2,492		6,584	6,584			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
DETAIL BY CATEGORY:									

LOCAL ASSISTANCE	3,359	2,533	2,492		6,584	6,584			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL EXPENDITURES BY CATEGORY	3,359	2,533	2,492		6,584	6,584			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SOURCES OF FINANCING:									

DIRECT APPROPRIATIONS:									
ENVIRONMENT TRUST					1,530	1,530			
MN RESOURCES	3,359	2,533	2,492		5,054	5,054			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
STATUTORY APPROPRIATIONS:									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
TOTAL FINANCING	3,359	2,533	2,492		6,584	6,584			

ACTIVITY:
PROGRAM:
AGENCY: University of Minnesota

1992-93 Biennial Budget

DECISION ITEM: LCMR Projects

	Dollars in Thousands			
	F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995
AGENCY PLAN:				
Minnesota Future Resources Fund	\$ 5,054	\$ 5,054	\$ -0-	\$ -0-
Minnesota Environment and Natural Resources Trust Fund	\$ 1,530	\$ 1,530	\$ -0-	\$ -0-
LCMR Total	\$ 6,584	\$ 6,584	\$ -0-	\$ -0-

Requires statutory change: _____ Yes X No
Statutes Affected:

ITEM SUMMARY:

The University of Minnesota requests F.Y. 1992-93 appropriations of \$5,054,000 from the Minnesota Future Resources Fund and \$1,530,000 from the Minnesota Environment and Natural Resources Trust Fund. These requests, which have been approved and endorsed by the Legislative Commission on Minnesota Resources (LCMR), address several important state environmental and natural resource management priorities. Major components of the request include groundwater sensitivity mapping, aquaculture research, taconite smelting research, land use strategies, and forestry and wildlife research.

The University of Minnesota requests funding for the 1992-93 biennium for the following projects:

	FY 1992-93
MINNESOTA FUTURE RESOURCES FUND	
Reclamation of Recreational Systems and Envmtl Resources	\$ 200,000
Dvlpmnt and Application of Aeration Technology	148,000
Lake Superior Initiative/Institute for Research	400,000
Continuing Ed in Outdoor Rec for Nat Resource Managers	125,000
Community Gardening Program	110,000
Nutrient Cycling and Tree Species Suitability	220,000
Means for Producing Lignin-based Plastics	100,000
Aspen Hybrids/New Tissue Culture Techniques	70,000
Aquaculture Facility Purchase and Development	1,200,000
Microbial/Genetic Strategies for Mosquito Control	150,000
Black Bear Research in East Central Minnesota	100,000
Establish Northern Raptors Rehab/Education Facility	75,000
Effect of Avian Flu Virus in Wild Waterfowl	16,000

	FY 1992-93
MINNESOTA FUTURE RESOURCES FUND (Contd.)	
Accelerated Soil Survey	1,270,000
Landuse and Design Strategies to Enhance Environ Quality	100,000
Model Residential Land Use Guidelines	150,000
Subsurface Greenstone Belts in Southwest Minnesota	120,000
Direct Smelting	500,000
TOTAL	\$5,054,000

MINNESOTA ENVIRONMENT AND NATURAL RESOURCES TRUST FUND	
County Geologic Atlas/Groundwater Sensitivity Mapping	\$1,400,000
Data Base for Plants of Minnesota	130,000
TOTAL	\$1,530,000

RATIONALE:

Given its land grant mission and its emphasis on research and public service, the University of Minnesota has a major role in identifying and resolving Minnesota's priority environmental, ecological, and economic concerns. Consistent with this overall goal, the University requests 1992-93 funding for 20 research and public service projects involving land use management, research related to environmentally sensitive industrial and commercial methods, hydrological research, continuing education for natural resource managers, and acquisition and development of an aquaculture research facility in the University' College of Natural Resources. Some of the University's 1992-93 requests continue and/or expand existing natural resource development projects. Others would fund new projects designed to address emerging or previously unrecognized environmental and natural resource management issues.

GOVERNOR'S RECOMMENDATION:

Recognizing the authority of the LCMR to make budget recommendations for projects funded by the Minnesota Future Resources Fund and the Minnesota Environment and Natural Resources Trust Fund, the Governor makes no specific recommendations.

PROGRAM: Special Projects
Agency: Minnesota, University of

1992-93 Biennial Budget

PROGRAM PURPOSE:

The following projects have received legislative support in prior years covering a variety of specific interests. Most of these projects were funded by actions taken in other "money" committees. The nature of these projects are non-recurring and will not be featured in the biennial base for F.Y. 1992-93.

<u>Project</u>	<u>(Dollars in Thousands)</u>		
	<u>F.Y. 1989</u>	<u>F.Y. 1990</u>	<u>Estimate F.Y. 1991</u>
Integrated Pest Management		\$ 42.0	\$308.0
Groundwater Research		255.0	45.0
Computer Fertilizer/Farm Safety	\$ 23.0	47.0	39.0
Small Ruminant Specialist		9.0	31.0
Pseudorabies Research		94.0	81.0
Bluegrass Research		19.0	26.0
Wild Rice Research	6.0	2.0	12.0
Forage and Turf Special		1.0	49.0
Farmer-Lender Mediation		306.0	94.0
St. Anthony Falls Hydraulics Laboratory	589.0	39.0	0.0
Sustainable Agriculture Chair	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total	\$618.0	\$814.0	\$685.0

Note: The Sustainable Agriculture Chair remains as a \$75,000 obligation of the state of Minnesota and is available to the University pending the raising of matching funds through F.Y. 1992.

