



UNIVERSITY OF MINNESOTA
TWIN CITIES

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To: President and Vice Presidents
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Subject: Instructional Cost Study, 1989-90

Enclosed are the 1989-90 cost schedules, user's guide commentary and appendices.

The 1989-90 study indicated that tuition support of state funded instructional costs is 35.4%, an increase of .3% from 1988-89. The 1989-90 tuition policy allowed certain colleges to exceed the bounds of cost related tuition to generate additional funds. Most notable was the Carlson School of Management. Therefore, the tuition percentage should be expected to be above 33%.

Fiscal year 1989-90 net tuition revenue was \$8,788,000 above the state higher education policy. This calculation reflects the removal of the Medical Fellow Specialist tuition subsidy from gross tuition revenue. Department of Finance and legislative analysts have repeatedly discounted University attempts to expand the appropriations base via excess tuition. Only a fraction of that excess is attributable to the Carlson School of Management and the Law School, with the greater share being attributable to a larger legislative intent instructional base (and smaller non-instructional base) than reported by the University.

Past efforts have been successful in convincing HECB, Department of Finance and legislative leadership of the most equitable method of viewing University instructional costs. Continuing enrollment declines will require instructional costs to be properly defined in future legislative request processes.

If there are any questions about the study we will be pleased to answer them.

SD/TG:cal

UNIVERSITY OF MINNESOTA
Instructional Cost Study
1989-90

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Instructional Cost Study User's Guide

Cost Study Scope

All university current fund operating accounts are included in the Instructional Cost Study. When an account is established, codes are assigned by Financial Operations to represent that account's mission, based upon information provided by the individual requesting the new account. Accounts with similar missions and sources of funding are grouped together into cost pools. MPIS reviews these codes and periodically surveys the instructional units to confirm the integrity of the cost pool assignments.

The FUNCTION code and the MPIS code on the account profile determine the cost pool assignments. Accounts are further segregated according to the source of funding into state supported and non-state supported accounts.

State supported sources of funding include the general legislative appropriations for instructional purposes, tuition and other general (O&M) income as well as any state special appropriations for instructional use. The O & M accounts are found in fund 0100 in the current Chart of Accounts (COA). State Specials are found in the 03xx fund series. Currently, there are no instructional state specials.

Non-state supported sources of funding include federal appropriations, endowments, sponsored training programs and other miscellaneous funds. These accounts are generally restricted and normally identified as instructional trust funds, 09XX-4XXX. Please note that only the 09XX-4XXX accounts with the specific function codes are instructional. The 09XX-4XXX numbering sequence has also been used for accounts with public service, student aid or training function codes.

Direct Instructional Costs

Direct instructional costs include all expenditures on accounts supporting degree or credit generating instruction activities, academic support and student services at the collegiate level. Instructional costs include expenditures from all current accounts coded on the account profile with these FUNCTION codes:

- 060-instruction
- 070-instructional trust fund
- 030-academic support
- 020-student services

Instructional accounts can also be sight identified in the current COA. Accounts with department numbers in the range 2000-4199 are usually instructional. (There will be no sight identification of these accounts under the new CUFS Chart of Accounts.)

Adjustments to Direct Costs

Instructional expenditures need to be adjusted to match the expense with benefit received. This is necessary because different activities are sometimes commingled in a single account on the general ledger. Frequently, an 0100 instructional account will contain expenses which really pertain to another function, i.e., research or public service. The following adjustments have been prescribed by the Academic Cost Committee:¹

Cost sharing

Cost sharing² is required on many federal research projects, usually occurring as a portion of the principal investigator's salary. The Office of Research & Technology Transfer Administration's (ORTTA) effort certification system is used to develop the entry to reduce instructional costs and increase research costs for the cost sharing adjustment. This entry may be understated, however, due to unreported cost sharing. Salaries charged to research by this procedure are in many cases providing graduate education jointly with research. While the identification of such research efforts as instruction overstates instructional cost, their exclusion undoubtedly understates it.

It is important to note that cost sharing exclusions represent efforts that may be vital to the instructional mission, particularly at the graduate level. This is an example of costs that jointly benefit two missions. On a system wide basis, this exclusion represents slightly less than 4% of the instruction and departmental research costs. On an individual college basis the exclusion ranged as high as 9.3% and as low as 0.2% for the year ended June 30, 1989. The average exclusion was 3.5%.

Departmental Administration

Any college or departmental administrative expenditures attributable to sponsored research are eliminated from instructional expenditures. ORTTA identifies the administrative costs to be eliminated in the indirect cost rate development process. Instructional expenditures are reduced and research or public service expenditures are increased. The Academic Cost Committee concluded that a system wide faculty analysis identifying public service was impractical, since in most (but not all) instances, the public service component was minimal.

Workstudy

All workstudy expenditures (budget 91) are removed from departmental accounts and reclassified as student financial aid.

¹ For detail see Appendix A, page 100.

² For the most part mandatory cost sharing.

Student Aid

All student aid expenditures, class 42XX, are excluded from total instruction. Also excluded are the payroll expenditures for all non-service fellows. Salaries paid to teaching and research assistants are included.

State Specials

Instructional expenditures are either increased or decreased to balance actual expenditures on state specials to the appropriation amount. There is no corresponding offset to research or public service.

O & M Reconciliation

General and administrative expenditures are either increased or decreased to balance total state expenditures to the operations and maintenance appropriation.

Departmental Adjustments

Ideally, each account would support only one mission. Since this is not always the case, we ask the departments to inform us of any material adjustments that need to be made. These adjustments are intended to remove expenditures that do not result from student credit hours and/or degrees from accounts with instructional function codes.

Each department is provided with a report of their accounts sorted by mission. They are asked to review their accounts and to determine the percentage or dollar amount of expenses to apply to credit instruction/degree generating activity, research or public service/other for accounts with multiple missions. This information is used to adjust the cost pools to more accurately reflect the activity in the department.

Other Adjustments

These adjustments are applied as a percentage of unadjusted direct instructional expenditures. The percentages were developed as a result of past analysis.

1. The Medical School is adjusted to decrease instruction and increase student financial aid for the medical fellow expenses.
2. Veterinary Medicine is adjusted to decrease instruction and equally increase research and public service to account for the public service aspect of the veterinary hospitals.
3. Continuing Education is adjusted to increase instruction for the amount of expenditures pertaining to student credit hour and/or degree granting programs.

Indirect Costs

Indirect costs in the Instructional Cost Study are defined as expenditures beyond collegiate level control. To fairly distribute these costs, an appropriate measure of utilization needs to be determined. Once this is determined, the expenses can be allocated according to this distribution base to the units receiving the benefit from the expenditure. Ideally, each indirect account should have its own distribution base identified and its cost allocated according to that base. However, the volume of accounts included in indirect activities requires the grouping of accounts with a similar distribution bases.

Indirect Cost Allocation Methods

Administrative and General (A & G) accounts fall into three categories: system-wide benefit, campus specific benefit and joint benefit. A & G accounts that provided benefit to all campuses are distributed according to an expenditure base that included the entire system. The President's office is a member of the system-wide cost pool.

A & G accounts that provide services to a specific campus are allocated to activities on that campus only. The UMD-Business Office is a member of this type of cost pool.

Some A & G accounts are hybrids; they provide benefit to the entire system, but a lesser degree to the coordinate campuses. This condition arises from similar services and activities being supported at each coordinate campus. The need for a partial allocation from this group of accounts is necessary only if the benefit received is material. Coordinate campuses utilization was assumed to be one-half of that of the Twin Cities campus; the midpoint between no use and full use. Financial Operations is a member of this cost pool.

Graduate School Administration expenditures are allocated to teaching units based upon graduate level student credit hours taught to students registered in the Graduate School.

Academic Computer services is a subset of Academic Support expenditures. Campus specific computing expenditures are allocated to the appropriate campus. Computer services costs are then allocated on the basis of computing usage by academic units recorded in University Computing records. (Administrative computing is allocated with A & G.)

Library costs are allocated based upon weighted full-time equivalent students. Before allocating of costs to the teaching units, specific amounts are assigned to organized research and public service. There are no system-wide allocations made within this activity. A library utilization study is being considered to more accurately assign costs to non-instructional activities.

The Law Library is considered a direct expense of the Law School. The Law School's basis for the library cost pool in turn, is reduced by half.

Academic Support (net of computer services and libraries) is allocated to each teaching unit based upon direct costs of instruction. Adjustments are made for the public service components of the University Galleries and the Museum of Natural History. Specific academic support expenditures for Institute of Agriculture, Natural Resources, Human Ecology and Health Sciences are assigned directly to appropriate units in addition to campus wide academic support expenditures

Student Services accounts fall into three categories: campus specific benefit, Twin Cities general benefit and a special Twin Cities allocation for units that do not provide any of their own student services. The FYE student basis is adjusted to match the allocation type.

Student Services accounts which, in whole or in part, apply to the Twin Cities campus are pooled into two categories. The intention of the two groupings is to separate the accounts which benefit all teaching units from those having limited application. The definition of the base for the distribution of the limited pool excludes teaching units which provide similar services at the collegiate level. Because the extent of student service activities within certain teaching units was not clear, a partial allocation of the limited pool was made to Liberal Arts and Biological Sciences. The teaching units excluded are Health Sciences, Education, University College, General College, Law and Management.

Twin Cities Campus Physical Plant costs are allocated to all units (direct and indirect) based upon a calculation using assigned square footage. The basis consists of each unit's assignable square footage multiplied by the cost per building provided by Physical Plant. The basis within these units is further identified by activity.

Approximately 3% of the space identified as instructional is general classroom space and was not assigned to a specific teaching unit.

Courses offered by one teaching unit may be conducted in the instructional space of another unit. To properly allocate the overlapping use as well as the general instructional space, a residual pool of instructional space is developed. 20% of the costs of all assigned instructional space is deducted from each teaching unit's base and added to the residual pool along with the cost of the unassigned teaching space.

The residual pool is then allocated to teaching units based upon the number of FYE students taught. Therefore, the collegiate cost of space for instructional purposes amounted to 80% of the assigned space added to its FYE pro rata share of the residual pool. Medicine, Pharmacy, Nursing, Dentistry, Mortuary Science, Veterinary medicine and Law are excluded from the above redistribution procedure. The cost of instructional space relies on assigned square footage only for the noted colleges.

UMD-Physical Plant costs are allocated to activities based upon assigned square footage.

Morris, Crookston, Waseca Physical Plant costs are allocated to activities based upon assigned square footage.

Allocation of Costs by Student Level

Instructional Output

As recommended by the Academic Cost Committee, instructional output is measured by FYE/SCH and assigned to the budgetary department/college. Budgetary decisions are normally made along college and department lines. This method of accounting for faculty teaching effort should encourage interchange across departmental lines by giving the budgetary unit credit for instruction in related fields or interdepartmental programs.

The committee also recommended that student advising loads, as an instructional output should be separated from teaching loads and credited to the budgetary department/college of the student's advisor. The committee recommended that any revision or redesign of student data should address the need to recover that information. The implementation of thesis credit requirements in the Graduate School has aided in quantifying the advising workload.

Adjusted instructional costs are then allocated to course level by the Minnesota Cost Development Model (MCDM). The MCDM is a computer model that relates "scheduled classroom hours" of faculty and students to the cost of instruction by collegiate unit.³

There are no basic differences in the definition of instructional costs among college units. The instructional expenditures are uniformly processed by the Minnesota Cost Development Model (MCDM), except as follows:

Within the Medical School, (Twin Cities campus), the Clinical Sciences departments could not be analyzed by the MCDM. Many of the Clinical Sciences course offerings are not conducted in the classroom setting, thereby not generating room scheduling statistics on the course inventory report (see Appendix B). The Health Sciences Cost Study allowed a substitution for course level costs for Medical Technology, Occupational Therapy, Physical Therapy, Mortuary Science and the other Clinical Sciences.

Average Costs vs. Marginal Costs

The discussion of Full Year Equivalent (FYE) costs in this study, relies on average costs. Average cost is total cost associated with a given activity or category divided by the total outcome units identified with the same activity.

The average cost concept does not differentiate between fixed and variable expenses. Fixed and variable expenses exist in both direct costs and indirect cost.

³ For a complete description of the MCDM see Appendix B, page 106.

Fixed costs of an activity remain unchanged regardless of the number of units (or a range of units) produced by the activity. An example of fixed costs is the department chairperson, since that cost will remain unchanged although the number of students taught may increase or decrease.

Variable costs of an activity are costs which change directly, but not necessarily proportionally, with the number of units produced by the activity. An example is the paper costs incurred by a department. As the number of students increase, the amount of paper for reading lists, exams, etc. increase accordingly.

The following elementary set of numbers demonstrates the relationships between average, marginal and total costs:

Department XYZ

	<u>25 FYE</u>	<u>40 FYE</u>
Fixed Costs		
Department Chair	\$15,000	\$15,000
2 Faculty	<u>20,000</u>	<u>20,000</u>
	\$35,000	\$35,000
 Variable Costs		
\$200/FYE	<u>5,000</u>	<u>8,000</u>
Total Costs	\$40,000	\$43,000
Marginal Cost(15 add'l FYE)		\$ 3,000
Average Costs	\$ 1,600/FYE	\$ 1,075/FYE

An important feature of marginal costs is that a decline in FYE production for any activity will not decrease the total cost of the activity by the number of decreased FYEs multiplied by their current average cost. Conversely, total costs will not increase proportionally to increases in FYEs.

Instructional Cost Perspectives

There are two perspectives used in developing the schedules in this cost study.

1. Each college is a teaching unit, incurring the costs of providing instruction to students, regardless of the student's enrollment.
2. Each college is an enrollment unit generating tuition income based upon the enrolled student's credit hours.

Since tuition rates are associated with specific enrollment units, the instructional costs must be formulated accordingly to allow an accurate comparison of tuition and cost.

Colleges as Teaching Units

Exhibit I displays a summary of fully allocated costs by collegiate unit and source of funding.

Exhibit II displays direct and indirect costs by collegiate unit, source of funding and course level⁴. The average cost per FYE student is also provided as a basis for uniform reporting and comparison.

Exhibit III displays direct expenditures per FYE student by course level for all funds.

Exhibit IV displays constant dollar state supported direct instructional costs by college and per FYE student. Selected fiscal periods beginning July 1, 1973 have been included. Each year's expenditures have been adjusted to the current fiscal year's level to allow a comparison in constant dollars.

Colleges as Enrollment Units

Exhibit V displays the state cost per FYE taught from Exhibit II translated into FYE cost per enrollment unit. The exhibit is organized to identify the collegiate units providing teaching efforts toward the average costs of a FYE student enrolled in lower and upper divisions of each college of enrollment. The weighted average cost for each college is also identified. Graduate school enrollments reflect the cost per FYE taught at each course level from all collegiate (teaching) units.

Exhibit VI displays the period's tuition rates by resident and non-resident. Tuition as a percent of instructional costs is calculated to highlight the relationship between tuition and the state supported cost of instruction.

Expenditure Profiles - All Activities

Exhibit VII identifies state funded and other funded expenditures for all activities by collegiate unit. State funded expenditures are adjusted for tuition and indirect cost recoveries assigned to each college. The effect of the adjustment isolates the net investment by the legislature in each unit for all purposes. The net legislative investment is then divided by the number of FYE students taught yielding a per unit amount.

Exhibit VIII analyzes the net legislative investment by function from Exhibit VII divided by FYE students taught. The reader should remember that each collegiate unit has a separate and unique mission to follow in employing its efforts.

⁴ Course level is identified in Exhibit II as Lower Division for 1XXX level courses, Upper Division for 3XXX and 5XXX (taken by undergraduate students) level courses; Graduate for 5XXX (taken by graduate students) and all 8XXX level courses.

Exhibit IX compares state funded direct expenditures per FYE student from Exhibit VIII for FY1977 through the current fiscal year in constant dollars. Historical expenditures have been restated into 1990 dollars to allow comparisons across years in constant dollars as well as actual dollars.

Summary

Analysis of financial data is only part of the picture. There must also be a concurrent review of associated academic program(s) for quality. Lewis and Kellogg⁵ summarized this thought in the following way..."What outcomes of what quality for what costs?." Statistical data should serve in the role of focusing attention on activities where issues need to be resolved through positive debate and decision making.

⁵ "Planning and Evaluation Criteria for Allocating Resources in the College of Education," by Darrell R. Lewis and Theodore E. Kellogg.

Exhibit I

Exhibit I provides a summary of fully allocated costs by teaching unit, activity and source of funding. Non-instructional activities are summarized by campus.

The allocation process used to distribute indirect costs to other indirect activities and direct activities is referred to as the "Step Down Method." Under this method, the indirect cost providing the widest benefit, physical plant, is allocated first. There is a "snowball" affect in that each subsequent allocation carries with it a portion of the preceding allocations. The final allocation will completely zero out the indirect costs, resulting in fully allocated cost for all activities.

Exhibit I reflects state supported indirect and fully allocated costs in the final two columns. These columns are of particular interest as more attention is drawn toward state funded instructional costs via "Average Cost Funding" and the "Cost Related Tuition Policy." State supported expenditures in this study agree in total with the appropriations request submitted to the Minnesota Department of Finance.

Financial Operations charges its auxiliaries an overhead fee based upon a percentage of revenues for providing administration and general services. Physical plant also charges each auxiliary for their utilities, etc. This year's cost study ignored the Financial Operations overhead charges and allowed the step down to calculate the overhead amounts.

Also note that Mortuary Science is no longer a separate unit. The programs's expenses began being charged to Cell Biology and Neuroanatomy during the second half of 1989. Costing of this program uses the Medical Basic Sciences values.

UNIVERSITY OF MINNESOTA
Summary Schedule of Fully Allocated Costs

Exhibit I

	Expenditures			Distribuiton of Indirect Costs							.....ALL FUNDS.....	.....STATE FUNDS ONLY.....		
	State Funds	Other Funds	Total Funds	Physical Plant	Admin and General	Academic Support	Grad School Admin	Student Services	Libraries	U Wide Allocations	Indirect Costs	Fully Allocated Costs	Indirect Costs	Fully Allocated Costs
TWIN CITIES CAMPUS														
==Indirect Costs==														
Physical Plant	64,634.2	(2,731.7)	61,902.5	(61,902.5)										
Administration & General	42,092.9	(2,210.6)	39,882.3	6,747.1	(46,629.4)									
Academic Support (1)	17,298.4	3,159.5	20,457.9	857.5	328.2	(21,643.5)								
Graduate School Admin	1,123.9	1,136.4	2,260.3	91.8	36.3	.0	(2,388.3)							
Student Services	15,744.6	5,369.6	21,114.1	687.7	338.7	.0	.0	(22,140.5)						
Libraries	15,307.4	8,717.7	24,025.1	4,844.9	385.4	.0	.0	.0	(29,255.4)					
Academic Support-UMH (2)	4,573.8	.0	4,573.8	.0	.0	(3,878.6)	(695.2)	.0	.0					
Subtotal	160,775.1	13,440.8	174,215.9	(48,673.5)	(45,540.9)	(25,522.1)	(3,083.6)	(22,140.5)	(29,255.4)					
==Direct Costs==														
Instruction														
Liberal Arts	47,768.9	1,732.0	49,500.9	3,650.2	2,851.1	3,216.2	608.2	6,045.2	8,031.9		24,402.7	73,903.7	20,241.6	68,010.5
Technology	37,865.7	2,739.7	40,605.4	3,142.5	2,300.1	2,752.3	481.5	3,040.4	4,149.9		15,866.6	56,472.0	13,638.6	51,504.3
Architecture	2,248.1	267.4	2,515.5	154.1	139.6	164.3	21.8	149.2	212.0		841.1	3,356.6	727.0	2,975.1
Agriculture	5,395.8	379.1	5,774.9	1,102.3	327.4	685.2	91.9	372.5	537.1		3,116.4	8,891.4	2,842.5	8,238.3
Natural Resources	1,201.4	107.1	1,308.4	126.0	73.6	142.7	21.1	72.0	111.6		546.9	1,855.4	485.3	1,686.7
Human Ecology	3,917.1	222.5	4,139.7	503.5	236.2	458.2	96.2	400.5	594.9		2,289.4	6,429.1	1,976.1	5,893.2
Medicine	26,489.6	5,469.0	31,958.6	2,392.1	1,713.2	5,009.5	85.3	1,695.4	3,034.0		13,929.5	45,888.1	12,484.7	38,974.2
Public Health	4,423.4	192.1	4,615.5	215.9	264.9	442.8	180.8	243.9	473.5		1,821.8	6,437.3	1,533.3	5,956.7
Pharmacy	3,791.4	65.2	3,856.6	338.8	224.2	590.7	13.4	135.6	213.1		1,515.8	5,372.4	1,401.1	5,192.5
Nursing	3,218.3	207.6	3,425.9	349.5	194.7	513.5	26.1	81.7	138.8		1,304.4	4,730.3	1,224.0	4,442.3
Dentistry	9,178.3	985.5	10,163.8	1,753.1	566.9	896.6	32.0	237.7	373.8		3,860.1	14,023.9	3,683.5	12,861.8
Humphrey Institute	1,387.6	719.4	2,107.0	187.7	102.4	112.1	51.6	66.4	130.2		650.4	2,757.4	574.7	1,962.3
Mortuary Science*	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0
Biological Sciences	7,243.3	278.5	7,521.8	775.1	432.8	473.8	73.0	459.9	620.0		2,834.6	10,356.4	2,503.6	9,746.8
Veterinary Medicine	5,185.4	244.2	5,429.6	1,102.8	311.1	340.6	18.9	203.7	318.6		2,295.8	7,725.3	2,161.5	7,346.9
Law	6,775.5	308.3	7,083.8	988.0	406.2	444.8	1.1	313.2	237.4		2,390.7	9,474.5	2,244.5	9,020.1
Management	13,229.2	2,428.6	15,657.8	441.4	846.7	987.5	392.1	928.8	1,563.0		5,159.5	20,817.3	4,264.5	17,493.7
Education	14,255.6	461.3	14,716.9	1,563.8	849.2	958.7	449.9	1,105.5	1,858.3		6,785.4	21,502.3	5,790.3	20,045.9
General College	5,120.9	425.2	5,546.1	240.9	312.7	342.3	.0	420.6	436.0		1,752.5	7,298.6	1,909.8	6,621.7
Summer Sessions	5,354.8	.0	5,354.8	113.0	313.9	343.7	120.5	682.4	1,002.8		2,576.4	7,931.2	2,047.4	7,402.2
Continuing Education	15,686.0	19.3	15,705.3	913.4	920.1	1,012.6	252.7	2,114.0	2,878.1		8,090.9	23,796.2	6,593.5	22,279.5
Subtotal	219,736.2	17,252.1	236,988.3	20,054.2	13,387.1	19,888.2	3,018.0	18,768.7	26,914.9		102,031.0	339,019.4	87,918.6	307,654.8
Continuing Education/NC	710.8	8,851.2	9,562.0	752.4	540.1	.0	.0	.0	.0		1,292.5	10,854.5	1,354.8	2,065.6
Minnesotal Extension Service	16,776.8	15,231.5	32,008.4	509.4	1,808.1	.0	.0	.0	.0		2,317.5	34,325.9	2,437.3	19,214.1
Research (academic) (3)	30,944.1	194,693.2	225,637.3	22,115.4	12,745.9	2,254.5	.0	542.3	877.7		38,535.7	264,173.0	39,489.2	70,433.3
Research (admin units)	31,734.6	20,440.4	52,175.0	237.0	2,947.3	2,312.1	.0	.0	.0		5,496.4	57,671.3	5,333.8	37,068.4
Public Service (academic)	11,857.3	62,695.9	74,553.2	1,426.5	4,211.4	863.9	.0	.0	.0		6,501.8	81,055.0	6,667.4	18,524.7
Public Service (admin units)	2,790.6	2,573.6	5,364.2	447.9	303.0	203.3	.0	.0	1,462.8		2,417.0	7,781.2	1,999.8	4,790.4
Military	61.2	21.8	82.9	182.7	4.7	.0	.0	.0	.0		187.4	270.4	195.8	256.9
Women's Athletics	2,615.1	154.5	2,769.6	409.3	44.4	.0	.0	.0	.0		453.7	3,223.2	474.1	3,089.2
Men's Athletics	675.5	10,300.4	10,975.9	730.2	176.1	.0	.0	.0	.0		906.3	11,882.1	948.0	1,623.4
Rec Sports	40.9	1,934.6	1,975.5	.0	31.7	.0	.0	.0	.0		31.7	2,007.2	33.4	74.2
University Hospitals	11,228.1	232,475.4	243,703.6	.0	6,194.9	.0	.0	.0	.0		6,194.9	249,898.4	6,528.1	17,756.3
Support Services	4.9	67,735.4	67,740.4	1,808.6	1,086.6	.0	.0	.0	.0		2,895.2	70,635.5	3,033.4	3,038.4
U Wide Allocations to Coordinate Campuses					2,059.7		65.6	2,829.6	(4,954.9)					
Total Twin Cities Campus	489,951.1	647,800.9	1,137,752.1	48,673.5	43,481.2	25,522.1	3,018.0	19,311.0	29,255.4	.0	169,261.0	1,132,797.2	156,413.5	485,589.5

Summary of Fully Allocated Costs
by Major Activity and Campus, FY 1990, In Thousands

	Expenditures			Distribuiton of Indirect Costs						.....ALL FUNDS.....		...STATE FUNDS ONLY..		
	State Funds	Other Funds	Total Funds	Physical Plant	Admin and General	Academic Support	Grad School Admin	Student Services	Libraries	U Wide Allocations	Indirect Costs	Fully Allocated Costs	Indirect Costs	Fully Allocated Costs
DULUTH CAMPUS														
==Indirect Costs==														
Physical Plant	7,598.3	(441.5)	7,156.9	(7,156.9)										
Administration & General	2,812.5	1,359.4	4,171.9	261.2	(4,433.1)									
Academic Support	862.1	109.6	971.7	666.2	72.4	(1,710.3)								
Student Services	2,614.8	155.3	2,770.1	843.3	206.3	.0		(3,819.7)						
Libraries	1,994.9	279.3	2,274.3	805.6	169.4	.0		.0	(3,249.3)					
Subtotal	15,882.7	1,462.1	17,344.8	(4,580.5)	(3,985.0)	(1,710.3)	.0	(3,819.7)	(3,249.3)					
==Direct Costs==														
Instruction														
Business and Economics-UMD	2,783.3	42.6	2,825.9	383.2	213.1	156.5		440.6	365.4	334.4	1,893.2	4,719.2	1,746.4	4,529.7
Education & Human Services-UMD	4,083.5	278.0	4,361.5	573.8	320.8	235.6		659.8	597.1	530.9	2,918.0	7,279.5	2,682.5	6,766.1
Fine Arts-UMD	1,994.4	87.9	2,082.3	338.2	154.8	113.7		388.9	281.8	274.8	1,552.3	3,634.6	1,437.4	3,431.9
Liberal Arts-UMD	5,411.5	363.5	5,775.0	1,015.1	424.9	312.1		1,167.1	899.3	801.1	4,619.7	10,394.7	4,283.5	9,695.0
Medicine-UMD	3,634.0	61.6	3,695.6	103.6	278.4	204.5		119.1	116.9	211.1	1,033.5	4,729.1	922.9	4,556.9
Science & Engineering-UMD	7,494.7	205.4	7,700.1	860.0	577.1	423.9		988.8	780.4	811.2	4,441.5	12,141.5	4,081.8	11,576.5
Supportive Services-UMD	220.7	.0	220.7	15.0	16.8	12.3		17.3	13.4	17.5	92.3	313.0	84.0	304.7
Subtotal	25,622.1	1,039.0	26,661.1	3,288.8	1,985.9	1,458.7	.0	3,781.5	3,054.3	2,981.2	16,550.4	43,211.6	15,238.6	40,860.8
														.0
Research (academic)														
Research (academic)	1,002.5	2,386.3	3,388.8	512.2	252.4	57.1		38.2	32.5	137.1	1,029.4	4,418.2	984.4	1,986.9
Research (admin units)	2,837.2	2,544.9	5,382.2	219.5	400.9	161.5		.0	.0	217.7	999.6	6,381.8	894.8	3,732.1
Public Service (academic)	438.2	1,696.5	2,134.7	344.0	159.0	24.9		.0	.0	86.3	614.3	2,749.0	590.7	1,028.9
Public Service (admin units)	140.2	690.7	830.9	147.4	61.9	8.0		.0	162.5	33.6	413.4	1,244.2	391.1	531.2
Military	.0	12.0	12.0	.0	.9	.0		.0	.0	.5	1.4	13.4	1.1	1.1
Women's Athletics	574.6	(32.6)	542.0	.0	40.4	.0		.0	.0	.0	40.4	582.3	28.1	602.7
Men's Athletics	433.6	1,303.1	1,736.7	.0	129.4	.0		.0	.0	.0	129.4	1,866.1	90.2	523.7
Rec Sports	.0	460.3	460.3	.0	34.3	.0		.0	.0	.0	34.3	494.6	23.9	23.9
Support Services	.0	12,351.2	12,351.2	68.6	920.0	.0		.0	.0	.0	988.6	13,339.8	714.0	714.0
Total Duluth Campus	46,931.1	23,913.5	70,844.6	4,580.5	3,985.0	1,710.3	.0	3,819.7	3,249.3	3,456.4	20,801.2	74,301.0	18,957.0	50,005.4

Summary of Fully Allocated Costs
by Major Activity and Campus, FY 1990, In Thousands

