

needs

UNIVERSITY OF MINNESOTA 73-75



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Equal Opportunity

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination in the treatment of persons because of race, creed, color, sex, or national origin. This policy is particularly applicable in the recruitment and hiring of members of the faculty and staff and in promoting the academic pursuits of all students at both undergraduate and graduate levels. Individual faculty members are expected to support the development of affirmative action programs to ensure a proper ethnic balance among the students and staff of their department.

Regents' Letter of Transmittal

The Regents are pleased to transmit this document, detailing and explaining the University's 1973-75 Request to the Minnesota State Legislature.

The total request is for some \$252 million to continue current University programs and implement essential new ones during the next biennium. While this represents a \$48 million increase over the previous appropriation, it comes close to a standstill budget when one considers that the University — like the rest of us — will be operating during a period of continuing inflation and rising costs.

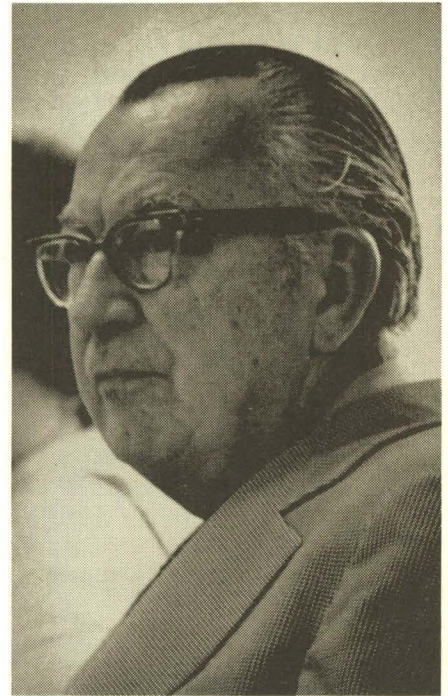
We have defined a "standstill" budget as the amount necessary to *continue* current operations, not as a fixed number of dollars. Considering inflationary pressures and the consequent need to increase the salaries of staff members to prevent a decline in their real income, a standstill budget in absolute terms would necessitate a drastic decrease in the level of University services. It seems reasonable, then, to consider a standstill budget as one that allows the current level of services to be maintained.

In addition to the funds necessary to do this, the administration and the Board of Regents

are recommending new program spending—including all the State Specials and Health Sciences — amounting to \$23 million. The Health Science expansion would take \$10.2 million, almost half of the total. Exclusive of State Specials, recommended increases in regular academic programs total about \$6 million, which is only 11 percent of the original unit requests.

The Board has recommended these increases because it felt that the maintenance of educational quality required implementation of some programs that went beyond the simple extension of current operations. The Board does not wish to see a decline in the quality of the University's efforts and believes that state resources are adequate to prevent it. What has been recommended is the minimum thought necessary to enable the University to meet the current educational needs of the citizens of Minnesota in a manner consistent with its historic excellence.

Among all levels of the University community there has been general understanding of the need to keep the level of spending at a minimum, and excellent cooperation in working toward that end. The request that is being forwarded accomplishes that goal and meets an equally important one by providing adequate funding for the University to continue as a nationally respected center of higher learning, providing top educational opportunities for the citizens of Minnesota.



Elmer Andersen

Chairman
Board of Regents

President's Message

THE GENERAL CONTEXT

The State of Minnesota has a long and proud tradition of generous and sustained support for higher education, particularly for its University. This heritage has enabled the University to develop into a significant educational system in the state and in the nation.

The University, in turn, has endeavored for more than a hundred years to meet the needs and desires of the citizens of Minnesota. Next June a hundred years will have passed since the University awarded its first degrees in 1873. The second century promises to be as challenging as the first. For if the first century reflected the excitements and pains of institutional infancy in an equally young and growing frontier environment, the second should bring the excitements and pains of institutional maturation in a more complicated, urban-oriented society.

While the University at one time was the primary source of higher education in the state, it now shares that responsibility with other systems. While higher education once commanded an unquestioned priority in public expenditures, it must now compete with other worthy claimants for the tax dollar. While individual institutions once grew independently in response to perceived needs, planned, coordinated, and controlled growth is now the watchword.

Recognizing that the University must continually adapt to its changing environment, we have refashioned and refined our mission so that we may better fulfill our commitment to the state. As many of you already know, the Board of Regents two years ago

adopted a policy that shifts the University's emphasis toward programs the University is uniquely qualified to offer: upper division, professional, and graduate programs. We recognize that the University cannot be all things to all people; it may not even be *some* things to all people. It is, therefore, increasingly important that the missions of the various systems of post-secondary education in the state be carefully delineated. Who gets what, should, in part, be determined by who does what.

The University also recognizes that it does not operate, and never did, during a time of untrammelled economic expansion. The resources available to the state are limited; the demands for those resources are endless. The University and other educational institutions have already felt the squeeze.

Somewhat paradoxically, the financial problems now facing higher education have come after a decade of record expansion due to a phenomenal increase in demand for opportunities in higher education. Nationally, total enrollments jumped from three million students in 1961 to over six million in 1971. The same increase in demand and consequent growth has occurred in Minnesota, and in response, since 1963, the University has increased the square footage of its facilities by 55 percent to accommodate its share of this increase.

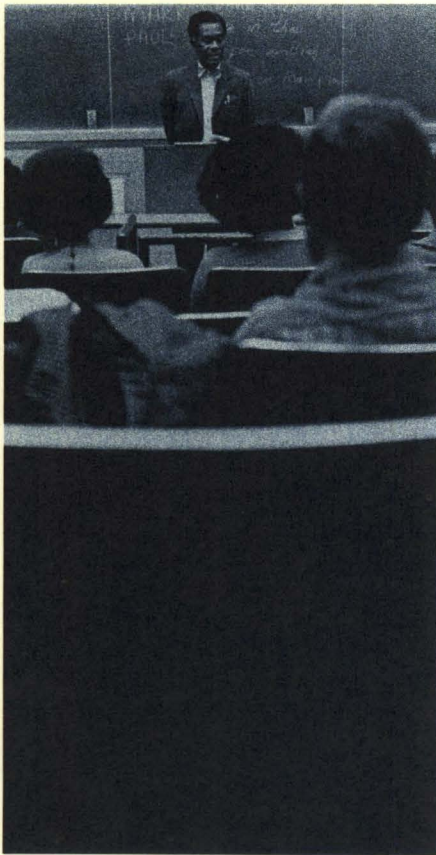
This growth in scale has been the most visible development in higher education in the last decade: more students, more buildings, more staff, more of everything. But it has diverted attention away from another kind of growth that is at least equally important: education has expanded in scope



"Education has expanded in scope as well as scale."

as well as scale. And in the 1970's and beyond, this expansion will be more characteristic and more significant than any growth in size.

The point is that higher education has not simply gotten bigger, it has gotten better: more has been discovered, more has been taught, more has been learned. New courses and even new fields have been added to the curriculum — some in response to new knowledge, some in response to additional demands for educational opportunities.



"New courses and even new fields have been added to the curriculum."

One of the more dramatic ways in which universities have expanded their scope is in dealing more directly with social problems and the impact of technological change. The pressures to move in that direction have come from both the campus and the community. One of the enduring student cries during the last decade has been for "relevance" in their studies. That was another way of asking that education become more concerned with the overwhelming social problems students saw confronting them. At the same time, community groups, many of whom have never been afforded the opportunity for higher education, began to press for widened access and new programs tailored to their backgrounds and needs.

Certainly it is no accident that many of our requests this year for new or expanded programs are in such areas as ethnic studies, criminal justice studies, environmental studies, and the like. And certainly it is no secret that these new programs will require additional funds. Expanding the scope of the educational experience is as expensive as expanding the scale of the institution. Either requires additional facilities and staff.

Accepting the fact that new programs are necessary, some may ask why old programs, which may have outlived their usefulness, cannot be eliminated. Some can, and that was the precise intention of the recent Retrenchment and Reallocation process at the University. The R & R process systematized and accelerated the ongoing program evaluations that result — and continue to result — in continuous change and

adaption. But quite obviously new knowledge only infrequently replaces old; usually it is something in addition to, *not in place of*. Therefore, if one accepts the traditional function of universities as repositories of the total body of knowledge, one must conclude that some widening of the curricular scope is necessary simply in response to the knowledge explosion that is upon us.

If, in addition, one accepts the idea that there is a growing need to apply the intelligence and industry of educational institutions to seek solutions to social problems, one must recognize the need to support innovative efforts to that end.

DETERMINING THE REQUEST

While many factors influenced decisions regarding the University's 1973-75 Legislative Request, probably the most important one was the realization that financial realities would dictate that our request reflect highest priorities and basic needs, rather than the entire domain of legitimate educational aspirations.