1992-1993 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: SPECIAL PROJECTS

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
SPECIAL PROJECTS	618	814	685						
TOTAL EXPENDITURES BY ACTIVITY	618	814	685						
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE	618	814	685						
TOTAL EXPENDITURES BY CATEGORY	618	814	685						
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	618	814	685						
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	618	814	685						

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: UNIVERSITY OF MINN
PROGRAM: PERM UNIV FUND

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
PERM UNIV FUND	185	344	397	397	397	397	397	397	397
TOTAL EXPENDITURES BY ACTIVITY	185	344	397	397	397	397	397	397	397
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE	185	344	397	397	397	397	397	397	397
TOTAL EXPENDITURES BY CATEGORY	185	344	397	397	397	397	397	397	397
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
STATUTORY APPROPRIATIONS:									
AGENCY	185	344	397	397	397	397	397	397	397
TOTAL FINANCING	185	344	397	397	397	397	397	397	397

REPORT ON LEGISLATIVE APPROPRIATION FOR TEACHING ASSISTANT (TA) DEVELOPMENT AT THE UNIVERSITY OF MINNESOTA,

In 1988 the State Legislature provided funding for each of 2 years (1989-90 and 1990-91) to be matched by University funds to improve the preparation of teaching assistants in communication and instructional skills.

More than 4,000 graduate students are employed annually as teaching assistants at the University of Minnesota. Of these, approximately 2/3 are from the United States and 1/3 from other countries. Teaching assistant duties range from grading course papers to responsibility for an entire course. With this large work force of teaching assistants, concerns have been raised about the quality of instruction in general, and, more specifically, about the communication skills of international teaching assistants for whom English is not the native language.

TA English Program (enhanced)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1990 (est.)

Expenditures \$168.0 \$198.0

The TA English Program is designed to help non-native English speaking TAs improve their English language and communication skills. TAs also learn about the culture of the American classroom and techniques for organizing and effectively teaching their disciplines. All non-native English speaking graduate students are required to pass a test of spoken English. International TAs (ITA) who score below 230 points out of 300 on the comprehensibility scale of this test must enroll in the program's 27 hour course in Classroom Communication Skills before beginning to work with American undergraduates in office hours, tutoring, lab supervision, or classroom instruction. It is the responsibility of the department to ensure that their TAs contact the Minnesota English Center to arrange for the testing. Those who do not pass the test are required to participate in the program for a minimum of one quarter. At the end of the quarter, these TAs must be retested. For those who do not pass, additional training is required before they are allowed to work with undergraduates. The program also works with the Institute of Technology in offering a 3 week preacademic program for incoming international teaching assistants.

Increases in the budget of the program allowed for the following improvements.

- The capacity of the TA English Program was increased to accommodate more teaching assistants and more extensive training. More teaching staff were added to the program to expand its teaching capacity. The number of hours each ITA spends in training has been increased by approximately 20% to provide more time for intensive pronunciation work.
- New pieces of technology (IBM SpeechViewer and Kay Electronics Visipitch) were introduced into the program that allow international speakers to analyze their own speech patterns against a model and learn to improve pronunciation. This technology dramatically improves the pronunciation of users in a short period of time.
- A new workshop for international TAs, "Teaching in a New Culture: The Minnesota Student," was developed and delivered. It has been offered 4 times with positive ratings by participants. It will continue to be offered at least once every quarter.
- Development of a brochure to acquaint undergraduates with strategies that have been successful in working with international teaching assistants.

- An evaluation of the TA English Program was conducted during the spring of 1990. A total of 1,517 undergraduates enrolled in 115 sections of courses in the departments of mathematics, chemistry, physics and sociology were asked to evaluate their international teaching assistants. In addition, the 47 international teaching assistants (ITAs) from these courses were also asked to complete a survey that queried their attitudes about the program. Highlights of this evaluation include the following:

Undergraduate perceptions:

- 78% of the undergraduates rated their international teaching assistants as "good," "very good," or "excellent."
- 46% of the undergraduates rated their international TA as average or above average in comparison to other TAs they had.
- 72% of the undergraduates said their ITAs were good or very good at making efforts to overcome language and communication problems in the classroom.
- On 16 specific items related to teaching, most undergraduates rated their internal TAs as acceptable to good. Highest rating was for subject matter expertise.
- Undergraduate ratings of their international TA's language skills were highly correlated with their ratings of their teaching performance, suggesting a strong linkage between these 2 in the minds of undergraduates.
- In general, the more previous experience the undergraduate had in working with people who had English as a second language, the more positive they were in rating both teaching and language skills.

International teaching assistants' perceptions:

- 77% of the international TAs gave the program a rating of good or better.
- 66% of the international TAs felt that more emphasis in the program should be placed on pronunciation.
- 55% of the international TAs felt there should be more emphasis in the program on student motivation issues (e.g., student participation in class, leading discussion, keeping students interested).