Exhibit I
Page 3

	Expenditures			Distribuiton of Indirect Costs						.....ALL FUNDS.....		...STATE FUNDS ONLY..		
	State Funds	Other Funds	Total Funds	Physical Plant	Admin and General	Academic Support	Grad School Admin	Student Services	Libraries	U Wide Allocations	Indirect Costs	Fully Allocated Costs	Indirect Costs	Fully Allocated Costs
MORRIS CAMPUS														
==Indirect Costs==														
Physical Plant	2,238.0	(362.2)	1,875.8	(1,875.8)										
Administration & General	1,436.9	864.5	2,301.5	92.1	(2,393.6)									
Academic Support	196.9	83.1	280.0	54.8	53.3	(388.1)								
Student Services	1,405.8	26.9	1,432.7	202.6	272.6	.0		(1,907.9)						
Libraries	789.2	1.0	790.1	275.4	150.3	.0		.0	(1,215.9)					
Subtotal	6,066.8	613.3	6,680.1	(1,250.9)	(1,917.3)	(388.1)	.0	(1,907.9)	(1,215.9)	.0	.0	.0	.0	.0
==Direct Costs==														
Instruction	5,349.1	391.9	5,741.0	1,171.7	1,092.3	385.9		1,907.9	1,155.1	779.1	6,492.0	12,233.0	6,036.8	11,385.9
Research (academic)	25.7	315.5	341.2	21.5	64.9	1.9		.0	.0	13.8	102.1	443.3	83.5	109.3
Research (admin units)	.2	38.4	38.6	.0	7.3	.0		.0	.0	1.6	8.9	47.5	6.4	6.6
Public Service (academic)	5.2	7.6	12.8	.0	2.4	.4		.0	.0	.5	3.3	16.2	2.4	7.6
Public Service (admin units)	.0	52.9	52.9	57.7	10.1	.0		.0	60.8	2.1	130.7	183.6	138.4	138.4
Military	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Women's Athletics	128.2	3.2	131.4	.0	25.0	.0		.0	.0	.0	25.0	156.4	16.2	144.3
Men's Athletics	249.7	40.0	289.7	.0	55.1	.0		.0	.0	.0	55.1	344.8	35.6	285.3
Rec Sports	.0	36.0	36.0	.0	6.8	.0		.0	.0	.0	6.8	42.8	4.4	4.4
Support Services	.0	3,433.4	3,433.4	.0	653.3	.0		.0	.0	.0	653.3	4,086.7	422.2	422.2
Total Morris Campus	11,824.9	4,932.2	16,757.1	1,250.9	1,917.3	388.1	.0	1,907.9	1,215.9	797.1	7,477.2	17,554.2	6,746.0	12,504.1
CROOKSTON CAMPUS														
==Indirect Costs==														
Physical Plant	1,596.9	1.4	1,598.3	(1,598.3)										
Administration & General	727.2	93.2	820.5	58.7	(879.2)									
Academic Support	346.8	44.7	391.5	30.9	49.3	(471.7)								
Student Services	661.9	27.2	689.2	204.2	86.7	.0		(980.1)						
Libraries	441.4	(.1)	441.3	91.4	55.5	.0		.0	(588.3)					
Subtotal	3,774.2	166.6	3,940.8	(1,213.0)	(687.6)	(471.7)	.0	(980.1)	(588.3)	.0	.0	.0	.0	.0
==Direct Costs==														
Instruction	2,970.9	12.5	2,983.4	1,197.2	375.5	450.0		980.1	558.9	340.0	3,901.6	6,885.0	3,724.6	6,695.5
Research (academic)	33.0	96.2	129.2	.0	16.3	5.0		.0	.0	5.2	26.5	155.7	24.5	57.6
Research (admin units)	.0	2.3	2.3	.0	.3	.0		.0	.0	.1	.4	2.7	.4	.4
Public Service (academic)	110.8	35.9	146.7	.0	18.5	16.8		.0	.0	5.9	41.2	187.9	37.8	148.5
Public Service (admin units)	.0	372.0	372.0	15.8	46.8	.0		.0	29.4	15.0	107.0	479.0	102.6	102.6
Military	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Women's Athletics	59.8	(3.3)	56.5	.0	7.1	.0		.0	.0	.0	7.1	63.6	6.4	66.2
Men's Athletics	203.5	95.3	298.9	.0	37.6	.0		.0	.0	.0	37.6	336.5	33.6	237.2
Rec Sports	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Support Services	.0	1,474.5	1,474.5	.0	185.6	.0		.0	.0	.0	185.6	1,660.1	165.9	165.9
Total Crookston Campus	7,152.3	2,252.0	9,404.3	1,213.0	687.6	471.7	.0	980.1	588.3	366.3	4,307.0	9,770.6	4,095.7	7,473.8

Summary of Fully Allocated Costs
by Major Activity and Campus, FY 1990, In Thousands

Exhibit I
Page 4

	Expenditures			Distribuiton of Indirect Costs						.....ALL	FUNDS.....	...STATE FUNDS ONLY...		
	State Funds	Other Funds	Total Funds	Physical Plant	Admin and General	Academic Support	Grad School Admin	Student Services	Libraries	U Wide Allocations	Indirect Costs	Fully Allocated Costs	Indirect Costs	Fully Allocated Costs
WASECA CAMPUS														
==Indirect Costs==														
Physical Plant	1,705.1	9.6	1,714.7	(1,714.7)										
Administration & General	721.7	462.0	1,183.7	215.6	(1,399.3)									
Academic Support	653.0	38.6	691.7	47.1	166.5	(905.4)								
Student Services	1,009.3	9.2	1,018.5	76.5	245.2		(1,340.2)							
Libraries	281.0	.2	281.1	144.5	67.7		.0	(493.3)						
Subtotal	4,370.1	519.6	4,889.7	(1,231.0)	(919.8)	(905.4)	.0	(1,340.2)	(493.3)	.0	.0	.0	.0	.0
==Direct Costs==														
Instruction	2,452.1	122.8	2,574.9	1,205.8	619.9	898.2		1,340.2	468.7	330.3	4,863.1	7,438.0	4,396.1	6,848.2
Research (academic)	6.6	.0	6.6	.0	1.6	2.4		.0	.0	.3	4.3	10.9	3.5	10.1
Research (admin units)	.1	1.2	1.3	.0	.3	.0		.0	.0	.1	.4	1.7	.3	.4
Public Service (academic)	12.7	23.8	36.5	.0	8.8	4.7		.0	.0	1.5	14.9	51.4	11.6	24.3
Public Service (admin units)	.0	73.9	73.9	25.2	17.8	.0		.0	24.7	3.0	70.7	144.5	63.6	63.6
Military	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Women's Athletics	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Men's Athletics	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0
Rec Sports	.0	2.6	2.6	.0	.6	.0		.0	.0	.0	.6	3.2	.4	.4
Support Services	.0	1,124.9	1,124.9	.0	270.8	.0		.0	.0	.0	270.8	1,395.8	181.2	181.2
Total Waseca Campus	6,841.7	1,868.7	8,710.4	1,231.0	919.8	905.4	.0	1,340.2	493.3	335.1	5,224.8	9,045.5	4,656.8	7,128.3
Student Aid	23,946.9	39,971.2	63,918.2									63,918.2		23,946.9
System Total	586,648.0	720,738.6	1,307,386.6	56,948.9	50,991.0	28,997.5	3,018.0	27,358.9	34,802.1	4,954.9	207,071.3	1,307,386.6	190,868.9	586,648.0

- (1) Includes the expenses of the Institute of Agriculture, Forestry and Home Economics (IAFHE) and Health Sciences Administration. Expenses for these administrative units have been allocated to the specific teaching units under each unit.
- (2) Includes the recommended treatment of the educational offset from UMHC. The expenses have been allocated to the specific teaching units benefiting from UMHC.
- (3) Includes departmental administration and cost sharing applicable to sponsored research.

* Included with Cell Biology & Neuroanatomy under the Medical School.

Recap:

Regular Instruction	408,787.0	373,445.3
Research	333,306.0	113,404.9
Public Service, MES, CEE Non-Credit	139,072.5	46,639.9
Student Financial Aid	63,918.2	23,946.9
Athletics	21,002.9	6,675.1
Hospital	249,898.4	17,756.3
Support Services & Other	91,401.7	4,779.7
Total	1,307,386.6	586,648.0

Exhibit II

Exhibit II displays direct and indirect costs of instruction by collegiate unit, source of funding and course level. The average cost per FYE student is also provided as a basis for uniform reporting and comparison.

Direct cost assignments are made by course level by the Minnesota Cost Development Model (MCDM). This computerized costing model uses the instructor clock hours by budgetary department to allocate academic salaries to course levels. Student-instructor clock hours are also used to assign departmental support costs as well as each department's share of college office support costs. Direct costs of course levels by department are then aggregated to college totals by course level. The assignment process is applied separately to state funds and other funds.

Two summaries are provided. The first summary is by campus; the next summary is by student level across all campuses. The student level summary provides totals by lower division, upper division, professional and graduate levels by campus. The professional summary includes Medicine, Dentistry, Veterinary Medicine, Pharmacy and Law, upper division credit hours only. (Upper division professional school credit hours are displayed as upper division in the body of Exhibit II.) Any graduate level course hours taught in a professional school are included in the graduate summary.

UNIVERSITY OF MINNESOTA
 Detail of Instructional Costs
 by College and Level of Courses Taught
 FY 1990

Exhibit II

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student --- --- Total Funds ---			State Total
	State	Other	Total				Direct	Indirect	Total	
Liberal Arts										
Lower Division	14,831.4	671.7	15,503.1	9,022.4	24,525.5	6,527	2,375	1,382	3,758	3,429
Upper Division	23,328.8	786.9	24,115.7	11,030.9	35,146.6	6,206	3,886	1,777	5,663	5,240
Graduate	9,608.7	273.4	9,882.1	4,349.5	14,231.6	1,675	5,900	2,597	8,496	7,829
Total	47,768.9	1,732.0	49,500.9	24,402.7	73,903.7	14,408	3,436	1,694	5,129	4,720
Technology										
Lower Division	10,189.3	848.4	11,037.7	5,209.9	16,247.7	2,977	3,708	1,750	5,458	4,946
Upper Division	19,488.1	1,343.2	20,831.3	6,831.4	27,662.8	2,856	7,294	2,392	9,686	8,904
Graduate	8,188.3	548.0	8,736.3	3,825.2	12,561.6	1,326	6,588	2,885	9,473	8,559
Total	37,865.7	2,739.7	40,605.4	15,866.6	56,472.0	7,159	5,672	2,216	7,888	7,194
Architecture										
Lower Division	340.5	58.8	399.3	176.6	575.9	100	3,993	1,766	5,759	4,944
Upper Division	1,623.1	180.7	1,803.8	501.7	2,305.5	191	9,444	2,627	12,071	10,801
Graduate	284.5	27.9	312.4	162.7	475.1	60	5,207	2,712	7,919	6,961
Total	2,248.1	267.4	2,515.5	841.1	3,356.6	351	7,167	2,396	9,563	8,476
Agriculture										
Lower Division	1,370.6	95.6	1,466.2	923.6	2,389.8	315	4,655	2,932	7,587	7,081
Upper Division	2,324.1	164.6	2,488.6	1,144.4	3,633.0	308	8,080	3,715	11,795	10,971
Graduate	1,701.2	118.9	1,820.1	1,048.5	2,868.6	253	7,194	4,144	11,338	10,390
Total	5,395.8	379.1	5,774.9	3,116.4	8,891.4	876	6,592	3,558	10,150	9,404
Natural Resources										
Lower Division	213.6	22.5	236.1	89.5	325.7	32	7,379	2,798	10,177	9,229
Upper Division	624.0	52.0	676.1	254.2	930.3	79	8,558	3,217	11,775	10,801
Graduate	363.7	32.5	396.2	203.2	599.4	58	6,831	3,504	10,335	9,278
Total	1,201.4	107.1	1,308.4	546.9	1,855.4	169	7,742	3,236	10,979	9,980
Human Ecology										
Lower Division	668.5	45.5	714.0	457.5	1,171.5	246	2,902	1,860	4,762	4,356
Upper Division	1,928.2	111.4	2,039.6	1,025.0	3,064.6	430	4,743	2,384	7,127	6,571
Graduate	1,320.5	65.6	1,386.1	806.8	2,192.9	265	5,231	3,045	8,275	7,532
Total	3,917.1	222.5	4,139.7	2,289.4	6,429.1	941	4,399	2,433	6,832	6,263

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student ---			State Total
	State	Other	Total				Direct	Indirect	Total	
Medicine										
Lower Division	271.2	56.0	327.1	95.5	422.6	36	9,087	2,653	11,740	9,924
Upper Division	19,784.5	4,084.7	23,869.1	7,908.8	31,777.9	1,781	13,402	4,441	17,843	15,196
Graduate	6,434.0	1,328.3	7,762.3	5,925.2	13,687.6	2,270	3,420	2,610	6,030	5,089
Total	26,489.6	5,469.0	31,958.6	13,929.5	45,888.1	4,087	7,820	3,408	11,228	9,536
Public Health										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	896.3	46.0	942.3	263.4	1,205.7	90	10,470	2,927	13,397	12,539
Graduate	3,527.1	146.1	3,673.2	1,558.4	5,231.7	498	7,376	3,129	10,505	9,695
Total	4,423.4	192.1	4,615.5	1,821.8	6,437.4	588	7,849	3,098	10,948	10,130
Pharmacy										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	3,665.2	61.0	3,726.2	1,398.7	5,124.8	290	12,849	4,823	17,672	17,124
Graduate	126.2	4.2	130.4	117.1	247.5	37	3,524	3,166	6,690	6,119
Total	3,791.4	65.2	3,856.6	1,515.8	5,372.4	327	11,794	4,635	16,429	15,879
Nursing										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	1,658.5	107.0	1,765.4	821.3	2,586.7	125	14,123	6,570	20,694	19,526
Graduate	1,559.8	100.6	1,660.4	483.1	2,143.6	72	23,062	6,710	29,772	27,800
Total	3,218.3	207.6	3,425.9	1,304.4	4,730.3	197	17,390	6,622	24,012	22,550
Dentistry										
Lower Division	123.1	31.2	154.4	102.4	256.7	21	7,350	4,874	12,224	10,599
Upper Division	7,768.1	1,014.1	8,782.2	3,159.7	11,942.0	464	18,927	6,810	25,737	23,263
Graduate	1,287.0	-59.8	1,227.2	598.0	1,825.3	88	13,946	6,796	20,742	20,967
Total	9,178.3	985.5	10,163.8	3,860.1	14,023.9	573	17,738	6,737	24,475	22,446
Humphrey Institute										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	287.5	149.6	437.0	84.4	521.4	18	24,279	4,687	28,966	20,295
Graduate	1,100.2	569.8	1,670.0	566.0	2,236.1	142	11,761	3,986	15,747	11,247
Total	1,387.6	719.4	2,107.0	650.4	2,757.5	160	13,169	4,065	17,234	12,265
Mortuary Science										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student ---			
	State	Other	Total				Direct	Indirect	Total Funds	State Total
Biological Sciences										
Lower Division	2,494.8	122.6	2,617.4	1,127.7	3,745.1	527	4,967	2,140	7,107	6,652
Upper Division	3,110.6	102.0	3,212.6	1,034.2	4,246.8	368	8,730	2,810	11,540	10,955
Graduate	1,637.8	54.0	1,691.8	672.7	2,364.5	201	8,417	3,347	11,764	10,995
Total	7,243.3	278.5	7,521.8	2,834.6	10,356.4	1,096	6,863	2,586	9,449	8,893
Veterinary Medicine										
Lower Division	29.8	1.2	31.0	13.0	44.0	3	10,348	4,325	14,673	14,070
Upper Division	4,567.0	220.6	4,787.7	2,008.4	6,796.0	436	10,981	4,606	15,587	14,828
Graduate	588.5	22.4	610.9	274.4	885.3	52	11,747	5,278	17,025	16,143
Total	5,185.4	244.2	5,429.6	2,295.8	7,725.3	491	11,058	4,676	15,734	14,963
Law										
Lower Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Upper Division	6,752.3	307.0	7,059.3	2,380.2	9,439.5	752	9,387	3,165	12,553	11,951
Graduate	23.2	1.3	24.5	10.4	35.0	3	8,169	3,482	11,651	10,874
Total	6,775.5	308.3	7,083.8	2,390.7	9,474.5	755	9,383	3,166	12,549	11,947
Management										
Lower Division	1,403.1	152.7	1,555.7	530.7	2,086.4	330	4,714	1,608	6,322	5,618
Upper Division	4,037.1	768.7	4,805.8	1,593.2	6,399.0	829	5,797	1,922	7,719	6,484
Graduate	7,789.1	1,507.2	9,296.3	3,035.5	12,331.9	1,080	8,608	2,811	11,418	9,504
Total	13,229.2	2,428.6	15,657.8	5,159.5	20,817.3	2,239	6,993	2,304	9,298	7,813
Education										
Lower Division	1,544.8	98.9	1,643.6	705.2	2,348.9	356	4,617	1,981	6,598	6,096
Upper Division	6,089.3	235.0	6,324.3	2,517.5	8,841.8	1,070	5,911	2,353	8,263	7,750
Graduate	6,621.5	127.4	6,748.9	3,562.6	10,311.6	1,239	5,447	2,875	8,323	7,735
Total	14,255.6	461.3	14,716.9	6,785.4	21,502.3	2,665	5,522	2,546	8,068	7,522
General College										
Lower Division	4,757.7	388.4	5,146.0	1,635.2	6,781.3	959	5,366	1,705	7,071	6,422
Upper Division	363.2	36.9	400.1	117.3	517.4	55	7,274	2,132	9,407	8,420
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	5,120.9	425.2	5,546.1	1,752.5	7,298.6	1,014	5,470	1,728	7,198	6,530
Business & Economics-UMD										
Lower Division	1,046.7	16.0	1,062.8	848.1	1,910.8	384	2,768	2,208	4,976	4,775
Upper Division	1,617.6	24.8	1,642.4	981.8	2,624.1	364	4,512	2,697	7,209	6,924
Graduate	119.0	1.8	120.8	63.4	184.2	18	6,711	3,524	10,235	9,753
Total	2,783.3	42.6	2,825.9	1,893.2	4,719.2	766	3,689	2,472	6,161	5,913

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student ---			State Total
	State	Other	Total				Direct	Indirect	Total	
Education & Human Services-UMD										
Lower Division	1,141.2	83.2	1,224.4	937.8	2,162.2	423	2,895	2,217	5,112	4,754
Upper Division	2,350.4	158.1	2,508.5	1,544.9	4,053.4	585	4,288	2,641	6,929	6,450
Graduate	592.0	36.7	628.7	435.3	1,064.0	139	4,523	3,132	7,654	7,064
Total	4,083.5	278.0	4,361.5	2,918.0	7,279.5	1,147	3,803	2,544	6,347	5,899
Fine Arts-UMD										
Lower Division	1,510.7	74.4	1,585.0	1,212.4	2,797.5	545	2,908	2,225	5,133	4,835
Upper Division	458.4	13.1	471.4	318.8	790.3	124	3,802	2,571	6,373	6,068
Graduate	25.4	0.5	25.8	21.0	46.9	7	3,693	3,005	6,697	6,320
Total	1,994.4	87.9	2,082.3	1,552.3	3,634.6	676	3,080	2,296	5,377	5,077
Liberal Arts-UMD										
Lower Division	2,849.0	217.8	3,066.8	2,843.0	5,909.8	1,345	2,280	2,114	4,394	4,086
Upper Division	2,478.3	141.1	2,619.4	1,730.9	4,350.3	671	3,904	2,580	6,483	6,072
Graduate	84.2	4.6	88.8	45.8	134.6	13	6,829	3,523	10,352	9,622
Total	5,411.5	363.5	5,775.0	4,619.7	10,394.7	2,029	2,846	2,277	5,123	4,778
Medicine-UMD										
Lower Division	131.8	3.0	134.8	42.1	176.9	11	12,252	3,830	16,082	15,431
Upper Division	3,402.4	57.8	3,460.2	955.1	4,415.3	188	18,405	5,080	23,486	22,634
Graduate	99.7	0.9	100.6	36.3	136.9	8	12,576	4,538	17,115	16,486
Total	3,634.0	61.6	3,695.6	1,033.5	4,729.1	207	17,853	4,993	22,846	22,014
Science & Engineering-UMD										
Lower Division	2,979.6	84.0	3,063.6	2,425.9	5,489.5	1,098	2,790	2,209	5,000	4,764
Upper Division	4,027.4	103.7	4,131.1	1,770.8	5,901.9	554	7,457	3,196	10,653	10,181
Graduate	487.7	17.7	505.4	244.8	750.2	67	7,543	3,654	11,197	10,534
Total	7,494.7	205.4	7,700.1	4,441.5	12,141.5	1,719	4,479	2,584	7,063	6,734
Supportive Services-UMD										
Lower Division	82.2	0.0	82.2	47.1	129.3	19	4,325	2,481	6,806	6,609
Upper Division	138.5	0.0	138.5	45.1	183.6	11	12,593	4,101	16,694	16,285
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	220.7	0.0	220.7	92.3	313.0	30	7,356	3,075	10,432	10,157
Morris										
Lower Division	2,913.2	232.2	3,145.3	3,834.9	6,980.3	1,233	2,551	3,110	5,661	5,272
Upper Division	2,435.9	159.8	2,595.7	2,657.0	5,252.7	723	3,590	3,675	7,265	6,757
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	5,349.1	391.9	5,741.0	6,492.0	12,233.0	1,956	2,935	3,319	6,254	5,821

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student ---			State Total
	State	Other	Total				--- Total Funds ---		Total	
							Direct	Indirect			Total
Crookston										
Lower Division	2,970.9	12.5	2,983.4	3,901.6	6,885.0	785	3,801	4,970	8,771	8,529
Upper Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	2,970.9	12.5	2,983.4	3,901.6	6,885.0	785	3,801	4,970	8,771	8,529
Waseca										
Lower Division	2,452.1	122.8	2,574.9	4,863.1	7,438.0	809	3,183	6,011	9,194	8,465
Upper Division	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Graduate	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Total	2,452.1	122.8	2,574.9	4,863.1	7,438.0	809	3,183	6,011	9,194	8,465
Summer Session										
Lower Division	1,084.6	0.0	1,084.6	562.6	1,647.3	476	2,279	1,182	3,461	3,228
Upper Division	3,227.2	0.0	3,227.2	1,326.6	4,553.8	837	3,856	1,585	5,441	5,137
Graduate	1,043.0	0.0	1,043.0	687.1	1,730.1	332	3,142	2,070	5,211	4,718
Total	5,354.8	0.0	5,354.8	2,576.4	7,931.2	1,645	3,255	1,566	4,821	4,500
Continuing Education										
Lower Division	4,700.8	5.8	4,706.6	2,842.3	7,548.9	2,234	2,107	1,272	3,379	3,150
Upper Division	8,142.2	10.0	8,152.3	3,649.6	11,801.9	2,166	3,764	1,685	5,449	5,146
Graduate	2,842.9	3.5	2,846.4	1,599.0	4,445.4	696	4,090	2,297	6,387	5,888
Total	15,686.0	19.3	15,705.3	8,090.9	23,796.2	5,096	3,082	1,588	4,670	4,372
Twin Cities Campus										
Duluth Campus	25,622.1	1,039.0	26,661.1	16,550.5	43,211.6	6,574	4,056	2,518	6,573	6,216
Morris Campus	5,349.1	391.9	5,741.0	6,492.0	12,233.0	1,956	2,935	3,319	6,254	5,821
Crookston Campus	2,970.9	12.5	2,983.4	3,901.6	6,885.0	785	3,801	4,970	8,771	8,529
Waseca Campus	2,452.1	122.8	2,574.9	4,863.1	7,438.0	809	3,183	6,011	9,194	8,465
Summer Session & Extension	21,040.8	19.3	21,060.1	10,667.3	31,727.4	6,741	3,124	1,582	4,707	4,403
System Wide Totals	256,130.5	18,818.4	274,948.9	133,838.2	408,787.1	54,961	5,003	2,435	7,438	6,795

	Total Direct Costs by Source of Funds			Indirect Costs	Total Costs	FYE Students	--- Costs per FYE Student ---			State Total
	State	Other	Total				--- Total Funds ---	Direct	Indirect		Total
LOWER DIVISION										
Twin Cities Campus	38,238.3	2,593.4	40,831.8	20,089.3	60,921.1	12,429	3,285	1,616	4,902	4,466
Duluth Campus	9,741.2	478.4	10,219.5	8,356.4	18,575.9	3,825	2,672	2,185	4,856	4,575
Morris Campus	2,913.2	232.2	3,145.3	3,834.9	6,980.3	1,233	2,551	3,110	5,661	5,272
Crookston Campus	2,970.9	12.5	2,983.4	3,901.6	6,885.0	785	3,801	4,970	8,771	8,529
Waseca Campus	2,452.1	122.8	2,574.9	4,863.1	7,438.0	809	3,183	6,011	9,194	8,465
Summer Session & Extension	5,785.4	5.8	5,791.2	3,404.9	9,196.1	2,710	2,137	1,256	3,393	3,163
Total	62,101.1	3,445.1	65,546.2	44,450.3	109,996.5	21,791	3,008	2,040	5,048	4,664
UPPER DIVISION										
Twin Cities Campus	65,758.7	4,084.0	69,842.7	27,218.9	97,061.5	12,625	5,532	2,156	7,688	7,063
Duluth Campus	11,070.6	440.8	11,511.3	6,392.3	17,903.6	2,309	4,985	2,768	7,754	7,336
Morris Campus	2,435.9	159.8	2,595.7	2,657.0	5,252.7	723	3,590	3,675	7,265	6,757
Crookston Campus	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Waseca Campus	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Summer Session & Extension	11,369.4	10.0	11,379.5	4,976.2	16,355.7	3,003	3,789	1,657	5,446	5,143
Total	90,634.6	4,694.6	95,329.2	41,244.4	136,573.6	18,660	5,109	2,210	7,319	6,776
PROFESSIONAL (MED, DENT, VET, PHARM, LAW)										
Twin Cities Campus	42,537.1	5,687.4	48,224.5	16,855.8	65,080.2	3,723	12,953	4,527	17,481	15,653
Duluth Campus	3,402.4	57.8	3,460.2	955.1	4,415.3	188	18,405	5,080	23,486	22,634
Total	45,939.5	5,745.2	51,684.7	17,810.8	69,495.6	3,911	13,215	4,554	17,769	15,989
GRADUATE										
Twin Cities Campus	52,161.3	4,868.0	57,029.3	27,199.8	84,229.1	9,319	6,120	2,919	9,038	8,051
Duluth Campus	1,408.0	62.1	1,470.1	846.7	2,316.8	252	5,834	3,360	9,193	8,589
Summer Session & Extension	3,885.9	3.5	3,889.5	2,286.1	6,175.6	1,028	3,784	2,224	6,007	5,510
Total	57,455.2	4,933.6	62,388.8	30,332.6	92,721.4	10,599	5,886	2,862	8,748	7,817

UNIVERSITY OF MINNESOTA
 Comparative Statement of Expenditures per
 FYE Student - By Level of Instruction (Direct Only-Total Funds)
 FY1978 through FY1990

Exhibit III

	FY1978	FY1979	FY1981	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989	FY1990
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Liberal Arts										
Lower Division	1,311	1,356	1,445	1,664	2,169	2,106	2,038	2,288	2,510	2,375
Upper Division	2,006	2,070	2,253	2,778	3,123	3,168	3,191	3,301	3,294	3,886
Graduate	2,533	2,733	3,348	5,394	4,579	5,494	4,921	4,769	4,836	5,900
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	1,732	1,803	1,970	2,419	2,770	2,828	2,762	2,958	3,094	3,436
Technology										
Lower Division	1,390	1,556	1,557	1,791	2,741	2,585	3,026	3,598	3,901	3,708
Upper Division	2,513	2,761	2,690	3,272	4,269	4,478	5,268	6,223	6,949	7,294
Graduate	3,199	2,885	3,580	4,460	3,922	4,351	3,988	4,292	4,684	6,588
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	2,031	2,182	2,232	2,709	3,571	3,623	4,096	4,773	5,242	5,672
Architecture										
Lower Division	0	0	0	0	0	0	0	0	0	3,993
Upper Division	0	0	0	0	0	0	0	0	0	9,444
Graduate	0	0	0	0	0	0	0	0	0	5,207
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	0	0	0	0	0	0	0	0	0	7,167
Agriculture										
Lower Division	1,704	1,926	2,333	4,960	4,160	4,433	5,682	5,887	4,804	4,655
Upper Division	3,207	3,272	3,533	6,489	6,649	7,500	9,207	10,881	8,908	8,080
Graduate	3,474	3,538	3,727	7,208	5,448	6,970	6,028	5,400	4,105	7,194
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	2,482	2,670	3,025	6,002	5,480	6,253	7,149	7,451	5,949	6,592
Natural Resources										
Lower Division	3,210	2,039	4,334	5,437	5,603	8,144	8,629	9,677	5,828	7,379
Upper Division	2,358	2,747	4,504	5,655	6,588	7,675	10,975	13,028	10,427	8,558
Graduate	4,949	5,269	5,252	7,721	4,682	10,216	8,650	9,596	8,632	6,831
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	2,761	3,011	4,567	5,909	6,005	8,429	9,769	11,210	8,916	7,742
Human Ecology										
Lower Division	1,543	1,796	2,979	2,822	2,305	2,528	3,247	3,091	2,697	2,902
Upper Division	2,873	2,757	2,751	4,403	4,510	5,072	4,867	5,225	4,408	4,743
Graduate	2,872	3,290	3,815	2,325	4,630	5,668	5,088	4,702	4,114	5,231
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	2,309	2,403	2,909	3,536	3,924	4,445	4,488	4,488	3,858	4,399
Medicine										
Lower Division	1,845	2,143	2,527	4,226	5,907	8,864	7,739	9,815	9,987	9,087
Upper Division	4,435	4,756	4,951	7,554	8,829	13,230	13,131	15,741	16,493	13,402
Graduate	5,890	6,816	9,165	16,933	8,939	3,765	3,337	3,493	3,480	3,420
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	5,007	5,603	6,825	11,654	8,850	8,961	8,277	9,267	9,452	7,820

Comparative statement of Expenditures
 Per FYE Student-by Level of Instruction
 (Direct Costs Only-Total Funds)
 FY 1977 through FY1989

Exhibit III
 Page 2

	FY1978	FY1979	FY1981	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989	FY1990
Public Health										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	3,592	4,322	4,865	5,148	5,754	7,718	7,270	9,404	16,146	10,470
Graduate	3,837	4,314	5,013	4,961	6,092	6,579	7,165	8,148	6,545	7,376
Total	3,663	4,320	4,904	5,062	5,923	7,094	7,217	8,721	9,249	7,849
Pharmacy										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	6,014	5,745	6,698	8,132	9,696	10,707	9,065	9,839	11,924	12,849
Graduate	21,212	12,432	12,382	20,164	13,453	17,483	12,877	11,395	17,745	3,524
Total	6,855	6,207	8,123	8,786	9,988	11,306	9,494	10,048	12,552	11,794
Nursing										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	6,964	6,916	8,429	10,647	8,442	10,425	10,507	11,811	15,091	14,123
Graduate	4,593	3,438	4,671	4,550	13,321	15,240	17,715	18,165	18,866	23,062
Total	6,284	5,627	7,054	7,966	10,383	12,310	13,088	14,222	16,712	17,390
Dentistry										
Lower Division	3,235	3,852	3,218	5,630	6,537	5,187	5,696	5,557	5,320	7,350
Upper Division	9,672	11,165	13,609	12,557	12,105	13,765	17,799	18,002	20,428	18,927
Graduate	18,621	14,407	21,339	12,110	14,978	17,225	16,624	17,422	15,591	13,946
Total	8,985	10,197	12,661	12,317	12,173	13,856	17,320	17,571	19,253	17,738
Humphrey Institute										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	0	0	0	23,636	34,727	17,211	15,122	15,337	12,997	24,279
Graduate	0	0	0	23,018	21,278	11,204	10,302	8,986	13,961	11,761
Total	0	0	0	23,112	22,743	11,805	10,804	9,563	13,812	13,169
Mortuary Science										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	2,503	3,312	3,824	3,594	3,771	4,653	4,622	6,980	3,451	0
Graduate	0	0	0	0	0	0	0	0	0	0
Total	2,503	3,312	3,824	3,594	3,771	4,653	4,622	6,980	3,451	0
Biological Sciences										
Lower Division	1,648	1,898	1,669	2,184	2,475	3,163	3,708	5,155	5,140	4,967
Upper Division	2,897	2,980	3,353	4,344	4,942	4,720	5,391	7,459	7,153	8,730
Graduate	4,378	4,342	5,919	6,126	4,411	5,259	4,994	7,103	6,399	8,417
Total	2,316	2,539	2,676	3,316	3,557	3,926	4,430	6,171	5,981	6,863