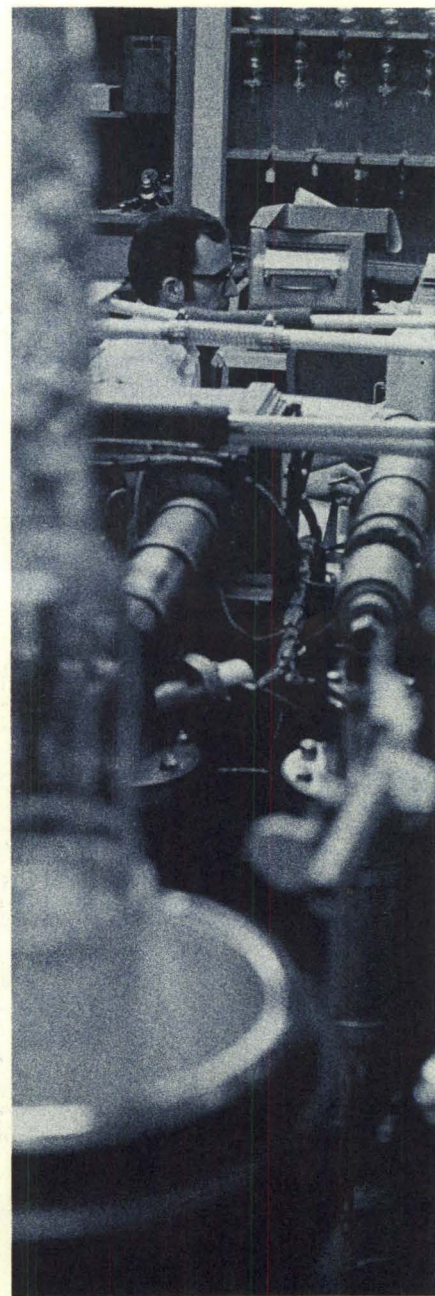
The first task, then, was to establish our institutional priorities. That is never an easy job. It becomes difficult and even painful when one is dealing with program proposals all of which have clear educational and social value.

Recognition of the need to continue decentralization and diversification of educational opportunity and to concentrate on unique programs suggested two broad priorities, the first being the promotion of the development of the coordinate campuses and the second being the elimination of program proposals that did not emphasize our unique role in graduate, professional, and upper division instruction, with a reduced emphasis on lower division programs.

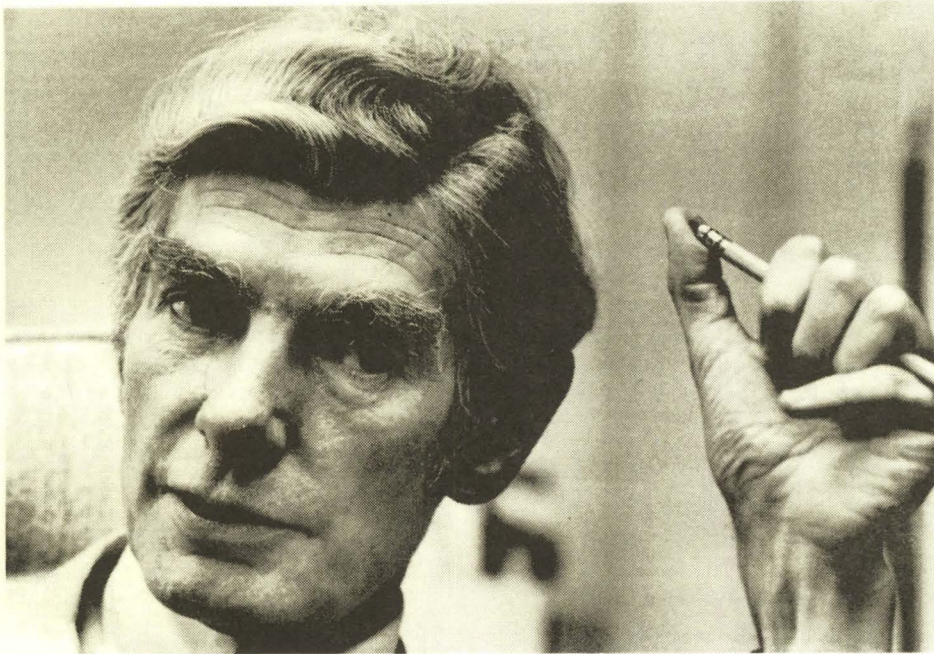
Four working priorities were finally determined. The first was to carry out the state and federally encouraged expansion of the Health Sciences. The second was to continue to promote the development of the coordinate campuses. The third was to strengthen distinguished departments and unique programs. The fourth was to begin to move Continuing Education and Extension (CEE) toward a more equitable funding formula in relation to other academic units, thus encouraging the full development of CEE as an educational alternative.

Within this set of basic priorities, students, faculty, administrators, and Regents all worked long and hard to arrive at a budget that would reflect basic needs. A substantial number of worthwhile programs were eliminated because they did not fall within these priorities. The funding for those that did was held at levels such that our total budget would fall within the financial constraints we perceived. The total process saw original unit program requests of \$55 million for new academic programs (other than Health Sciences) reduced to just over \$6 million.

Two points deserve special emphasis. First, the Health Science expansion is an expensive but critically needed effort to meet Minnesota's health care needs. It should be emphasized that new Health Science programs must be in addition to other University programs, not in place of them. The Health Science expansion is a state priority worthy of consideration on its own; it should not cut into funds needed in other academic areas. Second, this request is unlike any in re-



"It has taken and will take a big investment to maintain top educational quality."



cent years in two ways: It is based on a careful programmatic analysis rather than on student-faculty ratios, and it has already undergone an unparalleled reduction. It is a minimum budget: not a minimum to simply go on, but a minimum to continue as a quality educational institution worthy of the respect of the people of Minnesota and worthy of its name across the country. It is not a question of existence, but of excellence.

As noted earlier, Minnesotans have always understood the value of education and have looked upon it as one of their best social investments. All of us must remember that any return is always dependent upon what is invested and that it has taken and will take a big investment to maintain top educational quality in our state.

Malcolm Moos

The Changing University Role in Minnesota's Educational Picture

The role the University plays in the state higher educational picture has changed dramatically in recent years with the growth of the Junior College System and the expansion of the State College System, and as the demand for special graduate and professional programs has increased.

A few facts illustrate these changes.*

In 1961, the University's 30,846 students accounted for 43.4 percent of the total state enrollment (including private colleges). In 1971, that figure had shrunk to 30.6 percent even though enrollments were up to 51,449.

In 1961, 35.5 percent of post-secondary freshmen entering educational systems were at the University. In 1971, only 17.4 percent were.

In 1961, the University's 4,539 students in graduate and professional programs constituted 96.5

percent of the state total. In 1971, the University enrolled 10,264 in these programs, but that was only 64.2 percent of the total.

These figures show both great growth in the entire statewide system of higher education and the changing University role in that picture. Increasingly, the University is becoming a center for special and unique undergraduate, graduate, and professional programs. While some undergraduate programs are being expanded, the proportion of the curriculum centered around undergraduate — and particularly lower division — studies is declining.

Essentially this process of specialization applies to all components in the state system. The Higher Education Coordinating Commission (HECC) is charged with the responsibility of seeing that each of these units works in well with the others so that the entire system functions to provide the fullest range of educational opportunities at the lowest possible cost by avoiding dupli-

cation of efforts and introducing economies of scale.

The shift occurring at the University — toward upper division and graduate and professional programs — has important financial repercussions for the University, for all advanced studies require greatly increased expenditures of funds. Graduate programs cost an average of 2.4 times as much as lower division undergraduate instruction, while professional programs cost 2.8 times as much. Upper division programs cost roughly 1.5 times as much as lower (based on figures exclusive of federal funds).

What this means is that as the percentages of students in various areas shift toward higher cost programs, expenses go up without any increase in absolute numbers. Consequently, the University faces increased educational costs that are not tied to increased numbers of students but to different levels of study.

The charts and tables on these pages detail this enrollment shift.

*Source: Minnesota Higher Education Coordinating Commission Report; May, 1972. University's 1971 total has been revised to reflect updated figures from coordinate campuses.