Grants to support TA Development in Departments (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$47.0 \$74.0

Small grants totaling \$47,000 were provided to 23 academic departments on a competitive basis for activities that encourage better instruction delivered by teaching assistants. Some of the funded activities include the development of credit course offerings in teacher training, TA handbooks, orientation workshops on instructional skills, and departmental consultation service for teaching assistants. An estimated 18,450 undergraduates will be affected by the teaching assistants involved in the training delivered by these 23 departments.

Workshops to Improve Teaching (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$35.0 \$45.0

New workshops to improve the instructional skills of teaching assistants have been offered by the University. These workshops have addressed topics such as organizing a class session, leading discussion, running a lab, one to one advising of undergraduates, using cooperative learning groups, dealing with diversity and learning styles in the classroom, creating effective tests, and writing across the curriculum. To date, more than 400 teaching assistants have attending sections of these 2 hour workshops. An additional 250-300 teaching assistants have attended training workshops offered through the Institute of Technology. These teaching assistants will interact with approximately 40,000 undergraduates each year.

Classroom Consultant (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$12.0 \$18.0

An educational specialist has been hired to observe teaching assistants as they work with their undergraduate classrooms and provide constructive feedback and assistance. In F.Y. 1989-90, this individual consulted individually with approximately 25 teaching assistants and was called on by departments to engage with groups of teaching assistants in large group instruction. These teaching assistants will have contact with about 4,000 undergraduates.

Resource Collection on Teaching Information (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$1.0 \$1.0

A special reserve collection of materials for teaching assistants has been assembled in the University Library that can be used as a resource for teaching assistants. These materials include books, articles, handbooks, manuals, videotapes, and audiotapes on topics related to teaching.

Inventory of all TA Development Efforts Across the University (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$1.0 \$0.0

An inventory of all activities designed to improve the teaching skills of teaching assistants has been compiled. Now departments that review the inventory can gain new ideas about ways to support their own teaching assistants.

Improved Coordination of TA Development Activities, Including Publicity About the Components of the Programs (new)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$2.0 \$2.0

An advisory committee consisting of faculty, students, and administrators from across campus has been formed to meet quarterly with the Office of Academic Affairs to review the program services and components. Two brochures, 1 directed at teaching assistants and the other at departments, have been published and widely distributed which publicize TA development activities.

TA Development at Duluth (enhanced)

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Expenditures \$3.0 \$4.0

University of Minnesota, Duluth initiated an intensive 4 day orientation training session for graduate teaching assistants which was held at the end of August. A total of 39 teaching assistants attended sessions in communication skills, active-learning strategies, tutoring, and videotaped microteaching. Fourteen of the international teaching assistants attended special sessions which included small group work with a speech clinician.

(Dollars in Thousands)
F.Y. 1990 F.Y. 1991 (est.)

Total Expenditures \$268.0 \$322.0

Prospects for Future Plans for TA Development

The University of Minnesota plans to continue to build upon the TA development activities made possible by legislative funding in the following manner:

- Make mandatory specified levels of training for all teaching assistants. Currently, all non-native speakers must undergo training if they fail to reach a criterion level on the test of English. In the future, departments will be asked to demonstrate that all of their teaching assistants have completed requirements related to communication and instructional skill. Training can occur at the department, collegiate or university level.
- Expand the classroom consultant service so that all teaching assistants who need guidance and feedback can be identified and supported. The consultation might come from faculty in their departments or be provided centrally by the classroom consultant.
- Monitor the performance of teaching assistants so that problems can be detected early in the quarter. Each department by its teaching assistants. Central administration must work with departments to help them develop a system that can detect classroom problems early and take appropriate action. Each department should also establish baseline data on student evaluations for its teaching assistants to make it possible to compare teaching assistant performance.
- Increase cooperation and partnering with departments. An educational specialist will be available to aid departments in designing and delivering workshops for their TAs and will also train experienced TAs and faculty to provide observation and consultation services within their unit.

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: MAYO FOUNDATION

PROGRAM

PAGE

Mayo Medical School

176

Family Practice Graduate Residency Program

179

AGENCY: Mayo Foundation

1992-93 Biennial Budget

MISSION:

The mission of Mayo Medical School is to enroll outstanding students and, with small class size and a large faculty of practicing physicians, produce knowledgeable and compassionate physicians. Mayo Medical School, established in 1971, is responsible for undergraduate education leading to the M.D. degree. With a faculty of more than 570 and a class size of 40, students receive a highly personalized medical education.

The goals of Mayo Medical School are to graduate students who:

- accept the importance of the patient as an individual;
- have mastered the principles of health promotion, disease prevention and the skills of diagnosis and patient management;
- affirm the value of medical research, the importance of continuing medical education, and the role of physician as educator; and
- appreciate the ethical challenges faced by the physician and scientist.

Mayo Medical School is part of Mayo Foundation, a nonprofit, charitable corporation best described as a private trust for public purposes. It is governed by a Board of Trustees of which a majority of members represent the public, and provide liaison between the public and the Foundation.

