DOCUMENT RESUME

ED 321 631 HE 023 641

TITLE	Report to the Governor and the 1989 Minnesota Legislature. Technical Report.
INSTITUTION	Minnesota Higher Education Coordinating Board, St. Paul.
PUB DATE	Jan 89
NOTE	171p.; For a comparison summary report, see HE 023 642.
AVAILABLE FROM	Minnesota Higher Education Coordinating Board, Suite 400, Capitol Square, 550 Cedar, St. Paul, MN 55101.
PUB TYPE	Statistical Data (110) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Educational Planning; *Educational Policy; *Educational Trends; Enrollment; *Governing Boards; Higher Education; *Postsecondary Education; Public Policy; State Programs; Student Characteristics; Student Financial Aid
IDENTIFIERS	*Minnesota; *Minnesota Higher Education Coordinating Board

ABSTRACT

This technical report provides a detailed presentation of the status of Minnesota postsecondary education, summarizes policy issues studied by the Minnesota Higher Education Coordinating Board, and reviews programs administered by the Board. Section 1 reviews enrollment trends and projections, student characteristics, and Minnesota's investment in postsecondary education. The section also compares trends in Minnesota with those in other states. Section 2 reviews funding and financial aid issues; issues related to governance, mission differentiation, and planning; projects to improve educational quality; projects to enhance coordination and cooperation; and projects to improve information and assessment. Section 3 summarizes the state financial aid programs and such nonfinancial aid programs as the Interstate Tuition Reciprocity Program, the Minnesota Interlibrary Telecommunications Exchange, and Enterprise Development Partnership Centers. Over 100 tables offer supporting data. (JDD)

MINNESOTA
HIGHER
EDUCATION
COORDINATING
BOARD

January 1989
Technical Report

Report To The Governor And The 1989 Legislature

MINNESOTA HIGHER EDUCATION COORDINATING BOARD

MEMBERS

Alice Keller
Winona, First Congressional District

Maureen Johnson Stores
Marshall, Second Congressional District

Robert Ferguson
Eagan, Third Congressional District

Thomas Auth
Little Canada, Fourth Congressional District

Mona Hintzman
Brooklyn Center, Fifth Congressional District

Celeste O'Donnell
St. Paul, Sixth Congressional District

Andy Hilger
St. Cloud, Seventh Congressional District

Peter X. Fugina
Virginia, Eighth Congressional District

Charles Neerland
Minneapolis, At-Large Member

Duane C. Scribner
Minneapolis, At-Large Member

Andrea Schmidt
Red Wing, At-Large Member

OFFICERS

Maureen Johnson Stores
President

Mona Hintzman
Vice President

Duane C. Scribner
Secretary

Kathleen M. Kies
Acting Executive Director

Preface

This report to the governor and 1989 Legislature examines trends and conditions in Minnesota post-secondary education, summarizes policy issues addressed by the Minnesota Higher Education Coordinating Board, and provides information on the status of programs administered by the Board. A separate summary report highlights the major trends and issues and activities of the Coordinating Board. Related information also appears in the Board's biennial budget request and separate policy and data reports.

Section 1 of this document examines the status of Minnesota post-secondary education. It covers trends in enrollment and post-secondary education attainment, student characteristics, the state's investment in post-secondary education, and comparisons with other states.

Section 2 reviews policy studies and projects completed or begun by the Coordinating Board during the last two years. Section 3 summarizes the status of financial aid and non-financial aid programs administered by the Board.

Contents

Contents

Contents

Tables

Tables

Tables

Tables

Tables

An understanding of enrollments and fiscal conditions and their implications is important in developing public policy.

This section reviews enrollment trends and projections, student characteristics, and Minnesota's investment in post-secondary education. The section also compares trends in Minnesota with those in other states.

Enrollment and Attainment Trends

Participation affects virtually all aspects of post-secondary education. Enrollment characteristics are related closely to how much the state invests in post-secondary education, the number and types of programs it offers, the facilities it operates, the faculty it supports, the prices it charges, and the financial aid it provides to students. This chapter reviews several dimensions of participation in Minnesota post-secondary education.

Most of the data focuses on state-level trends. Additional information on system and institution level trends can be found in the Board's annual fall enrollment surveys and other data reports. Starting in fall 1983, the Coordinating Board received unit records for each student enrolled in an institution. With this method of data collection, however, some data have not been available on the unit record level. If a table displays students classified by two data elements, such as sex and level, a student cannot be tabulated when one of the two elements is missing. Footnotes indicate data that are unavailable. Although the unit record data collection method will improve comparability across institutions, it initially may lead to inconsistencies in historical comparisons.

Table I.1 reports on-campus fall headcount enrollment for public and private post-secondary education systems and sectors from 1973 to 1987. For collegiate institutions, total fall headcount enrollment represents students enrolled for credit as of the 10th day of classes in the fall term. For vocational institutions, enrollment over a three-month period is used. Extension enrollments are not included. Private vocational students are not included due to inconsistent reporting from year to year. The total includes both full-time and part-time students.

Table I.2 shows full-time and part-time on-campus headcount enrollment for all systems from 1973 to 1987 while Table I.3 provides full-time, part-time, and total fall headcount enrollment by system. Table I.4 includes undergraduate headcount enrollment by sex from 1977 through 1987, and Table I.5 includes the age distribution of on-campus collegiate undergraduate students from 1978 to 1987.

Table I.6 provides minority enrollments from 1983 through 1987. It includes headcount enrollment and percent of total headcount enrollment by racial ethnic group and system. Table I.7 includes a breakdown of headcount enrollment by resident, nonresident, and foreign students from 1978 to 1987. Table I.8 indicates fall headcount enrollment by system and educational level — undergraduate and unclassified, graduate and first professional, and vocational — from 1982 to 1987. First professional degrees include dentistry, medicine, optometry, pharmacy, osteopathic medicine, podiatry, veterinary medicine, chiropractic medicine, law, theology, and other fields. Unclassified students are enrolled for credit but do not fit into a particular class.

Enrollments for 1985-86 and 1986-87 under the Post-Secondary Enrollment Options Program are provided in Table I.9 with preliminary figures for 1987-88 presented.

Table I.10 shows outmigrants and inmigrants among first-time freshmen in higher education for each state by type of institution and state for fall 1986.

Table I.11 presents fall headcount enrollment of new entering students by system from 1978 to 1987.

Table I.12 provides an estimate of the participation rate in some form of post-secondary education by students within six years of high school graduation. The table provides a breakdown for 1986-87 by recent high school graduates entering post-secondary education for the first time, that is, those 19 years old and below, and those registering for post-secondary education programs within six years of high school graduation, that is those between the ages 20 to 24. Based on currently available information, slightly over 80 percent of high school graduates appear to attempt post-secondary education on a full-time or part-time basis in state or out of state during the 12 months following high school graduation. An additional 7.0 percent are estimated to attempt post-secondary education within six years of high school graduation. Thus, the overall estimated participation rate is 88.7 percent. Although studies over time using several measures would be needed to fully substantiate this estimate, data now available make it possible with less scientific rigor to infer a participation rate approaching 90 percent.

Table I.1
On-Campus Headcount Enrollment
Public and Private Post-Secondary Systems
1973-1987[1]

Year	Public Fall Headcount	Annual % Change	Private[2] Fall Headcount	Annual % Change	All Systems Fall Headcount	Annual % Change
1973	128,824		32,774		161,598	
1974	132,074	2.5	33,492	2.2	165,566	2.5
1975	143,588	8.7	36,076	7.7	179,664	8.5
1976	147,709	2.9	37,795	4.8	185,504	3.3
1977	149,540	1.2	40,062	6.0	189,608	2.2
1978	150,158	0.4	40,032	−0.1	190,190	0.3
1979	153,829	2.4	40,635	1.5	194,464	2.2
1980	165,591	7.6	41,767	2.8	207,358	6.6
1981	170,707	3.1	42,188	0.7	212,895	2.7
1982	171,791	0.6	42,543	0.8	214,334	0.7
1983	176,979	3.0	43,189	1.5	220,168	2.7
1984	176,374	−0.3	43,688	1.2	220,062	0.0
1985	180,875	2.6	43,261	−1.0	224,136	1.9
1986	180,845	0.0	44,609	3.1	225,454	0.6
1987	187,598	3.7	47,054	5.5	234,652	4.1

[1]Does not include extension students
[2]Does not include private vocational students.

Source: Minnesota Higher Education Coordinating Board

Table I.2
Full-Time and Part-Time On Campus
Headcount Enrollment, All Systems
1973-1987[1]

Fall	Full-Time No.	Percent	Part-Time No.	Percent	Total No.	Percent
1973	141,821	87.8	19,777	12.2	161,598	100.0
1974	142,801	86.3	22,765	13.7	165,566	100.0
1975	153,454	85.4	26,210	14.6	179,664	100.0
1976	157,787	85.1	27,717	14.9	185,504	100.0
1977	160,664	84.7	28,944	15.3	189,608	100.0
1978	156,985	82.5	33,205	17.5	190,190	100.0
1979	158,921	81.7	35,543	18.3	194,464	100.0
1980	167,143	80.6	40,215	19.4	207,358	100.0
1981	171,142	80.4	41,753	19.6	212,895	100.0
1982	170,260	79.4	44,074	20.6	214,334	100.0
1983	160,396	77.5	46,521	22.5	206,917	100.0
1984	171,478	77.9	48,584	22.1	220,062	100.0
1985	172,107	76.8	52,029	23.2	224,136	100.0
1986	170,553	75.6	54,901	24.4	225,454	100.0
1987	164,746	70.2	69,906	29.8	234,652	100.0

[1]Does not include private vocational or extension students

Source: Minnesota Higher Education Coordinating Board

Table I.3
Full-Time, Part-Time, and Total Fall Headcount Enrollment by System 1976, 1983, 1985 and 1987[1]

System	1976 Full-time No.	1976 Part-time Percent	1976 Part-time No.	1976 Part-time Percent	1976 Total No.	1983 Full-time No.	1983 Part-time Percent	1983 Part-time No.	1983 Part-time Percent	1983 Total No.
Technical Institutes[2]	27,745	100.0%	0	0.0%	27,745	23,004	96.2%	899	3.8%	23,903
Community College	16,485	60.5	10,768	39.5	27,253	19,290	50.3	19,091	49.7	38,381
State University	31,296	85.6	5,277	14.4	36,573	34,571	79.2	9,080	20.8	43,651
University of Minnesota	47,679	84.9	8,459	15.1	56,138	47,734	82.6	10,058	17.4	57,792
Private Two-Year	1,392	86.7	213	13.3	1,605	1,185	68.3	549	31.7	1,734
Private Four-Year	30,566	91.8	2,714	8.2	33,280	32,734	85.4	5,616	14.6	38,350
Private Professional	2,624	90.2	286	9.8	2,910	1,877	60.5	1,228	39.5	3,105
Total	157,787	85.1	27,717	14.9	185,504	160,395	77.5	46,521	22.5	206,916

System	1985 Full-time No.	1985 Part-time Percent	1985 Part-time No.	1985 Part-time Percent	1985 Total No.	1987 Full-time No.	1987 Part-time Percent	1987 Part-time No.	1987 Part-time Percent	1987 Total No.
Technical Institutes[2]	38,931	96.6	1,383	3.4	40,314	30,652	91.1	2,978	8.9	33,630
Community College	17,611	44.9	21,653	55.1	39,264	19,747	43.1	26,040	56.9	45,787
State University	35,150	77.8	10,039	22.2	45,189	39,416	75.4	12,841	24.6	52,257
University of Minnesota	45,184	80.5	10,924	19.5	56,108	37,218	66.6	18,706	33.4	55,924
Private Two-Year	716	74.9	240	25.1	956	693	67.2	339	32.8	1,032
Private Four-Year	32,624	83.4	6,510	16.6	39,134	34,254	79.8	8,678	20.2	42,932
Private Professional	1,891	59.6	1,230	40.4	3,171	2,766	89.5	324	10.5	3,090
Total	172,107	76.8	52,029	23.2	224,136	164,746	70.2	69,906	29.8	234,652

[1]Does not include extension students
[2]Until fall 1978, all AVTI students were considered full time. 1983 figures do not include 13,251 students who could not be classified as full or part time

Source: Minnesota Higher Education Coordinating Board enrollment survey

Table I.4
On-Campus Undergraduate Headcount Enrollment by Sex, All Systems, 1977-1987[1]

Fall	Male No.	Percent	Female No.	Percent	Total No.	Percent
1977	86,634	50.8	83,952	49.2	170,586	100.0
1978	85,659	50.2	84,832	49.8	170,491	100.0
1979	86,047	49.3	88,623	50.7	174,670	100.0
1980	92,070	49.2	95,095	50.8	187,165	100.0
1981	94,673	49.0	98,419	51.0	193,092	100.0
1982	95,877	49.5	97,653	50.5	193,530	100.0
1983	90,317	49.0	94,001	51.0	184,318	100.0
1984	97,829	49.5	99,960	50.5	197,789	100.0
1985	98,615	48.8	103,361	51.2	201,976	100.0
1986	109,448	48.6	115,523	51.4	224,971	100.0
1987	111,426	47.5	123,048	52.5	234,474	100.0

[1]Does not include private vocational or extension students. Does not include students whose sex is not classified. This accounts for the decrease in total enrollments shown between 1982 and 1983.

Source: Minnesota Higher Education Coordinating Board

Table I.13 presents fall headcount enrollment and full-year equivalents by system for 1978 to 1986. Full-year equivalent (FYE) enrollments represent the most accurate measure of educational volume at an institution. State funding to institutions is based on FYE enrollments. Headcount enrollment represents the number of students on campus, including those attending full-time and part-time. FYE counts are calculated by dividing the total number of credit hours generated that year by the normal full-time credit hour load at an institution. Average daily memberships (ADM) are shown for public technical institutes. They are based on clock hour instruction. One ADM receives 1,050 hours of instruction.

Transfer of credit data from post-secondary education system to system for fall 1987 are shown in Table I.14.

Table I.15 shows total degrees awarded by level for 1977 to 1987 while table I.16 shows graduates by academic program area for 1985. Table I. 17 presents a range of four projections of educational attainment of Minnesota's labor force, ages 25-64. The high projection assumes continuation of increased rates of attainment that occurred between 1970 and 1980. The low projection assumes stable or declining rates of educational attainment. Intermediate projections assume rates of educational attainment between the high and the low. The data may understate educational attainment levels because the figures don't take into account many persons who attend post-secondary education vocational schools nor do they consider job-related training of employees that may be at a comparable level to post-secondary education.

Recent high school graduates, who account for most new full-time students at post-secondary education institutions, have the greatest influence on enrollment projections. Table I.18 shows projected high school graduates by region from spring 1987 to spring 2006.

Projected fall headcount and FYE enrollments are presented in Tables I.19 and I.20 for the period 1988-89 to 2006-07. They are based on demographic data that traditionally have shaped post-secondary education enrollment patterns and, modified by findings from an analysis of enrollment trends by Board staff completed in spring 1988.[1]

[1]Minnesota Higher Education Coordinating Board. *Enrollment Analysis and Projections, 1988-89-2006-07* (March 1988).

Table I.5
Age Distribution of On-Campus Collegiate Undergraduate Students, All Systems 1978-1987[1]

	1978		1979		1980		1981		1982	
Age	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
17 and under	2,200	1.5%	2,364	1.6%	1,707	1.1%	2,606	1.7%	1,275	0.8%
18	24,436	17.1	25,135	17.2	24,794	16.6	25,322	16.4	23,917	15.4
19	26,381	18.5	26,687	18.2	27,177	18.1	27,523	17.8	27,265	17.6
20	21,683	15.2	22,674	15.5	23,302	15.6	23,855	15.5	23,963	15.4
21	18,901	13.2	19,034	13.0	20,207	13.5	20,407	13.2	21,578	13.9
22-24	22,147	15.5	22,549	15.4	23,669	15.8	24,341	15.8	25,563	16.5
25-29	13,467	9.4	13,451	9.2	13,635	9.1	14,269	9.2	14,478	9.3
30-34	5,958	4.2	6,197	4.2	6,680	4.5	7,089	4.6	7,450	4.8
35 and over	7,801	5.5	8,272	5.7	8,630	5.8	8,889	5.8	9,777	6.3
Total	142,974		146,363		149,801		154,301		155,266	

	1983		1984		1985		1986		1987	
Age	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
17 and under	538	0.3%	499	0.3%	1,336	0.9%	1,670	1.0%	1,676	1.0%
18	18,678	12.1	17,588	11.6	17,770	11.5	18,319	11.4	19,142	11.3
19	27,462	17.8	25,941	17.1	25,470	16.5	25,473	15.9	26,930	15.9
20	24,443	15.8	23,944	15.8	22,903	14.9	23,007	14.3	23,555	13.9
21	21,958	14.2	21,427	14.1	21,399	13.9	20,845	13.0	21,290	12.6
22-24	28,594	18.5	28,316	18.7	28,574	18.5	29,824	18.6	30,700	18.1
25-29	15,166	9.8	15,116	10.0	15,327	9.9	15,856	9.9	16,844	10.0
30-34	8,165	5.3	8,591	5.7	9,648	6.3	10,088	6.3	11,136	6.6
35 and over	9,599	6.2	10,195	6.7	11,797	7.6	15,482	9.6	17,943	10.6
Total	154,603		151,617		154,224		160,564		169,216	

[1]Does not include those students classified as age unknown or extension students

Source: Minnesota Higher Education Coordinating Board.

Table I.6
Headcount Enrollment and Percent of Total Headcount Enrollment by Racial/Ethnic Group and System[1]
Fall 1983, 1984, 1985, 1986, and 1987

Race Breakdown by System	Total Enrollment		Non-Resident Alien		Black Non-Hispanic		American Indian Alaskan Native	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
State University System								
1983	43,651	100.0	888	2.0	303	0.7	277	0.6
1984	43,833	100.0	772	1.8	307	0.7	256	0.6
1985	45,189	100.0	722	1.6	335	0.7	287	0.6
1986	47,708	100.0	710	1.5	356	0.7	311	0.7
1987	52,257	100.0	652	1.2	405	0.8	328	0.6
Community College System								
1983	38,381	100.0	232	0.6	424	1.1	241	0.6
1984	37,088	100.0	252	0.7	434	1.2	248	0.7
1985	39,264	100.0	218	0.6	639	1.6	368	0.9
1986	40,365	100.0	275	0.7	648	1.6	440	1.1
1987	45,787	100.0	338	0.7	676	1.5	511	1.1
Technical Institutes								
1983	37,388	100.0	4	0.0	509	1.4	909	2.4
1984	39,410	100.0	1	0.0	584	1.5	1,030	2.6
1985	40,314	100.0	3	0.0	651	1.6	1,138	2.8
1986	35,169	100.0	2	0.0	709	2.0	973	2.8
1987	34,827	100.0	74	0.2	605	1.7	852	2.4
University of Minnesota								
1983	57,792	100.0	2,411	4.2	861	1.5	370	0.6
1984	56,043	100.0	2,143	3.8	838	1.5	328	0.6
1985	56,108	100.0	2,382	4.2	928	1.7	395	0.7
1986	56,426	100.0	2,505	4.4	883	1.6	349	0.6
1987	55,924	100.0	2,678	4.8	918	1.6	371	0.7
Private Two-Year Colleges								
1983	1,734	100.0	6	0.3	65	3.7	21	1.2
1984	1,544	100.0	11	0.7	62	4.0	15	1.0
1985	956	100.0	3	0.3	22	2.3	9	0.9
1986	1,001	100.0	3	0.3	25	2.5	10	1.0
1987	1,032	100.0	1	0.1	42	4.1	6	0.6
Private Four-Year Colleges								
1983	38,350	100.0	728	1.9	473	1.2	132	0.3
1984	38,914	100.0	1,022	2.6	501	1.3	134	0.3
1985	39,134	100.0	974	2.5	465	1.2	133	0.3
1986	40,258	100.0	1,004	2.5	504	1.3	175	0.4
1987	42,932	100.0	1,097	2.6	585	1.4	197	0.5
Private Professional Schools								
1983	3,105	100.0	19	0.6	41	1.3	16	0.5
1984	3,230	100.0	29	0.9	70	2.2	16	0.5
1985	3,171	100.0	24	0.8	62	2.0	19	0.6
1986	3,350	100.0	21	0.6	66	2.0	15	0.4
1987	3,090	100.0	20	0.6	54	1.7	19	0.6
Total[1]								
1983	220,401	100.0	4,288	1.9	2,676	1.2	1,966	0.9
1984	220,062	100.0	4,230	1.9	2,796	1.3	2,027	0.9
1985	224,136	100.0	4,326	1.9	3,102	1.4	2,349	1.0
1986	225,454	100.0	4,520	2.0	3,191	1.4	2,273	1.0
1987	235,849	100.0	4,860	2.1	3,285	1.4	2,284	1.0
Total Population								
1980 Census Data	4,108,196	100.0	NA		52,325	1.3	36,730	0.9

[1]Does not include extension enrollment. Does not include private vocational schools

Source: Minnesota Higher Education Coordinating Board Student Record Data Base

Continued

Table I.6 (continued)
Headcount Enrollment and Percent of Total Headcount Enrollment by Racial/Ethnic Group and System Fall 1983, 1984, 1985, 1986 and 1987

Race Breakdown by System	Asian & Pacific Islander		Hispanic		White Non-Hispanic		Minority and Non-Resident Alien		Minority	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
State University System										
1983	192	0.4	128	0.3	37,211	85.2	1,788	4.1	900	2.1
1984	214	0.5	141	0.3	37,829	86.3	1,690	3.9	918	2.1
1985	295	0.7	138	0.3	39,723	87.9	1,777	3.9	1,055	2.3
1986	354	0.7	151	0.3	41,680	87.4	1,882	3.9	1,172	2.5
1987	390	0.7	157	0.3	45,011	86.1	1,932	3.7	1,280	2.4
Community College System										
1983	364	0.9	130	0.3	36,380	94.8	1,391	3.6	1,155	3.0
1984	390	1.1	132	0.4	35,055	94.5	1,456	3.9	1,204	3.2
1985	460	1.2	153	0.4	36,129	92.0	1,838	4.7	1,620	4.1
1986	534	1.3	139	0.3	38,329	92.3	2,036	4.9	1,761	4.4
1987	494	1.1	194	0.4	42,231	92.2	2,213	4.8	1,875	4.1
Technical Institutes										
1983	931	2.5	464	1.2	32,189	86.1	2,817	7.5	2,813	7.5
1984	1,159	2.9	513	1.3	34,911	88.6	3,287	8.3	3,286	8.3
1985	1,169	2.9	587	1.5	35,924	89.1	3,548	8.8	3,545	8.8
1986	1,120	3.2	459	1.3	31,404	89.3	3,263	9.3	3,261	9.3
1987	752	2.2	446	1.3	30,403	87.3	2,729	7.8	2,655	7.6
University of Minnesota										
1983	1,254	2.2	399	0.7	44,499	77.0	5,295	9.2	2,884	5.0
1984	1,286	2.3	398	0.7	42,223	75.3	4,993	8.3	2,850	5.1
1985	1,537	2.7	459	0.8	46,611	83.1	5,701	10.2	3,319	5.9
1986	1,629	2.9	456	0.8	47,210	83.7	5,822	10.3	3,317	5.9
1987	1,722	3.1	479	0.9	46,655	83.4	6,168	11.0	3,490	6.2
Private Two-Year Colleges										
1983	18	1.0	17	1.0	1,601	92.3	127	7.3	121	7.0
1984	20	1.3	11	0.7	1,420	92.0	119	7.7	108	7.0
1985	10	1.0	11	1.2	894	93.5	55	5.8	52	5.4
1986	9	0.9	6	0.6	933	93.2	53	5.3	50	5.0
1987	11	1.1	7	0.7	858	83.1	67	6.5	66	6.4
Private Four-Year Colleges										
1983	633	1.7	244	0.6	35,783	93.3	2,210	5.8	1,482	3.9
1984	436	1.1	272	0.7	34,873	89.6	2,365	6.1	1,343	3.5
1985	483	1.2	260	0.7	34,929	89.3	2,315	5.9	1,341	3.4
1986	584	1.5	263	0.7	37,140	92.3	2,530	6.3	1,526	3.8
1987	656	1.5	314	0.7	39,538	92.1	2,849	6.6	1,752	4.1
Private Professional Schools										
1983	19	0.6	10	0.3	2,359	76.0	105	3.4	86	2.8
1984	29	0.9	17	0.5	2,299	71.2	161	5.0	132	4.1
1985	31	1.0	27	0.9	2,317	73.0	163	5.1	139	4.4
1986	36	1.1	32	1.0	2,496	74.5	170	5.1	149	4.4
1987	42	1.4	32	1.0	2,912	94.2	167	5.4	147	4.8
Total[1]										
1983	3,411	1.5	1,392	0.6	190,022	86.2	13,733	6.2	9,445	4.3
1984	3,534	1.6	1,484	0.7	188,610	85.7	14,071	6.4	9,841	4.5
1985	3,985	1.8	1,635	0.7	196,527	87.7	15,397	6.9	11,071	4.9
1986	4,266	.9	1,506	0.7	199,192	88.4	15,756	7.0	11,236	5.0
1987	4,067	1.7	1,629	0.7	207,608	88.0	16,125	6.8	11,265	4.8
Total Population										
1980 Census Data	32,226	0.8	NA		3,942,025	96.0	NA		166,171	4.0

[1]Does not include extension enrollment. Does not include private vocational schools.

Source: Minnesota Higher Education Coordinating Board Student Record Data Base

Table I.7
Minnesota Resident/Nonresident/Foreign Headcount Enrollment, Fall 1978-1987

	Minn. Residents		Other States		Foreign		
Fall	No.	Percent	No.	Pecent	No.	Percent	Total
1978	160,439	84.1%	25,840	13.5%	4,550	2.4%	190,829
1979	165,943	84.8	25,277	12.9	4,499	2.3	195,719
1980	174,880	84.9	26,153	12.7	5,050	2.5	206,083
1981	180,369	84.7	26,680	12.5	5,920	2.8	212,858
1982	181,026	84.7	26,571	12.4	6,219	2.9	213,816
1983[1]	179,245	84.8	27,248	12.9	4,834	2.3	211,327
1984[2]	180,497	84.8	27,751	13.0	4,725	2.2	212,973
1985[3]	184,433	84.8	28,260	13.0	4,855	2.2	217,548
1986[4]	185,020	84.6	28,829	13.2	4,913	2.2	218,762
1987[5]	189,909	84.4	29,772	13.2	5,228	2.3	224,909

[1]Does not include 8,841 students whose place of residence was unknown
[2]Does not include 7,089 students whose place of residence was unknown.
[3]Does not include 6,588 students whose place of residence was unknown.
[4]Does not include 7,044 students whose place of residence was unknown
[5]Does not include 10,148 students whose place of residence was unknown.

Source: Minnesota Higher Education Coordinating Board.

Table I.8
Fall Headcount Enrollment by System and Level, 1982-1987[1]

System	Fall 1982 Voc.	Undergrad. & Unclass.	Grad 1st Prof.	Total	Fall 1983 Voc.	Undergrad. & Unclass.	Grad 1st Prof.	Total
Technical Institute[2]	31,786			31,786	37,154			37,154
Community College	9,412	28,033		37,445	10,175	28,197		38,372
State University		40,454	2,816	43,270		41,233	2,324	43,557
University of Minnesota		47,354	11,936	59,290		43,588	11,504	55,092
Private Vocational[3]	5,710			5,710	10,258			10,258
Private Two-Year		1,689		1,689		1,737		1,737
Private Four-Year & Grad.		34,802	2,693	37,495	89	35,456	2,799	38,344
Private Professional		104	3,255	3,359		57	3,048	3,105
Total	46,908	152,436	20,700	220,044	57,676	150,268	19,675	227,619

System	Fall 1984 Voc.	Undergrad. & Unclass.	Grad 1st Prof.	Total	Fall 1985 Voc.	Undergrad. & Unclass.	Grad 1st Prof.	Total
Technical Institute	39,410			39,410	40,314			40,314
Community College	9,611	27,473		37,084	9,485	29,573		39,058
State University		40,761	2,986	43,747		42,071	3,034	45,105
University of Minnesota		44,832	10,960	55,792		44,652	11,272	55,924
Private Vocational	8,866	143		9,009	7,836	1,403		9,239
Private Two-Year		1,537		1,537		955		955
Private Four-Year & Grad.	123	34,607	4,183	38,913	103	34,555	4,476	39,134
Private Professional		1	3,228	3,229		417	2,719	3,136
Total	58,010	149,354	21,357	228,721	57,738	153,626	21,501	232,865

System	Fall 1986 Voc.	Undergrad. & Unclass.	Grad & 1st Prof.	Total	Fall 1987 Voc.	Undergrad. & Unclass.	Grad & 1st Prof.	Total
Technical Institute	35,087			35,087	33,613			33,613
Community College	10,085	31,251		41,336	10,915	34,810		45,725
State University		44,350	3,296	47,646		48,307	3,889	52,196
University of Minnesota		43,891	12,406	56,297		43,162	12,762	55,924
Private Vocational	7,285	857		8,142	9,321			9,321
Private Two-Year		999		999		1,025		1,025
Private Four-Year & Grad.	78	35,288	4,892	40,258	62	37,069	5,799	42,930
Private Professional			3,348	3,348			3,061	3,061
Total	52,535	156,636	23,942	233,113	53,911	164,373	25,511	243,795

[1]Does not include extension students
[2]In Fall 1983 the AVTIs began using a different reporting period
[3]Fall 1983 represents more complete reporting of private vocational institutions than previous years

Source: Minnesota Higher Education Coordinating Board

Table I.9
Post-Secondary Enrollment Options Program 1985-86 — 1987-88

Post-Secondary Institutions	Fiscal Year 1985-86 Grade 11	Grade 12	Total
Technical Institutes	102	266	368
Community Colleges	481	1,329	1,810
State University	182	457	639
University of Minnesota	176	447	623
Private Institutions	68	163	231
Total	1,009	2,662	3,671

Post-Secondary Institutions	Fiscal Year 1986-87 Grade 11	Grade 12	Total
Technical Institutes	145	356	501
Community Colleges	479	1,405	1,884
State University	127	441	568
University of Minnesota	198	657	855
Private Institutions	44	206	250
Total	993	3,065	4,058

Post-Secondary Institutions	Fiscal Year 1987-88[1] Grade 11	Grade 12	Total
Technical Institutes	245	512	757
Community Colleges	571	1,718	2,289
State University	156	510	666
University of Minnesota	332	1,232	1,564
Private Institutions	63	228	291
Total	1,367	4,200	5,567

[1]Preliminary.

Source: Minnesota Department of Education

Table I.10
First-Time Freshmen in Institutions of Higher Education, Outmigrants and Inmigrants for Each State by Type of Institution and State: All Institutions, Fall 1986

Area and State	Minnesota Outmigrants Total	Outmigrants Four Year	Outmigrants Two Year	Inmigrants Total	Inmigrants Four Year	Inmigrants Two Year
50 States and D.C.	10,946	9,927	1,019	9,895	8,055	1,840
Alabama	23	17	6	11	11	0
Alaska	14	14	0	29	28	1
Arizona	506	333	173	58	47	11
Arkansas	24	23	1	17	16	1
California	352	303	49	209	200	9
Colorado	60	60	0	121	112	9
Connecticut	49	49	0	39	39	0
Delaware	2	2	0	9	9	0
District of Columbia	92	92	0	21	15	6
Florida	133	97	36	97	90	7
Georgia	54	43	11	27	27	0
Hawaii	29	27	2	16	16	0
Idaho	23	10	13	15	14	1

Continued

Table I.10 (continued)
First-Time Freshmen in Institutions of Higher Education, Outmigrants and Inmigrants for Each State by Type of Institution and State: All Institutions, Fall 1986

Area and State	Minnesota					
	Outmigrants			Inmigrants		
	Total	Four Year	Two Year	Total	Four Year	Two Year
Illinois	532	522	10	754	739	15
Indiana	188	188	0	74	73	1
Iowa	711	611	100	734	572	162
Kansas	74	67	7	55	52	3
Kentucky	14	12	2	29	28	1
Louisiana	36	36	0	17	16	1
Maine	21	21	0	15	15	0
Maryland	50	50	0	59	57	2
Massachusetts	263	260	3	88	86	2
Michigan	248	226	22	232	217	15
Minnesota	0	0	0	0	0	0
Mississippi	12	12	0	4	4	0
Missouri	230	215	15	86	82	4
Montana	57	56	1	158	148	10
Nebraska	113	110	3	183	178	5
Nevada	13	12	1	15	15	0
New Hampshire	34	34	0	17	17	0
New Jersey	36	35	1	76	75	1
New Mexico	28	21	7	27	27	0
New York	277	265	12	158	150	8
North Carolina	66	44	22	27	27	0
North Dakota	1,804	1,585	219	1,610	1,032	578
Ohio	97	95	2	136	115	21
Oklahoma	21	21	0	24	23	1
Oregon	89	78	11	38	37	1
Pennsylvania	81	80	1	87	82	5
Rhode Island	30	30	0	9	9	0
South Carolina	22	20	2	2	1	1
South Dakota	530	485	45	910	721	189
Tennessee	56	52	4	23	18	5
Texas	248	186	62	92	82	10
Utah	54	54	0	17	17	0
Vermont	31	31	0	10	10	0
Virginia	40	28	12	33	32	1
Washington	102	102	0	72	70	2
West Virginia	5	5	0	4	4	0
Wisconsin	3,358	3,198	160	2,443	2,036	407
Wyoming	14	10	4	27	25	2
State Unknown	0	0	0	881	539	342
Outlying Areas	4	4	0	32	9	23
American Samoa	0	0	0	0	0	0
Guam	4	4	0	4	4	0
Northern Marianas	0	0	0	0	0	0
Puerto Rico	0	0	0	22	1	21
Trust Territory Pacific Islands	0	0	0	3	1	2
Virgin Islands	0	0	0	3	3	0
Foreign Countries	0[1]	0	0	857	750	107

[1]Minnesotans attending foreign institutions not known

Source: National Center for Education Statistics Survey Report, June 1988

Table I.11
Fall Headcount Enrollment of New Entering Students by System, 1978-1987

System	Fall 1978	Fall 1979	% Change '78-79	Fall 1980	% Change '79-80	Fall 1981	% Change '80-81	Fall 1982	% Change '81-82
Technical Institute	20,294	21,872	7.8	23,961	9.6	23,254	−3.0	20,880	−10.2
Community College	13,300	13,969	5.0	15,450	10.6	15,508	0.4	14,596	−5.9
State University	7,561	7,787	3.0	8,158	4.8	8,267	1.3	7,416	−10.3
University of Minnesota	8,062	8,391	4.1	8,568	2.1	8,348	−2.6	7,997	−4.2
Private Two-Year	814	724	−11.1	790	9.1	644	−18.5	863	34.0
Private Four-Year	8,818	8,838	0.2	8,811	−0.3	8,837	0.3	8,187	−7.4
Total	58,849	61,581	4.6	65,738	6.8	64,858	−1.3	59,939	−7.6

System	Fall 1983	% Change '82-83	Fall 1984	% Change '83-84	Fall 1985	% Change '84-85	Fall 1986	% Change '85-86	Fall 1987	% Change '86-87
Technical Institute	15,767	−24.5	13,358	−15.3	14,880	11.4	13,434	-9.7	17,617	31.1
Community College	15,860	8.7	14,859	−6.3	16,648	12.0	15,434	−7.3	16,933	9.7
State University	7,744	4.4	7,402	−4.4	7,883	6.5	8 251	4.7	8,981	8.8
University of Minnesota	7,841	−2.0	7,359	−6.1	7,547	2.6	7,316	−3.1	6,839	−6.5
Private Two-Year[1]	583	−32.4	598	2.6	327	−45.3	337	3.1	317	−5.9
Private Four-Year	8,619	5.3	8,435	−2.1	8,275	−1.9	8,142	−1.6	8,470	4.0
Total	56,414	−5.9	52,011	−7.8	55,560	6.8	52,914	−4.8	59,157	11.8

[1]The decrease of new entering students at private two-year institutions in Fall 1985 is due to the closing of Golden Valley Lutheran College.

Source: Minnesota Higher Education Coordinating Board Enrollment Surveys

Table I.12
Estimated Rate of Participation by Minnesota Students in Post-Secondary Education[1]

Post-Secondary System	Age 19 or Below	Age 20 – 24	Public and Private High School Graduates 1986
Technical Institutes[2]	9,250	9,530	
Community Colleges	7,768	4,133	
State University System	7,842	462	
University of Minnesota	5,523	365	
Private 4-year[3]	5,322	208	
Private 2-year[3]	178	31	
Private Vo-Tech	1,355	814	
Out-of-State 4-year[3]	6,947[5]	2,980[5]	
Out-of-State 2-year[3]	519[5]	500[5]	
Allocation of Age Not Identified[4]	1,173	479	
Total	45,877[6] =	19,502 ÷ 5 = 3,900 averaged annually	
	81.7%	and 7.0% = ...	88.7% of 56,149[7]

[1]Fall, winter, and University of Minnesota spring terms
[2]Includes all programs full 1986-87 academic year.
[3]Does not include winter semester 1987 new entering freshmen.
[4]1,852 students who did not identify age were distributed by age according to prevailing average.
[5]Age distributed according to prevailing average.
[6]Some out-of-state institutions and those studying abroad not included due to non-reporting to IPEDS
[7]High school graduations peaked in 1977-78 with 72,660 and declined annually since then until 1987. They have been relatively stable over the last four years and therefore may serve as an acceptable basis for calculating the annual average for the column of the 20-24 age group

Sources: Minnesota Higher Education Coordinating Board Student Record Data Base
Integrated Post-Secondary Education Data System (IPEDS).
Consultation with post-secondary institutions.

Table I.13
Fall Headcount Enrollment and Full Year Equivalents by System, 1978-1986[1]

System	1978 Fall Headcount	FYE Acad. Yr. '78-79	1979 Fall Headcount	FYE Acad. Yr. '79-80	1980 Fall Headcount	FYE Acad. Yr. '80-81
Technical Institute[2]	27,291	31,010	27,596	31,717	30,111	34,365
Community College	29,324	18,440	30,346	20,109	34,894	21,630
State University	37,909	32,631	39,171	33,845	41,496	36,101
University of Minnesota	55,634	46,914	56,716	47,945	59,090	49,579
Private Two-Year	1,629	1,505	1,686	1,473	1,638	1,544
Private Four-Year	35,246	31,695	35,887	32,782	37,008	33,229
Private Professional[3]	1,997	1,696	1,935	32,782	1,964	1,648
Total	189,030	163,891	193,337	169,535	206,201	178,096

System	1981 Fall Headcount	FYE Acad. Yr. '81-82	1982 Fall Headcount	FYE Acad. Yr. '82-83	1983 Fall Headcount	FYE Acad. Yr. '83-84
Technical Institute[2]	31,234	34,978	31,786	35,456	37,154	35,175
Community College	37,222	22,400	37,445	22,984	38,381	22,873
State University	43,032	37,242	43,270	36,903	43,651	37,299
University of Minnesota[4]	59,219	49,675	59,290	48,075	57,793	51,049
Private Two-Year	1,601	1,450	1,689	1,352	1,734	1,456
Private Four-Year	37,576	33,584	37,495	32,953	38,350	33,185
Private Professional[3]	1,857	1,764	2,187	1,871	1,971	1,859
Total	211,741	181,093	213,162	179,594	219,034	188,896

System	1984 Fall Headcount	FYE Acad. Yr. '84-85	1985 Fall Headcount	FYE Acad. Yr. '85-86	1986 Fall Headcount	FYE Acad. Yr. '86-87
Technical Institute[2]	39,410	32,896	40,314	32,883	35,169	32,262
Community College	37,088	21,447	39,264	23,096	41,542	24,359
State University	43,833	37,146	45,189	38,294	47,708	40,606
University of Minnesota[4]	56,043	55,884	56,103	56,122	56,426	57,152
Private Two-Year	1,544	972	956	911	1,001	886
Private Four-Year	38,914	33,538	39,134	35,195	40,258	36,371
Private Professional[3]	2,130	1,761	2,067	1,789	2,223	1,842
Total	218,962	183,644	223,032	188,290	224,327	193,478

[1]Does not include summer sessions or extension students
[2]TI figures represent Average Daily Membership (ADM) rather than Full Year Equivalent (FYE)
[3]Figures for the private professional institutions do not include William Mitchell College of Law. William Mitchell changed its method of calculating FYE, and consistent historical data are not available
[4]The University of Minnesota began using a new method of calculating FYE in the 1983-84 academic year which includes summer session and extension students.

Source: Minnesota Higher Education Coordinating Board.

Table I.14
Undergraduate Transfers From System to System, Fall Term 1987

System Transferred From	System Transferred To								
Source Systems	State University System	Community College System	Technical Institutes	University of Minnesota	Private Vocational System	Private Two-Year System	Private Four-Year & Gr. System	Private Professional System	State of Minnesota
State University System	398	265	177	387	85	4	114	0	1,430
Community College System	1,863	327	189	923	155	21	468	0	3,946
Technical Institutes	208	404	179	0	141	4	24	0	960
University of Minnesota	612	445	115	2	115	29	262	0	1,580
Private Vocational System	2	12	31	1	90	2	17	0	155
Private Two-Year System	84	17	3	14	6	1	14	0	139
Private Four-Year & Grad System	266	129	18	311	33	17	144	0	918
Private Professional System	0	0	4	0	4	0	0	0	8
Other Minnesota Institutions	381	37	11	363	24	1	138	0	955
State of Minnesota Subtotal	3,814	1,636	727	2,001	653	79	1,181	0	10,091
Out of State	1,183	617	261	1,212	125	18	535	2	3,953
Unavailable	153	69	149	1,178	143	6	716	0	2,414
Total	5,150	2,322	1,137	4,391	921	103	2,432	2	16,458

Source: Minnesota Higher Education Coordinating Board.