Expenditures per FYE Student

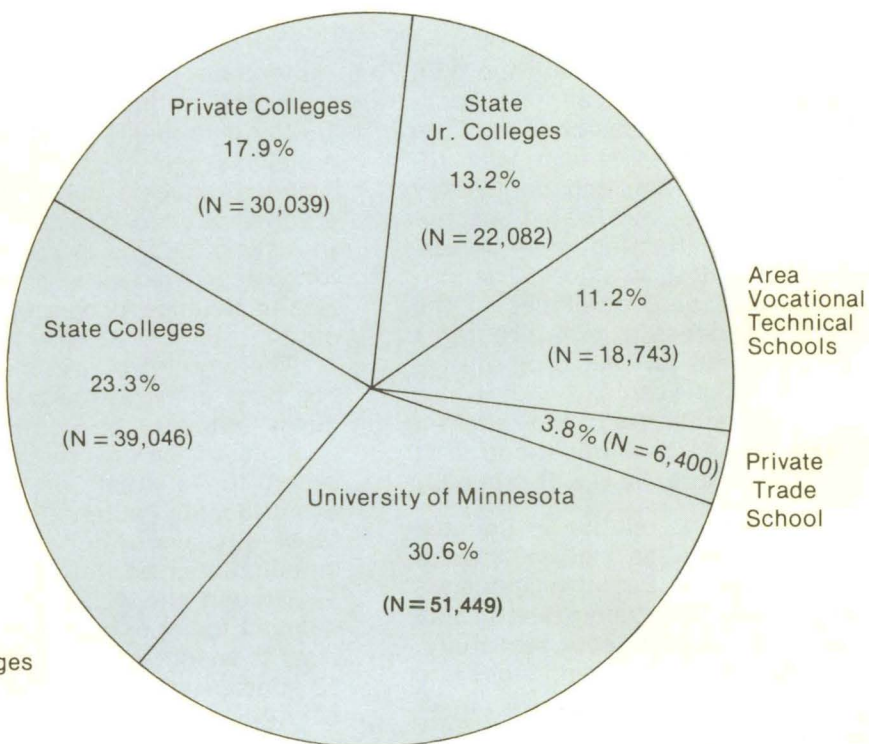
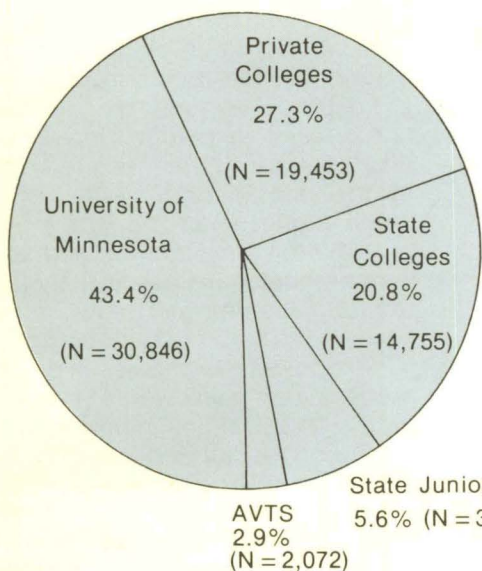
by Level Providing Instruction from Appropriations, Tuition, and Other State Income

Summary by Level	1970-71	1971-72	Estimated	Requested Budget	
			1972-73	1973-74	1974-75
Lower Division	\$1,388	\$1,467	\$1,559	\$1,707	\$1,778
Upper Division	2,128	2,222	2,394	2,596	2,695
Graduate	3,535	3,562	3,599	3,892	3,982
Professional and Graduate	4,011	4,572	5,507	6,597	6,403
Technical	4,447	3,803	3,650	3,607	3,288
Average	<u>\$2,120</u>	<u>\$2,262</u>	<u>\$2,479</u>	<u>\$2,757</u>	<u>\$2,815</u>

**Total Fall Enrollment
Selected Years, 1961-1971
(Headcount)**

1971
 Public: N = 131,116 78.3%
 Private: N = 36,439 21.7%
 Total: N = 167,555 100.0%

1961
 Public: N = 51,655 72.7%
 Private: N = 19,453 27.3%
 Total: N = 71,113 100.0%



**Full Year Equivalent Students by
Level of Instruction**

Level	1970-71	1971-72	1972-73	1973-74	1974-75
Lower Division	21,091 (47.8%)	19,405 (44.1%)	18,771 (43.3%)	18,915 (42.9%)	19,240 (43.0%)
Upper Division	14,532 (33.0%)	15,866 (36.0%)	15,325 (35.4%)	15,713 (35.7%)	15,710 (35.1%)
Graduate	4,077 (9.2%)	4,019 (9.1%)	3,796 (8.8%)	3,902 (8.8%)	3,909 (8.8%)
Professional and Graduate	3,956 (9.0%)	4,083 (9.3%)	4,369 (10.1%)	4,443 (10.1%)	4,648 (10.4%)
Technical	426 (1.0%)	678 (1.5%)	1,038 (2.4%)	1,081 (2.5%)	1,222 (2.7%)
Total	44,082 (100.0%)	44,051 (100.0%)	43,299 (100.0%)	44,054 (100.0%)	44,729 (100.0%)

The 1973-75 Request

In a sense, work on this request began a year and a half ago with the Retrenchment and Reallocation program designed by the University to systematically review all programs and identify any that could be eliminated without seriously affecting the University's central mission. The criteria that were developed in the R & R process to rank programs also served to rank program requests this year.

Here are a few of the program alterations or eliminations that resulted from the R & R process:

1. Seven relatively unusual languages plus several Middle Eastern languages are now being taught only through independent study.
2. Some other languages are now being taught only in alternate years.
3. Freshman English was reduced from three to two quarters; class time for communications (an alternate for freshman English) was reduced by 20 percent.
4. Reduced credit requirements in IT made it possible to realize savings from reduced teaching requirements.
5. Twenty-five small-enrollment courses in geology were eliminated.
6. Seventy courses in business administration were dropped.
7. Six undergraduate programs in home economics were discontinued.
8. Twenty sections of classes in General College were eliminated.

The same basic criteria were applied again this year in cutting

academic unit increase requests (other than Health Sciences) down from \$55 million to \$6 million. Building requests underwent an equally severe trimming. Health Science requests, while cut substantially, were not trimmed to the same degree because of a long recognized need to improve Health Science programs in the state.

The amount of trimming that has been done on the budget request cannot be emphasized enough. All new program requests except those which are essential and critical to the functions of the University were cut drastically or eliminated entirely.

Though the \$252 million requested for operating funds represents an increase over the 1971-73 appropriation, it is still some \$21 million less than the previous request.

The nearly \$48 million asked in new funds would generate new spending amounting to \$60 million, with \$12 million offset by associated new income.

Almost \$5 million would go just

to heat, cool, and maintain new buildings now open or opening during the biennium. Another \$1 million would be required to cover cost increases associated with the physical plant.

About \$9.3 million would go to extend University operations at the 1972-73 annual rate. (In accordance with plans, the expenditures during the second year of the last biennium were this much higher than the first.)

Inflation on supplies and expenses would take up another \$2.4 million, assuming it slows to 4 percent.