Mayo aspires to provide the best medical care--through practice, education and research in a unified multi-campus system.

Mayo pledges to conduct its interdependent programs of medical care, research and education in keeping with the highest standards of quality. Fundamental to this pledge is the absolute need to combine the science and art of medicine, technology and personalized care, and excellence in all endeavors with respect for the individual--both patient and employee. Mayo will achieve this pledge through:

- Comprehensive and compassionate patient care delivered through an integrated, multi-specialty group practice
- Superior biomedical research to attain new knowledge with broad clinical interactions
- Scholarly educational programs to teach and train medical and scientific professionals for national and Mayo needs and to be a health information resource for the public.

Other major educational programs within the Foundation are:

1. Mayo Graduate School of Medicine--established in 1915, administers graduate training programs in virtually all specialties of medicine, including the primary care fields of family medicine, general internal medicine, pediatrics, and obstetrics/gynecology. The nearly 1,000 physicians and scientists enrolled in the school augment the senior faculty and contribute to the medical students' education.
2. Mayo School of Health-Related Sciences--established in 1972 for the training of allied health professionals. It included 13 programs with 323 full- and part-time students in 1989.
3. Mayo Graduate School established in 1989, provides Masters and Ph.D. programs in the basic sciences. Enrollment in the 7 programs within this school is authorized at 132 positions.

4. The Section of Continuing Education conducts conferences and other education services for physicians in practice to update knowledge and skills in medicine.

MAJOR POLICY DRIVERS:

Minnesota has a continuing need for physicians. In a review of employment ads for physicians appearing in issues of Minnesota Medicine (Journal of the Minnesota Medical Association) for January, April, July, and October, 1990, the following pattern was observed. There was an average of 55 positions advertised for primary care physicians (family practice, general internal medicine, obstetrics, and pediatrics) in Minnesota each month. Twenty-five percent of those primary care openings were located in the Twin Cities metropolitan area or Duluth.

In each of those same journal issues, an average of 25 advertisements appeared for positions in internal medicine subspecialties, surgery and surgical specialties, or other medical specialties. Seventy-two percent of those positions for "specialists" were in communities outside of the Twin Cities metropolitan area or Duluth.

Although the state of Minnesota needs primary care physicians in rural areas, it also needs primary care physicians in urban areas. In addition, physicians trained in other medical and surgical specialties are needed to serve Minnesota's rural populations as well as urban citizens. Mayo Medical School helps Minnesota by preparing physicians for a variety of practice environments.

As the population of Minnesota continues to experience the same trends occurring in the general U.S. population, the need for primary care as well as specialized health care services will be present. With an aging population, transplantation surgery, joint replacement and repair, and geriatric medicine service will be needed. In addition, physicians will be required to deal with the complexities of Sexually Transmitted Diseases (STDs) in the population of Minnesota.

The U.S. Department of Health and Human Services has identified 47 medical service areas within 36 counties of Minnesota which have fewer physicians per 1,000 population than Health & Human Services Department guidelines. However, only 17 of the 47 service areas have a "high level" of need for primary care physicians according to the Department of Health & Human Services report.

In addition much of the literature suggests that the shortage of primary care physicians in rural areas of Minnesota and other states is affected by reimbursement levels of public and private health care payment programs. The unavailability of support services (i.e., hospital, radiology, laboratory, etc.) makes it difficult and inefficient for primary care physicians to practice in some rural areas.

As an affirmation of its interest in adequate health care in rural areas, Mayo Foundation supports the efforts of the Minnesota Rural Health Coalition and has appointed an observer to meet with that organization.

Because of capitation, Minnesota residents have the opportunity to attend Mayo Medical School at a tuition level comparable to other schools in the state. Capitating an average of 20 Minnesotans per class at Mayo Medical School is financially sound in that no capital investment is involved and the state knows precisely what its costs per student will be and the quality of the end product.

GOVERNOR'S RECOMMENDATION:

The Governor recommends a direct state appropriation of \$1,941,000 for the 1992-93 biennium.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: MAYO MEDICAL SCH

PROGRAM RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
MAYO MEDICAL SCHOOL	734	743	771	741	711	711	721	682	682
FAMILY RESIDENCY	181	281	291	291	274	274	291	274	274
TOTAL EXPENDITURES BY PROGRAM	915	1,024	1,062	1,032	985	985	1,012	956	956
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	915	1,024	1,062	1,032	985	985	1,012	956	956
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	915	1,024	1,062	1,032	985	985	1,012	956	956

BASE RECONCILIATION REPORT
for 1992-1993 Biennium

AGENCY: MAYO MEDICAL SCH

	ALL FUNDS		GENERAL FUND		OTHER STATE FUNDS		FEDERAL FUNDS	
	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93
F.Y.91 FUNDING LEVEL	1,062	1,062	1,062	1,062				
APPROPRIATIONS CARRIED FWD	<10>	<10>	<10>	<10>				
ACF ENROLLMENT ADJUSTMENTS	<49>	<69>	<49>	<69>				
BASE TECHNICAL ADJUSTMENTS	29	29	29	29				
TOTAL	1,032	1,012	1,032	1,012				
BIENNIAL TOTAL		2,044		2,044				

ACTIVITY:
PROGRAM:
SYSTEM: Mayo Foundation

1992-93 Biennial Budget

DECISION ITEM: Financing Inflationary Costs - Informational

	<u>Dollars in Thousands</u>			
	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>	<u>F.Y. 1995</u>
Expenditures				
General Fund	\$ 46	\$ 93	\$ 93	\$ 93
Revenues				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes x No

ITEM SUMMARY:

Inflation was calculated for the Mayo Foundation at 4.5% per year for each year of the 1992-93 biennium. The inflation factors were applied to the agency's adjusted base.