Table I.15
Total Degrees Awarded by Level, 1977-1987

Year	Degree Associate	Bachelor's	Master's	Doctor's	First Professional	All Degrees
1977-78	6,134	18,120[1]	3,572	502	1,454	29,782[1]
1978-79	5,740	18,498	3,322	471	1,652	29,683
1979-80	6,229	18,653	3,201	498	1,505	30,086
1980-81	6,579	19,113[2]	3,285	521	1,485[2]	30,983[2]
1981-82	6,960	19,798	3,545	479	1,756	32,538
1982-83	6,703	20,639	3,502	487	1,595	32,926
1983-84	6,789	20,437	4,187	593	1,093	33,099
1984-85	6,474[3]	20,670	3,493	529	1,559	32,725[3]
1985-86	7,192	20,401	3,456	569	1,548[4]	33,166[4]
1986-87	6,106[5]	19,948[5]	3,705	529	1,508	31,796[5]

[1]Does not include data from Minneapolis College of Art and Design.
[2]Does not include data from Hamline University.
[3]Does not include data from St. Mary's Junior College.
[4]Does not include data from United Theological Seminary.
[5]Does not include data from Fergus Falls Community College, Normandale Community College, Augsburg College, Minnesota Bible College, St. Paul Bible College, College of St. Scholastica and College of St Catherine, St Mary's campus

Source: Minnesota Higher Education Coordinating Board

Table I.17
Alternative Projected Levels of College Education Among Minnesota's Labor Force, Ages 25-64, 1980, 1990 and 2000

Scenario	1980 Estimated	1990 Projected	2000 Projected
High			
% with 2 or More Years of College	35.9	49.7	61.1
% with 4 or More Years of College	23.5	32.3	39.2
Intermediate High			
% with 2 or More Years of College	35.9	49.7	57.4
% with 4 or More Years of College	23.5	32.3	36.9
Intermediate Low			
% with 2 or More Years of College	35.9	45.9	51.1
% with 4 or More Years of College	23.5	29.9	33.1
Low			
% with 2 or More Years of College	35.9	45.9	49.8
% with 4 or More Years of College	23.5	29.9	32.3

Source: Higher Education Coordinating Board

Table I.16
Graduates by Program Area, 1985

Program Area	Number of Graduates						
	Less than 1 Yr.	2 Yr.	Assc.	Bac.	Master	Doc.	First Prof.
Agribusiness & Agri Production	116	503	132	104	18	10	–
Agricultural Sciences	–	10	99	132	53	33	–
Renewable Natural Resources	6	1	42	98	23	12	–
Architecture & Environmental Design	–	74	1	150	23	–	–
Area & Ethnic Studies	–	–	–	75	3	4	–
Business & Management	335	625	411	4,068	774	18	–
Business – Admin Support	2,886	1,060	270	91	1	–	–
Marketing & Distribution	735	614	74	48	–	–	–
Communications	55	30	2	956	43	10	–
Communications Technologies	89	75	12	–	–	–	–
Computer & Information Sciences	219	8	40	726	33	5	–
Consumer, Personal & Misc. Services	333	722	–	49	–	–	–
Education	28	22	2	2,437	975	89	–
Engineering	10	12	–	896	152	59	–
Engineering & Eng Related Tech	434	1,236	109	306	24	–	–
Foreign Languages	–	–	–	306	10	9	–
Allied Health	2,165	568	152	299	23	–	–
Health Sciences	–	183	753	974	398	30	515
Home Economics	–	–	15	273	20	2	–
Vocational Home Economics	662	340	33	16	–	–	–
Industrial Arts	14	0	–	–	–	–	–
Law	–	1	65	55	1	–	669
Letters	–	1	0	758	48	20	–
Liberal-General Studies	28	438	2,832	163	42	–	–
Library & Archival Sciences	–	1	–	1	99	–	–
Life Sciences	–	–	–	809	75	79	–
Mathematics	4	1	–	352	39	8	–
Multi-Interdisciplinary Studies	–	6	–	1,017	11	2	–
Parks & Recreation	–	–	1	151	13	–	–
Basic Skills	13	–	–	–	–	–	–
Philosophy & Religion	–	–	–	186	11	1	–
Theology	–	60	–	351	78	6	104
Physical Sciences	–	–	–	554	51	38	–
Science Technologies	17	23	–	4	–	–	–
Psychology	5	–	–	825	84	27	–
Protective Services	–	247	229	251	1	–	–
Public Affairs	80	42	7	388	156	3	–
Social Sciences	–	7	–	2,006	90	43	–
Construction Trades	379	653	1	–	–	–	–
Mechanics & Repairers	618	2,094	–	–	–	–	–
Precision Production	1,020	1,603	26	4	–	–	–
Transportation & Material Moving	293	33	17	–	–	–	–
Visual & Performing Arts	102	8	3	722	92	16	–
Total	10,646	11,301	5,328	20,601	3,464	524	1,288

Source: Higher Education Coordinating Board

Table I.18
Projections of High School Graduates by Region
Spring 1987 — Spring 2006

Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6
1986[1]	1,395	875	4,404	2,693	1,977	2,429
1987	1,421	937	4,466	2,664	1,967	2,502
1988	1,407	867	4,340	2,663	2,013	2,509
1989	1,352	917	4,285	2,616	2,042	2,488
1990	1,294	897	3,798	2,502	1,892	2,378
1991	1,200	882	3,704	2,237	1,743	2,216
1992	1,167	836	3,594	2,248	1,692	2,215
1993	1,248	871	3,538	2,350	1,744	2,372
1994	1,181	851	3,537	2,297	1,828	2,205
1995	1,286	825	3,630	2,441	1,992	2,405
1996	1,278	888	3,612	2,576	1,996	2,368
1997	1,332	899	3,547	2,608	2,094	2,520
1998	1,351	1,017	3,817	2,755	2,107	2,592
1999	1,321	1,019	3,794	2,808	2,183	2,591
2000	1,279	1,033	3,649	2,815	2,179	2,605
2001	1,186	990	3,338	2,669	2,101	2,507
2002	1,132	947	3,133	2,581	2,130	2,429
2003	1,153	974	2,998	2,553	2,022	2,385
2004	1,201	951	3,262	2,748	2,060	2,415
2005	1,208	954	3,355	2,836	2,119	2,425
2006	1,194	927	3,270	2,818	2,130	2,410

[1]Actual number of public and private high school graduates

Year	Region 7	Region 8	Region 9	Region 10	Region 11	State
1986[1]	5,200	1,970	2,963	5,599	26,644	56,149
1987	5,282	1,918	2,938	5,932	27,723	57,754
1988	5,503	1,963	2,929	5,788	28,367	58,354
1989	5,322	1,930	2,941	5,891	27,195	56,984
1990	5,004	1,775	2,615	5,291	24,249	51,700
1991	4,658	1,613	2,531	4,886	22,977	48,650
1992	4,653	1,687	2,557	4,889	22,491	48,034
1993	4,836	1,678	2,715	4,984	23,129	49,469
1994	4,808	1,650	2,613	5,126	22,815	48,914
1995	5,157	1,703	2,815	5,166	23,700	51,123
1996	5,359	1,766	2,955	5,359	24,835	52,994
1997	5,515	1,739	2,945	5,652	26,577	55,433
1998	6,008	1,779	3,118	5,973	27,427	57,949
1999	6,060	1,776	3,090	5,941	28,554	59,141
2000	6,020	1,768	3,040	5,924	28,976	59,293
2001	5,944	1,671	2,901	5,788	28,452	57,551
2002	5,867	1,581	2,846	5,709	29,006	57,366
2003	5,715	1,517	2,766	5,696	30,320	58,102
2004	6,425	1,574	3,030	6,054	29,025	58,750
2005	6,832	1,596	3,141	6,190	27,948	58,609
2006	6,886	1,576	3,086	6,135	27,626	58,062

[1]Actual number of public and private high school graduates

Source: Minnesota Higher Education Coordinating Board

Table I.19
Projections of Total Fall Headcount Enrollments Public Post-Secondary Education Systems 1988-89 – 2006-07

Fiscal Year	Community College System	State University System	University of Minnesota	Technical Institute System	Public Systems[2]
1986-87[1]	41,578	47,466	56,443	49,489	194,976
1987-88[1]	45,711	52,257	55,924	48,833	202,725[3]
1988-89	46,739	57,291	55,365	48,177	207,572
1989-90	48,480	58,686	55,069	48,049	210,284
1990-91	48,440	58,946	53,629	47,268	208,283
1991-92	49,354	59,071	51,898	45,997	206,320
1992-93	50,542	58,186	50,322	45,097	204,147
1993-94	49,355	56,517	49,379	44,908	200,159
1994-95	48,550	56,282	48,786	44,834	198,452
1995-96	48,750	56,605	48,862	44,866	199,083
1996-97	48,670	56,567	49,357	45,234	199,828
1997-98	48,900	56,695	50,119	45,659	201,373

[1]Actual enrollment
[2]Fall headcount for collegiate systems; annual headcount for technical institutes
[3]Includes TI estimate

Source: Minnesota Higher Education Coordinating Board, University Research Consortium

Table I.20
Projections of Full-Year Equivalent Enrollments Public Post-Secondary Education Systems 1988-89 – 2006-07[1]

Fiscal Year	Community College System	State University System	University of Minnesota	Technical Institute System	Public Systems
1986-87[2]	25,495	45,892	57,152	32,262	160,801
1987-88[2]	27,592	48,416	56,033	31,125[3]	163,166
1988-89	27,191	50,288	55,883	30,523	163,885
1989-90	27,477	51,611	55,654	30,442	165,184
1990-91	26,470	51,823	54,457	29,941	162,691
1991-92	26,527	51,861	52,752	29,122	160,262
1992-93	27,216	50,963	51,142	28,552	157,873
1993-94	26,573	49,317	50,081	28,454	154,425
1994-95	26,558	49,001	49,363	28,426	153,348
1995-96	26,735	49,292	49,253	28,473	153,753
1996-97	26,673	49,278	49,473	28,737	154,161
1997-98	26,872	49,397	49,951	29,026	155,246

[1]Includes summer session for all collegiate institutions and extension for the University of Minnesota
[2]Actual enrollment
[3]Preliminary figures, may be subject to change

Source Minnesota Higher Education Coordinating Board, University Research Consortium

Student Characteristics

Trend data on Minnesota high school juniors are obtained from the Minnesota Post-High School Planning Program (PSPP), a statewide career guidance, testing, information, and planning program. Table I.21 shows the post-high school plans of Minnesota high school juniors surveyed between 1979 and 1988. The Plans and Background Survey (PBS) is the questionnaire given in the spring of the junior year. The percentage of high school juniors answering the questionnaire ranged from 74 percent in 1983 to 63 percent in 1988. Table I.22, also based on the survey, shows expected educational levels of respondents. Table I.23 indicates the first choice post-secondary institution of respondents, and Table I.24 shows planned field of study.

Table I.21
Post-High School Plans, Minnesota High School Juniors, 1979-1988

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
College	43.8%	44.4%	46.7%	47.7%	49.3%	54.1%	54.4%	57.9%	60.3%	61.0%
Vo-Tech	25.5	25.1	24.6	24.4	23.5	21.3	20.7	18.9	17.0	16.8
Other School	1.9	1.7	1.6	1.8	1.8	1.6	1.4	1.5	1.5	1.4
Military	2.6	2.8	3.2	3.9	4.6	4.4	4.4	5.0	5.3	4.9
Work	11.2	11.2	9.9	9.7	9.2	7.9	8.2	6.7	6.2	6.0
Farm/Business	1.8	1.8	1.7	1.6	1.5	1.2	1.0	.7	.6	.6
Homemaker	.3	.3	.3	.3	.2	.2	.2	.1	.1	.1
Other Plans	3.0	3.0	2.7	2.6	2.4	2.5	2.7	2.7	2.7	2.7
Don't Know	7.4	7.1	6.9	6.5	6.1	5.6	5.5	5.3	5.2	5.2
No Response	2.5	2.7	2.5	1.5	1.3	1.2	1.5	1.2	1.2	1.2

Source: The Student Plans and Background Survey of the Minnesota Post-High School Planning Program, Minnesota Higher Education Coordinating Board

Table I.22
Expected Educational Levels, Minnesota High School Juniors, 1979-1988

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
High School	11.8%	11.5%	10.1%	9.6%	8.5%	7.3%	7.0%	5.8%	5.0%	4.9%
Vocational Certificate	31.9	31.9	31.1	30.5	29.7	26.3	25.6	22.8	20.6	20.1
Two-Year Degree	10.3	10.2	10.3	10.4	10.8	10.8	10.5	10.6	10.3	10.0
Four-Year Degree	29.9	31.4	33.6	34.3	35.2	38.7	39.6	41.7	43.0	42.6
Master's Degree	6.7	6.3	6.6	7.3	7.7	8.5	9.1	10.6	11.8	13.0
Professional Degree	5.1	5.0	5.0	5.4	6.0	6.5	5.9	6.5	7.3	7.6

Source: The Student Plans and Background Survey of the Minnesota Post-High School Planning Program, Minnesota Higher Education Coordinating Board

Table I.23
Minnesota High School Juniors First Choice Post-Secondary Institution, 1979-1988

System	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
University of Minnesota	15.4%	15.4%	16.4%	16.4%	16.9%	17.2%	17.6%	18.4%	14.8%	14.9%
Private College	8.9	9.8	9.7	10.0	10.0	11.4	11.5	12.1	11.4	11.9
State University	9.8	10.6	11.1	10.6	11.4	12.1	12.7	13.0	14.0	13.3
Community College	6.9	6.6	7.4	7.6	7.8	7.4	7.0	6.5	6.2	6.8
Area Vocational-Technical Institute	27.0	25.8	24.4	24.6	23.5	20.8	19.8	18.3	15.1	14.6
Other Minnesota School	3.8	3.6	3.1	4.6	4.9	5.0	5.1	5.3	4.3	4.2
Non-Minnesota School	9.8	9.9	9.7	10.7	10.8	12.7	12.6	14.1	14.0	14.1
Undecided	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.6	10.7
Not Planning to Attend or No Response	18.4	18.4	18.3	14.8	1 .9	12.7	12.9	11.3	9.2	9.0

Source: The Student Plans and Background Survey of the Post-High School Planning Program Higher Education Coordinating Board

Table I.24
Minnesota High School Juniors Planned Field of Study, 1979-1988

Field of Study	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Agriculture	7.4%	5.7%	5.5%	5.0%	4.8%	4.1%	4.0%	3.3%	3.6%	3.1%
Architecture	2.8	2.6	2.3	2.1	2.1	2.2	2.3	2.5	2.5	2.7
Art	4.0	3.5	3.2	2.9	2.9	2.9	3.1	3.4	3.0	3.2
Athletics	2.6	2.2	2.2	1.9	1.9	1.8	1.9	2.2	2.5	2.1
Biological Science	1.2	1.2	1.3	1.2	1.3	1.4	1.4	1.5	1.1	1.3
Business	15.2	14.3	15.5	15.4	16.0	17.3	18.4	18.3	16.5	16.7
Communications	2.3	2.5	2.5	2.8	2.9	3.2	3.4	3.5	3.5	3.5
Computer Science	2.2	2.7	3.8	5.0	6.3	.2	3.7	3.1	2.2	2.3
Home Ec/Consumer Serv.	5.9	5.0	4.7	4.7	5.2	5.0	4.8	4.2	3.4	2.9
Construction	4.9	3.6	3.1	2.6	2.2	2.1	2.1	2.0	2.2	1.9
Education	3.0	3.3	3.3	3.0	2.9	3.4	4.0	4.6	5.1	5.1
Engineering	4.4	5.0	5.7	5.8	5.8	6.2	6.4	6.6	5.7	6.0
Foreign Language	.3	.3	.4	.4	.4	.5	.6	.7	.3	.5
Health	10.9	10.2	10.1	11.5	11.9	11.2	9.7	9.1	8.5	8.3
Humanities	.6	.7	.7	.7	.6	.7	.8	.8	.9	1.1
Math/Science	1.5	1.7	1.6	1.7	1.8	2.0	1.8	1.9	1.1	1.4
Mechanics	7.2	6.3	6.5	6.6	6.2	5.8	5.8	5.2	4.5	4.7
Music	2.2	1.9	1.8	1.7	1.7	1.7	1.7	2.0	2.2	2.0
Public Service	3.6	2.9	3.2	3.4	3.7	4.0	4.3	4.6	4.6	4.3
Religion	.3	.3	.3	.3	.3	.3	.2	.2	.4	.2
Social Science	3.5	3.9	3.7	4.1	4.3	5.2	5.1	6.0	5.8	7.0
Transportation	2.7	2.1	2.0	1.9	1.8	1.9	2.0	3.2	4.3	3.1
Not Listed	4.8	3.2	2.7	2.8	2.7	2.7	3.0	.9	2.5	2.0
No Response	6.4	14.8	14.0	11.7	10.5	9.1	9.5	8.1	5.8	6.3

Source: Minnesota Higher Education Coordinating Board. Post-High School Planning Program.

Table I.25
Total State Appropriations and Tuition Revenue as a Percent of Instructional Expenditures and Percent Change From 1978 for Minnesota Public Systems, Fiscal Years 1978, 1983, 1986, and 1989 Estimates

(Dollars in Thousands)

System and Fiscal Year	Total State Appropriations	Percent Change From 1978	Total State Appropriations Constant $**	Percent Change From 1978	Tuition Rev. as a Percent of Instructional Expenditures*
University of Minnesota					
1978	$187,471.1	–	$187,471.1	–	28.5
1983	263,667.4	40.6	171,882.3	−8.3	34.4
1986	329,545.5	75.8	182,979.2	−2.4	36.2
1989	402,743.3	114.8	197,036.8	5.1	33.2
State University System					
1978	70,502.3	–	70,502.3	–	23.1
1983	95,399.8	35.3	62,190.2	−11.8	28.5
1986	116,217.2	64.8	64,529.3	−8.5	34.4
1989	147,354.1	109.0	72,091.0	2.3	36.1
Community College System					
1978	30,650.2	–	30,650.2	–	24.2
1983	43,959.2	43.4	28,656.6	−6.5	34.3
1986	57,683.7	88.2	32,028.7	4.5	34.1
1989	75,[illegible]88.8	147.9	37,[illegible]76.5	21.3	35.6
Technical Institute System					
1978	90,406.4	–	90,406.4	–	9.1
1983	122,698.9	35.7	79,986.2	−11.5	17.3
1986	142,890.3	58.1	79,339.4	−12.2	22.3
1989	159,714.2	76.7	78,138.1	−13.6	26.3
Total					
1978	379,030.0	–	379,030.0	–	–
1983	525,725.3	38.7	342,715.3	−9.6	–
1986	646,336.7	70.5	358,876.6	−5.3	–
1989	785,800.4	107.3	384,442.5	1.4	–

*Expenditure and tuition revenue data are estimated for fiscal year 1989
**The Higher Education Price Index was used as a deflator with 1978 = 100 The inflation rate for 1989 was assumed to be 4 4%

Source: Minnesota Department of Finance

Minnesota Investment in Post-Secondary Education

This chapter provides an overview of the investment in Minnesota post-secondary education. It first examines fiscal data for the four public post-secondary education systems. Second, it provides required tuition and fee charges in current and constant dollars for students attending public and private institutions. Third, it summarizes the state's investment in financial aid. Fourth, the chapter describes the state investment by various functions. Fifth, it shows faculty salaries in the public post-secondary systems.

Trends in state appropriations to the four public systems in both current and constant dollars for 1978, 1983, 1986, and 1989 are shown in Table I.25. The table also shows tuition revenue as a percentage of

Table I.26
Average Instructional Expenditures Per Full Year Equivalent Student in Current and Constant Dollars for Minnesota Public Systems
Fiscal Years 1978, 1983, 1986, and 1989**

System and Fiscal Year	Current Dollars Per FYE	Constant Dollars*	
		Dollars Per FYE	Percent Change From 1978
University of Minnesota			
1978	$2,956	$2,956	–
1983	4,120	2,686	−9.1
1986	5,349	2,970	0.5
1989	6,521	3,190	7.9
State University System			
1978	2,149	2,149	–
1983	2,953	1,925	−10.4
1986	3,859	2,143	−0.3
1989	3,996	1,955	−9.0
Community College System			
1978	1,790	1,790	–
1983	2,335	1,522	−15.0
1986	3,150	1,749	−2.3
1989	3,381	1,654	−7.6
Technical Institute System			
1978	2,567	2,567	–
1983	3,745	2,442	−4.9
1986	4,654	2,584	0.7
1989	5,094	2,492	−2.9

*The Higher Education Price Index was used as a deflator with 1978 = 100
**Expenditure and enrollment data for fiscal year 1989 are estimated

Source: Minnesota Department of Finance

instructional expenditures. Tuition revenue as a percentage of instructional expenditures is an indicator of changes in reliance on tuition as a revenue source for instruction.

Average instructional expenditures per full-year equivalent student in current and constant dollars for Minnesota public systems are shown in Table I. 26. The table relates expenditures to the volume of instructional activity occurring in each system. The use of constant dollars eliminates the effects of inflation.

Table I.27 shows total general fund expenditures and instructional expenditures for the four systems. It also displays full-year equivalent enrollments for the four systems. General fund instructional expenditures are the direct expenditures and the support (such as physical plant and library) expenditures attributable to instruction that are provided through the general fund. The state's average cost funding policy and cost-related tuition policy finance these expenditures.

Tables I.28 through I.35 show trends in the price charged to students. Table I.28 shows tuition and required fees compared to Minnesota per capita personal income in current and constant dollars for academic year 1971 through 1989 for the four public systems and the private four-year colleges.

Tables I. 29 through I. 35 show

Table I.27
Total General Fund Expenditures, Instructional Expenditures, Full Year Equivalent Enrollments and Percent Change From 1978 for Minnesota Public Systems Fiscal Years 1978, 1983, 1986, and 1989*

System and Fiscal Year	(Dollars in Thousands) Total General Fund Expenditures	Percent Change From 1978	Instructional Expenditures	Percent Change From 1978	Full Year Equivalent Enrollment***	Percent Change From 1978
University of Minnesota						
1978	$254,273.8	–	$171,126.3	–	57,899	–
1983	356,253.7	40.1	242,146.4	41.5	58,774	1.5
1986	452,110.0	77.8	300,280.9	75.5	56,143	−3.0
1989	531,381.6	109.0	360,972.1	110.9	55,353	−4.4
State University System						
1978	89,508.2	–	82,789.7	–	38,518	–
1983	134,111.1	49.8	124,314.4	50.2	42,102	9.3
1986	175,640.0	96.2	166,622.6	101.3	43,179	12.1
1989	212,526.6	137.4	202,850.3	145.0	50,762	31.8
Community College System						
1978	40,391.1	–	36,273.6	–	20,267	–
1983	64,686.7	60.2	57,496.6	58.5	24,624	21.5
1986	85,497.4	111.7	76,348.2	110.5	24,237	19.6
1989	113,044.0	179.9	102,088.0	181.4	30,199	49.0
Technical Institute System**						
1978	98,663.9	–	90,978.8	–	35,445	–
1983	162,979.0	65.2	154,901.1	70.3	41,359	16.7
1986	190,088.5	92.7	182,993.6	101.1	39,317	10.9
1989	212,564.5	115.4	206,544.2	127.0	40,548	14.4
Total						
1978	482,837.0	–	381,168.4	–	152,129	–
1983	718,030.5	48.7	578,858.5	51.9	166,859	9.7
1986	903,335.9	87.1	726,245.3	90.5	162,876	7.1
1989	1,069,516.7	121.5	872,454.6	128.9	176,862	16.3

*Enrollment and expenditure data for fiscal year 1989 are estimated.
**Fiscal year 1978 enrollments are estimated.
***Technical Institute enrollments are average daily membership.

Source: Minnesota Department of Finance

tuition and fees compared to per capita income in current and constant dollars from 1979 through 1989. Room and board charges also are shown for the four-year institutions.

Tuition represents the basic price charged by an institution to a student for enrolling in post-secondary education. Since virtually every post-secondary institution requires some fees in addition to tuition for a full-time student, tuition and required fees more accurately represent total charges to the student.

State appropriations for student financial assistance from Fiscal Year 1980 through 1989 are displayed in Table I.36, and the numbers of recipients are shown in Table I.37.

Tables I.38 through I.41 show the distribution of the state's

Table I.28
Tuition and Required Fees* Compared to Minnesota Per Capita Income in Current and Constant Dollars,*** Academic Years 1971 Through 1989

Academic Year	University of Minnesota: College of Liberal Arts Current Dollars	University of Minnesota: College of Liberal Arts Constant Dollars	University of Minnesota: College of Forestry Current Dollars	University of Minnesota: College of Forestry Constant Dollars	State University System Current Dollars	State University System Constant Dollars	Community College System Current Dollars	Community College System Constant Dollars	Technical Institute System Current Dollars	Technical Institute System Constant Dollars	Private Colleges Current Dollars	Private Colleges Constant Dollars	Minnesota Per Capita Personal Income** Current Dollars	Minnesota Per Capita Personal Income** Constant Dollars
1971	$ 522	$522	$ 522	$522	$ 379	$379	$ 353	$353	—	—	$1,671	$1,671	$4,099	$4,099
1972	525	507	525	507	416	402	386	373	—	—	1,795	1,733	4,332	4,182
1973	641	596	656	609	416	386	386	359	—	—	1,933	1,796	4,918	4,569
1974	683	583	719	613	453	386	420	358	—	—	2,029	1,731	5,634	4,806
1975	714	548	762	585	479	367	420	322	—	—	2,203	1,690	5,842	4,482
1976	772	553	826	592	519	372	461	330	—	—	2,382	1,706	6,363	4,558
1977	815	552	869	588	545	369	495	335	—	—	2,576	1,744	7,021	4,753
1978	927	588	990	628	590	374	518	328	—	—	2,882	1,827	7,771	4,926
1979	994	577	1,072	622	608	353	540	313	350	203	2,999	1,739	8,691	5,041
1980	1,060	543	1,150	589	675	346	574	294	373	191	3,284	1,681	9,603	4,916
1981	1,194	548	1,313	602	726	333	637	292	373	171	3,674	1,685	10,603	4,864
1982	1,264	533	1,402	592	802	338	697	294	438	185	4,192	1,769	11,308	4,772
1983	1,521	615	1,631	660	989	400	833	337	560	227	4,799	1,942	11,811	4,779
1984	1,673	653	1,889	737	1,246	486	1,013	395	777	303	5,292	2,065	12,734	4,968
1985	1,834	689	2,112	793	1,433	538	1,103	414	980	368	5,749	2,159	13,826	5,192
1986	1,942	709	2,235	816	1,543	563	1,170	427	1,070	390	6,385	2,330	14,549	5,309
1987	2,020	721	2,376	848	1,623	580	1,193	426	1,166	416	6,922	2,472	15,309	5,466
1988	2,104	722	2,523	865	1,650	566	1,238	425	1,271	436	7,453	2,556	16,255	5,576
1989	2,208	728	2,693	887	1,695	559	1,305	430	1,305	430	8,189	2,698	17,039	5,614
% Change 1971-89	323.0%	39.4%	415.9%	70.0%	347.2%	47.4%	269.7%	21.8%	—	—	390.1%	61.5%	315.7%	37.0%
% Change 1981-89	84.9%	32.8%	105.1%	47.3%	133.5%	67.7%	104.9%	47.2%	249.9%	151.3%	122.9%	60.1%	60.7%	15.4%

*All tuition rates are for undergraduate. Public system tuition rates are for Minnesota residents. Tuition rates for the University of Minnesota are an average of lower and upper division rates for academic years 1982-83 through 1988-89. The College of Liberal Arts and the College of Forestry tuition rates are the lowest and highest rates charged at the Twin Cities Campus in academic year 1988-89. The Minnesota Technical Institutes did not charge tuition for Minnesota residents under the age of 21 prior to 1979.
**Minnesota personal income per resident on a fiscal year basis. Income for fiscal years 1988 and 1989 is the January 1988 Department of Finance forecast.
***Consumer Price Index-United States with fiscal year 1971 = 100.0. Inflation rates for fiscal years 1988 and 1989 were assumed to be 4.1 percent.

Source: Minnesota Higher Education Coordinating Board

investment in post-secondary education. Table I.38 shows for Fiscal Year 1988 the distribution of state appropriations by function — institutional operation, student financial aid, statewide programs, and interstate tuition reciprocity.

The amounts do not include state appropriations to the Department of Finance for debt service on bonds sold for capital improvements in post-secondary education facilities. Table I.39 shows the distribution of state appropriations for institutional operations in Fiscal Year 1986. Table I.40 indicates the distribution of financial aid funds by system for Fiscal Year 1988 based on the State Scholarship and Grant Program, the State Part-Time Grant Program, and the State

Table I.29
Tuition and Fees Compared to Minnesota Per Capita Income* in Current and Constant Dollars, Technical Institutes, Academic Years 1979 Through 1989

Academic Year	Tuition and Fees	Annual % Change T and F	Cumulative % Change	Per Capita Personal Income	Annual % Change Total	Cumulative % Change
			Current Dollars			
1978-79	$ 350	—	—	$ 8,691	—	—
1979-80	373	6.6%	6.6%	9,603	10.5%	10.5%
1980-81	373	0.0	6.6	10,603	10.4	22.0
1981-82	438	17.4	25.1	11,308	6.6	30.1
1982-83	560	27.9	60.0	11,811	4.4	35.9
1983-84	777	38.8	122.0	12,734	7.8	46.5
1984-85	930	26.1	180.0	13,826	8.6	59.1
1985-86	1 070	9.2	205.7	14,549	5.2	67.4
1986-87	1,166	9.0	233.1	15,309	5.2	76.1
1987-88	1,271	9.0	263.1	16,255	6.2	87.0
1988-89	1,305	2.7	272.9	17,039	4.8	96.1
			Constant Dollars**			
1978-79	350	—	—	8,691	—	—
1979-80	309	−5.9	−5.9	8,476	−2.5	−2.5
1980-81	[illegible]	−10.4	−15.7	8,386	−1.1	[illegible].5
1981-82	319	8.0	−8.9	8,227	−1.9	−5.3
1982-83	391	22.6	11.6	8,239	0.1	−5.2
1983-84	523	33 8	49.3	8,566	4.0	−1.4
1984-85	634	21.4	81.3	8,951	4.5	3.0
1985-86	673	6.1	92.4	9,154	2.3	5.3
1986-87	718	6.6	105.1	9,425	3.0	8.4
1987-88	752	4.7	114.8	9,613	2.0	10.6
1988-89	741	−1.4	111.8	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis
**Consumer Price Index-United States with fiscal year 1979 = 100 0

Source: Minnesota Higher Education Coordinating B

Work-Study Program. Table I.41 displays the distribution of state appropriations for institutional operation and financial aid by system, category of institution, and statewide function. State appropriations to systems and categories of institutions include appropriations for institutional operations and appropriations for financial aid to students attending those systems and institutions.

Table I.42 displays average salaries for full-time faculty in Minnesota public collegiate institutions. Average salaries are displayed by rank and type of institution for Fiscal Years 1979-80 and 1987-88 in current and constant dollars. Because changes over time in the distribution of faculty by rank and institution affect overall average salaries, an additional comparison is provided using the 1987-88 distribution of faculty by rank to calculate the 1979-80 overall average salary; this comparison illustrates the overall impact of changes in salary only.

Comparisons

Additional perspective on the status of Minnesota post-secondary education is provided in this chapter by comparisons between Minnesota and other states. In addition, expenditures for Minnesota post-secondary education are compared with expenditures for other state services.

Table I.30
Tuition and Fees Compared to Minnesota Per Capita Income* In Current and Constant Dollars Community College System Academic Years 1979 Through 1989

Academic Year	Tuition and Fees	Annual % Change T and F	Cumulative % Change	Per Capita Personal Income	Annual % Change Total	Cumulative % Change
			Current Dollars			
1978-79	$ 540	—	—	$ 8,691	—	—
1979-80	574	6.3%	6.3%	9,603	10.5%	10.5%
1980-81	637	11.0	18.0	10,603	10.4	22.0
1981-82	697	9.4	29.1	11,308	6.6	30.1
1982-83	833	19.5	54.3	11,811	4.4	35.9
1983-84	1,013	21.6	87.6	12,734	7.8	46.5
1984-85	1,103	8.9	104.3	13,826	8.6	59.1
1985-86	1,170	6.1	116.7	14,549	5.2	67.4
1986-87	1,193	2.0	120.9	15,309	5.2	76.1
1987-88	1,238	3.8	9.3	16,255	6.2	87.0
1988-89	1,305	5.4	141.7	17,039	4.8	96.1
			Constant Dollars**			
1978-79	540	—	—	8,691	—	—
1979-80	507	−6.2	−6.2	8,476	−2.5	−2.5
1980-81	504	−0.6	−6.7	8,386	−1.1	−3.5
1981-82	507	0.7	−6.1	8,227	−1.9	−5.3
1982-83	581	14.6	7.6	8,239	0.1	−5.2
1983-84	681	17.3	26.2	8,566	4.0	−1.4
1984-85	714	4.8	32.2	8,951	4.5	3.0
1985-86	735	3.1	36.3	9,154	2.3	5.3
1986-87	734	−0.2	36.0	9,425	3.0	8.4
1987-88	732	−0.3	35.6	9,613	2.0	10.6
1988-89	741	1.3	37.3	9,680	0.7	11.4

*Minnesota Personal Income per Resident on a fiscal year basis
**Consumer Price Inc. -United States with fiscal year 1979 = 100.0

Source: Minnesota Higher Education Coordinating Board

Tables I.43 through I.47 show the ranking of Minnesota public tuition and fee rates compared to rates at similar institutions in other states for 1986 and 1987-88.

Tables I.43 and I.44 present tuition and required fees at public universities for resident undergraduates and graduates. This group consists of the major public doctoral level institutions in each state. The rates displayed for Minnesota are for the University of Minnesota.

Tables I.45 and I.46 present average tuition and required fees for resident undergraduate and graduate students at public colleges and universities. This group consists of 210 public comprehensive and general baccalaureate institutions in 46 states. The rates displayed for Minnesota are the average of the Minnesota State University System, excluding Metropolitan State University.

Table I.47 shows average tuition and required fees at public community colleges. The rates are an average for community colleges in 48 states. Minnesota rates are those for the Minnesota Community College System.

Table I.31
Tuition, Fees, Room and Board Compared to Minnesota Per Capita Income* In Current and Constant Dollars State University System Academic Years 1979 Through 1989

Academic Year	Tuition and Fees***	Annual Percent Change T & F	Room and Board	Annual Percent Change R & B	Total T & F + R & B	Annual Percent Change Total	Cumulative Percent Change	Per Capita Personal Income	Annual Percent Change Total	Cumulative Percent Change
					Current Dollars					
1978-79	$ 608	--	$1,155	—	$1,763	—	—	$ 8,691	—	—
1979-80	675	11.0%	1,160	0.4%	1,835	4.1%	4.1%	9,603	10.5%	10.5%
1980-81	726	7.6	1,180	1.7	1,906	3.9	9.1	10,603	10.4	22.0
1981-82	802	10.5	1,265	7.2	2,067	8.4	17.2	11,308	6.6	30.1
1982-83	989	23.3	1,445	14.2	2,434	17.8	38.1	11,811	4.4	35.9
1983-84	1,246	26.0	1,430	−1.0	2,676	9.9	51.8	12,734	7.8	46.5
1984-85	1,433	15.0	1,560	9.1	2,993	11.8	69.8	13,826	8.6	59.1
1985-86	1,543	7.7	1,670	7.1	3,213	7.4	82.2	14,549	5.2	67.4
1986-87	1,623	5.2	1,722	3.1	3,345	4.1	89.7	15,309	5.2	76.1
1987-88	1,650	1.7	1,895	10.0	3,545	6.0	101.1	16,255	6.2	87.0
1988-89	1,695	2.7	2,030	7.1	3,725	5.1	111.3	17,0.	4.8	96.1
					Constant Dollars**					
1978-79	608	—	1,155	—	1,763	—	—	8,691	—	—
1979-80	596	−2.0	1,024	−11.4	1,620	−8.1	−8.1	8,476	−2.5	−2.5
1980-81	574	−3.6	933	−8.8	1,507	−6.9	−14.5	8,386	−1.1	−3.5
1981-82	584	1.6	920	−1.4	1,504	−0.2	−14.7	8,227	−1.9	−5.3
1982-83	690	18.2	1,008	9.5	1,698	12.9	−3.7	8,239	0.1	−5.2
1983-84	838	21.5	962	−4.6	1,800	6.0	2.1	8,566	4.0	−1.4
1984-85	928	10.7	1,010	5.0	1,938	7.6	9.9	8,951	4.5	3.0
1985-86	971	4.6	1,051	4.0	2,022	4.3	14.7	9,154	2.3	5.3
1986-87	999	2.9	1,060	0.9	2,059	1.9	16.8	9,425	3.0	8.4
1987-88	976	−2.3	1,121	5.7	2,097	1.8	18.9	9,613	2.0	10.6
1988-89	963	−1.3	1,150	2.9	2,116	0.9	20.0	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis.
**Consumer Price Index-United States with fiscal year 1979 = 100.0
***Tuition and maximum required fees. Excludes Metropolitan State University.

Source: Minnesota Higher Education Coordinating Board

Tables I.48 through I.52 present rankings in five categories of undergraduate need-based financial aid for Fiscal Years 1987 and 1988. The data for Fiscal Year 1988 are based on estimated data reported to the National Association of State Scholarship and Grant Programs and thus may differ from other program data for Minnesota in this report.

Table I.48 presents total payments for need-based financial aid for undergraduates. The aggregate level of payments is influenced by many variables, such as the size of the student population in the state and state policies regarding private post secondary education. Table I.49 shows the number of awards for need-based financial aid undergraduates. Table I.50 presents average awards for need-based undergraduate financial aid. One reason for Minnesota's lower rank in this category than in other comparisons is because the maximum grant aid a student can receive is based on the

Table I.32
Tuition, Fees, Room and Board Compared to Minnesota Per Capita Income* In Current and Constant Dollars University of Minnesota-Twin Cities College of Liberal Arts Academic Years 1979 Through 1989

Academic Year	Tuition and Fees***	Annual Percent Change T & F	Room and Board	Annual Percent Change R & B	Total T & F + R & B	Annual Percent Change Total	Cumulative Percent Change	Per Capita Personal Income	Annual Percent Change Total	Cumulative Percent Change
Current Dollars										
1978-79	$ 994	—	$1,680	—	$2,674	—	—	$ 8,691	—	—
1979-80	1,060	6.6%	1,796	6.9%	2,856	6.8%	6.8%	9,603	10.5%	10.5%
1980-81	1,194	12.6	1,971	9.7	3,165	10.8	18.4	10,603	10.4	22.0
1981-82	1,284	5.9	2,245	13.9	3,509	10.9	31.2	11,308	6.6	30.1
1982-83	1,520	20.3	2,575	14.7	4,095	16.7	53.1	11,811	4.4	35.9
1983-84	1,673	10.1	2,446	−5.0	4,119	0.6	54.0	12,734	7.8	46.5
1984-85	1,834	9.6	2,623	7.2	4,457	8.2	66.7	13,826	8.6	59.1
1985-86	1,942	5.9	2,610	−0.5	4,552	2.1	70.2	14,549	5.2	67.4
1986-87	2,020	4.0	2,595	−0.6	4,615	1.4	72.6	15,309	5.2	76.1
1987-88	2,104	4.2	2,648	2.0	4,752	3.0	77.7	16,255	6.2	87.0
1988-89	2,208	4.9	2,826	6.7	5,034	5.9	88.3	17,039	4.8	96.1
Constant Dollars**										
1978-79	994	—	1,680	—	2,674	—	—	8,691	—	—
1979-80	936	−5.9	1,585	−5.6	2,521	−5.7	−5.7	8,476	−2.5	−2.5
1980-81	944	0.9	1,559	−1.7	2,503	−0.7	−6.4	8,386	−1.1	−3.5
1981-82	920	−2.6	1,633	4.8	2,553	2.0	−4.5	8,227	−1.9	−5.3
1982-83	1,060	15.3	1,796	10.0	2,857	11.9	3.8	8,239	0.1	−5.2
1983-84	1,125	6.1	1,645	−8.4	2,771	−3.0	3.6	8,566	4.0	−1.4
1984-85	1,187	5.5	1,698	3.2	2,886	4.1	7.9	8,951	4.5	3.0
1985-86	1,222	2.9	1,642	−3.3	2,864	−0.7	7.1	9,154	2.3	5.3
1986-87	1,244	1.8	1,598	−2.7	2,841	−0.8	6.3	9,425	3.0	8.4
1987-88	1,244	0.1	1,566	−2.0	2,810	−1.1	5.1	9,613	2.0	10.6
1988-89	1,254	0.8	1,605	2.5	2,860	1.8	7.0	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis
**Consumer Price Index-United States with fiscal year 1979 = 100.0
***Average of lower division and upper division tuition rates

Source: Minnesota Higher Education Coordinating Board

combination of the state grant and federal Pell grant.

Table I.51 presents estimated grant dollars per undergraduate student by state for 1987-88. The objective is to relate each state's payment to its pool of undergraduate students. Total undergraduate students is the best available measure of the pool of eligible students. This measure probably overestimates the number of eligible students for the states. Undergraduate headcount includes nonresidents who are not eligible in most states and part-time students who are not eligible in some states. Table I.52 shows the change over five years in total awards for state programs, thus providing an overview of the trends over time.

Tables I.53 through I.59 present comparative state-level fiscal

Table I.33
Tuition, Fees, Room and Board Compared to Minnesota Per Capita Income* In Current and Constant Dollars University of Minnesota-Twin Cities Institute of Technology Academic Years 1979 Through 1989

Academic Year	Tuition and Fees***	Annual Percent Change T & F	Room and Board	Annual Percent Change R & B	Total T & F + R & B	Annual Percent Change Total	Cumulative Percent Change	Per Capita Personal Income	Annual Percent Change Total	Cumulative Percent Change
Current Dollars										
1978-79	$1,135	—	$1,680	—	$2,815	—	—	$ 8,691	—	—
1979-80	1,219	7.4%	1,796	6.9%	3,015	7.1%	7.1%	9,603	10.5%	10.5%
1980-81	1,374	12.7	1,971	9.7	3,345	10.9	18.1	10,603	10.4	22.0
1981-82	1,465	6.6	2,245	13.9	3,710	10.9	31.8	11,308	6.6	30.1
1982-83	1,620	10.6	2,575	14.7	4,195	13.1	49.0	11,811	4.4	35.9
1983-84	1,806	11.5	2,446	−5.0	4,252	1.4	51.0	12,734	7.8	46.5
1984-85	2,002	10.9	2,623	7.2	4,625	8.8	64.3	13,826	8.6	59.1
1985-86	2,119	5.8	2,610	−0.5	4,729	2.2	68.0	14,549	5.2	67.4
1986-87	2,210	4.3	2,595	−0.6	4,805	1.6	70.7	15,309	5.2	76.1
1987-88	2,303	4.2	2,648	2.0	4,951	3.0	75.9	16,255	6.2	87.0
1988-89	2,429	5.5	2,826	6.7	5,255	6.1	86.7	17,039	4.8	96.1
Constant Dollars**										
1978-79	1,135	—	1,680	—	2,815	—	—	8,691	—	—
1979-80	1,076	−5.2	1,585	−5.6	2,661	−5.5	−5.5	8,478	−2.5	−2.5
1980-81	1,087	1.0	1,559	−1.7	2,645	−0.6	−6.0	8,386	−1.1	−3.5
1981-82	1,066	−1.9	1,633	4.8	2,699	2.0	−4.1	8,227	−1.9	−5.3
1982-83	1,130	6.0	1,796	10.0	2,926	8.4	4.0	8,239	0.1	−5.2
1983-84	1,215	7.5	1,645	−8.4	2,860	−2.3	1.6	8,566	4.0	−1.4
1984-85	1,296	6.7	1,698	3.2	2,994	4.7	6.4	8,951	4.5	3.0
1985-86	1,333	2.9	1,642	−3.3	2,975	−0.6	5.7	9,154	2.3	5.3
1986-87	1,361	2.0	1,598	−2.7	2,958	−0.6	5.1	9,425	3.0	8.4
1987-88	1,362	0.1	1,566	−2.0	2,928	−1.0	4.0	9,613	2.0	10.6
1988-89	1,380	1.3	1,605	2.5	2,985	2.0	6.1	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis.
**Consumer Price Index-United States with fiscal year 1979 = 100.0
***Average of lower division and upper division tuition rates

Source: Minnesota Higher Education Coordinating Board

data based on *State Profiles: Financing Public Higher Education* by Research Associates of Washington. In 1987 a group of representatives from the Coordinating Board and post-secondary systems and the Department of Finance reviewed five publications that use state-level data and concluded that this material is the most appropriate for examining state efforts in financing post-secondary education. The group also agreed on eight conclusions regarding Minnesota's financial support for public post-secondary education based on the publication.

Although the publication is considered technically superior to other sources, it also has some limitations. Compliance with its data definitions,

Table I.34
Tuition, Fees, Room and Board Compared to Minnesota Per Capita Income* In Current and Constant Dollars University of Minnesota-Twin Cities College of Forestry Academic Years 1979 Through 1989

Academic Year	Tuition and Fees***	Annual Percent Change T & F	Room and Board	Annual Percent Change R & B	Total T & F + R & B	Annual Percent Change Total	Cumulative Percent Change	Per Capita Personal Income	Annual Percent Change Total	Cumulative Percent Change
					Current Dollars					
1978-79	$1,072	–	$1,680	–	$2,752	–	–	$ 8,691	–	–
1979-80	1,150	7.3%	1,796	6.9%	2,946	7.0%	7.0%	9,603	10.5%	10.5%
1980-81	1,313	14.2	1,971	9.7	3,284	11.5	19.3	10,603	10.4	22.0
1981-82	1,402	6.8	2,245	13.9	3,647	11.1	32.5	11,308	6.6	30.1
1982-83	1,631	16.3	2,575	14.7	4,206	15.3	52.8	11,811	4.4	35.9
1983-84	1,889	15.8	2,446	−5.0	4,335	3.1	57.5	12,734	7.8	46.5
1984-85	2,112	11.8	2,623	7.2	4,735	9.2	72.1	13,826	8.6	59.1
1985-86	2,235	5.8	2,610	−0.5	4,845	2.3	76.1	14,549	5.2	67.4
1986-87	2,376	6.3	2,595	−0.6	4,971	2.6	80.6	15,309	5.2	76.1
1987-88	2,523	6.2	2,648	2.0	5,171	4.0	87.9	16,255	6.2	87.0
1988-89	2,693	6.7	2,826	6.7	5,519	6.7	100.5	17,039	4.8	96.1
					Constant Dollars**					
1978-79	1,072	–	1,680	–	2,752	–	–	8,691	–	–
1979-80	1,015	−5.3	1,585	−5.6	2,600	−5.5	−5.5	8,476	−2.5	−2.5
1980-81	1,038	2.3	1,559	−1.7	2,597	−0.1	−5.6	8,386	−1.1	−3.5
1981-82	1,020	−1.8	1,633	4.8	2,653	2.2	−3.6	8,227	−1.9	−5.3
1982-83	1,138	11.5	1,796	10.0	2,934	10.6	6.6	8,239	0.1	−5.2
1983-84	1,271	11.7	1,645	−8.4	2,916	−0.6	6.0	8,566	4.0	−1.4
1984-85	1,367	7.6	1,698	3.2	3,066	5.1	11.4	8,951	4.5	3.0
1985-86	1,406	2.8	1,642	−3.3	3,048	−0.6	10.8	9,154	2.3	5.3
1986-87	1,463	4.0	1,598	−2.7	3,060	0.4	11.2	9,425	3.0	8.4
1987-88	1,492	2.0	1,566	−2.0	3,058	−0.1	11.1	9,613	2.0	10.6
1988-89	1,530	2.5	1,605	2.5	3,135	2.5	13.9	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis
**Consumer Price Index-United States with fiscal year 1979 = 100.0
***Average of lower division and upper division tuition rates.

Source Minnesota Higher Education Coordinating Board

particularly with respect with state expenditures that do not flow through institutions, was a concern as was the lack of data on state support to private institutions. A final concern regarding the use of the data is its applicability. It compares state financial support for public post-secondary education in total. It does not address support for specific institutions, categories of institutions, or systems.

Table I.53 shows student enrollment per 1,000 residents for 1987-88 in Minnesota public institutions. It shows that enrollment in Minnesota's public post-secondary institutions relative to its population is high, and has grown since the late 1970s in both absolute terms and relative to the national average. This

Table I.35
Tuition, Fees, Room and Board Compared to Minnesota Per Capita Income* In Current and Constant Dollars Minnesota Private Colleges** Academic Years 1979 Through 1989

Academic Year	Tuition and Fees	Annual Percent Change T & F	Room and Board	Annual Percent Change R & B	Total T & F + R & B	Annual Percent Change Total	Cumulative Percent Change	Per Capita Personal Income	Annual Percent Change Total	Cumulative Percent Change
Current Dollars										
1978-79	$2,999	—	$1,410	—	$4,409	—	—	$ 8,691	—	—
1979-80	3,284	9.5%	1,484	5.2%	4,768	8.1%	8.1%	9,603	10.5%	10.5%
1980-81	3,674	11.9	1,660	11.9	5,334	11.9	21.0	10,603	10.4	22.0
1981-82	4,193	14.1	1,779	7.2	5,972	12.0	35.5	11,308	6.6	30.1
1982-83	4,799	14.5	1,972	10.8	6,771	13.4	53.6	11,811	4.4	35.9
1983-84***	5,295	10.3	2,188	11.0	7,483	10.5	69.7	12,734	7.8	46.5
1984-85	5,841	10.3	2,300	5.1	8,141	8.8	84.6	13,826	8.6	59.1
1985-86	6,385	9.3	2,410	4.8	8,795	8.0	99.5	14,549	5.2	67.4
1986-87	6,922	8.4	2,520	4.6	9,442	7.4	114.2	15,309	5.2	76.1
1987-88	7,453	7.7	2,637	4.6	10,090	6.9	128.9	16,255	6.2	87.0
1988-89	8,189	9.9	2,803	6.3	10,992	8.9	149.3	17,039	4.8	96.1
Constant Dollars****										
1978-79	2,999	—	1,410	—	4,409	—	—	8,691	—	—
1979-80	2,898	−3.4	1,310	−7.1	4,208	−4.6	−4.6	8,476	−2.5	−2.5
1980-81	2,906	0.2	1,313	0.2	4,219	0.2	−4.3	8,386	−1.1	−3.5
1981-82	3,051	5.0	1,294	−1.4	4,345	3.0	−1.5	8,227	−1.9	−5.3
1982-83	3,348	9.7	1,376	6.3	4,723	8.7	7.1	8,239	0.1	−5.2
1983-84	3,562	6.4	1,472	7.0	5,034	6.6	14.2	8,566	4.0	−1.4
1984-85	3,782	6.2	1,489	1.2	5,271	4.7	19.5	8,951	4.5	3.0
1985-36	4,017	6.2	1,516	1.8	5,534	5.0	25.5	9,154	2.3	5.3
1986-87	4,262	6.1	1,551	2.3	5,813	5.0	31.8	9,425	3.0	8.4
1987-88	4,408	3.4	1,560	0.5	5,967	2.7	35.3	9,613	2.0	10.6
1988-89	4,652	5.5	1,592	2.1	6,245	4.6	41.6	9,680	0.7	11.4

*Minnesota Personal Income per resident on a fiscal year basis
**Includes the 17 institutions that are members of the Minnesota Private College Council
***Room and Board and Total exclude data for the Minneapolis College of Art and Design
****Consumer Price Index-United States with fiscal year 1979 = 100.0

Source: Minnesota Higher Education Coordinating Board

growth was added to a level of enrollment that was already well above the national average. The growth appears to be due in part to increased participation by individuals other than recent high school graduates.

Table I.54 shows tax revenue per capita and allocation to public higher education. Minnesota's average tax capacity and its high tax effort combine to yield tax revenue per capita that is well above the national average. Minnesota's average tax revenue per capita combined with its average allocation to public post-secondary education suggests that it provides a level of appropriations for public post-secondary education on a per capita basis that is above the national average.