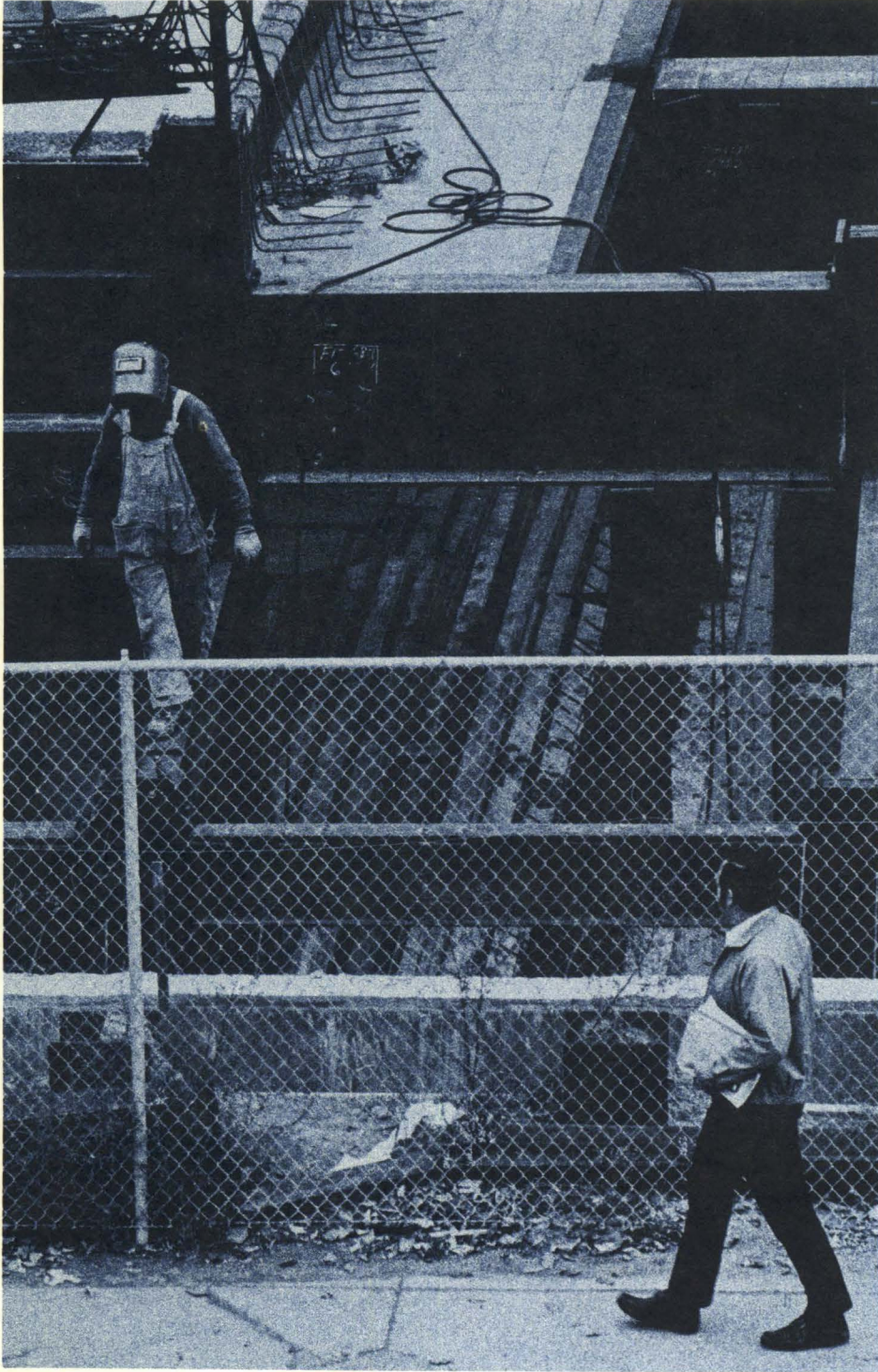
Proposed pay increases at 5.5 percent per year would require almost \$13.3 million in new funds.

Over \$10.2 million would go to expanded or new Health Science programs to meet state and national goals for health care.

Another \$13.4 million would go to new programs in all other academic areas, including State Specials.

New student financial aids to offset costs of tuition increases would require \$1.2 million.

	in \$ millions	
Increase to 1972-73 Rate	9.3	Fixed 18.5
Space and facilities	6.8	
4% inflation	2.4	
Health Sciences	10.2	41.4
Other academic programs	13.4	
Pay increases at 5.5% yearly	13.3	
All other	4.5	
	59.9	



"Almost \$5 million would go just to heat, cool and maintain new buildings now open or opening during the biennium."

Summary of New Program Recommendations

New or strengthened programs are recommended for some academic units. Generally programmatic recommendations are tied to either increased interest and enrollment in the field or a high priority for the discipline.

DULUTH CAMPUS

Duluth is conceived of as a multi-purpose University Center providing a wide scope of educational opportunities that parallel and complement other components in the University. The existence of medical and dental programs at Duluth points up this multi-purpose role.

While the medical and dental programs at Duluth are funded separately under State Specials, the undergraduate programs that provide a foundation for these programs are not. As graduate and professional programs develop, a parallel strengthening of the undergraduate curriculum is essential. Additional funds sought for Duluth are to strengthen its general program in these and other areas. Duluth also anticipates enrollment increases during the next biennium, and a portion of the funding increase is tied to this growth.

MORRIS CAMPUS

New program recommendations for Morris would permit a rounding out of the college's curriculum so that a minimal but strong liberal arts program can be offered in West Central Minnesota.

There is a particularly critical need for strengthening the social sciences and physical sciences, disciplines in which there is currently an inadequate program. In addition, reduced

reliance on non-recurring funds is sought, as are improvements in administration, planning, and development.

COLLEGE OF LIBERAL ARTS

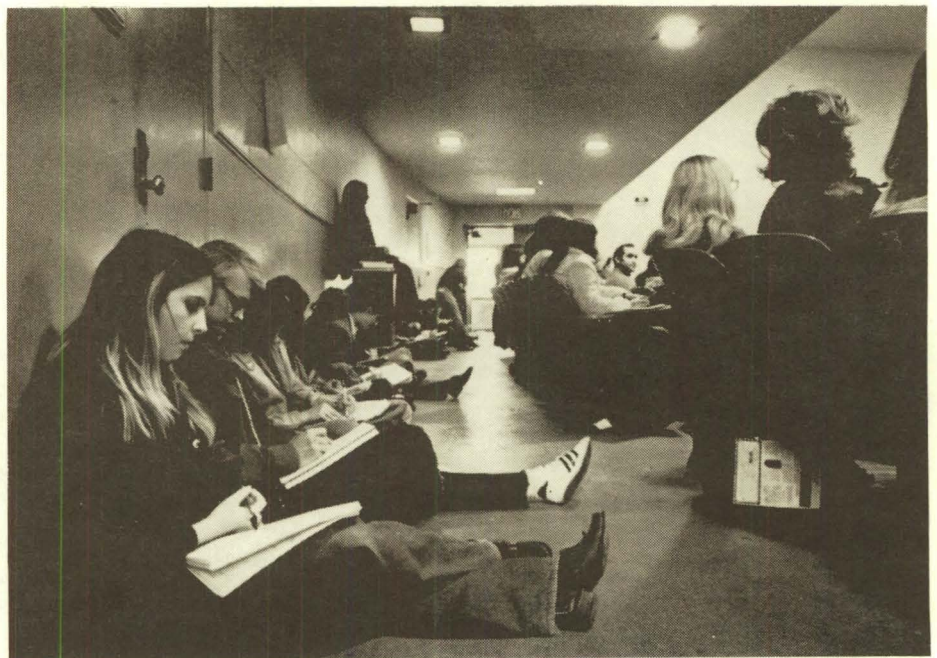
This college is central to the total instructional mission of the University. It serves as the point of entry for students of professional schools such as the College of Business Administration, the College of Education, and the College of Biological Sciences, and provides a very large proportion of the faculty who accomplish the instructional and research missions of the Graduate School.

CLA programs which would undergo continued development include ethnic studies, cross-disciplinary studies, statistics

and social science research, and minor expansion in other areas.

Additional program funds are being sought for ethnic studies to strengthen the departments of Afro-American Studies and American Indian Studies and also to implement the program in Chicano Studies. All these programs have generated widespread student interest and growing enrollments in course offerings. The American Indian Studies program is one of the few in the country giving attention to this neglected minority — one of Minnesota's largest minority groups.

Cross-disciplinary studies — areas which combine two or more traditional areas of study — have attracted more and more students in recent years. Some of
(continued)



"Recommendations are tied to either increased interest and enrollment in the field or a high priority for the discipline."

Summary of Regents' Request to the Legislature

	Legislative Appropriation		Legislative Request	
	1971-72	1972-73	1973-74	1974-75
I. Current Operations⁽¹⁾				
General Operations and Maintenance Fund	\$ 77,747,228	\$ 82,415,297	\$ 89,409,665	\$ 91,875,388
Crookston Technical College	888,000	960,526	951,060	985,006
Waseca Technical College	700,000	701,837	1,017,488	1,087,012
Special State Appropriations — Other Than Health Sciences	9,892,497	10,266,428	12,577,075	13,022,476
Special State Appropriations — Health Sciences ⁽²⁾	4,454,457	4,909,757	7,807,773	8,749,094
University Hospitals	4,562,700	4,789,889	5,564,374	5,597,030
Sub-Totals	\$ 98,244,882	\$104,043,724	\$117,327,435	\$121,316,006
Temporary Funding — Municipal Reference Bureau	—	—	54,927	—
	<u>\$ 98,244,882</u>	<u>\$104,043,724</u>	<u>\$117,382,362</u>	<u>\$121,316,006</u>

(1) Includes adjustments for funds returned to the State due to Civil Service Pay Plan changes, as well as deficiency appropriations necessary to cover costs resulting from new Federal legislation on the OASI program.

(2) Including UMD.