The Mayo Foundation receives capitation funding for Minnesota residents in the Mayo Medical School and Mayo Family Practice Graduate Residency Program. The Mayo Foundation will use its own resources to address any program cost increases.

PROGRAM: Mayo Medical School
Agency: Mayo Foundation

1992-93 Biennial Budget

senior year in clerkship training at Mayo (230 since 1982). No financial support has been asked for this service.

PROGRAM PURPOSE:

- **Background.** Since its establishment in 1971, 15 classes of approximately 40 students each have been graduated. From its inception the school has received capitation in support of Minnesota residents. For classes entering between 1972 and 1983 capitation was available for up to 40 Minnesotans. In 1984, capitation was authorized to support 20 state residents. No state funds are being requested for capital expenditures. Buildings and facilities have been and will continue to be provided by Mayo Foundation.

In 1972 the Minnesota legislature concluded that Mayo Clinic/Mayo Foundation was not only a national resource, but one which was Minnesota's as well. It was determined that the citizens of the state should benefit by using this resource for a medical school. Time and experience have confirmed the judgement that Mayo is an excellent place for a portion of the state's medical students to receive their education.

- **Curriculum.** Minnesota students accepted at Mayo Medical School learn the art and science of medicine in a curriculum that is designed to take full advantage of the many and varied resources of Mayo Clinic/Mayo Foundation. Emphasis is given to the primary care disciplines of general internal medicine, family medicine, pediatrics, and obstetrics/gynecology in an effort to encourage students to select one of these fields when making career choices. Mayo Medical School's goal is to train compassionate, highly-skilled, cost-conscious physicians, which are qualities that Mayo physicians are recognized for nationally.
- **Applicants/Enrollment.** In 1990, applications for Mayo Medical School (MMS) were received from 270 Minnesotans and 1,116 nonresidents. Students selected over the past 18 years have received their undergraduate education from the University of Minnesota in the Twin Cities, Duluth, and Morris, 6 state universities, and 16 private colleges in the state. Of the 624 Minnesotans enrolled since 1972, 283 have come from the Twin Cities metro area. In addition, nearly 100 other Minnesota communities have been represented. Of 158 Mayo Medical School students who matriculated in 1990-91, 78 are Minnesota residents, 65 are women, and 7 are minority students.

PERFORMANCE:

Of the 41 students who graduated from MMS in May, 1990, 21 (51%) are pursuing residencies in a primary care field. Of those 41 students, 20 were Minnesotans and 13 of them are pursuing residencies in a primary care field.

Mayo Medical School conducted a survey of all of its alumni in 1989. Of the 473 students graduating from MMS from 1976-1987, 224 or 47% have chosen to practice in Minnesota. Another 42 graduates practice in states contiguous to Minnesota bringing to 56% the number of graduates who practice in this region. Of the 224 MMS graduates working in Minnesota, 125 (56%) are practicing in the fields of internal medicine, family medicine, pediatrics, or obstetrics/gynecology.

	<u>Practice Locations Chosen, Classes of 1976-1987</u>	<u>Residency Training Locations Chosen, Classes for 1988-90</u>
Practicing in:		
Minnesota	224	53
Wisconsin	35	5
North/South Dakota	7	1
Total	267	59
Percent	56%	52%

- Overall, 185 (39%) of the 473 MMS graduates from 1976-1987 have entered these primary care fields.
- Each year a substantial number of University of Minnesota medical students spend 6 to 8 weeks of their

Although some perceive there is an ample (or even an over-) supply of physicians in certain specialties, there is no doubt about the continued need for physicians in the primary care fields of internal medicine, family medicine, pediatrics, and obstetrics/gynecology. These are fields which are given emphasis at MMS. As part of their education, each MMS student lives with a family practice physician who is in private practice in this region to experience first-hand the challenges and rewards of primary care medicine.

PROSPECTS:

No changes are anticipated for the MMS funding request for the next biennium.

PLAN:

Mayo Foundation requests that an average of 20 Minnesota residents in each of 4 medical classes (for a total of 80 per year) have the opportunity of receiving partial financial support of their medical education at Mayo. The MMS portion of the request for 1992-93, therefore, will increase only as a result of the inflation adjustments allocated by the legislature.

The cost per student per year to provide a medical school education at Mayo is approximately \$40,000. About 53% of this cost is borne by Mayo Foundation. Out-of-state students pay tuition/fees equal to the other 47%. For Minnesotans, however, the tuition/fee is reduced because of state capitation. Tuition/fees have been set for 1990-91 at \$8,200 for "residents" (½ of 1% increase over 1989-90) and \$17,650 for "nonresidents" (a 7% increase over 1989-90). A modest increase in tuition/fees is anticipated during the next biennium.