Comparative statement of Expenditures
 Per FYE Student-by Level of Instruction
 (Direct Costs Only-Total Funds)
 FY 1977 through FY1989

Exhibit III
 Page 3

	FY1978	FY1979	FY1981	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989	FY1990
Veterinary Medicine										
Lower Division	2,864	3,150	650	2,778	3,266	5,467	1,222	1,236	6,998	10,348
Upper Division	8,524	5,260	9,523	12,367	14,291	14,053	7,310	7,839	8,114	10,981
Graduate	11,873	10,987	13,686	18,825	15,804	17,886	25,584	29,667	25,401	11,747
Total	8,573	8,345	9,643	12,584	14,155	14,168	8,846	9,537	9,941	11,058
Law										
Lower Division	0	0	0	0	0	0	0	0	0	0
Upper Division	2,664	3,026	3,608	4,619	5,884	6,195	6,543	8,708	9,330	9,387
Graduate	2,745	2,275	2,805	2,259	2,826	6,819	7,199	9,581	10,263	8,169
Total	2,665	3,018	3,606	4,609	5,867	6,199	6,545	8,710	9,331	9,383
Management										
Lower Division	1,242	1,568	1,588	2,852	2,552	2,766	2,972	2,966	4,214	4,714
Upper Division	1,530	1,600	2,095	2,557	2,910	2,805	3,266	4,067	5,734	5,797
Graduate	2,186	2,089	2,667	3,117	4,193	5,231	4,735	5,478	6,489	8,608
Total	1,638	1,715	2,230	2,822	3,311	3,639	3,816	4,470	5,857	6,993
Education										
Lower Division	3,485	3,352	3,451	4,137	4,391	4,548	4,195	4,551	5,712	4,617
Upper Division	2,777	3,035	3,496	4,552	4,514	4,632	4,670	5,253	5,543	5,911
Graduate	4,187	4,133	4,267	4,683	4,566	4,829	5,672	4,646	4,551	5,447
Total	3,234	3,352	3,692	4,527	4,513	4,696	4,939	4,909	5,128	5,522
General College										
Lower Division	1,294	1,375	1,347	1,507	1,802	1,929	2,238	3,128	3,822	5,366
Upper Division	1,752	1,902	1,500	2,463	2,693	3,974	5,748	7,901	13,996	7,274
Graduate	0	0	0	0	0	0	0	0	0	0
Total	1,338	1,439	1,365	2,297	1,923	2,169	2,576	3,594	4,529	5,470
Business & Economics-UMD										
Lower Division	789	721	1,237	1,405	2,155	2,626	2,978	3,258	3,050	2,768
Upper Division	1,731	1,846	1,904	2,996	3,615	3,129	3,626	4,156	3,950	4,512
Graduate	2,255	2,495	3,145	4,440	4,179	5,108	4,814	4,765	5,337	6,711
Total	1,272	1,311	1,605	2,253	2,920	2,933	3,346	3,733	3,538	3,689
Education-UMD										
Lower Division	1,225	1,082	1,308	1,714	1,825	0	0	0	0	0
Upper Division	1,734	1,878	2,012	2,617	2,713	0	0	0	0	0
Graduate	3,996	4,443	3,292	4,014	4,145	0	0	0	0	0
Total	1,630	1,632	1,742	2,270	2,483	0	0	0	0	0

Comparative statement of Expenditures
 Per FYE Student-by Level of Instruction
 (Direct Costs Only-Total Funds)
 FY 1977 through FY1989

Exhibit III
 Page 4

	FY1978	FY1979	FY1981	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989	FY1990
Education & Human Services-UMD										
Lower Division	0	0	0	0	0	2,723	2,914	3,844	3,360	2,895
Upper Division	0	0	0	0	0	3,605	3,383	3,673	3,222	4,288
Graduate	0	0	0	0	0	4,576	8,194	7,287	5,021	4,523
Total	0	0	0	0	0	5,612	3,425	3,971	3,419	3,803
Fine Arts-UMD										
Lower Division	1,415	1,661	1,846	2,258	2,358	2,325	2,176	2,247	2,420	2,908
Upper Division	2,417	2,806	3,052	4,091	4,151	5,114	4,507	4,850	4,724	3,802
Graduate	2,410	3,357	3,178	4,935	4,976	4,271	3,603	3,841	3,778	3,693
Total	1,678	1,951	2,149	2,640	2,717	2,779	2,573	2,676	2,831	3,080
Letters & Science-UMD										
Lower Division	923	1,016	1,093	1,417	2,196	0	0	0	0	0
Upper Division	2,074	2,097	2,378	2,617	4,113	0	0	0	0	0
Graduate	3,713	3,430	3,902	7,051	4,808	0	0	0	0	0
Total	1,253	1,327	1,485	1,821	2,834	0	0	0	0	0
Liberal Arts-UMD										
Lower Division	0	0	0	0	0	1,837	2,007	2,294	2,719	2,280
Upper Division	0	0	0	0	0	2,774	3,210	3,103	3,404	3,904
Graduate	0	0	0	0	0	3,573	4,633	3,156	3,355	6,829
Total	0	0	0	0	0	2,130	2,361	2,558	2,954	2,846
Science & Engineering-UMD										
Lower Division	0	0	0	0	0	3,109	3,849	3,789	3,867	2,790
Upper Division	0	0	0	0	0	4,503	6,500	6,757	6,311	7,457
Graduate	0	0	0	0	0	5,914	7,228	5,026	3,570	7,543
Total	0	0	0	0	0	3,663	4,749	4,704	4,605	4,479
Medicine-UMD										
Lower Division	0	0	4,958	16,165	7,987	12,656	9,459	10,182	11,224	12,252
Upper Division	12,233	10,834	10,264	11,681	12,791	15,211	14,785	16,327	19,405	18,405
Graduate	27,103	24,100	87,100	22,390	16,383	15,872	18,221	23,536	18,532	12,576
Total	12,416	10,903	10,843	12,225	12,638	15,140	14,632	16,205	18,957	17,853
Social Development-UMD										
Lower Division	7,574	6,342	5,841	6,740	6,152	0	0	0	0	0
Upper Division	4,082	3,623	4,855	6,790	7,974	0	0	0	0	0
Graduate	2,832	2,109	2,687	5,166	4,919	0	0	0	0	0
Total	3,599	3,049	3,985	5,916	6,568	0	0	0	0	0

Comparative statement of Expenditures
 Per FYE Student-by Level of Instruction
 (Direct Costs Only-Total Funds)
 FY 1977 through FY1989

Exhibit III
 Page 5

	FY1978	FY1979	FY1981	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989	FY1990
Support Services-UMD										
Lower Division	0	0	0	1,677	3,349	3,116	3,066	5,932	9,221	4,325
Upper Division	0	0	0	7,452	7,744	3,016	2,745	3,499	8,032	12,593
Graduate	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2,630	4,134	3,101	3,012	5,360	9,016	7,356
Morris										
Lower Division	1,678	1,849	1,963	1,520	1,922	1,897	1,945	1,998	2,051	2,551
Upper Division	2,395	2,954	2,817	2,831	2,577	3,274	3,357	4,013	3,774	3,590
Graduate	0	0	0	0	0	0	0	0	0	0
Total	1,942	2,261	2,248	2,009	2,167	2,394	2,445	2,643	2,635	2,935
Crookston										
Lower Division	1,954	2,086	2,090	2,358	2,716	3,645	3,365	4,047	3,630	3,801
Upper Division	0	0	0	0	0	0	0	0	0	0
Graduate	0	0	0	0	0	0	0	0	0	0
Total	1,954	2,086	2,090	2,358	2,716	3,645	3,365	4,047	3,630	3,801
Waseca										
Lower Division	1,958	2,031	2,651	2,204	2,626	2,607	2,902	2,994	3,467	3,183
Upper Division	0	0	0	0	0	0	0	0	0	0
Graduate	0	0	0	0	0	0	0	0	0	0
Total	1,958	2,031	2,651	2,204	2,626	2,607	2,902	2,994	3,467	3,183
Summer Session										
Lower Division	0	0	0	1,210	1,432	1,685	1,705	1,828	2,299	2,279
Upper Division	0	0	0	1,894	2,321	2,702	2,790	3,208	3,462	3,856
Graduate	0	0	0	2,586	2,413	2,596	3,081	1,658	2,160	3,142
Total	0	0	0	1,783	2,075	2,391	2,512	2,403	2,838	3,255
Continuing Education										
Lower Division	0	0	0	1,882	1,620	1,577	1,570	1,567	1,838	2,107
Upper Division	0	0	0	2,685	2,674	2,534	3,036	2,734	3,285	3,764
Graduate	0	0	0	4,633	3,298	3,520	2,892	4,300	4,237	4,090
Total	0	0	0	2,553	2,304	2,240	2,356	2,363	2,748	3,082

Exhibit IV

Exhibit IV displays constant dollar state supported direct instructional expenditures by collegiate unit and per FYE student. Selected fiscal periods beginning July 1, 1973 have been included. Each year's expenditures have been adjusted to the current year's level to allow a comparison in constant dollars.

The constant dollar expenditures allow the observation of "real" expenditures over time. The combination of constant dollar expenditures and FYE students taught allows the cost per FYE student in constant dollars to be defined for each year. The final comparison made in this exhibit is the relationship of the per FYE costs of each year to the base year. The results of this comparison are expressed in a percentage of increase or (decrease) from 1973, the base year. In instances where the collegiate unit was not in existence in FY1973, the unit's first year was used as the base year.

There are many reasons for the differences in direct cost per FYE among academic units. The most common include differences in average class size, average faculty load, and average faculty salary. Other elements contributing to the differences are the number of faculty and college/departmental support costs.

Exhibit IV most effectively highlights changes in the two elements of unit costs. First, to the extent that expenditures correspond to budget allotment, the conversion to constant dollars allows the reader to view the actual changes in budgeted funding, by college, that have occurred over time.

Second, the changes in workload (FYE students taught) can also be observed during the same period. The unit cost, in constant dollars provides a unit of measure for each college.

The College of Veterinary Medicine comparisons shows a significant decrease in instructional expenditures from FY1986 to FY1987 and beyond. An effort analysis conducted by the college shifted \$3.1 million from instruction to research and public service.

UNIVERSITY OF MINNESOTA
 Direct Instructional (Collegiate) Expenditures
 State Instructional Funds
 Inflated to Constant Dollars per Higher Education Price Index
 FY 1973 Through FY 1990

Exhibit IV
 Page 1

	FY1973	FY1975	FY1977	FY1979	FY1981	FY1983	FY1985	FY1987	FY1988	FY1989	FY1990
	3.022	2.599	2.287	1.999	1.643	1.411	1.277	1.172	1.123	1.060	1.000
Liberal Arts											
Direct Expenditures-Actual	\$15,895,162	\$17,139,781	\$20,988,593	\$22,437,400	\$25,550,600	\$28,244,887	\$33,763,492	\$38,421,234	\$41,511,900	\$43,820,500	\$47,768,900
-Constant	\$48,035,180	\$44,546,291	\$48,000,912	\$44,852,363	\$41,979,636	\$39,853,536	\$43,115,979	\$45,029,686	\$46,617,864	\$46,449,730	\$47,768,900
Percent Change From FY1973	.0%	(7.3%)	(.1%)	(6.6%)	(12.6%)	(17.0%)	(10.2%)	(6.3%)	(3.0%)	(3.3%)	(.6%)
FYE Students	14774	14417	13814	12714	13169	12993	12903	14343	14382	14430	14408
Percent Change From FY1973	.0%	(2.4%)	(6.5%)	(13.9%)	(10.9%)	(12.1%)	(12.7%)	(2.9%)	(2.7%)	(2.3%)	(2.5%)
Constant \$ per FYE Student	\$3,251	\$3,090	\$3,475	\$3,528	\$3,188	\$3,067	\$3,342	\$3,139	\$3,241	\$3,219	\$3,315
Percent Change From FY1973	.0%	(5.0%)	(6.9%)	(8.5%)	(2.0%)	(5.7%)	(2.8%)	(3.4%)	(.3%)	(1.0%)	(2.0%)
Technology											
Direct Expenditures-Actual	\$10,242,856	\$11,031,463	\$12,918,162	\$14,847,000	\$17,019,800	\$18,928,421	\$27,541,581	\$32,928,895	\$34,264,500	\$37,638,500	\$37,865,700
-Constant	\$30,953,911	\$28,670,772	\$29,543,836	\$29,679,153	\$27,963,531	\$26,708,002	\$35,170,599	\$38,592,665	\$38,479,034	\$39,896,810	\$37,865,700
Percent Change From FY1973	.0%	(7.4%)	(4.6%)	(4.1%)	(9.7%)	(13.7%)	(13.6%)	(24.7%)	(24.3%)	(28.9%)	(22.3%)
FYE Students	5800	6296	6925	7048	7908	8669	8570	8507	7940	7710	7159
Percent Change From FY1973	.0%	(8.6%)	(19.4%)	(21.5%)	(36.3%)	(49.5%)	(47.8%)	(46.7%)	(36.9%)	(32.9%)	(23.4%)
Constant \$ per FYE Student	\$5,337	\$4,554	\$4,266	\$4,211	\$3,536	\$3,081	\$4,104	\$4,537	\$4,846	\$5,175	\$5,289
Percent Change From FY1973	.0%	(14.7%)	(20.1%)	(21.1%)	(33.7%)	(42.3%)	(23.1%)	(15.0%)	(9.2%)	(3.0%)	(.9%)
Architecture											
Direct Expenditures-Actual	-	-	-	-	-	-	-	-	-	-	\$2,248,100
-Constant	-	-	-	-	-	-	-	-	-	-	\$2,248,100
Percent Change From FY1990	-	-	-	-	-	-	-	-	-	-	.0%
FYE Students	-	-	-	-	-	-	-	-	-	-	351
Percent Change From FY1990	-	-	-	-	-	-	-	-	-	-	.0%
Constant \$ per FYE Student	-	-	-	-	-	-	-	-	-	-	\$6,405
Percent Change From FY1990	-	-	-	-	-	-	-	-	-	-	.0%
Agriculture											
Direct Expenditures-Actual	\$2,333,493	\$2,723,530	\$3,434,334	\$3,926,900	\$4,226,000	\$5,133,843	\$5,882,328	\$6,661,075	\$6,452,200	\$5,519,800	\$5,395,800
-Constant	\$7,051,816	\$7,078,454	\$7,854,322	\$7,849,873	\$6,943,318	\$7,243,852	\$7,511,733	\$7,806,780	\$7,245,821	\$5,850,988	\$5,395,800
Percent Change From FY1973	.0%	.4%	(11.4%)	(11.3%)	(1.5%)	(2.7%)	(6.5%)	(10.7%)	(2.8%)	(17.0%)	(23.5%)
FYE Students	1191	1351	1623	1553	1433	1262	1105	978	978	934	876
Percent Change From FY1973	.0%	(13.4%)	(36.3%)	(30.4%)	(20.3%)	(6.0%)	(7.2%)	(17.9%)	(17.9%)	(21.6%)	(26.4%)
Constant \$ per FYE Student	\$5,921	\$5,239	\$4,839	\$5,055	\$4,845	\$5,740	\$6,798	\$7,982	\$7,409	\$6,264	\$6,160
Percent Change From FY1973	.0%	(11.5%)	(18.3%)	(14.6%)	(18.2%)	(3.1%)	(14.8%)	(34.8%)	(25.1%)	(5.8%)	(4.0%)
Natural Resources											
Direct Expenditures-Actual	\$423,140	\$502,747	\$638,974	\$646,200	\$759,300	\$718,722	\$1,049,376	\$1,401,140	\$1,461,200	\$1,217,200	\$1,201,400
-Constant	\$1,278,729	\$1,306,639	\$1,461,334	\$1,291,754	\$1,247,530	\$1,014,117	\$1,340,053	\$1,642,136	\$1,640,928	\$1,290,232	\$1,201,400
Percent Change From FY1973	.0%	(2.2%)	(14.3%)	(1.0%)	(2.4%)	(20.7%)	(4.8%)	(28.4%)	(28.3%)	(.9%)	(6.0%)
FYE Students	236	317	254	222	172	149	181	145	135	134	169
Percent Change From FY1973	.0%	(34.3%)	(7.6%)	(5.9%)	(27.1%)	(36.9%)	(23.3%)	(38.6%)	(42.8%)	(43.2%)	(28.4%)
Constant \$ per FYE Student	\$5,418	\$4,122	\$5,753	\$5,819	\$7,253	\$6,806	\$7,404	\$11,325	\$12,155	\$9,629	\$7,109
Percent Change From FY1973	.0%	(23.9%)	(6.2%)	(7.4%)	(33.9%)	(25.6%)	(36.6%)	(109.0%)	(124.3%)	(77.7%)	(31.2%)

Direct Instructional (Collegiate) Expenditures
State Instructional Funds
Inflated to Constant Dollars per Higher Education Price Index
FY 1973 Through FY 1990

	FY1973	FY1975	FY1977	FY1979	FY1981	FY1983	FY1985	FY1987	FY1988	FY1989	FY1990
	3.022	2.599	2.287	1.999	1.643	1.411	1.277	1.172	1.123	1.060	1.000
Human Ecology											
Direct Expenditures-Actual	\$808,108	\$859,643	\$1,321,865	\$1,790,700	\$1,956,800	\$2,253,636	\$3,712,661	\$4,148,686	\$4,265,500	\$3,714,100	\$3,917,100
-Constant	\$2,442,102	\$2,234,212	\$3,023,105	\$3,579,609	\$3,215,022	\$3,179,880	\$4,741,068	\$4,862,260	\$4,790,157	\$3,936,946	\$3,917,100
Percent Change From FY1973	.0%	(8.5%)	23.8%	46.6%	31.6%	30.2%	94.1%	99.1%	96.1%	61.2%	60.4%
FYE Students	688	735	758	768	705	618	958	958	969	1005	941
Percent Change From FY1973	.0%	6.8%	10.2%	11.6%	2.5%	(10.2%)	39.2%	39.2%	40.8%	46.1%	36.8%
Constant \$ per FYE Student	\$3,550	\$3,040	\$3,988	\$4,661	\$4,560	\$5,145	\$4,949	\$5,075	\$4,943	\$3,917	\$4,163
Percent Change From FY1973	.0%	(14.4%)	12.4%	31.3%	28.5%	45.0%	39.4%	43.0%	39.3%	10.4%	17.3%
Medical School											
Direct Expenditures-Actual	\$7,374,636	\$9,236,957	\$13,922,672	\$13,518,703	\$15,862,213	\$18,216,432	\$23,347,953	\$22,256,298	\$24,047,000	\$25,497,500	\$26,489,600
-Constant	\$22,286,150	\$24,006,851	\$31,841,151	\$27,023,887	\$26,061,616	\$25,703,386	\$29,815,336	\$26,084,381	\$27,004,781	\$27,027,350	\$26,489,600
Percent Change From FY1973	.0%	7.7%	42.9%	21.3%	16.9%	15.3%	33.8%	17.0%	21.2%	21.3%	18.9%
FYE Students	2867	3666	4362	4332	4319	4046	4106	3802	3865	3855	4087
Percent Change From FY1973	.0%	27.9%	52.1%	51.1%	50.6%	41.1%	43.2%	32.6%	34.8%	34.5%	42.6%
Constant \$ per FYE Student	\$7,773	\$6,549	\$7,300	\$6,238	\$6,034	\$6,353	\$7,261	\$6,861	\$6,987	\$7,011	\$6,481
Percent Change From FY1973	.0%	(15.8%)	(6.1%)	(19.7%)	(22.4%)	(18.3%)	(6.6%)	(11.7%)	(10.1%)	(9.8%)	(16.6%)
Public Health											
Direct Expenditures-Actual	\$567,434	\$937,439	\$1,528,982	\$1,609,100	\$1,749,900	\$2,093,717	\$3,462,009	\$3,650,068	\$4,106,100	\$4,147,200	\$4,423,400
-Constant	\$1,714,786	\$2,436,404	\$3,496,782	\$3,216,591	\$2,875,086	\$2,954,235	\$4,420,985	\$4,277,880	\$4,611,150	\$4,396,032	\$4,423,400
Percent Change From FY1973	.0%	42.1%	103.9%	87.6%	67.7%	72.3%	157.8%	149.5%	168.9%	156.4%	158.0%
FYE Students	491	531	606	647	644	842	755	666	601	593	588
Percent Change From FY1973	.0%	8.1%	23.4%	31.8%	31.2%	71.5%	53.8%	35.6%	22.4%	20.8%	19.8%
Constant \$ per FYE Student	\$3,492	\$4,588	\$5,770	\$4,972	\$4,464	\$3,509	\$5,856	\$6,423	\$7,672	\$7,413	\$7,523
Percent Change From FY1973	.0%	31.4%	65.2%	42.4%	27.8%	.5%	67.7%	83.9%	119.7%	112.3%	115.4%
Pharmacy											
Direct Expenditures-Actual	\$734,356	\$994,661	\$1,272,443	\$1,631,100	\$1,797,800	\$1,827,599	\$2,476,363	\$2,755,998	\$2,851,400	\$3,424,200	\$3,791,400
-Constant	\$2,219,224	\$2,585,124	\$2,910,077	\$3,260,569	\$2,953,785	\$2,578,742	\$3,162,316	\$3,230,030	\$3,202,122	\$3,629,652	\$3,791,400
Percent Change From FY1973	.0%	16.5%	31.1%	46.9%	33.1%	16.2%	42.5%	45.5%	44.3%	63.6%	70.8%
FYE Students	262	339	319	318	308	321	309	320	327	315	327
Percent Change From FY1973	.0%	29.4%	21.8%	21.4%	17.6%	22.5%	17.9%	22.1%	24.8%	20.2%	24.8%
Constant \$ per FYE Student	\$8,470	\$7,626	\$9,122	\$10,253	\$9,590	\$8,033	\$10,234	\$10,094	\$9,792	\$11,523	\$11,594
Percent Change From FY1973	.0%	(10.0%)	7.7%	21.1%	13.2%	(5.2%)	20.8%	19.2%	15.6%	36.0%	36.9%
Nursing											
Direct Expenditures-Actual	\$663,832	\$810,347	\$1,116,839	\$1,366,000	\$1,958,300	\$2,094,175	\$2,635,593	\$2,859,740	\$2,995,100	\$2,976,200	\$3,218,300
-Constant	\$2,006,100	\$2,106,092	\$2,554,211	\$2,730,634	\$3,217,487	\$2,954,881	\$3,365,652	\$3,351,615	\$3,363,497	\$3,154,772	\$3,218,300
Percent Change From FY1973	.0%	5.0%	27.3%	36.1%	60.4%	47.3%	67.8%	67.1%	67.7%	57.3%	60.4%
FYE Students	173	236	219	267	306	307	269	228	224	191	197
Percent Change From FY1973	.0%	36.4%	26.6%	54.3%	76.9%	77.5%	55.5%	31.8%	29.5%	10.4%	13.9%
Constant \$ per FYE Student	\$11,596	\$8,924	\$11,663	\$10,227	\$10,515	\$9,625	\$12,512	\$14,700	\$15,016	\$16,517	\$16,337
Percent Change From FY1973	.0%	(23.0%)	.6%	(11.8%)	(9.3%)	(17.0%)	7.9%	26.8%	29.5%	42.4%	40.9%

Direct Instructional (Collegiate) Expenditures
State Instructional Funds
Inflated to Constant Dollars per Higher Education Price Index
FY 1973 Through FY 1990

	FY1973	FY1975	FY1977	FY1979	FY1981	FY1983	FY1985	FY1987	FY1988	FY1989	FY1990
	3.022	2.599	2.287	1.999	1.643	1.411	1.277	1.172	1.123	1.060	1.000
Dentistry											
Direct Expenditures-Actual	\$2,559,433	\$4,404,603	\$5,634,753	\$6,796,100	\$8,809,500	\$7,350,558	\$8,153,284	\$9,397,594	\$9,607,300	\$10,153,100	\$9,178,300
-Constant	\$7,734,607	\$11,447,563	\$12,886,680	\$13,585,404	\$14,474,009	\$10,371,637	\$10,411,744	\$11,013,980	\$10,788,998	\$10,762,286	\$9,178,300
Percent Change From FY1973	.0%	48.0%	66.6%	75.6%	87.1%	34.1%	34.6%	42.4%	39.5%	39.1%	18.7%
FYE Students	706	824	932	831	814	814	689	602	613	595	573
Percent Change From FY1973	.0%	16.7%	32.0%	17.7%	15.3%	(2.4%)	(14.7%)	(13.2%)	(15.7%)	(15.7%)	(18.8%)
Constant \$ per FYE Student	\$10,956	\$13,893	\$13,827	\$16,348	\$17,781	\$12,742	\$15,111	\$18,296	\$17,600	\$18,088	\$16,018
Percent Change From FY1973	.0%	26.8%	26.2%	49.2%	62.3%	16.3%	37.9%	67.0%	60.7%	65.1%	46.2%
Mortuary Science											
Direct Expenditures-Actual	\$103,373	\$116,277	\$143,031	\$167,400	\$192,800	\$221,523	\$266,195	\$262,964	\$270,600	\$148,400	-
-Constant	\$312,393	\$302,204	\$327,112	\$334,633	\$316,770	\$312,569	\$339,931	\$308,194	\$303,884	\$157,304	-
Percent Change From FY1973	.0%	(3.3%)	4.7%	7.1%	1.4%	.1%	8.8%	(1.3%)	(2.7%)	(49.6%)	-
FYE Students	56	49	65	51	51	64	72	60	40	43	-
Percent Change From FY1973	.0%	(12.5%)	16.1%	(8.9%)	(8.9%)	14.3%	28.6%	7.1%	(28.6%)	(23.2%)	-
Constant \$ per FYE Student	\$5,578	\$6,167	\$5,032	\$6,561	\$6,211	\$4,884	\$4,721	\$5,137	\$7,597	\$3,658	-
Percent Change From FY1973	.0%	10.6%	(9.8%)	17.6%	11.3%	(12.5%)	(15.4%)	(7.9%)	36.2%	(34.4%)	-
Biological Sciences											
Direct Expenditures-Actual	\$2,153,034	\$2,336,152	\$2,965,865	\$3,200,000	\$3,007,200	\$3,457,522	\$4,189,321	\$5,098,804	\$5,705,300	\$6,543,400	\$7,243,300
-Constant	\$6,506,469	\$6,071,659	\$6,782,933	\$6,396,800	\$4,940,830	\$4,878,564	\$5,349,763	\$5,975,798	\$6,407,052	\$6,936,004	\$7,243,300
Percent Change From FY1973	.0%	(6.7%)	4.2%	(1.7%)	(24.1%)	(25.0%)	(17.8%)	(8.2%)	(1.5%)	6.6%	11.3%
FYE Students	1239	1463	1377	1327	1206	1256	1234	1191	1125	1095	1096
Percent Change From FY1973	.0%	18.1%	11.1%	7.1%	(2.7%)	1.4%	(.4%)	(3.9%)	(9.2%)	(11.6%)	(11.5%)
Constant \$ per FYE Student	\$5,251	\$4,150	\$4,926	\$4,820	\$4,097	\$3,884	\$4,335	\$5,017	\$5,695	\$6,334	\$6,609
Percent Change From FY1973	.0%	(21.0%)	(6.2%)	(8.2%)	(22.0%)	(26.0%)	(17.4%)	(4.5%)	8.5%	20.6%	25.8%
Veterinary Medicine											
Direct Expenditures-Actual	\$2,023,412	\$2,607,097	\$3,438,596	\$3,513,900	\$4,137,700	\$5,374,093	\$7,201,219	\$4,977,747	\$4,959,400	\$5,046,500	\$5,185,400
-Constant	\$6,114,751	\$6,775,845	\$7,864,069	\$7,024,286	\$6,798,241	\$7,582,845	\$9,195,957	\$5,833,919	\$5,569,406	\$5,349,290	\$5,185,400
Percent Change From FY1973	.0%	10.8%	28.6%	14.9%	11.2%	24.0%	50.4%	(4.6%)	(8.9%)	(12.5%)	(15.2%)
FYE Students	363	442	471	496	467	489	514	587	551	528	491
Percent Change From FY1973	.0%	21.8%	29.8%	36.6%	28.7%	34.7%	41.6%	61.7%	51.8%	45.5%	35.3%
Constant \$ per FYE Student	\$16,845	\$15,330	\$16,697	\$14,162	\$14,557	\$15,507	\$17,891	\$9,939	\$10,108	\$10,131	\$10,561
Percent Change From FY1973	.0%	(9.0%)	(.9%)	(15.9%)	(13.6%)	(7.9%)	6.2%	(41.0%)	(40.0%)	(39.9%)	(37.3%)
Law School											
Direct Expenditures-Actual	\$1,233,419	\$1,366,153	\$1,632,361	\$2,053,200	\$2,564,000	\$2,922,152	\$3,599,541	\$4,299,748	\$5,460,900	\$6,306,400	\$6,775,500
-Constant	\$3,727,392	\$3,550,632	\$3,733,210	\$4,104,347	\$4,212,652	\$4,123,156	\$4,596,614	\$5,039,305	\$6,132,591	\$6,684,784	\$6,775,500
Percent Change From FY1973	.0%	(4.7%)	.2%	10.1%	13.0%	10.6%	23.3%	35.2%	64.5%	79.3%	81.8%
FYE Students	747	698	693	707	718	758	737	738	732	724	755
Percent Change From FY1973	.0%	(6.6%)	(7.2%)	(5.4%)	(3.9%)	1.5%	(1.3%)	(1.2%)	(2.0%)	(3.1%)	1.1%
Constant \$ per FYE Student	\$4,990	\$5,087	\$5,387	\$5,805	\$5,867	\$5,440	\$6,237	\$6,828	\$8,378	\$9,233	\$8,974
Percent Change From FY1973	.0%	1.9%	8.0%	16.3%	17.6%	9.0%	25.0%	36.8%	67.9%	85.0%	79.8%