Current Operations

General Operations and Maintenance Fund

	<u>1973-74</u>	<u>1974-75</u>
I. Summary of Request		
Operational Needs	\$134,370,507	\$138,232,779
Deduct: Estimated Income	44,960,842	46,357,391
Balance Requested	\$ 89,409,665	\$ 91,875,388
72-73 Appropriation	82,415,297	82,415,297
Needed Increments (Over 72-73)	<u>\$ 6,994,368</u>	<u>\$ 9,460,091</u>
II. Analysis of Needed Increments		
Additional Academic Staff		
Health Sciences	\$ 1,104,130	\$ 1,478,204
Other than Health Sciences	1,432,332	1,930,553
	<u>\$ 2,536,462</u>	<u>\$ 3,408,757</u>
Additional Civil Service Staff		
Health Sciences	\$ 464,721	\$ 652,435
Other than Health Sciences	742,010	897,758
Custodial Staff to Operate New Space	478,282	601,608
	<u>\$ 1,685,013</u>	<u>\$ 2,151,801</u>
Supplies, Expense and Equipment		
Health Sciences	\$ 464,130	\$ 611,852
Other than Health Sciences	684,125	1,310,554
Maintenance and Operation of New Space	1,626,592	1,987,225
Cost Increases	1,636,130	2,881,286
Other Needs (Space rentals, Fringe benefits, new staff and other misc. items)	994,039	1,137,288
	<u>\$ 5,405,016</u>	<u>\$ 7,928,205</u>
Total Incremental Needs	\$ 9,626,491	\$ 13,488,763
Less: Program discontinued	(100,613)	(100,613)
Income Increases (Tuition and Other Income)	(2,531,510)	(3,928,059)
Incremental Needs through State Funds	<u>\$ 6,994,368</u>	<u>\$ 9,460,091</u>

Legislative Budget Request 1973-75
State Funds, Tuition, and Other Income on State Funds
(In Million of Dollars)

1. Increase to level of second year of current biennium and thus maintain current service levels	\$ 9.3
2. Programs dropped or phased out*	(.5)
3. To fund operation of new buildings coming into use	4.7
4. Tradesmen's salary increase and utility cost increases	1.2
5. Space rentals .....	.9
6. 4% selective price increases each year (non-salary budget)	2.4
7. Increases in Social Security	1.8
8. Civil Service Pay Plan refunds	(1.8)
9. Increases for training of Health Sciences personnel	10.2
10. Increases in academic programs other than Health Sciences	6.1
11. UMD — Medicine, Dental Hygiene, Social Work, Basin Studies	1.2
12. Crookston .....	.2
13. Waseca .....	.9
14. Instructional computing .....	.8
15. Continuing Education and Extension	1.1
16. Summer Session	1.0
17. Special educational costs in hospitals .....	.9
18. Student aid	1.2
19. Civil Service and police staff at coordinate campuses .....	.2
20. Agricultural research and extension .....	.8
21. Other research and service	2.1
22. Administrative and service unit additions .....	.5
23. Transportation rate and service increases .....	.1
24. Systems development — student records and registration .....	.1
25. Unemployment compensation .....	.1
26. Hospital costs	1.1
27. Reinstate Municipal Reference Bureau for one year .....	.1
Gross Increases	\$ 46.6
Less Increases in Estimated Tuition and Other Income	(12.2)
Net Increase Requested from the State	\$ 34.4
Previous Biennial Appropriation	204.3
Total State Funds Requested — Net without Pay Plan	\$238.7
To be added if pay adjustments of 5½ % in each year of the biennium are granted	13.3
Total State Funds Requested (Including Pay Plan)	<u>\$252.0</u>

*Ore Estimate, Municipal Reference Bureau, F.I.R.E., Agricultural Schools Tuition and Transportation Aid, Medical Education Contingency Fund.

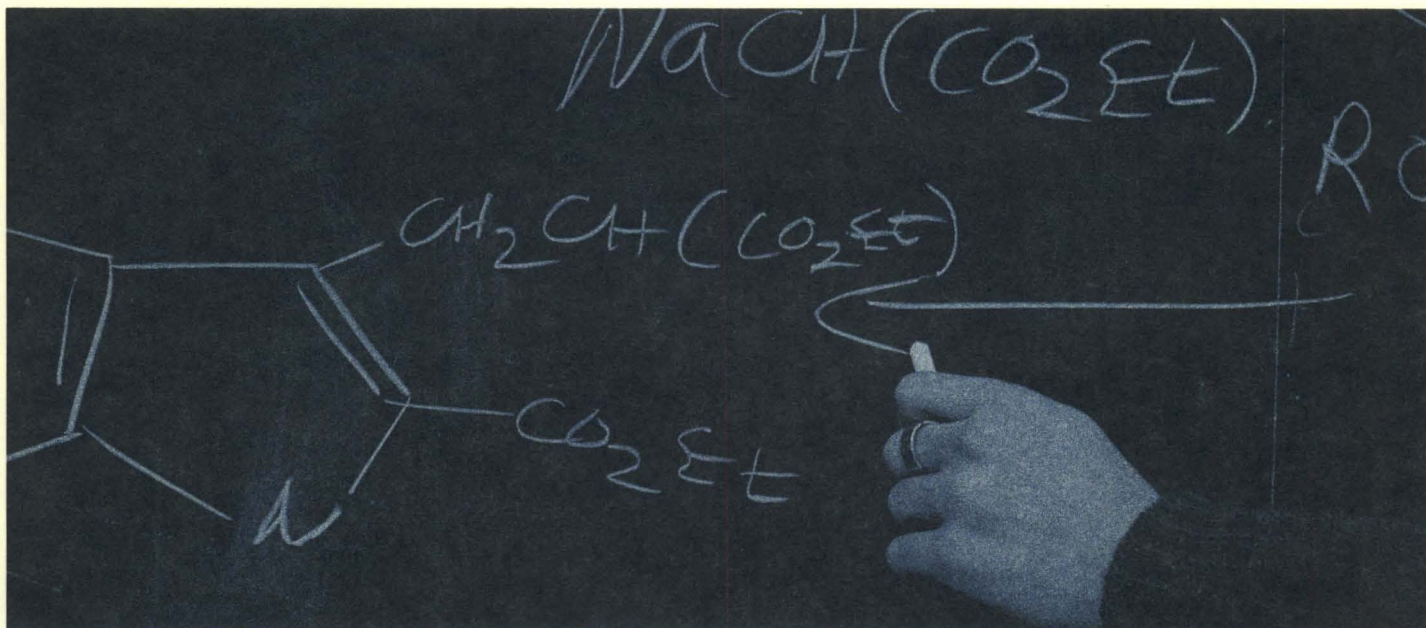
Building Request

Legislative Request

II. Building Request

Health Sciences:				
Twin Cities Campus	—	—	\$ 23,842,928	
Duluth Campus	—	—	<u>2,493,800</u>	\$ 26,336,728
Twin Cities Campus (Other Than Health Sciences)				
Preliminary Planning & Working Drawings	—	—	1,402,000	
New Construction	—	—	31,622,000	
Remodeling & Rehabilitation ...	—	—	2,231,800	
Utilities and Services	—	—	2,928,800	
Miscellaneous	—	—	<u>948,500</u>	39,133,100
Duluth Campus (Other Than Health Sciences)	—	—	—	\$ 2,228,500
Morris Campus	—	—	—	1,521,000
Technical Colleges:				
Crookston	—	—	2,497,750	
Waseca	—	—	<u>1,942,000</u>	4,439,750
Experiment Stations & Research Centers				<u>2,030,012</u>
Total Proposed Capital Development Program 1971-73 ...				<u>\$ 75,689,090</u>

"Physics, chemistry, and mathematics provide the basic science instruction for engineering students, for pre-medical students, and for social science majors."



these combinations ultimately become new areas of highly productive study. The union of chemistry and biology produced biochemistry — a field producing many discoveries of importance in understanding the nature of life. Program expansion in cross-disciplinary studies is recommended to accommodate the increased numbers of students who wish to pursue studies in areas which cross department lines.

Urban and environmental studies are given a high priority because their offerings are felt to be essential to the mission of the University and utilize its unique talents and resources. Current program offerings in these fields would be expanded to accommodate growing student interest.

INSTITUTE OF TECHNOLOGY

This unit provides instruction and research in the physical sciences,

engineering, and architecture. The basic science units in the Institute of Technology play a similar role to that of many of the departments of the College of Liberal Arts. Thus, physics, chemistry, and mathematics provide the basic science instruction for engineering students, for pre-medical students, and for social science majors. This unit is the sole source of training in the State of Minnesota for those students seeking career opportunities in engineering and architecture.

To accommodate increased student interest, funds for widened programs are being sought in architecture and landscape architecture. Enrollment in programs in these areas has increased substantially and is expected to continue to increase.

Similarly, interest in, and use of, computers has resulted in needs for additional program offerings in computer, informa-

tion, and control sciences.

Registration for course offerings in astronomy has also increased and additional funds for programs in this discipline are also being sought.

The dramatic decrease in the IT dropout rate (from 65 percent in 1968-69 to only 25 percent last year) has resulted in the retention of 500 students who probably would have transferred to other areas without the active recruitment and retention program IT is now operating. Continued improvement in the retention picture is sought as a significant long-run cost savings in educational expenditures in the college.