With the exception of state support for Minnesota students to attend MMS and funding for 18 family medicine residency positions, education programs are funded by Mayo Foundation. This support from Mayo will total more than \$52 million in 1990.

Projected Capitation for Minnesota Students*

	<u>Fresh.</u>	<u>Soph.</u>	<u>Jr.</u>	<u>Sr.</u>	<u>Total</u>	<u>Per Student Capitation</u>	<u>Total Capitation</u>
F.Y. 1991-92	20	16	18	22	76	\$ 9,875	\$750,500
F.Y. 1992-93	20	20	14	20	74	\$ 9,875	\$730,750

* The number of students enrolled each year varies because of late enrollment decisions, leaves of absence, withdraws, and absence during the junior year to pursue the combined MD/PhD program. Mayo requests that this appropriation provide capitation for an average of 20 Minnesota residents in each of the 4 classes at MMS and that the appropriation may be transferred between years within the biennium to accommodate enrollment fluctuations.

GOVERNOR'S RECOMMENDATION:

The Governor recommends funding of \$711,000 in F.Y. 1992 and \$682,000 in F.Y. 1993 for the Mayo Medical School. This recommendation represents a 5% reduction in the program base, and reduces the number of funded student positions from 75 to 72 in F.Y. 1992 and 73 to 69 in F.Y. 1993.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: MAYO MEDICAL SCH
PROGRAM: MAYO MEDICAL SCHOOL

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
MAYO MEDICAL SCHOOL	734	743	771	741	711	711	721	682	682
TOTAL EXPENDITURES BY ACTIVITY	734	743	771	741	711	711	721	682	682
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE	734	743	771	741	711	711	721	682	682
TOTAL EXPENDITURES BY CATEGORY	734	743	771	741	711	711	721	682	682
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	734	743	771	741	711	711	721	682	682
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	734	743	771	741	711	711	721	682	682

ACTIVITY:
 PROGRAM: Mayo Medical School
 AGENCY: Mayo Foundation

1992-93 Biennial Budget

DECISION ITEM: Reduction in Capitation

Dollars in Thousands

	F.Y. 1992	F.Y. 1993	F.Y. 1994	F.Y. 1995
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AGENCY PLAN:

Expenditures				
General Fund	\$ (30)	\$ (39)	\$ (39)	\$ (39)
Revenues				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

GOVERNOR'S RECOMMENDATION:

Expenditures				
General Fund	\$ (30)	\$ (39)	\$ (39)	\$ (39)
Revenues				
General Fund	\$ -0-	\$ -0-	\$ -0-	\$ -0-

Requires statutory change: _____ Yes X No
 Statutes Affected:

ITEM SUMMARY/RATIONALE:

This plan is submitted at the request of the Governor's Office to reduce the 1992-93 biennial allocation for the Mayo Foundation by 5%. This item reduces the Mayo Medical School (MMS) base by \$30,000 in F.Y. 1992 and \$39,000 in F.Y. 1993 by reducing the number of funded student positions from 75 to 72 in F.Y. 1992 and 73 to 69 in F.Y. 1993.

GOVERNOR'S RECOMMENDATION:

The Governor concurs with agency's plan.

PROGRAM: Family Practice Graduate Residency Program
Agency: Mayo Foundation

1992-93 Biennial Budget

- "There may be a shortage of family physicians, despite a predicted oversupply of physicians in general, particularly in managed care systems and in rural areas that are underserved."

Mayo has a Department of Family Medicine with 19 full-time staff members. The department is responsible for the Family Practice Residency Program.

PROGRAM PURPOSE:

The mission of the Mayo Foundation Family Practice Residency Program is to train family physicians who will provide personal, comprehensive, continuing care to patients of all ages, regardless of their health problems.

Recognizing the needs of Minnesota for physicians specializing in primary care fields, the Mayo Graduate School of Medicine developed a 3-year graduate medical residency training program in the specialty of family medicine in 1978.

The program has been successful in recruiting high caliber medical school graduates in each of the 13 entering classes. A concerted effort is made to select persons who have an interest in practicing medicine in small communities, and graduates of the first 10 groups to finish the residency program have selected family practices in a variety of small communities. Mayo Clinic is pleased that over 57% of these graduates have begun their family medicine careers in Minnesota. Three of our 1990 graduates have accepted positions in northern Minnesota communities.

The Family Practice Residency Program has all of the resources of the Mayo institution available to it in order to provide a sound graduate medical education program of excellence. In addition, the curriculum is designed to provide the resident physician with significant exposure to the practice of medicine in a rural community. The Kasson-Mayo Family Practice Clinic provides a rural model for training, allowing residents to learn family medicine in a small town environment.

PERFORMANCE:

The Family Practice Clinic is a vital element of any family medicine residency. Here the resident spends a major portion of his or her training time providing care for patients on an ambulatory basis in an environment stressing continuity of care and preventive medicine. This center is located in Kasson, Minnesota, a rural community of just over 3,200 people, located 12 miles west of Rochester. In a joint effort with the community, Mayo's Department of Family Medicine established the Kasson-Mayo Family Practice Clinic, 1) as a place for the delivery of primary medical care services to a rural area having a population of approximately 18,000, and 2) as a "class-room" for teaching family medicine to resident physicians. In 1989, over 31,000 patients visited the Kasson-Mayo Family Practice Clinic.