Table I.55 shows appropriations per student. Minnesota's average level of appropriations per student combined with its average net tuition revenue per

Table I.36
State Appropriations for Student Assistance, Fiscal Years 1982-1989

Fiscal Year	1982	1983	1984	1985	1986	1987	1988	1989
Grants								
Scholarships	$12,193,500	$11,632,500	$11,575,000	$11,900,000	$12,655,400	$14,018,700	$16,050,000	$15,312,500
Grant-in-Aid	18,141,900	17,373,700	34,724,000	35,666,000	38,300,000	42,281,300	48,150,000	45,937,500
Nursing Grants	148,000	75,000	700,000	0	0	0	0	0
Subtotal	30,483,400	29,081,200[1]	46,999,000	47,566,000	50,955,400[2]	56,300,000[3]	64,200,000	61,250,000
AVTI Subsidy	1,400,000	1,400,000	0	0	0	0	0	0
Part-Time Grant Vets	300,000	300,000	300,000	300,000	1,000,000	2,000,000	2,000,000	2,000,000
Dependents	1,200	1,200	0	0	0	0	0	0
Work-Study	3,891,000	4,067,000	4,209,000	4,428,600	4,428,600	4,428,600	4,503,600	4,678,600
Total	36,075,600	34,849,400	51,508,000	52,294,600	56,384,000	62,728,600	70,703,600	67,928,600
Total in Constant Dollars[4]	29,740,808	27,548,933	39,259,146	38,367,278	40,166,168	43,743,794	47,356,731	43,321,811

[1]The Fiscal Year 1983 appropriation was reduced by $1.9 million under Chapter 2, Third Special Session 1981, *Minn. Laws* 1982, Chapter 641 called for an additional reduction of $1,265,000 in Fiscal Year 1983. This was to be done at the end of the fiscal year through refunds.
[2]The Fiscal Year 1986 appropriation was reduced by $344,600 under the governor's unallotment process.
[3]The Fiscal Year 1987 appropriation was reduced by $1.5 million under *Minn. Laws 1986*, First Special Session, Chapter 1, Article 10, Section 1, Subd. 3.
[4]United States Consumer Price Index used as a deflator. Fiscal Year 1980 = 100. Fiscal Year 1989 inflation rate was estimated to be 5 percent.

Source: Minnesota Higher Education Coordinating Board

Table I.37
Recipients Under State-Funded Student Financial Aid Programs, Fiscal Years 1980-1989

Academic Year Program	1979-80 FY 80	1980-81 FY 81	1981-82 FY 82	1982-83 FY 83	1983-84 FY 84	1984-85 FY 85	1985-86 FY 86	1986-87 FY 87	1987-88 FY 88	1988-89 FY 89[1]
Scholarship and Grant	28,033	38,254	42,822	41,053	52,130	53,036	55,858	62,987	62,237	63,667
Part-Time Grant	1,448	1,583	1,358	1,245	1,011	1,143	2,274	4,579	5,627	6,300
AVTI Subsidy	7,342	6,126	4,595	4,278	0	0	0	0	0	0
Work-Study	5,307	6,533	6,675	7,228	7,363	7,372	7,225	7,350	6,970	7,596
Total	42,130	52,496	55,450	53,804	60,504	61,551	65,357	74,916	74,834	77,563

[1]Estimates for 1988-89

Source: Minnesota Higher Education Coordinating Board

Table I.38
Relative Investment in Post-Secondary Education by Function Fiscal Year 1988

	Appropriations	Percent of Total
Funds for Institutional Operation	$738,165,900	90.4%
Student Financial Aid	67,976,490	8.3
Statewide Programs	6,921,098	0.8
Interstate Tuition Reciprocity	3,908,000	0.5
Total	$816,971,488	100.0%

Source: Minnesota Higher Education Coordinating Board

Table I.39
Distribution of State Appropriations for Institutional Operation Fiscal Year 1988

System	Appropriations	Percent of Total
University of Minnesota	$387,865,200	52.5%
State University System	130,897,600	17.7
Community College System	66,122,900	9.0
Technical Institute System	152,428,900	20.6
Mayo	851,300	0.1
Total	$738,165,900	100.0%

Source Minnesota Higher Education Coordinating Board

student results in levels of appropriations and tuition revenue per student that are equal to the national average. Recent declines in appropriations per student have been balanced by increases in net tuition revenue per student to achieve more stable levels of appropriations and tuition per student.

Table I.56 shows estimated net tuition revenue per student. Minnesota's tuition revenue per student net of state financial aid rose from well below the national average in 1977-78 to 10 percent above the national average in 1984-85 and has since declined to the national average.

Table I.57 shows appropriations per student and estimated tuition per student. Minnesota's above average per capita appropriations for public post-secondary education and its very high level of enrollment relative to population combine to yield a level of appropriations per student that is equal to the national average. The state's level of appropriations per

Table I.40
Distribution of State Appropriations for Financial Aid Awards by System Fiscal Year 1988

System	Total	Percent of Total
University of Minnesota	$10,894,356	15.8%
State University System	10,788,118	15.6
Community College System	6,242,196	9.0
Technical Institute System	9,256,086	13.4
Private Four-Year Institutions	25,002,948	36.2
Private Two-Year Institutions	6,846,549	9.9
Total	69,030,853	100.0%

Source. Minnesota Higher Education Coordinating Board

Table I.41
Distribution of State Appropriations for Institutional Operation and Financial Aid by System Fiscal Year 1988

System	Appropriations	Percent of Total
University of Minnesota	$398,499,002	48.8%
State University System	141,574,113	17.3
Community College System	72,320,501	8.9
Technical Institute System	161,574,802	19.8
Private Four-Year	24,540,231	3.0
Private Two-Year	6,782,441	0.8
Mayo	851,300	0.1
Statewide Programs and Coordination	6,921,098	0.8
Interstate Reciprocity	3,908,000	0.5
Total	$816,971,488	100.0%

Source. Minnesota Higher Education Coordinating Board

student has declined relative to the national average, apparently as a result of the enrollment increases and the decline in the percentage of state and local tax revenues allocated to public post-secondary education.

Table I.58 shows potential tax revenues per student.

Minnesota's potential to support public post-secondary education on a per student basis is low relative to the national average because of its high enrollment levels.

Table I.59 presents rankings for collective financial actions. That is, a comparison of Minnesota's appropriations and net tuition revenue per student to its available tax dollars per student suggests that Minnesota's effort in support of public post-secondary education ranks well above the national average. This high ranking must be balanced with a recognition that as a result of high enrollments,

Table I.42
Average Salaries and Number of Full-Time Faculty in Minnesota Public Collegiate Institutions by Academic Rank and Institution Type in Current and Constant Dollars, Academic Years 1979-80 and 1987-88

Academic Rank and Institution Type	1979-80 Number	1979-80 Average Salary	1987-88 Number	1987-88 Average Salary Current Dollars	1987-88 Average Salary Constant Dollars	Percent Change Current Dollars 1980 to 1988	Percent Change Constant Dollars 1980 to 1988
Doctoral Institution[1]							
Professor	817	$31,395	780	$52,084	$34,885	65.9%	11.1%
Associate	441	23,106	483	38,264	25,629	65.6	10.9
Assistant	406	18,800	333	32,675	21,885	73.8	16.4
Instructor	114	15,698	23	28,774	19,273	83.3	22.8
Overall	1,778	25,457	1,619	43,638	29,228	71.4	14.8
Overall Holding Distribution Constant[5]		26,115		43,638	29,228	67.1	11.9
Comprehensive Institutions[2]							
Professor	248	25,762	315	43,512	29,144	68.9	13.1
Associate	287	21,712	277	34,782	23,297	60.2	7.3
Assistant	319	17,997	307	28,058	18,793	55.9	4.4
Instructor	126	14,971	93	22,427	15,021	49.8	0.3
Overall	980	20,661	992	34,315	22,984	66.1	11.2
Overall Holding Distribution Constant[5]		21,221		34,315	22,984	61.7	8.3
General Baccalaureate[3] Institutions							
Professor	53	24,874	80	43,381	29,056	74.4	16.8
Associate	54	20,077	64	34,543	23,137	69.5	13.5
Assistant	68	17,347	67	27,912	18,695	60.9	7.8
Instructor	14	14,097	28	22,362	14,978	58.6	6.2
Overall	189	20,083	239	34,215	22,917	70.4	14.1
Overall Holding Distribution Constant[5]		20,206		34,215	22,917	69.3	13.4
Two-Year Academic Institutions[4]							
Overall	866	19,884	838	33,399	22,370	68.0	12.5
Overall Holding Distribution Constant[5]		19,911		33,399	22,370	67.7	12.4

[*] Consumer Price Index-United States with fiscal year 1980 = 100.0

[1] Includes University of Minnesota-Twin Cities
[2] Includes University of Minnesota-Duluth and Bemidji, Moorhead and Winona State Universities
[3] Includes University of Minnesota-Morris and Metropolitan and Southwest State Universities
[4] Includes University of Minnesota campuses at Crookston and Waseca and all Minnesota Community Colleges
[5] Changes in average salary over time are the result of changes in salaries and changes in the distribution of faculty by rank and institution. This comparison uses the 1987-88 distribution of faculty by rank to compute the 1979-80 average and eliminate the impact of changes in rank

Source: Meryse Eymonerie Associates, McLean, Virginia

Table I.43
Tuition and Required Fees for Resident Undergraduates at Public Universities in Selected States by Rank, 1986-87 and 1987-88

1986-87 Rank	State	Rate	1987-88 Rank	State	Rate
1	Vermont	$3,208	1	Vermont	$3,432
2	Pennsylvania	2,996	2	Pennsylvania	3,292
3	Michigan	2,695	3	Michigan	2,828
4	New Hampshire	2,529	4	New Hampshire	2,754
5	New Jersey	2,278	5	New Jersey	2,573
6	Virginia	2,238	6	Delaware	2,501
7	**Minnesota**	2,205	7	Virginia	2,366
8	Delaware	2,205	8	**Minnesota**	2,331
9	Illinois	2,083	9	Illinois	2,215
10	Massachusetts	2 046	10	Connecticut	2,133
	National Average	1,592	21	Wisconsin	1,737
22	Wisconsin	1,570		National Average	1,702
24	South Dakota	1,542	24	South Dakota	1,631
30	Iowa	1,390	27	Iowa	1,564
37	North Dakota	1,266	30	New York	1,474
40	Arizona	1,136	32	North Dakota	1,412
50	Wyoming	778	40	Arkansas	1,230
			50	Wyoming	778

Source *1987-88 Tuition and Fee Rates — A National Comparison*, Higher Education Coordinating Board, State of Washington (February 1988)

the state's above average effort yields only average levels of support per student.

Tables I.60 through I.62 show the scores of Minnesota students on college aptitude tests (the Preliminary Scholastic Aptitude Test, American College Testing Program, and Scholastic Aptitude Test) during the past decade.

Tables I.63 and I.64 compare spending for post-secondary education with spending for other state services. Table I.63 shows total state general fund expenditures in the 1987-89 biennium by major categories. Table I.64 shows post-secondary education expenditures as a percent of Minnesota general fund expenditures for the past 14 years. Expenditures for post-secondary education include state appropriations, tuition revenue, and other receipts. This category includes expenditures for the University of Minnesota, State University System, Community College System, technical institutes, and Higher Education Coordinating Board.

Table I.44
Average Tuition and Required Fees for Resident Graduates at Public Universities in Selected States by Rank, 1986-87 and 1987-88

1986-87 Rank	State	Rate	1987-88 Rank	State	Rate
1	Michigan	$4,140	1	Michigan	$4,514
2	Vermont	3,208	2	Pennsylvania	3,510
3	Pennsylvania	3,194	3	New Jersey	3,438
4	New Jersey	2,995	4	Vermont	3,368
5	Minnesota	2,683	5	Minnesota	2,820
6	New Hampshire	2,529	6	New Hampshire	2,754
7	Illinois	2,514	7	Illinois	2,662
8	Washington	2,319	8	Washington	2,505
9	Wisconsin	2,255	9	Wisconsin	2,484
10	Connecticut	2,240	10	Ohio	2,481
	National Average	1,775		National Average	1,898
26	Iowa	1,646	23	Iowa	1,852
30	Georgia	1,451	30	North Dakota	1,610
31	North Dakota	1,446		Arkansas	1,610
32	South Dakota	1,422	34	South Dakota	1,494
40	Montana	1,227	40	Hawaii	1,276
50	Texas	590	50	Texas	584

Source: *1987-88 Tuition and Fee Rates – A National Comparison*, Higher Education Coordinating Board, State of Washington (February 1988)

Table I.45
Average Tuition and Required Fees for Resident Undergraduates at Public Colleges and State Universities in Selected States by Rank, 1986-87 and 1987-88

1986-87 Rank	State	Rate	1987-88 Rank	State	Rate
1	Vermont	$2,354	1	Vermont	$2,482
2	Virginia	2,077	2	Virginia	2,215
3	New Hampshire	1,909	3	Pennsylvania	2,039
4	Pennsylvania	1,882	4	New Hampshire	2,000
5	Ohio	1,826	5	Ohio	1,989
6	New Jersey	1,742	6	New Jersey	1,881
7	Maryland	1,660	7	Maryland	1,780
8	Indiana	1,656	8	Indiana	1,764
9	Minnesota	1,583	9	Michigan	1,675
10	Michigan	1,578	10	Minnesota	1,617
15	South Dakota	1,447	13	Wisconsin	1,564
17	Wisconsin	1,437	14	Iowa	1,548
18	Iowa	1,324	17	South Dakota	1,499
	National Average	1,289		National Average	1,380
30	North Dakota	1,125	29	North Dakota	1,226
40	Arkansas	909	30	Missouri	1,218
46	Oklahoma	652	40	West Virginia	1,008
			46	California	769

Source: *1987-88 Tuition and Fee Rates — A National Comparison*, Higher Education Coordinating Board, State of Washington (February 1988)

Table I.46
Average Tuition and Required Fees for Resident Graduates at Public Colleges and State Universities in Selected States by Rank, 1986-87 and 1987-88

1986-87 Rank	State	Rate	1987-88 Rank	State	Rate
1	Ohio	$2,368	1	Ohio	$2,528
2	Vermont	2,354	2	New Jersey	2,348
3	New York	2,198	3	New York	2,237
4	Oregon	2,161	4	Vermont	2,234
5	New Jersey	2,077	5	Oregon	2,225
6	Virginia	1,945	6	Virginia	2,074
7	New Hampshire	1,909	7	New Hampshire	2,000
8	Wisconsin	1,840	8	Pennsylvania	1,993
9	Pennsylvania	1,829	9	Wisconsin	1,971
10	Washington	1,710	10	Indiana	1,826
17	Iowa	1,476	13	Iowa	1,720
21	North Dakota	1,392	21	North Dakota	1,521
22	**Minnesota**	1,385		National Average	1,478
	National Average	1,378	25	**Minnesota**	1,413
26	South Dakota	1,346	27	South Dakota	1,396
30	Montana	1,146	30	Alabama	1,305
40	New Mexico	839	40	New Mexico	958
46	Oklahoma	516	46	Texas	591

Source: *1987-88 Tuition and Fee Rates — A National Comparison*, Higher Education Coordinating Board, State of Washington (February 1988)

Table I.47
Average Tuition and Required Fees for Residents at Public Community Colleges in Selected States by Rank, 1986-87 and 1987-88

1986-87 Rank	State	Rate	1987-88 Rank	State	Rate
1	Vermont	$1,440	1	Wisconsin	$1,393
2	Wisconsin	1,278	2	New York	1,389
3	Indiana	1,270	3	Indiana	1,343
4	New York	1,225	4	Vermont	1,304
5	**Minnesota**	1,193	5	**Minnesota**	1,238
6	North Dakota	1,108	6	North Dakota	1,208
7	Pennsylvania	1,105	7	Ohio	1,190
8	Ohio	1,090	8	Pennsylvenia	1,1[illegible]
9	New Jersey	924	9	Maryland	1,020
10	Iowa	913	10	New Jersey	993
	Netional Average	736	12	Iowa	937
30	Louisiene	630		Netional Averege	780
40	Missouri	527	30	Tennessee	681
48	California	100	40	Missouri	572
			48	California	100

South Dakote not included

South Dakota N/A

Source: *1987-88 Tuition and Fee Rates — A National Comparison*, Higher Education Coordinating Board, State of Washington (February 1988)

Table I.48
Total Payments, Need-Based Scholarships and Grants for Undergraduates, Selected States Fiscal Years 1987 and 1988

Fiscal Year 1987			Fiscal Year 1988[1]		
Rank	State	Payments (in thousands)	Rank	State	Payments (in thousands)
1.	New York	$391,989	1.	New York	$381,007
2.	Illinois	131,788	2.	Illinois	135,722
3.	California	112,770	3.	California	135,002
4.	Pennsylvania	103,401	4.	Pennsylvania	109,823
5.	Michigan	66,864	5.	New Jersey	72,475
6.	Minnesota	65,473	6.	Michigan	68,380
7.	New Jersey	63,978	7.	Massachusetts	61,654
8.	Massachusetts	56,995	8.	Minnesota	60,000
9.	Ohio	47,846	9.	Ohio	49,400
10.	Wisconsin	30,622	10.	Indiana	45,408
12.	Iowa	22,378	11.	Wisconsin	34,754
46.	South Dakota	563	12.	Iowa	26,157
47.	North Dakota	503	46.	South Dakota	581
52.	Wyoming	204	47.	North Dakota	540
			52.	Wyoming	204

[1]Estimated

Source: National Association of State Scholarship and Grant Programs, *19th Annual Survey Report, 1987-88 Academic Year* (January 1988)

Table I.49
Number of Awards, Need-Based Scholarships and Grants for Undergraduates, Selected States Fiscal Years 1987 and 1988

Fiscal Year 1987			Fiscal Year 1988[1]		
Rank	State	Number of Awards	Rank	State	Number of Awards
1.	New York	315,000	1.	New York	305,400
2	Pennsylvania	114,228	2.	Pennsylvania	114,176
3.	Illinois	100,810	3.	Illinois	101,025
4.	Ohio	71,155	4.	California	70,185
5.	California	67,877	5.	Ohio	68,000
6.	Minnesota	63,199	6.	Minnesota	66,000
7.	New Jersey	60,358	7.	Massachusetts	59,275
8.	Puerto Rico	56,630	8.	Puerto Rico	56,630
9.	Massachusetts	54,816	9.	New Jersey	54,466
10.	Wisconsin	48,507	10.	Wisconsin	52,125
18.	Iowa	14,683	18.	Iowa	16,475
38.	South Dakota	2,426	38	South Dakota	2,426
45.	North Dakota	1,175	44.	North Dakota	1,200
52.	Alaska	166	52.	Alaska	160

[1]Estimated

Source: National Association of State Scholarship and Grant Programs, *19th Annual Survey Report, 1987-88 Academic Year* (January 1988)

Table I.50
Average Award, Need-Based Scholarships and Grants for Undergraduates, Selected States Fiscal Years 1987 and 1988

Fiscal Year 1987			Fiscal Year 1988[1]		
Rank	State	Average Award	Rank	State	Average Award
1.	South Carolina	$2,097	1.	South Carolina	$2,[illegible]2
2.	California	1,661	2.	California	1,924
3.	Iowa	1,524	3.	Iowa	1,558
4.	Michigan	1,460	4	Alaska	1,500
5.	Alaska	1,380	5.	Michigan	1,492
6.	District of Columbia	1,346	6.	Indiana	1,410
7.	Illinois	1,307	7.	District of Columbia	1,405
8.	New York	1,244	8.	Illinois	1,344
9.	Texas	1,200	9.	New Jersey	1,331
10.	Missouri	1,1[illegible]1	10.	Texas	1,262
15.	**Minnesota**	1,036		National Average	1,070
	National Average	1,018	18.	**Minnesota**	909
36.	Wisconsin	631	37.	Wisconsin	667
45.	North Dakota	428	45.	North Dakota	450
51.	South Dakota	232	51.	South Dakota	239
52.	Puerto Rico	216	52.	Puerto Rico	226

[1]Estimated

Source National Association of State Scholarship and Grant Programs, *19th Annual Survey Report, 1987-88 Academic Year* (January 1988)

Table I.51
Estimated Grant Dollars to Undergraduates in 1987-88 per Undergraduate Enrollment, by State[1]

Rank	State	Need-Based Aid to Undergraduates
1.	New York	$533
2.	Vermont	355
3.	New Jersey	326
4.	Illinois	282
5.	**Minnesota**	273
6.	Pennsylvania	265
7.	Indiana	221
8.	Massachusetts	218
9.	Iowa	208
10.	Rhode Island	182
11.	Wisconsin	165
	National Average	154
36.	South Dakota	22
42.	North Dakota	17
50.	Idaho	10

[1]Grant dollars are estimates for 1987-88. Enrollment data are U.S. Department of Education "Fall Enrollment in Colleges and Universities 1985." The Minnesota figure has been adjusted to include technical institute headcount enrollment. this has not been done for other states. The federal data include only collegiate students

Source: National Association of State Scholarship and Grant Programs, *19th Annual Survey Report 1987-88 Academic Year* (January 1988)

Table I.52
Five-Year Percent Change in Aggregate Dollars of Awards for Comprehensive Undergraduate Need Based Scholarship and Grant Programs (Amounts in Thousands), 1982-83 – 1987-88

Rank	State	1982-83	1987-88[1]	Five-Year Percent Change
1.	Massachusetts	16,650	61,654	270.3
2.	Maine	518	1,422	174.5
3.	Tennessee	7,221	16,500	128.5
4.	Indiana	19,880	45,408	128.4
5.	Michigan	30,499	68,380	124.2
6.	Washington	5,979	12,975	117.0
7.	Arkansas	1,866	3,896	108.8
8.	Minnesota	29,217	60,000	105.4
9.	Kentucky	6,016	12,229	93.6
10.	Connecticut	8,594	12,337	90.1
18.	Iowa	17,259	26,157	51.6
19.	Wisconsin	23,040	34,754	50.8
	National	957,955	1,421,085	48.3
39.	South Dakota	531	581	9.4
51.	North Dakota	699	540	--22.7
52.	Idaho	462	343	–25.8

[1]Estimated

Source: National Association of State Scholarship and Grant Programs, *19th Annual Survey Report, 1987-88 Academic Year* (January 1988)

Table I.53
Student Enrollment Per 1,000 Residents in Selected States by Rank 1987-88 and Minnesota 1977-78 — 1987-88

Student Enrollment Load 1987-88	Annual FTE Public Students Per 1,000 Population	Index	System Financial Load — Public Students Load Adjusted Per 1,000 Population Index
1 North Dakota	44.4	149	161
2 Wisconsin	39.5	133	134
3. Minnesota	39.0	131	136
4. California	38.4	129	117
5. Kansas	38.3	129	138
6. North Carolina	37.3	125	124
7. Wyoming	36.8	123	121
8. Alabama	35.8	123	125
9. Michigan	35.7	123	122
10. Colorado	35.6	113	124
19. Iowa	32.9	110	120
39. South Dakota	25.1	84	96
United States	29.8	100	100
Minnesota 1977-78 — 1987-88			
1977-78	35.3	117	
1979-80	37.3	121	
1980-81	39.5	124	
1981-82	39.9	125	
1982-83	39.1	123	
1983-84	38.1	122	
1984-85	36.9	122	
1985-86	37.5	126	
1986-87	38.5	129	
1987-88	39.0	131	

Student Enrollment. Annual average full-time-equivalent students in public institutions of higher education per 1,000 population. Measures financial load for funding that supports student-related functions of instruction, academic and institutional support, student services, and operation and maintenance of the physical plant. Makes no distinction between the varied support requirements of the different types of institutions in the state system.

Source: Research Associates of Washington, *State Profiles: Financing Public Higher Education 1978 to 1988*

Table I.54
Tax Revenue Per Capita 1986 and Allocation to Public Higher Education 1987-88 in Selected States by Rank 1987-88 and Minnesota 1977-78 — 1987-88

Tax Revenue 1986 Estimated	Dollars Per Capita	Index
1. Alaska	$4,602	310
2. Wyoming	2,615	176
3. District Columbia	2,595	175
4. New York	2,406	162
5. Massachusetts	1,901	128
6. Connecticut	1,889	127
7. New Jersey	1,838	124
8. Hawaii	1,762	119
9. Wisconsin	1,708	115
10. Michigan	1,691	114
12. **Minnesota**	1,648	111
32. North Dakota	1,244	84
44. South Dakota	1,099	74
United States	$1,487	100
Minnesota 1977-78 — 1987-88		
1977-78	$ 824	115
1979-80	958	116
1980-81	1,053	122
1981-82	1,078	114
1982-83	1,121	109
1983-84	1,221	110
1984-85	1,418	121
1985-86	1,638	126
1986-87	1,697	121
1987-88	1,648	111

Allocation to Public Higher Education 1987-88	Education (Total) Appropriation as a Percent of Tax Revenue		Index
1. Alabama	13.1%	(16.8)	161
2. Idaho	13.0	(14.7)	160
3. North Carolina	13.0	(16.5)	160
4. California	11.4	(12.6)	140
5. New Mexico	11.1	(14.1)	137
6. North Dakota	10.8	(14.6)	132
7. Utah	10.7	(12.2)	132
8. Tennessee	10.3	(12.7)	127
9. South Carolina	10.2	(14.1)	125
10. Hawaii	10.1	(12.4)	124
13. **Minnesota**	9.7	(11.2)	119
18. Iowa	9.1	(10.9)	112
22. Wisconsin	8.8	(9.9)	108
42. South Dakota	6.2	(8.3)	76
United States	8.1%	(9.8)	100
Minnesota 1977-78 — 1987-88			
1977-78	10.3%		119
1979-80	10.3		117
1980-81	9.5		104
1981-82	10.5		116
1982-83	9.9		115
1983-84	9.8		115
1984-85	8.9		100
1985-86	8.4		99
1986-87	9.1		110
1987-88	9.7		119

Tax Revenues. State and Local tax revenue collected per capita. Collected tax revenue represents the wealth available to state and local governments for public use. The index essentially identifies "rich" versus "poor" states according to the size of their current tax income. State wealth such as nontax revenues from government fees and charges for selling certain public services are not included.

Allocation to Public Higher Education. State and local tax revenue appropriated or levied for current operating education expenses of public institutions. This ratio suggests the relative importance and requirements of financing public student education to the funding of other public services in the state and local government budgets. The ratio for total appropriations is shown in ( )

Source: Research Associates of Washington, *State Profiles: Financing Public Higher Education 1978 to 1988*

Table I.55
Education Appropriations Per Student 1987-88 in Selected States by Rank and Minnesota 1977-78 – 1987-88

Education Appropriations per Student 1987-88	Dollars per Student	Index	Relative to System Financial Load Index	Rank	10-Year Constant Dollar Change	Res-Ag-Med Approp. as a Percent of Total Approp.	($/Capita)
1. District Columbia	$9,326	230	228	(2)	11.8%	0.0%	$0.0
2. Alaska	9,048	223	237	(1)	−18.1	7.5	(19.5)
3. Hawaii	6,805	168	163	(4)	9.3	18.9	(41.3)
4. Wyoming	6,203	153	156	(5)	6.9	9.7	(24.5)
5. New York	6,115	151	164	(3)	23.1	14.1	(23.6)
6. New Jersey	5,540	137	145	(6)	28.8	21.0	(29.3)
7. Massachusetts	5,482	135	138	(8)	16.5	4.9	(6.1)
8. Connecticut	5,468	135	139	(7)	7.7	16.2	(20.7)
9. Maine	4,938	122	116	(10)	59.1	6.0	(7.2)
10. California	4,920	121	133	(9)	4 9	9 7	(20.3)
19. **Minnesota**	4,080	101	97	(19)	−11.4	13.9	(25.8)
23. Iowa	3,903	96	88	(29)	−9.3	16.3	(24.9)
25. Wisconsin	3,796	93	93	(22)	13.4	11.2	19.0
43. North Dakota	3,016	74	69	(45)	−20.2	26.0	(47.1)
48. South Dakota	2,705	67	59	(49)	−24.5	25.2	(22.9)
United States	$4,053	100	100		2.5	17.1	(24.9)
Minnesota – 1977-78 – 1987-88							
1977-78	$2,349	116	112		14.3%		($14.2)
1979-80	2,652	112	108		14.4		(16.7)
1980-81	2,543	102	98		14.0		(16.4)
1981-82	2,828	105	101		14.2		(18.7)
1982-83	2,849	102	98		14.4		(18.7)
1983-84	3,136	104	100		14 6		(20.4)
1984-85	3,438	99	95		15.3		(23.0)
1985-86	3,677	99	95		14.7		(23.8)
1986-87	4,017	103	99		14.0		(25.3)
1987-88	4,080	101	97		13 9		(25.8)

Education Appropriations per Student State and local tax revenue appropriated for current operating education expenses of public institutions per annual FTE student Indicates average state support to individual students without taking into account the types of institutions attended Education appropriations related to the state system s funding requirements are reported as an index Appropriations for research, agriculture, and medical schools are reported as a percent of total appropriations to suggest relative importance and per capita as a need measure

Source Research Associates of Washington, *State Profiles Financing Public Higher Education 1978 to 1988*

Table I.56
Estimated Net Tuition Revenue Per Student in Selected States by Rank and Minnesota 1977-78 — 1987-88

Estimated Net Tuition 1987-88	Dollars per Student	Index	Relative to System Financial Load Index	Rank	10-Year Constant Dollar Change	Relative to Personal Disposable Income/Cap Index	(Rank)
1. Vermont	$4,927	394	340	(1)	42.8%	432	(1)
2. Delaware	3,301	264	249	(2)	31.8	260	(2)
3. New Hampshire	3,083	247	237	(3)	1.3	216	(3)
4. Pennsylvania	2,460	197	197	(4)	23.8	200	(4)
5. Michigan	2,096	168	164	(5)	51.9	166	(7)
6. Rhode Island	1,887	151	149	(6)	42.4	148	(12)
7. Ohio	1,823	146	134	(9)	16.9	153	(11)
8. Indiana	1,788	143	129	(13)	18.3	158	(8)
9. Iowa	1,782	143	131	(11)	19.6	154	(10)
10. Colorado	1,750	140	135	(8)	41.5	135	(16)
11. Wisconsin	1,750	140	139	(7)	14.3	145	(13)
24. North Dakota	1,322	106	98	(26)	28.0	120	(23)
28. Minnesota	1,261	101	97	(29)	32.6	99	(30)
34. South Dakota	1,133	91	79	(39)	−9.3	106	(27)
United States	$1,250	100	100		20.8%	100	
Minnesota — 1977-78 — 1987-88							
1977-78	$ 485	92	88			94	
1979-80	600	97	93			96	
1980-81	633	93	90			92	
1981-82	710	94	91			94	
1982-83	872	104	100			103	
1983-84	981	104	100			104	
1984-85	1,138	110	106			111	
1985-86	1,184	106	102			105	
1986-87	1,164	99	95			99	
1987-88	1,261	101	97			99	

Net Tuition Revenues per Student. Tuition revenues of public institutions per annual FTE student. Indicates average tuition (less state appropriated student aid) paid by all resident and non-resident students without recognizing the types of institutions attended. Tuition related to the state system's funding requirements is reported as an index. Tuition revenues per student relative to disposable personal income per capita indicates tuition level relative to resident ability to pay.

Source: Research Associates of Washington, *State Profiles: Financing Public Higher Education 1978 to 1988*

Table I.57
Education Appropriations Per Student and Estimated Tuition Per Student 1987-88 in Selected States by Rank and Minnesota 1977-78 — 1987-88

Education Appropriations & Est. Tuition per Student	Dollars per Student	Index	Relative to System Financial Load Index	(Rank)	10-Year Constant Dollar Change
1. District Columbia	$10,133	191	189	(2)	13.1%
2. Alaska	10,129	191	203	(1)	−17.3
3. Delaware	7,545	142	134	(7)	25.7
4. Hawaii	7,525	142	138	(5)	10.0
5. New York	7,304	138	150	(3)	18.5
6. Wyoming	6,979	132	134	(6)	1.3
7. New Jersey	6,950	131	139	(4)	28.2
8. Vermont	6,945	131	113	(13)	22.0
9. Massachusetts	6,901	130	133	(9)	16.8
10. Connecticut	6,894	130	134	(8)	10.2
17. Iowa	5,685	107	98	(22)	−1.9
19. Wisconsin	5,546	105	104	(17)	−6.2
22. **Minnesota**	5,340	101	97	(24)	−3.9
45. North Dakota	4,338	82	76	(47)	−9.9
51. South Dakota	3,838	72	63	(51)	−20.6
United States	$5,303	100	100		6.3
	Minnesota 1977-78 — 1987-88				
1977-78	2,834	111	107		
1979-80	3,251	109	105		
1980-81	3,176	100	96		
1981-82	3,538	103	99		
1982-83	3,721	103	99		
1984-84	4,117	104	100		
1984-85	4,576	101	97		
1985-86	4,861	100	97		
1986-87	5,180	102	98		
1987-88	5,340	101	97		

Education Appropriations and Net Tuition per Student. Appropriations and tuition revenues for current operating education expenses for public institutions per annual FTE student indicates support for individual students without taking into account the types of institutions attended. Education appropriations and tuition related to the state system's financial support requirements is reported as an index.

Source: Research Associates of Washington, *State Profiles. Financing Public Higher Education 1978 to 1988*

Table I.58
Potential Tax Revenues Per Student 1987-88 in Selected States by Rank and Minnesota 1977-78 -- 1987-88

Potential Tax Revenues Per Student 1987-88	Dollars per Student	Index	Relative to System Financial Load Index	(Rank)
1. District of Columbia	$151,145	303	300	(2)
2. Alaska	150,986	303	322	(1)
3. Connecticut	98,066	197	203	(3)
4. New Jersey	88,574	178	189	(4)
5. Nevada	87,233	175	164	(5)
6. Massachusetts	78,730	158	161	(6)
7. Florida	74,180	149	155	(7)
8. New Hampshire	72,925	146	141	(9)
9. Hawaii	66,141	133	129	(11)
10. New York	65,448	131	143	(8)
22. South Dakota	48,070	96	85	(31)
42. **Minnesota**	38,493	77	74	(42)
45. Iowa	37,017	74	68	(46)
48. Wisconsin	33,486	67	66	(48)
49. North Dakota	32,779	66	61	(51)
United States	$49,858	100	100	
Minnesota 1977-78 -- 1987-88				
1977-78	$ 19,243	83	80	
1979-80	22,341	83	80	
1980-81	23,113	85	81	
1981-82	24,316	82	79	
1982-83	26,379	81	78	
1983-84	28,808	81	78	
1984-85	30,964	79	76	
1985-86	33,354	76	73	
1986-87	37,027	78	75	
1987-88	38,493	77	74	

Potential Tax Revenue Per Student These combined input factors establish a state's basic potential to finance public institutions relative to student enrollment load. Reports relatively stable tax potential to finance individual student's education without taking into account the types of institutions attended. Tax potential related to the state system's financial support requirements is reported as an index

Source Research Associates of Washington, *State Profiles Financing Public Higher Education 1978 to 1988*

Table I.59
Collective Financial Actions in Selected States by Rank 1987-88 and Minnesota 1977-78 — 1987-88

Collective Financial Actions 1987-88	Percent	Index	Relative to System Financial Load Index	(Rank)
1. Wisconsin	16.6%	156	154	(1)
2. Iowa	15.4	144	132	(5)
3. Alabama	15.3	144	138	(2)
4. Michigan	14.6	137	135	(4)
5. Utah	14.4	136	127	(7)
6. North Carolina	14.3	135	136	(3)
7. Delaware	14.2	134	126	(8)
8. South Carolina	14.0	132	132	(6)
9. Minnesota	13.9	130	125	(10)
10. Mississippi	13.5	127	126	(9)
11. North Dakota	13.2	124	115	(14)
43. South Dakota	8.0	75	66	(47)
United States	10.6	100	100	
Minnesota 1977-78 — 1987-88				
1977-78	14.7%	124	129	
1979-80	14.6	130	125	
1980-81	13.7	118	113	
1981-82	14.5	126	121	
1982-83	14.1	126	121	
1983-84	14.3	128	124	
1984-85	14.8	128	123	
1985-86	14.6	132	127	
1986-87	14.0	130	125	
1987-88	13.9	130	125	

Collective Financial Actions The combined factors are the financial actions that establish the degree to which the potential tax dollars per student are actually utilized to achieve the support level provided. States with high levels are making a substantial combined tax effort, allocation to education, and tuition charge to finance public institutions. The actions related to the state system's financial support requirements is reported as an index.

Source: Research Associates of Washington, *State Profiles: Financing Public Higher Education 1978 to 1988*

Table I.60
Preliminary Scholastic Aptitude Test Mean Scores, Minnesota High School Juniors and National College-Bound Juniors, 1979-1988

Year Ending	Minnesota Participation		Minnesota		National	
	Number	Participation	Verbal	Math	Verbal	Math
1979	26,418	33.7	40.9	47.0	40.6	44.8
1980	26,879	35.1	40.8	47.7	40.3	45.3
1981	26,869	39.1	41.2	47.4	40.6	45.2
1982	27,311	42.4	41.9	46.9	41.5	45.1
1983	26,064	40.1	41.9	46.9	41.1	44.7
1984	28,600	45.8	41.2	46.4	40.9	44.7
1985	28,689	46.5	41.0	46.0	41.0	44.2
1986	29,547	46.0	41.1	46.7	40.9	45.0
1987	30,892	48.0	41.3	46.5	40.9	45.0
1988	29,081	48.0	40.1	46.5	40.4	45.0

Note: Includes only those students who authorized release of their scores to the Post-High School Planning Program

Source: Midwestern Regional Office, The College Board (national trend) Minnesota Post-High School Planning Program (state trend)

Table I.61
ACT Composite Scores, Minnesota and National, 1978-79 — 1987-88

School Year	Minnesota			National	
	Minnesota Mean	Total Students	Estimated Percent[1]	Mean	Total
1978-79	20.5	20,315	25.9	18.6	NA
1979-80	20.3	19,562	25.6	18.5	NA
1980-81	20.3	18,938	27.5	18.5	NA
1982-83	20.2	17,839	27.2	18.3	NA
1983-84	20.2	18,134	29.0	18.5	NA
1984-85	20.2	17,635	28.5	18.6	738,836
1985-86	20.3	17,615	27.9	18.8	729,606
1986-87	20.2	20,119	31.5	18.7	777,444
1987-88	19.9	25,648	43	18.8	842,322

[1]Based on number of high school juniors for each year

Source: ACT

Table I.62
Mean SAT Scores, Minnesota and National, 1980-1988

School Year	Minnesota				National	
	Minnesota Verbal	Math	Total Students	Estimated Percent[1]	Verbal	Math
1980	491	544	4,814	6.8	424	466
1981	486	539	5,074	7.4	424	466
1982	485	543	4,983	7.5	426	467
1983	482	538	5,631	8.9	425	468
1984	481	539	6,623	11.1	426	471
1985	481	537	7,304	12.7	431	475
1986	482	540	7,764	13.8	431	475
1987	472	531	10,162	17.5	430	476
1988	470	531	10,722	18.4	428	476

[1]Based on number of high school seniors for each year

Source. The College Board

Table I.63
State of Minnesota General Fund Expenditures by Major Categories, 1987-89 Biennium[1]

Category	Amount	Percent
Aid to School Districts	$ 3,007,743.4	25.7
Post-Secondary Education	2,205,077.7	18.9
Property Tax Credits and Refunds	1,767,277.6	15.1
Medical Assistance/General Assistance Medical	1,313,413.0	11.2
Local Government Aid	647,806.9	5.5
Debt Service and Short-Term Borrowing	268,878.9	2.3
Income Maintenance	251,873.9	2.2
Other Major Local Assistance	490,418.6	4.2
State Institutions	594,495.8	5.1
Legislature, Judicial, Constitutional	182,611.1	1.6
State Agencies	966,812.0	8.3
Total	$11,696,408.9	100.0

[1]Fiscal Year 1988 actual, 1989 estimated, $40 million in cancellations expected, making actual expenditure $11,656,408.9

Source Minnesota Department of Finance

This section summarizes policy issues addressed by the Higher Education Coordinating Board during the past two years, including some projects scheduled for completion in early 1989.

The section is divided into five parts. The first covers funding and financial aid issues. The second covers projects and issues relating to governance, mission differentiation, and planning. The third part reviews projects to improve quality. The fourth part describes projects to enhance coordination and cooperation. The fifth part covers projects to improve information and assessment services.

Funding and Financial Aid

This part provides an update on the work of the average cost funding task force and previews the Coordinating Board's post-secondary education cost study scheduled for release in late 1988. It presents the conclusions and recommendations of the Board's study of graduate and professional education released in January 1987 and a follow-up study on financing policies for students in high cost University of Minnesota health professions programs. This part presents the conclusions and recommendations from the Board's studies of Guaranteed Student Loan borrowers, state saving incentive and prepaid tuition plans, and the implications of expanding the Graduated Repayment Income Protection Program.

Average Cost Funding Task Force

The Average Cost Funding Task Force conducted several activities during the 1987-89 biennium. The task force revised its issue agenda, reviewed its structure and conducted analyses of its two highest priority issues. The task force also suspended work on its issue agenda for several months in 1987, pending the outcome of the 1987 legislative session.

Agenda: The task force reviewed and revised its issue agenda. Several policy and technical issues were added. A survey of task force members was conducted and each issue was assigned a priority. Following is the priority list.

1. **Adequate Funding Level** — System representatives contend that their systems are not adequately funded. Some maintain that funding levels have not been adjusted to reflect changes in mission or type of student served. Current funding levels are not sufficient to finance desired staffing ratios, needed support services, or equipment and supply purchases.

2. **Counterincentives in the Current Policies** — Several counterincentives in the current financing policies have been identified.

A. *Incentive to maintain enrollments.* Since all instructional funding varies with enrollments, the current policy provides an incentive for systems to maintain enrollment levels. Consequently, a system choosing to contract faces a significant counterincentive.

B. *Incentive to retain low cost programs and avoid high cost programs.* The current policies specify that state appropriations for instruction equal 67 or 74 percent of instructional expenditures. Consequently, a system choosing to reduce its enrollments in low cost programs and maintain its enrollments in high cost programs would experience increases in per student expenditures and in tuition rates that would exceed the rate of inflation.

C. *Incentive to serve students who are easy to educate.* Average cost funding provides an incentive to constrain spending levels by reducing funding proportionately as enrollments decline. Consequently, it provides an incentive to educate students who are less expensive to serve and a counterincentive to serve students who are more expensive to serve.

3. **Treatment of Fixed Costs** — The average cost funding policy treats all instructional expenditures as though they vary proportionately with enrollments. It is argued, however, that certain categories of expenditures remain fixed for a range of enrollment levels.

4. **Difficulty in Funding New Programs** — The reduction in funding proportionately with enrollments and the provision of funds on the basis of enrollments two years earlier constrain the funds available for the development and implementation of new instructional and support programs.

5. **Average Cost Funding and Minnesota's Objectives for Post-secondary Education** — Minnesota has certain objectives for post-secondary education. The state's funding policy for public post-secondary education systems should help achieve those objectives. Some argue that average cost funding does not help achieve the state's current objectives.

6. **The Funding of Extension Enrollments** — The average cost policy is used to finance instruction in the public systems that is creditable toward a degree or certificate. There appear to be differences among the systems, however, in the type of extension instruction that is degree or certificate creditable.

7. Average Cost Funding and Interstate Tuition Reciprocity — Some neighboring states with which Minnesota has interstate tuition reciprocity agreements are tightening admission standards and/or establishing enrollment limitations at some of their public post- secondary institutions. To the extent that these actions result in increased enrollments at Minnesota's public post-secondary institutions, there will be cost implications for the state.

8. Consideration of Incorporating Capital Funding Into the Current Funding Policy — The biennial budget process provides operating funds and facility repair and replacement funds. Capital funds are provided through the capital budgeting process. It has been argued that the current capital budgeting process provides little incentive for the systems to constrain their requests for or use of physical plant space. It has been suggested that the incorporation of capital funding into the biennial budget process might strengthen the incentive to constrain the requests for and use of physical plant space.

9. The Treatment of Student Health Service and Activity Fees and Expenditures — There are differences in the extent to which the public systems support student health services and activities with state funds.

10. The Treatment of New Program Funding in the Enrollment Error Adjustment — An adjustment to the instructional spending base is made each biennium for the variation between actual enrollment and the estimate used to fund the second year of the biennium. The adjustment is based on total instructional spending and affects funding levels in subsequent biennia. Total instructional spending is supported by enrollment related funding and by funding provided for new programs. The funding for new programs, however, was not provided on the basis of enrollments. Consequently, the adjustment alters non-enrollment related instructional funding levels for new programs on the basis of enrollments.

Structure of the Task Force: The task force conducted a review of its structure and considered alternatives. Task force members expressed concern about the structure of the task force at the January 1987 meeting. The concerns focused on the existence of two processes for addressing policy issues, the task force and the Higher Education Advisory Council's mission differentiation process. Members noted a lack of coordination between the two processes in addressing similar issues. After a review of its structure and consideration of alternatives, the task force decided to retain its current structure.

Issues: The task force had identified difficulties resulting from the two year lag in funding as an issue that it wanted to address. Large increases in system enrollment from one year to the next were resulting in significant differences between actual and funded enrollments. After study of the issue, the task force recommended a change in state funding policy to the 1988 Legislature.

The task force recommended a marginal cost approach to fund enrollments above levels funded by average cost funding and the two year lag. State appropriations for each unfunded student would be equal to marginal cost minus marginal revenue. The task force recommended that marginal costs be set equal to 65 percent of system level legislative intent average cost. This percentage appeared to be about the mid-point of marginal cost estimates prepared by each system. The task force recommended that marginal revenue be set equal to system level legislative intent average tuition revenue. This recommendation did not alter the current average cost funding policy and two year lag in funding.

The 1988 Legislature adopted this approach to fund the three public systems that had experienced enrollment increases since two years earlier. The approach provided an additional $13.3 million in total state appropriations to the three systems. The appropriations were provided on a non-recurring basis and are not to be included in the base budget for the 1989-91 biennium.

The task force identified adequate funding as its top priority issue in June 1988. The task force began work on an analysis of the adequacy of the systems' funding levels in June 1988. The analysis will examine past and current spending levels, changes in the types of students served, and comparisons of spending in Minnesota public institutions with that in peer institutions. The results of this analysis will be available for consideration by the 1989 Legislature in making its funding decisions.

Post-Secondary Cost Study

Post-secondary institutions' costs of providing instruction have come under closer scrutiny in recent years. Concern regarding rapid increases in tuition rates has directed attention toward the cost of providing instruction. Measures have been proposed to contain the growth in post-secondary costs. The Higher Education Coordinating Board placed a post-secondary cost study on its 1987-90 Management Plan to address this issue for the Minnesota public post-secondary systems.

Background: The post-secondary cost study will document recent trends in tuition and costs of providing public post-secondary instruction. The national and Minnesota data suggest that the price of attending a higher education institution and the cost of providing the instruction have risen since the early 1980s at a rate which exceeds that of inflation and disposable income. Minnesota's operating cost trends will be examined with system level data on instructional costs; national operating cost trends will be examined using finance data collected through the U.S. Department of Education's Integrated Post-Secondary Education Data System (IPEDS).