Direct Instructional (Collegiate) Expenditures
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FY 1973 Through FY 1990

	FY1973 3.022	FY1975 2.599	FY1977 2.287	FY1979 1.999	FY1981 1.643	FY1983 1.411	FY1985 1.277	FY1987 1.172	FY1988 1.123	FY1989 1.060	FY1990 1.000
Education											
Direct Expenditures-Actual	\$4,816,319	\$6,134,347	\$7,836,654	\$7,793,900	\$8,469,100	\$10,028,663	\$11,097,871	\$12,495,248	\$12,484,000	\$13,318,200	\$14,255,600
-Constant	\$14,554,916	\$15,943,168	\$17,922,428	\$15,580,006	\$13,914,731	\$14,150,443	\$14,171,981	\$14,644,431	\$14,019,532	\$14,117,292	\$14,255,600
Percent Change From FY1973	.0%	9.5%	23.1%	7.0%	(4.4%)	(2.8%)	(2.6%)	.6%	(3.7%)	(3.0%)	(2.1%)
FYE Students	2634	2601	2553	2347	2321	2293	2508	2660	2711	2643	2665
Percent Change From FY1973	.0%	(1.3%)	(3.1%)	(10.9%)	(11.9%)	(12.9%)	(4.8%)	1.0%	2.9%	.3%	1.2%
Constant \$ per FYE Student	\$5,526	\$6,130	\$7,020	\$6,638	\$5,995	\$6,171	\$5,651	\$5,505	\$5,171	\$5,341	\$5,349
Percent Change From FY1973	.0%	10.9%	27.0%	20.1%	8.5%	11.7%	2.3%	(.4%)	(6.4%)	(3.3%)	(3.2%)
Management											
Direct Expenditures-Actual	\$1,951,213	\$2,275,263	\$2,860,625	\$3,434,000	\$4,488,500	\$5,557,932	\$9,201,809	\$10,544,501	\$11,213,000	\$12,375,300	\$13,229,200
-Constant	\$5,896,566	\$5,913,409	\$6,542,249	\$6,864,566	\$7,374,606	\$7,842,242	\$11,750,710	\$12,358,155	\$12,592,199	\$13,117,818	\$13,229,200
Percent Change From FY1973	.0%	.3%	11.0%	16.4%	25.1%	33.0%	99.3%	109.6%	113.6%	122.5%	124.4%
FYE Students	1601	2065	1929	2059	2350	2492	2791	2900	2731	2283	2239
Percent Change From FY1973	.0%	29.0%	20.5%	28.6%	46.8%	55.7%	74.3%	81.1%	70.6%	42.6%	39.9%
Constant \$ per FYE Student	\$3,683	\$2,864	\$3,392	\$3,334	\$3,138	\$3,147	\$4,210	\$4,261	\$4,611	\$5,746	\$5,909
Percent Change From FY1973	.0%	(22.2%)	(7.9%)	(9.5%)	(14.8%)	(14.6%)	14.3%	15.7%	25.2%	56.0%	60.4%
General College											
Direct Expenditures-Actual	\$1,753,799	\$1,875,154	\$2,511,846	\$2,679,100	\$3,290,000	\$3,575,073	\$4,317,918	\$4,593,247	\$4,903,500	\$5,009,800	\$5,120,900
-Constant	\$5,299,981	\$4,873,525	\$5,744,592	\$5,355,521	\$5,405,470	\$5,044,428	\$5,513,981	\$4,593,247	\$5,506,631	\$5,310,388	\$5,120,900
Percent Change From FY1973	.0%	(8.0%)	8.4%	1.0%	2.0%	(4.8%)	4.0%	(13.3%)	3.9%	(.2%)	(3.4%)
FYE Students	1924	2045	2159	1880	2410	2324	2263	1828	1402	1194	1014
Percent Change From FY1973	.0%	6.3%	12.2%	(2.3%)	25.3%	20.8%	17.6%	(5.0%)	(27.1%)	(37.9%)	(47.3%)
Constant \$ per FYE Student	\$2,755	\$2,383	\$2,661	\$2,849	\$2,243	\$2,171	\$2,437	\$2,513	\$3,928	\$4,448	\$5,050
Percent Change From FY1973	.0%	(13.5%)	(3.4%)	3.4%	(18.6%)	(21.2%)	11.5%	8.8%	42.6%	61.5%	83.3%
Humphrey Institute											
Direct Expenditures-Actual	-	-	-	-	\$515,800	\$523,793	\$600,370	\$523,204	\$957,800	\$1,431,000	\$1,387,600
-Constant	-	-	-	-	\$847,459	\$739,072	\$766,672	\$613,195	\$1,075,609	\$1,516,860	\$1,387,600
Percent Change From FY1981	-	-	-	-	.0%	(12.8%)	(9.5%)	(27.6%)	26.9%	79.0%	63.7%
FYE Students	-	-	-	-	123	87	101	145	143	143	160
Percent Change From FY1981	-	-	-	-	.0%	(29.3%)	(17.9%)	17.9%	16.3%	16.3%	30.1%
Constant \$ per FYE Student	-	-	-	-	\$6,890	\$8,495	\$7,591	\$4,229	\$7,522	\$10,607	\$8,673
Percent Change From FY1981	-	-	-	-	.0%	23.3%	10.2%	(38.6%)	9.2%	54.0%	25.9%
Duluth-Medicine											
Direct Expenditures-Actual	-	\$1,102,173	\$1,537,926	\$2,045,900	\$2,184,500	\$2,612,688	\$2,894,201	\$2,953,781	\$3,060,000	\$3,471,500	\$3,634,000
-Constant	-	\$2,864,548	\$3,517,237	\$4,089,754	\$3,589,134	\$3,686,503	\$3,695,895	\$3,461,831	\$3,436,380	\$3,679,790	\$3,634,000
Percent Change From FY1974	-	23.5%	51.7%	76.4%	54.8%	59.0%	59.4%	49.3%	48.2%	58.7%	56.7%
FYE Students	-	120	148	182	224	237	230	214	208	196	207
Percent Change From FY1974	-	25.0%	54.2%	89.6%	133.3%	146.9%	139.6%	122.9%	116.7%	104.2%	115.6%
Constant \$ per FYE Student	-	\$23,871	\$23,765	\$22,471	\$16,023	\$15,555	\$16,069	\$16,177	\$16,521	\$18,774	\$17,556
Percent Change From FY1974	-	(1.2%)	(1.6%)	(7.0%)	(33.7%)	(35.6%)	(33.5%)	(33.0%)	(31.6%)	(22.3%)	(27.3%)

Direct Instructional (Collegiate) Expenditures
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FY 1973 Through FY 1990

	FY1973 3.022	FY1975 2.599	FY1977 2.287	FY1979 1.999	FY1981 1.643	FY1983 1.411	FY1985 1.277	FY1987 1.172	FY1988 1.123	FY1989 1.060	FY1990 1.000
Duluth-Supportive Services											
Direct Expenditures-Actual	-	\$75,844	\$128,246	\$152,130	\$194,388	\$244,322	\$276,026	\$268,049	\$434,600	\$529,100	\$220,700
-Constant	-	\$197,119	\$293,299	\$304,108	\$319,379	\$344,738	\$352,485	\$314,153	\$488,056	\$560,846	\$220,700
Percent Change From FY1974	-	31.2%	95.2%	102.4%	112.5%	129.4%	134.5%	109.0%	224.8%	273.2%	46.9%
FYE Students	-	70	116	110	126	82	83	90	85	58	30
Percent Change From FY1974	-	40.0%	132.0%	120.0%	152.0%	64.0%	66.0%	80.0%	70.0%	16.0%	40.0%
Constant \$ per FYE Student	-	\$2,816	\$2,528	\$2,765	\$2,535	\$4,204	\$4,247	\$3,491	\$5,742	\$9,670	\$7,357
Percent Change From FY1974	-	(6.3%)	(15.9%)	(8.0%)	(15.7%)	39.9%	41.3%	16.1%	91.0%	221.7%	144.8%
Duluth-Social Development											
Direct Expenditures-Actual	-	\$380,663	\$389,339	\$434,300	\$488,300	\$498,546	\$348,459	-	-	-	-
-Constant	-	\$989,343	\$890,418	\$868,166	\$802,277	\$703,448	\$444,982	-	-	-	-
Percent Change From FY1974	-	12.9%	1.6%	(.9%)	(8.4%)	(19.7%)	(49.2%)	-	-	-	-
FYE Students	-	75	99	140	144	86	63	-	-	-	-
Percent Change From FY1974	-	15.4%	52.3%	115.4%	121.5%	32.3%	(3.1%)	-	-	-	-
Constant \$ per FYE Student	-	\$13,191	\$8,994	\$6,201	\$5,571	\$8,180	\$7,063	-	-	-	-
Percent Change From FY1974	-	(2.1%)	(33.3%)	(54.0%)	(58.7%)	(39.3%)	(47.6%)	-	-	-	-
Duluth-Education & Human Services											
Direct Expenditures-Actual	-	\$1,749,549	\$1,840,047	\$2,042,700	\$2,286,900	\$2,770,153	\$2,724,285	\$3,648,743	\$4,064,800	\$4,086,800	\$4,083,500
-Constant	-	\$4,547,078	\$4,208,187	\$4,083,357	\$3,757,377	\$3,908,686	\$3,478,912	\$4,276,327	\$4,564,770	\$4,332,008	\$4,083,500
Percent Change From FY1974	-	(.4%)	(7.8%)	(10.5%)	(17.7%)	(14.4%)	(23.8%)	(6.3%)	.0%	(5.1%)	(10.5%)
FYE Students	-	1175	1239	1282	1429	1194	1124	1183	1092	1268	1147
Percent Change From FY1974	-	6.8%	12.6%	16.5%	29.9%	8.5%	2.2%	7.5%	(.7%)	15.3%	4.3%
Constant \$ per FYE Student	-	\$3,870	\$3,396	\$3,185	\$2,629	\$3,274	\$3,095	\$3,615	\$4,180	\$3,416	\$3,560
Percent Change From FY1974	-	(6.7%)	(18.1%)	(23.2%)	(36.6%)	(21.1%)	(25.4%)	(12.9%)	.8%	(17.7%)	(14.2%)
Duluth-Letters & Sciences											
Direct Expenditures-Actual	-	\$3,362,894	\$3,536,976	\$4,009,900	\$4,835,500	\$6,078,916	\$9,044,403	-	-	-	-
-Constant	-	\$8,740,162	\$8,089,064	\$8,015,790	\$7,944,727	\$8,577,350	\$11,549,703	-	-	-	-
Percent Change From FY1974	-	(.3%)	(7.7%)	(8.6%)	(9.4%)	(2.2%)	31.7%	-	-	-	-
FYE Students	-	2711	3227	2947	3140	3307	3252	-	-	-	-
Percent Change From FY1974	-	(5.6%)	12.4%	2.6%	9.4%	15.2%	13.3%	-	-	-	-
Constant \$ per FYE Student	-	\$3,224	\$2,507	\$2,720	\$2,530	\$2,594	\$3,552	-	-	-	-
Percent Change From FY1974	-	5.6%	(17.9%)	(10.9%)	(17.2%)	(15.1%)	16.3%	-	-	-	-
Duluth-Liberal Arts											
Direct Expenditures-Actual	-	-	-	-	-	-	-	\$4,209,044	\$4,692,800	\$5,055,400	\$5,411,500
-Constant	-	-	-	-	-	-	-	\$4,933,000	\$5,270,014	\$5,358,724	\$5,411,500
Percent Change From FY1986	-	-	-	-	-	-	-	7.7%	15.0%	17.0%	18.1%
FYE Students	-	-	-	-	-	-	-	1817	1857	1973	2029
Percent Change From FY1986	-	-	-	-	-	-	-	2.0%	4.3%	10.8%	13.9%
Constant \$ per FYE Student	-	-	-	-	-	-	-	\$2,715	\$2,838	\$2,716	\$2,667
Percent Change From FY1986	-	-	-	-	-	-	-	5.5%	10.3%	5.6%	3.7%

Direct Instructional (Collegiate) Expenditures
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 FY 1973 Through FY 1990

Exhibit IV
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	FY1973 3.022	FY1975 2.599	FY1977 2.287	FY1979 1.999	FY1981 1.643	FY1983 1.411	FY1985 1.277	FY1987 1.172	FY1988 1.123	FY1989 1.060	FY1990 1.000
Duluth-Science & Engineering											
Direct Expenditures-Actual	-	-	-	-	-	-	-	\$6,766,247	\$6,968,700	\$7,349,100	\$7,494,700
-Constant	-	-	-	-	-	-	-	\$7,930,041	\$7,825,850	\$7,790,046	\$7,494,700
Percent Change From FY1986	-	-	-	-	-	-	-	11.7%	10.2%	9.7%	5.6%
FYE Students	-	-	-	-	-	-	-	1504	1542	1638	1719
Percent Change From FY1986	-	-	-	-	-	-	-	(6.2%) (	3.8%)	2.2%	7.2%
Constant \$ per FYE Student	-	-	-	-	-	-	-	\$5,273	\$5,075	\$4,756	\$4,360
Percent Change From FY1986	-	-	-	-	-	-	-	19.1%	14.6%	7.4%	(1.6%)
Duluth-Fine Arts											
Direct Expenditures-Actual	-	\$747,330	\$785,987	\$932,800	\$1,109,700	\$1,295,705	\$1,503,997	\$1,493,202	\$1,593,800	\$1,795,800	\$1,994,400
-Constant	-	\$1,942,311	\$1,797,552	\$1,864,667	\$1,823,237	\$1,828,240	\$1,920,604	\$1,750,033	\$1,789,837	\$1,903,548	\$1,994,400
Percent Change From FY1974	-	(.4%) (	7.8%) (	4.3%) (	6.5%) (	6.2%) (	1.5%) (	10.2%) (	8.2%) (	2.4%)	2.3%
FYE Students	-	450	486	478	538	514	564	657	698	698	676
Percent Change From FY1974	-	4.2%	12.5%	10.6%	24.5%	19.0%	30.6%	48.4%	52.1%	61.6%	56.5%
Constant \$ per FYE Student	-	\$4,316	\$3,699	\$3,901	\$3,389	\$3,557	\$3,405	\$2,730	\$2,724	\$2,727	\$2,950
Percent Change From FY1974	-	(4.3%) (	18.0%) (	13.6%) (	24.9%) (	21.2%) (	24.5%) (	39.5%) (	39.6%) (	39.6%) (	34.6%) (
Duluth-Business & Economics											
Direct Expenditures-Actual	-	\$645,388	\$678,641	\$976,500	\$1,280,100	\$1,540,001	\$1,936,707	\$2,233,794	\$2,386,700	\$2,719,600	\$2,783,300
-Constant	-	\$1,677,363	\$1,552,052	\$1,952,024	\$2,103,204	\$2,172,941	\$2,473,175	\$2,618,007	\$2,680,264	\$2,882,776	\$2,783,300
Percent Change From FY1974	-	(.3%) (	7.8%)	16.0%	25.0%	29.1%	46.9%	55.5%	59.2%	71.3%	65.4%
FYE Students	-	555	593	750	805	694	667	675	661	781	766
Percent Change From FY1974	-	5.3%	12.5%	42.3%	52.8%	31.7%	26.6%	28.1%	25.4%	48.2%	45.4%
Constant \$ per FYE Student	-	\$3,022	\$2,617	\$2,603	\$2,613	\$3,131	\$3,708	\$3,879	\$4,055	\$3,691	\$3,634
Percent Change From FY1974	-	(5.4%) (	18.1%) (	18.5%) (	18.2%) (	2.0%)	16.1%	21.4%	27.0%	15.6%	13.8%
Duluth-Total											
Direct Expenditures-Actual	\$6,404,091	\$8,063,841	\$8,897,162	\$10,594,230	\$12,379,388	\$15,040,331	\$18,728,078	\$21,572,860	\$23,201,400	\$25,007,300	\$25,622,100
-Constant	\$19,353,163	\$20,957,923	\$20,347,809	\$21,177,866	\$20,339,334	\$21,221,907	\$23,915,756	\$25,283,392	\$26,055,172	\$26,507,738	\$25,622,100
Percent Change From BASE YEAR	.0%	8.3%	5.1%	9.4%	5.1%	9.7%	23.6%	30.6%	34.6%	37.0%	32.4%
FYE Students	5169	5156	5908	5889	6406	6114	5983	6124	6102	6612	6574
Percent Change From BASE YEAR	.0%	(.3%) (	14.3%	13.9%	23.9%	18.3%	15.7%	18.5%	18.0%	27.9%	27.2%
Constant \$ per FYE Student	\$3,744	\$4,065	\$3,444	\$3,596	\$3,175	\$3,471	\$3,997	\$4,129	\$4,270	\$4,009	\$3,897
Percent Change From BASE YEAR	.0%	8.6%	(8.0%) (	4.0%) (	15.2%) (	7.3%)	6.8%	10.3%	14.0%	7.1%	4.1%
Morris											
Direct Expenditures-Actual	\$1,296,745	\$1,704,078	\$1,995,422	\$2,547,320	\$2,742,860	\$2,906,705	\$3,542,317	\$3,990,673	\$4,853,700	\$5,085,500	\$5,349,100
-Constant	\$3,918,763	\$4,428,899	\$4,563,530	\$5,092,093	\$4,506,519	\$4,101,361	\$4,523,539	\$4,677,069	\$5,450,705	\$5,390,630	\$5,349,100
Percent Change From FY1973	.0%	13.0%	16.5%	29.9%	15.0%	4.7%	15.4%	19.4%	39.1%	37.6%	36.5%
FYE Students	1844	1718	1634	1426	1588	1554	1644	1670	1878	1945	1956
Percent Change From FY1973	.0%	(6.8%) (	11.4%) (	22.7%) (	13.9%) (	15.7%) (	10.8%) (	9.4%)	1.8%	5.5%	6.1%
Constant \$ per FYE Student	\$2,125	\$2,578	\$2,793	\$3,571	\$2,838	\$2,639	\$2,752	\$2,801	\$2,902	\$2,772	\$2,735
Percent Change From FY1973	.0%	21.3%	31.4%	68.0%	33.5%	24.2%	29.5%	31.8%	36.6%	30.4%	28.7%

Direct Instructional (Collegiate) Expenditures
 State Instructional Funds
 Inflated to Constant Dollars per Higher Education Price Index
 FY 1973 Through FY 1990

	FY1973	FY1975	FY1977	FY1979	FY1981	FY1983	FY1985	FY1987	FY1988	FY1989	FY1990
	3.022	2.599	2.287	1.999	1.643	1.411	1.277	1.172	1.123	1.060	1.000
Crookston											
Direct Expenditures-Actual	\$762,815	\$977,500	\$1,401,405	\$1,685,640	\$1,884,273	\$2,149,116	\$2,533,462	\$2,621,199	\$2,960,300	\$2,807,000	\$2,970,900
-Constant	\$2,305,227	\$2,540,523	\$3,205,013	\$3,369,594	\$3,095,861	\$3,032,403	\$3,235,231	\$3,072,045	\$3,324,417	\$2,975,420	\$2,970,900
Percent Change From FY1973	.0%	10.2%	39.0%	46.2%	34.3%	31.5%	40.3%	33.3%	44.2%	29.1%	28.9%
FYE Students	660	763	954	966	1106	982	934	779	766	797	785
Percent Change From FY1973	.0%	15.6%	44.5%	46.4%	67.6%	48.8%	41.5%	18.0%	16.1%	20.8%	18.9%
Constant \$ per FYE Student	\$3,493	\$3,330	\$3,360	\$3,488	\$2,799	\$3,088	\$3,464	\$3,944	\$4,340	\$3,733	\$3,785
Percent Change From FY1973	.0%	(4.7%)	(3.8%)	(.1%)	(19.9%)	(11.6%)	(.8%)	12.9%	24.3%	6.9%	8.4%
Waseca											
Direct Expenditures-Actual	\$519,642	\$782,075	\$1,105,574	\$1,485,023	\$1,772,682	\$1,863,594	\$2,126,443	\$2,135,346	\$2,216,000	\$2,330,400	\$2,452,100
-Constant	\$1,570,358	\$2,032,613	\$2,528,448	\$2,968,561	\$2,912,517	\$2,629,531	\$2,715,468	\$2,502,626	\$2,488,568	\$2,470,224	\$2,452,100
Percent Change From FY1973	.0%	29.4%	61.0%	89.0%	85.5%	67.4%	72.9%	59.4%	58.5%	57.3%	56.1%
FYE Students	399	628	912	1004	1009	879	813	817	798	745	809
Percent Change From FY1973	.0%	57.4%	128.6%	151.6%	152.9%	120.3%	103.8%	104.8%	100.0%	86.7%	102.8%
Constant \$ per FYE Student	\$3,936	\$3,237	\$2,772	\$2,957	\$2,887	\$2,992	\$3,340	\$3,063	\$3,119	\$3,316	\$3,031
Percent Change From FY1973	.0%	(17.8%)	(29.6%)	(24.9%)	(26.7%)	(24.0%)	(15.1%)	(22.2%)	(20.8%)	(15.8%)	(23.0%)
Twin Cities Campus (Excluding CEE & SS)											
Direct Expenditures-Actual	\$55,637,019	\$65,351,614	\$84,166,595	\$91,410,703	\$106,355,313	\$118,522,741	\$152,498,884	\$167,276,191	\$177,516,700	\$188,287,300	\$198,695,500
-Constant	\$168,135,071	\$169,848,845	\$192,489,003	\$182,729,995	\$174,741,779	\$167,235,588	\$194,741,075	\$196,047,696	\$199,351,254	\$199,584,538	\$198,695,500
Percent Change From BASE YEAR	.0%	1.0%	14.5%	8.7%	3.9%	(.5%)	15.8%	16.6%	18.6%	18.7%	18.2%
FYE Students	35752	38075	39059	37567	39424	39784	40065	40658	39469	38415	38096
Percent Change From BASE YEAR	.0%	6.5%	9.2%	5.1%	10.3%	11.3%	12.1%	13.7%	10.4%	7.4%	6.6%
Constant \$ per FYE Student	\$4,703	\$4,461	\$4,928	\$4,864	\$4,432	\$4,204	\$4,861	\$4,822	\$5,051	\$5,195	\$5,216
Percent Change From BASE YEAR	.0%	(5.1%)	4.8%	3.4%	(5.8%)	(10.6%)	3.4%	2.5%	7.4%	10.5%	10.9%
Health Sciences											
Direct Expenditures-Actual	\$14,026,476	\$19,107,381	\$27,057,316	\$28,602,303	\$34,508,213	\$37,178,097	\$47,542,616	\$46,160,409	\$48,836,900	\$51,393,100	\$52,286,400
-Constant	\$42,388,010	\$49,660,083	\$61,880,082	\$57,176,004	\$56,696,994	\$52,458,295	\$60,711,921	\$54,099,999	\$54,843,839	\$54,476,686	\$52,286,400
Percent Change From BASE YEAR	.0%	17.2%	46.0%	34.9%	33.8%	23.8%	43.2%	27.6%	29.4%	28.5%	23.4%
FYE Students	4918	6087	6974	6942	6909	6883	6714	6265	6221	6120	6263
Percent Change From BASE YEAR	.0%	23.8%	41.8%	41.2%	40.5%	40.0%	36.5%	27.4%	26.5%	24.4%	27.3%
Constant \$ per FYE Student	\$8,619	\$8,158	\$8,873	\$8,236	\$8,206	\$7,621	\$9,043	\$8,635	\$8,816	\$8,901	\$8,348
Percent Change From BASE YEAR	.0%	(5.3%)	2.9%	(4.4%)	(4.8%)	(11.6%)	4.9%	.2%	2.3%	3.3%	(3.1%)
T.C. Non Health Sciences (Excluding CEE & SS)											
Direct Expenditures-Actual	\$41,610,543	\$46,244,233	\$57,109,279	\$62,808,400	\$71,847,100	\$81,344,644	\$104,956,268	\$121,115,782	\$128,679,800	\$136,894,200	\$146,409,100
-Constant	\$125,747,061	\$120,188,762	\$130,608,921	\$125,553,992	\$118,044,785	\$114,777,293	\$134,029,154	\$141,947,697	\$144,507,415	\$145,107,852	\$146,409,100
Percent Change From BASE YEAR	.0%	(4.4%)	3.9%	(.2%)	(6.1%)	(8.7%)	6.6%	12.9%	14.9%	15.4%	16.4%
FYE Students	30834	31988	32085	30625	32515	32901	33351	34393	33248	32295	31833
Percent Change From BASE YEAR	.0%	3.7%	4.1%	(.7%)	5.5%	6.7%	8.2%	11.5%	7.8%	4.7%	3.2%
Constant \$ per FYE Student	\$4,078	\$3,757	\$4,071	\$4,100	\$3,630	\$3,489	\$4,019	\$4,127	\$4,346	\$4,493	\$4,599
Percent Change From BASE YEAR	.0%	(7.9%)	(.2%)	.5%	(11.0%)	(14.5%)	(1.5%)	1.2%	6.6%	10.2%	12.8%

Direct Instructional (Collegiate) Expenditures
 State Instructional Funds
 Inflated to Constant Dollars per Higher Education Price Index
 FY 1973 Through FY 1990

	FY1973	FY1975	FY1977	FY1979	FY1981	FY1983	FY1985	FY1987	FY1988	FY1989	FY1990
	3.022	2.599	2.287	1.999	1.643	1.411	1.277	1.172	1.123	1.060	1.000
System Total (Excluding CEE & SS)											
Direct Expenditures-Actual	\$64,620,312	\$76,879,108	\$97,566,158	\$107,722,916	\$125,134,516	\$140,482,487	\$179,429,184	\$197,596,269	\$210,748,100	\$223,517,500	\$235,089,700
-Constant	\$195,282,583	\$199,808,802	\$223,133,803	\$215,338,109	\$205,596,010	\$198,220,789	\$229,131,068	\$231,582,827	\$236,670,116	\$236,928,550	\$235,089,700
Percent Change From BASE YEAR	.0%	2.3%	14.3%	10.3%	5.3%	1.5%	17.3%	18.6%	21.2%	21.3%	20.4%
FYE Students	43824	46340	48467	46852	49533	49313	49439	50048	49013	48514	48220
Percent Change From BASE YEAR	.0%	5.7%	10.6%	6.9%	13.0%	12.5%	12.8%	14.2%	11.8%	10.7%	10.0%
Constant \$ per FYE Student	\$4,456	\$4,312	\$4,604	\$4,596	\$4,151	\$4,020	\$4,635	\$4,627	\$4,829	\$4,884	\$4,875
Percent Change From BASE YEAR	.0%	(3.2%)	3.3%	3.1%	(6.9%)	(9.8%)	4.0%	3.8%	8.4%	9.6%	9.4%

Exhibit V

Exhibit V displays the state cost per FYE taught from Exhibit II translated into FYE cost per enrollment unit. The exhibit is organized to identify the collegiate units providing teaching efforts toward the average costs of a FYE student enrolled in lower and upper divisions of each enrollment unit. The weighted average cost for each college is also identified. Graduate school enrollments reflect the cost per FYE taught at each course level from all collegiate (teaching) units.

Technically each table represents three matrices (student demand, induced course load and cost). The unit cost information summarized in each table is used to determine tuition as a percentage of instructional costs in Exhibit VI.