PROSPECTS:

The program currently is being supported financially by funds from Mayo Foundation and from the State of Minnesota. In addition to the educational goal of providing an excellent training program, one of the major goals is to train family physicians who will establish their practices in the towns of rural Minnesota and the Upper Midwest. It is anticipated that the majority of its graduates will be physicians engaged in the broad spectrum of primary care activities including preventive care, health maintenance and broad medical services for the entire family. As in 1990-91, Mayo is requesting funding for 18 positions in the 1992-93 budget.

An article in the 9-2-88, issue of JAMA on the "Future of Family Practice" states:

- While family physicians represented 11.9% of all U.S. M.D.'s in 1986, 30.5% of all patient visits to office-based physicians were performed by family physicians.
- While the U.S. population is projected to increase by 12.3% between 1985 and 2000, the number of family physicians will only increase by 9%.
- Family physicians are sought out by many managed care providers (particularly HMO's) because they offer a broad range of services and are perceived as cost efficient utilizers of services.

PLAN:

From 1978 through the 1987-89 biennium capitation has been authorized for 12 family medicine residents per year. During F.Y. 1991, capitation was \$16,165 per resident for a total of \$291,000 supporting 18 family practice residents. Capitation to continue support for 18 family practice residents is requested for each year of the 1992-93 biennium.

GOVERNOR'S RECOMMENDATION:

The Governor recommends funding of \$274,000 in F.Y. 1992 and \$274,000 in F.Y. 1993 for the Family Practice Graduate Residency Program. Recommended funding represents a 5% reduction in the program base and reduces the per student capitation amount from \$16,165 to \$15,222 in each year of the 1992-93 biennium.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS).

AGENCY: MAYO MEDICAL SCH
PROGRAM: FAMILY RESIDENCY

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
FAMILY RESIDENCY	181	281	291	291	274	274	291	274	274
TOTAL EXPENDITURES BY ACTIVITY	181	281	291	291	274	274	291	274	274
DETAIL BY CATEGORY:									
LOCAL ASSISTANCE	181	281	291	291	274	274	291	274	274
TOTAL EXPENDITURES BY CATEGORY	181	281	291	291	274	274	291	274	274
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
GENERAL	181	281	291	291	274	274	291	274	274
STATUTORY APPROPRIATIONS:									
TOTAL FINANCING	181	281	291	291	274	274	291	274	274

ACTIVITY:

1992-93 Biennial Budget

PROGRAM: Mayo Family Practice Residency Program

AGENCY: Mayo Foundation

DECISION ITEM: Reduction in Capitation

Dollars in Thousands

F.Y. 1992 F.Y. 1993 F.Y. 1994 F.Y. 1995

AGENCY PLAN:

Expenditures

General Fund \$ (17) \$ (17) \$ (17) \$ (17)

Revenues

General Fund \$ -0- \$ -0- \$ -0- \$ -0-

GOVERNOR'S RECOMMENDATION:

Expenditures

General Fund \$ \$ \$ \$

Revenues

General Fund \$ \$ \$ \$

Requires statutory change: _____ Yes X No

Statutes Affected:

ITEM SUMMARY/RATIONALE:

This plan is submitted at the request of the Governor's Office to reduce the 1992-93 biennial allocation for the Mayo Foundation by 5%. This item reduces the Mayo Family Practice Residency Program (MFPRP) base by \$17,000 in each year of the 1992-93 biennium. The MDFPRP base is reduced by reducing the per student capitation from the current level of \$16,165 per student per year to \$15,222 per student per year. The number of funded student positions remains constant at 18 per year.

GOVERNOR'S RECOMMENDATION:

The Governor concurs with the agency's plan.

1992-93 BIENNIAL BUDGET

PROGRAM STRUCTURE

AGENCY: HIGHER EDUCATION FACILITIES AUTHORITY

PROGRAM

PAGE

Facilities Authority Salaries

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MISSION:

The Higher Education Facilities Authority (hereafter called the Authority) was created to assist Minnesota non-profit, non-sectarian institutions of higher education in the construction, financing and refinancing of facilities at a lower interest rate than might otherwise be available to them. Beginning in F.Y. 1988, the legislature also asked that the Authority finance projects at public higher education institutions. The Authority has access to capital improvement funds only through borrowing. The facilities built by the Authority must be financed from tax-exempt revenue bonds sold by the Authority. In turn, the Authority enters into lease agreements whereby an institution pays rent in an amount needed to retire the incurred debt. Since the Authority is an agency of the state, the interest paid by the Authority to the bondholders is tax-exempt. The use of the financing arrangements for facility construction made possible by the existence of the Authority is entirely voluntary. Currently, the Authority has \$250 million of bonding authority.