Issues: The study will explore the reasons for the recent trends in tuition and cost and analyze their implications. Most explanations have suggested that increases in faculty salaries and certain non-personnel expenditures, increases in administrative expenditures, and increases in institutionally funded financial aid are the primary causes of the increases in the cost of instruction and tuition. These explanations along with other possible reasons will be explored. This task will rely primarily on a review of existing research.

The study will assess the implications of these trends for students, institutions, systems, and the state. Their influence on existing finance policies will be determined and evaluated.

Finally, the study will identify and assess state and institutional cost containment strategies. The strategies will be based primarily on a literature review of pertinent articles and journals relating to cost containment. The identification will draw in part on the experience of health care providers in containing costs.

Status: The study was scheduled for presentation to the Coordinating Board in December 1988.

Financing of Graduate and Professional Education

Across the nation, as well as in Minnesota, graduate and professional education are being reassessed for several reasons. One issue is how to maintain a capacity for providing balanced, high quality advanced study while meeting changing patterns of demand. Related issues are how to prepare for anticipated changes in demand and how to maintain an adequate level of accessibility for students in the face of these circumstances. In Minnesota, the University of Minnesota, the state's largest provider of graduate and professional education, is implementing Commitment to Focus. Through this plan the University is placing more emphasis on graduate and professional programs and improvement in its national position as a graduate institution. Commitment to Focus has contributed to an examination of mission differentiation among the state's other post-secondary systems to reduce duplication of effort. A major element is a request that state government change its financing policies for post-secondary education to help the University achieve its goals.

In 1987, the Coordinating Board staff completed a study assessing the relationship of various state policies for post-secondary education to graduate and professional education.[1] A staff policy paper and a technical report were presented to the Board.[2]

Issues: The study explored state financing policies by posing three questions:

- What methods does state government employ to support advanced study?
- How appropriate are these methods of support for fulfilling the state's interests?
- Could alternative methods be more effective in pursuit of the state's interests?

The study does not indicate how much the state should spend or what specific programs or areas of advanced study should receive financial support.

[1] Minnesota Higher Education Coordinating Board, *The Financing of Graduate and Professional Education in Minnesota* (Policy Paper) with Coordinating Board Recommendations (February 19, 1987)

[2] Minnesota Higher Education Coordinating Board, *The Financing of Graduate and Professional Education in Minnesota* (Staff Technical Paper), (January 1987).

Results of the study, however, may help determine the appropriate state role and methods of financing particular types of programs to meet the state's objectives.

Three broad concepts are explored.

- General, unrestricted financing of institutions that offer graduate or professional education.
- Financing of specific programs, projects, or activities that are related to advanced study.
- Financing of students who undertake advanced study.

These approaches are not mutually exclusive. However, the implications of each differ. Providing general support for institutions leaves discretion over specific programs and level of funding for them largely to institutions. Financing of specific programs allows for greater initiatives by the financing source in setting institutional priorities and resource allocations. Financing of students rather than institutions or programs focuses responsibility for educational choices on students and their sources of support.

Conclusions: The study led to the following conclusions:

General Financing Issues

- Separate, non-enrollment driven funding for graduate and professional education could be more stable than the general, systemwide approach now employed, but it would intrude into governing board autonomy and would pose academic, staffing, and budgetary difficulties.
- Reducing the state's tuition expectations from graduate and professional instruction could reduce the financial burden on students, but it would encroach on governing board authority to set tuition without making a great reduction in students' total costs of attendance.
- Expanded use of restricted program funding could promote activities desired by the state, but it would intrude into institutional autonomy and would risk misdirected or unstable support.
- State-funded, merit-based fellowships and other grants could be an incentive to pursue advanced education despite unfavorable, short-term market conditions for prospective students.
- State-funded, need-based grants could increase financial access for students, but they would be difficult to administer and would not be targeted to the most talented students.
- Creative financing methods sponsored by the state could help students overcome risks involved in pursuing advanced studies.

Specific Financing Issues

- To be nationally competitive for highly talented students in Ph.D. programs, Minnesota institutions not only need to offer outstanding programs but also might have to offer financial incentives.
- Projected surpluses of practitioners in some first professional fields could lead to declining enrollments, which might make special support from the state desirable to sustain the quality of programs.

Nonfinancing Issues

- Reassessment of institutional roles in providing graduate and professional education in Minnesota might be necessary as circumstances change.
- The state's role in contributing Minnesota's "fair share" nationally to graduate and professional education deserves attention.
- The apparent imbalance between Minnesota's share of national population and advanced degrees conferred deserves attention.

Recommendations: Based on the findings and conclusions of the study, the Coordinating Board adopted the following recommendations:

1. That the legislature support the general, unrestricted financing of systems as the basic means of supporting graduate and professional education in Minnesota's public systems of higher education.

2. That in cases when institutions propose termination of graduate and professional programs or seek special funding for them, the Higher Education Coordinating Board examine need for those programs and determine the suitable response to address the need.

3. The legislature approve the University of Minnesota's request for funds to provide graduate fellowships.

4. That the Board staff immediately begin working with the University of Minnesota to explore assistance for students in the health professions in financing their education, and that such exploration focus on targeted grant programs.

5. That the Higher Education Coordinating Board explore more creative ways to assist graduate and professional students in financing their education.

6. The post-secondary community explore further issues emerging from this study related to the quantity of graduate and professional education in Minnesota.

7. That the Higher Education Coordinating Board, in concert with the post-secondary education community, explore the establishment of guidelines for outcomes of graduate and professional education programs in Minnesota.

Financing Policies for High Cost University of Minnesota Health Professions Programs

In April 1987, the Higher Education Coordinating Board directed staff "to immediately begin working with the University of Minnesota to explore more creative ways to assist students in health professions in financing their education and that such exploration focus on targeted grant programs."

Background: The state's funding policy for public collegiate institutions assumes that 33 percent of a system's instructional cost will be covered by tuition receipts. The University of Minnesota Board of Regents' policy is to move toward tuition rates that will cover 33 percent of instructional cost within a program or group of similar programs.

For many years, tuition in certain high cost health professions programs has paid for less than one third of the costs of these programs. Students in other programs, especially undergraduates, have paid more than one third of their costs. The University wishes to reduce these cost shifts. If tuition in the certain health professions programs increases to 33 percent of the cost of instruction, the University believes that it will not be able to compete with other universities for the most qualified students. An additional concern is that higher tuition would require many students to accept loans that require an unreasonable repayment at typical incomes for graduates.

The University has proposed that a separate category of six unique and high cost health professions programs be created for funding purposes. The legislature has been asked to fund 75 percent of the cost of instruction for these programs. This proposal is called the "tuition offset" approach. It would allow tuition to remain at 25 percent of the cost of instruction, the current proportion across the group of six programs.

Issues: A key issue is whether conditions at the University warrant special state funding. Any form of special treatment is subject to later similar requests by other programs, including programs in other public institutions.

In considering the purpose of any special funding, the following questions should be answered:

- Is special funding an appropriate and effective state response to counteract diminishing student interest in the health professions?
- If the University needs to maintain professional school tuition rates that are competitive with its peers, should all taxpayers, not just other students at the University, share in the additional cost?
- Does the state have an obligation to insure that any student, regardless of financial circumstances, can attend health professions programs without incurring an unreasonable loan burden?

Findings: The report focuses on dentistry, pharmacy, and veterinary medicine because these programs were identified in previous work as being particularly harmed if cost-related tuition were adopted. Information on medicine was included at the University's request.[3] Each profession has its own profile, but there are similarities in the condition they face.

Findings Regarding Quality Issues

Supply and demand for graduates in these fields are relatively in balance or in surplus. The University's expressed need for special funding therefore is not

[3] Minnesota Higher Education Coordinating Board, *Financing Policies for High Cost University of Minnesota Health Professions Programs* with Coordinating Board Recommendations (March 17, 1988).

based on the desire to induce more students to enter these fields. There is evidence, however, that the professions are becoming less attractive to prospective students because of changing practice conditions. The number of applications nationally has been falling, forcing programs to cut class size or become less selective. Competition between universities for the most highly qualified students is intensifying.

Although the relationship between measured ability and later professional achievement is not precise, the University wants the largest possible, most highly able, applicant pool from which to admit. In dentistry, the decline in the numbers of applicants nationally and in Minnesota has been accompanied by a drop in the measured academic quality of entering classes. The other fields are struggling to maintain the quality of entering students within a smaller applicant pool.

The University of Minnesota's current resident tuition rates are among the highest for public universities. From about one third to one half of the admitted applicants who turn down the University's offers of admission say that non-competitive tuition and fees were partially responsible for their decisions.

The effects on the applicant pool if tuition is increased to 33 percent of the cost of instruction are speculative. Students clearly evaluate on multiple factors, and some expensive programs can continue to be highly selective based on their quality and prestige.

Findings Regarding Access Issues

At current tuition rates, most health professions students borrow heavily, and their debts have been increasing. Some students already borrow amounts that will require repayment of more than 10 percent of the average professional income during the early years of practice. This situation is most pronounced in veterinary medicine and dentistry and least evident in pharmacy.

The Graduated Repayment Income Protection (GRIP) Program can contain debt repayment within 10 percent of average annual income for most of today's students. If tuition is raised to 33 percent of the cost of instruction, however, a majority of veterinary medicine students and about a fourth of the dental students might incur loans that could not be repaid under GRIP within the standard repayment schedule.

Alternatives: The Board explored eight policy alternatives. Four expect the University of Minnesota to allocate funds to health professions programs within its general appropriation for instruction:

- Continue to modify cost-related tuition within the University.
- Allow tuition to increase to 33 percent of the cost of instruction.
- Allocate or solicit more private University funds to attract qualified students.
- Allocate or solicit more private University funds to help financially needy students.

The report does not evaluate the management of the University's high cost programs. Any of these approaches might be accompanied by cost reductions to minimize adverse effects on students.

Four alternatives would require the state to provide additional funding:

- Provide additional program funding in the form of a tuition offset or other means.
- Provide additional scholarship funds to be used by the University to attract qualified students.
- Provide grant funds to help financially needy students.
- Modify the GRIP program to reduce the repayment burden on students with exceptionally high loans or low income.

Preferred Approaches: In response to the Board's directive, Coordinating Board and University staff agreed on two approaches that meet the concerns of each organization. These approaches are variations of the scholarship and program funding options. They are intended to help the University remain competitive for the most qualified students since the University's chief concern is with the quality of its programs.

First Preferred Approach

The Minnesota Legislature provide funds to the University of Minnesota for health professions student fellowships under the following conditions:

1. The University's continued progress toward cost-related tuition results in tuition increases for students in dentistry, pharmacy, medicine, and veterinary medicine.

2. The University develops rigorous fellowship selection criteria that are designed to increase the numbers of extremely well qualified Minnesota residents who enroll in these programs.

3. The University raises private funds to recruit non-residents who meet the same selection criteria.

4. The amount of individual awards is limited to tuition.

5. No funds are awarded to students who do not meet the selection criteria even if the University is unable to recruit enough highly qualified students.

6. A maximum of $2 million in annual funding is phased in over four years with $500,000 added to the appropriation each year, beginning in Fiscal Year 1989.

Second Preferred Approach
1. University of Minnesota and Coordinating Board staff examine program expenditures in dentistry, pharmacy, medicine, and veterinary medicine to determine unique costs now included in instructional cost that should be attributed to the research and public service missions of these programs.

2. These costs be removed from average cost and tuition funding and covered by a special legislative appropriation.

Board Recommendation: Based on the findings of the report and consultation with staff of the University of Minnesota, the Coordinating Board on March 17, 1988 voted to recommend the first approach (student fellowships) to the Minnesota Legislature.

This approach is consistent with previous Board endorsement of University fellowships to attract outstanding graduate students. The second approach, while acceptable to solve tuition problems in health sciences, has potential to be applied to all University programs. The University is exploring the feasibility of separating certain research and public service costs in future budget requests. Other public systems also might claim departmental research and public service costs that could be removed from instruction.

Analysis of Guaranteed Student Loan Borrowers

To learn more about Guaranteed Student Loan Program borrowers in Minnesota, the Higher Education Coordinating Board in 1987 contracted for a study of debt levels and defaults.

Issue: Debt levels are a concern because of their possible impact on future life decisions of borrowers. Defaults are a concern because of their cost to the federal government and their negative impact on those borrowers who default. The study did not directly address a third concern: debt burden, which compares debt level with the ability to repay.

Background: In 1987 a study released by Federal Funds Information for States, a joint service of the National Governors' Association Center for Policy Research and the National Conference of State Legislatures, raised questions concerning default rates of Guaranteed Student Loan borrowers. Working with the Federal Funds Information for States, the Coordinating Board gained access to the U.S. Department of Education's data base. This source includes a summary of each borrower's record derived from data that guarantee agencies must regularly submit to the Department of Education. From this data base the Coordinating Board obtained information about each borrower listed as attending a Minnesota post-secondary institution or as residing in Minnesota.

To analyze the data, the Board contracted for a study with Saul Schwartz of Tufts University, Medford, Massachusetts, and Sandra Baum of Skidmore College, Saratoga Springs, New York. They had performed similar research for Massachusetts. They analyzed 500,000 records in each borrower's data file. Loan records were merged to obtain a single record for each borrower. Their report to the Coordinating Board, *The Operation of the Guaranteed Student Loan Program in Minnesota, 1977-1985*, is based on 345,000 borrowers who attended Minnesota institutions during those years.

Although the data provide a useful snapshot of activity under the GSL Program, the data base did not provide insights into the relationship of Guaranteed Student Loans and other loans. It provides only the last date a loan was made, not when the loan went into repayment or how much of a loan was paid before defaulting. The report shows that the time it takes for a group of borrowers to enter repayment is long. Some of the students who last borrowed in 1977 still had not

entered into repayment in 1986, for example. The time it takes for a loan to be classified as "in default" after the borrower makes the last payment can be two years or more. This suggests that default rates for the two to three most recent years are too incomplete to be used for analysis.

Findings: Following are findings from the contractors' report.

The average cumulative amount of Guaranteed Student Loans, by type of institution attended, held by borrowers in repayment whose last loan was approved in 1984, is as follows:

Technical Institutes	$2,700
Community Colleges	$2,800
State Universities	$4,000
University of Minnesota	$5,000
Private Four-Year Institutions	$5,700
Private Two-Year Institutions	$2,900
Graduate/Professional	$6,700

As of 1984, almost all the borrowers who reported the last institution attended as a technical institute, community college, or private two-year institution, had a Guaranteed Student Loan debt of less than $7,500.

About 10 percent of undergraduates attending a state university or the University of Minnesota and 15 percent attending private four-year institutions had a Guaranteed Student Loan debt of more than $7,500. About 22 percent of graduate and professional students had a GSL debt of over $7,500.

The GSL default rate has been declining since 1977. The decline has decreased by different amounts for each system. The overall decline, however, has been from a default rate of 28.7 percent in 1977 to 19.2 percent in 1980. The dollar volume of GSL defaults, however, is increasing due to the growing number of borrowers and total loan volume.

The default rates of the 1983 group of GSL borrowers by type of institution last attended are:

Technical Institutes	18.0%
Community Colleges	17.8%
State Universities	8.1%
University of Minnesota	6.2%
Private Four-Year Institutions	5.3%
Private Two-Year Institutions	16.4%

Conclusions: Based on the contractors' report and other information, Coordinating Board staff reached the following conclusions:

- A review of cumulative GSL debt levels does not show excessive borrowing.

- The distributions of borrowers and students suggest that relatively more students attending technical institutes and private two-year institutions borrow than students attending other types of institutions.

- Proportionally fewer students attending community colleges borrow than other students. Part of this difference can be explained by the way the borrowers are classified. Each borrower was assigned an institution based on the last loan approved. Transfer students show up as attending four-year institutions rather than a community college.

- Differences in the default rates between borrowers attending two-year institutions and four-year institutions raise questions about why borrowers default. Students from lower income families are assisted by federal and state scholarship and grant programs. Tuition levels at two-year institutions are lower than at four-year institutions. Yet, students attending two-year institutions borrow more frequently and are more likely to default than other students.[4]

Recommendations: Based on the findings and conclusions of the study, the Coordinating Board on May 19, 1988 recommended that it:

1. Encourage all two-year post-secondary institutions within the state and the few four-year institutions with comparatively high default rates, to develop strategies for reducing defaults by their students. To assist in this effort, the Board should sponsor training symposia for representatives of these institutions to help them identify ways in which their institutions can work effectively to reduce defaults without reducing access to post-secondary education.

2. Work actively at the federal level to develop policies that provide incentives for post-secondary institutions to develop efforts to control defaults by rewarding reduced default experience, penalizing institutions that prove unwilling or unprepared to address the

[4]Minnesota Higher Education Coordinating Board, *Analysis of Guaranteed Student Loan Program Borrowers*, Consultants' Report and Coordinating Board Recommendations (May 19, 1988).

issue, and assuring individual institutions greater discretion in pursuing professional remedies.

3. Continue to make the case within Minnesota for strong state scholarship and grant support for students, including part-time and returning students, from low-income backgrounds in order to avoid the need for excessive borrowing by these students.

4. Work actively at the federal level to develop policies that reduce the borrowing need of economically disadvantaged students by increasing the availability of federal student grant assistance, including aid for part-time and returning students.

5. Support the Higher Education Assistance Foundation (HEAF) in its ongoing review of institutions with high levels of borrowing and default and with problems administering their institutional responsibilities within the Guaranteed Student Loan Program. As allowed under current law, HEAF is encouraged to limit, suspend, or terminate eligibility for institutions that prove unwilling or unprepared to address the issue.

6. Work actively at the federal level to: a) develop policies that allow the state designated guarantee agency within each state with the authority to eliminate eligibility for those institutions that prove unwilling and unprepared to address the issue, and b) encourage the U.S. Secretary of Education to support institutional eligibility sanctions imposed by the state designated guarantee agencies and prevent other guarantee agencies from approving loans for students attending an institution that has been designated as ineligible by the state designated agency.

Status: In summer and fall 1988 both the House and Senate considered federal legislation to control defaults, and the U.S. Department of Education proposed rules that would allow it to cut schools with default rates exceeding 20 percent from student aid programs. Due to time limitations and lack of agreement, Congress did not act, and action on the proposed regulations was delayed.

The Coordinating Board communicated its recommendations to the state's Congressional delegation, directors and presidents of post-secondary institutions and their financial aid officers, the U.S. Department of Education, and the Higher Education Assistance Foundation.

In fall 1988 the Board sponsored 14 workshops throughout the state on managing student loan defaults for presidents and directors of post-secondary institutions and their financial aid officers.

State Saving Incentive and Prepaid Tuition Plans

Concern over the ability to pay for an individual's post-secondary education has led to interest in saving incentive and prepaid tuition plans. Saving plans are designed to encourage the accumulation of money to cover an individual's expenses at the time of attendance. Prepayment plans involve the purchase of education services at current or discounted prices before attendance. Several states recently have enacted plans, and other states are considering action. Interest in state plans and plans from the federal government and private organizations has developed because of trends in educational costs and personal finance.

In 1987, the Minnesota Higher Education Coordinating Board directed its staff to study state saving incentive and prepaid tuition plans. The study examines the benefits, costs, and risks of three types of state plans: prepaid tuition, savings bonds, and savings accounts.[5]

Issue: The purpose of the study was to determine whether any of the various plans established or proposed are appropriate for the state to adopt or endorse. Two major policy questions were addressed:

- What should be the nature and degree of involvement of state government in educational saving and tuition prepayment plans?

- How might the existence of state-sponsored plans affect other state policies for post-secondary education such as institutional funding and student financial aid?

Conclusions: Analysis of the plans led to the following conclusions:

- Prepaid tuition — A prepaid tuition plan would place all parties at considerable risk. Each party involved in a plan

[5]Minnesota Higher Education Coordinating Board, *State Saving Incentive and Prepaid Tuition Plans* with Coordinating Board Recommendations (March 17, 1988).

faces the possibility of financial loss. Other consequences might include inappropriate educational choices by participants, loss of enrollments by some post-secondary institutions, and loss of credibility by the state for not delivering promised benefits.

• Savings bonds — A state savings bond program would leave participants responsible for purchasing enough bonds to pay the cost of a post-secondary education. While risks to participants and institutions would be small, the state might incur costs related to issuance of bonds and debt management.

• Savings accounts — Savings accounts also would leave participants responsible for covering educational costs. Otherwise, participants and institutions would face little risk. Tax advantages with such accounts would be a cost to the state in the form of foregone tax revenues. The absence of similar tax advantages at the federal level, however, might deter participation in a state program.

Assessment of state saving incentive and prepaid tuition plans requires other considerations. Enactment of a federal plan or development of plans in the private sector might make a separate state plan unnecessary. No plan, however, would replace need-based financial aid because participants in each come from different populations. Further, early saving by families for post-secondary education remains a key element in any financing strategy.

Recommendations: Based on the conclusions of the study, the Coordinating Board on March 17, 1988 adopted the following recommendations:

1. That if the Minnesota Legislature establishes a state savings plan, the Higher Education Coordinating Board, based on the knowledge gained from its extensive study of prepaid tuition and saving incentive plans, actively participate in the development of the plan, which should:

a. be applicable to a wide range of post-secondary institutions within and outside the state;

b. be applicable to all levels of post-secondary education, from sub-baccalaureate through graduate and professional;

c. provide some measure of equity by limiting the amount that participants can save in the program;

d. be developed in the context of state policies outside post-secondary education that might be affected;

e. be presented to prospective participants in terms that make clear the financial risks and benefits; and

f. complement either proposed federal savings plans or suitable plans developed by the private sector.

2. That the Higher Education Coordinating Board continue to examine the need analysis for state financial aid programs to determine if adjustments should be made in the way parental savings affect qualifications for awards; further, the Coordinating Board and the post-secondary education community in Minnesota seek to have the federal government undertake similar action for its student financial aid programs.

3. That the legislature and governor not enact a state plan for prepaid tuition at Minnesota's institutions of post-secondary education.

4. That the Higher Education Coordinating Board seek funds for a campaign to inform families about the cost of post-secondary education and to encourage them to plan for that cost.

Status: The Coordinating Board's staff study was released January 21, 1988 in St. Paul at a symposium on "Financing One's Post-Secondary Education: Perceptions and Realities."

The 1988 Legislature authorized a college savings bond program, pending the results of a feasibility and market study.[6] The commissioner of Finance, in cooperation with the Coordinating Board, was directed to study and report to the legislature by September 1, 1988 on the market for and feasibility of college savings bonds. The bonds would be state general obligation bonds sold as zero coupon bonds. Sale and marketing efforts are to be directed to Minnesota residents of low and moderate income whose children or grandchildren are likely to pursue post-secondary education.

Based on the results of the feasibility study, the commissioner and the Coordinating Board are to develop a plan for marketing college savings bonds. The plan must include appropriate disclosures to potential buyers, including information on the types of savers for whom long term, tax-exempt bonds may not be appropriate investments.

[6] *Laws of Minnesota for 1988*, Chapter 694

Before implementing the marketing plan, the commissioner and Board must seek the advice of the chairs of the Senate Finance and House Appropriations Committees.

The amount of bonds that can be issued may not exceed the amount of authorized, but unissued bonds for facilities in the four public post-secondary systems.

The legislation states that bonds are to be made available in as small denominations as is feasible given the costs of marketing and administering the bond issue, and bonds in denominations of $1,000 must be made available. The commissioner may sell bonds directly to the public or to financial institutions for prompt resale to the public. Also, the commissioner is to make bonds available for sale to financial institutions located in neighborhoods where low or moderate income persons reside.

Prior to adjournment, Congress approved the use of U.S. Savings Bonds as education savings bonds. Following this action, the commissioner of Finance postponed a decision on whether to recommend action to proceed with a state program.

Implications of Expansion of the Graduatea Repayment Income Protection Program

The 1987 Minnesota Legislature mandated that the Higher Education Coordinating Board study and report in December 1987 on the potential for the expansion of the Graduated Repayment Income Protection Program (GRIP) to all academic programs with specific attention to osteopathic medicine and optometry graduates.[7] These two programs are not available in Minnesota.

Background: GRIP was implemented in 1987 following a study mandated by the 1985 Legislature. It is designed to help students who have accumulated large amounts of student loan debt by the time they complete their graduate and professional programs. GRIP assists these borrowers in repaying their student loans by providing a repayment plan that is related to their income. Eligibility is limited to borrowers who have completed graduate and professional programs in dentistry, medicine, pharmacy, public health, veterinary medicine, and chiropractic medicine in Minnesota institutions. Interest has been expressed to expand the program as it matures.

Issue: The 1987 Legislature did not fund new seats for Minnesota residents under the Optometry and Osteopathy Contracting Programs. Thus, it was implicit that the Board look at GRIP as a way of considering the issue of financial accessibility for these students since the benefits of the contract program no longer would be available, and they could face larger debt loads.

Conclusions: A staff report presented to the Coordinating Board in December 1987 pointed out that it was premature to make a recommendation on expansion of the program to all graduates because there had not been enough experience with GRIP or with commercial loan consolidation programs. Also, more information was needed on student indebtedness, which would be provided in staff study to be released in spring 1988.[8]

The December staff report did, however, conclude that graduates of osteopathic medicine and optometry have characteristics similar to those of graduates now included in GRIP. Numbers of potential applicants, repayment potential, and funding and administrative resources are relatively predictable. The inclusion of Minnesota residents graduating from these two programs could be accommodated within GRIP in its current structure.

Recommendations: Based on the study, the Coordinating Board on December 10, 1987 adopted the following recommendations:

1. **That the Board recommend to the legislature that Minnesota residents graduating from optometry and osteopathy programs be included in GRIP.**
2. **That the Board include a funding request in its biennial budget proposal to the governor and 1989 Legislature.**
3. **That the study to expand GRIP to graduates of other academic programs be postponed until the summer of 1988.**

The Board pointed out that in the past Minnesota has promoted access to optometry and osteopathic medicine programs by funding seats in institutions in other states. Discontinuation of funding of

[7] *Laws of Minnesota for 1987*, Chapter 401, Section 2, Subdivision 6

[8] Minnesota Higher Education Coordinating Board, *Expansion of the GRIP Program to Cover Academic Programs, Including Optometry and Osteopathy* with Coordinating Board Recommendations (December 1987).

new seats, however, will increase the tuition and fees these students will have to pay in public institutions. The number of Minnesota residents enrolled in these programs, the known average debt load at graduation, and the predictability of timely repayment fit the profiles of graduates now eligible for GRIP.

While GRIP is accessible to graduates regardless of state of residence and future practice, the most appropriate criterion for inclusion of osteopathic medicine and optometry graduates in GRIP would be Minnesota residence prior to beginning these programs of study, regardless of future place of practice. This eligibility criterion would put the graduates of these two programs into the most equitable position with graduates of programs now included in GRIP who are free to locate for practice in or outside the state.

Status: The 1988 Legislature accepted the recommendation to include in GRIP Minnesota residents graduating from optometry and osteopathic medicine programs.[9] A staff report analyzing the further expansion of GRIP was presented to the Board in October 1988.[10]

The analysis pointed out that since GRIP was established several commercial loan consolidation programs have been developed. A May 1988 Board study found that students are increasingly relying on loans to finance their education but that debt levels do not appear to be excessive. During the first 14 months of GRIP, 28 borrowers were accepted from the eight approved programs.

The analysis concluded that if an expanded GRIP program is approved, it be limited to Minnesota residents who are graduates of post-secondary two-year diploma and all degree programs, who have annual loan repayment in excess of 10 percent of the following income thresholds:

- $12,000 to $15,000 a year for two-year diploma or degree holders.
- $16,000 to $20,000 a year for baccalaureate degree holders.
- $20,000 to $25,000 a year for graduate and professional degree holders.

It is estimated that these criteria would make a maximum of 2,400 graduates eligible annually for the next three to four years. Based on experience to date with GRIP, about 300 graduates are projected to apply annually. Experience with GRIP indicates that the administration of an expanded program would require approximately $32,000 for staff support for every 80 participants, and about $1,000 for the same group to provide for space and equipment needs. The current loan capital resources of the Coordinating Board could support an expanded GRIP program in the short term for about 300 participants annually.

The report concluded that adequately reliable information is not yet available to assess borrower demand and fund requirements with sufficient accuracy to develop a comprehensive, long-term expansion. It also is not yet clear whether or not commercial loan consolidation programs will be able to accommodate all student borrowers identified in the report. GRIP, as a matter of public policy, could provide balance to commercial loan consolidation programs as a lower cost alternative and serve as a lender of last resort. Although GRIP could be made available for a two-to-three year period, the Coordinating Board would need to assess borrower demand and the appropriateness of commercial loan consolidation programs, gather sufficient information on loan sizes and capital requirements, explore appropriate mechanisms to secure loan capital, and seek legislative support for potential costs before considering a longer-term expanded program. A trial period of two to three years, however, would require commitment to a group of borrowers for up to 20 years. Trial programs are not easily ended. It is possible that the timated maximum of 2,400 additional students would apply, creating an immediate need for more staff and loan capital.

Recommendation: On November 17, 1988, the Coordinating Board recommended to delay action on the expansion of GRIP for two years to allow time for further experience with the limited GRIP program and with commercial alternatives coming onto the market. Additional time also would permit exploration of long-term financing options of need for the GRIP concept under changed circumstances.

[9] *Laws of Minnesota for 1988*, Chapter 703, Article 1, Section 22.

[10] Minnesota Higher Education Coordinating Board, *Analysis of Implications of the Expansion of the Graduated Repayment Income Protection Program (GRIP)*, (October 1988)

Governance, Mission Differentiation, and Planning

This part summarizes recent developments and proposals to alter the governance structure of Minnesota post-secondary education. It provides an update of progress in mission differentiation. This part summarizes the Board's review and comment of the post-secondary systems' 1986 planning reports, and presents a preview of the statewide study of post-secondary education access and needs (M SPAN 2000) mandated by the 1988 Minnesota Legislature. Next, appear summaries of the Coordinating Board's review and comment on the expansion of higher education services for Rochester, the progress of the Fond du Lac Higher Education Center, and the State University System's report on "Initiatives for Minnesota's Future." Last is a status report on the work of the Task Force on Instructional Technology created by the 1987 Legislature.

Governance

Governance of Minnesota's public two-year post-secondary institutions has received much attention in recent years. To a considerable degree, the focus of discussion has been the effective provision of instructional programs below the baccalaureate level. The result has been several changes in governance since 1983. The state's technical institutes have come under stronger state-level guidance through the creation of the State Board of Vocational Technical Education. In southwestern Minnesota, four technical institutes have administratively merged. Beyond this, technical institutes and community colleges in the state cooperate in numerous instructional and administrative activities. Further changes in governance continue to receive consideration.

Recommendation: The Coordinating Board in March 1987 voted to affirm its longstanding commitment to strong state-level governance of post-secondary vocational education through a single board for technical institutes and community colleges.

The Board urged the 1987 Legislature to make a clear-cut decision on governance. In December 1985 the Board had recommended that state governance of post-secondary technical institutes be unified and strengthened by placing all technical institutes under the complete managerial authority of the State Board of Vocational Technical Education. The Board's 1985 recommendation focused strictly on TI governance because the State Board of Vocational Technical Education had proposed a governance change and legislative discussion was anticipated for 1986. In light of new proposals to create a single governing board, the Coordinating Board re-examined its 1985 recommendation. The Board concluded that the creation of a single board will resolve the major gap between the statewide governance responsibility of the State Board of Vocational Technical Education and the board's authority to fulfill that responsibility. Moreover, a single governing board for the two systems would enhance educational opportunities for a changing student population in a time of limited resources. The Board would be able to ensure that graduates of its institutions possessed high quality general education and high quality vocational education. A single board is the best way to preserve and strengthen both missions.

The Coordinating Board has repeatedly studied and made recommendations on governance. In 1981 the Board concluded separate studies of the two systems by recommending the creation of a new state board for technical institutes and community colleges.

Status: The 1988 Legislature mandated a study by the Coordinating Board into the governance of two-year institutions. The focus is to be "the procedures necessary, fiscal implications, and effects of implementing alternative governance arrangements of two-year public post-secondary institutions." The legislature appropriated $25,000 for the study.[11] To conduct the study, the Board retained a consultant (McKinney & Associates of East Lansing, Michigan), who was to submit a report by January 1989. The Board is scheduled to submit the report to the legislature in March 1989.

In a paper released in June 1988, Joe Graba, state director of vocational-technical education, offered his views on structure and mission.[12] He asserted that the University of Minnesota be encouraged to continue with its plan to focus on its unique mission of upper division baccalaureate and post-baccalaureate education. He further suggested that an

[11] *Laws of Minnesota for 1988*, Chapter 703, Section 2

[12] Joseph P Graba, state director Minnesota Technical Institute System, "Minnesota Post-Secondary Education in the 1990s Structure and Mission" (June 1988)

analysis of the missions of the campuses at Crookston, Waseca, and Morris be undertaken to determine if they are consistent with the focused mission of the University; if they are found to be inconsistent, the Regents may want to examine the option of transferring the operation of these campuses to the most appropriate governing board. Graba also pointed out that it is not clear which governing board should operate the Morris campus.

The state director stated that the growing relationship between the state universities and community colleges, as well as the relative compatibility of the mission of the two positions, would suggest that a merger of the two systems be thoroughly examined.

The remaining realignment of post-secondary missions, he said, requires development of a system that offers occupational education at less than the baccalaureate level. Creating such a system requires examination of the occupational programs offered at the University's Crookston and Waseca campuses, and the community colleges, he said. Consistent with the realignment of post-secondary missions, it would be appropriate to consider transferring occupational programs to the Technical Institute System. He added that realignment only can be accomplished if a state system of technical institutes is created.

Gerry Christenson, chancellor of the Community College System, on October 4, 1988 outlined his ideas on reorganization; he proposed a state network of comprehensive two-year post-secondary institutions – geographically accessible to all, and integrating occupational education with general education.[13]

Mission Differentiation/ Cooperative Efforts

Background: The 1985 Minnesota Legislature directed the post-secondary systems to focus on mission differentiation as part of the planning process and required the Coordinating Board to coordinate the effort. The Higher Education Advisory Council (HEAC) appointed senior staff representatives to an advisory task force known as the Mission Differentiation Group. The HEAC directed the advisory task force to discuss and present to HEAC recommendations on several issues including:

- Associate degrees and occupational programs
- Access to undergraduate programs in the metropolitan area
- Doctoral degree programs
- Research roles
- Credit transfer
- Recruiting and marketing
- Continuing education and extension

In October 1986, the Advisory Council presented a report with recommendations to the Coordinating Board. Recommendations on several of the issues were included.[14]

Status: During 1987, the mission differentiation group continued to work on the remaining issues of recruitment and marketing. In August 1987, the HEAC adopted the following statement.

Recruiting

Guidelines detailing acceptable recruitment practices have been established by the National Association of College Admissions Counselors (NACAC), the national professional association for high school and post-secondary counselors participating in student recruitment. These guidelines include a grievance procedure through the Minnesota NACAC chapter. All Minnesota post-secondary institutions subscribe to these guidelines either through direct NACAC membership or by participating in the college night program sponsored by the Minnesota NACAC chapter.

We have concluded that NACAC's "Statement of Principles of Good Practice" includes guidelines and procedures regarding student recruitment which are adequate. The HEAC endorses these guidelines and encourages all secondary schools to comply with them as well.

- The HEAC reaffirms the continued endorsement of the NACAC guidelines by all Minnesota post-secondary institutions.

- The HEAC intends to work with the Department of Education, Minnesota School Boards Association and secondary school associations and organizations to emphasize the importance of dissemination of post-secondary information

[13] Gerald W Christenson, chancellor, Minnesota Community College System, "The New Challenge for Post-Secondary Education in Minnesota" (October 1988)

[14] Minnesota Higher Education Coordinating Board, *Report to the Governor and the 1987 Legislature* (1987) pp 84-87

as a means of maintaining access and choice.

- The HEAC recommends that those groups adopt and implement the NACAC guidelines as a part of their involvement in the post-secondary decision making process of Minnesota students and their parents.

Marketing

Unlike recruiting, there appear to be no specific guidelines — state or national — which govern marketing practices. The development of specific guidelines, however, is unwarranted at this time.

- The HEAC affirms its belief that institutional marketing does not require extensive regulation, and that, at this time it does not appear that mission differentiation would benefit from specific marketing guidelines. Should problems in the area of institutional marketing arise, the current forums of the HEAC and the Intersystem Planning Group are the appropriate channels for discussion and resolution of issues in this area.

- The HEAC encourages each system chief executive officer to advise staffs and institutions regarding the need for all institutional marketing and student recruiting efforts to be consistent with the mission of the system. The mission differentiation principles endorsed by the HEAC in October 1986 should serve as a guide for aligning marketing and recruiting with each system's mission. Systems and institutions should examine on a regular basis what they tell the public in general and potential students in particular about their educational offerings and services as well as the accomplishments of their faculty and alumni. What the systems and institutions communicate through their own print and electronic materials as well as through public media should promote an image which is consistent with and appropriate for the mission of each system. Direct and invidious comparisons should be avoided.

- The HEAC directs the Intersystem Planning Group to continue to monitor issues related to student recruitment and institutional marketing and to bring to the attention of HEAC, any emerging issues which indicate a need for mission-related direction.

The HEAC discussed the issue of no-need scholarships and other pricing strategies as marketing and recruitment tools. It focused on the public policy issue of the appropriate use of state funds for undergraduate scholarships that are not based on need.

Recommendations

- The HEAC encourages each system chief executive officer to advise staffs and institutions to use particular care in the use of public funds for no-need scholarships. Systems and institutions should examine, on a regular basis, the extent to which public funds are utilized to give the systems and institutions competitive advantages over other Minnesota post-secondary institutions. Public funds should be used to assist students to make informed and realistic choices rather than to advantage one Minnesota system or institution over another.

- The HEAC directs the Intersystem Planning Group to continue to monitor issues related to the use of no-need scholarships and other pricing and marketing strategies in order to bring to its attention any issues which emerge regarding the use of public funds to create competi advantages in student recruitment.

Cooperative Efforts

Late in 1987, the HEAC directed the mission differentiation group to continue to monitor existing mission differentiation agreements but to re-focus the work of the group on areas of cooperation rather than upon additional mission differentiation issues.

For the past year, the Mission Differentiation Group, renamed the Intersystem Planning Group, has focused its work on cooperative efforts that can enhance post-secondary education. Issues discussed by the group include cooperative efforts in providing information about Minnesota post-secondary education to business and industry, ways to inform adults who may wish to return to school, strategies to communicate expected college level skills in mathematics to post-secondary schools and students, joint dissemination of information concerning costs and ways to finance a post-secondary education, uses and cooperative development of an instructional technology system, and ways to enhance and streamline program review.

System Plans

Every two years, before each budget session, the four public post-secondary education systems prepare reports to the Minnesota Legislature of their short and long-range plans. In accordance with the statute requiring the plans, the Coordinating Board submits a review and comment to accompany the system planning reports.[15]

The third biennial set of plans was prepared for the 1987 Legislature, and in December 1986 the Coordinating Board adopted its review and comment.[16] The Board's review and comment summarizes the major themes and provisions in the systems' plans, analyzes their proposed strategies, and identifies and recommends positions on selected, important policy issues raised by the plans.

Common Issues: Five common themes transcending strategies for a single system were highlighted in the 1986 plans:

- Enrollment management in the face of a declining pool of new high school graduates.
- Student assessment, placement, and supporting services for a diverse student population.
- Quality improvement to meet the demands of student-consumers and political constituencies.
- Economic development and the growing role of post-secondary education.
- Intersystem planning and mission differentiation in response to resource constraints and legislative mandates.

In its comment, the Coordinating Board analyzes these themes and accomplishments and areas of concern in the individual plans.

Comment: The Coordinating Board reported that the 1986 plans reflected substantial progress in differentiating missions as a result of intersystem discussions sponsored by the Board. Much work remains to be done in mission differentiation. However, it is already clear that intersystem planning and cooperation result in significant, long-term benefits to students, the post-secondary institutions, and the state.

The discussions on mission differentiation culminated in a progress report by the Higher Education Advisory Council (HEAC) in October 1986. It lists accomplishments in clarifying missions and presents recommendations on future policy changes.

After reviewing the HEAC report and the system plans, the Coordinating Board presented the following views:

- A new agreement between the State Board of Vocational Technical Education and the State Board for Community Colleges defines a cooperative relationship for Associate in Applied Science degrees. It is a key component to solving a persistent and growing mission differentiation problem between these two systems.
- An intersystem agreement on associate degree standards will significantly improve the definition of these programs and their articulation with other levels of post-secondary education.
- The University should follow through on its plans to develop strong General College programs to assist students prepared to enter rigorous baccalaureate programs in the other colleges on the Twin Cities campus.
- The Coordinating Board agrees with a HEAC recommendation that the Community College System and the State University System begin discussions with the Minnesota Association of Private Postsecondary Schools on associate degrees for occupational programs.
- The Coordinating Board agrees with a HEAC recommendation that the University of Minnesota reduce its undergraduate enrollment on the Twin Cities campus by 8,000 between 1985-86 and 1994-95. State funding reductions that would occur under average cost funding should be moderated if the University adheres to scheduled reductions in undergraduate enrollments. Legislative decisions to deviate from average cost funding should be contingent each biennium upon the University's progress in reaching predetermined enrollment limits.
- The Coordinating Board agrees with a HEAC recommendation that University of Minnesota enrollment reductions should be concentrated at the lower division. Upper division reductions should be confined to specific academic programs.

[15] *Minn. Stat.* 135A.06 (1988).

[16] Minnesota Higher Education Coordinating Board, *Review and Comment on System Plans for 1986* (December 22, 1986)

- The Coordinating Board agrees with a HEAC conclusion that reductions in enrollments at the University of Minnesota can probably be accommodated by other metropolitan colleges without creating a new institution.

- The Coordinating Board supports additions to the missic ' of Metropolitan State University to adjust to changing enrollment policies of the University of Minnesota and other educational needs of the Twin Cities, provided that all new programs undergo program review by the Coordinating Board and are developed with other area institutions.

- The Coordinating Board agrees with a HEAC recommendation that the state universities not offer doctoral degrees.

- The Coordinating Board agrees with a HEAC statement defining research as central to the mission of the University of Minnesota. Direct support for applied research and technical assistance in other public post-secondary institutions, if desired, should be provided by special legislative appropriations and not incorporated into basic system funding.

- The Coordinating Board supports new agreements to facilitate transfer of credit between the community colleges and state universities and between the University of Minnesota and Minneapolis Community College. It supports efforts to develop agreements between the community colleges and the University of Minnesota and between collegiate systems and the members of the Minnesota Association of Private Postsecondary Schools.

The Board concluded by pointing out that planning efforts for the two-year period had focused on structural and intersystem questions because the planning legislation implied or required attention to these issues. Further work needs to continue in these areas, but progress has been made. While all the current plans devote some attention to developing quality programs, quality assessment and improvement deserve to be major planning themes for the next planning cycle, the Board said.

Status: The 1987 Legislature amended the statute governing the planning language, directing the public systems, in cooperation with the Coordinating Board, to jointly review their missions, develop strategies to achieve mission differentiation, and create an overall intersystem plan. The Coordinating Board is to establish an agenda, determine schedules for accomplishing that agenda, and develop criteria for the intersystem plan.[17] The 1988 Legislature specified that the statewide study of higher education needs is to serve as the 1988 intersystem plan.[18] The Coordinating Board received copies of the systems 1988 plans by September 1988 as required. The Board was expected to adopt its review and comment in December in time for consideration by the 1989 Legislature.

17 *Laws of Minnesota for 1987*, Chapter 401, Section 10.

18 *Laws of Minnesota for 1988*, Chapter 703, Article 1, Section 2, Subdivision 3

Study of Statewide Higher Education Needs

The 1988 Minnesota Legislature appropriated $350,000 to the Higher Education Coordinating Board to begin a study of the post-secondary education needs of the state.

Background: The first phase of the study is to focus on the needs of the population corridor extending from St. Cloud to Rochester, and the Coordinating Board is to report its findings to the legislature by February 1, 1989. The second phase is to be done in 1989 and concentrate on the rest of the state.[19]

The study mandate states that both phases of the study are to focus on: (1) an assessment of the current and future conditions and needs; (2) strategies to meet these needs; (3) costs associated with the strategies; and (4) effects of the strategies on existing institutions, state policies, and system and institutional missions. Both phases are to include consideration of at least the following concerns: the current and projected demographic and participation trends; current level and type of services available; needs of traditional, nontraditional, and minority students; the geographical accessibility of services needed by different types of students; uses of alternative delivery systems, technology, cooperative efforts, and reciprocity agreements; and the physical capacity of existing institutions.

19 *Ibid.*

Issues: Based on discussions with the post-secondary community and external advisers, Coordinating Board staff identified four key issues in the request for proposals to obtain a contractor for the study:

- Are changes needed to assure that residents of the Twin Cities metropolitan area have access to post-secondary education, particularly four-year degree programs?

- How are changes in attitudes, values, and lifestyles affecting the demand for post-secondary education?

- How can post-secondary education create opportunities and services to help all students succeed in achieving their educational goals?

- How will the economy of the region affect demand and need for post-secondary education?

Status: The Coordinating Board on August 9, 1988 authorized staff to enter into a contract with SRI International, a nonprofit consulting organization with headquarters in Menlo Park, California, to conduct the study. The SRI proposal was one of nine presented to the Coordinating Board.

M SPAN 2000 was selected as the name for the study. It stands for Minnesota Study of Post-Secondary Education Access and Needs. The project is assessing current conditions and future needs to the year 2000.

The Coordinating Board has been collaborating with the state's public and private post-secondary systems as represented by two groups. One is the Higher Education Advisory Council. The second group includes representatives of the post-secondary systems and the State Department of Education, State Planning Agency, State Department of Finance, and legislative staff.

Findings from the study were to be released in mid-December. Alternatives are to be released in early January. The final report is to be released in late January and presented to the legislature in February.

Expansion of Services for Rochester Area

As a result of its long range planning, the Rochester community has proposed expansion of higher education programs and services.

A study of higher education in Rochester was part of the community's strategic planning effort (FutureScan 2000) begun in 1985 by leaders in government, industry, and education. Recommendations from a Task Force on Higher Education resulted in the creation of a Greater Rochester Area University Center (GRAUC) Board of Directors and a Board of Higher Education Providers. The GRAUC Board contracted the M & H Group, Inc., of Boulder, Colorado, to conduct the study. The M & H report was released in September 1987. Subsequently, the GRAUC Board of Directors developed a proposal for consideration by the governor and 1988 Legislature.

- Seek legislation and funding to establish a University Center at Rochester (UCR) which would include a Graduate Research Center (GRC) and a high tech incubator.

- Develop incentives for entrepreneurship support for spinoffs and startups, and stronger ties with the R & D activities of local high tech industries.

- Meet the higher education needs of IBM and Mayo in engineering, computer science, and the management of technology, so as to facilitate technological development, technology transfer, and commercialization.

In October 1987, after receiving the report and recommendations of the consultants and hearing a presentation from community leaders, the Coordinating Board adopted a resolution praising the community for its planning efforts and directing staff to prepare a review and comment to be ready for its January 1988 meeting so that it could consider possible policy positions before the 1988 legislative session. After discussions at its January and February meetings, the Board adopted the review and comment and six recommendations on February 18, 1938.[20]

Issue: The issue is to enhance access to post-secondary education opportunities for residents of the Rochester area.