AGRICULTURE

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	0.3	.001	5	0.0	.000	0	0.3	.001	2
UC__UD	5,240	0.6	.003	15	0.4	.001	6	1.0	.002	10
AG__LD	7,081	59.1	.282	1,998	54.6	.162	1,145	113.7	.208	1,472
AG__UD	10,971	28.7	.137	1,503	137.8	.408	4,477	166.5	.304	3,340
AG__GR	10,390	0.0	.000	0	0.7	.002	22	0.7	.001	13
CBS__LD	6,652	15.3	.073	486	12.3	.036	242	27.6	.050	336
CBS__UD	10,955	8.0	.038	418	18.5	.055	600	26.5	.048	531
ED__LD	6,096	2.0	.010	58	2.9	.009	52	4.9	.009	55
ED__UD	7,750	2.7	.013	100	2.0	.006	46	4.6	.008	65
FOR__LD	9,229	0.4	.002	18	0.8	.002	22	1.3	.002	22
FOR__UD	10,801	0.9	.004	46	2.0	.006	64	2.8	.005	55
GC__LD	6,422	2.1	.010	64	2.4	.007	46	4.4	.008	52
HE__LD	4,356	1.3	.006	27	0.4	.001	5	1.7	.003	14
HE__UD	6,571	0.0	.000	0	0.4	.001	8	0.4	.001	5
CLA__LD	3,429	27.6	.132	452	23.3	.069	237	50.9	.093	319
CLA__UD	5,240	9.0	.043	225	14.5	.043	225	23.5	.043	225
CLA__GR	7,829	0.0	.000	0	0.4	.001	9	0.4	.001	6
MGMT__LD	5,618	3.9	.019	105	5.1	.015	85	9.0	.016	92
MGMT__UD	6,484	0.2	.001	6	5.0	.015	96	5.1	.009	60
BMD__LD	9,924	0.1	.000	5	0.1	.000	3	0.2	.000	4
BMD__UD	15,386	0.9	.004	66	3.4	.010	155	4.3	.008	121
HHH__UD	20,296	0.2	.001	19	0.0	.000	0	0.2	.000	7
SPH__UD	12,539	0.4	.002	24	0.6	.002	22	1.0	.002	23
IT__LD	4,946	40.2	.192	949	30.6	.091	448	70.8	.129	640
IT__UD	8,904	4.2	.020	179	12.0	.036	316	16.2	.030	264
VETM__LD	14,071	0.4	.002	27	0.2	.001	8	0.6	.001	15
VETM__UD	14,828	1.0	.005	71	2.0	.006	88	3.0	.005	81
ARCH__LD	4,944	0.0	.000	0	4.1	.012	60	4.1	.007	37
ARCH__UD	10,801	0.0	.000	0	1.2	.004	38	1.2	.002	24
TOTAL	0	209.5	1.000	6,865	337.7	1.000	8,525	546.9	1.000	7,890

ARCHITECTURE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	0.0	.000	0	0.1	.000	2	0.1	.000	2
AG__LD	7,081	2.7	.148	1,050	0.0	.000	0	2.7	.012	87
AG__UD	10,971	0.0	.000	0	1.5	.007	81	1.5	.007	75
CBS__LD	6,652	0.0	.000	0	0.1	.000	3	0.1	.000	3
CBS__UD	10,955	0.0	.000	0	0.2	.001	11	0.2	.001	10
ED__LD	6,096	0.0	.000	0	0.4	.002	12	0.4	.002	11
ED__UD	7,750	0.0	.000	0	0.1	.000	4	0.1	.000	4
FOR__LD	9,229	0.0	.000	0	0.1	.000	5	0.1	.000	4
FOR__UD	10,801	0.0	.000	0	0.3	.001	16	0.3	.001	15
GC__LD	6,422	0.0	.000	0	0.1	.000	3	0.1	.000	3
GC__UD	8,420	0.0	.000	0	0.1	.000	4	0.1	.000	4
HE__LD	4,356	0.0	.000	0	0.1	.000	2	0.1	.000	2
HE__UD	6,571	0.0	.000	0	0.2	.001	7	0.2	.001	6
CLA__LD	3,429	6.1	.335	1,149	3.2	.016	54	9.3	.042	145
CLA__UD	5,240	0.0	.000	0	11.3	.056	293	11.3	.051	269
MGMT_LD	5,618	0.0	.000	0	0.2	.001	6	0.2	.001	5
IT__LD	4,946	2.9	.159	788	0.0	.000	0	2.9	.013	65
IT__UD	8,904	0.0	.000	0	16.9	.084	745	16.9	.077	683
ARCH_LD	4,944	6.5	.357	1,766	0.0	.000	0	6.5	.030	146
ARCH_UD	10,801	0.0	.000	0	167.0	.827	8,929	167.0	.758	8,191
ARCH_GR	6,961	0.0	.000	0	0.1	.000	3	0.1	.000	3
TOTAL	0	18.2	1.000	4,753	202.0	1.000	10,181	220.2	1.000	9,732

BIOLOGICAL SCIENCES
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.0	.000	0	1.2	.005	25	1.2	.005	25
AG__LD	7,081	0.0	.000	0	0.6	.002	17	0.6	.002	17
AG__UD	10,971	0.0	.000	0	3.6	.014	156	3.6	.014	156
CBS__LD	6,652	0.0	.000	0	3.6	.014	95	3.6	.014	95
CBS__UD	10,955	0.0	.000	0	129.0	.511	5,595	129.0	.511	5,595
CBS__GR	10,995	0.0	.000	0	1.2	.005	52	1.2	.005	52
ED__LD	6,096	0.0	.000	0	1.3	.005	31	1.3	.005	31
ED__UD	7,750	0.0	.000	0	0.9	.004	28	0.9	.004	28
FOR__UD	10,801	0.0	.000	0	1.3	.005	56	1.3	.005	56
FOR__GR	9,278	0.0	.000	0	0.1	.000	4	0.1	.000	4
GC__LD	6,422	0.0	.000	0	0.1	.000	3	0.1	.000	3
HE__LD	4,356	0.0	.000	0	0.1	.000	2	0.1	.000	2
HE__UD	6,571	0.0	.000	0	0.2	.001	5	0.2	.001	5
CLA__LD	3,429	0.0	.000	0	20.7	.082	281	20.7	.082	281
CLA__UD	5,240	0.0	.000	0	25.2	.100	523	25.2	.100	523
MGMT__LD	5,618	0.0	.000	0	0.6	.002	13	0.6	.002	13
MGMT__UD	6,484	0.0	.000	0	0.4	.002	10	0.4	.002	10
BMD__LD	9,924	0.0	.000	0	0.1	.000	4	0.1	.000	4
BMD__UD	15,386	0.0	.000	0	21.7	.086	1,322	21.7	.086	1,322
BMD__GR	22,781	0.0	.000	0	0.2	.001	18	0.2	.001	18
HHH__UD	20,296	0.0	.000	0	0.1	.000	8	0.1	.000	8
SPH__UD	12,539	0.0	.000	0	0.4	.002	20	0.4	.002	20
IT__LD	4,946	0.0	.000	0	18.1	.072	354	18.1	.072	354
IT__UD	8,904	0.0	.000	0	20.1	.080	709	20.1	.080	709
IT__GR	8,559	0.0	.000	0	0.4	.002	14	0.4	.002	14
VETM__UD	14,828	0.0	.000	0	1.1	.004	65	1.1	.004	65
VETM__GR	16,143	0.0	.000	0	0.1	.000	6	0.1	.000	6
ARCH__LD	4,944	0.0	.000	0	0.2	.001	4	0.2	.001	4
TOTAL	0	0.0	0.000	0	252.6	1.000	9,418	252.6	1.000	9,418

DENTAL HYGIENE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
DENT_LD	10,599	0.0	.000	0	21.0	.408	4,322	21.0	.374	3,968
DENT_UD	23,263	0.0	.000	0	28.6	.555	12,919	28.6	.510	11,860
GC_LD	6,422	0.0	.000	0	0.1	.002	12	0.1	.002	11
CLA_LD	3,429	0.1	.022	75	0.2	.004	13	0.3	.005	18
CLA_UD	5,240	0.0	.000	0	0.2	.004	20	0.2	.004	19
BMD_LD	9,924	4.5	.978	9,706	1.1	.021	212	5.6	.100	991
SPH_UD	12,539	0.0	.000	0	0.2	.004	49	0.2	.004	45
IT_LD	4,946	0.0	.000	0	0.1	.002	10	0.1	.002	9
TOTAL	0	4.6	1.000	9,781	51.5	1.000	17,557	56.1	1.000	16,920

EDUCATION

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	0.0	.000	0	0.1	.000	1	0.1	.000	0
UC__UD	5,240	0.1	.000	1	0.3	.001	3	0.4	.000	2
AG__LD	7,081	0.6	.001	10	3.6	.006	44	4.2	.004	30
AG__UD	10,971	2.8	.007	74	7.5	.013	143	10.3	.010	114
CBS__LD	6,652	1.4	.003	22	3.6	.006	42	5.0	.005	34
CBS__UD	10,955	1.5	.004	39	2.5	.004	47	4.0	.004	44
ED__LD	6,096	83.2	.200	1,218	42.2	.073	446	125.3	.126	769
ED__UD	7,750	283.4	.681	5,276	377.5	.654	5,072	660.8	.666	5,158
ED__GR	7,735	0.0	.000	0	4.2	.007	56	4.2	.004	33
FOR__LD	9,229	0.1	.000	2	0.1	.000	2	0.2	.000	2
FOR__UD	10,801	0.0	.000	0	0.7	.001	13	0.7	.001	8
GC__LD	6,422	0.6	.001	9	2.8	.005	31	3.3	.003	21
GC__UD	8,420	0.0	.000	0	0.2	.000	3	0.2	.000	2
HE__LD	4,356	0.8	.002	8	1.4	.002	11	2.2	.002	10
HE__UD	6,571	2.1	.005	33	2.2	.004	25	4.2	.004	28
HE__GR	7,532	0.0	.000	0	0.1	.000	1	0.1	.000	1
CLA__LD	3,429	8.5	.020	70	22.3	.039	133	30.9	.031	107
CLA__UD	5,240	16.2	.039	204	50.1	.087	455	66.3	.067	350
CLA__GR	7,829	0.0	.000	0	0.6	.001	8	0.6	.001	5
MGMT__LD	5,618	0.5	.001	7	1.3	.002	13	1.8	.002	10
MGMT__UD	6,484	0.6	.001	9	4.6	.008	52	5.2	.005	34
MGMT__GR	9,504	0.0	.000	0	0.1	.000	2	0.1	.000	1
BMD__LD	9,924	1.4	.003	33	1.6	.003	28	3.0	.003	30
BMD__UD	15,386	0.6	.001	22	0.4	.001	11	1.0	.001	15
PHM__UD	17,124	0.1	.000	4	0.3	.001	9	0.4	.000	7
HHH__UD	20,296	0.0	.000	0	0.3	.001	11	0.3	.000	6
SPH__UD	12,539	3.0	.007	90	9.9	.017	215	12.9	.013	163
IT__LD	4,946	4.6	.011	55	17.9	.031	153	22.5	.023	112
IT__UD	8,904	4.1	.010	88	17.6	.031	272	21.6	.022	194
VETM__UD	14,828	0.1	.000	4	0.5	.001	13	0.7	.001	10
DED__UD	6,450	0.0	.000	0	0.2	.000	2	0.2	.000	1
ARCH__LD	4,944	0.0	.000	0	0.1	.000	1	0.1	.000	0
TOTAL	0	416.3	1.000	7,280	576.8	1.000	7,315	992.8	1.000	7,301

GENERAL COLLEGE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	0.6	.000	2	0.0	.000	0	0.6	.000	1
UC__UD	5,240	0.4	.000	2	0.1	.001	3	0.5	.000	2
AG__LD	7,081	8.1	.007	46	0.0	.000	0	8.1	.006	41
AG__UD	10,971	1.0	.001	9	0.0	.000	0	1.0	.001	8
CBS__LD	6,652	22.0	.018	118	2.6	.017	112	24.6	.018	117
CBS__UD	10,955	0.2	.000	2	0.2	.001	14	0.4	.000	3
ED__LD	6,096	13.1	.011	64	2.9	.019	114	16.0	.011	70
ED__UD	7,750	4.1	.003	26	3.0	.019	150	7.1	.005	39
FOR__LD	9,229	1.1	.001	8	0.0	.000	0	1.1	.001	7
FOR__UD	10,801	0.0	.000	0	0.1	.001	7	0.1	.000	1
GC__LD	6,422	776.8	.625	4,011	43.0	.277	1,780	819.8	.586	3,764
GC__UD	8,420	15.1	.012	102	30.9	.199	1,677	46.0	.033	277
HE__LD	4,356	7.7	.006	27	0.7	.005	20	8.4	.006	26
HE__UD	6,571	1.3	.001	7	1.0	.006	42	2.3	.002	11
CLA__LD	3,429	245.2	.197	676	31.8	.205	703	277.0	.198	679
CLA__UD	5,240	28.2	.023	119	24.8	.160	838	53.0	.038	199
MGMT__LD	5,618	7.6	.006	34	1.4	.009	51	9.0	.006	36
MORT__UD	15,386	0.1	.000	1	0.0	.000	0	0.1	.000	1
BMD__LD	9,924	1.2	.001	10	0.1	.001	6	1.2	.001	9
BMD__UD	15,386	1.7	.001	21	0.6	.004	60	2.3	.002	25
NURS__LD	0	0.0	.000	0	0.2	.001	0	0.2	.000	0
PHM__UD	17,124	0.3	.000	4	0.1	.001	11	0.3	.000	4
SPH__UD	12,539	1.4	.001	14	0.7	.005	57	2.2	.002	20
IT__LD	4,946	101.3	.081	403	6.8	.044	217	108.1	.077	382
IT__UD	8,904	5.3	.004	38	0.5	.003	29	5.8	.004	37
ARCH__LD	4,944	0.0	.000	0	3.6	.023	115	3.6	.003	13
TOTAL	0	1,243.8	1.000	5,742	155.1	1.000	6,005	1,398.8	1.000	5,771

LAW
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
ED__UD	7,750	0.0	.000	0	0.3	.000	3	0.3	.000	3
HE__UD	6,571	0.0	.000	0	0.1	.000	1	0.1	.000	1
HE__GR	7,532	0.0	.000	0	0.1	.000	1	0.1	.000	1
LAW__UD	11,951	0.0	.000	0	750.9	.990	11,831	750.9	.990	11,831
CLA__LD	3,429	0.0	.000	0	1.7	.002	8	1.7	.002	8
CLA__UD	5,240	0.0	.000	0	3.9	.005	27	3.9	.005	27
CLA__GR	7,829	0.0	.000	0	0.2	.000	2	0.2	.000	2
MGMT__GR	9,504	0.0	.000	0	0.8	.001	10	0.8	.001	10
HHH__UD	20,296	0.0	.000	0	0.2	.000	5	0.2	.000	5
SPH__UD	12,539	0.0	.000	0	0.1	.000	2	0.1	.000	2
IT__LD	4,946	0.0	.000	0	0.1	.000	1	0.1	.000	1
IT__UD	8,904	0.0	.000	0	0.1	.000	1	0.1	.000	1
TOTAL	0	0.0	0.000	0	758.5	1.000	11,892	758.5	1.000	11,892

HUMAN ECOLOGY
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.2	.001	4	0.0	.000	0	0.2	.000	1
AG__LD	7,081	54.9	.189	1,335	27.5	.060	422	82.4	.110	776
AG__UD	10,971	8.6	.030	324	48.0	.104	1,142	56.5	.075	824
CBS__LD	6,652	4.7	.016	107	1.2	.003	17	6.0	.008	53
CBS__UD	10,955	0.8	.003	30	2.8	.006	67	3.6	.005	52
ED__LD	6,096	4.2	.014	88	3.2	.007	42	7.4	.010	60
ED__UD	7,750	3.9	.013	104	9.5	.021	160	13.3	.018	137
GC__LD	6,422	10.5	.036	232	6.8	.015	95	17.3	.023	148
GC__UD	8,420	0.1	.000	3	0.2	.000	4	0.3	.000	3
HE__LD	4,356	51.9	.178	777	36.7	.080	347	88.6	.118	513
HE__UD	6,571	39.6	.136	894	220.8	.479	3,146	260.4	.346	2,275
HE__GR	7,532	0.0	.000	0	0.7	.002	11	0.7	.001	7
CLA__LD	3,429	63.1	.217	743	31.2	.068	232	94.3	.125	430
CLA__UD	5,240	13.2	.045	238	31.4	.068	357	44.5	.059	310
MGMT__LD	5,618	3.7	.013	71	2.1	.005	26	5.8	.008	43
MGMT__UD	6,484	0.4	.001	9	5.7	.012	80	6.2	.008	53
BMD__LD	9,924	0.1	.000	3	0.4	.001	9	0.4	.001	5
BMD__UD	15,386	2.0	.007	106	2.2	.005	73	4.3	.006	88
HHH__UD	20,296	0.0	.000	0	0.8	.002	35	0.8	.001	22
SPH__UD	12,539	0.6	.002	26	0.9	.002	24	1.5	.002	25
IT__LD	4,946	26.5	.091	450	16.7	.036	179	43.1	.057	283
IT__UD	8,904	2.1	.007	64	3.2	.007	62	5.3	.007	63
VETM__UD	14,828	0.0	.000	0	1.8	.004	58	1.8	.002	35
ARCH__LD	4,944	0.0	.000	0	5.8	.013	62	5.8	.008	38
ARCH__UD	10,801	0.0	.000	0	1.6	.003	37	1.6	.002	23
TOTAL	0	291.1	1.000	5,608	461.2	1.000	6,687	752.1	1.000	6,270

LIBERAL ARTS

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	9.8	.001	5	0.9	.000	1	10.7	.001	3
UC__UD	5,240	2.7	.000	2	3.3	.001	4	6.0	.001	3
AG__LD	7,081	27.1	.004	26	14.9	.003	23	42.0	.004	25
AG__UD	10,971	4.5	.001	7	14.0	.003	33	18.6	.002	17
AG__GR	10,390	0.0	.000	0	0.1	.000	0	0.1	.000	0
CBS__LD	6,652	299.2	.041	274	46.1	.010	65	345.3	.029	192
CBS__UD	10,955	48.5	.007	73	86.2	.018	202	134.7	.011	123
CBS__GR	10,995	0.0	.000	0	0.1	.000	0	0.1	.000	0
ED__LD	6,096	114.2	.016	96	37.9	.008	49	152.1	.013	78
ED__UD	7,750	106.6	.015	114	158.2	.034	262	264.8	.022	172
ED__GR	7,735	0.0	.000	0	0.6	.000	1	0.6	.000	0
FOR__LD	9,229	3.5	.000	4	3.3	.001	6	6.8	.001	5
FOR__UD	10,801	1.4	.000	2	2.7	.001	6	4.1	.000	4
GC__LD	6,422	36.6	.005	32	8.7	.002	12	45.3	.004	24
GC__UD	8,420	0.2	.000	0	0.4	.000	1	0.7	.000	0
HE__LD	4,356	25.3	.003	15	8.4	.002	8	33.7	.003	12
HE__UD	6,571	8.9	.001	8	21.0	.004	29	29.9	.003	16
HE__GR	7,532	0.0	.000	0	0.3	.000	0	0.3	.000	0
LAW__UD	11,951	0.0	.000	0	0.9	.000	2	0.9	.000	1
CLA__LD	3,429	3,496.8	.481	1,650	696.4	.149	510	4,193.2	.351	1,203
CLA__UD	5,240	1,472.9	.203	1,062	2,967.9	.633	3,319	4,440.8	.371	1,946
CLA__GR	7,829	0.0	.000	0	11.1	.002	19	11.1	.001	7
MGMT__LD	5,618	142.2	.020	110	36.4	.008	44	178.6	.015	84
MGMT__UD	6,484	3.8	.001	3	17.1	.004	24	20.9	.002	11
MGMT__GR	9,504	0.0	.000	0	1.1	.000	2	1.1	.000	1
MORT__UD	15,386	0.1	.000	0	0.5	.000	2	0.6	.000	1
BMD__LD	9,924	18.1	.002	25	4.5	.001	10	22.6	.002	19
BMD__UD	15,386	46.5	.006	98	49.4	.011	162	96.0	.008	124
BMD__GR	22,781	0.0	.000	0	0.3	.000	1	0.3	.000	1
NURS__LD	0	0.0	.000	0	1.1	.000	0	1.1	.000	0
NURS__UD	19,526	0.4	.000	1	0.0	.000	0	0.4	.000	1
PHM__LD	0	0.0	.000	0	0.8	.000	0	0.8	.000	0
PHM__UD	17,124	7.6	.001	18	1.9	.000	7	9.5	.001	14
HHH__UD	20,296	3.9	.001	11	3.7	.001	16	7.6	.001	13
HHH__GR	11,247	0.0	.000	0	0.1	.000	0	0.1	.000	0
SPH__LD	0	0.0	.000	0	10.9	.002	0	10.9	.001	0
SPH__UD	12,539	20.0	.003	34	12.4	.003	33	32.4	.003	34
IT__LD	4,946	1,200.9	.165	817	201.5	.043	213	1,402.4	.117	580
IT__UD	8,904	162.2	.022	199	203.0	.043	386	365.2	.031	272
IT__GR	8,559	0.0	.000	0	0.5	.000	1	0.5	.000	0
VETM__LD	14,071	0.3	.000	1	0.1	.000	0	0.4	.000	0
VETM__UD	14,828	4.9	.001	10	1.2	.000	4	6.1	.001	8
ARCH__LD	4,944	0.0	.000	0	49.5	.011	52	49.5	.004	20
ARCH__UD	10,801	0.0	.000	0	6.8	.001	16	6.8	.001	6
TOTAL	0	7,269.1	1.000	4,697	4,686.2	1.000	5,523	11,955.6	1.000	5,021

MANAGEMENT

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.0	.000	0	1.2	.002	9	1.2	.002	9
AG__LD	7,081	0.0	.000	0	0.2	.000	2	0.2	.000	2
AG__UD	10,971	0.0	.000	0	1.8	.002	27	1.8	.002	27
CBS__LD	6,652	0.0	.000	0	2.2	.003	20	2.2	.003	20
CBS__UD	10,955	0.0	.000	0	0.7	.001	11	0.7	.001	11
ED__LD	6,096	0.0	.000	0	3.7	.005	31	3.7	.005	31
ED__UD	7,750	0.0	.000	0	0.3	.000	3	0.3	.000	3
GC__LD	6,422	0.0	.000	0	0.2	.000	2	0.2	.000	2
HE__LD	4,356	0.0	.000	0	0.3	.000	2	0.3	.000	2
HE__UD	6,571	0.0	.000	0	0.1	.000	1	0.1	.000	1
CLA__LD	3,429	0.0	.000	0	28.6	.040	136	28.6	.040	136
CLA__UD	5,240	0.0	.000	0	149.3	.206	1,081	149.3	.206	1,081
MGMT_LD	5,618	0.0	.000	0	14.5	.020	113	14.5	.020	113
MGMT_UD	6,484	0.0	.000	0	507.3	.701	4,546	507.3	.701	4,546
MGMT_GR	9,504	0.0	.000	0	2.9	.004	38	2.9	.004	38
BMD__UD	15,386	0.0	.000	0	0.1	.000	2	0.1	.000	2
HHH__UD	20,296	0.0	.000	0	0.1	.000	3	0.1	.000	3
IT__LD	4,946	0.0	.000	0	4.9	.007	33	4.9	.007	33
IT__UD	8,904	0.0	.000	0	4.8	.007	59	4.8	.007	59
ARCH_LD	4,944	0.0	.000	0	0.4	.001	3	0.4	.001	3
TOTAL	0	0.0	0.000	0	723.6	1.000	6,121	723.6	1.000	6,121

MEDICAL TECHNOLOGY
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
AG__LD	7,081	0.0	.000	0	0.3	.006	45	0.3	.006	45
AG__UD	10,971	0.0	.000	0	0.1	.002	23	0.1	.002	23
CBS__UD	10,955	0.0	.000	0	0.8	.017	186	0.8	.017	186
HE__LD	4,356	0.0	.000	0	0.1	.002	9	0.1	.002	9
CLA__LD	3,429	0.0	.000	0	2.4	.051	174	2.4	.051	174
CLA__UD	5,240	0.0	.000	0	1.5	.032	167	1.5	.032	167
BMD__LD	9,924	0.0	.000	0	0.1	.002	21	0.1	.002	21
BMD__UD	15,386	0.0	.000	0	6.4	.135	2,081	6.4	.135	2,081
AH__UD	14,341	0.0	.000	0	23.9	.507	7,274	23.9	.507	7,274
CMD__UD	15,210	0.0	.000	0	9.6	.203	3,086	9.6	.203	3,086
PHM__UD	17,124	0.0	.000	0	0.1	.002	36	0.1	.002	36
SPH__UD	12,539	0.0	.000	0	0.1	.002	27	0.1	.002	27
IT__LD	4,946	0.0	.000	0	1.3	.028	136	1.3	.028	136
IT__UD	8,904	0.0	.000	0	0.5	.011	94	0.5	.011	94
TOTAL	0	0.0	0.000	0	47.2	1.000	13,359	47.2	1.000	13,359

MEDICINE

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
CBS_UD	10,955	0.0	.000	0	0.1	.000	1	0.1	.000	1
CLA_UD	5,240	0.0	.000	0	0.1	.000	0	0.1	.000	0
CLA_GR	7,829	0.0	.000	0	0.1	.000	1	0.1	.000	1
BMD_UD	15,386	0.0	.000	0	558.3	.449	6,911	558.3	.449	6,911
CMD_UD	15,210	0.0	.000	0	682.3	.549	8,351	682.3	.549	8,351
SPH_UD	12,539	0.0	.000	0	1.6	.001	16	1.6	.001	16
SPH_GR	9,695	0.0	.000	0	0.1	.000	1	0.1	.000	1
IT_LD	4,946	0.0	.000	0	0.2	.000	1	0.2	.000	1
TOTAL	0	0.0	0.000	0	1,242.8	1.000	15,282	1,242.8	1.000	15,282

MORTUARY SCIENCE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	----- ENROLLMENTS -----						-----		
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.0	.000	0	0.1	.001	8	0.1	.001	8
CBS__LD	6,652	0.0	.000	0	0.1	.001	10	0.1	.001	10
ED__LD	6,096	0.0	.000	0	0.3	.004	26	0.3	.004	26
ED__UD	7,750	0.0	.000	0	0.1	.001	11	0.1	.001	11
GC__LD	6,422	0.0	.000	0	4.5	.065	418	4.5	.065	418
GC__UD	8,420	0.0	.000	0	0.1	.001	12	0.1	.001	12
CLA__LD	3,429	0.0	.000	0	1.3	.019	64	1.3	.019	64
CLA__UD	5,240	0.0	.000	0	5.6	.081	424	5.6	.081	424
MGMT__LD	5,618	0.0	.000	0	0.2	.003	16	0.2	.003	16
MGMT__UD	6,484	0.0	.000	0	0.2	.003	19	0.2	.003	19
MORT__UD	15,386	0.0	.000	0	49.9	.721	11,095	49.9	.721	11,095
BMD__LD	9,924	0.0	.000	0	0.8	.012	115	0.8	.012	115
BMD__UD	15,386	0.0	.000	0	5.4	.078	1,201	5.4	.078	1,201
SPH__UD	12,539	0.0	.000	0	0.5	.007	91	0.5	.007	91
IT__LD	4,946	0.0	.000	0	0.1	.001	7	0.1	.001	7
TOTAL	0	0.0	0.000	0	69.2	1.000	13,516	69.2	1.000	13,516

NATURAL RESOURCES

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	0.0	.000	0	0.1	.001	2	0.1	.000	1
UC__UD	5,240	0.0	.000	0	0.2	.001	7	0.2	.001	4
AG__LD	7,081	19.1	.182	1,292	7.5	.047	335	26.6	.101	716
AG__UD	10,971	2.5	.024	262	13.5	.085	936	16.0	.061	667
CBS__LD	6,652	14.0	.134	889	2.6	.016	109	16.6	.063	420
CBS__UD	10,955	2.5	.024	262	14.9	.094	1,031	17.4	.066	725
ED__LD	6,096	0.7	.007	41	0.8	.005	31	1.5	.006	35
ED__UD	7,750	0.0	.000	0	2.2	.014	108	2.2	.008	65
FOR__LD	9,229	10.0	.096	881	11.4	.072	665	21.4	.081	751
FOR__UD	10,801	7.5	.072	774	60.1	.380	4,101	67.6	.257	2,775
FOR__GR	9,278	0.0	.000	0	0.1	.001	6	0.1	.000	4
GC__LD	6,422	1.1	.011	67	0.9	.006	37	2.1	.008	51
HE__LD	4,356	0.1	.001	4	0.0	.000	0	0.1	.000	2
HE__UD	6,571	0.0	.000	0	0.1	.001	4	0.1	.000	2
CLA__LD	3,429	7.4	.071	242	8.1	.051	175	15.5	.059	202
CLA__UD	5,240	3.6	.034	180	9.3	.059	308	12.9	.049	257
MGMT__LD	5,618	0.4	.004	21	0.4	.003	14	0.8	.003	17
MGMT__UD	6,484	0.2	.002	12	1.4	.009	57	1.6	.006	39
BMD__LD	9,924	0.0	.000	0	0.1	.001	6	0.1	.000	4
BMD__UD	15,386	0.0	.000	0	0.3	.002	29	0.3	.001	18
SPH__UD	12,539	0.1	.001	12	0.2	.001	16	0.3	.001	14
IT__LD	4,946	33.4	.319	1,578	10.5	.066	328	44.0	.167	827
IT__UD	8,904	1.8	.017	153	12.1	.076	681	13.9	.053	470
VTM__LD	14,071	0.3	.003	40	0.3	.002	27	0.5	.002	27
ARCH__LD	4,944	0.0	.000	0	0.9	.006	28	0.9	.003	17
ARCH__UD	10,801	0.0	.000	0	0.3	.002	20	0.3	.001	12
TOTAL	0	104.7	1.000	6,712	158.3	1.000	9,061	263.1	1.000	8,122

NURSING
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.0	.000	0	0.2	.001	7	0.2	.001	7
AG__LD	7,081	0.0	.000	0	0.1	.001	5	0.1	.001	5
CBS__UD	10,955	0.0	.000	0	0.1	.001	7	0.1	.001	7
ED__LD	6,096	0.0	.000	0	0.1	.001	4	0.1	.001	4
ED__UD	7,750	0.0	.000	0	1.0	.007	52	1.0	.007	52
FOR__LD	9,229	0.0	.000	0	0.1	.001	6	0.1	.001	6
HE__LD	4,356	0.0	.000	0	0.1	.001	3	0.1	.001	3
HE__UD	6,571	0.0	.000	0	0.1	.001	4	0.1	.001	4
CLA__LD	3,429	0.0	.000	0	1.0	.007	23	1.0	.007	23
CLA__UD	5,240	0.0	.000	0	5.9	.040	208	5.9	.040	208
BMD__LD	9,924	0.0	.000	0	0.1	.001	7	0.1	.001	7
BMD__UD	15,386	0.0	.000	0	14.6	.098	1,515	14.6	.098	1,515
NURS__UD	19,526	0.0	.000	0	123.4	.832	16,247	123.4	.832	16,248
NURS__GR	27,800	0.0	.000	0	1.0	.007	187	1.0	.007	187
PHM__UD	17,124	0.0	.000	0	0.1	.001	12	0.1	.001	12
SPH__UD	12,539	0.0	.000	0	0.1	.001	8	0.1	.001	8
IT__LD	4,946	0.0	.000	0	0.3	.002	10	0.3	.002	10
TOTAL	0	0.0	0.000	0	148.3	1.000	18,307	148.3	1.000	18,307

OCCUPATIONAL THERAPY
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
ED__UD	7,750	0.0	.000	0	0.1	.001	11	0.1	.001	11
CLA__UD	5,240	0.0	.000	0	0.1	.001	7	0.1	.001	7
BMD__UD	15,386	0.0	.000	0	7.1	.100	1,534	7.1	.100	1,534
AH__UD	14,341	0.0	.000	0	63.7	.897	12,870	63.7	.897	12,871
TOTAL	0	0.0	0.000	0	71.0	1.000	14,423	71.0	1.000	14,423

PHARMACY
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	-----			E N R O L L M E N T S			-----		
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
AG__LD	7,081	0.0	.000	0	0.2	.001	4	0.2	.001	4
CBS__UD	10,955	0.0	.000	0	0.5	.001	16	0.5	.001	16
ED__UD	7,750	0.0	.000	0	3.8	.011	88	3.8	.011	88
CLA__LD	3,429	0.0	.000	0	1.5	.004	15	1.5	.004	15
CLA__UD	5,240	0.0	.000	0	0.7	.002	11	0.7	.002	11
MGMT_LD	5,618	0.0	.000	0	0.8	.002	13	0.8	.002	13
MGMT_UD	6,484	0.0	.000	0	0.1	.000	2	0.1	.000	2
BMD__UD	15,386	0.0	.000	0	42.6	.127	1,948	42.6	.127	1,948
PHM__UD	17,124	0.0	.000	0	277.5	.825	14,122	277.5	.825	14,122
PHM__GR	6,119	0.0	.000	0	0.3	.001	5	0.3	.001	5
SPH__UD	12,539	0.0	.000	0	1.3	.004	48	1.3	.004	48
IT__LD	4,946	0.0	.000	0	0.2	.001	3	0.2	.001	3
IT__UD	8,904	0.0	.000	0	0.4	.001	11	0.4	.001	11
VETM_LD	14,071	0.0	.000	0	1.4	.004	59	1.4	.004	59
VETM_UD	14,828	0.0	.000	0	5.2	.015	229	5.2	.015	229
TOTAL	0	0.0	0.000	0	336.5	1.000	16,574	336.5	1.000	16,574