COLLEGE OF BIOLOGICAL SCIENCES

This college is still developing the faculty and staff necessary to support its curriculum and to respond to an increasing student demand for instruction. It draws

upon and relates to the specialized programs and facilities of other units including the Health Sciences, the Institute of Technology, and the College of Agriculture. In addition to providing instruction for its own majors, the college carries a substantial service course load of instruction in the environmental and life areas for other units of the University.

A major expansion of programs in core biology is recommended in response to a 25 percent increase in students majoring in the field.

Additional programmatic funds are also sought to deal with the increased teaching loads generated by students from other disciplines.

GENERAL COLLEGE

This unit serves a special student clientele whose backgrounds are different from the typical entering student. Its student population includes an increasing number of minority-group students. In addition to providing an opportunity for education at the associate degree level, the college is developing its recently approved individualized, four-year programs for the Bachelor of General Studies and the Bachelor of Applied Studies degrees. The college continues to perform its vital role of developing and piloting curricular programs appropriate to the students it serves.

New funds would support strengthening of programs both in practical areas such as paraprofessional legal training, and in others that provide mid-career upgrading of skills and knowledge (in cooperation with Continuing Education and Extension). Other

new funds would support the development of the College Media Center, which provides coordination for the expanding use of educational technology, and would provide critically needed counseling services for General College students.

COLLEGE OF BUSINESS ADMINISTRATION

In order to provide more effective and relevant teaching, this college is in the process of reorienting its programs and instructional approaches to achieve more involvement with both the business community and the community-at-large.

New funds for the college would permit strengthening and expansion of programs dealing with the relationships between business and government and business and society. Student enrollment in existing programs in these areas has increased sharply and is expected to continue to increase.

LAW SCHOOL

To maintain its distinction as a center for legal education, the Law School needs additional funds to expand programs of practical clinical experience and individual research. Such programs, which provide invaluable educational experiences that cannot be obtained through conventional courses alone, require either small group or individualized instruction and consequently demand additional staff time. Since Law School staffing is currently considered below the optimum level for professional instruction, additional programs cannot be undertaken without expanded support.

COLLEGE OF AGRICULTURE

This college is a new college consolidating a number of departments that previously reported individually to an associate dean for resident instruction in the Institute of Agriculture. It is the sole source of baccalaureate programs related to agriculture in the State of Minnesota.

The additional funds recommended are in support of two important high-priority programs, one dealing with the environmental aspects of agricultural production and the second a joint program with Home Economics dealing with food sciences and nutrition.

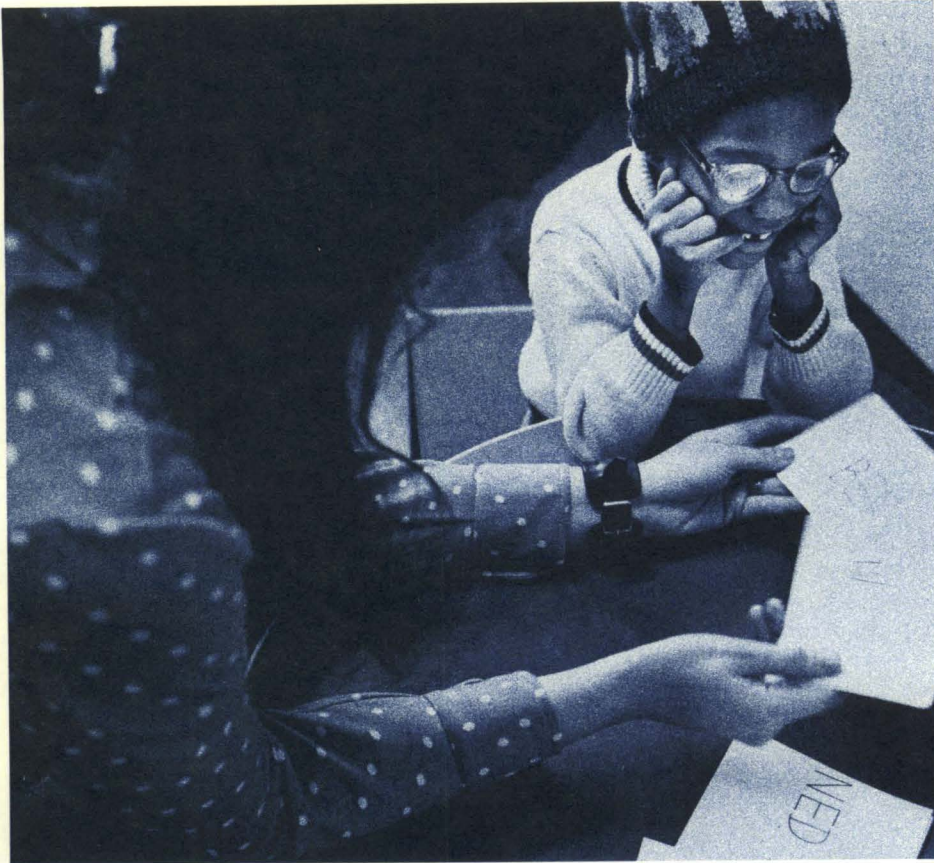
COLLEGE OF HOME ECONOMICS

Funds for new programs here are to accommodate overall growth and a 19 percent increase in graduate course enrollments.

New programs would also focus additional attention on consumer affairs, housing, and food service management.

COLLEGE OF FORESTRY

This college is working to aid Minnesota in attaining goals in forest, wildlife, land, outdoor recreation, and water management. Individuals trained in environmental education will help make environmental knowledge widely available. The growing demand for new housing technology, paper recycling, and improved use of forest wastes requires additional support for research and teaching. New and strengthened programs in the College of Forestry will be directed toward meeting these needs.



"New funds would strengthen curricular efforts in programs dealing with child development and the education of those with special learning difficulties."

COLLEGE OF EDUCATION

This college has a threefold obligation — to extend continuously the frontiers of knowledge and tested skill, to provide education of high quality for prospective and present members of the education profession, and to afford leadership in applying tested insights to school and college problems. The primary obligation of the college is to contribute ideas for the improvement of educational processes. The shift toward upper division and graduate programs in the college has been accompanied by substantial programmatic changes in virtually every department.

New funds would strengthen curricular efforts in programs dealing with child development and the education of those with special learning difficulties. Increased recognition of the need for programs dealing with children who have such disabilities has created a demand for additional teachers with training in this area.

Additional program offerings are also recommended in areas dealing with human relations and intercultural education.

The Health Sciences Request

Recommended programmatic expansion in the Health Sciences would cost almost as much as new programs in all other academic areas combined.

There are three major reasons for this special emphasis on the Health Sciences.

First, the Health Sciences are in the process of developing new programs emphasizing family and rural practice, and others to reorganize and reeducate health personnel.

Second, there is the fact that many of the University Health Science programs are the only publicly funded ones of their kind in the state. Minnesota puts most of its resources for medical and related health care education into University programs. This has enabled the University to build a medical center that is known and respected across the country.

The Regents underscored a commitment to maintaining excellence in the Health Sciences by recommending a major building and expansion program in 1969. The first phase of the construction program will be completed by fall of 1973.

Third, there are greatly increased enrollments in nearly all of the Health Science areas. Each student is educated at a very great expense, with the instructional cost running as high as \$7,250* a year per student in some programs. Federal aid in others — such as the Medical School — keeps the increase in state costs down. (The state share for instructional increases to accommodate two hundred new students would run close to a million dollars.)

*Including state share and tuition only.

NEW DIRECTIONS IN HEALTH CARE

Medical Schools: The new Health Science programs are directed toward meeting the health care needs in all areas of Minnesota.

A key element of the Health Sciences is, of course, medical education. Medical School enrollments have increased sharply, and extensive program changes have been implemented to respond to the critical shortage of doctors in family practice and in rural areas.

The recently established Department of Family Practice is now responsible for the major teaching effort in the Medical School. Graduate programs have also been instituted in family practice. Sixty-four residents were in the program in 1971. By

HEALTH SCIENCES Full Year Equivalent Students

Full Year Equivalent Students — All Levels	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>
Medical School	2,393	2,431	2,579	2,610	2,706
Nursing	119	137	151	160	202
Dentistry	529	582	606	677	743
Public Health	422	439	429	440	460
Mortuary Science	37	45	43	47	47
Pharmacy	189	213	219	249	272
Veterinary Medicine	333	361	368	376	386
Totals	<u>4,022</u>	<u>4,208</u>	<u>4,395</u>	<u>4,559</u>	<u>4,816</u>
Index Numbers	<u>100.0</u>	<u>104.6</u>	<u>109.3</u>	<u>113.4</u>	<u>119.7</u>

1974 the Medical School expects over 150.