Conclusions: The Coordinating Board concluded that a coordinated effort by several providers under a university center is consistent with state policy that is based on clear

[20] Minnesota Higher Education Coordinating Board, *Review and Comment on Proposed Expansion of Post-Secondary Education Services for Rochester Area* with Coordinating Board Recommendations (February 18, 1988)

differentiation of system missions. This approach would be more efficient and cost effective than establishing a new institution. Successful coordination, however, will require the cooperation and coordination of all the providers. Of particular importance would be the expanded presence of the University of Minnesota in providing quality graduate programs in engineering and management.

A concern raised by the community's proposals is an apparent orientation toward a local governance structure for the university center. It would recreate the governance dilemma now facing the the state's system of technical institutes, in which responsibility is vested with the state board but authority rests with local school districts. Moreover, a new governance structure would duplicate the responsibilities of the existing governing boards, which already have the responsibility for serving the Rochester area. An appropriately designed administrative structure, however, could make the university concept work well. A local advisory group would be an important part of this structure.

Additional resources will be needed for facilities and for incentive funds, or "academic seed capital," to encourage existing institutions to provide programs that meet the area's needs. Over time, however, existing state funding policy should adequately cover instruction and related educational costs. A question remains about whether funds should be allocated directly to the providers or to the proposed University Center at Rochester.

Recommendations: Based on its review of a study commissioned by GRAUC, the GRAUC proposal, discussions with the Higher Education Advisory Council, and broad consultation, the Coordinating Board on February 18, 1988 adopted the following recommendations:

1. The Board endorses the general concept of a University Center in Rochester, and development of a research institute in conjunction with the Center, contingent on formal commitments by governing boards of providers of services, specifically to include a commitment by the Regents of the University of Minnesota.

2. The Board recommends that the state provide full funding for three years for the University Center, with a substantial portion of funds dedicated to contracting for services. Funds should be used to:

- **provide academic seed capital to develop graduate programs in engineering, computer science and technical management.**

- **provide support for an administrative structure to operate a University Center.**

Funding should be contingent on development of an evaluation proposal, to include a formal review by the Board before January 1991 of the effectiveness of administration, contracts and services in meeting needs.

3. The Board recommends that available state-owned land be dedicated to this facility, provided local fund-raising yields a match to state funds for the proposed facility.

4. The Board reaffirms its own budget request and Commitment to Focus as its highest 1988 priorities.

5. Until the recommended evaluation and review in 1991, the Board recommends that the governance of the University Center at Rochester be vested in a Board of Trustees comprised of the majority of local lay members and including provider representatives, appointed by and reporting to the Higher Education Coordinating Board. The authority of this Board of Trustees shall not overlap or duplicate the authority of the existing post-secondary education governing boards and shall be limited to:

- **development and management of the University Center at Rochester facilities.**

- **making arrangements for the provision of needed educational programs and services in the Rochester area.**

- **allocation of funds for such facilities, programs, and services in the Rochester area.**

6. The Board shall forward its review and comment, along with these recommendations and the February 8 staff analysis, to the governor, the 1988 Legislature, the Greater Rochester Area University Center Board of Directors, and members of the Higher Education Advisory Council.

Status: The 1988 Legislature authorized $450,000 for the University of Minnesota Board of Regents to provide graduate degree programs in the Rochester area. This includes a state appropriation of $300,000

and estimated tuition revenue of $150,000.

To the extent possible, the University is to provide programs in electrical engineering, comp ter science, and technology management.

The legislation requests the regents to prepare a report on its plans for program development, faculty recruitment, availability and uses of adjunct faculty, estimates of costs for five years, and a timetable for establishment of graduate programs. The regents are required to establish a permanent local advisory committee of persons residing in the Rochester area who have knowledge of and interest in graduate education. The University is to report its findings to the legislature by February 1, 1989 after they are submitted to the Coordinating Board for review and comment.

In addition, the Coordinating Board is to review the delivery of graduate-level programs in the Rochester area and report its findings to the legislature by February 1, 1990.[21]

Fond du Lac Highe. Education Center

The 1987 Minnesota Legislature auth rized the establishment, as a pilot project, of the Fond du Lac Higher Education Center to be go erned by the State Board for Community Colleges and administered by Arrowhead Community College. The State Board for Community Colleges was directed to submit progress reports to the legislature by January 15, 1988 and January 15, 1989, with a review and comment by the Coordinating Board.[22]

Background: The 1986 Minnesota Legislature directed a task force to study the feasibility of establishing a coordinate campus of Arrowhead Community College on the Fond du Lac Indian Reservation. In January 1987 the task force recommended that a pilot project, called the Fond du Lac Higher Education Center, be established with a biennial appropriation of $800,000. On February 17, 1987, the Minnesota State Board for Community Colleges passed a resolution supporting the establishment of this pilot project, subject to certain operational and financial conditions. The Coordinating Board, in February 1987, recommended that the initiative proceed as a pilot project and its progress be closely monitored and evaluated. As part of the 1987 legislation approving the pilot, $400,000 for the biennium was appropriated to the State Board for Community Colleges. The legislation also continued the task force until June 30, 1989 to oversee establishment of the center.

The 1988 community college progress report summarized activities undertaken to serve the Fond du Lac area. The report included information regarding course offerings, student enrollment, faculty assignments, administrative activities, and budget information for the first two quarters of the Center's operation.

Review and Comment: At its January 21, 1988 meeting, the Coordinating Board adopted a review and comment on the Community College System's report, "Fond du Lac Higher Education Center."[23]

The Coordinating Board concluded that the center is in its early stages of development and will require additional time to establish operation. While it is too early to evaluate conclusively the center's activities, steps should be taken to insure that future evaluations respond to the issues raised. In February 1987 the Board had specified information that should be considered when evaluating the center; the Board also stated that three years would be an appropriate time for the center to operate before being evaluated for further funding.

Recommendations: Based on the review and comment, the Coordinating Board reiterated its 1987 recommendations regarding the operation and evaluation of the center. Also, the Board recommended that the Community College System and the task force created in law to oversee the establishment of the center continue to monitor the development of the center and ask that the center collect items of information specified by the Board in 1987 — an inventory of courses advertised and offered, including location, dates, and time; the number of students enrolled at the beginning and end of each course; data regarding the students' age, sex, employment status, and ethnic origin and course costs. (The Board also

[21] *Laws of Minnesota for 1988*, Chapter 703, Article 1, Section 6, Subd. 2(b).

[22] *Laws of Minnesota for 1987*, Chapter 274, Section 4

[23] Minnesota Higher Education Coordinating Board, *Review and Comment on the Minnesota Community College System's Report to the Legislature, "Fond du Lac Higher Education Center A Report on Establishment and Progress"* (January 1988)

proposed that the evaluation include longitudinal enrollment data from the nine post-secondary educational institutions in the Duluth-Superior area.)

The Coordinating Board noted that the Community College System's progress report did not include information on enrollment and completion by courses. This information would help determine courses of greatest interest to students, especially as they relate to their employment status and ethnic origin. Second, 25 percent of the center's winter quarter courses were scheduled for Duluth while no courses were available at that site fall quarter. It would help to know the effect of this development on the enrollment of other institutions and the proportion of students attending courses in Duluth compared to Cloquet and the Fond du Lac Reservation.

Status: The second required progress report was scheduled for presentation to the Coordinating Board in December 1988.

Meeting Educational Needs of the Duluth-Superior Area

In response to a request from the Higher Education Advisory Council, the Higher Education Coordinating Board staff in August 1986 convened representatives from the post-secondary institutions in the area to explore the possibility of expanding educational services, especially the possibility of a cooperative effort involving institutions in Minnesota and Wisconsin.

Background: Coordinating Board staff met twice with administrative staff of the six post-secondary institutions in northeastern Minnesota and Northwestern Wisconsin; Duluth Technical Institute, Arrowhead Community College Region, College of St. Scholastica, University of Minnesota-Duluth, Wisconsin Indianhead Technical Institute, and University of Wisconsin-Superior. Staff gathered information from the personnel at the institutions and public agencies in Wisconsin and Minnesota and prepared a report.[24]

Conclusions: Based on the number of post-secondary institutions, projected number of high school graduates, and the current post-secondary participation rate in the Duluth-Superior area, additional service providers are not needed. The type and intensity of service may change, however, and the expanded presence of community college programs on the Fond du Lac Reservation, as authorized by the 1987 Legislature, would affect the need for any current provider to expand services in the area. Personnel from the institutions indicated that they are satisfied there is not a problem with duplication of service, and they can coordinate needed services.

The report was presented to the Coordinating Board in April 1987. No action was requested or taken.

Status: In 1988, the Northeast Minnesota Higher Education Consortium (University of Minnesota-Duluth, College of St. Scholastica, Bemidji State University, and the Arrowhead Community College Region) began a study to assess the needs of adult learners in the area. The Blandin Foundation and Northeast Minnesota Initiative Fund awarded grants for the study of needs.

Review and Comment on State University System Report — Initiatives for Minnesota's Future

The 1987 Minnesota Legislature appropriated $50,000 to the State University System for Fiscal Year 1988 for Winona State University to develop a Composite Materials Engineering Program. The release of an additional $500,000 for the program in Fiscal Year 1989 was to be contingent upon legislative approval of a systemwide report by the State University System regarding the development of new programs in science, technology, and engineering. The report was to be submitted to the Coordinating Board for review and comment prior to submission to legislative finance committees.[25]

HECB Action: The Coordinating Board at its January 21, 1988 meeting adopted a review and comment and four recommendations.[26] The recommendations were that:

1. The State University System provide an integrated approach to engineering, technology and science education, and that this be provided not later than in the upcoming biennial plan in fall 1988.

2. The legislature, as a preliminary step, release from the $500,000 reserved for implementation of the Winona Composite Engineering program during Fiscal Year 1989, an amount sufficient for

[24] Minnesota Higher Education Coordinating Board, *Meeting the Educational Needs of the Duluth-Superior Area* (April 1987).

[25] *Laws of Minnesota for 1987* Chapter 401, Section 5, Subd 2

[26] Minnesota Higher Education Coordinating Board, *Review and Comment on the Minnesota State University System Report, "Initiatives for Minnesota's Future in the State University System"* (January 21, 1988).

further planning. These funds should be used only for continued planning of the program and not presume implementation of the program.

3. The legislature release the remaining funds for implementation upon favorable review of the proposed program by the Coordinating Board.

4. The legislature be prepared to provide adequate funding to ensure the implementation of a quality and competitive program, or seek institutional commitment for the reallocation of resources.

The Board found that the State University System report provides a comprehensive inventory of existing programs and industry-institution interaction. The report also summarizes the intentions of individual institutions to propose programs in the sciences and engineering. The report provides an analysis of existing programs, and a listing of programs proposed by individual institutions. It does not, however, provide a system-wide integrated planning approach to program development within the short (1987-1990) and long range (1990-1995) context for the fields listed in the legislative mandate. The report also does not provide State University Board guidance to the institutions or notice to the state beyond an intent to review the proposed programs. As the report now stands, the institutions appear to compete with rather than complement each other.

Because the State University System report does not place development in an integrated system and state-wide planning context, and because the report does not address all the specific issues in the legislative mandate, the Board recommended that the State University System provide an integrated approach not later than fall 1988.

The review and comment pointed out that the State University System report specifically addresses issues related to the proposed Composite Materials Engineering program at Winona State University. Because the program was in preparation, the Board was unable to comment on a specific proposal

Board staff, as a result of preliminary research, however, analyzed issues related to the program, such as the appropriateness of the undergraduate level for the program, and a number of risks and benefits. Based on preliminary research, the Board concluded that the funds reserved by the legislature alone appear to be inadequate to implement and operate a quality, stand-alone engineering program of this nature, and that additional funds would be required from the legislature or through the reallocation of institutional resources.

Status: After receiving the Coordinating Board's review and comment and recommendations, the 1988 Legislature adopted language to allow the release of the $500,000 authorized in 1987 for the Winona State program upon the legislature receiving a positive program review from the Coordinating Board and documentation that $250,000 of the appropriation has been matched by nonstate contributions.[27]

The Coordinating Board approved the program at its October 1988 meeting. The Board noted that it would continue to monitor the program under its review framework, following the guidelines of its engineering task force. Also, the program would be expected to achieve accreditation by the Accreditation Board for Engineering and Technology.

In reviewing the program, Coordinating Board staff raised three major concerns. First, staff pointed out that a major expenditure of funds would be needed for additional faculty, classroom and laboratory space, laboratory equipment and supplies, and library reference materials in support of the program. State University System personnel provided assurance that the institution is prepared to make internal allocations necessary to accommodate the program.

Second, Board staff noted that professional opinion is divided as to whether the baccalaureate degree is the appropriate level to prepare engineers in this field of study. System personnel pointed out that as a result of their consultations they believe that the baccalaureate level is appropriate.

Third, that although the institution surveyed potential employers, an estimate of the number of baccalaureate prepared composite materials

[27] *Laws of Minnesota for 1988*, Chapter 703, Article 1, Section 5(b)

engineers expected to be employed during the next five years was not obtained

Task Force on Instructional Technology

Introduction: The introduction of computers, audio and video technology, and telecommunications is transforming the way in which education can be provided to Minnesotans. Institutions and states are using these new technologies in several ways including:

- enhancing instruction in classroom or laboratory situations,
- providing instruction to students at remote sites,
- providing courses to students dispersed in different locations and institutions,
- sharing books and periodicals between libraries,
- providing professional courses to students at their place of work,
- establishing local and regional cooperatives which include all levels of education (K-12, post-secondary, and professional continuing education),
- providing conferences to participants and allowing consultation among people in several remote sites, and
- transmitting data for administrative and research purposes.

The use of new technologies has significant implications for the nature, quality, accessibility, and cost of education and for state policy regarding the funding and regulation of instruction provided through the new technologies.

Background: Electronic technology is being used in a variety of ways to provide credit courses, non-credit courses, continuing education, job-related instruction at the place of employment, and teleconferencing. Among the transmission technologies being used are:

- coaxial cable,
- broadcast television,
- fiber optics,
- satellites,
- microwave,
- twisted pair wire, and
- radio (AM and FM).

In addition to the various transmission technologies, there are different levels of interactivity that are possible using instructional telecommunications.

In Minnesota, all types of technology have been used at virtually every level of education.

The 1987 Minnesota Legislature received budget requests to support instructional technology and telecommunications systems from all systems of public education (elementary, secondary, and post-secondary). Seeking a more coordinated way to respond to the many requests it receives, the legislature created the Task Force on Instructional Technology to examine current efforts to use instructional technology and telecommunications and to develop a statewide policy for these new technologies.[28] The legislature appropriated $60,000 to the Coordinating Board to support this activity.

The legislature charged the task force with:

- conducting an inventory and evaluation of current and emerging systems of instructional technology and telecommunications in elementary, secondary, and post-secondary education;
- assessing the costs and benefits of statewide networks of local and regional telecommunications systems, including opportunities for collaboration among post-secondary institutions, elementary and secondary schools, public agencies, communities and the private sector;
- examining the potential effect of telecommunications instruction transmitted from outside the state;
- determining objectives for the delivery of K-12 and post-secondary instruction through technological and telecommunications systems; and
- establishing minimum state standards and procedures for the support of instructional technology and telecommunications systems.

The task force is to submit its findings and recommendations to the Higher Education Coordinating Board for review and comment. The report and the Coordinating Board review are to be submitted to the legislature by January 15, 1989.

The legislation mandated that the task force be composed of one representative selected by each public and private system of post-secondary education, six representatives selected by the Department of Education, including representation from school districts and other educational organizations involved in telecommunications, one selected by the Department of Administration, a representative from the HECB Student Advisory Council, three representatives selected by the Coordinating Board including two from the private sector, and a representative from the Minnesota Public Television

[28] *Laws of Minnesota for 1987*, Chapter 401, Section 35

Association. The Coordinating Board has convened the task force and is providing staff and support services for its work.

Status: The task force met 11 times in 1988. Given the limited time frame for its work, the task force concluded that it would not be able to consider all types of instructional technology. Meetings with and communications from legislators helped the task force to focus its efforts on issues related to instructional telecommunications.

Electronic instruction has been successfully provided with different types of technology for interaction between the teacher and students and among the students themselves. Among the different levels of interactivity are one way (broadcast) audio, one-way (broadcast) video, two-way audio, one-way video/two-way audio, and two-way interactive video. Institutions and students appear to prefer two-way interactive video which allows the faculty and students to see and hear each other on television monitors. This type of interactivity requires comparatively greater transmission capacity. A telecommunications medium that has the capacity to transmit two-way interactive television, also will have the capacity to provide any of the less interactive forms of communication and to transmit data as well. Consequently, the discussions, findings, and recommendations of the task force are focused on two-way interactive television.

To provide data on the extent of educational telecommunications activities, the task force, in cooperation with the Department of Administration, conducted an inventory of existing uses of telecommunications. The inventory was intended to provide data on current and planned uses of telecommunications by schools and post-secondary institutions. It was distributed to school districts and post-secondary institutions. A number of large school districts and post-secondary institutions did not respond in a timely manner. Further efforts to collect more complete and representative data were made, and the report on the inventory delayed. Consequently, a supplemental report will provide findings from the inventory.

The task force gathered information pertaining to attitudes about telecommunications. A consultant conducted focus groups and telephone interview needs assessments. Sixty-three participants representing different educational functions and systems met in 10 focus groups around the state. Opinion leaders also were interviewed by telephone to determine their views about educational telecommunications.

In addition to the work of the task force, there are several other activities regarding telecommunications occurring through state agency direction. While the Task Force on Instructional Technology met, a number of other groups, educational and non-educational, also were studying the issue of telecommunications and instructional technology in Minnesota. These include the State Board of Vocational Technical Education (SBVTE), the Higher Education Advisory Council (HEAC), the Higher Education Coordinating Board, the Department of Administration, and the State Planning Agency.

The task force report was presented to the Coordinating Board in December 1988.

Quality

This part provides an update on quality assessment activities in response to legislation in 1987, on remedial education, and teacher education.

Quality Assessment

Introduction: Nationally, the criticism leveled at elementary and secondary education during the early 1980s now has been directed at post-secondary education. Many persons are charging that graduates don't know and can't do all that a post-secondary degree should imply. Post-secondary institutions have found it difficult to respond to much of the criticism because, in fact, they have not always established clear goals and ways to assess how well students are meeting those goals. Educators and policymakers in nearly every state are addressing issues of assessment and assurance of quality in post-secondary education.

In the past, quality has been defined in terms of inputs, such as the number of books in the library, the number of faculty with doctorates, or the Scholastic Aptitude Test scores of entering freshmen. Only recently have policy makers and educators focused on outcome measures as indicators of quality. These outcomes are usually indicators of what a student knows or can do as a result of a post-secondary education.

Paper and pencil tests are one indicator, but there are others, including performance portfolios, senior capstone experiences, follow-up surveys of graduates and their employers, and many other sources of information about the knowledge, skills, and attitudes of graduates.

Issue: The issue for the state is to work with the post-secondary education community to determine what students should learn as a result of their post-secondary educational experiences, to establish measures to assess whether or not those standards are being achieved, and based upon the evaluation, to improve the effectiveness of the educational process.

Background: Many states and individual campuses have responded to the need to assess how well students are meeting educational goals. Responses have ranged from mandating statewide standardized tests of basic skills in Florida and Georgia, to linking funding to demonstrated achievement in Tennessee and Colorado, to providing funds to individual campuses to establish educational goals and measure how well students are meeting those goals in Virginia. The Coordinating Board's 1987 *Report to the Governor and the 1987 Legislature* describes in detail the various approaches.

The approach taken in Minnesota is similar to the Virginia approach. The state has indicated that assessing the quality of Minnesota's post-secondary education system is important but has left much of the decision about the goals and ways to assess those goals to the post-secondary community.

In 1986 the Higher Education Coordinating Board recommended establishment of a task force on quality assessment. The Board included in its biennial budget request, a proposal for $360,000 to support the work of a task force and to fund pilot assessment projects in each of the post-secondary systems.

The introduction of legislation to establish quality assessment activities followed a series of events in March 1987 sponsored by the Coordinating Board to inform legislators and educators about the issue. The Board brought five consultants to Minnesota to talk to and with legislators, legislative staff, administrators, students, governing board members, and system heads. Four separate events were held to meet the diverse needs of these groups, including a joint legislative hearing of the House and Senate higher education policy committees, a discussion with Coordinating Board staff, an informal discussion with a group of campus and system representatives, and a reception and dinner with governing board members, system heads, and key legislators. Experiences in New Jersey, South Dakota, and Tennessee were described. A survey of activities in the states by the Education Commission of the States was summarized.[29]

The 1987 Legislature established a Task Force on Post-Secondary Quality Assessment and charged it with the following responsibilities:

- Determine the goals of quality assessment.
- Study and recommend strategies and mechanisms for the state to use in achieving those goals.
- Consider ways to use assessment to improve post-secondary education.
- Establish pilot projects within each of the public post-secondary education systems.[30]

The legislature provided the Coordinating Board $50,000 for the quality assessment initiative.

Status: The 17 member Task Force on Post-Secondary Quality Assessment, including faculty and administrators from the public and private post-secondary systems/sectors, students, secondary education educators, and a representative of the Higher Education Coordinating Board, began its work in September 1987. In its preliminary report to the legislature in January, 1988, the task force stated that the two goals of quality assessment should be first, improvement and second, accountability. The preliminary report was discussed at the annual meeting of education governing boards.[31]

The preliminary report describes various approaches used throughout the country. It also describes current and future activities in each of the public and private systems in Minnesota. The task force found that the systems and campuses

[29] Minnesota Higher Education Coordinating Board, *Quality Assessment, Proceedings, Legislative Hearing and Seminar* (March 9, 1987).

[30] *Laws of Minnesota for 1987*, Chapter 401, Section 33

[31] Minnesota Higher Education Coordinating Board, *Quality Assessment, Proceedings, Annual Meeting of Education Governing Boards* (February 17, 1988).

are engaged in a variety of assessment activities and plan to expand them.[32]

To assist policy makers and educators interested in developing assessment programs, the task force recommended a set of guiding principles for consideration. These principles, based upon the task force's review of the literature, conversations with assessment experts, and experience, are ways to use assessment to improve post-secondary education.

Principle 1: While outcomes assessment programs should result in improved student learning and accountability, improved student learning is the most important, and the process is not complete until the results have been used for institutional improvement.

Principle 2: Multiple and varied measures are more desirable than a single standardized exam.

Principle 3: Keep the number of assessment dimensions to a manageable number.

Principle 4: Assessment policies and practices should go beyond examining basic skills and minimum competencies, especially if the instructional program of the institution is broader.

Principle 5: Faculty involvement in, and support of, all aspects of the program is essential.

Principle 6: Data collected should build upon existing data and should reflect the campus master plan.

Principle 7: There are substantial costs, both in time and money, especially in the early stages of an assessment program.

Principle 8: Outcomes assessment should yield information to decision makers about the quality of the educational experience.

Principle 9: Assessment policies should include provisions for analysis of the effects of the assessment upon students, institutions, and the teaching and learning process.

Principle 10: Students must see value in outcomes assessment. The most important purpose for assessment is the improvement of the educational experience of the students.

The task force also recommended a total of $300,000 for each post-secondary system to initiate a pilot quality assessment project. The task force did not set up educational goals but left the development of the goals of the pilot and ways to measure attainment of those goals up to each system.

At its January 1988 meeting, the Board received the preliminary report of the task force, required by legislation, and adopted five recommendations.

Noting the progress made by the task force, the Board voted to commend it for its work to date. Second, the Board voted to encourage each post-secondary system to clearly state educational goals for its students based on its mission, and to develop ways to measure how well the system and students are meeting those goals.

Third, the Board voted to affirm the dual purposes of assessment; improvement and accountability. Although the task force concluded that institutional improvement is the most important goal, the Board, in its recommendation, affirmed that accountability also is important. Fourth, the Board endorsed the general direction outlined by the task force in working with the post-secondary systems to establish pilot projects. Fifth, the Board endorsed the task force request and its own budget request of $60,000 for the work of the task force and $300,000 for pilot projects. The governor's budget included $150,000, the amount appropriated.

The 1988 Legislature provided $100,000 for the pilot project phase, and an additional $50,000 to the Coordinating Board for Fiscal Year 1989 to staff the task force.[33]

The task force decided to recommend that the money be divided among the six systems/sectors. Thus each received a grant of $16,650 to develop a plan or plans for quality assessment project(s).

In August 1988, nine pilot proposals, involving 18 campuses, were funded. Each of the pilot project sites will develop a plan for implementation of the pilot. Plans were to be submitted to the task force in December 1988.

[32] Minnesota Higher Education Coordinating Board, *Preliminary Report of the Task Force on Post-Secondary Education Quality Assessment* (January 1988).

[33] *Laws of Minnesota for 1988*, Chapter 703, Article 1, Section 2 Subd 4(b)

The task force was to review the proposals and recommend that the most promising receive additional funding from the 1989 Legislature.

A conference on quality assessment for faculty and administrators was held in October 1988. It was sponsored in part by a $10,000 grant from Cray Research Inc. The purpose of the conference was to assist pilot project teams and other interested faculty, students, and administrators in learning more about various approaches to assessment.

More than 40 campuses were surveyed concerning assessment activities. The survey resulted in the publication of a directory of selected assessment activities containing information on assessment projects on 20 campuses throughout the state.

Remedial Education Update

In May 1984, the Higher Education Coordinating Board adopted recommendations following review of a staff study on remedial and skills development instruction in Minnesota post-secondary education. In August 1988 Board staff presented an update on the status of the recommendations.[34]

Background: The Board requested a study on remedial education at a time of intense scrutiny of elementary and secondary education. In many states, and to some extent Minnesota, the presence of remedial programs in colleges and universities was commonly used as evidence that schools have failed.

The study identified the extent and nature of remedial and skills development instruction in Minnesota public and private collegiate institutions, and in the technical institutes with data from 1982-83. Remedial instruction was defined in terms of basic skills in reading, writing, and mathematics that could be expected of any high school graduate. Skills development instruction was defined as high school mathematics, English as a Second Language, and study skills; subjects that are not required for high school graduation, but are needed by many students for success in post-secondary education.

The study concluded that the need for remedial and skills development programs had resulted from changes in the mission of post-secondary education as well as changes in student achievement in the elementary and secondary schools.

The Board's recommendations supported the need for high quality remedial education to fulfill the state's obligation to provide access to educational opportunity. At the same time, the Board stated that elementary, secondary, and post-secondary education need to implement policies that will encourage students to become fully prepared for post-secondary programs before graduation from high school.

1988 Update: Activities since 1984 are the result of general trends and the leadership of many forces in education. The direction of change is clear:

- Compared to four years ago, there is more attention given to informing and guiding high school students to take rigorous courses in foundation academic fields.
- There is an increase in the assessment of students in elementary and secondary schools to identify learning problems and in post-secondary education institutions to identify incoming students who could benefit from remedial services.
- There has been extensive discussion in Minnesota over the implications of post-secondary enrollments drawn from the entire ability and age spectrum, including the role of different systems and institutions in serving underprepared students.
- With changes in welfare strategies and continued attention to economic dislocation of farmers and other workers, there is a new appreciation of the potential value of basic skills programs to improve individual well-being and reduce costs for income support.

In consulting with representatives of the state's post-secondary systems, Coordinating Board staff found a consensus that enrollments in remedial programs have grown rapidly since the 1984 study. Some of this growth is attributed to policies that support participation by dislocated workers and welfare clients. Special programs have been created, and improvements

[34] Memorandum to the Higher Education Coordinating Board from Kathleen M. Ki ting executive director, "An Update on Remed Education Policies" (August 8, 1988).

in assessment have identified more students who could benefit from assistance in developing academic skills. Institutions continue to expand access and increase enrollments through enrolling students who previously did not attend post-secondary education.

None of these reasons for growth imply deterioration in the preparation of new high school graduates. Changes in preparation are not likely to have been dramatic, however. The Board's communications about high school preparation are directed at eighth grade students; the first students receiving these publications have not yet entered post-secondary educatic Few post-secondary institutions have changed their requirements in order to reduce demands on remedial programs. The University of Minnesota's preparation requirements will not take effect until 1991. High school graduation requirements and course offerings may change as a result of current discussion, but have not yet occurred.

Recommendations: After reviewing developments since its 1984 study of remedial education, the Coordinating Board in August 1988 recommended that:

1. **The Higher Education Coordinating Board include a study in its 1988-91 management plan of th haracteristics of students enrolled in remedial education classes.**
2. **The Coordinating Board continue its information initiative to encourage prospective students to obtain the academic preparation that will help them succeed in post-secondary education.**
3. **The Higher Education Coordinating Board renew its legislative requests for authority and funding to provide up to five years of financial aid to undergraduate students.**

Teacher Education Update

Background: The 1986 Legislature directed the Higher Education Coordinating Board to study the need for a loan forgiveness program for career teachers as defined in *Minn. Stat.* 129B.41-129B.47. Subsequently, the National Conference of State Legislatures agreed to provide a grant for the study providing it consider teacher retention issues also. Under the law, career teachers continue to teach but work an extended year in order to assume an additional diagnostic and instructional role. Under their extended contracts, career teachers are each responsible for developing and coordinating individual learning plans for up to 125 students. They receive additional pay. A report presented to the Coordinating Board in January 1987 included information on the career teacher role; it also included survey data on the attitudes of Minnesota teachers and principals toward alternative roles or careers in education for teachers.[36]

Findings: The study found in general that the concept of career teachers is most attractive as a career enhancement to those who find teaching a satisfying career and who appear committed to it. The concept of a career teacher appears to be a lesser incentive for those dissatisfied with teaching as a career. The study also found that the concept is not well understood by teachers and principals, and that, as a result, they perceive a variety of personal and administrative obstacles. They range from potential burnout to union considerations. The study found that there is interest in the concept of career teacher. Additional educational activity aimed at the teaching profession and school administrators could enhance this interest.

Recommendation: Based on the study, the Coordinating Board did not recommend a state loan forgiveness program for career teachers under the Minnesota Improved Learning Law. The Board concluded that the career teaching model is promising but it had not been widely implemented. Further, principals report several significant barriers to implementation besides the inability to hire teachers who can perform this role. While there may be a need in the schools for the kinds of functions career teachers would perform, this need has not been translated into a demand for persons with specialized graduate education. Strategies to promote the use of career teachers are more likely to be effective than a loan forgiveness program.

[36] Minnesota Higher Education Coordinating Board, *New Roles for Teachers: Can They Improve Retention in the Teaching Profession?* (January 1987)

Coordination and Cooperation

This part provides an overview of several projects. It begins with an update of the Coordinating Board's program review activities. This is followed by a summary of the Board's review of academic programs with low and declining numbers of graduates.

Next is a description of the framework for monitoring and reviewing engineering programs that was developed by a Board task force. This part also summarizes the Board's review and comment on a legislatively-mandated task force which examined the feasibility of a common course numbering system. This part concludes with a report on advanced placement activity in Minnesota, recent federal actions, and the beginning stages of a Board project to consolidate and further develop its data bases for planning and research.

Program Review

Introduction: The Coordinating Board has the statutory responsibility to review proposed new programs of instruction and periodically to review existing programs.

Background: The 1987 Legislature changed the Board's responsibility from "review" of program proposals to "approval or disapproval."[36] In addition to considering whether a new or existing program is needless duplication of existing programs, the Board is required to apply two new criteria — whether the program is within the capability of the system or institution considering its resources, or outside the scope of the system or institutional mission. Statutory language "requesting" post-secondary education institutions to cooperate with and supply information to the Coordinating Board was amended to require public institutions to provide information. Private post-secondary education institutions are requested to cooperate and provide information.

Following passage of the legislation, the Board and its advisory groups reviewed procedural and policy issues related to the program review process. The Board in October 1987 voted to use a set of revised procedures and criteria for a trial period until February 1988. In March 1988 the Board voted to approve the revised criteria with the provision that staff clarify indicators of some of the measures in detail and communicate these details to all concerned parties. Further, the Board voted to confirm the existing timeframe for review of programs with a provision for specific exceptions approved by the Board.

Following are the criteria now in effect.

1. *Mission*
The measure is: the mission statement which is, in most cases, broadly framed. A proposing institution should document a program's appropriateness within its mission statement.

2. *Institutional and Program Capability*
Measures are:
(a) the existence of an institutional framework, related and supporting programs, and facilities that are appropriate for the proposed program;
(b) the subjection of a proposed curriculum for evaluation by peers and/or external accrediting bodies as appropriate;
(c) the capability and commitment to assure program quality by providing the qualified staff, and appropriate physical and financial resources necessary following program approval;
(d) the capability and commitment to assure program viability by offering a curriculum that meets minimum standards of content and quality.

3. *Need*
Measures are:
(a) occupational opportunities as measured by labor market absorption of graduates into appropriate employment categories, short and long-term employment forecasts, regional and statewide unemployment statistics, trend forecasts, and perceptions of advisory groups and employers;
(b) occupational skill requirements for training and retraining, as defined by respective professions and employers;
(c) societal requirements and expectations (this measure is a primary consideration for liberal arts and general science programs);
(d) student demand and professional expectations and interest at the state and institutional levels.

[36] *Minn. Stat.* 136A.04(d)(1988).

Table II.1
Summary of Action on Proposed New Programs Fiscal Years 1979-1988

Fiscal Years	1979-80	1981-82	1983-84	1985-86	1987-88
Category					
Preliminary Proposals	110	81	75	130	102
Formal Proposals	100	75	75	110	101
Discontinued Programs	21	49	37	47	12
Board Action					
Approved	87	60	71	99	92
Conditional Approval	2	2	2	9	1
Disapproved	1	6	1	0	4

Source: Higher Education Coordinating Board

4. *Unnecessary duplication.* Measures are:

(a) adequacy and appropriateness of geographical and financial accessibility;

(b) deleterious impact on existing programs.

Program proposals should address these criteria. When there is disagreement, it shall be Board staff's burden to provide supporting evidence. When institutions are unable to provide requested information within the Board-approved timeframe, the institution could request an extension of the timeframe or suspension of the proposal from the agenda.

Status: The number of proposed new programs increased during 1985-86 to 130, the highest level since 1975-76, but decreased by 21 percent during 1987-88 to 102. During Fiscal Years 1987 and 1988, the Coordinating Board received for preliminary review 102 proposals for new programs, as shown in Table II.1. Of the 101 formal proposals, 97 came to the Board for action, because 4 were withheld by the post-secondary systems; and 93 were approved. During this period, the institutions formally discontinued 12 programs.

The programs reviewed during Fiscal Years 1987 and 1988 are displayed by system and level in Table II.2. Three categories are shown based on whether program proposals were approved, withdrawn, or disapproved. Of the 94 programs that were approved, 55 were proposed by public technical institutes, consisting principally in restructuring of existing programs. Of the 55, 38, or 70 percent, involved a college or university in a cooperative or joint effort to award the Associate in Applied Science (A.A.S.) degree. An additional 3 stand-alone TI programs will grant the A.A.S. Of the remaining 39 programs, 15 were from private four-year colleges and universities, 13 from state universities, 7 from the University of Minnesota, 3 from community colleges, and 1 from a private vocational institute.

As illustrated in Table II.2, there were more proposals for associate degree programs than any other length. Of the 94 programs proposed, 73 were for degree programs, with 45, or 62 percent, for associate degrees. Of the 45 proposals for associate degree programs, 38, or 84 percent, were cooperative ventures. Technical institutes and community colleges developed 26 joint degree programs, and graduates will receive their degree from both institutions. Technical institutes developed 12 program proposals where the general education coursework will be provided by a state university or campus of the University of Minnesota.

Table II.2
Action on Instructional Programs
Program Requests to the Coordinating Board, Fiscal Years 1987 and 1988

System	Non-Degree		Degree				
	Certificate	Minor	Associate	Bachelor's	Master's	Doctoral	Total
Programs Favorably Reviewed by System and Level							
Technical Institute	14	–	3	–	–	–	17
Community College	–	–	3	–	–	–	3
TI/CC Joint	–	–	26	–	–	–	26
State University	–	3	–	7	3	–	13
TI/SU Cooperative	–	–	12	–	–	–	12
University of Minnesota	–	2	–	1	2	2	7
Private College	1	1	–	8	3	2	15
Private Vocational	–	–	1	–	–	–	1
Totals	15	6	45	16	8	4	94
Programs Withdrawn, By System and Level							
Technical Institute	–	–	2	–	–	–	2
Community College	–	–	–	–	–	–	–
State University	–	–	–	–	–	–	–
University of Minnesota	–	–	–	–	–	–	–
Private College	–	–	–	–	2	–	2
Private Vocational	–	–	1	–	–	–	1
Totals	–	–	3	–	2	–	5
Programs Disapproved, By System and Level							
Technical Institute	–	–	–	–	–	–	–
Community College	–	–	–	–	–	–	–
State University	–	–	–	–	–	–	–
University of Minnesota	–	–	–	–	–	–	–
Private College	–	–	–	1	3	–	4
Private Vocational	–	–	–	–	–	–	–
Totals	–	–	–	1	3	–	4

Source: Higher Education Coordinating Board

The second category is proposals that were withdrawn from consideration before reaching the Board for action. Three of the five proposals in this category would have resulted in associate degrees, and the other two would have been master's degree programs.

The third category is proposed programs that were disapproved by the Coordinating Board. All four of the programs disapproved by the Board were proposed by private colleges and universities, and three of the four were for master's level programs.

The four programs were: Master of Arts and Licensur[illegible] Elementary Educa[illegible]on, College of St. Thomas; Bachelor of Science, Management, Cardinal Stritch, Milwaukee, Minnesota Extension; Master of Arts in Clinical Psychology, Illinois School of Professional Psychology, Minneapolis Branch.

Unfavorable action by the Coordinating Board is the exception rather than the rule for two reasons. First, an extensive review process at the institutional and system levels prevents some program proposals from reaching the Coordinating Board. Second, review by the Coordinating Board's Program Advisory Committee, as well as staff evaluations, exerts pressure on institutions to withdraw programs not meeting criteria before they reach the Board for action.

Table II.3
Programs Approved by Discipline
Fiscal Years 1987 and 1988

Program Area	Number Granted Favorable Review	U of M	State Univ. System	Comm. College	TI	Private College	Private Trade/ Tech.	Coop[1] w/TI	Joint TI/CC
Agriculture/Natural Resources	2				1				1
Area/Ethnic Studies	3	3							
Business/Management	12		1		2	4		3	2
Admin. Support	23			2	3			7	11
Marketing/Cosmetology	4		1		2		1		
Communications	3				1	1			1
Comp. Science/Math	4	2	1						1
Education	4		1			3			
Engineering Tech.	4				2				2
Allied Health/Health Science	15	2	5		1	2		1	4
Home Economics	3					2			1
Physical Technology	2	1							1
Psychology/Theology	3					3			
Public Affairs	2		1						1
Mechanics & Repairs	5				4				1
Precision Products	3				1				2
Flight Training	2		1			1			
Totals	94	8	11	2	17	16	1	11	28

[1]Cooperative program involving a technical institute and a state university or the University of Minnesota-Crookston

Source: Higher Education Coordinating Board

Most of the programs approved during Fiscal Years 1987 and 1988 were in the categories of administrative support, health sciences, and business and management, as shown in Table II.3. Many of the administrative support and business programs involved a redesign of existing diploma programs available through technical institutes to Associate in Applied Science degree programs. Eighteen of the 23 administrative support, and five of 12 business programs were converted to associate degree status, mostly through cooperative arrangement with a community college or state university.

The Higher Education Advisory Council in fall 1988 authorized a group of representatives from the post-secondary systems and sectors and the Higher Education Coordinating Board to discuss further program review issues and procedures.

Low and Declining Graduate Numbers

Background: Since 1970, the Minnesota Higher Education Coordinating Board has reviewed proposed new programs and considered existing programs under its statutory mandate.[37]

The Coordinating Board developed a program data base and a systematic procedure for reviewing existing programs. The program review policy adopted June 24, 1982 outlines the Board's plan for reviewing selected programs in order to identify programs that are underused or represent an unnecessary duplication of effort.[38] The Coordinating Board first used its program inventory to analyze trends in the number of graduates from each major program of study for the five year period, 1977-82, and recommended a second review two years later.[39] In April 1987

[37] *Ibid.*

[38] Minnesota Higher Education Coordinating Board, *Policy on Program Review* (June 1982).

[39] Minnesota Higher Education Coordinating Board, *A Review of Trends in the Number of Graduates From Existing Minnesota Post-Secondary Instructional Programs* with Coordinating Board Recommendations (January 1984).

the Board discussed the second report which covered the five-year period 1979-84.[40]

Findings: Following are highlights from the report:

- Out of 2,717 programs, 423, or 16 percent, reported zero graduates for 1983-84, and 76, or 3 percent, reported zero graduates all five years.
- Private four-year colleges reported the most programs, 47, with zero graduates for five years.
- Eleven non-baccalaureate program clusters with four or more programs per cluster had an average decrease of 19.8 percent in graduate numbers during 1979-84. These 11 clusters involved 93 programs, 8.6 percent of the 1,081 non-baccalaureate programs offered.
- Nine baccalaureate program clusters with more than 10 programs per cluster had a 25 percent or greater decrease during the past five years. These nine clusters included 144 programs, 12.2 percent of the 1,182 baccalaureate programs offered.
- Six master's degree program clusters had a greater than 25 percent decrease in graduate numbers the past five years. These six clusters included 36 programs, 11 percent of the 328 programs offered.
- Over one-third of the state's baccalaureate-level programs had an average of less than eight graduates per program per year, as did over 15 percent of the master's/specialist programs. In contrast, over 99 percent of all non-baccalaureate programs graduated more than 10 people annually.

Recommendations: The Board suggested that each post-secondary system participate in an intersystem examination of clusters that had low or decreasing numbers of graduates, and examine factors such as geographic access, service relationship to other programs or institutions, cost, and possible unnecessary duplication.

Based on the findings of the study of existing instructional programs, the Coordinating Board on April 7, 1987 adopted the following recommendations:

1. Where there were zero graduates from a specific program for the five-year period, the appropriate governing body should consider modification or elimination of that program. The Coordinating Board requests that the appropriate governing bodies submit a report to the Minnesota Higher Education Coordinating Board by November 1, 1987, specifying plans regarding these programs. The plans might involve a rationale for continuing the programs, plans to modify the programs, negotiations with other institutions regarding consolidation or cooperation, or plans for discontinuation.

Impact. There were 76 programs that had zero graduates for the five-year period 1979-84.

2. Where a cluster of programs had a rapidly decreasing number of graduates during the five years, or low average numbers of graduates per program, governing bodies should examine the entire cluster of similar programs in order to share ideas across systems and institutions that will make possible coordinated activities related to the programs. The Coordinating Board requests that the appropriate governing bodies submit a report to the Minnesota Higher Education Coordinating Board by November 1, 1987, specifying plans regarding low and declining program clusters. The plans might involve a rationale for continuing the programs, plans to modify the programs, negotiations with other institutions regarding consolidation or cooperation, or plans for discontinuation.

Specifically, the following conditions merit attention:

a. A decrease of at least 40 percent in the number of graduates for the cluster during the five years.

(The focus of the study was on program clusters with a decrease of at least 10 percent and which included at least four programs. In order to keep the project manageable, however, a higher threshold with respect to percent decrease and minimum number of programs per cluster is applied in this recommendation).

Impact. Using a 40 percent decrease over the five years as one checkpoint, the number of program clusters affected would be:

- Non-baccalaureate — one program cluster with five programs.
- Baccalaureate — four program clusters with at least seven programs per cluster; this

[40] Minnesota Higher Education Coordinating Board, *A Review of Trends in the Number of Graduates from Existing Minnesota Post-Secondary Instructional Programs 1979-1984* (April 1987).

involves 43 programs.

- **Master's/Specialist** — two program clusters with at least five programs per cluster; this involves 10 programs.

b. On average, a small number of graduates per program within the cluster. For non-baccalaureate program clusters, the suggested criterion is fewer than 10.0 graduates; for baccalaureate program clusters, the suggested criterion is fewer than 2.0 graduates; for master's/specialist program clusters, the suggested criterion is fewer than 3.0 graduates per year.

(The focus of the study was on program clusters that had an annual average of 10 or fewer graduates. In order to keep the project manageable, a more conservative criterion with respect to graduate numbers is applied in this recommendation for the baccalaureate and master's/specialist program clusters.)

Impact. Based on the average number of graduates:

- **Non-baccalaureate** — two program clusters involving 10 programs had an average of fewer than 10.0 graduates per program in 1983-84.
- **Baccalaureate** — three program clusters involving 26 programs had an average of fewer than 2.0 graduates per program in 1983-84.
- **Master's/Specialist** — four program clusters involving 19 programs had an average of fewer than 3.0 graduates per program in 1983-84.

3. After reviewing the reports from the systems and institutions during its November meeting, the Board determine if a more direct involvement in the review process is needed. If the responses are inadequate, the Board should:

a. Refer education programs that had zero graduates, as well as program clusters with low average numbers of graduates per year or a severe decrease in graduate numbers 1979-84, to the Minnesota Board of Teaching to consider whether those programs should continue to be listed.

Impact. Six baccalaureate clusters with 90 programs and four master's/specialist clusters with 19 programs had at least a 10 percent decrease in graduate numbers 1979-84. Thirteen baccalaureate clusters with 166 programs and six master's/specialist clusters with 27 programs had fewer than 10 graduates per program 1979-84. Because eight clusters with 99 programs are on both lists, 21 clusters with 203 programs would be affected.

b. Establish a task force to review other programs that had zero graduates, as well as program clusters with low average number of graduates per year or a severe decrease in graduate numbers 1979-84.

Impact. There were eight program clusters (six baccalaureate and two master's/specialist) with at least a 15 percent decrease in graduate numbers during 1979-84 and 1977-82. There were five clusters (three baccalaureate and two master's/specialist) that had fewer than 3.0 graduates during 1983-84 and fewer than 4.0. The cluster that does not involve education programs is Classics.

Comment: A program with no graduates for five years may not remain viable. Programs with a sharp decrease in graduate numbers would appear not to require the resources they now receive. Although small programs may be able to maintain high quality, there are questions of their cost effectiveness and educational effectiveness. Thus, programs that continue to experience low or decreasing number of graduates deserve extra attention to assure their vitality and quality.

Status: The four public systems responded to the recommendations. The Board discussed the issue during 1988 and decided to re-examine the situation when an additional five years of data are available, that is, when graduate numbers through 1989 are available.

Engineering Programs

Because engineering programs are important to the state's economy and are expensive to implement and operate, the Coordinating Board has expressed its interest in maintaining an awareness of the programs available to Minnesota residents, both through Minnesota post-secondary institutions, and those in nearby states.