The Authority's policies, procedures, regulations and approval of bonding projects are made by a board composed of 10 members, 8 of which are appointed by the Governor. The remaining 2 are ex-officio members: namely the executive director of the Higher Education Coordinating Board and the president of the Minnesota Private College Council. The Authority provides the following services:

- investigates the eligibility and makes recommendations to the board on institutions' bond projects;
- oversees the maintenance of Authority projects;
- supervises the initial construction and maintenance stages to ensure that the project is being used for its stated purposes;
- keeps records and audits the accounts involved to ensure that the trustees are handling all accounts properly; and
- manages the investment accounts of the general bond reserve.

MAJOR POLICY DRIVERS:

It is evident that colleges and universities in Minnesota will be in need of financing programs, such as the Authority's program, for financing building projects and purchasing new equipment.

Deferred Maintenance: Recent nationwide studies show that a crisis of major proportions exists among higher education institutions. These studies report accumulated deferred maintenance needs in excess of \$60 billion. Minnesota private colleges are proportionately facing this problem. The massive building programs of the 1950s and 1960s have created a deferred maintenance problem for the 1990s.

Technological Advances: Advanced technology is dramatically changing the way information is disseminated, stored and retrieved. This technology has forever changed the college library, the business office, development office, registrar and admissions offices. The computer has become an invaluable tool for teaching in most academic disciplines, and telecommunications systems are rapidly transforming campus instructional and administrative systems.

Obsolete Building Replacement: Any major renovation requires the entire building to be brought up to the standards of the local building codes. Replacement rather than renovation is the only solution where there is wide spread use of asbestos, obsolete or worn out electrical and plumbing systems, or if existing structures are not energy efficient and are not accessible to the handicapped.

EXPLANATION OF BUDGET ISSUES AND ALTERNATIVES:

1. The 1986 Federal Tax Reform Act has limited the amount the Authority can charge participant colleges. The fees charged to participant colleges are the funds used for the Authority's operating budget. To comply with new arbitrage rebate regulations, the Authority must lower the fees charged for each bond issue. The old fee policy of the Authority was a fee of 0.2 of 1% of the original bond issue amount. The new fee schedule will limit the annual fee to 0.125 of 1% of the outstanding principal of the bonds. The annual fees are the major source of the Authority's operating budget.

2. Maintain financial security. Expenses must not exceed revenues. The new lower fee schedule approved and implemented this past fiscal year will mean the Authority must make greater use of computers than it has in the past. The Authority has been self-supporting since its inception in 1971, and intends to continue in that manner. The Authority's financial advisors have concluded that the Authority will remain financially sound even with its new fee schedule.
3. This activity receives no state appropriation. The dollars shown on the activity fiscal summary reflect only salaries and benefits for the 3 staff positions of the Authority. In the interest of convenience, the Authority has elected to pay its salaries and benefits through the state payroll system. It is this portion (i.e., the payroll portion) of the Authority's budget which appears in this submission.

PERFORMANCE INDICATORS:

1. Bonds totalling \$29,245,000 were issued this past biennium. This figure represents 9 issues for the following: Wm. Mitchell College of Law, \$4,250,000; College of St. Thomas, \$4,415,000; College of St. Scholastica, \$5,105,000; College of St. Benedict, \$1,680,000; Gustavus Adolphus College, \$1,440,000; St. John's University, \$2,500,000; Augsburg College \$900,000; Concordia College, Moorhead, \$3,800,000 and Northwestern College of Chiropractic \$5,155,000.
2. Three issues are pending: College of St. Thomas, \$25,000,000; Hamline University, \$5,430,000; and Gustavus Adolphus College, \$3,000,000.

GOVERNOR'S RECOMMENDATION:

The Governor concurs with the agency plan to achieve its 1992-93 objectives.

1992-1993 BIENNIAL BUDGET
(DOLLARS IN THOUSANDS)

AGENCY: HIGHER ED FAC AUTH
PROGRAM: FACILITIES AUTH SALARIES

ACTIVITY RESOURCE ALLOCATION:	FY 1989	FY 1990	Est. FY 1991	FY 1992			FY 1993		
				Adjusted Base	Agency Plan	Governor Recomm.	Adjusted Base	Agency Plan	Governor Recomm.
FACILITIES AUTH SALARIES	109	133	144	148	148	148	154	154	154
TOTAL EXPENDITURES BY ACTIVITY	109	133	144	148	148	148	154	154	154
DETAIL BY CATEGORY:									
STATE OPERATIONS	109	133	144	148	148	148	154	154	154
TOTAL EXPENDITURES BY CATEGORY	109	133	144	148	148	148	154	154	154
SOURCES OF FINANCING:									
DIRECT APPROPRIATIONS:									
STATUTORY APPROPRIATIONS:									
SPECIAL REVENUE	109	133	144	148	148	148	154	154	154
TOTAL FINANCING	109	133	144	148	148	148	154	154	154

BASE RECONCILIATION REPORT
for 1992-1993 Biennium

AGENCY: HIGHER ED FAC AUTH

	ALL FUNDS		GENERAL FUND		OTHER STATE FUNDS		FEDERAL FUNDS	
	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93	F.Y.92	F.Y.93
F.Y.91 FUNDING LEVEL	144	144			144	144		
OPEN APPROPRIATIONS	4	10			4	10		
TOTAL BIENNIAL TOTAL	148	154			148	154		
		302				302		