The Rural Physicians Associate Program will help provide health care delivery in small towns and rural communities. The program works two ways: It contributes to the education of medical students in principles of family practice and exposes them and their families to the advantages of living in rural areas and smaller communities.

The Duluth Medical Program opened in 1972 with 24 freshman medical students, all of whom are from Minnesota. (Approximately 90 percent of all medical students at the University are Minnesota residents.) The program emphasis in Duluth is also on rural health care and family practice. In 1974 the new Duluth students are scheduled to complete their first two years of medical training and to join other medical school juniors at the Twin Cities Campus Medical School.

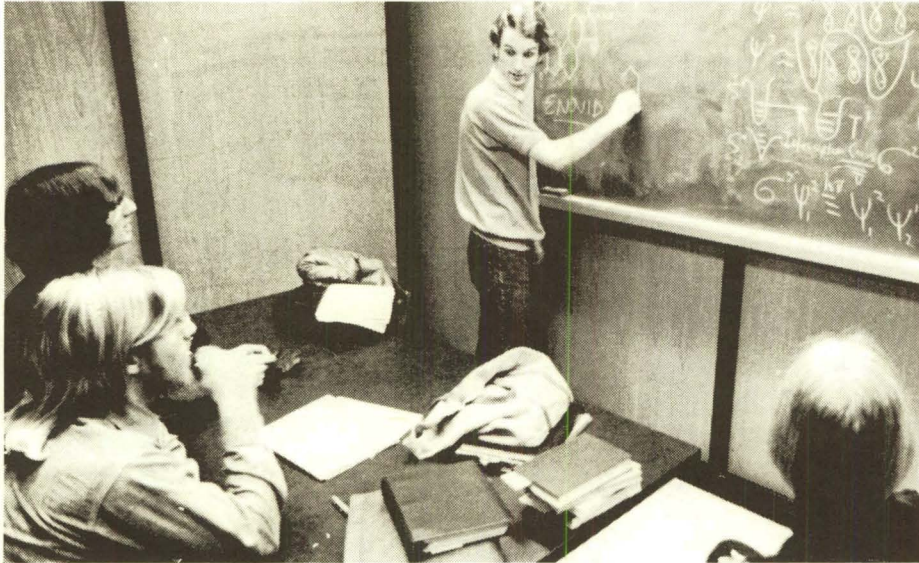
The Mayo Graduate School of Medicine and the new Mayo Medical School, affiliated with the University, constitute vital links that serve both institutions well. The Mayo facilities and programs will help insure that Minnesota medical research and pioneering techniques continue to be preeminent across the country.

Allied Health Personnel: A new emphasis is being placed on the health team support personnel who provide a major portion of health care in terms of hour-by-hour fulfillment of patient needs.

Nurse clinicians (in pediatrics and geriatrics) are being trained to assume greater roles and responsibilities to free the individual doctor to care for more pa-



"Minnesota puts most of its resources for medical and related health care education into University programs."



New areas require more thorough and exhaustive — and more expensive — training.

tients and to attend to the critical decisions that he alone can make. A midwifery program in obstetrics will have the same effect. But each of these new areas requires more thorough and exhaustive—and more expensive—training so that graduates of the programs can fill more functions, freeing doctors for others.

Nursing education generally has taken a similar direction. The growing complexity of medical care demands more extensive training to deal with modern medical techniques so that nurses assume more responsibility in patient care.

The Interdisciplinary Approach: In order to insure that new roles for support personnel are made more meaningful, a team approach is being adopted in Health Science teaching. It will bring students in nursing, medicine, public health, pharmacy, hospital administration, and other disciplines together to build a common understanding and appreci-

ation of the vital roles each plays.

As an example, there is a new and growing emphasis on cooperation between pharmacy and medicine. As the proliferation of new drugs for almost all ills complicates the medication picture, the pharmacist is being trained to provide specialized drug knowledge and consultation to the health care team rather than being looked upon as a mortar-and-pestle technician who can only put together whatever the doctor has ordered.

An integrated health care team in which each individual understands and appreciates the special talents and vital roles the others play is the goal of all these programs. The most important reason for this orientation is that it will provide better health care. A second benefit is that, in the long run, it will help reduce health care costs for everyone because it will be more efficient and fully utilize each component's special talents and skills.

AGRICULTURE

Most of the new funds recommended are for increases in general agricultural research to support the Minnesota Agricultural Experiment Stations for research in agriculture, forestry, home economics, and veterinary medicine.

An expanded program is also recommended in Agricultural Extension Service. The State Special appropriation provides approximately 40 percent of the funding for this unit.

Other small increases are recommended for potato processing research, soybean research, and the Cloquet Forestry Center.

GENERAL RESEARCH FUND

The General Research Fund is the principal source of small grants to faculty members initiating new research programs or entering new areas of interest. It has proven particularly valuable as a source of support for new, young faculty whose research programs need to be established. This use has first priority and these funds thus become "seed money" grants for exploring new ideas and projects which, if successful, attract support from other sources.

CENTER FOR URBAN AND REGIONAL AFFAIRS

The Center for Urban and Regional Affairs conducts experimental, short-term, pilot programs directed at urban and community problems which, if successful, are incorporated into collegiate units for continuing administration and development. Institutional and counseling proj-



"The library is a vital part of education and research efforts, and is being developed as a statewide educational resource through programs such as MINITEX."

ects in low income and minority areas of the Twin Cities are examples of pilot efforts initiated by this center in the past. The Center currently manages urban and regional, community, and central office programs.

Additional funds are requested to expand existing environmental studies, land use and zoning, transportation, and housing programs in urban and regional management.

LIBRARIES

Substantial increases are recommended in funding for the libraries at all campuses.

Publications costs have skyrocketed in recent years, and the library appropriation has not proved adequate to buy and

shelve all the books and periodicals and retain the personnel necessary to maintain library quality. This request is important to the entire University for the library is a vital part of education and research efforts, and is being developed as a statewide educational resource through programs such as MINITEX.

DULUTH CAMPUS

The largest portion of the recommended increases would go to UMD medical and dental programs. Substantial expansion of the UMD Social Work Program and implementation of a new program to study the Lake Superior Basin is also recommended for Duluth.

Enrollments and Workloads

Second Week Headcounts

<i>Enrollment Picture by Campus</i>	ACTUAL ENROLLMENT			ESTIMATED ENROLLMENT	
	Fall 1970	Fall 1971	Fall 1972	Fall 1973	Fall 1974
Twin Cities	42,878	43,061	41,220	42,017	42,569
Duluth	5,568	5,367	5,488	5,505	5,813
Morris	1,716	1,714	1,763	1,850	1,900
Crookston	418	526	660	625	605
Waseca		131	430	400	500
Mayo	667	650	478	500	500
Total Enrollments	<u>51,247</u>	<u>51,449</u>	<u>49,929</u>	<u>50,897</u>	<u>51,932</u>
 <i>Full Year Equivalent Students by Campus</i>	 1970-71	 1971-72	 1972-73	 1973-74	 1974-75
Twin Cities	37,011	36,669	35,369	35,999	36,524
Duluth	4,931	4,911	5,042	5,039	4,995
Morris	1,714	1,793	1,850	1,935	1,988
Crookston	426	517	665	614	639
Waseca		161	373	467	583
Total	<u>44,082</u>	<u>44,051</u>	<u>43,299</u>	<u>44,054</u>	<u>44,729</u>

CROOKSTON CAMPUS

The level of spending recommended for Crookston would enable the college to maintain its current level of services with no new major program additions. Continued enrollment growth is expected while a period of program consolidation is undertaken.

WASECA CAMPUS

Increases for the Waseca Technical College are to accommodate a doubling in the student body enrollment. The college is still in the process of developing its programs and facilities.

CONTINUING EDUCATION AND EXTENSION AND SUMMER SESSION

Additional funds for CEE reflect the University's desire to move toward the provision of instructional services on a basis that does not discriminate by location, time of day, or ability to bear full costs. Education must be a continuing process throughout life rather than an interlude confined to the years 18 through 25. Educational opportunity should be available, within reason, wherever and whenever it is needed.

Joint appointments of faculty

between their "home" colleges and CEE would serve to integrate Continuing Education and Extension programs into the University more fully. The present necessity of recovering all costs from student fees creates an illogical incentive for faculty members — that of offering courses and service to those who can pay the full price, rather than providing instruction where the need or demand may be greatest.

The same arguments that apply to CEE funding also apply to Summer Session. Additional and more equitable support for Summer Session will encourage its use and its integration into

regular academic programs. The expansion of both CEE and Summer Session programs would more fully utilize the University's physical plant investment and thus contribute to the more effective use of educational resources.