Background: Between 1983 and 1986, the Board favorably reviewed six baccalaureate engineering programs at Mankato State University, St. Cloud State University, and the University of Minnesota-Duluth, and noted an intent to review the programs following

Table II.4
Minnesota Engineering Programs, Capacity, Enrollment, Graduates 1987-88

	Program Capacity[1]	Undergrad. Enrollment[2]	Graduates		
			Baccal.	Masters	Ph.D.
Mankato					
Electrical	110	75	27	–	–
Mechanical	110	12	2	–	–
St. Cloud					
Electrical	80	74	24	–	–
University of Minnesota-Duluth					
Computer	100	50	6	–	–
Industrial	100	41	5	–	–
Materials Proc.	60	11	1	–	–
University of Minnesota-Twin Cities					
Aerospace	161	285 (333)	87	5	2
Chem./Materials Science	165	323 (203)	112	9	19
Civil/Mineral	160	216 (171)	56	29	12
Electrical	337	736 (541)	237	43	13
Mechanical	329	673 (477)	240	16	10
Total	1,712	2,496	795	102	56

[1]Capacity for University of Minnesota-Twin Cities programs is expressed as FYE students, not headcount.
[2]Headcount of juniors and seniors; FYE capacity at University of Minnesota-Twin Cities in ( ).

Source Mankato State University, St. Cloud State University, University of Minnesota-Duluth, University of Minnesota-Twin Cities

their implementation. In 1987 the Board established a task force to identify a data base appropriate for that review. In January 1988, the Board examined the task force report, and adopted five recommendations.[41]

1. The Coordinating Board accept the data base framework and criteria developed by the task force for review and planning of engineering programs.

2. The Coordinating Board accept ABET (Accreditation Board for Engineering and Technology) professional accreditation within the timeframe proposed by the task force to satisfy quality considerations, and recognizing that these reports are public information under state law, request that they be included as part of the data base.

3. The Coordinating Board authorize the development of the proposed data base to commence immediately.

4. That a review of baccalaureate engineering programs not begin until at least one year after graduation of the first full class. This would normally occur five years after implementation of a program.

5. The Board thank the task force for the quality of the report and the expeditious way in which it executed its mandate.

There are two elements involved with engineering programs — qualitative and quantitative. The qualitative aspect is to be addressed by the Accreditation Board for Engineering and

[41]Minnesota Higher Education Coordinating Board, *Report of the Task Force to Identify Criteria for the Review of Engineering Programs* (January 1988).

Table II.5
Minnesota Engineering Programs, Current and Projected Budgets for Instruction and Externally Funded Research, 1987-88 — 1992-93

	FY 87/88 Instr.	Budget[1] EFR	FY 92/93 Instr.	Budget[2] EFR	Percent Incr. Instr.	5 Years EFR
Mankato[3]						
Electrical	$ .838	N.A.	$1.156	N.A.	38	–
Mechanical	.593	N.A.	1.051	N.A.	77	–
St. Cloud[4]						
Electrical[5]	1.243	N.A.	2.425[6] 3.050	N.A.	95	–
University of Minnesota-Duluth[3]						
Computer	.493	N.A.	.624	N.A.	27	–
Industrial	.417	N.A.	.531	N.A.	27	–
Materials Proc.	.422	N.A.	.446	N.A.	6	–
University of Minnesota-Twin Cities[4]						
Aerospace	1.560	.580	2.565	1.757	64	203
Chem/Materials Sci.	2.467	6.145	3.159	6.157	28	0
Civil/Mineral	2.079	1.955	2.971	7.355	43	276
Electrical	3.766	2.531	6.821	5.704	81	125
Mechanical	3.291	4.273	5.762	6.848	75	60
Total	$17.169	$15.484	$27.511[7]	$27.821	60	80

1In millions of dollars.
2Projected.
3Budget figures are FY 1988 actual and FY 1993 projected.
4Budget figures are FY 1987 actual and FY 1992 projected.
5Data are based on the addition of a second engineering program during the period
6Higher figure includes addition of applied research special initiative.
7Assuming SCSU FY 1992 instructional budget of $2,425,000

N A = Not Applicable
EFR = Externally Funded Research.

Source: Mankato State University, St Cloud State University, University of Minnesota-Duluth, University of Minnesota-Twin Cities

Technology (ABET), while the quantitative aspect was addressed by the task force. The task force designed a form to collect information regarding Minnesota's undergraduate engineering programs and authorized Board staff to collect the data.

Status Report: Information regarding 11 engineering programs through Minnesota universities is summarized in a status report by the task force presented to the Coordinating Board in September 1988.[42] The report provides current and optimal student enrollment, 1987-88 graduates for each program, current and future budgets, and descriptive information.

[42]Minnesota Higher Education Coordinating Board. *Engineering Programs in Minnesota: A Status Report*, prepared by the Engineering Task Force of the Minnesota Higher Education Coordinating Board (September 2, 1988).

Junior and senior enrollment in the 11 programs was 2,496 during the 1987-88 school year. Over 90 percent of the students were residents of Minnesota or reciprocity states. Residents of other states and other countries made up a small percent of each program's total enrollment, ranging from zero to eight percent of any one program.

The six new engineering

programs have increased the capacity for junior and senior engineering students by 560 students, an increase of almost 50 percent over the stated capacity of engineering programs offered by the University of Minnesota-Twin Cities. Compared to the 2,496 juniors and seniors enrolled in 11 engineering programs at four locations in fall quarter 1987, there were 2,317 juniors and seniors enrolled in engineering programs at the University of Minnesota-Twin Cities in fall quarter 1983. Increased enrollment at the three new locations has been somewhat offset by a planned decrease of undergraduate enrollment at the University of Minnesota-Twin Cities. Enrollment in programs at the University of Minnesota-Twin Cities exceeds what is considered optimal for existing resources. Enrollment in the three programs offered by the University of Minnesota-Duluth is not increasing as rapidly as enrollment in the programs at Mankato and St. Cloud.

According to information submitted by task force members, the instructional budget for engineering programs should increase 60 percent within five years, to more than $27 million. The budgets of new, developing programs can be expected to increase rapidly the first decade of their existence because of the need for new faculty, equipment, and other resources.

Common Course Numbering

A major issue that continues to face Minnesota post-secondary education is how to improve transfer of credit from one post-secondary institution to another.

Background: In view of expressed student concerns, the Minnesota Legislature has passed several laws to improve transfer from one institution to another. Most recently, the 1987 Minnesota Legislature established a task force on common course numbering to study and report on the benefits to students, the cost, and the feasibility of implementing a common course numbering system in Minnesota.[43] The 25-member task force consisted of system level administrators experienced in transfer of credit, campus-level administrators experienced in curriculum development, faculty, and students.

The task force was to submit its report to the Higher Education Coordinating Board for review and comment prior to submitting it to the 1988 Legislature.

Issues: The task force identified and addressed general issues and specific items related to the legislative charge:

- How to expedite the movement of students from one institution to another to achieve a baccalaureate degree.

— determining which courses are comparable between institutions.
— using transfer guides and determining their value, limits, and availability.
— communicating information between students, faculty, and counselors.
— encouraging students to develop a planning process. Providing transfer guides and other materials that illustrate opportunities for students.

- How to assure high quality education through Minnesota post-secondary institutions while achieving the most efficient use of public resources.

- How to protect the academic freedom of faculty responsible for developing and delivering high quality education.

— interaction of faculty in determining course content and graduation requirements.[44]

Conclusions: The task force reached the following conclusions:

1. Minnesota should not create a common course numbering system at this time for its systems of higher education because, while having some benefits, it would not achieve a measurably better result for students wishing to transfer than would expanded development and dissemination of transfer guides.

2. A statewide common course numbering system would likely prove costly, cumbersome, and confusing without the benefit of increased transfer opportunities, and would not be worth the cost from the standpoint of improving transfer of credit. The key to improving transfer of credit is the identification and verification of comparable courses between institutions.

[43] *Laws of Minnesota for 1987*, Chapter 401, Section 34.

[44] Minnesota Higher Education Coordinating Board, *Report of the Task Force on Common Course Numbering* (December 1987).

3. Other states have found that common course numbering systems are of limited benefit, primarily helping registrars and counselors expedite transfer. Students have not used the systems greatly, and are largely unaware of them.

4. If a common course numbering system's greatest value would be in communicating which courses are interchangeable between institutions, it would be necessary to develop equivalent courses before a numbering system would be valid, and continuous upgrading would be required.

5. Legislative support and encouragement of efforts that will improve credit transfer, such as identifying equivalent courses, are imperative. Progress is being made; accelerating the process will require funds, primarily for faculty and other personnel release time needed to identify and verify comparable/ equivalent courses, and to continue to develop course equivalency guides.

Task force recommendations:

To Minnesota post-secondary institutions:

1. Each institution receiving transfer students should establish procedures and implement a process for determining which transfer courses are accepted as comparable or equivalent to its own.

2. All institutions should require current and accurate course syllabi for all courses offered and should make these syllabi available to students and personnel from other institutions upon request.

3. Institutions that have not developed transfer guides for Minnesota community colleges should do so.

4. Each post-secondary institution in Minnesota should identify personnel as the transfer specialist on that campus. A major responsibility of these personnel would be to facilitate transfer of credit between and among institutions. These personnel should meet as a group on a regular basis.

To systems:

1. Transfer guides should be developed between institutions in the [illegible]oe system with a high frequency of transfer for lower division liberal education courses, freshman/sophomore pre-major courses, and Associate in Applied Science and Associate in Science degree courses.

2. Faculty in the same discipline should take advantage of opportunities to meet and discuss the content of courses and their applicability toward major and graduation requirements.

To the Higher Education Coordinating Board:

1. The Coordinating Board should publish the names of the transfer specialists throughout the state.

2. The Coordinating Board should annually collect information on the number of students who transfer into and out of Minnesota post-secondary institutions.

3. The Coordinating Board should continue the standing advisory committee on transfer established in 1985.

To the Minnesota Legislature:

The Minnesota Legislature can best promote ease of student transfer by encouraging and supporting the development and dissemination of transfer guides through appropriations to support release time for faculty and other personnel charged with developing and distributing these guides. The legislature should reaffirm its mandate to the public institutions and its encouragement to the private colleges to complete transfer guides no later than September 1, 1990 and appropriate special funding to help public and private institutions defray some of the personnel, computer, and publication costs in producing and maintaining these documents.

HECB Recommendations: The Coordinating Board, at its January 21, 1988 meeting, voted to recommend to the legislature the adoption and implementation of the task force recommendations. The Board also recommended that it and the post-secondary systems assess the cost implications of the task force recommendations when developing their 1989-91 budget requests.

Status: Several developments have occurred during the past five years resulting in an improved transfer process in Minnesota. Most post-secondary institutions have developed course transfer tables for use by students, faculty, and counselors. These tables usually take the form of a one or two page sheet that lists the courses offered by one institution and accepted by another, often within a specific baccalaureate

major. They have been developed by faculty or counselors so that transfer students will be able to plan their study for a baccalaureate degree.

All the community colleges have developed course transfer tables for students. Five of the state universities have extensive guides for students attending Minnesota community colleges. The University of Minnesota-Twin Cities has developed manuals that include information on graduation requirements, transfer of credit policies, and course transfer tables between the 18 community colleges and the nine larger undergraduate admitting colleges on that campus. Similar manuals for the nine smaller admitting colleges are being developed.

A major development occurred in 1986 when the chancellors of the State University System and Community College System signed an agreement which states that community college students with an Associate in Arts degree have satisfied the general education requirements of the state universities. This action assures students that they will not have to worry whether general education courses will be examined individually when they transfer to a state university to work toward a baccalaureate degree. The University of Minnesota-Duluth has an Associate in Arts degree waiver policy, but it includes some scrutiny of liberal education coursework.

The Community College System and University of Minnesota have signed an enabling agreement that will simplify transfers and improve educational options for students. Individual agreements have been developed between the Community College System and several University of Minnesota colleges — College of Agriculture, College of Forestry, College of Home Economics, College of Liberal Arts, and College of Science and Engineering at Duluth.

Joint admission allows a student who meets admission requirements to one of these University of Minnesota colleges to enter a community college, and, pending completion of designated courses and maintenance of requisite grade point averages, the same opportunity to enter upper division University programs as students who enter the University of Minnesota as freshmen. Joint admission programs are being monitored, and a decision will be made by spring 1989 as to their ongoing status.

Students at Arrowhead Community Colleges who want to apply to one of three University of Minnesota-Duluth engineering programs (computer engineering, industrial engineering, and materials processing engineering) should contact the transfer specialist at their community college and indicate they want to be considered for joint admission. Students accepted into the pre-engineering programs as joint admission candidates as freshmen are guaranteed admission to their intended upper division engineering program pursuant to completing specified coursework, maintaining requisite grade point averages, and meeting other requirements.

Concurrent enrollment in the College of Liberal Arts, College of Agriculture, College of Forestry, and College of Home Economics allows a student in the joint admission program to take a course at the University of Minnesota while still enrolled at a community college. Concurrent enrollment enables students in the joint enrollment program to take a course helpful for their other programs, but not available in the curriculum of their community college. Concurrent enrollment is subject to the availability of space and suitability of each student's preparation.

Another agreement guarantees that University of Minnesota students can transfer and complete their Associate in Arts degree at a community college. University students can transfer from bachelor's programs to Minneapolis, Lakewood, and North Hennepin Community Colleges for completion of an Associate in Arts degree. Students must be admitted to one of these community colleges and must complete at least 16 credits in residence at the college. This program will be evaluated in spring 1989 for continuation or termination.

Students seeking to transfer to other community colleges should contact the transfer specialist at that community college. These students may present their cases individually as to admission, transferability of credits, and the number of credits to be taken in residence at the community college.

Minnesota's Technical Institute System has begun to convert all its one and two-year programs from a clock hour basis to a

course basis. The procedure will assure that the content of similarly titled courses within that system will be comparable.

Several private colleges and universities have developed course transfer tables to assist students coming from other institutions, although many course transfer decisions are made individually.

Minnesota's public collegiate institutions have achieved a common course numbering convention that distinguishes remedial, lower division, upper division, and graduate level coursework that assists students to identify courses likely to transfer. Minnesota systems and institutions are not, however, close to having a common course numbering system.

The Coordinating Board published 60,000 copies of the third edition of its transfer brochure in fall 1987 and distributed them to 110 post-secondary institutions. The brochure describes the transfer process, and provides a contact for students at each of Minnesota's public post-secondary and private collegiate institutions.

In January 1987, the Coordinating Board established a standing advisory committee to replace the original special committee set up in 1984 to assist students who experience difficulty with intersystem transfer of credit after they have exhausted existing appeals procedures. The committee membership includes representatives from each of the six post-secondary systems and one student.

In September 1988, the committee agreed to procedures for considering student requests. The committee agreed that it has an appropriate charge, one that is valid and useful to the post-secondary community. The committee agreed to meet at least annually to discuss transfer issues, and to exchange specific experiences regarding credit transfer. It was suggested that the Coordinating Board's transfer brochure place greater emphasis on the role of the Credit Transfer Committee and a greater effort be made to alert students to the committee's function.

In developing its biennial budget request, the Coordinating Board concluded that it would be appropriate for the post-secondary systems to request funds in their biennial budgets for measures to improve transfer. The University of Minnesota indicated that it would cost $2,138,000 to determine and develop course equivalencies between all Minnesota public and private colleges and its five campuses. The State University System has estimated a cost of $18,400 to collect all course syllabi and hold a one-day regional conference for faculty to discuss course content in their discipline. The development of transfer guides between institutions in the system would cost about $195,000, but the system indicated that the development of these guides does not appear warranted because less than eight percent of transfer students are within the system. The Community College System estimated that it would cost $228,750 per year for 6.25 full-time equivalent additional personnel to facilitate transfer of credit among institutions, and $61,500 annually to conduct faculty discipline meetings with other systems. Private College Council personnel estimated that the average cost per private college to produce transfer manuals for all of the community colleges and distribute five copies to each community college would be approximately $150,000. The Coordinating Board included $8,000 in its budget request for the next edition of the transfer brochure.

Advanced Placement

The College Board Advanced Placement Program consists of 26 examinations that high school students may take to show that they have mastered material typically taught in college freshman courses. Each post-secondary institution determines what credit and placement benefits will be awarded to admitted students for satisfactory scores.

Background: The 1986 Legislature passed legislation requiring that each year the University of Minnesota, state universities, and community colleges provide the Higher Education Coordinating Board information and data about credit awarded for advanced placement program examinations.[45]

This requirement was part of a request to develop a "clear and uniform" advanced placement policy in each system. The Board reviewed and commented on the system policies in January, 1987.[46] The purpose of

[45] *Minn. Stat.* 135A.10

[46] Minnesota Higher Education Coordinating Board, *Review and Comment on Advanced Placement Policies* (January 1987).

Table II.6
College Board Advanced Placement Program Examination Scores Submitted by New Entering Students Who Graduated From Minnesota High Schools, January 1, 1987-December 31, 1987

AP Subject Areas	University of Minnesota		State Universities		Community Colleges		Total	
	Students With AP Scores	Students Awarded Credit	Students With AP Scores	Students Awarded Credit	Students With AP Scores	Students Awarded Credit	Students With AP Scores	Students Awarded Credit
Art, art history and music	3	0	1*	0	0	0	4*	0
English literature and composition	204	147	14*	14	12	9	230*	170
History and government	105	48	4*	4	9	8	118*	60
Foreign languages	14	1	1*	1	1	0	16*	2
Mathematics and computer science	99	54	5*	8	0	0	104*	62
Science	56	21	1*	6	1	0	58*	27
Total Credits Awarded	1577		128		124		1829	
Institutions Attended**	Duluth Twin Cities		Mankato Moorhead St. Cloud Winona		Anoka Ramsey Austin Brainerd Normandale Rochester			

*St. Cloud and Winona State Universities were unable to report the numbers of students with score reports. State university and total data on students with scores reported are therefore incomplete.
**University of Minnesota-Morris not included. Other institutions not listed reported no entering students with Advanced Placement scores

Source: Higher Education Coordinating Board

the reporting requirement is to learn whether new state incentives are needed to encourage high schools and high school students to take advantage of the Advanced Placement Program.

Findings: Summary data for the 1987 calendar year are found in Table II.6. Following are comments:

- The University of Minnesota-Twin Cities continues to enroll the greatest majority of Minnesota students with Advanced Placement scores who enter in-state public post-secondary institutions.
- Advanced placement credits earned by students entering public institutions would have cost them approximately $80,000 in tuition and fees if they had taken equivalent courses in college. The cost to the state would have been approximately $137,000.
- Many students who submitted Advanced Placement scores did not receive credit. In nearly all cases, the student's score did not meet the institution's minimum requirements. College Board data indicate that 36 percent of the Minnesota examination scores sent to in-state colleges

were below the lowest level accepted at Minnesota public institutions.

- Reported data on credits awarded do not include participation by Minnesota students entering private institutions in the state or by Minnesota students entering out-of-state institutions. About 52 percent of the students taking exams in Minnesota forwarded their scores to out-of-state colleges. About 48 percent of Minnesota scores submitted to in-state institutions were sent to private colleges and universities.
- The Advanced Placement Program is growing rapidly in Minnesota. According to College Board data, the number of exams taken in the state rose from 2,046 in 1985, to 3,068 in 1987, an increase of 50 percent over two years.

Federal-State Relations

Introduction: The United States Constitution relegates to the states primary responsibility for educating the citizenry. Nonetheless, federal education policies and appropriations greatly affect education in Minnesota, particularly post-secondary education.

The most notable federal influence occurs through the post-secondary education programs administered by the U.S. Education Department (ED). ED received approximately $9.76 billion for post-secondary education in Fiscal Year 1989, up from $8.9 billion in 1988. About 2 percent of federal funds flow to Minnesota through the state's post-secondary education students and institutions.

Background: Federal activities affecting post-secondary education have evolved since the adoption of the land grant commitments in the 1860s. For a more comprehensive discussion of the federal government's role, the reader is referred to previous Coordinating Board biennial reports to the governor and legislature.

Status: During the past year, Congress took several actions that may have significant effects on Minnesota post-secondary education now and in the future.

For federal Fiscal Year 1989, Congress appropriated almost $9 billion for the generally available student assistance programs, as shown in Table II.7. This represents an increase of 10.8 percent over the $8.1 billion appropriated for Fiscal Year 1988. In constant dollars, Congress appropriated $7.1 billion for Fiscal Year 1989, an increase of 6.4 percent over 1988.

For the Pell Grant Program, the major federal grant program, appropriations have increased every year since 1982 except for a small decline in 1986. Between Fiscal Year 1982 and 1989, Pell Grant funding increased by 85 percent. In constant dollars, appropriations for Pell Grants increased 45.2 percent during the period.

Between academic year 1980-81 and 1987-88, federally supported aid to post-secondary students increased by 28.3 percent, from $14.4 billion to $18.4 billion. Aid awarded under the major federal supported grant and loan programs (such as Pell and Guaranteed Student Loan) increased by 63.7 percent, from $10.4 billion to $17 billion. Meanwhile, specially directed aid (such as veterans, military, and social security) declined by 64 percent, from $3.9 billion to $1.4 billion. In constant dollars during the period, federally supported aid to students decreased by 4.1 percent, from $16 billion to $15.4 billion. Constant dollar awards under the major programs increased by 22.4 percent, from $11.6 billion to $14.2 billion; however, specially directed aid declined by 75.8 percent, from $4.4 billion to $1 billion, due primarily to the elimination of Social Security benefits.[47]

Pell Grant funding for students attending Minnesota post-secondary institutions increased 80 percent between Fiscal Years 1981 and 1988, from $47 million to $85 million. Minnesota has received $1.4 to $1.5 million per year under the federal State Student Incentive Grant Program. These funds are used to match State Scholarship and Grant funds. Minnesota students have received between $9 and 11 million per year under the Supplemental Educational Opportunity Grant program, and about $13 million under College Work-Study. The federal contribution to institutions' capital fund under the Perkins Loan Program has been about $4 million per year. The post-secondary institution is required to match the federal contribution and may add proceeds from prior loans. As shown in Table II.8, funding for

[47] The College Board, *Trends in Student Aid, 1980 to 1988* (September 1988). Federally supported programs generally available include the Pell Grant, Supplemental Educational Opportunity Grant, State Student Incentive Grant, College Work-Study, Perkins Loan, Income Contingent Loan, Guaranteed Student Loan, Supplemental Loans for Students, and Parent Loans for Undergraduate Students programs. Specially directed aid includes social security, veterans, military assistance, and various other grant and loan programs.

Table II.7
Appropriations in Current and Constant Dollars for Generally Available Federal Aid Programs for Fiscal Years 1981 to 1988 (in millions)

	Current Dollars								
Program	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pell Grant	2,604	2,419	2,419	2,800	3,862	3,580	4,187	4,260	4,484
SEOG	370	355	355	375	413	395	413	408	438
SSIG	77	74	60	76	76	73	76	73	72
CWS	550	528	590	555	593	567	593	588	610
Perkins Loan (NDSL)	201	193	193	181	217	209	210	211	205
Income Contingent Loan							5	4	5
GSL, PLUS, and SLS	2,536	3,074	3,100	2,254	3,798	3,266	2,717	2,565	3,174
Total	6,337	6,643	6,718	6,241	8,959	8,089	8,200	8,110	8,988

	Constant 1982 Dollars								
Program	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pell Grant	2,828	2,445	2,363	2,628	3,496	3,162	3,593	3,513	3,550
SEOG	402	359	348	352	384	340	354	337	347
SSIG	83	74	59	71	69	64	65	60	57
CWS	597	534	576	521	537	501	509	485	483
Perkins Loan (NDSL)	218	195	189	170	196	184	180	174	162.3
Income Contingent Loan							4	4	4
GLS, PLUS, and SLS	2,754	3,107	3,028	2,116	3,438	2,885	2,322	2,115	2,513
Total	6,882	6,715	6,561	5,858	8,109	7,145	7,038	6,688	7,116

Notes:

The Pell Grant appropriation for 1987 includes a $287 million supplemental appropriation that was used largely to offset a shortfall that had accumulated in previous years

GSL appropriations do not reflect loans made but only federal expenses for interest subsidies and default payments. All "generally available aid" programs (except GSL) are "forward funded" — meaning that appropriations for a given fiscal year are intended for use by students during the following academic year, and appropriations for Perkins Loans include federal capital contributions and teacher cancellations.

Pell: Pell Grant
SEOG: Supplemental Educational Opportunity Grants
CWS: College Work-Study
SSIG: State Student Incentive Grants
Perkins: Perkins Direct Loans
GSL, PLUS, and SLS Guaranteed Student Loan, Parent Loans for Undergraduate Students, and Supplemental Loans for Students

Source: The College Board, *Trends in Student Aid, 1980 to 1988* (September 1988).

students in Minnesota under the major federal grant and work programs increased by 52 percent between Fiscal Years 1981 and 1988, from $75.4 million to $114.6 million.

Because of its concern about the high costs from loan defaults, both Congress and ED have devoted extensive time to default prevention measures.

ED estimates that students will fail to repay about $2 billion per year in federally backed loans by 1990.

In September 1988, ED announced regulations to crack down on post-secondary schools with default rates above 20 percent. Under the proposal, the school would have an opportunity to defend itself, but the Secretary of Education could limit the school's participation in federal student aid programs or eliminate the school entirely from the programs. Institutions could avoid penalties by proving their high default rates were caused by factors beyond their control, such as "a precipitous and unforeseeable increase in unemployment among graduates of certain fields of study."

Table II.8
Federal Financial Aid in Minnesota Post-Secondary Education Fiscal Years 1981-88

Program	1981	1982	1983	1984	1985	1986	1987	1988
Pell Grant	47	46	50	59	68	81	77	85
SEOG	9	9.4	9.4	9.2	10	11	10.5	11
SSIG	1.5	1.5	1.4	1.1	1.5	1.5	1.5	1.4
CWS	12	11.1	11.6	12.2	12.2	13	12.5	13.1
Perkins	5.9	3.6	3.3	3.7	3.5	4.1	3.9	4.1
Total	75.4	71.6	76.2	85.2	95.2	110.6	105.4	114.6

Pell Grant represents awards to students attending Minnesota post-secondary education institutions CWS and SEOG represent federal allocations to Minnesota campuses Perkins represents only the federal contribution to the capital fund of participating institutions.

Pell: Pell Grant
SEOG: Supplemental Educational Opportunity Grant
CWS: College Work-Study
SSIG: State Student Incentive Grant Program
Perkins: Perkins Direct Loans

Source: U S Department of Education, Higher Education Coordinating Board

About the same time the federal regulations were promulgated, the Senate passed legislation that would require schools, guarantee agencies, and lenders with high loan default rates to develop plans to reduce them. The Senate bill would require schools, lenders, and guarantee agencies with default rates exceeding 25 percent to implement a three-year default management plan.

If a lender or school's default rate were still above 25 percent after three years, the state guarantee agency could require another plan or recommend that participation in the student loan program be cut. The bill also would exempt from the student aid need analysis the value of a family's home.

The bill would require schools to wait 30 days before issuing loan checks to first time borrowers, require that credit agencies be notified when a student is 90 days delinquent on a loan; withhold academic transcripts from most defaulters; and prohibit a school that loses its accreditation from becoming eligible for student aid programs for two years.

In July 1988, the House Education and Labor Committee had passed default legislation that would require schools with high default rates to develop default management plans and make the Pell Grant Program an entitlement. The House authors agreed to delay floor action after ED said it would extend the period of public comment on the regulations to February 28, 1989. Thus, a new federal administration can alter the regulations, and the new Congress will have additional time to act.

Congress in fall 1988 approved tax legislation designed to correct errors in the 1986 tax reform act. The legislation includes several provisions of significance for post-secondary education.

The law provides an exemption on interest from U.S. Savings Bonds purchased by parents to finance a college education starting in 1990. Only bonds purchased by people at least 24 years old would be eligible for the tax exemption. To receive a full exemption, a couple filing a joint tax return could not have an income higher than $60,000.

A single person would have to earn less than $40,000 to qualify for the full exemption. Couples with incomes between $60,000 and $90,000 and single parents with incomes of between $40,000 and $55,000 would receive partial exemptions.

Congress extended tax breaks allowing employers to provide tax free tuition benefits to their workers, but approved new limits. Until last year, employers could provide up to $5,250 a year in tax-free tuition benefits to their workers. The tax bill extended the provision through the end of the year, and limits its use to undergraduate students.

In another provision, Congress voted to make permanent a tax exemption on tuition waivers for graduate students that are not provided as compensation in return for teaching or research assistance. Several tax provisions are likely to be of interest in the coming year. One issue is a possible proposal to restore the tax break for graduate students receiving tuition payments from employers and a new tax deduction for payments on student loans.

Potential changes in the tax code of concern to post-secondary education are possible. They might include: new limits on issuing tax-exempt bonds, new taxes on employee benefits, and possible changes in laws governing business operation of tax-exempt organizations.

Congress approved legislation extending the authority of the Internal Revenue Service to withhold tax refunds from student loan defaulters until January 10, 1994. ED reports that between 1985 and 1988, the IRS collected $530 million of defaulted student loans under this program.

The 100th Congress passed a major welfare reform bill that may have implications for post-secondary education if welfare recipients enroll in education and job training programs in community colleges and vocational schools. The bill would provide money to states for education and job training and require many welfare recipients to participate in the programs to be set up by states — or risk losing their federal support. States would be required by 1990 to have 7 percent of their welfare participants enrolled in education and training programs, and to have 20 percent enrolled by 1995. Community colleges and vocational institutions could be assigned to perform an evaluation of welfare recipients and assess their skills.

Congress passed legislation (PL 100-297) reauthorizing many of the elementary and secondary programs through 1993, including Title II of the Education for Economic Security Act (see page 147).

Previously, Title II authorized assistance to improve instruction in math, science, computer learning, and foreign languages. The new law (Dwight D. Eisenhower Math and Science Education Act) focuses funds on updating skills of math and science teachers. It channels a greater portion of the funds to local school districts. The old law authorized $350 million for Fiscal Year 1988, but Congress appropriated only $119.6 million. The Fiscal Year 1989 appropriation is $137,332,000. The new law authorizes grants to states and discretionary grants at $258 million per year. The old law targeted 30 percent of state funds to higher education for training teachers to specialize in high school math and science, for retraining teachers to teach math, science, foreign languages, or computer learning, or for inservice training. The new law reduces the authorization from 30 to 25 percent for higher education. The law also renames the Guaranteed Student Loan Program the Robert T. Stafford Student Loan Program, after the senator from Vermont, the ranking Republican and former chair of the Senate Education, Arts, and Humanities Subcommittee, and makes several changes affecting the Center for Education Statistics.

Another law would allow judges to strip federal student grants and loans from people convicted of using or selling illegal drugs; the effective date is September 1, 1989.

Also in 1988 Congress passed a comprehensive trade bill, authorizing more than a dozen new federal education and training programs at an annual cost of $1.7 billion; however, it is uncertain how much funding will be provided for these programs.

In other legislation, Congress reauthorized programs of the National Science Foundation for five years and made permanent the New GI Bill, which provides education benefits for veterans. Also, Congress overrode a presidential veto of legislation that overturned a 1984 Supreme Court decision limiting the scope

of civil rights laws. The Civil Rights Restoration Act reversed the court's ruling in *Grove City vs. Bell,* which curtailed enforcement of four civil rights laws prohibiting discrimination on the basis of sex, race, age, or physical disability.

All this activity occurred during the controversial term of William Bennett as secretary of education. Bennett stimulated discussion on several issues, including cost containment, accountability and quality assessment, and the curriculum.

Data Base Development

The Higher Education Coordinating Board is involved in several efforts to improve the quality, quantity, and accessibility of the information it gathers on various aspects of post-secondary education.

Financial Aid Data Base: The Coordinating Board has established a data base to evaluate the state's policies for providing student assistance. During 1987-88, data were obtained from three sources: a questionnaire sent to all institutions participating in the State Scholarship and Grant Program, questionnaires about a random sample of students at those institutions, and data from Board financial aid programs. More than 98 percent of the institutions responded to the survey. Board staff are working with an advisory committee to develop a project design for using the data in the evaluation of policies. The evaluation is expected to answer four questions: how much financial aid is disbursed, what is the institutional budget, how much is the student share of the cost of attendance, and how much do students borrow.

Teacher Education Student Information: The 1985 Legislature directed the Coordinating Board to "publish annual data on the characteristics of students admitted to and graduating from teacher education programs."[48] The purpose of the activity is to provide accurate information for institutional planning, state policy development, and education research. A report presented to the Coordinating Board in December 1986 outlined the development of the data collection project and procedures.[49] Based on the report, the Coordinating Board adopted the following recommendations:

1. That the Coordinating Board request each higher education institution offering teacher licensure to provide annual data on the characteristics of students who apply for, are admitted to, and graduate from their teacher education programs.
2. That the Board endorse the proposed set of data items for the initial development of the data base and authorize changing them as experience dictates.
3. That the Coordinating Board include in its budget and management plan staff time and financial resources for data entry, data base operation and maintenance, and preparation and distribution of reports in magnetic and print formats.
4. That the Coordinating Board approve required nondisclosure statements as included in the report.
5. That the Coordinating Board enter into agreement with the Minnesota State Department of Education to transfer data items from this data base to the teacher licensure data base for individuals who apply for licensure.

The data base includes demographic and academic achievement information about students who apply for, enter, and exit teacher education programs in Minnesota. The data base was developed to be compatible with the Minnesota State Department of Education teacher licensure files. This allows information from the Coordinating Board data base to be included with the record of those individuals who apply for teacher licensure in Minnesota. With this capability it is possible to determine relationships between individual characteristics, completion of licensure programs, and teaching experience. Information is initially supplied when the student applies to a teacher education program. Other information is added by the student's institution. Each summer the first copy of the form is submitted to the Coordinating Board showing whether the student has or has not been admitted. A second updated copy is submitted when the admitted student withdraws or graduates.

With the leadership of the Minnesota Association of Colleges for Teacher Education, the Coordinating Board

[48] *Minn. Stat.* 136A.044 (1988).

[49] Minnesota Higher Education Coordinating Board, *Report of a Project to Publish Annual Data on the Characteristics of Students Admitted to and Graduating From Teacher Education Programs in Minnesota,* A Policy Paper (December 1986)

conducted a trial run of the process in 1986-87. The first full year of data collection was 1987-88. In fall 1988, the Board was scheduled to publish a statewide summary report and summary reports for each institution's applicants and students.

Data Base Development: In 1988 the Board began a project to assess and improve its data bases. These data bases include the Student Record Data Base (for enrollments), the Post-High School Planning Program, the State Scholarship and Grant Program, the Part-Time Grant Program, the State Work-Study Program, the Interstate Tuition Reciprocity Program, and the Teacher Education Data Base. Initial efforts are to: assess the consistency and completeness of information collected in recent years, particularly the Student Record Data Base; identify information that should be collected routinely; identify information that can be obtained by merger of data through linkages with various data bases; determine data processing resources necessary for gathering, storing, and retrieving data as well as for linking data bases; and determine resources that would be necessary to conduct and provide timely analysis of data. The project will involve an internal review of data bases and needs, consultation with the post-secondary systems, and consultation with other agencies. The Board's 1990-91 biennial budget request includes $350,000 for the project.

Information and Assessment This part describes the Coordinating Board's proposals on providing better information and assessment services to adults considering post-secondary education. It also summarizes the results of a survey which asked parents of eighth grade students what they know, don't know, and need to know about the costs and academic requirements of post-secondary education.

Assistance to Adults Considering Post-Secondary Studies

The 1987 Minnesota Legislature directed the Advisory Task Force of the Post-High School Planning Program to study and make recommendations about methods to provide assistance to adults who are considering beginning or returning to post-secondary education, and to report the results to the 1988 Legislature.[50]

The mandate for this special study was consistent with action by the 1987 Legislature to expand the target population of the Post-High School Planning Program to include all Minnesota residents from eighth grade to adulthood. As an ongoing responsibility, the PSPP Task Force is to study and make recommendations about a variety of methods that could be used throughout the community to provide assistance to adults considering post-secondary education. The Coordinating Board is to coordinate efforts and develop additional methods of providing information, guidance, and testing services to out-of-school youth and adults.[51]

Issues: The study sought responses to four questions:

- What are the characteristics and educational needs of adults and out-of-school youth?
- What education decisionmaking services, such as career and program information, career assessment testing, and counseling, do these potential students need?
- What are the most appropriate mechanisms to provide these services?
- What special programs and opportunities are available within institutions to serve the special needs of these students?

Conclusions: Responses to the four questions are as follows:

- The characteristics and educational information and counseling needs of adults and out-of-school youth are different than those of traditional students.
- Adult students need access to accurate and objective information about adult education and career opportunities and access to accurate self-appraisal tailored to adult needs.
- The most appropriate mechanisms to provide these services are educational

[50] *Laws of Minnesota for 1987*, Chapter 401, Section 37.

[51] *Laws of Minnesota for 1987*, Chapter 401, Sections 24, 25, 26, and 27.

brokering services that advocate client support and responsibility and are neutral toward specific post-secondary institutions.

- Many of Minnesota's post-secondary institutions offer special opportunities for adults, but only a few types of institutions have currently the resources to provide institution-neutral services to non-enrolled students.[52]

Despite the wide range of services, two primary problems remain for adults who are considering a life change that may require or could benefit from education. One is access to information and counseling services, particularly for residents of Greater Minnesota. The second is making sure the services are the most appropriate for the individual.

Recommendations: The Coordinating Board on December 10, 1987, recommended that the legislature adopt the report and implement its seven recommendations and an additional Coordinating Board proposal to develop a communications plan to inform adults about the value of post-secondary education and the services and programs available to them.

The Board voted, however, to delay action on proposals for state funding until it develops its 1989-91 budget request. Following are the seven task force proposals endorsed by the Board.

1. The compilation of a publication, paper, and/or computerized inventory of statewide public and private post-secondary education information and assessment service providers. The production and distribution of the resulting directory should be administered by the HECB and reviewed by the Post-High School Planning Program Task Force. This activity must have additional state appropriations.

2. The availability to selected libraries and other neutral demonstration sites, of an annually updated paper, microfiche, or computerized version of a data base for post-secondary institutions' information and career information.

3. The establishment and advertisement of a neutral "800" telephone number to facilitate statewide access to information and referral services for adults considering post-secondary education or needing access to assessment services. The effectiveness of the service would be evaluated after three years.

4. The promotion of "college fairs" for adults by the Minnesota Association of Secondary School Counselors and College Admissions Officers.

5. The establishment, through the PSPP, of regional task forces of practitioners and providers of educational services to adults to discuss mechanisms for assessing information and assessment needs and advising on a coordinated delivery system, and to review the effectiveness of demonstration sites.

6. The establishment of three to five regional demonstration sites as easily accessible entry points for people needing career planning, educational advisory and assessment services. These sites would be chosen to provide services to those areas least well-served by current providers on the basis of information gathered from HECB and PSPP surveys.

7. The adaptation of the Student Plans and Background Survey for adults who are considering post-secondary education. The opportunity to complete the survey should be made easily accessible.

In addition, the Coordinating Board recommended the development and implementation of a communications plan to inform adults and out-of-school youth about the value of beginning or returning to post-secondary education, about the variety of post-secondary programs and services available to them, about the financial assistance available to help them pay for post-secondary education, and about the information and assessment services available to help them make sound education and career decisions.

[52] Minnesota Higher Education Coordinating Board, *Report on Adults and Out-of-School Youth Considering Post-Secondary Studies*, prepared by the Advisory Task Force of the Post-High School Planning Program (November 9, 1987).

Survey of Parents of Eighth Graders

Since 1986 the Coordinating Board, as required by statute, has provided information to eighth grade students about the wide variety of high quality post-secondary options in Minnesota, the importance of preparing well academically, and the availability of financial aid to help them afford post-secondary education.

The 1987 Legislature expanded the Post-High School Planning Program, which previously served only juniors in high school, to serve Minnesotans from eighth grade through adulthood. The eighth grade information campaign was incorporated in this program, and the Board was directed to provide information about post-secondary education and financial aid to parents.

To learn more about what parents do and don't know about post-secondary education and financial aid, their attitudes and plans, and what they need and would like to know, the Board staff in spring 1988 surveyed a sample of parents of eighth graders.

Assistance in developing the survey was provided by the Minnesota Center for Survey Research and Minnesota Department of Education staff. A report of the survey findings was presented to the Board in August 1988.[68]

Findings: The survey revealed many information gaps.

Eighty-five percent of parents surveyed said they had not received information about post-secondary education or financial aid. Most parents could not estimate the cost of attending post-secondary education for one year, or they overestimated the cost. Most parents also do not know the admissions requirements for post-secondary institutions their child might attend, and many parents think their child needs less than the generally accepted preparatory load.

Results indicate that parents in general have an unrealistic expectation of how they will cover the cost of a post-secondary education. While more than three quarters of parents are somewhat or very concerned about the cost of post-secondary education, two thirds of them are not saving money to cover the cost. Further, the majority expect to rely on student loans and scholarships and grants; even at the highest income level, over 50 percent of parents expect their children to receive scholarships or grants.

Over 50 percent of parents do not expect to use their own income or savings, nor do they expect their children to use their income or savings. Only among parents at the top income levels did a majority of parents expect to use their own income to cover the cost of a post-secondary education.

Parents in lower income and education categories appear to have the greatest need for information. These parents are less likely to be able to estimate the cost of a post-secondary education, more likely to vastly overestimate the cost, and are most concerned about the cost but least likely to be saving to pay for their child's post-secondary education because they lack adequate funds. Parents with the lowest incomes and least education are less likely to think post-secondary education is very important, are less likely to talk to their children about high school courses and post-secondary education, and their children are likely to have lower grades than children of parents in higher socioeconomic strata.

Conclusions: The information gaps are significant given survey results that show most parents reported talking to their children about high school and post-secondary education, and that most parents expect their children to continue education beyond high school. Consequently, many parents in Minnesota, particularly those with lower income and education levels, need more information about post-secondary education, financial aid, and planning for their child's education in order to help them make sound decisions about the future and not limit their options.

Recommendation: Based on the survey report, the Coordinating Board in August 1988 recommended that it support funding in its 1990-91 biennial budget request to (1) inform families about the cost of post-secondary education and to encourage them to pay for that cost, and (2) to inform parents of eighth graders about post-secondary education opportunities, planning, and ways to pay.

[68] Minnesota Higher Education Coordinating Board, *Report on Survey of Parents of Eighth Graders* (August 1988).

This section reviews the state financial aid and nonfinancial aid programs administered by the Coordinating Board. The focus is on describing changes in the programs the past two years and summarizing the status of activity in them. Additional background appears in previous biennial reports to the governor and legislature.

Financial Aid

Introduction

The Coordinating Board administers 12 student financial aid programs which have been created to help students pursue the post-secondary education that can best meet their needs. Combined with aid from federal, institutional, and private sources, the programs provide a comprehensive package of assistance for students in public and private institutions.

More than 85,000 students received approximately $80 million in state assistance from these grant and loan programs in Fiscal Year 1988.

This section summarizes activity in the programs during Fiscal Years 1988 and 1989. Additional background is provided in previous biennial reports to the governor and legislature.

Following are summaries of the state financial aid programs.

Scholarship and Grant-in-Aid Program

Objective of the Scholarship Program: To identify talented students in the state and provide financial assistance for those students who demonstrate financial need and wish to continue their education at Minnesota institutions of their choice.

Objective of the Grant-in-Aid Program: To provide financial assistance for students with need and to encourage their post-secondary educational development at the Minnesota institutions of their choice.

Statutory Authority for the Scholarship and Grant-in-Aid Programs: *Minn. Stat.* Sections 136A.09-136A.131 (1988).

Background: The State Scholarship Program was authorized in 1967, and the Grant-in-Aid Program was authorized in 1969. These programs form the foundation of Minnesota's comprehensive financial aid effort. Changes in the programs together with increased funding have made the programs increasingly comprehensive.

The 1987 Minnesota Legislature adopted the federal definition of an independent student for implementation beginning fall 1987.

The Board began using it in the 1987-88 school year for both the Scholarship and Grant Program and the State Work-Study Program. It sets age 24 as the threshold for independent status, but includes several exemptions and allows students under age 24 to qualify by demonstrating that they are self sufficient. Previously, federal law considered students independent if they had been self-supporting and living separately from their families for the previous year. For 1985-86 and 1986-87 the Coordinating Board had under administrative rule considered students under age 22 dependent on their parents and required them to submit financial information about their family unless they met one of several exemptions.

The new state law requires the Board to inform students, in writing, as part of the application process for financial aid, about (1) the definition of an independent student and (2) the possibility of appeals to the financial aid administrator regarding the dependency determination.

Also, the 1987 omnibus higher education appropriations law required the Board to convene a task force of student representatives, financial aid administrators, and representatives of the systems and Coordinating Board to develop guidelines to interpret unusual circumstances that would qualify an applicant to be an independent student.

The task force met in the summer of 1987 and developed a set of guidelines for unusual circumstances. In summary, the task force concluded that:

- Any act which is undertaken voluntarily by parents or students to dissolve the family should not be considered justification for "independent" status.
- Any family which is dissolved because of some act or event beyond the control of the parent or student may be considered justification for independent status.

The guidelines do not supersede the aid administrator's professional judgment. The aid administrator's decision is final. The Board distributed the guidelines to financial aid directors and student organizations.

The 1987 Legislature delayed implementation of the statutory provision providing eligibility for four years of grants until July 1, 1989. A Coordinating Board proposal to allow

Table III.1
Overview of State Scholarship and Grant Program Fiscal Years 1985-88 and Projections for Fiscal Years 1989-91

	Actual Fiscal Years				Projected Fiscal Years		
	1985	1986	1987	1988	1989	1990	1991
Appropriations:							
Carryover	$ 1.9	$ 0	$ 7.1	$ 0	$ .2	$ 0	$ 0
Federal SSIG	1.5	1.5	1.4	1.5	1.4	1.4	$ 1.4
State	47.3	51.3	56.3	64.2	61.2	70.7	79.0
Total	50.7	52.8	64.8	65.7	62.8	72.1	80.4
Awards	53.5	57.0	84.2	82.3	76.8	86.1	94.4
Refunds	(8.6)	(11.3)	(20.5)	(16.8)	(14.0)	(14.0)	(14.0)
New Awards	44.9	45.7	63.7	65.5	62.8	72.1	80.4
Turnback/Carryover	$ 5.8	$ 7.1	$ 1.1	$ .2	$ 0	$ 0	$ 0
Applications							
Student Pool	124,192	139,956	144,514	149,446	151,239	153,032	151,687
Applicants	101,627	114,269	125,773	127,697	130,408	131,361	130,499
% of Pool	82%	82%	87%	85.4%	86.2%	85.8%	86%
Awards Offered	60,505	67,515	65,434	65,977	65,667	62,168	64,998
% of Pool	49%	48%	45%	44%	43%	41%	43%
% of Applicants	60%	59%	52%	52%	50%	47%	50%
Awards Not Accepted	6,963	11,129	1,679	2,074	2,000	2,000	2,000
Awards Accepted	53,542	56,386	63,755	63,703	63,667	60,168	62,998
% of Pool	43%	40%	44.1%	42.6%	42.0%	39.3%	41.5%
% of Applicants	53%	49%	50.7%	49.9%	48.8%	45.8%	48.3%
% of Offered	88%	83%	97%	96%	97%	97%	97%
Average Award Size							
Offered	884	844	1,067	1,079	1,089	1,219	1,367
Accepted	836	814	1,014	1,028	986	1,198	1,340

Source: Higher Education Coordinating Board

recipients to receive five years of aid was not adopted.