TECHNOLOGY

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	7.7	.004	14	0.8	.000	1	8.5	.002	8
UC__UD	5,240	0.7	.000	2	3.0	.002	8	3.7	.001	5
AG__LD	7,081	3.1	.002	12	1.9	.001	7	5.0	.001	9
AG__UD	10,971	0.1	.000	1	2.1	.001	12	2.2	.001	6
CBS__LD	6,652	20.6	.011	75	7.6	.004	26	28.2	.007	50
CBS__UD	10,955	2.6	.001	16	17.1	.009	96	19.7	.005	57
ED__LD	6,096	7.6	.004	25	6.7	.003	21	14.3	.004	23
ED__UD	7,750	3.5	.002	15	1.4	.001	6	4.9	.001	10
FOR__LD	9,229	0.4	.000	2	0.8	.000	4	1.2	.000	3
FOR__UD	10,801	0.0	.000	0	0.7	.000	4	0.7	.000	2
GC__LD	6,422	1.2	.001	4	0.9	.000	3	2.1	.001	4
HE__LD	4,356	0.6	.000	1	0.4	.000	1	1.0	.000	1
HE__UD	6,571	0.0	.000	0	0.4	.000	1	0.4	.000	1
CLA__LD	3,429	344.3	.189	647	97.9	.050	171	442.2	.117	401
CLA__UD	5,240	91.2	.050	262	201.7	.103	539	292.9	.077	405
CLA__GR	7,829	0.0	.000	0	0.2	.000	1	0.2	.000	0
MGMT__LD	5,618	13.8	.008	42	8.1	.004	23	21.9	.006	33
MGMT__UD	6,484	0.5	.000	2	9.9	.005	33	10.4	.003	18
MGMT__GR	9,504	0.0	.000	0	0.1	.000	0	0.1	.000	0
BMD__LD	9,924	0.5	.000	3	0.3	.000	2	0.8	.000	2
BMD__UD	15,386	0.5	.000	4	6.3	.003	49	6.8	.002	28
PHM__LD	0	0.0	.000	0	0.1	.000	0	0.1	.000	0
PHM__UD	17,124	0.2	.000	2	0.0	.000	0	0.2	.000	1
HHH__UD	20,296	0.0	.000	0	0.1	.000	1	0.1	.000	1
SPH__UD	12,539	0.6	.000	4	0.4	.000	3	1.0	.000	3
IT__LD	4,946	739.9	.406	2,006	56.9	.029	144	796.8	.210	1,041
IT__UD	8,904	584.7	.321	2,854	1,493.7	.762	6,782	2,078.4	.549	4,889
IT__GR	8,559	0.0	.000	0	9.8	.005	43	9.8	.003	22
VETM__UD	14,828	0.0	.000	0	0.4	.000	3	0.4	.000	2
ARCH__LD	4,944	0.0	.000	0	28.2	.014	71	28.2	.007	37
ARCH__UD	10,801	0.0	.000	0	3.1	.002	17	3.1	.001	9
TOTAL	0	1,824.3	1.000	5,994	1,961.0	1.000	8,070	3,785.3	1.000	7,069

UNIVERSITY COLLEGE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__UD	5,240	0.1	.009	45	0.3	.004	22	0.4	.005	25
AG__LD	7,081	0.0	.000	0	0.6	.008	59	0.6	.007	51
AG__UD	10,971	0.5	.043	473	8.8	.123	1,348	9.2	.111	1,218
CBS__LD	6,652	0.2	.017	115	0.6	.008	56	0.8	.010	64
CBS__UD	10,955	0.3	.026	283	2.2	.031	337	2.5	.030	330
ED__LD	6,096	0.1	.009	53	0.7	.010	60	0.8	.010	59
ED__UD	7,750	1.3	.112	868	4.8	.067	520	6.2	.075	580
FOR__LD	9,229	0.0	.000	0	0.1	.001	13	0.1	.001	11
FOR__UD	10,801	0.0	.000	0	1.1	.015	166	1.1	.013	143
GC__LD	6,422	0.5	.043	277	2.3	.032	206	2.8	.034	217
GC__UD	8,420	0.1	.009	73	1.2	.017	141	1.2	.014	122
HE__LD	4,356	0.0	.000	0	0.3	.004	18	0.3	.004	16
HE__UD	6,571	0.7	.060	396	4.5	.063	413	5.2	.063	412
LAW__UD	11,951	0.0	.000	0	0.1	.001	17	0.1	.001	14
CLA__LD	3,429	1.4	.121	414	5.6	.078	268	6.9	.083	285
CLA__UD	5,240	5.9	.509	2,665	29.8	.416	2,181	35.6	.429	2,250
MGMT__LD	5,618	0.0	.000	0	0.1	.001	8	0.1	.001	7
MGMT__UD	6,484	0.0	.000	0	2.6	.036	235	2.6	.031	203
MGMT__GR	9,504	0.0	.000	0	0.1	.001	13	0.1	.001	11
BMD__LD	9,924	0.1	.009	86	0.0	.000	0	0.1	.001	12
BMD__UD	15,386	0.1	.009	133	1.5	.021	322	1.6	.019	297
HHH__UD	20,296	0.0	.000	0	0.5	.007	142	0.5	.006	122
SPH__UD	12,539	0.1	.009	108	0.8	.011	140	0.9	.011	136
IT__LD	4,946	0.1	.009	43	1.2	.017	83	1.3	.016	78
IT__UD	8,904	0.1	.009	77	1.6	.022	199	1.7	.021	183
ARCH__UD	10,801	0.0	.000	0	0.2	.003	30	0.2	.002	26
TOTAL	0	11.6	1.000	6,107	71.6	1.000	6,997	82.9	1.000	6,874

MASTER OF PUBLIC HEALTH
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
AG__LD	7,081	0.0	.000	0	0.1	.000	2	0.1	.000	2
AG__GR	10,390	0.0	.000	0	1.1	.004	40	1.1	.004	40
CBS__GR	10,995	0.0	.000	0	0.3	.001	12	0.3	.001	12
DENT__GR	20,967	0.0	.000	0	0.4	.001	30	0.4	.001	30
ED__LD	6,096	0.0	.000	0	0.1	.000	2	0.1	.000	2
ED__GR	7,735	0.0	.000	0	3.2	.011	87	3.2	.011	87
HE__GR	7,532	0.0	.000	0	0.6	.002	16	0.6	.002	16
LAW__GR	10,875	0.0	.000	0	1.0	.004	38	1.0	.004	38
CLA__LD	3,429	0.0	.000	0	0.3	.001	4	0.3	.001	4
CLA__UD	5,240	0.0	.000	0	0.2	.001	4	0.2	.001	4
CLA__GR	7,829	0.0	.000	0	3.0	.011	83	3.0	.011	83
MGMT__LD	5,618	0.0	.000	0	0.1	.000	2	0.1	.000	2
MGMT__GR	9,504	0.0	.000	0	7.4	.026	248	7.4	.026	248
BMD__GR	22,781	0.0	.000	0	4.3	.015	346	4.3	.015	346
NURS__GR	27,800	0.0	.000	0	0.6	.002	59	0.6	.002	59
PHM__GR	6,119	0.0	.000	0	0.5	.002	11	0.5	.002	11
HHH__GR	11,247	0.0	.000	0	1.7	.006	67	1.7	.006	67
SPH__GR	9,695	0.0	.000	0	257.2	.908	8,802	257.2	.908	8,802
IT__LD	4,946	0.0	.000	0	0.3	.001	5	0.3	.001	5
IT__GR	8,559	0.0	.000	0	0.9	.003	27	0.9	.003	27
TOTAL	0	0.0	0.000	0	283.3	1.000	9,886	283.3	1.000	9,886

TC GRADUATE SCHOOL
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	----- ENROLLMENTS -----								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
AG__LD	7,081	0.0	.000	0	2.6	.000	3	2.6	.000	3
AG__UD	10,971	0.0	.000	0	1.6	.000	3	1.6	.000	3
AG__GR	10,390	0.0	.000	0	244.1	.039	403	244.1	.039	403
CBS__LD	6,652	0.0	.000	0	0.4	.000	0	0.4	.000	0
CBS__UD	10,955	0.0	.000	0	0.5	.000	1	0.5	.000	1
CBS__GR	10,995	0.0	.000	0	199.2	.032	348	199.2	.032	348
DENT__LD	20,967	0.0	.000	0	87.4	.014	291	87.4	.014	291
ED__LD	6,096	0.0	.000	0	4.1	.001	4	4.1	.001	4
ED__UD	7,750	0.0	.000	0	2.3	.000	3	2.3	.000	3
ED__GR	7,735	0.0	.000	0	725.9	.115	893	725.9	.115	893
FOR__GR	9,278	0.0	.000	0	57.9	.009	85	57.9	.009	85
GC__LD	6,422	0.0	.000	0	0.1	.000	0	0.1	.000	0
GC__GR	0	0.0	.000	0	1.3	.000	0	1.3	.000	0
HE__LD	4,356	0.0	.000	0	0.3	.000	0	0.3	.000	0
HE__UD	6,571	0.0	.000	0	1.0	.000	1	1.0	.000	1
HE__GR	7,532	0.0	.000	0	246.8	.039	296	246.8	.039	296
LAW__GR	10,875	0.0	.000	0	2.0	.000	3	2.0	.000	3
CLA__LD	3,429	0.0	.000	0	28.7	.005	16	28.7	.005	16
CLA__UD	5,240	0.0	.000	0	17.9	.003	15	17.9	.003	15
CLA__GR	7,829	0.0	.000	0	1,572.3	.250	1,957	1,572.3	.250	1,957
MGMT__LD	5,618	0.0	.000	0	0.3	.000	0	0.3	.000	0
MGMT__UD	6,484	0.0	.000	0	0.3	.000	0	0.3	.000	0
MGMT__GR	9,504	0.0	.000	0	1,045.8	.166	1,580	1,045.8	.166	1,580
BMD__UD	15,386	0.0	.000	0	0.9	.000	2	0.9	.000	2
BMD__GR	22,781	0.0	.000	0	141.5	.022	512	141.5	.022	512
CMD__GR	19,748	0.0	.000	0	96.4	.015	303	96.4	.015	303
NURS__GR	27,800	0.0	.000	0	70.3	.011	311	70.3	.011	311
PHM__GR	6,119	0.0	.000	0	36.0	.006	35	36.0	.006	35
HHH__UD	20,296	0.0	.000	0	0.6	.000	2	0.6	.000	2
HHH__GR	11,247	0.0	.000	0	135.0	.021	241	135.0	.021	241
SPH__UD	12,539	0.0	.000	0	0.1	.000	0	0.1	.000	0
SPH__GR	9,695	0.0	.000	0	112.2	.018	173	112.2	.018	173
IT__LD	4,946	0.0	.000	0	7.2	.001	6	7.2	.001	6
IT__UD	8,904	0.0	.000	0	14.6	.002	21	14.6	.002	21
IT__GR	8,559	0.0	.000	0	1,311.5	.209	1,785	1,311.5	.209	1,785
VETM__GR	16,143	0.0	.000	0	51.9	.008	133	51.9	.008	133
ARCH__LD	4,944	0.0	.000	0	1.2	.000	1	1.2	.000	1
ARCH__UD	10,801	0.0	.000	0	7.5	.001	13	7.5	.001	13
ARCH__GR	6,961	0.0	.000	0	59.0	.009	65	59.0	.009	65
TOTAL	0	0.0	0.000	0	6,288.7	1.000	9,508	6,288.7	1.000	9,508

DULUTH BUSINESS & ECONOMICS
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
DSBE_LD	4,775	202.9	.292	1,395	41.8	.092	441	244.8	.213	1,019
DSBE_UP	6,924	19.0	.027	189	282.4	.623	4,316	301.4	.263	1,819
DSBE_GR	9,753	0.0	.000	0	0.7	.002	15	0.7	.001	6
DED_LD	4,754	55.0	.079	377	3.9	.009	41	58.9	.051	244
DED_UD	6,450	7.6	.011	71	16.6	.037	236	24.2	.021	136
DSFA_LD	4,835	72.3	.104	503	5.6	.012	60	77.9	.068	328
DSFA_UD	6,068	0.0	.000	0	1.8	.004	24	1.8	.002	10
DCLA_LD	4,086	194.6	.280	1,145	27.0	.060	244	221.5	.193	789
DCLA_UD	6,072	16.6	.024	145	48.6	.107	651	65.2	.057	345
DMED_LD	15,432	0.0	.000	0	0.3	.001	10	0.3	.000	4
DSE_LD	4,764	117.6	.169	807	16.3	.036	171	133.9	.117	556
DSE_UD	10,181	2.5	.004	37	7.2	.016	162	9.7	.008	86
DSS_LD	6,609	5.1	.007	49	0.0	.000	0	5.1	.004	29
DSS_UD	16,285	1.1	.002	26	0.8	.002	29	2.0	.002	28
TOTAL	0	694.3	1.000	4,744	453.0	1.000	6,400	1,147.4	1.000	5,399

DULUTH EDUCATION & HUMAN SERVICE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
ED__UD	7,750	0.0	.000	0	0.2	.000	3	0.2	.000	1
DSBE_LD	4,775	5.8	.010	48	8.3	.016	76	14.1	.013	62
DSBE_UP	6,924	0.6	.001	7	1.9	.004	25	2.5	.002	16
DED_LD	4,754	93.9	.164	781	66.6	.128	607	160.5	.147	698
DED_UD	6,450	132.6	.232	1,497	236.8	.454	2,930	369.4	.338	2,180
DED_GR	7,064	0.0	.000	0	5.0	.010	68	5.0	.005	32
DSFA_LD	4,835	56.7	.099	480	19.1	.037	177	75.8	.069	335
DSFA_UD	6,068	2.4	.004	25	7.7	.015	90	10.1	.009	56
DCLA_LD	4,086	148.7	.260	1,064	59.9	.115	470	208.7	.191	780
DCLA_UD	6,072	18.4	.032	196	47.1	.090	549	65.5	.060	364
DCLA_GR	9,622	0.0	.000	0	0.1	.000	2	0.1	.000	1
DMED_LD	15,432	6.1	.011	165	0.0	.000	0	6.1	.006	86
DMED_UD	22,634	0.2	.000	8	0.2	.000	9	0.4	.000	8
DSE_LD	4,764	87.1	.152	726	35.1	.067	321	122.3	.112	533
DSE_UD	10,181	11.6	.020	207	29.8	.057	582	41.5	.038	387
DSS_LD	6,609	4.8	.008	56	0.5	.001	6	5.2	.005	31
DSS_UD	16,285	2.4	.004	68	2.9	.006	91	5.3	.005	79
TOTAL	0	571.3	1.000	5,328	521.2	1.000	6,006	1,092.7	1.000	5,651

DULUTH FINE ARTS
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
DSBE_LD	4,775	0.9	.006	27	0.9	.007	36	1.8	.006	31
DSBE_UP	6,924	0.0	.000	0	0.3	.002	17	0.3	.001	7
DED_LD	4,754	5.7	.036	173	5.8	.048	228	11.5	.042	197
DED_UD	6,450	1.0	.006	41	7.0	.058	374	8.0	.029	186
DSFA_LD	4,835	79.2	.506	2,448	25.9	.215	1,037	105.1	.379	1,834
DSFA_UD	6,068	25.5	.163	989	59.6	.494	2,996	85.1	.307	1,864
DSFA_GR	6,320	0.0	.000	0	0.2	.002	10	0.2	.001	5
DCLA_LD	4,086	29.5	.189	771	8.5	.070	288	38.0	.137	560
DCLA_UD	6,072	2.8	.018	109	9.3	.077	468	12.1	.044	265
DSE_LD	4,764	10.1	.065	308	2.9	.024	114	13.0	.047	224
DSE_UD	10,181	0.1	.001	7	0.3	.002	25	0.4	.001	15
DSS_LD	6,609	1.3	.008	55	0.0	.000	0	1.3	.005	31
DSS_UD	16,285	0.3	.002	31	0.0	.000	0	0.3	.001	18
TOTAL	0	156.4	1.000	4,959	120.7	1.000	5,595	277.1	1.000	5,236

DULUTH LIBERAL ARTS
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
CLA_UD	5,240	0.0	.000	0	0.1	.000	1	0.1	.000	0
DSBE_LD	4,775	49.8	.039	187	19.0	.037	179	68.8	.039	185
DSBE_UP	6,924	3.5	.003	19	21.6	.043	295	25.1	.014	98
DED_LD	4,754	99.1	.078	371	12.8	.025	120	111.9	.063	299
DED_UD	6,450	40.8	.032	207	67.9	.134	864	108.7	.061	394
DED_GR	7,064	0.0	.000	0	0.1	.000	1	0.1	.000	0
DSFA_LD	4,835	160.4	.126	610	20.2	.040	193	180.6	.102	491
DSFA_UD	6,068	3.4	.003	16	13.0	.026	156	16.3	.009	56
DCLA_LD	4,086	511.0	.402	1,643	61.2	.121	493	572.2	.322	1,315
DCLA_UD	6,072	160.7	.126	768	241.3	.476	2,890	402.0	.226	1,373
DCLA_GR	9,622	0.0	.000	0	0.1	.000	2	0.1	.000	1
DMED_LD	15,432	0.7	.001	9	0.7	.001	21	1.3	.001	11
DMED_UD	22,634	0.4	.000	7	0.1	.000	4	0.5	.000	6
DSE_LD	4,764	221.7	.174	831	26.5	.052	249	248.2	.140	665
DSE_UD	10,181	13.6	.011	109	20.4	.040	410	34.0	.019	195
DSS_LD	6,609	3.4	.003	18	0.0	.000	0	3.5	.002	13
DSS_UD	16,285	2.0	.002	26	2.0	.004	64	4.1	.002	38
TOTAL	0	1,270.5	1.000	4,822	507.0	1.000	5,942	1,777.5	1.000	5,141

DULUTH SCIENCE & ENGINEERING
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	----- ENROLLMENTS -----						-----		
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
DSBE_LD	4,775	27.1	.029	140	10.4	.025	121	37.4	.028	133
DSBE_UP	6,924	0.7	.001	5	4.5	.011	76	5.2	.004	27
DED_LD	4,754	43.2	.047	221	5.6	.014	65	48.8	.036	173
DED_UD	6,450	4.3	.005	30	7.1	.017	111	11.4	.009	55
DSFA_LD	4,835	73.7	.079	384	9.3	.023	109	83.0	.062	300
DSFA_UD	6,068	0.5	.001	3	2.0	.005	29	2.6	.002	12
DCLA_LD	4,086	146.7	.158	646	17.6	.043	175	164.3	.123	501
DCLA_UD	6,072	16.9	.018	111	25.4	.062	375	42.4	.032	192
DMED_LD	15,432	1.7	.002	28	1.7	.004	64	3.3	.002	38
DMED_UD	22,634	4.3	.005	105	1.2	.003	66	5.6	.004	95
DSE_LD	4,764	418.5	.451	2,150	50.1	.122	580	468.6	.350	1,668
DSE_UD	10,181	183.2	.198	2,012	275.0	.668	6,805	458.2	.342	3,485
DSE_GR	10,535	0.0	.000	0	0.5	.001	13	0.5	.000	4
DSS_LD	6,609	5.5	.006	39	0.1	.000	2	5.6	.004	28
DSS_UD	16,285	0.9	.001	16	0.9	.002	36	1.8	.001	22
TOTAL	0	927.2	1.000	5,891	411.4	1.000	8,626	1,338.7	1.000	6,732

DULUTH GRADUATE
 Abbreviated Student Demand, Induced Courseload
 and Cost Matrices
 FY 1990

Exhibit V

	Cost per FYE Taught	----- ENROLLMENTS -----			-----			-----		
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
DSBE_LD	4,775	0.0	.000	0	0.1	.000	2	0.1	.000	2
DSBE_UP	6,924	0.0	.000	0	0.3	.001	8	0.3	.001	8
DSBE_GR	9,753	0.0	.000	0	17.2	.069	674	17.2	.069	674
DED_LD	4,754	0.0	.000	0	0.2	.001	4	0.2	.001	4
DED_UD	6,450	0.0	.000	0	0.6	.002	16	0.6	.002	16
DED_GR	7,064	0.0	.000	0	133.7	.537	3,796	133.7	.537	3,796
DSFA_LD	4,835	0.0	.000	0	0.1	.000	2	0.1	.000	2
DSFA_UD	6,068	0.0	.000	0	0.2	.001	5	0.2	.001	5
DSFA_GR	6,320	0.0	.000	0	6.4	.026	163	6.4	.026	163
DCLA_LD	4,086	0.0	.000	0	0.4	.002	7	0.4	.002	7
DCLA_UD	6,072	0.0	.000	0	0.2	.001	5	0.2	.001	5
DCLA_GR	9,622	0.0	.000	0	12.9	.052	499	12.9	.052	499
DMED_GR	16,486	0.0	.000	0	8.0	.032	530	8.0	.032	530
DSE_LD	4,764	0.0	.000	0	0.2	.001	4	0.2	.001	4
DSE_UD	10,181	0.0	.000	0	2.0	.008	82	2.0	.008	82
DSE_GR	10,535	0.0	.000	0	66.3	.266	2,807	66.3	.266	2,807
TOTAL	0	0.0	0.000	0	248.8	1.000	8,603	248.8	1.000	8,603

EXTENSION

Exhibit V

Abbreviated Student Demand, Induced Courseload
and Cost Matrices
FY 1990

	Cost per FYE Taught	E N R O L L M E N T S								
		Lower Division			Upper Division			Total		
		FYE	Ratio	Cost	FYE	Ratio	Cost	FYE	Ratio	Cost
UC__LD	3,429	2.4	.001	3	0.2	.000	0	2.7	.000	1
UC__UD	5,240	1.5	.001	3	1.8	.000	1	3.3	.000	2
AG__LD	7,081	16.4	.007	49	9.0	.001	10	25.4	.003	20
AG__UD	10,971	4.2	.002	19	13.1	.002	22	17.4	.002	21
CBS__LD	6,652	57.4	.024	160	8.8	.001	9	66.2	.007	49
CBS__UD	10,955	9.8	.004	45	17.5	.003	29	27.3	.003	34
ED__LD	6,096	17.8	.007	45	5.9	.001	6	23.6	.003	16
ED__UD	7,750	39.2	.016	127	58.2	.009	69	97.4	.011	85
FOR__LD	9,229	0.1	.000	0	0.1	.000	0	0.1	.000	0
FOR__UD	10,801	0.1	.000	0	0.3	.000	0	0.4	.000	0
GC__LD	6,422	45.9	.019	123	10.9	.002	11	56.8	.006	41
GC__UD	8,420	2.1	.001	7	3.6	.001	5	5.7	.001	5
HE__LD	4,356	81.7	.034	149	27.2	.004	18	108.9	.012	53
HE__UD	6,571	37.1	.016	102	87.9	.013	89	125.1	.014	92
CLA__LD	3,429	1,081.6	.453	1,552	215.4	.033	113	1,297.0	.145	499
CLA__UD	5,240	330.6	.138	725	666.2	.102	535	996.8	.112	586
MGMT__LD	5,618	68.2	.029	160	17.5	.003	15	85.7	.010	54
MGMT__UD	6,484	48.8	.020	132	219.5	.034	218	268.4	.030	195
BMD__LD	9,924	0.8	.000	3	0.2	.000	0	1.0	.000	1
BMD__UD	15,386	8.9	.004	57	9.4	.001	22	18.3	.002	32
NURS__UD	19,526	0.6	.000	5	0.0	.000	0	0.6	.000	1
PHM__UD	17,124	0.6	.000	4	0.1	.000	0	0.7	.000	1
HHH__UD	20,296	3.7	.002	31	3.5	.001	11	7.2	.001	16
SPH__UD	12,539	13.8	.006	72	8.6	.001	17	22.4	.003	32
IT__LD	4,946	387.3	.162	802	65.0	.010	49	452.2	.051	251
IT__UD	8,904	129.2	.054	481	161.7	.025	221	290.8	.033	290
VETM__UD	14,828	0.1	.000	1	0.0	.000	0	0.1	.000	0
DSBE__LD	4,775	0.0	.000	0	16.7	.003	12	16.7	.002	9
DSBE__UP	6,924	0.0	.000	0	28.9	.004	31	28.9	.003	22
DED__LD	4,754	0.0	.000	0	31.1	.005	23	31.1	.003	17
DED__UD	6,450	0.0	.000	0	62.3	.010	62	62.3	.007	45
DSFA__LD	4,835	0.0	.000	0	22.3	.003	17	22.3	.003	12
DSFA__UD	6,068	0.0	.000	0	7.9	.001	7	7.9	.001	5
DCLA__LD	4,086	0.0	.000	0	126.3	.019	79	126.3	.014	58
DCLA__UD	6,072	0.0	.000	0	81.6	.013	76	81.6	.009	56
DSE__LD	4,764	0.0	.000	0	111.3	.017	81	111.3	.012	59
DSE__UD	10,181	0.0	.000	0	8.2	.001	13	8.2	.001	9
DSS__LD	6,609	0.0	.000	0	11.6	.002	12	11.6	.001	9
MOR__LD	5,272	0.0	.000	0	3.0	.000	2	3.0	.000	2
CEE__LD	3,150	0.0	.000	0	2,233.8	.342	1,078	2,233.8	.251	789
CEE__UD	5,146	0.0	.000	0	2,165.7	.332	1,708	2,165.7	.243	1,250
ARCH__UD	10,801	0.0	.000	0	3.0	.000	5	3.0	.000	4
TOTAL	0	2,389.9	1.000	4,861	6,525.3	1.000	4,676	8,915.2	1.000	4,725

UNIVERSITY OF MINNESOTA
Tuition Relative to Instructional Cost
as Defined for the Instructional Cost Study
FY 1990

Exhibit VI

Enrollment Unit	Tuition Rates				Cost Per SCH (1) or Term	Tuition as a Percentage of Cost			
	Resident		Nonresident			Resident		Nonresident	
	Per Credit	Term	Per Credit	Term		Per Credit	Term	Per Credit	Term
Twin Cities Campuses									
Liberal Arts-Lower Division	47.68		119.20		111.83	42.6%		106.6%	
-Upper Division	49.66		124.15		131.50	37.8%		94.4%	
Technology-Lower Division	47.68		119.20		142.71	33.4%		83.5%	
-Upper Division	61.87		154.68		192.14	32.2%		80.5%	
Architecture-Lower Division	47.68		119.20		113.17	42.1%		105.3%	
-Upper Division	61.87		154.68		242.40	25.5%		63.8%	
Agriculture-Lower Division	47.68		119.20		163.45	29.2%		72.9%	
-Upper Division	68.36		170.90		202.98	33.7%		84.2%	
Natural Resources-Lower Division	47.68		119.20		159.81	29.8%		74.6%	
-Upper Division	68.36		170.90		215.74	31.7%		79.2%	
Human Ecology-Lower Division	47.68		119.20		133.52	35.7%		89.3%	
-Upper Division	68.36		170.90		159.21	42.9%		107.3%	
Medicine-OT/PT	72.60		181.50		343.56	21.1%		52.8%	
-Medical Tech	72.60		181.50		318.07	22.8%		57.1%	
-Undergraduate M.D.		2,503.00		5,006.00	6,792.00		36.9%		73.7%
-Medical Fellow Sp.		121.00 (2)		121.00	1,428.44		8.5%		8.5%
Public Health-Upper Division	69.38		173.45		235.38	29.5%		73.7%	
Pharmacy-Upper Division	70.60		176.50		394.62	17.9%		44.7%	
-Pharm D.	75.45		188.63		473.54	15.9%		39.8%	
Nursing-Upper Division	72.60		181.50		435.88	16.7%		41.6%	
Dentistry-Dental Hygiene	68.77		171.93		418.02	16.5%		41.1%	
-D.D.S./M.S.D.		2,093.00		3,139.50	9,732.89	.0%	21.5%	.0%	32.3%
Mortuary Science-Upper Division	71.17		177.93		321.81	22.1%		55.3%	
Biological Sciences-Upper Division	68.36		170.90		224.24	30.5%		76.2%	
Veterinary Medicine-Upper Division/PB		1,935.00		2,902.50	6,582.67		29.4%		44.1%
Law-Upper Division/PB		1,958.00		3,916.00	7,928.00		24.7%		49.4%
Education-Lower Division	47.68		119.20		173.33	27.5%		68.8%	
-Upper Division	63.93		159.83		174.17	36.7%		91.8%	
Management-Upper Division	57.27		143.18		145.74	39.3%		98.2%	
University College-Lower Division	47.68		119.20		145.40	32.8%		82.0%	
-Upper Division	51.28		128.20		166.60	30.8%		77.0%	
General College-Lower Division	47.68		119.20		136.71	34.9%		87.2%	
-Upper Division	50.02		125.05		142.98	35.0%		87.5%	
Graduate School-All Majors		980.00		1,960.00	3,169.33		30.9%		61.8%

Enrollment Unit	Tuition Rates				Cost Per SCH (1) or Term	Tuition as a Percentage of Cost			
	Resident		Nonresident			Resident		Nonresident	
	Per Credit	Term	Per Credit	Term		Per Credit	Term	Per Credit	Term
Duluth Campus									
Medicine-Upper Division/PB		2,503.00		5,006.00	10,055.56		24.9%		49.8%
Liberal Arts-Lower Division	47.68		119.20		114.81	41.5%		103.8%	
-Upper Division	56.53		141.33		141.48	40.0%		99.9%	
Business & Economics-Lower Division	47.68		119.20		112.95	42.2%		105.5%	
-Upper Division	54.25		135.63		152.38	35.6%		89.0%	
Education & Human Services-Lower Division	47.68		119.20		126.86	37.6%		94.0%	
-Upper Division	52.72		131.80		143.00	36.9%		92.2%	
Fine Arts-Lower Division	47.68		119.20		118.07	40.4%		101.0%	
-Upper Division	57.85		144.63		133.21	43.4%		108.6%	
Sciences & Engineering-Lower Division	47.68		119.20		140.26	34.0%		85.0%	
-Upper Division	59.53		148.83		205.38	29.0%		72.5%	
Graduate School-All Majors		980.00	.00	1,960.00	2,867.67		34.2%		68.3%
Morris Campus									
All Departments-Lower Division	47.68		119.20		134.52	35.4%		88.6%	
-Upper Division	56.55		141.38		150.74	37.5%		93.8%	
Crookston Campus									
All Departments-Technical	47.68		119.20		203.07	23.5%		58.7%	
Waseca									
All Departments-Technical	47.68		119.20		201.55	23.7%		59.1%	
Summer Sessions									
All Colleges-Lower Division	44.06		44.06		76.86	57.3%		57.3%	
-Upper Division	56.93 (3)		56.93		122.31	46.5%		46.5%	
Continuing Education & Extension									
All Colleges-Lower Division	47.68		47.68		115.74	41.2%		41.2%	
-Upper Division	65.86 (3)		65.86		111.33	59.2%		59.2%	

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(1) Cost per FYE divided by 42 (14 credit band).