CRIMINAL JUSTICE STUDIES

This growing department needs additional funding to keep up with increased enrollments and student interest. The funds requested will permit CJS to become a full disciplinary offering in the College of Liberal Arts, as intended in the original legislative appropriation, and will permit establishment of some graduate programs in the field.

BUREAU OF BUSINESS RESEARCH

The objective of the bureau is to support and publish the results of business research that will contribute to the economic growth of the area. It does this through grants to faculty members and college research centers and through a comprehensive publications program.

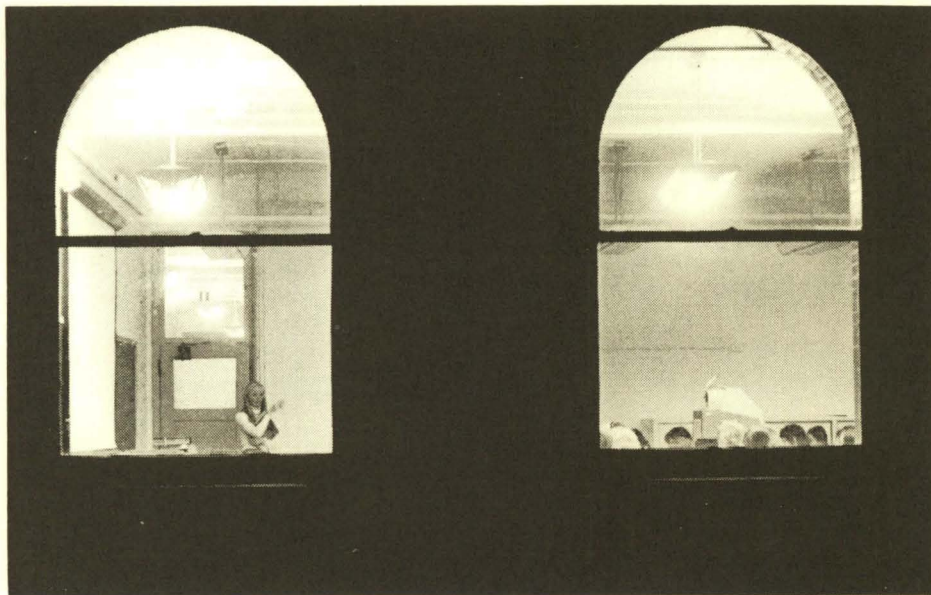
Additional funds would be utilized in an expanded research and publication program.

HEALTH SCIENCE SPECIALS

Major increases are recommended in several Health Science Specials.

Some of these, including the Duluth Medical Program, have already been discussed in the general section on the Health Sciences.

Funds to expand the graduate residency programs in family practice account for approxi-



A move to provide instructional services on a basis that does not discriminate by location, time of day, or ability to bear full costs.

mately half of the recommended increase.

Expansion of the Rural Physicians Associate Program and the undergraduate family practice programs would also require substantial increases in funding.

University Hospitals is seeking additional funds so the state as a whole absorbs a greater share of the expenses in catastrophic cases. Entire county medical care budgets can be exhausted by these high cost cases. The changed catastrophic relief formula would prevent that from happening. New funds are also sought to offset the instructional costs University Hospitals patients have been absorbing.

The allied health program — to expand the training of health care support personnel — is seeking first-time funding, thus constituting another major increase in Health Science Specials.

Notes on the Request

TUITION POLICY

The University Request is based on a formula that currently recovers 26.5 percent of the total instructional costs from tuition. Students in some units pay a greater share, in others a smaller one, to generate this average amount.

Since new and expanded programs and cost increases would require an additional \$48 million during the next two years, student tuition increases would necessarily make up roughly a quarter of that amount, or about \$12 million. This would mean that the average student would pay an additional \$125 per year. If the percentage formula is raised, the tuition increases would be substantially higher and would constitute an additional hardship for many students who are already experiencing serious difficulties in financing their education.

Additional student aids in the amount of \$1.2 million are necessary to assist students who would be unable to pay the additional costs resulting from the anticipated tuition increases. Again, if the 26.5 percent formula is revised upward, substantially increased amounts of tuition aids would be necessary to enable many students to continue their education.

SALARY INCREASES

Salary increases for civil service personnel and faculty have both been figured at 5.5 percent per year rate.

Civil service employees will be affected by the general State of Minnesota Employee pay plan, whenever that increase is determined and in whatever

amounts. If it is greater than 5.5 percent the University will need additional appropriations to meet the cost. If it is less, the University's request can be cut by a proportionate amount.

Faculty increases are determined on the basis of merit within individual departments. Funds have been requested to permit a 5.5 percent average increase. At the discretion of the departments, some raises may be higher, some lower.

INFLATION

Inflation on selected goods and services has been figured at an average annual rate of 4 percent. This represents the best estimate available, based on an analysis of consumer price indices and other relevant indicators. If inflation fails to slow as anticipated, the University will be forced to make minor cutbacks in some areas.

FULL YEAR EQUIVALENT (FYE)

This request uses FYE enrollment figures rather than simple headcounts. This technique translates the teaching load generated by part-time students into an equivalent number of full-year students for one year (45 credits completed or attempted for undergraduates, 30 for graduate students). Not presently included in the University's FYE enrollments are the 35,000 students in Continuing Education and Extension programs. Those enrolled in CEE courses for credit constitute an additional 3,694 FYE students.

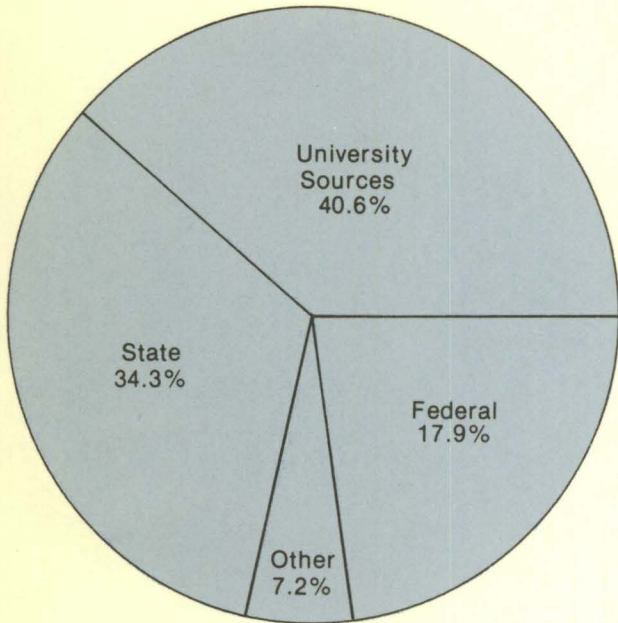
THE BUILDING REQUEST

The University of Minnesota Building Request is detailed in the Report of the Legislative Building Commission. It is presented in this request only in tabular summary form to convey a general idea of its nature and distribution.

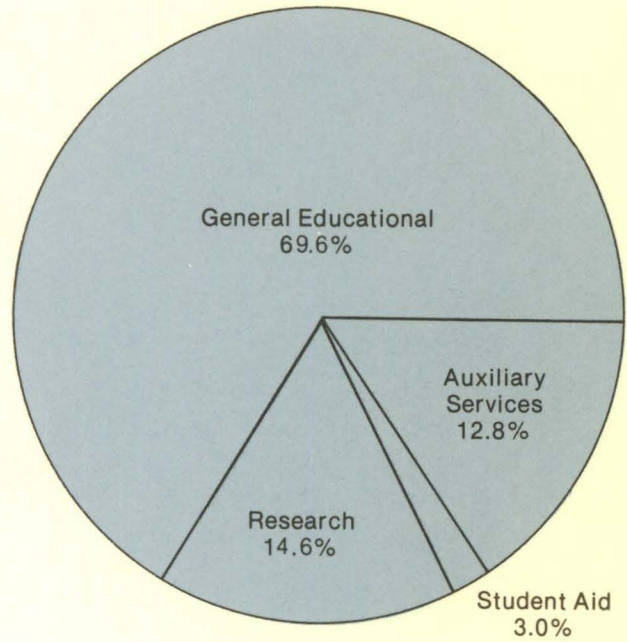
THE TOTAL UNIVERSITY BUDGET

While the legislative appropriation is a substantial amount, it only provides approximately 34 percent of the total University budget. Since close to 70 percent of the University expenditures are in the general educational category, the state appropriation makes up about half of the general educational expenditures. The pie charts shown detail the sources of income and expenditures for the \$288 million budget for the fiscal year which ended June 30, 1972.

Income by Source



Expenditures by Function



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