Program Operation: A new system of delivering state scholarship and grant awards to students was tested with six state universities in 1987-88.

As an alternative to the centralized Scholarship and Grant delivery system, the six state universities (St. Cloud, Bemidji, Mankato, Moorhead, Winona and Southwest) verify the eligibility of students, calculate their awards, and make payments.

Each term the six schools request the amount of money needed to fund eligible students. They report to the Board financial data, the enrollment status, and award and payment information for each student via computer tape.

Students communicate directly with their university rather than with the Coordinating Board concerning data changes and eligibility problems.

Board staff worked with State University System in developing the new approach after the Board in 1985 adopted a recommendation providing institutions with a choice between a new campus-based delivery system or the current

Table III.2
Combined State Scholarship and Grant and Pell Awards by Family Income Level Fiscal Years 1987 and 1988

Income Distribution	Fiscal Year 1987 Recipients	Percent	Awards	Percent	Average	Fiscal Year 1988 Recipients	Percent	Awards	Percent	Average
All Students										
$0 to $4,999	17,943	28.5%	38,877,826	32.7%	2,167	16,884	26.7%	38,488,388	31.0%	2,280
$5,000 to $9,999	8,966	14.2%	18,617,105	15.7%	2,076	9,241	14.6%	19,684,396	15.8%	2,130
$10,000 to $14,999	8,697	13.8%	17,647,522	14.8%	2,029	8,422	13.3%	17,493,268	14.1%	2,077
$15,000 to $19,999	7,430	11.8%	14,240,341	12.0%	1,917	7,527	11.9%	15,389,660	12.4%	2,045
$20,000 to $24,999	6,475	10.3%	11,257,029	9.5%	1,739	6,368	10.1%	11,844,417	9.5%	1,860
$25,000 to $29,999	5,682	9.0%	8,432,212	7.1%	1,484	5,741	9.1%	9,296,184	7.5%	1,619
$30,000 to $34,999	3,906	6.2%	5,178,463	4.4%	1,326	4,234	6.7%	6,054,224	4.9%	1,430
$35,000 and over	3,888	6.2%	4,495,297	3.8%	1,156	4,812	7.6%	5,974,302	4.8%	1,242
Total	62,987	100.0%	$118,745,795	100.0%	$1,885	63,229	100.0%	$124,224,839	100.0%	$1,965
Dependent Students										
$0 to $4,999	7,428	19.3%	16,092,345	23.0%	2,166	5,614	15.1%	13,327,917	18.7%	2,374
$5,000 to $9,999	4,180	10.9%	9,186,397	13.1%	2,198	3,945	10.6%	9,151,538	12.8%	2,320
$10,000 to $14,999	5,051	13.1%	10,842,259	15.5%	2,147	4,670	12.6%	10,519,041	14.8%	2,252
$15,000 to $19,999	5,145	13.4%	10,134,007	14.5%	1,970	5,136	13.9%	11,036,540	15.5%	2,149
$20,000 to $24,999	5,037	13.1%	8,706,691	12.4%	1,729	4,835	13.0%	9,182,865	12.9%	1,899
$25,000 to $29,999	4,722	12.3%	6,851,178	9.8%	1,451	4,695	12.7%	7,523,789	10.6%	1,603
$30,000 to $34,999	3,432	8.9%	4,380,713	6.3%	1,276	3,720	10.0%	5,149,937	7.2%	1,384
$35,000 and over	3,521	9.1%	3,873,313	5.5%	1,100	4,448	12.0%	5,370,178	7.5%	1,207
Total	38,516	100.0%	$70,066,903	100.0%	$1,819	37,063	100.0%	$71,261,805	100.0%	$1,923
Independent Students										
$0 to $4,999	10,515	43.0%	22,785,481	46.8%	2,167	11,270	43.1%	25,160,470	47.5%	2,233
$5,000 to $9,999	4,786	19.6%	9,430,708	19.4%	1,970	5,296	20.2%	10,532,858	19.9%	1,989
$10,000 to $14,999	3,646	14.9%	6,805,263	14.0%	1,867	3,752	14.3%	6,974,227	13.2%	1,859
$15,000 to 19,999	2,285	9.3%	4,106,334	8.4%	1,797	2,391	9.1%	4,353,119	8.2%	1,821
$20,000 to $24,999	1,438	5.9%	2,550,338	5.2%	1,774	1,533	5.9%	2,661,552	5.0%	1,736
$25,000 to $29,999	960	3.9%	1,581,034	3.2%	1,647	1,046	4.0%	1,772,395	3.3%	1,694
$30,000 to $34,999	474	1.9%	797,750	1.6%	1,683	514	2.0%	904,287	1.7%	1,759
$35,000 and over	367	1.5%	621,984	1.3%	1,695	364	1.4%	604,124	1.1%	1,660
Total	24,471	100.0%	$48,678,892	100.0%	$1,989	26,166	100.0%	$52,963,032	100.0%	$2,024

Source: Minnesota Higher Education Coordinating Board

centralized system with changes. Board recommendations were based on the conclusions of a task force established in 1984 to study alternative delivery methods.

Additional schools will be added to the new delivery system in the future as they adjust their internal data processing operation to meet the needs of the new system.

Status: Table III.1 presents an overview of program activity for Fiscal Years 1985 to 1988, estimates for Fiscal Year 1989, and projections for Fiscal Years 1990 and 1991.

The 1987 and 1988 Legislatures appropriated $125,450,000 for the 1988-89 biennium, an increase of 16.6 percent over the $107,600,000 in funding for the biennium ending June 30, 1987.

Increases were provided to revise the private college caps used in the award formula, to offset tuition increases in the post-secondary education systems, and to slightly raise the living allowance. The 1987 Legislature provided $800,000 for Fiscal Year 1988 and $1.2 million for Fiscal Year 1989 to raise the living allowance from $2,960 in Fiscal Year 1987 to $2,985 in Fiscal Year 1988 and $2,995 in Fiscal Year 1989. Additional funding of

Table III.3
State Scholarship and Grant Awards by Family Income Level Fiscal Years 1987 and 1988

Income Distribution	Fiscal Year 1987 Recipients	Percent	Awards	Percent	Average	Fiscal Year 1988 Recipients	Percent	Awards	Percent	Average
All Students										
$0 to $4,999	17,943	28.5%	9,452,769	14.9%	527	16,884	26.7%	8,653,197	13.4%	513
$5,000 to $9,999	8,966	14.2%	7,337,034	11.6%	818	9,241	14.6%	7,465,991	11.6%	808
$10,000 to $14,999	8,697	13.8%	9,800,787	15.5%	1,127	8,422	13.3%	9,204,283	14.3%	1,093
$15,000 to $19,999	7,430	11.8%	10,361,192	16.4%	1,395	7,527	11.9%	10,277,123	15.9%	1,365
$20,000 to $24,999	6,475	10.3%	9,479,593	15.0%	1,464	6,368	10.1%	9,271,721	14.4%	1,456
$25,000 to $29,999	5,682	9.0%	7,691,318	12.1%	1,354	5,741	9.1%	8,085,473	12.5%	1,408
$30,000 to $34,999	3,906	6.2%	4,902,214	7.7%	1,255	4,234	6.7%	5,677,273	8.8%	1,341
$35,000 and over	3,888	6.2%	4,309,381	6.8%	1,1[illegible]	4,812	7.6%	5,872,618	9.1%	1,220
Total	62,987	100.0%	$63,334,288	100.0%	$1,006	63,229	100.0%	$64,507,679	100.0%	$1,020
Dependent Students										
$0 to $4,999	7,428	19.3%	5,471,981	12.6%	737	5,614	15.1%	4,215,683	9.7%	751
$5,000 to $9,999	4,180	10.9%	3,932,597	9.0%	941	3,945	10.6%	3,712,912	8.6%	941
$10,000 to $14,999	5,051	13.1%	5,971,849	13.7%	1,182	4,670	12.6%	5,353,930	12.3%	1,146
$15,000 to $19,999	5,145	13.4%	6,995,564	16.1%	1,360	5,136	13.9%	6,958,128	16.0%	1,355
$20,000 to $24,999	5,037	13.1%	7,118,519	16.3%	1,413	4,835	13.0%	6,748,015	15.6%	1,396
$25,000 to $29,999	4,722	12.3%	6,180,967	14.2%	1,309	4,695	12.7%	6,327,019	14.6%	1,348
$30,000 to $34,999	3,432	8.9%	4,134,778	9.5%	1,205	3,720	10.0%	4,776,311	11.0%	1,284
$35,000 and over	3,521	9.1%	3,732,933	8.6%	1,060	4,448	12.0%	5,271,521	12.2%	1,185
Total	38,516	100.0%	$43,539,188	100.0%	$1,130	37,063	100.0%	$43,363,519	100.0%	$1,170
Independent Students										
$0 to $4,999	10,515	43.0%	3,980,788	20.1%	379	11,270	43.1%	4,437,513	21.0%	394
$5,000 to $9,999	4,786	19.6%	3,404,437	17.2%	711	5,296	20.2%	3,753,079	17.7%	709
$10,000 to $14,999	3,646	14.9%	3,828,938	19.3%	1,050	3,752	14.3%	3,850,353	18.2%	1,026
$15,000 to $19,999	2,285	9.3%	3,365,628	17.0%	1,473	2,391	9.1%	3,318,994	15.7%	1,388
$20,000 to $24,999	1,438	5.9%	2,361,074	11.9%	1,642	1,53[illegible]	5.9%	2,523,706	11.9%	1,646
$25,000 to $29,999	960	3.9%	1,510,351	7.6%	1,573	1,04[illegible]	4.0%	1,758,454	8.3%	1,681
$30,000 to $34,999	474	1.9%	767,436	3.9%	1,619	514	2.0%	900,932	4.3%	1,753
$35,000 and over	367	1.5%	576,448	2.9%	1,571	364	1.4%	601,097	2.8%	1,651
Total	24,471	100.0%	$19,795,100	100.0%	$809	26,166	100.0%	$21,144,158	100.0%	$ 808

Source: Minnesota Higher Education Coordinating Board

$4 million was provided to raise the private college cap for students attending four-year institutions from $5,271 in Fiscal Year 1987 to $5,875 in Fiscal Year 1988 and $6,024 in Fiscal Year 1989. For private two-year institutions, the cap was increased from $4,215 in Fiscal Year 1987 to $4,568 in Fiscal Year 1988 and $4,684 in Fiscal Year 1989.

The 1988 Legislature approved a supplemental appropriation of $5.7 million for Fiscal Year 1988 and $500,000 for 1989 to the Coordinating Board for the Scholarship and Grant Program.

Although it provided slightly less money than the Board's most recent projection for Fiscal Year 1989, the legislature directed the Board to make full awards in 1988-89 rather than ration funds. The Board may request the necessary appropriation in the 1989 legislative session if the Fiscal Year 1989 money is insufficient to make full awards.

The Board had an appropriation of $60 million ($58.5 million state and $1.5 million federal) available for awards in Fiscal

Table III.4
Combined State Scholarship and Grant and Pell Awards by System Fiscal Years 1987 and 1988

System	Fiscal Year 1987 Recipients	Percent	Awards	Percent	Average	Fiscal Year 1988 Recipients	Percent	Awards	Percent	Average
All Students										
Tech. Institute System	15,356	24.4%	26,304,410	22.2%	1,713	14,916	23.6%	26,546,484	21.4%	1,780
Comm. College System	8,813	14.0%	13,959,314	11.8%	1,584	9,225	14.6%	14,914,980	12.0%	1,617
State University System	13,371	21.2%	23,214,592	19.5%	1,736	12,968	20.5%	22,936,753	18.5%	1,769
University of Minnesota	9,753	15.5%	18,317,222	15.4%	1,878	9,413	14.9%	18,372,958	14.8%	1,952
Private Four-Year Inst.	10,110	16.1%	25,001,524	21.1%	2,473	10,886	17.2%	28,808,899	23.2%	2,646
Private Two-Year Inst.	5,584	8.9%	11,948,815	10.1%	2,140	5,821	9.2%	12,644,764	10.2%	2 172
Total	62,987	100.0%	$118,745,883	100.0%	$1,885	63,229	100.0%	$124,224,838	100.0%	$1,965
Dependent Students										
Tech. Institute System	6,999	18.2%	10,915,361	15.6%	1,560	5,773	15.6%	9,426,955	13.2%	1,633
Comm. College System	4,101	10.6%	5,799,417	8.3%	1,414	4,224	11.4%	6,198,662	8.7%	1,467
State University System	9,512	24.7%	15,638,313	22.3%	1,644	9,303	25.1%	15,658,933	22.0%	1,683
University of Minnesota	6,833	17.7%	12,142,868	17.3%	1,777	6,564	17.7%	12,273,323	17.2%	1,870
Private Four-Year Inst.	8,391	21.8%	20,248,607	28.9%	2,413	8,856	23.9%	23,009,486	32.3%	2,598
Private Two-Year Inst.	2,680	7.0%	5,322,425	7.6%	1,986	2,343	6.3%	4,694,447	6.6%	2,004
Total	38,516	100.0%	$70,066,991	100.0%	$1,819	37,063	100.0%	$71,261,806	100.0%	$1,923
Independent Students										
Tech. Institute System	8,357	34.2%	15,389,055	31.6%	1,841	9,143	34.9%	17,119,529	32.3%	1,872
Comm. College System	4,712	19.3%	8,159,897	16.8%	1,732	5,001	19.1%	8,716,318	16.5%	1,743
State University System	3,859	15.8%	7,576,279	15.6%	1,963	3,665	14.0%	7,277,820	13.7%	1,986
University of Minnesota	2,920	11.9%	6,174,354	12.7%	2,115	2,849	10.9%	6,099,635	11.5%	2,141
Private Four-Year Inst.	1,719	7.0%	4,752,917	9.8%	2,765	2,030	7.8%	5,799,414	10.9%	2,857
Private Two-Year Inst.	2,904	11.9%	6,626,390	13.6%	2,282	3,478	13.3%	7,950,317	15.0%	2,286
Total	24,471	100.0%	$48,678,892	100.0%	$1,989	26,166	100.0%	$52,963,033	100.0%	$2,024

Source: Minnesota Higher Education Coordinating Board

Year 1988, but expended approximately $65.7 million due to increased enrollments and increased financial need demonstrated by new, independent student applicants. The Board projects a shortfall of approximately $2.1 million in Fiscal Year 1989, most of which could be covered by the supplemental appropriation and the authorized transfer of funds from other agency accounts.

Tables III.2 through III.6 present information about Scholarship and Grant activity and Pell awards by post-secondary system and by income levels.

Veterans' Dependents Student Assistance Program

Objective: To pay the tuition and fees for Minnesota post-secondary students who are dependents of veterans declared prisoners of war or missing in action after August 1, 1958.

Statutory Authority: *Minn. Stat. 197.752* (1988).

Background: The Veterans' Dependents Assistance Program pays tuition and fees for students enrolled in any public post-secondary educational institution in Minnesota if they are dependents of Minnesota veterans who, while serving in the United States Armed

Table III.5
State Scholarship and Grant Awards by Educational System Fiscal Years 1987 and 1988

System	Fiscal Year 1987 Recipients	Percent	Awards	Percent	Average	Fiscal Year 1988 Recipients	Percent	Awards	Percent	Average
All Students										
Tech. Institute System	15,356	24.4%	9,054,550	14.3%	590	14,916	23.6%	8,238,398	12.8%	552
Comm. College System	8,813	14.0%	5,554,140	8.8%	630	9,225	14.6%	5,266,168	8.2%	571
State Univ. System	13,371	21.2%	10,806,388	17.1%	808	12,968	20.5%	9,857,824	15.3%	760
University of Minnesota	9,753	15.5%	9,878,342	15.6%	1,013	9,413	14.9%	9,567,278	14.8%	1,016
Private Four-Year Inst.	10,110	16.1%	21,299,994	33.6%	2,107	10,886	17.2%	24,605,171	38.1%	2,260
Private Two-Year Inst.	5,584	8.9%	6,740,873	10.6%	1,207	5,821	9.2%	6,972,839	10.8%	1,198
Total	62,987	100.0%	$63,334,287	100.0%	$1,006	63,229	100.0%	$64,507,678	100.0%	$1,020
Dependent Students										
Tech. Institute System	6,999	18.2%	4,434,137	10.2%	634	5,773	15.6%	3,319,014	7.7%	575
Comm. College System	4,101	10.6%	2,684,407	6.2%	655	4,224	11.4%	2,476,761	5.7%	586
State University System	9,512	24.7%	7 915,626	18.2%	832	9,303	25.1%	7,270,683	16.8%	782
University of Minnesota	6,833	17.7%	7,195,950	16.5%	1,053	6,564	17.7%	6,953,764	16.0%	1,059
Private Four-Year Inst.	8,391	21.8%	17,755,854	40.8%	2,116	8,856	23.9%	20,258,982	46.7%	2,288
Privte Two-Year Inst.	2,680	7.0%	3,553,213	8.2%	1,326	2,343	6.3%	3,084,316	7.1%	1,316
Total	38,516	100.0%	$43,539,187	100.0%	$1,130	37,063	100.0%	$43,363,520	100.0%	$1,170
Independent Students										
Tech. Institute System	8,357	34.2%	4,620,413	23.3%	553	9,143	34.9%	4,919,384	23.3%	538
Comm. College System	4,712	19.3%	2,869,733	14.5%	609	5,001	19.1%	2,789,407	13.2%	558
State University System	3,859	15.8%	2,890,762	14.6%	749	3,665	14.0%	2,587,141	12.2%	706
University of Minnesota	2,920	11.9%	2,682,392	13.6%	919	2,849	10.9%	2,613,514	12.4%	917
Private Four-Year Inst.	1,719	7.0%	3,544,140	17.9%	2,062	2,030	7.8%	4,346,190	20.6%	2,141
Private Two-Year Inst.	2,904	11.9%	3,187,660	16.1%	1,098	3,478	13.3%	3,888,523	18.4%	1,118
Total	24,471	100.0%	$19,795,100	100.0%	$ 809	26,166	100.0%	$21,144,159	100.0%	$ 808

Source: Minnesota Higher Education Coordinating Board

Forces, were declared prisoners of war or missing in action after August 1, 1958. A dependent who enrolls as an undergraduate in any private Minnesota post-secondary institution shall be entitled to payment by the state of tuition and fees at a rate not to exceed $250 per year for so long the dependent is eligible to attend the institution and is working toward a bachelor's degree or certificate of completion.

Part-Time Student Grant Program

Objectives: To provide need-based financial assistance to students who enroll less than half time in a program that applies to a degree, diploma, or certificate and who demonstrate financial need.

Statutory Authority: *Minn. Stat.* 136A.132 (1988).

Background: The Part-Time Student Grant Program was enacted in 1977 to assist the growing number of part-time students in Minnesota. The program serves students with need enrolled less than half time (one to five credits, or equivalent) and new or returning students enrolled at least half time but less than full time.

The part-time student must be pursuing work toward a degree,

Table III.6
Average State Award, Combined State and Pell Award, Average Family Income and Average Net Worth by Parental Contribution for Dependent Students Fiscal Year 1988

Parental Contribution	Average Family Income	Average Net Worth	Number of Recipients	Average State Award	Average Combined Award
$ 0	$ 8,626.57	$22,417.97	15,441	$ 959.98	$2,433.67
100	18,595.23	30,169.90	895	1,545.15	2,408.12
200	18,546.06	31,706.26	946	1,549.14	2,325.24
300	19,872.08	30,882.63	936	1,493.70	2,206.93
400	20,361.38	34,925.42	975	1,512.02	2,149.06
500	21,412.62	34,732.33	1,037	1,591.91	2,120.55
600	22,004.77	36,969.17	979	1,522.43	1,992.11
700	23,423.54	37,940.23	1,011	1,594.70	1,948.23
800	24,294.92	38,125.79	982	1,535.95	1,817.61
900	25,036.75	36,555.83	948	1,514.27	1,757.92
1,000	25,125.32	36,220.58	942	1,491.18	1,668.73
1,100	26,393.38	36,378.91	921	1,421.56	1,540.26
1,200	26,524.60	39,900.07	901	1,456.79	1,536.65
1,300	27,517.55	39,243.44	820	1,372.32	1,428.47
1,400	27,174.99	40,704.72	774	1,323.69	1,365.25
1,500	28,238.55	40,977.68	865	1,223.15	1,254.64
1,600	29,115.55	42,531.80	816	1,188.04	1,202.88
1,700	29,920.61	42,886.74	695	1,166.88	1,179.24
1,800	30,635.86	42,277.99	676	1,023.41	1,030.85
1,900	30,357.11	44,721.50	677	948.46	954.04
2,000	31,393.22	43,224.07	635	932.59	934.91
2,100	32,082.81	45,796.17	483	977.73	977.73
2,200	32,235.44	47,285.32	447	912.74	915.54
2,300	33,603.61	44,715.02	316	1,146.44	1,147.23
2,400	34,070.75	48,771.03	302	1,217.35	1,224.14
2,500	33,467.01	46,711.78	253	1,174.53	1,175.42
2,600	34 894.17	52,630.88	241	1,269.05	1,269.05
2,700	34,960.00	53,565.08	192	1,260.18	1,260.18
2,800	37,004.39	47,724.24	150	1,433.50	1,433.50
2,900	36,426.99	52,688.21	151	1,373.10	1,379.89
3,000	37,198.39	53,031.47	150	1,294.70	1,294.70
3,100	35,645.52	56,707.90	155	1,170.89	1,170.89
3,200	38,322.24	52,558.96	164	1,117.41	1,116.85
3,300	38,635.59	57,247.36	125	1,073.72	1,073.72
3,400	39,987.23	51,481.47	120	965.53	965.53
3,500	37,785.79	48,397.47	129	878.26	878.26
3,600	37,719.25	65,186.60	114	780.36	780.36
3,700	38,751.48	53,537.95	114	680.23	680.23
3,800	41,913.13	62,428.68	114	615.61	615.61
3,900	41,576.42	58,619.02	111	523.32	523.32
4,000	40,859.46	49,725.27	96	431.71	431.71
4,100	43,088.21	59,513.30	94	317.28	317.28
4,200	42,589.19	59,169.80	100	228.82	228.82
4,300	42,559.54	76,549.84	83	128.89	128.89
Average $741.71	$19,352.65	$25,043.75	37,063	$1,169.99	$1,922.99

Source: Minnesota Higher Education Coordinating Board

diploma, or certificate and is eligible for an award for one term. Students may, however, apply for additional awards.

The 1987 Legislature amended the statute to require that if increased funding is provided in the future, the allocation formula for the program will be based on resident enrollments rather than total part-time or full-time enrollments at the school.

Status: The 1987 Legislature appropriated $2 million for Fiscal Year 1988 and $2 million for Fiscal Year 1989. Tables III.7 and III.8 display program activity by system for Fiscal Years 1987 and 1988.

Table III.7
Minnesota Part-Time Grant Program Activity by Educational System Fiscal Year 1987

System	Total Recipients	Total Grants	Total Terms Attended	Average Terms Attended	Average Grant Per Term	Annual Average Grants
Technical Institutes	2,257	$ 355,462	2,967	1.31	$126	$157
Community Colleges	1,432	440,585	1,850	1.29	240	308
State Universities	306	116,970	398	1.30	296	382
University of Minnesota	480	298,568	704	1.47	416	622
Private Four-Year	99	63,863	121	1.22	524	645
Private Two-Year	5	2,086	5	1.00	417	417
Total	4,579	$1,277,534	6,045	1.32	$212	$279

Source: Higher Education Coordinating Board

Table III.8
Minnesota Part-Time Grant Program Activity by Educational System Fiscal Year 1988

System Attended	Total Recipients	Total Grants	Average Terms Attended	Annual Grants
Technical Institute	2,733	$ 455,331	1.47	$167
Community Colleges	1,875	593,038	1.35	320
State Universities	349	123,523	1.37	354
University of Minnesota	511	314,532	1.41	616
Private Four-Year	109	87,920	1.12	807
Private Two-Year	50	23,586	1.27	472
Total	5,627	$1,603,980	1.41	$285

Source: Minnesota Higher Education Coordinating Board

Dislocated Rural Worker Grant Program

Objective: To assist residents of rural Minnesota who have lost or are about to lose their jobs in paying for post-secondary education programs that will help them prepare for employment.

Statutory Authority: *Minn. Stat.* 136A.134. (1988)

Background: The 1987 Minnesota Legislature, as part of a legislative package to assist the economy of Greater Minnesota, established a program of grants to dislocated rural workers.

Applicants must be residents of rural Minnesota and be enrolled in adult farm management programs or programs designed to provide preparation for available employment within the local labor market or an area to which the individual is willing to relocate.

The student must: be a U.S.

Table III.9
Minnesota Dislocated Rural Worker Grant Program Activity By System, Fiscal Year 1988

System	Total Recipients	Total Grant	Average Grant
Technical Institutes	298	$115,608	$ 388
Community Colleges	112	71,903	642
State Universities	25	34,151	1,366
University of Minnesota	5	2,547	509
Private Vocational Schools	3	1,524	508
Private Four-Year Colleges	3	1,387	462
Private Two-Year Institutions	0	0	0
Totals	446	$227,120	$ 509

Source: Higher Education Coordinating Board

citizen or permanent U.S. resident; be a Minnesota resident; attend an eligible Minnesota institution and be making satisfactory academic progress and in good standing; and demonstrate financial need. The student must have applied for all other federal and state scholarship and grant programs.

Also, the applicant must demonstrate that one of the following criteria has been met:

- the applicant or applicant's spouse has been separated from employment or has received a notice of separation from employment as a result of job obsolescence, plant shutdown, regional decline in the applicant's customary occupation, or industry slowdown, and the applicant or applicant's spouse is unlikely to return to work for that employer in the occupation within 12 months following separation from employment;

- the applicant is a displaced homemaker;

- the applicant or applicant's spouse is a farmer who can demonstrate severe household financial need. For 1988-89 the income must be below that shown below.

Family Size	Maximum Income
2	$ 8,580
3	10,690
4	13,200
5	15,570
6	18,220

Each additional person $2,060

The Coordinating Board allocates the funds to eligible schools according to a formula. The formula is based on the number of entering Minnesota resident students enrolled in the last fiscal year, from the school's home county, and contiguous counties. For schools located in Hennepin and Ramsey counties, the following counties are considered contiguous counties: Chisago, Isanti, Sherburne, Wright, McLeod, Sibley, Le Sueur, Rice, and Goodhue. Students who resided in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington county must not be counted in any school's share.

Campus financial aid officers determine if the student is eligible and awards the grant. Aid officers are to determine financial need according to a method that is consistent with the school's policies and procedures. The combination of awards from this program plus other financial aid cannot exceed the student's cost of attendance.

Status: The 1987 Legislature appropriated $500,000 to the Coordinating Board for the 1988-89 biennium. The Board allocated $250,000 in Fiscal Year 1988 to 71 schools. Of 70 schools reporting back to the Board by fall 1988, 33 had used all funds disbursed to them, 16 had used partial funds and refunded the balance, and 21 schools refunded, or were refunding, all money.

Twenty-four schools awarded grants to six or fewer students; 13 schools awarded grants to one to three students. In all, 446 students received awards the first year.

Table III.10
Minnesota College Work-Study Program Activity by Educational System Fiscal Year 1987

System	Total Recipients	Total Earnings	Total Hours	Average Earnings	Average Hours	Average Wage
Technical Institutes	1,713	$ 878,832	238,177	$ 513	139	$3.69
Community Colleges	1,056	671,422	180,563	636	171	3.72
State Universities	1,565	1,172,854	491,910	749	314	2.38
University of Minnesota	1,071	1,813,944	288,199	1,694	269	6.29
Private Four-Year	1,703	1,327,956	338,296	780	199	3.93
Private Two-Year	242	180,433	44,129	746	182	4.09
Total	7,350	$6,045,441	1,581,274	$ 823	215	$3.82

Source: Minnesota Higher Education Coordinating Board

Table III.11
Minnesota College Work-Study Program Activity by Educational System Fiscal Year 1988

System	Total Recipients	Total Earnings	Total Hours	Average Earning	Average Wage Rate
Technical Institute	1,781	$ 939,321	241,293	$ 527	$3.89
Community Colleges	961	657,379	171,119	684	3.84
State Universities	1,607	1,240,756	353,953	772	3.51
University of Minnesota	896	1,740,614	277,148	1,943	6.28
Private Four-Year	1,702	1,233,632	320,475	725	3.85
Private Two-Year	23	11,951	3,310	520	3.61
Total	6,970	$5,823,654	1,367,298	$ 836	$4.26

Source: Minnesota Higher Education Coordinating Board

For Fiscal Year 1989 the Board made an initial allocation of $233,472 to 55 institutions.

Table III.9 shows activity by system for Fiscal Year 1988.

Minnesota Work-Study Program

Objective: To assist students in meeting their financial needs, to provide students with valuable work experiences, and to provide non-profit service agencies, handicapped persons, and persons over 65 with student assistance at low cost.

Statutory Authority: *Minn. Stat.* Sections 136A.233-136A.234 (1988).

Background: The State Work-Study Program was created by the 1975 Legislature to supplement the Federal Work-Study Program. The program provides work opportunities to graduate and undergraduate post-secondary students enrolled in public and private colleges and vocational schools in Minnesota.

The 1987 Legislature amended the statute governing the program to incorporate two changes. One change requires that if increased funding is provided in the future, the

allocation formula will be based on resident enrollments rather than total full-time equivalent enrollments at the school. This amendment was adopted to ensure that funds were allocated to those institutions that enroll greater numbers of eligible resident students. The second change allows the Board, in allocating funds, to consider employment needs at eligible institutions in addition to enrollments. This change was based on a 1985 Board study which found that increased employment opportunities for students may be needed in Greater Minnesota. New program funding, however, was not provided to implement these provisions during the 1988-89 biennium.

Status: The 1987 Legislature appropriated $4,503,600 for Fiscal Year 1988 and $4,678,600 for Fiscal Year 1989. This amount represented no change from the previous biennium except for an additional $75,000 in Fiscal Year 1988 and $250,000 in Fiscal Year 1989 to cover increases under the state minimum wage law. Tables III.10 and III.11 show activity under the program in Fiscal Years 1987 and 1988.

State Student Loan Program and Other Federal Loan Programs

Objective: To improve access and choice of post-secondary education for Minnesota students by providing loans to assist them in paying for the costs of education.

Statutory Authority: *Minn. Stat.* Section 136A.14-136A.142, 136A.15-136A.179 (1988).

Background: The 1973 Minnesota Legislature authorized the Higher Education Coordinating Board to establish and administer a State Student Loan Program as a direct lending institution under the Federal Guaranteed Student Loan (GSL) Program (now called Stafford Loan Program).

Funding for the State Student Loan Program is accomplished in three ways:

1. Issuance of Tax-Exempt Revenue Bonds. Statutory authority exists for the issuance of bonds for all student loan programs up to $550 million. As of June 30, 1988, the bonds outstanding totaled $232 million. Table III.12 presents a history of bonds issued by the Coordinating Board and outstanding as of June 30, 1988. The current and projected bond ceiling is presented in Table III.13.

2. Program Earnings in Excess of Program Operating and Debt Service Requirements. As of June 30, 1988, approximately $135 million of program funding had been derived from this source since July 1, 1974.

3. Sale of Loans to Secondary Markets. As of June 30, 1988, $285 million of Board originated loans had been sold to secondary markets. The proceeds were used for debt service and new loan origination.

Details of the GSL Program are provided in the Board's *Report to the Governor and 1987 Legislature.* Following is a description of the federal Parent Loans for Undergraduate Students (PLUS), the Supplemental Loans for Students Program (SLS), and the Perkins Loan Program.

Parents of dependent, undergraduate students, and parents of dependent graduate/professional students may borrow up to $4,000 per year, with an overall total of $20,000 for each child enrolled at least half time. Graduate students and independent undergraduate students may borrow the same yearly and total amounts in the SLS program, and these limits do not include amounts borrowed under the Guaranteed Student Loan Program or amounts borrowed by parents under the PLUS program. The combined annual total of PLUS or SLS loans and other financial aid cannot exceed the student's cost of attendance.

PLUS and SLS loans made for periods of enrollment beginning on or after July 1, 1987 will have a variable interest rate that changes annually.

For loans disbursed on or after July 1, 1988, the variable interest rate will be 10.45 percent. A new rate will be determined by the Secretary of Education each year, and will become effective July 1 of the new fiscal year. The maximum interest rate is 12 percent.

Loans that are made for periods of enrollment that begin on or after July 1, 1987 will have a guarantee fee based upon the same structure used in the Guaranteed Student Loan Program deducted from their loans. There is no origination fee.

Repayment of both principal and interest begins within 60 days of receiving the PLUS loan, and extends from 5 to 10 years. The minimum payment is $50 a month.

Table III.12
Student Loan Revenue Bonds Issued by the Higher Education Coordinating Board as of June 30, 1988

Revenue Bonds	Issue Amount	Issue Date	Due Date	Interest Rate	Status
I	$ 29,400,000.00	01-74	04-84	4.8	Matured
II	8,000,000.00	10-75	10-85	6.5	Matured
III	10,000,000.00	12-75	10-80	5.75	Matured
IV	37,200,000.00	04-76	04-78	5.25	Matured
V	37,000,000.00	10-77	04-80	4.2	Matured
VI	38,250,000.00	08-78	04-82 to 04-89	6.3	Matured
VII	100,000,000.00*	09-79	04-82 to 04-89	6.14	Outstanding
VIII	55,000,000.00*	08-80	04-83 to 04-92	6.98	Outstanding
IX	50,000,000.00	03-81	04-84	7.88	Matured
X	45,000,000.00	10-81	04-85	10.75 (plus variable)	Matured
XI	45,000,000.00	12-81	04-85	9.75 (plus variable)	Matured
XII	37,000,000.00*	02-82	04-83 to 04-90	12.6	Outstanding
XIII	150,000,000.00*	12-83	04-89	variable (5.25 on 6-30-86)	Outstanding
Total	$641,850,000.00				

Total	$641,850,000.00
Less: Escrowed and Matured	(389,350,000)
Less: Matured 4-1-88	(20,500,000)
Total Outstanding	$232,000,000.00

*All Outstanding issues were escrowed on July 13, 1988.

Source: Minnesota Higher Education Coordinating Board

Table III.13
Minnesota State Student Loan Bond Ceiling Projected Through June 30, 1991

	Current 6-30-88	Projected 6-30-91
Current Bond Ceiling	$550,000,000	$550,000,000
Less Outstanding Issues (6-30-88)		
Guaranteed Student Loan	$232,000,000	$ 0
Medical and Osteopathy Loan	1,100,000	0
Student Education Loan Fund	60,000,000	60,000,000
	$293,100,000	$ 60,000,000
Ceiling Balance	$256,900,000	$490,000,000

Source: Minnesota Higher Education Coordinating Board

Table III.14
Student Borrowing in Minnesota from the Higher Education Coordinating Board and Private Lenders Under the Guaranteed Student Loan Program Fiscal Years 1980-1988[1]

Fiscal Year	No. of HECB Loans	Total Dollars	Avg. Loan Size	No. of Loans by Private Lenders	Total Dollars	Avg. Loan Size	Total MN Loans (HECB & Private Lenders)	Total Dollars	Avg. Loan Size
1980	33,499	$ 62,108,509	$1,854	33,708	$ 69,710,462	$2,068	67,207	$131,818,971	$1,961
1981	55,648	109,522,423	1,968	51,766	113,693,881	2,196	107,414	223,216,304	2,078
1982	37,458	73,474,066	1,961	47,430	104,981,002	2,213	84,888	178,455,068	2,102
1983	33,268	64,388,000	1,935	58,509	125,544,340	2,146	91,777	189,932,540	2,069
1984	27,685	55,113,012	1,9[illegible]	66,297	145,053,869	2,187	93,982	200,166,881	2,130
1985	16,863	35,095,001	2,081	81,659	179,649,649	2,200	98,522	214,744,650	2,180
1986	8,442	18,047,816	2,138	91,145	203,447,416	2,232	99,587	221,495,232	2,224
1987	5,490	12,987,640	2,366	78,705	181,060,210	2,300	84,195	194,047,850	2,305
1988	1,975	4,622,374	2,340	87,499	211,856,011	2,421	89,474	216,478,385	2,419

[1]Federal Fiscal Years, October 1-September 30.

Source: Minnesota Higher Education Coordinating Board and Higher Education Assistance Foundation

Repayment of both principal and interest begins within 60 days of receiving the loan in the SLS program as well, unless the student borrower is enrolled full-time. If enrolled full-time, the student borrower qualifies for a deferment of principal payment benefit. The student may also apply to the lender for some provision for satisfying interest that accrues while in school. There are some SLS lenders who will permit the borrower to have the interest capitalized, though many will require the regular payment of interest while in school because that is less expensive for the student in the long run.

Approximately 450 lenders (including banks, savings and loan associations, credit unions and other financial institutions) participate in the program in Minnesota. The Coordinating Board is not a lender under this program.

Formerly known as the National Direct/Defense Student Loan (NDSL) Program, the Perkins Loan Program provides long-term, low interest (5 percent) loans to undergraduate and graduate students who are enrolled in participating schools. Schools may make loans available to part-time students, and in some cases to less than half-time students. Students apply to the financial aid office at the school they attend, and must show financial need. Each school has its own application deadline.

Total amounts available are up to $4,500 for students enrolled in a vocational program or the first two years of a program leading to a bachelor's degree with a total of $9,000 for an undergraduate education. No more than $18,000 can be borrowed for graduate and undergraduate education combined. Loan amounts depend on the availability of funds at the school, financial need, and the amount of other aid being received.

Students begin repaying the loan nine months after they graduate or leave school if they are borrowing for the first time or have repaid previous loans. If students are new borrowers, they have six months before they must start repaying the loan. Borrowers may be allowed up to 10 years to repay loans. The amount of the payment depends upon the size of the debt, but no student will pay less than $30 a month. Part or all of the loan can be canceled if the student teaches handicapped children or teaches full time in a designated elementary or secondary school that serves low income students.

Status: The Board does not anticipate the issuance of additional bonds during the 1990-91 biennium. No increase in borrowing authority will be necessary.

Table III.15
Borrowing Under the Guaranteed Student Loan Program by Post-Seccndary System Fiscal Years 1980-1988[1]

System	FY 1980		FY 1981		FY 1982		FY 1983	
	No. Loans	Dollar Amount	No. Loans	Dollar Amount	No. Loans	Dollar Amount	No. Loans	Dollar Amount
University of Minnesota	11,592	$28,069,647	21,311	$52,631,224	16,531	$41,114,159	15,593	$39,191,292
State University	8,349	14,951,167	16,434	29,362,436	12,088	20,942,883	13,283	23,062,776
Community College	2,964	4,748,154	6,766	12,139,831	5,399	9,876,685	5,857	10,400,206
Tech. Institute	7,937	12,282,138	13,668	23,031,722	12,295	21,544,663	14,711	26,525,300
Private Two/Four Year[2]	17,603	37,046,290	30,593	64,417,467	25,330	55,580,372	28,433	63,933,817
Totals	48,445	97,097,396	88,772	181,582,680	71,663	149,058,772	77,877	163,113,391

System	FY 1984		FY 1985		FY 1986		FY 1987	
	No. Loans	Dollar Amount	No. Loans	Dollar Amount	No. Loans	Dollar Amount	No. Loans	Dollar Amount
University of Minnesota	14,888	$38,196,329	16,930	$43,677,653	19,789	$50,053,222	16,930	$44,432,338
State University	14,593	26,021,282	15,130	27,285,320	16,245	29,841,011	13,347	23,203,541
Community College	6,036	10,577,997	6,412	11,436,512	5,905	11,217.178	5,050	8,986,686
Tech. Institute	16,451	30,254,483	17,896	34,344,822	15,281	31,277,018	13,269	25,783,142
Private Two/Four Year[2]	27,759	63,856,779	27,069	64,050,086	25,033	59,830,643	25,476	64,117,574
Totals	79,547	168,906.870	83,437	180,794,393	82,793	182,219,072	74,072	166,523,281

System	FY 1988	
	No. Loans	Dollar Amount
University of Minnesota	18,283	$52,938,842
State University	15,890	28,321,128
Community College	6,036	11,238,429
Tech. Institute	13,962	28,673,734
Private Two/Four Year[2]	31,112	81,522,677
Totals	85,283	202,694,810

[1]Includes Minnesota schools only; does not include Minnesota borrowers attending an institution outside Minnesota. Includes loans from private lenders and the state. Activity is for the federal fiscal year, October 1-September 30.
[2]Includes private collegiate, proprietary, and graduate institutions.

Source: Higher Education Assistance Foundation

The Coordinating Board is a lender of last resort under the Guaranteed Student Loan Program. Thus, all applicants must present evidence of having been refused a loan by two other lenders. All eligible applicants who apply to the state program receive loans. Private lenders have shown increasing interest in providing Guaranteed Student Loans over the past several years. Because of a decreasing market share, the Board in January 1988 decided to curtail its lending in this program until it can be demonstrated that the Board's role as a lender of last resort is necessary to assure the availability of funds. Under current conditions, the Board is expected to make less than $100,000 in loans each year of the 1990-91 biennium.

Table III.16
Student Borrowing in Minnesota Under PLUS/SLS Program, Fiscal Years 1982-1988[1]

Fiscal Year	Number of Lenders	Number of Loans	Dollar Amount	Average Loan Size
1982	NA	552	$ 1,376,259	$2,493
1983	434	2,147	5,383,664	2,507
1984	434	3,094	7,811,897	2,524
1985	473	4,242	10,851,346	2,558
1986	467	4,422	10,112,101	2,237
1987	487	6,207	16,549,679	2,666
1988	488	13,860	39,797,698	2,871

[1]Federal fiscal years, October 1-September 30.

Source: Higher Education Assistance Foundation

In July 1988, the Coordinating Board escrowed the outstanding bonds in the Guaranteed Student Loan Program and transferred the remaining assets of the program to the Loan Capital Fund. The purpose of this fund is to provide capital for the other loan programs administered by the Board in addition to providing loan capital for the Minnesota State Student Loan Program.

Table III.14 shows borrowing under the Guaranteed Student Loan Program from both private lenders and the Coordinating Board since Fiscal Year 1980. Table III.15 shows borrowing by post-secondary system under the Guaranteed Student Loan Program between Fiscal Years 1982 and 1988. Table III.16 shows borrowing in Minnesota under the federal Parent Loans for Undergraduate Students (PLUS) and Supplemental Loans for Students (SLS) Programs between Fiscal Years 1982 and 1988. These programs provide loans to parents of dependent students, to graduate students, and to independent undergraduates. Borrowers do not have to show need for these programs, but may have their credit worthiness examined. Students are required to apply for GSLs and Pell grants before applying for supplemental loans.

Student Educational Loan Fund (SELF)

Objective: To help students who are ineligible for subsidized federal student loans, students who need to borrow more than is allowed under existing loan programs, and students who have limited access to other financial aid programs.

Statutory Authority: *Minn. Stat.* Section 136A.14-136A.1701 (1988).

Background: Based on its study of student borrowing needs and options, the Coordinating Board in May 1984 directed staff to pursue the development, funding, and implementation of a new, supplemental loan program with a target date of fall 1984. Because of separate funding sources, there have been two phases of operation. The pilot program, Phase I, began June 1985, and ended September 1988. The continuation program, Phase II, began September 1988, and is still in operation.

This program is part of Minnesota's overall financial aid policy which provides grant assistance to students from families with limited financial resources but also expects students to contribute toward their education through savings, work, or borrowing.

Many of the program's provisions differ from those of existing loan programs. Because this program receives no subsidy or guarantee from the state or federal governments, the cost to the student for borrowing is higher than the cost under other existing subsidized programs. Phase I was funded by the sale of tax-exempt revenue bonds, Phase II from other agency sources. No state appropriations are used in either program phase.

Program Features: Eligible institutions are those that have

Table III.17
Student Educational Loan Fund
Total Dollars Approved by
Fiscal Year, 1985-1988[1]

Fiscal Year	No. of Loans	Total Dollars Approved
1985	1,020	$ 3,789,632
1986	3,472	8,656,279
1987	6,570	18,464,772
1988	10,221	28,348,794

[1]Federal Fiscal Year, October 1-September 30

Source: Minnesota Higher Education Coordinating Board

signed an agreement with the Higher Education Coordinating Board listing the duties and responsibilities of both the institution and the Board in administering the program. The institution must be located in the United States or its territories and must have been approved by the U.S. Department of Education for participation in federal financial aid programs. Eligible students must:

- be enrolled in an eligible school in Minnesota or be a Minnesota resident enrolled in an eligible school in another state or U.S. territory,
- be enrolled at least half time in a program leading to a certificate, associate, baccalaureate, graduate, or professional degree,
- be making satisfactory academic progress as defined by the school,
- not be delinquent or in default of any student educational loan at the current or previous school,
- not be currently delinquent in payment of interest or principal on an outstanding loan from the SELF Program,
- have a credit worthy co-signer,
- demonstrate financial eligibility by meeting the "maximum effort" test.

The financial aid officer at the eligible school will determine the amount a student can borrow. The loan amount cannot exceed the cost of attendance, as defined by the institution, minus other financial aid that the student has been awarded or is eligible to receive. The SELF loan, in combination with student aid from all known sources, cannot exceed the cost of attendance at the institution. The cost of attendance is the total amount it costs to attend a member school. It includes actual tuition and fees charged for the loan period; room and board charged for the loan period (or a reasonable allowance, as determined by the school, for off-campus living); and an allowance for books, supplies, transportation and personal expenses.

Cost of attendance		$xxx
Less available financial aid		
Federal loans and grants	$xx	
State grants	xx	
Institutional assistance	xx	
Total Aid		xx
SELF loan amount		$ xx

A student need not borrow the full amount for which he or she is eligible, although the minimum loan amount is $1,000.

Undergraduate students can borrow a maximum of $4,000 per year from SELF, not to exceed an aggregate indebtedness from all loan sources of $4,000 times the number of years in school, or $16,000, whichever is less.

Graduate students can borrow a maximum of $6,000 per year from SELF not to exceed an aggregate indebtedness of $25,000, including undergraduate debt. The minimum loan size is $1,000.

The borrower must pay interest and/or principal on the loan and also must pay a guarantee fee. The interest rate on SELF loans may change every week for loans made from Phase I, and every calendar quarter for loans made from Phase II. Interest will continue to vary throughout the life of the loan. For loans made from Phase I, the interest rate equals 3.50 percent in excess of the rate on the bonds sold to finance the program. Since June, 1985, the interest rate on Phase I loans has varied

Table III.18
Student Educational Loan Fund
Loans Approved by School Type
Fiscal Year 1987

School System	Loan Amount Approved	No. of Loans Approved	Percent of Loans Approved	Percent of Dollars Approved	Average Loan Size
University of Minnesota	$ 1,999,577	619	9.4%	10.8%	$3,230
State University	5,607,421	2,030	30.9	30.4	2,762
Community College	859,458	380	5.8	4.7	2,262
Private Four-Year	6,069,884	1,989	30.3	32.9	3,052
Private Two-Year	114,950	34	0.5	0.6	3,381
Technical Institute	1,173,859	512	7.8	6.4	2,293
Proprietary (Term Based)	990,009	374	5.7	5.4	2,647
Proprietary (Clock Hour Based)	741,318	309	4.7	4.0	2,399
Out of State	908,296	323	4.9	4.9	2,812
Total	$18,464,772	6,570			$2,810

[1]October 1, 1986 – September 30, 1987.