(2) Net of MFS subsidy

(3) Estimated weighted average tuition rates

Exhibit VII

Exhibit VII identifies state funded and other funded expenditures for all activities by collegiate unit. State funded expenditures are adjusted for tuition and indirect cost recoveries assigned to each college. The effect of the adjustment isolates the net investment by the legislature in each unit for all purposes.

The net legislative investment is then divided by the number of FYE students taught yielding a per unit amount. (A tuition matrix reassigned tuition revenues from enrollment units to the appropriate teaching unit.) It is important to note the resulting amount per FYE represents all activities, not instructional activities alone. Thus, the amount per FYE identified in this schedule represents net investment by the Minnesota legislature to carry out all activities within each collegiate unit.

State support for research relates to the direct costs of cost sharing of faculty salaries toward sponsored research. Also included as direct cost of state supported research are the college and departmental administrative expenditures applicable to research.

UNIVERSITY OF MINNESOTA
 Collegiate Expense Summary
 by Adjusted Source of Funds
 FY 1990
 (\$'000's)

Exhibit VII

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Liberal Arts										
Direct Costs	47,768.9	1,732.0	49,500.9	1,481.2	4,211.1	5,692.3	547.0	1,671.3	2,218.3	57,411.5
Indirect Costs	20,241.6	4,161.2	24,402.7	996.2	-24.1	972.2	198.4	-4.9	193.5	25,568.4
Total	68,010.5	5,893.2	73,903.7	2,477.4	4,187.0	6,664.4	745.4	1,666.4	2,411.8	82,979.9
State Funds	68,010.5			2,477.4			745.4			71,233.3
Other Funds		5,893.2			4,187.0			1,666.4		11,746.6

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	71,233.3	-207.1	-31,152.8	39,873.4	48.1 %	Sponsored Research	149.0
Other Funds	11,746.6	207.1	31,152.8	43,106.6	51.9 %	Sponsored Tr and PS	58.1
Total Funds	82,979.9	0.0	0.0	82,979.9	100.0 %	Total	207.1
(6) 39,873,350 divided by 14,408 FYE students taught = 2,767 per FYE							

Technology

Direct Costs	37,865.7	2,739.7	40,605.4	9,093.8	42,580.5	51,674.3	493.2	580.7	1,073.9	93,353.6
Indirect Costs	13,638.6	2,228.0	15,866.6	9,043.6	-218.4	8,825.3	96.0	-2.4	93.7	24,785.5
Total	51,504.4	4,967.7	56,472.0	18,137.4	42,362.1	60,499.5	589.3	578.3	1,167.5	118,139.1
State Funds	51,504.4			18,137.4			589.3			70,231.1
Other Funds		4,967.7			42,362.1			578.3		47,908.0

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	70,231.1	-1,094.5	-15,916.2	53,220.3	45.0 %	Sponsored Research	1,080.7
Other Funds	47,908.0	1,094.5	15,916.2	64,918.8	55.0 %	Sponsored Tr and PS	13.8
Total Funds	118,139.1	0.0	0.0	118,139.1	100.0 %	Total	1,094.5
(6) 53,220,340 divided by 7,159 FYE students taught = 7,434 per FYE							

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Architecture										
Direct Costs	2,248.1	267.4	2,515.5	0.0	420.1	420.1	0.0	420.1	420.1	3,355.7
Indirect Costs	727.0	114.1	841.1	42.9	1.3	44.3	73.5	-1.8	71.7	957.1
Total	2,975.1	381.5	3,356.6	43.0	421.4	464.4	73.5	418.3	491.9	4,312.8
State Funds	2,975.1			43.0			73.5			3,091.6
Other Funds		381.5			421.4			418.3		1,221.2

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	3,091.6	-15.5	-1,355.8	1,720.3	39.9 %	Sponsored Research	2.8
Other Funds	1,221.2	15.5	1,355.8	2,592.5	60.1 %	Sponsored Tr and PS	12.7
Total Funds	4,312.8	0.0	0.0	4,312.8	100.0 %	Total	15.5
(6)	1,720,306 divided by		351 FYE students taught =		4,901 per FYE		

Agriculture										
Direct Costs	5,395.8	379.1	5,774.9	1,458.6	10,224.7	11,683.3	197.5	3,994.6	4,192.1	21,650.3
Indirect Costs	2,842.5	274.0	3,116.4	2,044.7	-49.4	1,995.3	374.9	-9.3	365.6	5,477.4
Total	8,238.3	653.1	8,891.4	3,503.3	10,175.3	13,678.6	572.4	3,985.3	4,557.7	27,127.7
State Funds	8,238.3			3,503.3			572.4			12,314.0
Other Funds		653.1			10,175.3			3,985.3		14,813.7

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	12,314.0	-399.5	-2,121.8	9,792.7	36.1 %	Sponsored Research	122.9
Other Funds	14,813.7	399.5	2,121.8	17,335.0	63.9 %	Sponsored Tr and PS	276.6
Total Funds	27,127.7	0.0	0.0	27,127.7	100.0 %	Total	399.5
(6)	9,792,652 divided by		876 FYE students taught =		11,179 per FYE		

Natural Resources										
Direct Costs	1,201.4	107.1	1,308.4	440.0	1,813.6	2,253.6	60.4	319.0	379.3	3,941.4
Indirect Costs	485.3	61.6	546.9	394.4	-9.5	384.9	33.9	-0.8	33.1	964.9
Total	1,686.7	168.7	1,855.4	834.5	1,804.1	2,638.5	94.3	318.1	412.4	4,906.3
State Funds	1,686.7			834.5			94.3			2,615.4
Other Funds		168.7			1,804.1			318.1		2,290.9

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	2,615.4	-17.4	-407.2	2,190.9	44.7 %	Sponsored Research	16.2
Other Funds	2,290.9	17.4	407.2	2,715.4	55.3 %	Sponsored Tr and PS	1.1
Total Funds	4,906.3	0.0	0.0	4,906.3	100.0 %	Total	17.4
(6)	2,190,876 divided by		169 FYE students taught =		12,964 per FYE		

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Human Ecology										
Direct Costs	3,917.1	222.5	4,139.7	344.9	1,448.9	1,793.8	89.8	519.7	609.5	6,543.0
Indirect Costs	1,976.1	313.3	2,289.4	313.9	-7.6	306.4	54.5	-1.4	53.2	2,648.9
Total	5,893.2	535.8	6,429.1	658.9	1,441.3	2,100.2	144.3	518.3	662.6	9,191.9
State Funds	5,893.2			658.9			144.3			6,696.4
Other Funds		535.8			1,441.3			518.3		2,495.5

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	6,696.4	-52.1	-2,209.8	4,434.4	48.2 %	Sponsored Research	49.5
Other Funds	2,495.5	52.1	2,209.8	4,757.4	51.8 %	Sponsored Tr and PS	2.6
Total Funds	9,191.9	0.0	0.0	9,191.9	100.0 %	Total	52.1
(6)	4,434,424 divided by		941 FYE students taught =		4,712 per FYE		

Medicine										
Direct Costs	26,489.6	5,469.0	31,958.6	10,063.1	92,698.5	102,761.6	788.3	27,064.3	27,852.6	162,572.8
Indirect Costs	12,484.7	1,444.9	13,929.5	17,984.5	-434.2	17,550.3	2,490.9	-61.9	2,429.0	33,908.8
Total	38,974.2	6,913.9	45,888.1	28,047.5	92,264.3	120,311.9	3,279.2	27,002.5	30,281.6	196,481.6
State Funds	38,974.2			28,047.5			3,279.2			70,300.9
Other Funds		6,913.9			92,264.3			27,002.5		126,180.7

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	70,300.9	-2,556.0	-10,879.3	56,865.6	28.9 %	Sponsored Research	2,399.5
Other Funds	126,180.7	2,556.0	10,879.3	139,616.0	71.1 %	Sponsored Tr and PS	156.4
Total Funds	196,481.6	0.0	0.0	196,481.6	100.0 %	Total	2,556.0
(6)	56,865,630 divided by		4,087 FYE students taught =		13,914 per FYE		

Public Health										
Direct Costs	4,423.4	192.1	4,615.5	1,323.0	17,960.1	19,283.1	45.5	2,836.0	2,881.5	26,780.1
Indirect Costs	1,533.3	288.5	1,821.8	3,374.8	-81.5	3,293.3	257.7	-6.4	251.3	5,366.4
Total	5,956.7	480.7	6,437.4	4,697.7	17,878.6	22,576.3	303.2	2,829.6	3,132.8	32,146.5
State Funds	5,956.7			4,697.7			303.2			10,957.6
Other Funds		480.7			17,878.6			2,829.6		21,188.9

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	10,957.6	-732.7	-1,255.6	8,969.3	27.9 %	Sponsored Research	576.0
Other Funds	21,188.9	732.7	1,255.6	23,177.2	72.1 %	Sponsored Tr and PS	156.7
Total Funds	32,146.5	0.0	0.0	32,146.5	100.0 %	Total	732.7
(6)	8,969,302 divided by		588 FYE students taught =		15,254 per FYE		

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Pharmacy										
Direct Costs	3,791.4	65.2	3,856.6	165.1	2,291.5	2,456.6	31.7	1,413.5	1,445.2	7,758.4
Indirect Costs	1,401.1	114.7	1,515.8	429.9	-10.4	419.6	129.2	-3.2	126.0	2,061.4
Total	5,192.5	179.9	5,372.4	595.1	2,281.1	2,876.2	161.0	1,410.3	1,571.3	9,819.8
State Funds	5,192.5			595.1			161.0			5,948.5
Other Funds		179.9			2,281.1			1,410.3		3,871.3

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	5,948.5	-64.5	-715.0	5,169.1	52.6 %	Sponsored Research	52.3
Other Funds	3,871.3	64.5	715.0	4,650.8	47.4 %	Sponsored Tr and PS	12.2
Total Funds	9,819.8	0.0	0.0	9,819.8	100.0 %	Total	64.5
(6)	5,169,064 divided by		327 FYE students taught = 15,808 per FYE				

Nursing										
Direct Costs	3,218.3	207.6	3,425.9	118.0	410.5	528.5	0.1	68.1	68.2	4,022.6
Indirect Costs	1,224.0	80.4	1,304.4	92.5	-2.2	90.3	6.1	-0.2	5.9	1,400.7
Total	4,442.3	288.0	4,730.3	210.5	408.3	618.8	6.2	68.0	74.1	5,423.3
State Funds	4,442.3			210.5			6.2			4,659.0
Other Funds		288.0			408.3			68.0		764.3

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	4,659.0	-20.4	-517.1	4,121.5	76.0 %	Sponsored Research	15.7
Other Funds	764.3	20.4	517.1	1,301.7	24.0 %	Sponsored Tr and PS	4.7
Total Funds	5,423.3	0.0	0.0	5,423.3	100.0 %	Total	20.4
(6)	4,121,546 divided by		197 FYE students taught = 20,922 per FYE				

Dentistry										
Direct Costs	9,178.3	985.5	10,163.8	2,068.2	2,045.3	4,113.4	72.8	4,798.1	4,870.9	19,148.1
Indirect Costs	3,683.5	176.6	3,860.1	719.9	-17.4	702.5	435.6	-10.8	424.8	4,987.5
Total	12,861.8	1,162.1	14,023.9	2,788.1	2,027.9	4,815.9	508.4	4,787.3	5,295.7	24,135.6
State Funds	12,861.8			2,788.1			508.4			16,158.3
Other Funds		1,162.1			2,027.9			4,787.3		7,977.3

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	16,158.3	-154.3	-2,124.5	13,879.5	57.5 %	Sponsored Research	101.1
Other Funds	7,977.3	154.3	2,124.5	10,256.1	42.5 %	Sponsored Tr and PS	53.2
Total Funds	24,135.6	0.0	0.0	24,135.6	100.0 %	Total	154.3
(6)	13,879,460 divided by		573 FYE students taught = 24,222 per FYE				

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Humphrey Institute										
Direct Costs	1,387.6	719.4	2,107.0	26.5	570.3	596.8	150.6	1,837.2	1,987.8	4,691.6
Indirect Costs	574.7	75.7	650.4	104.4	-2.5	101.9	177.8	-4.4	173.4	925.7
Total	1,962.3	795.1	2,757.4	130.9	567.8	698.7	328.4	1,832.8	2,161.2	5,617.3
State Funds	1,962.3			130.9			328.4			2,421.6
Other Funds		795.1			567.8			1,832.8		3,195.7

	(1)	(2)	(3)	(4)	(5)		(ICR)	
State Funds	2,421.6	-12.1	-347.7	2,061.8	36.7 %	Sponsored Research	7.0	
Other Funds	3,195.7	12.1	347.7	3,555.5	63.3 %	Sponsored Tr and PS	5.1	
Total Funds	5,617.3	0.0	0.0	5,617.3	100.0 %	Total	12.1	
(6)	2,061,802 divided by		160 FYE students taught = 12,886 per FYE					

Mortuary Science										
Direct Costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indirect Costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Funds	0.0			0.0			0.0			0.0
Other Funds		0.0			0.0			0.0		0.0

	(1)	(2)	(3)	(4)	(5)		(ICR)	
State Funds	0.0	0.0	0.0	0.0	0.0 %	Sponsored Research	0.0	
Other Funds	0.0	0.0	0.0	0.0	0.0 %	Sponsored Tr and PS	0.0	
Total Funds	0.0	0.0	0.0	0.0	100.0 %	Total	0.0	
(6)	0 divided by		0 FYE students taught = 0 per FYE					

Biological Sciences										
Direct Costs	7,243.3	278.5	7,521.8	2,134.1	7,881.6	10,015.7	78.3	356.2	434.5	17,972.0
Indirect Costs	2,503.6	331.1	2,834.6	1,752.9	-42.3	1,710.5	38.9	-1.0	37.9	4,583.1
Total	9,746.8	609.6	10,356.4	3,887.0	7,839.3	11,726.3	117.2	355.2	472.4	22,555.1
State Funds	9,746.8			3,887.0			117.2			13,751.0
Other Funds		609.6			7,839.3			355.2		8,804.1

	(1)	(2)	(3)	(4)	(5)		(ICR)	
State Funds	13,751.0	-372.7	-2,464.9	10,913.4	48.4 %	Sponsored Research	331.4	
Other Funds	8,804.1	372.7	2,464.9	11,641.7	51.6 %	Sponsored Tr and PS	41.3	
Total Funds	22,555.1	0.0	0.0	22,555.1	100.0 %	Total	372.7	
(6)	10,913,380 divided by		1,096 FYE students taught = 9,957 per FYE					

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Veterinary Medicine										
Direct Costs	5,185.4	244.2	5,429.6	551.1	4,163.3	4,714.5	5,505.5	3,538.7	9,044.2	19,188.2
Indirect Costs	2,161.5	134.2	2,295.8	825.1	-19.9	805.2	808.8	-20.1	788.7	3,889.7
Total	7,346.9	378.4	7,725.3	1,376.2	4,143.4	5,519.6	6,314.3	3,518.6	9,832.9	23,077.9
State Funds	7,346.9			1,376.2			6,314.3			15,037.4
Other Funds		378.4			4,143.4			3,518.6		8,040.5

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	15,037.4	-94.1	-1,760.1	13,183.2	57.1 %	Sponsored Research	73.3
Other Funds	8,040.5	94.1	1,760.1	9,894.7	42.9 %	Sponsored Tr and PS	20.8
Total Funds	23,077.9	0.0	0.0	23,077.9	100.0 %	Total	94.1
(6) 13,183,170 divided by 491 FYE students taught = 26,850 per FYE							

Law										
Direct Costs	6,775.5	308.3	7,083.8	8.6	126.2	134.8	0.6	881.3	882.0	8,100.5
Indirect Costs	2,244.5	146.1	2,390.7	23.6	-0.6	23.0	78.9	-2.0	76.9	2,490.6
Total	9,020.1	454.4	9,474.5	32.1	125.6	157.8	79.5	879.4	958.9	10,591.1
State Funds	9,020.1			32.1			79.5			9,131.7
Other Funds		454.4			125.6			879.4		1,459.4

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	9,131.7	-4.8	-3,261.1	5,865.8	55.4 %	Sponsored Research	1.6
Other Funds	1,459.4	4.8	3,261.1	4,725.3	44.6 %	Sponsored Tr and PS	3.3
Total Funds	10,591.1	0.0	0.0	10,591.1	100.0 %	Total	4.8
(6) 5,865,817 divided by 755 FYE students taught = 7,769 per FYE							

Management										
Direct Costs	13,229.2	2,428.6	15,657.8	474.0	1,613.7	2,087.7	1,336.7	1,753.7	3,090.4	20,835.9
Indirect Costs	4,264.5	895.0	5,159.5	365.4	-8.8	356.6	276.4	-6.9	269.5	5,785.5
Total	17,493.7	3,323.6	20,817.3	839.4	1,604.9	2,444.3	1,613.1	1,746.8	3,359.9	26,621.5
State Funds	17,493.7			839.4			1,613.1			19,946.1
Other Funds		3,323.6			1,604.9			1,746.8		6,675.3

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	19,946.1	-18.2	-4,941.2	14,986.8	56.3 %	Sponsored Research	18.2
Other Funds	6,675.3	18.2	4,941.2	11,634.6	43.7 %	Sponsored Tr and PS	0.0
Total Funds	26,621.5	0.0	0.0	26,621.5	100.0 %	Total	18.2
(6) 14,986,800 divided by 2,239 FYE students taught = 6,694 per FYE							

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Education										
Direct Costs	14,255.6	461.3	14,716.9	1,112.6	4,179.8	5,292.4	658.2	3,756.1	4,414.3	24,423.7
Indirect Costs	5,790.3	995.0	6,785.4	926.2	-22.4	903.9	394.8	-9.8	385.0	8,074.2
Total	20,045.9	1,456.4	21,502.3	2,038.9	4,157.4	6,196.3	1,053.0	3,746.3	4,799.3	32,497.9
State Funds	20,045.9			2,038.9			1,053.0			23,137.8
Other Funds		1,456.4			4,157.4			3,746.3		9,360.1

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	23,137.8	-500.4	-6,142.7	16,494.7	50.8 %	Sponsored Research	169.4
Other Funds	9,360.1	500.4	6,142.7	16,003.2	49.2 %	Sponsored Tr and PS	331.1
Total Funds	32,497.9	0.0	0.0	32,497.9	100.0 %	Total	500.4
(6) 16,494,680 divided by 2,665 FYE students taught = 6,189 per FYE							

General College

Direct Costs	5,120.9	425.2	5,546.1	81.2	53.3	134.5	4.6	742.9	747.5	6,428.1
Indirect Costs	1,500.8	251.7	1,752.5	23.5	-0.6	23.0	66.8	-1.7	65.2	1,840.7
Total	6,621.7	676.9	7,298.6	104.7	52.7	157.5	71.4	741.2	812.6	8,268.7
State Funds	6,621.7			104.7			71.4			6,797.9
Other Funds		676.9			52.7			741.2		1,470.9

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	6,797.9	-39.5	-2,099.1	4,659.2	56.3 %	Sponsored Research	5.0
Other Funds	1,470.9	39.5	2,099.1	3,609.5	43.7 %	Sponsored Tr and PS	34.6
Total Funds	8,268.7	0.0	0.0	8,268.7	100.0 %	Total	39.5
(6) 4,659,235 divided by 1,014 FYE students taught = 4,595 per FYE							

Summer Sessions

Direct Costs	5,354.8	0.0	5,354.8	0.0	0.0	0.0	0.0	0.0	0.0	5,354.8
Indirect Costs	2,047.4	528.9	2,576.4	0.0	0.0	0.0	0.0	0.0	0.0	2,576.4
Total	7,402.2	528.9	7,931.2	0.0	0.0	0.0	0.0	0.0	0.0	7,931.2
State Funds	7,402.2			0.0			0.0			7,402.2
Other Funds		528.9			0.0			0.0		528.9

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	7,402.2	0.0	-8,888.3	-1,486.1	-18.7 %	Sponsored Research	0.0
Other Funds	528.9	0.0	8,888.3	9,417.3	118.7 %	Sponsored Tr and PS	0.0
Total Funds	7,931.2	0.0	0.0	7,931.2	100.0 %	Total	0.0
(6) -1,486,080 divided by 1,645 FYE students taught = -903 per FYE							

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Continuing Education										
Direct Costs	15,686.0	19.3	15,705.3	0.0	0.0	0.0	710.8	8,851.2	9,562.0	25,267.3
Indirect Costs	6,593.5	1,497.4	8,090.9	0.0	0.0	0.0	855.1	-21.2	833.9	8,924.8
Total	22,279.5	1,516.7	23,796.2	0.0	0.0	0.0	1,566.0	8,829.9	10,395.9	34,192.1
State Funds	22,279.5			0.0			1,566.0			23,845.5
Other Funds		1,516.7			0.0			8,829.9		10,346.6
	(1)	(2)	(3)	(4)	(5)				(ICR)	
State Funds	23,845.5	-44.6	-11,211.3	12,589.6	36.8 %		Sponsored Research		6.0	
Other Funds	10,346.6	44.6	11,211.3	21,602.5	63.2 %		Sponsored Tr and PS		38.6	
Total Funds	34,192.1	0.0	0.0	34,192.1	100.0 %		Total		44.6	
(6) 12,589,580 divided by 5,096 FYE students taught = 2,470 per FYE										

Business and Economics-UMD										
Direct Costs	2,783.3	42.6	2,825.9	427.5	70.1	497.6	161.6	459.3	620.9	3,944.4
Indirect Costs	1,746.4	146.9	1,893.2	144.5	6.6	151.2	171.8	6.9	178.7	2,223.1
Total	4,529.7	189.5	4,719.2	572.1	76.7	648.7	333.4	466.2	799.6	6,167.5
State Funds	4,529.7			572.1			333.4			5,435.2
Other Funds		189.5			76.7			466.2		732.4
	(1)	(2)	(3)	(4)	(5)				(ICR)	
State Funds	5,435.2	0.0	-1,720.7	3,714.5	60.2 %		Sponsored Research		0.0	
Other Funds	732.4	0.0	1,720.7	2,453.0	39.8 %		Sponsored Tr and PS		0.0	
Total Funds	6,167.5	0.0	0.0	6,167.5	100.0 %		Total		0.0	
(6) 3,714,500 divided by 766 FYE students taught = 4,849 per FYE										

Education & Human Services-UMD										
Direct Costs	4,083.5	278.0	4,361.5	52.9	75.7	128.7	34.0	85.1	119.1	4,609.3
Indirect Costs	2,682.5	235.5	2,918.0	37.4	1.7	39.1	33.0	1.3	34.3	2,991.4
Total	6,766.1	513.4	7,279.5	90.3	77.4	167.8	66.9	86.4	153.4	7,600.7
State Funds	6,766.1			90.3			66.9			6,923.3
Other Funds		513.4			77.4			86.4		677.3
	(1)	(2)	(3)	(4)	(5)				(ICR)	
State Funds	6,923.3	-4.8	-2,597.4	4,321.1	56.9 %		Sponsored Research		0.6	
Other Funds	677.3	4.8	2,597.4	3,279.5	43.1 %		Sponsored Tr and PS		4.2	
Total Funds	7,600.7	0.0	0.0	7,600.7	100.0 %		Total		4.8	
(6) 4,321,129 divided by 1,147 FYE students taught = 3,767 per FYE										

Teaching Unit	Instruction			Research			Public Service			Collegiate Total																																								
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total																																									
Fine Arts-UMD																																																		
Direct Costs	1,994.4	87.9	2,082.3	21.1	15.7	36.8	30.8	291.0	321.9	2,441.0																																								
Indirect Costs	1,437.4	114.9	1,552.3	10.7	0.5	11.2	89.1	3.6	92.6	1,656.1																																								
Total	3,431.9	202.7	3,634.6	31.8	16.2	48.0	119.9	294.6	414.5	4,097.1																																								
State Funds	3,431.9			31.8			119.9			3,583.5																																								
Other Funds		202.7			16.2			294.6		513.5																																								
<table border="1"> <thead> <tr> <th></th> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> <th></th> <th>(ICR)</th> </tr> </thead> <tbody> <tr> <td>State Funds</td> <td>3,583.5</td> <td>-1.2</td> <td>-1,510.3</td> <td>2,072.1</td> <td>50.6 %</td> <td>Sponsored Research</td> <td>0.1</td> </tr> <tr> <td>Other Funds</td> <td>513.5</td> <td>1.2</td> <td>1,510.3</td> <td>2,025.0</td> <td>49.4 %</td> <td>Sponsored Tr and PS</td> <td>1.1</td> </tr> <tr> <td>Total Funds</td> <td>4,097.1</td> <td>0.0</td> <td>0.0</td> <td>4,097.1</td> <td>100.0 %</td> <td>Total</td> <td>1.2</td> </tr> <tr> <td colspan="8">(6) 2,072,087 divided by 676 FYE students taught = 3,065 per FYE</td> </tr> </tbody> </table>												(1)	(2)	(3)	(4)	(5)		(ICR)	State Funds	3,583.5	-1.2	-1,510.3	2,072.1	50.6 %	Sponsored Research	0.1	Other Funds	513.5	1.2	1,510.3	2,025.0	49.4 %	Sponsored Tr and PS	1.1	Total Funds	4,097.1	0.0	0.0	4,097.1	100.0 %	Total	1.2	(6) 2,072,087 divided by 676 FYE students taught = 3,065 per FYE							
	(1)	(2)	(3)	(4)	(5)		(ICR)																																											
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Total Funds	4,097.1	0.0	0.0	4,097.1	100.0 %	Total	1.2																																											
(6) 2,072,087 divided by 676 FYE students taught = 3,065 per FYE																																																		

Liberal Arts-UMD																																																		
Direct Costs	5,411.5	363.5	5,775.0	93.8	105.5	199.3	118.2	71.1	189.3	6,163.6																																								
Indirect Costs	4,283.5	336.2	4,619.7	57.9	2.6	60.5	52.4	2.1	54.5	4,734.7																																								
Total	9,695.0	699.6	10,394.7	151.7	108.1	259.9	170.6	73.2	243.8	10,898.3																																								
State Funds	9,695.0			151.7			170.6			10,017.4																																								
Other Funds		699.6			108.1			73.2		880.9																																								
<table border="1"> <thead> <tr> <th></th> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> <th></th> <th>(ICR)</th> </tr> </thead> <tbody> <tr> <td>State Funds</td> <td>10,017.4</td> <td>-0.2</td> <td>-4,575.0</td> <td>5,442.2</td> <td>49.9 %</td> <td>Sponsored Research</td> <td>0.2</td> </tr> <tr> <td>Other Funds</td> <td>880.9</td> <td>0.2</td> <td>4,575.0</td> <td>5,456.1</td> <td>50.1 %</td> <td>Sponsored Tr and PS</td> <td>0.0</td> </tr> <tr> <td>Total Funds</td> <td>10,898.3</td> <td>0.0</td> <td>0.0</td> <td>10,898.3</td> <td>100.0 %</td> <td>Total</td> <td>0.2</td> </tr> <tr> <td colspan="8">(6) 5,442,196 divided by 2,029 FYE students taught = 2,682 per FYE</td> </tr> </tbody> </table>												(1)	(2)	(3)	(4)	(5)		(ICR)	State Funds	10,017.4	-0.2	-4,575.0	5,442.2	49.9 %	Sponsored Research	0.2	Other Funds	880.9	0.2	4,575.0	5,456.1	50.1 %	Sponsored Tr and PS	0.0	Total Funds	10,898.3	0.0	0.0	10,898.3	100.0 %	Total	0.2	(6) 5,442,196 divided by 2,029 FYE students taught = 2,682 per FYE							
	(1)	(2)	(3)	(4)	(5)		(ICR)																																											
State Funds	10,017.4	-0.2	-4,575.0	5,442.2	49.9 %	Sponsored Research	0.2																																											
Other Funds	880.9	0.2	4,575.0	5,456.1	50.1 %	Sponsored Tr and PS	0.0																																											
Total Funds	10,898.3	0.0	0.0	10,898.3	100.0 %	Total	0.2																																											
(6) 5,442,196 divided by 2,029 FYE students taught = 2,682 per FYE																																																		

Medicine-UMD																																																		
Direct Costs	3,634.0	61.6	3,695.6	218.4	1,191.0	1,409.4	31.5	503.1	534.6	5,639.6																																								
Indirect Costs	922.9	110.6	1,033.5	409.4	18.7	428.1	147.9	5.9	153.8	1,615.5																																								
Total	4,556.9	172.2	4,729.1	627.8	1,209.7	1,837.6	179.4	509.0	688.4	7,255.1																																								
State Funds	4,556.9			627.8			179.4			5,364.2																																								
Other Funds		172.2			1,209.7			509.0		1,890.9																																								
<table border="1"> <thead> <tr> <th></th> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> <th></th> <th>(ICR)</th> </tr> </thead> <tbody> <tr> <td>State Funds</td> <td>5,364.2</td> <td>-71.3</td> <td>-769.8</td> <td>4,523.1</td> <td>62.3 %</td> <td>Sponsored Research</td> <td>53.1</td> </tr> <tr> <td>Other Funds</td> <td>1,890.9</td> <td>71.3</td> <td>769.8</td> <td>2,732.0</td> <td>37.7 %</td> <td>Sponsored Tr and PS</td> <td>18.2</td> </tr> <tr> <td>Total Funds</td> <td>7,255.1</td> <td>0.0</td> <td>0.0</td> <td>7,255.1</td> <td>100.0 %</td> <td>Total</td> <td>71.3</td> </tr> <tr> <td colspan="8">(6) 4,523,133 divided by 207 FYE students taught = 21,851 per FYE</td> </tr> </tbody> </table>												(1)	(2)	(3)	(4)	(5)		(ICR)	State Funds	5,364.2	-71.3	-769.8	4,523.1	62.3 %	Sponsored Research	53.1	Other Funds	1,890.9	71.3	769.8	2,732.0	37.7 %	Sponsored Tr and PS	18.2	Total Funds	7,255.1	0.0	0.0	7,255.1	100.0 %	Total	71.3	(6) 4,523,133 divided by 207 FYE students taught = 21,851 per FYE							
	(1)	(2)	(3)	(4)	(5)		(ICR)																																											
State Funds	5,364.2	-71.3	-769.8	4,523.1	62.3 %	Sponsored Research	53.1																																											
Other Funds	1,890.9	71.3	769.8	2,732.0	37.7 %	Sponsored Tr and PS	18.2																																											
Total Funds	7,255.1	0.0	0.0	7,255.1	100.0 %	Total	71.3																																											
(6) 4,523,133 divided by 207 FYE students taught = 21,851 per FYE																																																		

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Science & Engineering-UMD										
Direct Costs	7,494.7	205.4	7,700.1	188.7	928.3	1,117.0	62.1	136.9	199.0	9,016.0
Indirect Costs	4,081.8	359.6	4,441.5	324.5	14.8	339.3	55.1	2.2	57.3	4,838.1
Total	11,576.5	565.0	12,141.5	513.1	943.1	1,456.3	117.2	139.1	256.3	13,854.1
State Funds	11,576.5			513.1			117.2			12,206.9
Other Funds		565.0			943.1			139.1		1,647.2

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	12,206.9	-18.3	-3,948.8	8,239.7	59.5 %	Sponsored Research	16.7
Other Funds	1,647.2	18.3	3,948.8	5,614.4	40.5 %	Sponsored Tr and PS	1.7
Total Funds	13,854.1	0.0	0.0	13,854.1	100.0 %	Total	18.3
(6)	8,239,729 divided by 1,719 FYE students taught = 4,793 per FYE						

Supportive Services-UMD										
Direct Costs	220.7	0.0	220.7	0.0	0.0	0.0	0.0	149.9	149.9	370.6
Indirect Costs	84.0	8.2	92.3	0.0	0.0	0.0	41.5	1.7	43.1	135.4
Total	304.7	8.2	313.0	0.0	0.0	0.0	41.5	151.6	193.1	506.0
State Funds	304.7			0.0			41.5			346.2
Other Funds		8.2			0.0			151.6		159.8

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	346.2	0.0	-102.1	244.1	48.2 %	Sponsored Research	0.0
Other Funds	159.8	0.0	102.1	261.9	51.8 %	Sponsored Tr and PS	0.0
Total Funds	506.0	0.0	0.0	506.0	100.0 %	Total	0.0
(6)	244,105 divided by 30 FYE students taught = 8,137 per FYE						

Morris										
Direct Costs	5,349.1	391.9	5,741.0	0.2	38.4	38.6	0.0	52.9	52.9	5,832.5
Indirect Costs	6,036.9	455.1	6,492.0	-0.2	-38.4	-38.6	0.0	-52.9	-52.9	6,400.5
Total	11,385.9	847.1	12,233.0	0.0	0.0	0.0	0.0	0.0	0.0	12,233.0
State Funds	11,385.9			0.0			0.0			11,385.9
Other Funds		847.1			0.0			0.0		847.1

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	11,385.9	0.0	-4,056.5	7,329.4	59.9 %	Sponsored Research	0.0
Other Funds	847.1	0.0	4,056.5	4,903.6	40.1 %	Sponsored Tr and PS	0.0
Total Funds	12,233.0	0.0	0.0	12,233.0	100.0 %	Total	0.0
(6)	7,329,430 divided by 1,956 FYE students taught = 3,747 per FYE						

Teaching Unit	Instruction			Research			Public Service			Collegiate Total
	State Funds	Other Funds	Total	State Funds	Other Funds	Total	State Funds	Other Funds	Total	
Crookston										
Direct Costs	2,970.9	12.5	2,983.4	0.0	2.3	2.3	0.0	372.0	372.0	3,357.7
Indirect Costs	3,724.6	177.0	3,901.6	0.0	-2.3	-2.3	0.0	-372.0	-372.0	3,527.3
Total	6,695.5	189.5	6,885.0	0.0	0.0	0.0	0.0	0.0	0.0	6,885.0
State Funds	6,695.5			0.0			0.0			6,695.5
Other Funds		189.5			0.0			0.0		189.5

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	6,695.5	-1.3	-1,245.1	5,449.1	79.1 %	Sponsored Research	1.3
Other Funds	189.5	1.3	1,245.1	1,436.0	20.9 %	Sponsored Tr and PS	0.0
Total Funds	6,885.0	0.0	0.0	6,885.0	100.0 %	Total	1.3
(6)	5,449,075 divided by		785 FYE students taught =		6,941 per FYE		

Waseca										
Direct Costs	2,452.1	122.8	2,574.9	0.1	1.2	1.3	0.0	73.9	73.9	2,650.0
Indirect Costs	4,396.1	467.0	4,863.1	-0.1	-1.2	-1.3	0.0	-73.9	-73.9	4,788.0
Total	6,848.2	589.8	7,438.0	0.0	0.0	0.0	0.0	0.0	0.0	7,438.0
State Funds	6,848.2			0.0			0.0			6,848.2
Other Funds		589.8			0.0			0.0		589.8

	(1)	(2)	(3)	(4)	(5)		(ICR)
State Funds	6,848.2	-2.5	-1,555.5	5,290.2	71.1 %	Sponsored Research	2.2
Other Funds	589.8	2.5	1,555.5	2,147.8	28.9 %	Sponsored Tr and PS	0.3
Total Funds	7,438.0	0.0	0.0	7,438.0	100.0 %	Total	2.5
(6)	5,290,227 divided by		809 FYE students taught =		6,539 per FYE		

- (1) Distribution of total collegiate expenses between state and other support.
- (2) Indirect cost recoveries from external agencies, primarily federally sponsored research.
- (3) Tuition income assigned to teaching units via tuition matrix.
- (4) Adjusted distribution between state supported expenses and other.
- (5) Percentage distribution of (4).
- (6) Adjusted state supported expenditures (all activities) per FYE student taught.

UNIVERSITY OF MINNESOTA
 FYE Based-State Funded (1)
 Expenditure Profile
 FY 1990

Exhibit VIII

Teaching Unit Activity	Direct Costs	Indirect Costs	Total
	-----	-----	-----
Liberal Arts"			
=====			
Instruction	1,797	761	2,558
Research	103	59	162
Public Service	38	10	48
	-----	-----	-----
Total	1,938	830	2,767
Technology			
=====			
Instruction	3,655	1,316	4,971
Research	1,270	1,112	2,383
Public Service	69	12	81
	-----	-----	-----
Total	4,994	2,440	7,434
Architecture			
=====			
Instruction	3,486	1,127	4,613
Research	0	114	115
Public Service	0	173	173
	-----	-----	-----
Total	3,486	1,415	4,901
Agriculture			
=====			
Instruction	4,573	2,409	6,982
Research	1,665	2,194	3,859
Public Service	225	112	338
	-----	-----	-----
Total	6,464	4,715	11,179
Natural Resources			
=====			
Instruction	5,393	2,178	7,571
Research	2,604	2,238	4,841
Public Service	357	194	551
	-----	-----	-----
Total	8,353	4,610	12,964

Teaching Unit Activity	Direct Costs	Indirect Costs	Total
	-----	-----	-----
Human Ecology			
=====			
Instruction	2,602	1,313	3,914
Research	367	281	648
Public Service	95	55	151
	-----	-----	-----
Total	3,064	1,649	4,712
Medicine			
=====			
Instruction	4,672	2,202	6,874
Research	2,462	3,813	6,276
Public Service	193	571	764
	-----	-----	-----
Total	7,327	6,587	13,914
Public Health			
=====			
Instruction	5,937	2,058	7,995
Research	2,250	4,760	7,010
Public Service	77	172	249
	-----	-----	-----
Total	8,264	6,990	15,254
Pharmacy			
=====			
Instruction	9,998	3,695	13,693
Research	505	1,155	1,660
Public Service	97	358	455
	-----	-----	-----
Total	10,600	5,208	15,808
Nursing			
=====			
Instruction	14,435	5,490	19,925
Research	599	390	989
Public Service	0	7	8
	-----	-----	-----
Total	15,034	5,887	20,922
Dentistry			
=====			
Instruction	13,372	5,302	18,674
Research	3,609	1,080	4,689
Public Service	127	732	859
	-----	-----	-----
Total	17,109	7,114	24,222

Teaching Unit Activity	Direct Costs	Indirect Costs	Total
	-----	-----	-----
Humphrey Institute			
=====			
Instruction	7,136	2,946	10,081
Research	166	609	775
Public Service	941	1,089	2,030
	-----	-----	-----
Total	8,243	4,644	12,886
Mortuary Science			
=====			
Instruction	0	0	0
Research	0	0	0
Public Service	0	0	0
	-----	-----	-----
Total	0	0	0
Biological Sciences			
=====			
Instruction	4,938	1,707	6,644
Research	1,947	1,297	3,244
Public Service	71	-2	69
	-----	-----	-----
Total	6,956	3,001	9,957
Veterinary Medicine			
=====			
Instruction	8,031	3,348	11,378
Research	1,122	1,531	2,654
Public Service	11,213	1,605	12,818
	-----	-----	-----
Total	20,366	6,484	26,850
Law			
=====			
Instruction	5,730	1,898	7,628
Research	11	29	40
Public Service	1	100	101
	-----	-----	-----
Total	5,742	2,027	7,769
Management			
=====			
Instruction	4,240	1,367	5,606
Research	212	155	367
Public Service	597	123	720
	-----	-----	-----
Total	5,048	1,645	6,694

Teaching Unit Activity	Direct Costs	Indirect Costs	Total
Education			
=====			
Instruction	3,710	1,507	5,217
Research	417	284	702
Public Service	247	24	271
	-----	-----	-----
Total	4,375	1,815	6,189
General College			
=====			
Instruction	3,449	1,011	4,460
Research	80	18	98
Public Service	5	32	36
	-----	-----	-----
Total	3,534	1,061	4,595
Summer Sessions			
=====			
Instruction	-654	-250	-903
Research	0	0	0
Public Service	0	0	0
	-----	-----	-----
Total	-654	-250	-903
Continuing Education			
=====			
Instruction	1,529	643	2,172
Research	0	-1	-1
Public Service	139	160	300
	-----	-----	-----
Total	1,669	802	2,470
Business and Economics-UMD			
=====			
Instruction	2,253	1,414	3,667
Research	558	189	747
Public Service	211	224	435
	-----	-----	-----
Total	3,022	1,827	4,849
Education & Human Services-UMD			
=====			
Instruction	2,193	1,441	3,634
Research	46	32	78
Public Service	30	25	55
	-----	-----	-----
Total	2,269	1,498	3,767

Teaching Unit Activity	Direct Costs	Indirect Costs	Total
	-----	-----	-----
Fine Arts-UMD			
=====			
Instruction	1,652	1,191	2,843
Research	31	16	47
Public Service	46	130	176
	-----	-----	-----
Total	1,729	1,336	3,065
Liberal Arts-UMD			
=====			
Instruction	1,409	1,115	2,523
Research	46	28	75
Public Service	58	26	84
	-----	-----	-----
Total	1,513	1,169	2,682
Medicine-UMD			
=====			
Instruction	14,590	3,690	18,280
Research	1,055	1,722	2,777
Public Service	152	642	794
	-----	-----	-----
Total	15,797	6,054	21,851
Science & Engineering-UMD			
=====			
Instruction	2,873	1,564	4,436
Research	110	179	289
Public Service	36	32	68
	-----	-----	-----
Total	3,019	1,775	4,793
Supportive Services-UMD			
=====			
Instruction	4,892	1,862	6,754
Research	0	0	0
Public Service	0	1,383	1,383
	-----	-----	-----
Total	4,892	3,245	8,137
Morris			
=====			
Instruction	1,760	1,987	3,747
Research	0	-0	0
Public Service	0	0	0
	-----	-----	-----
Total	1,761	1,987	3,747

Exhibit IX

Exhibit IX compares state funded direct expenditures per FYE student from Exhibit VIII for FY1977 through the current fiscal year in constant dollars. Historical expenditures have been restated into 1990 dollars to allow comparisons across years in constant dollars as well as actual dollars.

The results reflect the variables of net O&M and State Specials instructional funds and FYE students taught. The amount of cost sharing, college and departmental administration applicable to research, and the amount of tuition collected from students also impacts net legislative funding.

UNIVERSITY OF MINNESOTA
Comparative of FYE Based
State Funded(1) Instructional Costs
(Direct Costs Only)

Exhibit IX

Teaching Unit	FY 1977		FY 1979		FY 1981		FY 1985		FY 1987		FY 1989		FY 1990	
	Actual*(	Constant 2.287)	Actual*(	Constant 1.999)	Actual*(	Constant 1.643)	Actual*(	Constant 1.277)	Actual*(	Constant 1.172)	Actual*(	Constant 1.060)	Actual*(	Constant 1.000)
Liberal Arts	1,095	2,504	1,222	2,443	1,310	2,152	1,468	1,875	1,472	1,725	1,627	1,725	1,797	1,797
Technology	1,360	3,110	1,474	2,947	1,464	2,405	2,001	2,555	2,556	2,996	3,341	3,541	3,655	3,655
Architecture	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,486	3,486
Agriculture	1,478	3,380	1,679	3,356	2,153	3,537	4,069	5,196	5,328	6,244	4,380	4,643	4,573	4,573
Natural Resources	1,941	4,439	2,258	4,514	3,396	5,580	4,479	5,720	7,930	9,294	7,018	7,439	5,393	5,393
Human Ecology	1,559	3,565	1,549	3,096	2,123	3,488	2,673	3,413	2,965	3,475	2,277	2,414	2,602	2,602
Medicine	3,001	6,863	2,945	5,887	3,533	5,805	4,634	5,918	3,915	4,588	4,724	5,007	4,672	4,674
Public Health	1,645	3,762	1,535	3,068	1,663	2,732	3,472	4,434	4,224	4,951	5,484	5,813	5,937	5,937
Pharmacy	3,124	7,145	3,917	7,830	4,307	7,076	7,013	8,956	7,388	8,659	9,317	9,876	9,998	9,998
Nursing	4,287	9,804	4,163	8,322	5,269	8,657	8,373	10,692	10,806	12,665	13,797	14,625	14,435	14,435
Dentistry	4,076	9,322	5,691	11,376	7,295	11,986	9,886	12,624	13,101	15,354	14,414	15,279	13,372	13,372
Mortuary Science	1,433	3,277	2,091	4,180	1,695	2,785	2,298	2,935	2,845	3,334	1,905	2,019	0	0
Humphrey Institute	NA	NA	NA	NA	4,193	6,889	4,504	5,752	2,526	2,960	8,496	9,006	7,136	7,136
Biological Sciences	1,577	3,607	1,741	3,480	1,757	2,887	2,319	2,961	2,995	3,510	4,431	4,697	4,938	4,938
Veterinary Medicine	6,289	14,383	5,913	11,820	7,439	12,222	12,003	15,328	6,500	7,618	7,139	7,567	8,031	8,031
Law	1,587	3,629	1,960	3,918	2,441	4,011	3,109	3,970	3,403	3,988	5,498	5,828	5,730	5,730
Education	2,402	5,493	2,551	5,099	2,783	4,572	3,183	4,065	3,316	3,886	3,432	3,638	3,710	3,710
Management	1,051	2,404	1,370	2,739	1,305	2,144	1,941	2,479	2,249	2,636	3,801	4,029	4,240	4,240
University College	2,640	6,038	3,045	6,087	3,595	5,907	NA	NA	NA	NA	NA	NA	NA	NA
General College	743	1,699	886	1,771	793	1,303	806	1,029	1,284	1,505	2,711	2,874	3,449	3,449
Duluth-Medicine	NA	NA	9,472	18,935	8,453	13,888	10,774	13,758	11,580	13,572	15,118	16,025	14,590	14,590
Duluth-Social Development	NA	NA	2,230	4,458	2,837	4,661	4,317	5,513	NA	NA	NA	NA	NA	NA
Duluth-Education	NA	NA	1,100	2,199	1,095	1,799	1,489	1,901	NA	NA	NA	NA	NA	NA
Duluth-Education & Human S	NA	NA	NA	NA	NA	NA	NA	NA	1,981	2,322	2,172	2,302	2,193	2,193
Duluth-Letters & Sciences	NA	NA	921	1,841	1,107	1,819	1,759	2,246	NA	NA	NA	NA	NA	NA
Duluth-Liberal Arts	NA	NA	NA	NA	NA	NA	NA	NA	1,320	1,547	1,275	1,352	1,409	1,409
Duluth-Science & Engineeri	NA	NA	NA	NA	NA	NA	NA	NA	3,234	3,790	3,192	3,384	2,873	2,873
Duluth-Fine Arts	NA	NA	1,379	2,757	1,516	2,491	1,661	2,121	1,317	1,544	1,506	1,596	1,652	1,652
Duluth-Business & Economic	NA	NA	876	1,751	1,177	1,934	1,880	2,401	2,174	2,548	2,619	2,776	2,253	2,253
Duluth-Supportive Services	NA	NA	NA	NA	NA	NA	2,196	2,804	1,931	2,263	NA	NA	4,892	4,892
Morris	1,292	2,955	1,807	3,612	1,755	2,883	1,479	1,889	1,607	1,883	1,729	1,833	1,760	1,760
Crookston	1,454	3,325	1,737	3,472	1,702	2,796	2,148	2,743	2,798	3,279	2,903	3,077	3,081	3,081
Waseca	1,265	2,893	1,619	3,236	1,912	3,141	2,042	2,608	2,067	2,423	2,452	2,599	2,343	2,343

(1) Represents legislative funds only, tuition and dedicated income are not included.

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APPENDIX A

The following is a listing of the original issues and recommendations of the Academic Cost Committee.

Which funds should be included in the base against which tuition is compared? (recommendation 14, p. 17).

We recommend that for the 1976-77 study, in calculating departmental direct costs, all costs under control of the budgetary college continue to be classified as direct. However we note that there are wide differences in college-level support costs among colleges, and believe that for some purposes it may be useful to report departmental direct costs only, excluding college-level support costs. We therefore recommend that MPIS undertake an informal survey to determine whether or not present practice might mislead users of the data in any significant respect, as the basis for a possible future change in practice.

Discussion: The guiding principle should be controllability: only those costs under the control of the unit under review are direct costs; with this definition direct costs can be used as a management tool. In logic then, departmental direct costs would exclude costs of centralized collegiate services and administration while collegiate direct costs would include them.

In fact, college support costs vary widely across colleges: almost 30% of total cost for 8-level courses in dentistry (\$119/SCH), under 4% of total cost for 1-level courses in mechanical engineering (\$1/SCH). Clearly part of the reason for such wide differences rests in different practices with respect to decentralization of budgets within colleges, and it may be that within a college no serious error is introduced by attributing collegiate support costs to departments as direct costs. If so, we would prefer to omit the refinement, so as to reduce complexity of the resulting report at the departmental level.

We recommend that faculty time assignments continue to be used to determine salary costs to be applied to instruction, outside the health sciences.

Discussion: The cost of a complete faculty activity analysis is prohibitive. This cost is in part financial, and in part a cost to the faculty measured both by the time required to keep careful track of activities and by the effect on morale: many faculty members would deeply resent what is perceived as an attempt either to control activities or to force scholarship into neat boxes, ill-suited to the nature of the activity.

We recommend that salary costs be charged to courses on the basis of departmental average salaries for each rank, not on the basis of salaries of individual instructors assigned to the course.

Discussion: Most, perhaps all, other instructional cost studies use actual salary cost; this can create instability as the assigned instructor changes due to differences in salary or teaching load among instructors. The procedure now used by MPIS reduces instability due to changes in teaching assignments within the department (it charges the same cost for all faculty holding the same rank within the department); however by charging different salaries by rank, it allows scope for a higher cost to be charged for 8-level courses, taught by senior people, than for 1-level courses taught by junior people.

We do not believe that this divergence from practice in other Universities creates a problem.

MEASUREMENT OF INDIRECT COST

We recommend that the present formula used to assign indirect costs to colleges be reviewed by MPIS and, where feasible, refined. Guiding principles for this review should include the following:

- à Where individual campuses or colleges provide for themselves services that are also provided centrally (e.g. placement, library, police, personnel) an attempt should be made to avoid double charging for those services.
- à However, the significance of any proposed revision must be balanced against the cost of carrying it out: not all revisions that are justified in theory are worth doing in practice.

Detailed recommendations for revision follow; MPIS proposals for meeting these recommendations are provided in Exhibit II.

a. General and administrative expense

We recommend that these be reviewed to see if it is feasible to separate those functions that serve only the Twin Cities campus, so that they will no longer be charged as indirect costs to the coordinate campuses.

Discussion: Present practice is to assign all general and administrative costs to units in proportion to their total direct expenditures; thus coordinate campuses are charged for part of the Twin Cities police department, and for purchasing and personnel functions that they in fact perform for themselves. MPIS will explore the possibility of changing these allocations to reflect services actually performed.

b. Graduate School administration and other academic support

We recommend that the two main components be reported separately, and that the "other academic support" be reviewed for possible double charges of the sort discussed above, under (a).

Discussion: There has been interest expressed in seeing the charge for graduate school administration recorded separately; and since this is distributed according to graduate SCH while other academic support services are distributed according to direct costs, there is some justification for doing so.

Note: Insofar as the Bell Museum of Natural History and Art Gallery costs include a significant component of public service, provided jointly with their contribution to instruction and research, we urge MPIS to explore the possibility of attributing some costs separately to this service component, if the financial impact on cost of instruction would be material.

c. Student services

We recommend that where feasible and material, separate pools be established for assigning these costs so that a college which provides certain services for itself is not double charged.

Discussion: Some colleges provide placement and counseling services which would otherwise be provided centrally. Note that both present practice and our recommendation would treat student services provided by the college as direct costs, while centrally provided services are indirect. This inconsistency creates a minor element of non-comparability between colleges.

d. Libraries

We recommend that for each campus, all library costs attributable to instruction be allocated together, according to numbers of faculty and FYE students in each unit, with the following weights:

<u>Class of User</u>	<u>Weight</u>
lower division student	2
upper division student	3
professional student	4
graduate student	4
faculty	4

Discussion: We recommend that Professional libraries be included with the general library system. Weights attached to different users are intended to reflect approximate relative intensity of use; the weights are based in part on a study of library use conducted at Stanford University in 1963. Note that, since an FYE graduate student represents 30 SCH while an FYE undergraduate or professional student represents 45 SCH, graduate students are weighted more heavily in terms of cost per SCH: the progression of the 4 student classes in cost per SCH is 2:3:4:6.

Note: Libraries have a component of "public service," provided jointly with their contributions to instruction and research (public use through the Minitex system and of the Law Library provide examples). We urge MPIS to explore the possibility of attributing some costs separately to this service component, in light of the financial impact of library operation on cost of instruction. Notice that coordinate campus libraries are to be charged separately; the attribution of an appropriate share of Minitex costs to these campuses would also be appropriate, if feasible.

e. Physical Plant

We recommend that MPIS proceed with its plan to assign costs according to actual costs of each building, assigned to users in proportion to square feet of space assigned to each college (including special purpose classrooms under departmental control).

Discussion: Detailed allocation of the cost of operation and maintenance of facilities has not been possible in the recent past, for lack of information on space assignments. MPIS expects to have this information for the future studies. The method for allocating general service classroom cost will presumably be based on SCH, if possible, with a credit to offset for charges on special purpose classrooms to avoid double charging.

University of Minnesota
Instructional Cost Study
Indirect Cost Allocations

In accordance with the recommendation of the Academic Cost Committee, the separation between direct and indirect costs shall be made on the basis of controllability. Since this cost study is focusing on the unit costs at the collegiate level, all costs at or below shall be direct. All supportive costs beyond that level shall be treated as indirect.

The following is an outline reflecting the basic cost groupings (and sub-groupings) that can be reasonably identified, along with a proposed method of allocation:

<u>Cost Grouping</u>	<u>Method of Allocation</u>
1. Administrative and General	
a) University wide cost pool e.g., Board of Regents, Presidents Office, V.P. for Ad University Stores, Employee Benefits	- Total U expenditures, including outstate locations.
b) Partial absorption cost pool (50% applicability, to recognize similar support at outstate locations.) e.g., Business Office Personnel, Purchasing, Data Processing	- Total University expenditures, including outstate locations.
c) Residual cost pool (Total Administrative and General expense, less amounts allocated in a) and b).	- Total University expenditures, excluding appropriate outstate locations.
2. Academic Support	
e.g., Center for Ed. Dev., U Computer Center, Museum of Natural Hist., Offset for Organized Res.	- Total direct expenditures of instruction and research.
3. Graduate School Administration	
e.g., Graduate School, NSF Educational Allow., Offset for Organized Res.	- Graduate level student credit hours.

Cost Grouping

Method of Allocation

- | | | |
|----|---|--|
| 4. | Student Services (by location)*
a) Campus wide cost pool
(Total student services costs, less: Admissions support, prospective student support, and orientation support).
b) Residual cost pool
(Total student services costs less amount allocated in a). | - Total FYE students.

- Total FYE students less FYE students of colleges having student support at the college level. |
| 5. | Libraries (by location)*
e.g., Mpls-St. Paul Libraries, Bio-Medical Libraries, Law Library, Offset for Organized Res. | - Total FYE students, weighted to recognized intensiveness. |
| 6. | Operation and Maintenance of Facilities | - Functionally assigned, by square feet, by building and collegiate unit. |

* Twin Cities, Duluth, Morris, Crookston and Waseca

MPIS (updated)
08/01/91

APPENDIX B

Overview of the MPIS Cost Model

The "cost model" is not a model in the technical sense of the term, but an allocation mechanism used to distribute departmental and collegiate expenditures for an academic year to course levels for the purpose of computing average expenditures (e.g., all funds or only 0100 funds, including or excluding support costs, etc.) and the level of aggregation (e.g., course level by department, total department, course level by college, average per student credit hour expenditures or total expenditures, etc.) that can be entered or calculated.

The department is the basic unit of analysis in the model, and collegiate expenditures are calculated as sums of departmental expenditures. The heart of the model is the allocation mechanism that distributes departmental faculty salaries and support expenditures and appropriate calculated collegiate support expenditures, by fund source, to course levels for the department.¹ The departmental faculty salary expenditure, for a given rank and fund source, allocated to the course level is the product of the expenditure figure and the ratio of the instructor clock hours (classroom contact hours) taught at the course level by faculty of the given rank to the total instructor clock hours taught by faculty of that rank. The total faculty salary expenditure for the course level is then the sum over the faculty ranks of the expenditures allocated for each rank.

¹ Expenditures distributed within the model include the portion of the dean's office expenditures allocable to the department. Other expenditures (e.g., central administration, libraries, computer centers, etc.) are indirect costs not directly included in this particular model.

Departmental support expenditures for a given fund source are defined as the difference between total departmental and total faculty salaries. In most cases this is the departmental civil service salaries and supply and equipment expenditures from the fund.² These expenditures are allocated to the course level as the product of the expenditure and the ratio of the student instructor clock hours taught at the course level to the total student instructor clock hours taught in the department. Collegiate support expenditures (the total expenditures in the college dean's office) for a given fund source are similarly allocated based on the ratio of the student instructor clock hours taught in the course level to the total taught in the college.

In mathematical symbols these allocation mechanisms for expenditures are defined as follows. Let:

FS_{df} = total faculty salaries (excluding fringes) by department (d), rank (r), and fund source (f).

DSC_{df} = departmental support expenditures by department and fund source.

CSC_f = college support expenditures by fund source.

The data that are used to allocate these expenditures are as follows. Let:

ICH_{drl} = instructor clock hours taught in department (d) by faculty of rank (r) at course level (l).

$TICH_{dr}$ = total instructor clock hours taught in department (d) by faculty of rank (r).

² If faculty of a given rank do not teach so that their salary expenditures cannot be allocated by the method described above, that salary expenditure is treated as an addition to departmental support expenditures.

$SICH_{dl}$ = student instructor clock hours taught at course level (l) in department (d).

$TSICH_d$ = total student instructor clock hours taught in department (d).

$CSICH$ = total student instructor clock hours taught in the college.

For calculating the formulae let:

n_d = number of departments in the college,

n_r = number of ranks,

n_f = number of fund sources,

n_l = number of course levels.

Note that by definition we have

$$TICH_{dr} = \sum_{l=1}^{n_l} ICH_{drl}$$

$$TSICH_d = \sum_{l=1}^{n_l} SICH_{dl}$$

$$CSICH = \sum_{d=1}^{n_d} TSICH_d$$

The expenditure allocated to a course level for a given fund source (EXP_{dfl}) is

$$EXP_{dfl} = \sum_{r=1}^{n_r} \left(\frac{ICH_{drl}}{TICH_{dr}} \right) * FS_{drl}$$

$$+ [DSC_{df} + CSC_f * \left(\frac{TSICH_d}{CSICH} \right)] * \left(\frac{SICH_{dl}}{TSICH_d} \right)$$

The first term is the allocation of faculty salaries. The fraction in this term is the proportion of the total instructor clock hours taught by faculty of rank (r) that are taught in course level (l). Note that

$$\sum_{l=1}^n \sum_{r=1}^n \left(\frac{ICH_{drl}}{TICH_{dr}} \right) * FS_{drf}$$

$$\sum_{r=1}^n \left[\sum_{l=1}^n \left(\frac{ICH_{drl}}{TICH_{dr}} \right) \right] * FS_{drf} =$$

$$\sum_{r=1}^n FS_{drf} = \text{total salaries paid from fund source f.}$$

Thus, if these are considered "instructional" expenditures, then all faculty salary expenditures are allocated to "instruction," and further, to classroom instruction. There are no explicit categories for non-classroom instructional activities such as advising or thesis supervision.

The second term is the allocation of support expenditures. The fraction outside the brackets is the proportion of the student instructor clock hours taught at course level (l) in the department. This proportion of departmental support expenditures is directly allocated to EXP_{drf} . Collegiate support expenditures are first "deflated" by the proportion of total college student instructor clock hours taught in the department. Clearly, the product of the two proportions is $\frac{SICH_{dl}}{CSICH}$ so that the proportion of collegiate support expenditures allocated is the proportion of student instructor clock hours taught in department (d) at course level (l) that are taught in the entire college.

The EXP_{df} 's are the building blocks of the model. They can be directly divided by the student credit hours taught in department (d) at course level (l), SCH_{dl} , to yield expenditures per student credit hour for fund (f) and level (l). Or the EXP_{df} 's can be summed from l to n_f ($\sum_{f=1}^{n_f} EXP_{df}$) to yield total expenditures over all of fund sources for level (l). These sums can then be divided by SCH_{dl} ($[\sum_{f=1}^{n_f} EXP_{df}] / SCH_{dl}$) to find expenditures per credit hour for all funds. Similar sums over all departments yield total collegiate expenditures by level or by fund and level. Thus, for example,

$$\left(\sum_{d=1}^{n_d} \sum_{f=1}^{n_f} EXP_{df} \right) / \left(\sum_{d=1}^{n_d} SCH_{dl} \right)$$

is collegiate expenditures per student credit hour for all funds in course level (l). The particular sums computed depend on the desired output from the model.

In the application of these general allocation principles to University expenditures each budgeted department is the basic unit of analysis. There are six faculty rank categories (Professor, Associate Professor, Assistant Professor, Instructor, other 94XX ranks and 95XX ranks) and two fund categories, "state" (01XX and 03XX funds) and "non-state" (all other funds), used in the model. For each fund, salary expenditures for each rank category and departmental and collegiate support expenditures are produced by Administrative Information Service. The needed instructor and student instructor clock hour data are computed from the Course Inventory Reports. For the provision of average expenditures figures student credit hours are calculated from Student Support Services reports.

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