Source: Minnesota Higher Education Coordinating Board

from 6.875 percent to 14.50 percent. From June, 1985 to June, 1986, the average of weekly interest rate charges was 8.672 percent.

For loans made from Phase II, the interest equals 1.75 percent in excess of the average weekly sale price of the 13-week Treasury Bill sales for the previous calendar quarter. Actual interest rate history using the Phase II formula suggests that the interest rates for loans from the two phases will be similar.

Borrowers are charged a one-time guarantee fee of up to 6.25 percent of the loan amount. Fee proceeds are placed in a reserve fund to cover a portion of insurance claims in the event of nonpayment of interest and principal amounts by borrowers and co-signers. The fee is nonrefundable and is deducted from each loan amount when it is disbursed.

All borrowers must obtain a co-signer. Co-signers may include someone from the student's immediate family or other interested third parties. The co-signer must have demonstrated through past performance that he or she has not had difficulty in repaying debts. The Board will verify the credit-worthiness of co-signers by checking information available through one of several nationally located credit bureaus. Those not found in a credit bureau will complete a personal financial statement which is used to determine credit-worthiness.

The borrower must pay interest on a quarterly basis while in school. This is called the "in-school period." Interest payments will start approximately 90 days from the disbursement of the loan check. The borrower may, if he or she chooses, begin repaying the principal while in school. During the first 12 months after graduation or termination of study, the borrower will be converted to a monthly interest repayment schedule. This 12 month period is called the "transition period."

Payment of principal and interest will be monthly starting on the 13th month after graduation or termination of study. This is called the "repayment period."

For loans made from Phase I the maximum loan repayment period is 10 years from the time the student graduates or terminates study, 15 years from the date of the first loan disbursement, or November 1, 2000, whichever is least. For loans made from Phase II, the maximum loan repayment period is 10 years from the time the student graduates or terminates study, or 15 years from the date of the first loan disbursement, whichever is less. A shorter repayment period may be arranged. A minimum annual payment of $600 of loan principal and accrued interest will be required of all borrowers,

Table III.19
Student Educational Loan Fund
Loans Approved by School Type
Fiscal Year 1988

School System	Loan Amount Approved	No. of Loans Approved	Percent of Loans Approved	Percent of Dollars Approved	Average Loan Size
University of Minnesota	$ 2,869,093	941	9.2%	10.19%	$3,049
State University	11,225,484	4,063	39.8	39.88	2,763
Community College	917,557	385	3.8	3.26	2,383
Private Four-Year	8,439,210	2,805	27.4	29.98	3,009
Technical Institute	1,530,846	547	5.4	5.44	2,799
Proprietary (Campus Based)	846,858	331	3.2	3.01	2,558
Proprietary (Clock Hours)	601,031	560	5.5	2.14	1,073
Out of State	1,716,437	589	5.8	6.10	2,914
Total	$28,146,516	10,221			$2,754

[1]October 1, 1987 – September 30, 1988.

Source: Minnesota Higher Education Coordinating Board

including SELF loans to spouses during the repayment period.

All of a borrower's SELF loan payments in Phase I may be combined into a single bill when he or she enters the repayment period. All of a borrower's SELF loan payments in Phase II may be combined into a single bill when he or she begins the in-school period of repayment.

Borrowers are encouraged to repay as quickly as possible. There is no penalty for prepaying SELF loans.

If the borrower who has left school is delinquent in payment beyond 120 days or has failed to meet any of the other conditions of the loan, the repayment responsibility will shift to the co-signer. If a loan should be in default, the program or its insurers will then take one or more of the following actions:

- Work to effect repayment through the Minnesota Revenue Recapture Act. Under this law, the borrower or the co-signer's state income tax and property tax refunds can be diverted to repay amounts owed to the state.
- Take legal action against the borrower for repayment.
- Take legal action against the co-signer for repayment.
- Report the borrower's defaulted loan to the credit bureau.

Borrowers cannot have their loan obligations discharged through bankruptcy for five years after leaving school. Federal bankruptcy laws exclude from discharge loans made by a state agency, except in hardship circumstances.

Security for the program against the risks of death, default, and disability is provided solely by the Higher Education Coordinating Board for Phase II of the program, and by the Higher Education Coordinating Board in conjunction with a nationally rated reinsurer for Phase I of the program.

Funding: The original source of program funding, a $60 million issue of tax exempt revenue bonds in Fiscal Year 1985, was exhausted in September, 1988. To ensure the availability of loan capital for the program, the Coordinating Board in June 1987 authorized staff to restructure its student loan programs so that existing reserves can be used for the SELF program. A lender under the federal Guaranteed Student Loan Program since 1974, the Board had accumulated reserves in the State Student Loan Program exceeding levels necessary to support current levels of student borrowing from the program; meanwhile, SELF funds were running out. Thus in July 1988 the Board escrowed all outstanding bonds in the Guaranteed Student Loan Program and transferred the remaining assets to the Board's Loan Capital Fund. This fund is expected to meet the loan capital requirements of the SELF program for the next four to six years.

As part of its June 1987 action, the Board recommended that reserve levels be reviewed every two years to determine if projected levels exceed projected requirements for loan capital. The Board stated that the highest priority for projected excess reserves be to reduce or eliminate the in-school interest repayment requirements of borrowers under the SELF program.

Status: Tables III.17 through III.19 show activity under the program.

To help respond to questions and concerns from borrowers, the Higher Education Coordinating Board in 1988 arranged for the installation of a toll-free telephone number at HEMAR, the agency which services SELF loans.

Graduated Repayment Income Protection Program (GRIP)

Objective: To help graduates of Minnesota schools in dentistry, medicine, pharmacy, veterinary medicine, public health and chiropractic medicine and Minnesota residents graduating from optometry and osteopathy programs repay their student loans with a repayment loan based on their projected annual income.

Statutory Authority: *Laws of Minnesota for 1985, First Special Session,* Chapter 11, Section 3, Subdivision 6. *Laws of Minnesota for 1987,* Chapter 401, Section 2, Subdivision 6, and *Laws of Minnesota for 1988,* Chapter 703. Article 1, Section 22.

Background: The first applications from graduates were received in February 1987. The 1987 Legislature approved continued funding for GRIP and added programs in public health and chiropractic medicine.

The 1987 Legislature mandated that the Minnesota Higher Education Coordinating Board study the potential for expansion of the Graduated Repayment Income Protection (GRIP) Program to all academic programs with specific attention to osteopathic medicine and optometry graduates and report in December 1987.

In December 1987, the Board recommended to the legislature that Minnesota residents graduating from optometry and osteopathy programs be included in GRIP, and that consideration to expand GRIP to graduates of other academic programs be postponed until the fall of 1988.[1] This postponement was to enable the Board to:

- gather information on emerging commercial loan consolidation programs,
- work with better information on student debt loads, and
- gain experience with GRIP.

The 1988 Legislature accepted the recommendations to add Minnesota residents graduating from optometry and osteopathy programs.

Program Operation: The Graduated Repayment Income Protection Program (GRIP) helps graduates in specific professions repay their student loans by providing a repayment plan based on average annual income for the respective professions.

Applicants must be Minnesota residents who have graduated from an accredited school of optometry or osteopathy, or they must have graduated from either the University of Minnesota, Mayo Medical School, Mayo Graduate School of Medicine, or Northwestern College of Chiropractic, with a degree in one of the following fields: bio-medical sciences, chiropractic, dentistry, hospital administration, medicine, pharmacy, public health, or veterinary medicine.

Graduates' student loan repayments must exceed 10 percent of the average annual adjusted gross income for their professions. They must work at least 30 hours per week, have never defaulted on a student loan, and be a U.S. citizen or permanent U.S. resident. The program requires a credit-worthy co-signer. The program is designed as a final source of assistance. Prospective borrowers are expected to investigate other options to reduce their loan debt repayments.

Interest is 8 percent; no additional fees are charged. The borrower makes one payment to the Board each month representing 10 percent of the average annual income for the profession. The Board loans the borrower the remaining amount necessary to repay the student loans, combines the payments, and forwards them to the holders of the loans. The program does not consolidate or pay off the borrower's loans; rather it acts as a paying agent for the borrower's student loan payments.

[1] Minnesota Higher Education Coordinating Board, *Expansion of the GRIP Program to Cover Academic Programs, Including Optometry and Osteopathy* with Coordinating Board Recommendations (December 1987).

Table III.21
Status of the Minnesota Medical and Osteopathy Loan Program
As of May 1988

	Percentage of Students	No. of Participants	No. of Loans	Cumulative Loan Amount	Average Amount of Debt
In School	0	0%	0	$ 0	$ 0
In Residency	1	.50	4	24,000.00	6,000
Subtotal:	1	2.49%	4	$ 24,000.00	
In Repayment	80	39.80	277	1,613,000.00	20,162
Repaid	76	37.81	188	1,014,372.00	13,347
Subtotal:	156	77.61%	465	$2,627,372.00	
Rural Practice					
Completed	24	11.94	71	382,500.00	15,938
Incomplete	18	8.96	66	388,000.00	21,556
Subtotal	42	20.90%	137	$ 770,500.00	
Bankruptcy	2	1.00	6	32,538.85	–
Subtotal	2	1.00%	6	$ 32,538.85	
Totals	201	100.00%	612	$3,454,410.85	$17,186

Average Number Loans/Student = 3.0

Participants have located in the following communities for loan forgiveness purposes:

- Albany-Holdingford
- Arlington
- Belle Plaine
- Benson
- Bertha
- Big Fork
- Blue Earth
- Cambridge
- Cass Lake
- Chisago City
- Deer River
- Elbow Lake
- Foley
- Fosston-Begley
- Hawley
- Henderson
- Long Prairie
- Madison
- Mahnomen
- Milaca
- Moose Lake
- Mora
- New Richland
- New York Mills
- Parkers Prairie
- Paynesville
- Pequot Lakes
- Perham
- Pine River
- Plainview
- Princeton
- Red Lake Falls
- Redwood Falls
- Roseau
- St. James
- Spring Grove
- Springfield
- St[illegible]ck
- W[illegible]n

Source: Minnesota Higher Education Coordinating Board

Table III.22
Summer Scholarship Program Statistics
Summers 1986-1988

	1986	1987	1988	3 Yr. Increase Number	3 Yr. Increase Percent
No. of Schools Participating	15	31	25	10	87%
No. of Programs	27	78	45	18	66
No. of Students Enrolled	5,348	5,798	6,168	820	15
No. of Scholarships	239	385	554	315	132
Ratio (Scholarships to Enrolled)	4.5%	6.0%	8.0%		
Dollar Amount — Scholarships	$73,789	$129,509	$207,710	$133,921	181
Dollar Amount — Average Award	$ 309	$ 336	$ 375	$ 66	20
Recipients from:					
Minneapolis-St. Paul	90	119	129	39	43
Other	149	266	425	276	185
Totals	239	385	554	315	132%
Recipients by Grade Level:					
7	32	54	81	49	153%
8	47	68	93	46	98
9	42	75	107	65	155
10	44	65	115	71	161
11	[illegible]	119	155	89	135
12	8	4	3	(5)	(62)
Totals	239	385	554	315	132%
Recipients by Income Levels:					
$0-16,000	171	240	280	109	64%
16-20,000	35	51	95	60	171
20-24,000	20	41	77	57	285
24-28,000	7	31	58	51	728
28-32,000	6	16	37	31	516
32-36,000		5	6	6	—
36,000+		1	1	1	—
Totals	239	385	554	315	132%

Appropriation Summary: 1988-89

	1988	1989	Total
Total Appropriation	$213,700	$213,700	$427,400
Initial Awards	(207,710)		
Refunds	7,365		
Appropriation Canceled	(13,355)		
Balance	—0—		

Note: No administration costs are taken from this budget. They are charged to another budget item.

Source: Minnesota Higher Education Coordinating Board

given primary responsibility for providing students with information about the program.

The 1988 Legislature amended the statute to allow a student to be eligible if he or she has earned a B average during the semester or quarter prior to application in the academic subject area applicable to the summer program the student wishes to attend. Previously, a student had to earn a B average overall during the preceding quarter or semester.

Status: As shown in Table III.22,

Table III.23
Paul Douglas Teacher Scholarship Program
Program Activity Summary, 1986-87 — 1988-89

	Number	$ Amount
1986-87 Academic Year: Recipients by System		
University of Minnesota System	12	$ 56,628
State University System	6	29,814
Community College System	3	11,637
Private 2/4 Year	11	53,310
Reciprocity Schools	4	18,150
Total	36	$169,539
1987-88 Academic Year: Recipients by System		
University of Minnesota System	21	$100,640
State University System	11	47,465
Community College System	—	—
Private 2/4 Year	23	112,267
Reciprocity Schools	5	25,000
Total	60	$285,372
1988-89 Academic Year; Recipients by System		
University of Minnesota System	22	$110,000
State University System	13	61,750
Private 2/4 Year	29	144,781
Reciprocity Schools	4	19,700
Total	68	$336,231

NOTE: Number of 1986-87 Applications: 223
Number of 1987-88 Applications: 465*
Number of 1988-89 Applications: 460

*First year that high school seniors were eligible to apply.

Source: Higher Education Coordinating Board

participation in the program has increased over the past three years due to growing awareness of the program and its value to students, and the statutory changes.

Paul Douglas Teacher Scholarship Program

Objective: To provide financial aid to encourage and enable outstanding high school graduates interested in teaching to become pre-school, elementary or secondary school teachers.

Authority: Title V, Part E of the Higher Education Act of 1965 as amended by the Human Services Reauthorization Act of 1984, P.L. 98-558.

Background: The Paul Douglas Teacher Scholarship Program was enacted by Congress in 1984, and $10 million was appropriated for the program in Fiscal Year 1986. Minnesota's proportional share, based on population, was $173,000. Congress appropriated $15,705,003 for Fiscal Year 1987, and Minnesota's share was $281,290. Congress appropriated $17,523,651 for Fiscal Year 1988, and Minnesota's share was $318,733. No funds are provided for administration.

All scholarship recipients are obligated to teach pre-school, elementary school, or secondary school for two years for each year of assistance they receive. Teaching economically disadvantaged students, handicapped students, or

Table III.24
Minnesota-Wisconsin Annual Tuition, 1988-89 Resident, Non-Resident, and Reciprocity Rates

	Rates		
	Resident	Non-Resident	Reciprocity
Wisconsin			
1. Doctoral Institutions (UW-Madison and Milwaukee)			
Undergraduate	$1,679	$ 5,461	$2,016[1]
Graduate	2,439	7,584	2,674[1]
Law	2,439	7,584	3,416
Veterinary Medicine*	6,159	9,002	5,184
Medicine*	7,815	11,422	6,804[1]
2. University Cluster (Green Bay, Parkside, Eau Claire, LaCrosse, Oshkosh, Platteville, River Falls, Stevens Point, Stout, Superior, Whitewater)			
Undergraduate	1,363	4,445	1,440
Graduate	1,786	5,553	1,546
3. University Center System			
Undergraduate	1,251	4,013	1,192
Minnesota			
1. Doctoral Institutions (UMTC and UMD)			
Undergraduate	2,016	5,888	1,679
Graduate	2,674	5,347	2,439
Law	3,416	6,832	2,439
Veterinary Medicine*	5,184	7,777	6,159
Medicine*	6,804	13,608	7,815
Dentistry*	5,605	8,407	5,605
2. University Cluster			
Minnesota State Universities			
Undergraduate	1,440	2,318	1,363
Graduate	1,546	2,232	1,786
UM — Morris			
Lower Division	1,850	4,626	1,363
Upper Division	2,197	5,494	1,363
3. University Center			
Minnesota Community Colleges[1]	1,192[2]	1,845[2]	1,251
UM-Crookston	1,850	4,626	1,251
UM-Waseca	1,850	4,626	1,251

[1]Tuition schedule for reciprocity and resident tuition may vary due to averaging, different tuition plateaus, annual credits and/or rounding
[2]$2.50 activity fee deducted.

*Applies to students initially enrolled prior to the 1987-88 academic year. Professional students initially enrolled in a Doctor of Medicine, Doctor of Dental Sciences, or Doctor of Veterinary Medicine program in the public institutions of either state beginning with the 1987-88 academic year will be ineligible for reciprocity tuition under this agreement.

Source: Minnesota Higher Education Coordinating Board.

students with limited English proficiency reduces the obligation to one year of teaching for each year of scholarship assistance. Students are not required to teach in Minnesota.

Students who fail to fulfill their teaching obligation within 10 years of graduation must repay all or part of their scholarships, including substantial interest plus collection fees.

Status: Since the program's inception, 164 Paul Douglas Teacher Scholarships have been awarded to Minnesota students.

Table III.25
Minnesota-Wisconsin Participation and Balance of Payment Trends, 1977-78 – 1987-88

	Academic Year										
	'77-78	'78-79	'79-80	'80-81	'81-82	'82-83	'83-84	'84-85	'85-86	'86-87[1]	'87-88[2]
Minnesota Residents in Wisconsin[1]											
UW-Eau Claire	444	576	748	905	943	1,040	1,064	1,025	1,115	1,224	1,304
UW-LaCrosse	648	706	801	827	863	866	924	835	865	826	834
UW-Madison	866	1,006	1,160	1,255	1,320	1,410	1,523	1,502	1,780	1,855	1,988
UW-River Falls	1,617	1,700	1,777	1,915	1,959	1,961	1,993	1,758	1,921	2,119	2,169
UW-Stout	1,326	1,466	1,513	1,740	1,859	1,899	1,823	1,802	1,950	1,996	1,964
UW-Superior	511	488	458	487	503	470	430	354	548	639	688
Other	362	393	435	461	522	555	500	1,062	479	453	482
Total	5,764	6,335	6,892	7,590	7,969	8,201	8,257	8,338	8,658	9,112	9,429
Wisconsin Residents in Minnesota[1]											
UM-Duluth	233	198	214	271	296	292	290	329	350	329	357
UM-Twin Cities	1,691	1,756	1,890	1,842	1,984	2,055	2,027	1,978	2,048	2,179	2,510
Mankato State	107	104	105	101	144	144	138	125	166	167	215
Winona State	425	470	606	605	617	633	634	626	682	763	933
Other	253	274	317	317	354	397	436	485	524	506	613
Total	2,709	2,802	3,132	3,136	3,395	3,521	3,525	3,543	3,770	3,944	4,628
Payments by Minnesota (millions)[3]	$6.8	$8.1	$4.1	$5.6	$3.9[4]	$5.3	$2.8	$2.7	$3.0	$3.9	$3.0[5]
Net Cost per Student (thousands)	$2.2	$3.2	$1.1	$1.3	$ .9	$1.1	$. 6	$ .6	$ .6	$ .8	$ .6

[1]Based on Fall Headcount.
[2]Based on Fall Headcount that has not been verified.
[3]Funds for a year's activity come from the subsequent Fiscal Year appropriations. For example, the Fiscal Year 1987 appropriation is used for the 1986-86 program activity.
[4]Was $5.1 million prior to one-time adjustment of $1.2 million.
[5]Wisconsin will make a $1.1 million dollar payment to Minnesota because of the elimination of the professional category.

Source: Minnesota Higher Education Coordinating Board.

Nonfinancial Aid Programs

Introduction

In addition to the financial aid programs, Minnesota assists its residents through several other statewide programs. Described below are the interstate tuition reciprocity programs, the Minnesota Interlibrary Telecommunications Exchange, the Private Institutions Registration Program, the Post-High School Planning Program, the Optometry and Osteopathy Contracting Program, the Enterprise Development Partnership Program, and the Minnesota Job Skills Partnership Program. Also described is the federal program of grants for science and math instruction.

Interstate Tuition Reciprocity

Objective: To increase access and choice for Minnesota post-secondary students, to encourage the maximum use of educational facilities, and to minimize duplication of educational efforts among participating states and institutions.

Statutory Authority: *Minn. Stat.* Section 136A.08 (1988).

Background: Authorization to enter into reciprocity agreements with neighboring states was one of the first responsibilities assigned to the Higher Education Coordinating Board. This authority recognizes that opportunities for post-secondary education should extend beyond state boundaries and that historically

Table III.26
Minnesota-North Dakota Annual Tuition, 1988-89 Resident, Non-Resident, and Reciprocity Rates

	Rates		
	Resident	Non-Resident	Reciprocity
Category I All Minnesota and North Dakota graduates and professional students and North Dakota undergraduate students enrolled at the U of M-Twin Cities and Minnesota TIs pay the comparable rate of the state in which the institution is located.			
N. Dakota State U, U of North Dakota and Minot State			
Graduate	$1,464	$ 3,660	$1,546
Law	1,658	4,150	1,658
Medicine	5,654	14,135	5,654
Minnesota State Universities			
Graduate	1,546	2,232	1,546
University of Minnesota — Twin Cities			
Undergraduate (CLA — Lower Division)	1,850	4,626	1,850
Graduate	2,674	5,347	2,674
Law	3,416	6,832	3,416
Veterinary Medicine	5,184	7,777	5,184
Medicine	6,804	13,608	6,804
Dentistry	5,605	8,407	5,605
University of Minnesota-Duluth			
Graduate	2,674	5,347	2,674
Medicine	6,804	13,608	6,804
Minnesota TIs	1,309	2,518	1,309
Category II — Undergraduates			
U of North Dakota	1,254	3,138	1,536
North Dakota State U.-Fargo	1,254	3,138	1,536
Minnesota State Universities	1,440	2,318	1,397
U of M Campuses	1,850	4,626	1,397
Dickinson, Mayville, Minot, Valley City State Universities	1,122	2,802	1,240
Category III — Undergraduates			
North Dakota Colleges (Wahpeton College of Science, University of North Dakota Bottineau)	1,122	2,802	1,193
Bismarck State College	1,122	2,802	1,193
University of North Dakota Lake Region	1,122	2,802	1,193
University of North Dakota Williston	1,122	2,802	1,193
Minnesota Community Colleges[1]	1,193[1]	1,845	1,170

[1] $2.50 activity fee deducted.

Source: Minnesota Higher Education Coordinating Board.

states have tended to develop systems of post-secondary education facilities and programs in contiguous states. The reciprocity agreements have expanded educational choice for students, limited unnecessary duplication of programs and facilities across state boundaries, and reduced cost to the Minnesota taxpayer.

Status: Following is a summary of changes in the status of the agreements during the past two years.

Minnesota-Wisconsin Agreement: Under a revision in the program approved in November 1986, new entering students in medicine, veterinary medicine, and dentistry are no longer eligible as of the 1987-88

Table III.27
Minnesota-North Dakota Participation and Balance of Payment Trends, 1977-78 — 1987-88

	Academic Year										
	'77-78	'78-79	'79-80	'80-81	'81-82	'82-83	'83-84	'84-85	'85-86	'86-87	'87-88[2]
Minnesota Residents in North Dakota											
University of North Dakota	1,106	1,400	1,404	1,801	1,900	2,276	2,308	2,152	2,134	2,262	2,316
North Dakota State University	1,444	1,633	1,798	2,031	2,255	2,530	2,588	2,650	2,651	2,542	2,617
North Dakota College of Science	293	324	362	459	457	524	453	447	387	420	396
Other	135	146	134	137	127	127	187	193	181	165	158
Total	3,039	3,506	3,698	4,428	4,739	5,457	5,536	5,442	5,353	5,389	5,487
North Dakota Residents in Minnesota[1]											
UM-Twin Cities	182	195	235	254	256	262	222	210	224	284	318
Moorhead State	1,605	2,006	2,138	2,394	2,702	2,385	2,333	2,464	2,730	2,705	2,918
Other	199	218	261	271	286	282	329	309	331	393	326
Total	1,986	2,419	2,624	2,919	3,244	2,929	2,884	2,983	3,285	3,382	3,562
MN Residents in ND Vocational[1]											
Bismarck State College						1	1	1	6	1	1
UND Lake Region						0	1	1	1	3	5
UND-Willston						0	0	1	0	0	1
Total						1	2	3	7	4	7
ND Residents in MN Vocational[1]											
East Grand Forks						267	300	259	319	273	325
Moorhead						355	437	449	409	414	403
Other						59	102	129	118	168	171
Total						681	839	837	846	855	899
Payments by Minnesota (millions)[3]	$.8	$.7	$.8	$.9	$1.0	$1.1	$.06	$.0	$.0	$.0	$.0
Net Cost Per Student (thousands)	$.8	$.7	$.8	$.6	$.7	$.6	$.1	$.0	$.0	$.0	$.0

[1]Based on Fall Headcount.
[2]Based on Fall Headcount that has not been verified
[3]Funds for a year's activity come from the subsequent fiscal year appropriation. For example, the Fiscal Year 1987 appropriation is used for the 1985-88 program activity.

Source: Minnesota Higher Education Coordinating Board.

school year. Students who enrolled prior to 1987-88 are covered until completion of their programs. The effect of this change is to increase Minnesota's liability by approximately $400,000 each year for four years, or $800,000 in Fiscal Year 1990 and $1.2 million in Fiscal Year 1991. Also in the 1987-88 academic year, Wisconsin initiated an enrollment cap on the number of its incoming students. Although it is too early to determine trends, this may reduce the number of Minnesota students going to Wisconsin and increase the number of Wisconsin students attending Minnesota institutions, thus increasing Wisconsin's liability.

Minnesota-North Dakota Agreement: The agreement places students into three categories for tuition rates. In 1988, a modification was made to

Table III.28
Minnesota-South Dakota Annual Tuition, 1988-89 Resident, Non-Resident, and Reciprocity Rates

	Rates		
	Resident	Non-Resident	Reciprocity
Category I Graduate/professional students pay the resident tuition rate of the state in which the institution is located. Undergraduate students attending the U of M Twin Cities pay the resident tuition rate at that institution.			
U of South Dakota-Vermillion, South Dakota State University, South Dakota School of Mines and Technology			
Graduate	$1,272	$ 2,496	$1,272
Medical	6,050	12,500	6,050
U of M-Twin Cities			
Graduate	2,674	5,347	2,674
Dentistry	5,605	8,407	5,605
Medicine	6,804	13,608	6,804
Law	3,416	6,832	3,416
Veterinary Medicine	5,184	7,777	5,184
Undergraduate (CLA — Lower Division)	1,850	4,626	1,850
U of M-Duluth			
Graduate	2,674	5,347	2,674
Medicine	6,804	13,608	6,804
Minnesota State Universities			
Graduate	1,546	2,232	1,546
South Dakota Colleges Graduate (Northern State, Dakota State, Black Hills State)	1,248	2,304	1,248
Category II — Undergraduates			
U of South Dakota-Vermillion, South Dakota State University, South Dakota School of Mines and Technology	1,065	2,430	1,526
UM-Duluth (College of Letters and Sciences)			
Lower Division	1,850	4,626	1,526
Upper Division	2,234	5,581	1,526
UM-Morris			
Lower Division	1,850	4,626	1,526
Upper Division	2,197	5,494	1,526
UM-Waseca	1,850	4,626	1,526
UM-Crookston	1,850	4,626	1,526
Category III — Undergraduates			
South Dakota Colleges (Northern State, Dakota State, Black Hills)	1,035	2,190	1,224
Minnesota State Universities	1,440	2,318	1,224
Minnesota Community Colleges[1]	1,193[1]	1,845	1,224

[1] $2.50 activity fee deducted.

Source: Minnesota Higher Education Coordinating Board

tuition rates in Categories 2 and 3. The North Dakota regional universities were included in Category 2. The tuition rates for Minnesota residents at the North Dakota regional universities is an average of the undergraduate resident tuition charged at these institutions and the undergraduate resident tuition charged at the Minnesota state universities. Previously, the North Dakota regional universities were in Category 3 with community colleges. The change is a result of a recommendation that comparisons made for tuition

Table III.29
Minnesota-South Dakota Participation and Balance of Payment Trends, 1978-79 — 1987-88

	Academic Year									
	'78-79	'79-80	'80-81	'81-82	'82-83	'83-84	'84-85	'85-86	'86-87	'87-88
Minnesota Residents in South Dakota[1]										
South Dakota State University	380	535	757	944	1,058	949	863	812	817	708
South Dakota State M&T	41	39	51	62	75	92	69	63	52	44
University South Dakota-Vermillion	40	66	82	94	120	114	113	99	112	114
Other	26	38	51	91	101	78	70	53	57	77
Total	487	678	941	1,191	1,354	1,233	1,115	1,027	1,038	943
South Dakota Residents in Minnesota[1]										
UM-Twin Cities	136	223	295	335	368	343	314	325	405	407
Mankato State University	48	74	116	135	173	172	191	261	300	325
Moorhead State University	27	70	97	120	145	143	185	254	312	357
S.W. State University	38	61	91	114	117	179	236	271	315	319
UM-Morris	7	47	48	82	90	99	132	141	146	136
St. Cloud State University	19	24	47	54	63	71	59	69	80	76
Other	35	55	52	72	63	71	78	64	77	90
Total	310	554	746	912	1,019	1,077	1,195	1,385	1,635	1,710
Minnesota Residents in South Dakota Vocational										
Lake Area Vocational Technical Institute								27	31	
Mitchell Vocational Technical Institute								0	0	
Southeast Vocational Technical Institute								13	17	
Western Dakota Vocational Technical Institute								0	0	
Total								40	48	
South Dakota Residents in Minnesota Vocational										
Canby								39	50	
Granite Falls								42	68	
Pipestone								51	81	
Other								43	88	
Total								175	287	
Payments by Minnesota (millions)[3]	$ .2	$ .2	$ .3	$ .4	$ .6	$ .1	$ .0	$ .0	$ .0	$ .0
Payments by South Dakota (millions)	$ .0	$ .0	$ .0	$ .0	$ .0	$ .0	$.06	$ .1	$ .1	$ .0
Net Cost per Student (thousands)	$1.1	$1.6	$1.5	$1.4	$1.8	$ .6	$ .8	$ .2	$ .1	$ .0

[1]Based on Fall Headcount.
[2]Based on Fall Headcount that has not been verified.
[3]Funds for a year's activity come from the subsequent fiscal year appropriation. For example the Fiscal Year 1987 appropriation is used for the 1985-86 program activity.

Source: Minnesota Higher Education Coordinating Board.

Table III.30
Minnesota-Iowa Participation and Balance of Payment Trends, 1977-78 – 1987-88

	Academic Year										
	'77-78	'78-79	'79-80	'80-81	'81-82	'82-83	'83-84	'84-85	'85-86	'86-87	'87-88
Minnesota Residents in Iowa[1]											
Iowa Lakes Community College	28	43	61	71	56	62	74	68	78	50	50
Northwest Iowa Tech. College	1	3	3	14	10	4	6	2	13	11	6
Total	29	46	64	85	66	66	80	70	91	61	56
Iowa Residents in Minnesota[1]											
Jackson AVTI	15	53	51	54	46	66	73	55	66	92	69
Pipestone AVTI	7	20	5	7	12	17	13	13	17	12	8
Worthington Community College	34	36	96	125	50	48	43	47	54	50	35
Total	56	109	152	186	108	131	129	115	137	154	112

[1]Based on Fall Enrollment.

Source: Minnesota Higher Education Coordinating Board.

calculations were inappropriate. This modification is being phased in over two academic years. The three categories for tuition rates are as follows:

Category 1:

A. All North Dakota graduate and professional students enrolled in Minnesota institutions pay the resident tuition rate of the institution attended. North Dakota undergraduate students enrolled at the University of Minnesota-Twin Cities and Minnesota TIs pay the resident tuition rate of the institution attended.

B. All Minnesota professional students enrolled in North Dakota institutions pay the resident tuition rate of the institution attended.

C. All Minnesota graduate students enrolled in North Dakota institutions pay a tuition comparable to the resident rate charged at the Minnesota state universities.

Category 2:

A. Undergraduate students enrolled in the Minnesota State University System pay a tuition rate reflecting the average of the resident rate at these institutions and the resident rate at the University of North Dakota and North Dakota State University. North Dakota residents attending the University of Minnesota campuses at Crookston, Morris, Waseca, and Duluth also pay this average rate.

B. Undergraduate students enrolled at the University of North Dakota and North Dakota State University pay a tuition comparable to the resident rate charged at the Minnesota state universities.

C. Undergraduate students enrolled at the State Universities of North Dakota — Dickinson, Mayville, Minot and Valley City pay an average of the resident tuition charged at these institutions and the resident tuition charged at the Minnesota state universities.

Category 3:

A. Students enrolled in the Minnesota Community College System pay a tuition rate reflecting the average of the resident rate at these institutions and the resident rates at North Dakota State College of Science, North Dakota State University in Bottineau, Bismarck State College in Bismarck, University of North Dakota — Lake Region in Devils Lake, and the University of North Dakota — Williston Center.

B. Students enrolled at the North Dakota State College of

Table III.31
Actual and Projected Participation and Fiscal Trends Under Tuition Reciprocity Program, 1980-81 to 1990-91

Academic Year	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Projected 1987-88	1988-89	1989-90
Fiscal Year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Appropriations	$5,300,000	$5,669,000	$6,850,000	$4,800,000	$2,800,000	$4,000,000[1]	$3,700,000	$4,300,000	$4,300,000	$4,300,000
MN Payments to										
Wisc.	$5.6 m.	$3.9 m.	$5.3 m.	$2.8 m.	$2.7 m.	$3.1 m.	$3.9 m.	$3.0 m	$4.3 m.	$4.3 m.
N.D.	$900,000	$1 m.	$1.1 m.	$ 49,000 E.	0	0	0	0	0	0
S.D.	$300,000	$400,000	$600,000	$117,000 E.	0	0	0	0	0	0
Total	$6.8 m.	$5.3 m.	$7 m.	$3.0 m.	$2.7 m.	$3.1 m.	$3.9 m.	$3.0 m.	$4 3 m.	$4.3 m.
Reciprocity Payments to MN										
SD					$ .06	$0.1	$0.1	0	0	0
Net Payments					$2.64	$3.0	$3.8	$3.0	$4.3	$4.3
MN Residents in Reciprocity States										
Wisc.	7,590	7,969	8,201	8,257	8,338	8,358	9,112	9,429	10,276	10,789
N.D.	4,428	4,739	5,457	5,536	5,445	5,353	5,393	5,494	5,549	5,604
S.D.	941	1,191	1,354	1,233	1,115	1,067	1,086	943	971	990
Iowa	85	66	66	80	70	91	61	56	60	64
Total	13,044	13,965	15,078	15,106	14,968	15,169	15,652	15,022	16,856	17,447
Reciprocity State Residents in MN Schools										
Wisc.	3,136	3,395	3,521	3,525	3,543	3,770	3,944	4,628	5,999	6,598
N.D.	2,919	3,244	3,610	3,723	3,820	4,131	4,237	4,461	4,666	4,759
S.D.	746	912	1,019	1,077	1,195	1,560	1,922	1,710	1,796	1,813
Iowa	186	108	131	129	115	137	154	112	119	126
Total	6,987	7,659	8,281	8,454	8,673	9,518	10,257	10,911	12,580	13,296
Net Students	6,057	6,306	6,797	6,652	6,295	5,571	5,395	4,111	4,276	4,151
MN cost per net student	1,123	840	1,030	451	429	556	723	730	1,006	1,036
S.D. cost per net student					750	202	119	0	0	0

[1]1986 Legislature reduced amount t 3,000,000

Source: Minnesota Higher Education Coordinating Board

Science, North Dakota State University in Bottineau, Bismarck State College in Bismarck, University of North Dakota — Lake Region in Devils Lake, and the University of North Dakota - - Williston Center pay a tuition comparable to the resident rate charged at the Minnesota's community colleges.

Minnesota-South Dakota Agreement: In June 1988, both state agencies agreed to revisions in the agreement. Beginning with the 1988-89 academic year, there will be no reimbursement from one state to the other. Starting with the 1989-90 academic year, all Minnesota residents attending institutions in South Dakota and all South Dakota residents attending institutions in Minnesota will pay the resident rate of the institution attended. For 1988-89 all participating students pay the negotiated tuition rate. (See *Report to the Governor and 1987 Legislature.*)

The application procedure for students participating in the Minnesota-South Dakota Vocational Technical Reciprocity

program was eliminated beginning with the 1987-88 academic year. Students participating in this program apply at the institution they are attending. Eligible students pay the resident tuition rate of the institution. There is no reimbursement from one state to the other.

Status: The 1987 Minnesota Legislature appropriated $3.7 million for Fiscal Year 1988 and $4.3 million for Fiscal Year 1989 to the Coordinating Board for reciprocity.

Interstate Reciprocity Analysis

The Coordinating Board in June 1988 received an analysis of the effects of interstate tuition reciprocity. The report analyzes state residents who applied for tuition reciprocity under agreements between Minnesota and Wisconsin, North Dakota, and South Dakota in fall 1985 and compares them to reciprocity applicants in fall 1982. It also compares fields of study and traces changing patterns over the period.[2]

Findings: For many students, the nearby location of a post-secondary institution in another state is the most important factor in choosing to apply for tuition reciprocity. Of the 10 Minnesota counties with the most reciprocity applicants, five are in the immediate Twin Cities area, and most residents of the other five counties are within commuting distance of another state's post-secondary institution. Minnesota has had reciprocity agreements with Wisconsin since 1973, North Dakota since 1975, and South Dakota since 1978.

Majors in business and management were chosen more often than other majors by Minnesota reciprocity applicants to Wisconsin institutions. Education was the second most popular choice. Nineteen percent of the Minnesota applicants for both North Dakota and South Dakota institutions chose engineering. The majority of engineering majors came from the Twin Cities area. Business and management were the second most popular choice. The first choice of applicants from Wisconsin, North Dakota, and South Dakota was majors in business and management. The second most popular choice was education.

MINITEX

Objective: To establish and facilitate a system of resource sharing of services among higher education libraries, state agency libraries, and other libraries that elect to contract for services.

Statutory Authority: *Laws of Minnesota 1987,* Chapter 401, Section 2, Subdivision 7.

Background: The Minnesota Interlibrary Telecommunications Exchange (MINITEX) was established as a program of the Higher Education Coordinating Board to facilitate resource sharing among higher education and state agency libraries in Minnesota, and to aid in the reduction of unit costs in these libraries. Prior to Fiscal Year 1988, MINITEX fulfilled this objective through five major activities: (1) document delivery, (2) periodical exchanges, (3) creation and maintenance of a union list of serials holdings of the participating libraries, (4) a common data base of participants' books and non-print holdings through participation in a national program of online shared cataloging, and (5) reference services to participating libraries.

One hundred thirty Minnesota post-secondary and state agency libraries currently participate in the MINITEX programs, supported by state appropriations to the Coordinating Board. In addition, public libraries in Minnesota participate through the Office of Library Development and Services, and libraries in North and South Dakota participate under contracts that also provide funding. Within Minnesota, 59 percent of MINITEX document delivery requests come from Greater Minnesota.

MINITEX services are designed to provide students, faculty, and other residents of Minnesota with maximum access to library resources around the state and region. Maintenance of the program is essential in Minnesota due to a high concentration of total state library resources in the Twin Cities area. Over 60 percent of document delivery requests are filled from the University of Minnesota/Twin Cities library collections, the Minneapolis Public Library and Information Center, the Minnesota Historical Society, and the Minnesota Department of Health Library. These items are retrieved by MINITEX staff going to the

[2]Minnesota Higher Education Coordinating Board, *Tuition Reciprocity Agreements Between Minnesota and Contingent States* (June 1988)

Table III.32
Actual and Projected MINITEX Activity Supported by State Appropriations, Fiscal Years 1985-1991

Fiscal Year Academic Year	Actual FY 85 (1984-85)	Actual FY 86 (1985-86)	Actual FY 87 (1986-87)	Actual FY 88 (1987-88)	Estimated FY 89 (1988-89)	Estimated FY 90 (1989-90)	Estimated FY 91 (1990-91)
No. of libraries served	125	125	130	130	130	130	130
No. of documents delivered	111,854	116,870	134,750	140,724	149,438	157,809	167,332
No. of periodical exchanges	26,107	18,222	6,041	0	0	9,466	10,886
No. of reference requests	1,368	1,187	700	0	0	900	1,200
No. of OCLC libraries	92	93	93	94	95	95	97
No. of online holdings records (in millions)	4.5	5.0	5.8	6.9	7.2	7.5	7.9
No. of work sessions	30	50	60	70	80	95	110

Source: MINITEX Office

key Twin Cities library facilities. The remaining requests are referred and filled from other MINITEX participating libraries which absorb the cost of retrieving the materials.

MINITEX provides its core service at low cost — one of the lowest cost per unit shared among libraries in the country. It has been nationally recognized as a model interlibrary resource sharing program.

The increased volume of activity that has resulted from out-of-state contractual arrangements contributes to the low unit cost that MINITEX has maintained. In addition, participation of the Office of Library Development and Services, North Dakota, and South Dakota has broadened the base of library collections, and consequently, enhanced resource sharing among all participants, including Minnesota higher education and state agency libraries.

The Coordinating Board contracts with the University of Minnesota for MINITEX services. The University manages day-to-day operations of the program and services at the MINITEX office in Wilson Library. Coordinating Board staff determine the policy direction of the program, set the goals and objectives, define the services, develop budget requests, contract for major services, and represent MINITEX to the legislature and public. An advisory committee assists the Board.

Table III.32 identifies actual and projected activity supported by direct state appropriations in all major program areas from 1984-85 to 1990-91 while Table III.33 shows total program activity for the same period.

The 1987 Legislature appropriated $759,300 for Fiscal Year 1988 and $759,300 for 1989.

The appropriation for the 1987-89 biennium included an increase to cover the cost of pay equity adjustments for MINITEX employees at the University. However, the appropriation did not include funds for an inflation adjustment or for improvements in service, despite all-time demands for document delivery service.

Status: In response to limited state appropriations for the 1987-89 biennium, the Coordinating Board identified core and secondary services. Document delivery, the union list of serials, and online catalog were identified as the core MINITEX services, and they continue to be provided at no cost to participating libraries. Periodical exchange and the reference service were identified as secondary services and are being provided to participating libraries on a fee basis. Only those libraries willing and able to pay have access to reference and periodical exchange services. Because of the decrease in the number of libraries using

Table III.33
Actual and Projected Activity Supported by MINITEX Appropriations and Contracts Fiscal Years 1985-1991[1]

Fiscal Year Academic Year	FY 85 (1984-85)	FY 86 (1985-86)	FY 87 (1986-87)	FY 88 (1987-88)	FY 89 (1988-89)	FY 90 (1989-90)	FY 91 (1990-91)
No. of libraries served	190	190	216	216	216	216	216
No. of documents delivered	166,658	175,914	191,737	200,885	210,703	227,242	242,176
No. of periodical exchanges	26,107	18,222	6,041	6,586	8,232	10,412	11,358
No. of reference requests	4,120	3,656	2,466	1,489	1,650	2,300	2,600
No. of OCLC libraries	159	161	161	160	162	162	164
No. of online holding records (in millions)	7.5	8.5	9.0	9.2	9.3	9.4	9.5
No. of work sessions	30	50	60	70	80	95	110

[1]Includes contracts with Office of Library Development and Service, North Dakota and South Dakota, and fees for Secondary Services.

Source: MINITEX Office

these services (and consequently, decreases in the number of reference questions and periodical exchanges), the unit costs and fees for these services have increased significantly.

Document delivery requests have increased at a higher-than-expected rate so that the 1987-89 appropriation has not adequately covered the cost of providing this service and the other core services. Since Fiscal Year 1985, the higher education and state agency demand for document delivery has increased 25 percent, while the MINITEX appropriation has increased only 10 percent. Figured in constant dollars (based on 1985 dollars), the MINITEX appropriation actually dropped more than two percent between 1985 and 1988. Additional funds to cover core services have been found through unanticipated and one-time sources such as temporarily unfilled positions and from fees. Nevertheless, during Fiscal Year 1988, there was a noticeable decline in the quality of document delivery service as the MINITEX staff had to reduce quality control mechanisms to meet the ever increasing demand for materials.

Minnesota's libraries are moving toward greater use of computer services and processes, placing new demands on MINITEX staff to provide more sophisticated information and support services to libraries so they may better serve students, faculty, and other Minnesota residents. The MINITEX office must work closely with the online system of the University of Minnesota/Twin Cities campus (LUMINA) and the State University System online system (MSUS/PALS) to enhance resource sharing. In particular, there is a demand for more efficient delivery of materials, more timely response to document delivery requests, and more geographically accessible instruction in the use of new technologies related to resource sharing.

The 1987-89 biennial appropriation did not include funds to cover the cost for inflation. Moreover, during Fiscal Year 1989, the appropriation is not expected to cover the cost of providing MINITEX core services. If the current appropriation level is continued, a further decrease in the level of service provided to libraries would be required. The most probable loss would be in the number of requests filled, and in the timeliness of responding to requests. One possible response would be to limit the number of requests that each library may send.

In Fiscal Year 1989, the level of service is budgeted to exceed levels for which there is funding. Moreover, the current

quality of service is already deteriorating and the future demand for service is expected to increase.

If this program were not available, libraries would face the prospect of either paying much higher costs to purchase the materials or be unable to provide information to students, faculty, researchers, and other residents of Minnesota. In 1987, the average cost to purchase and process a book for an academic institution was $68. Periodical reprints are available to libraries through University Microfilms at $8.75 per item, a higher fee than it costs MINITEX to provide the same material. The unit cost proposed for all MINITEX services for Fiscal Year 1990 is $7.88 (this includes both primary and secondary services; the unit costs for document delivery services alone would be somewhat lower), allowing savings of from $2.25 to $61.50 per item. In Fiscal Year 1988, MINITEX made 140,724 transactions.

Private Institutions Registration Program

Objective: To assure the authenticity and legitimacy of private institutions that provide post-secondary education to Minnesota residents.

Statutory Authority: *Minn. Stat.* Sections 136A.61-136A.71 (1988).

Background: The Private Institutions Registration Program was established by the 1975 Minnesota Legislature in response to an increasing number of inquiries and complaints by students which pointed to possible abuses in the advertisement and delivery of post-secondary education in Minnesota. Implementation of the program began in 1977. Several amendments to the act were adopted by the 1978 Minnesota Legislature; they clarified the intent of the law and expanded its effect to include public schools located outside Minnesota which offer programs or courses within the state.

The program ensures protection of student records, disclosure of certain information to students and prospective students, financial stability of educational institutions, appropriate curriculum, faculty, and physical facilities for education programs, and adequate governance of educational institutions. The procedures also assist institutions by providing guidelines to private schools offering programs and courses in Minnesota, helping to protect legitimate and authentic institutions from unfair competition, and offering guidelines and assistance to developing institutions and experimental programs.

Schools under the purview of this program must register annually with the Coordinating Board. Once an institution has registered, the Coordinating Board staff reviews material that has been submitted and recommends Board action concerning institutional names and the granting of degrees.

The Board maintains a list of registered schools, schools approved to offer specified degrees, and schools approved to use the name "academy," "college," "institute" or "university."

Status: By August, 1988, 70 institutions were registered with the Coordinating Board, 51 were approved to grant degrees, and 10 were approved only to use certain terms in their names. Nine were simply registered. Several institutions have been discouraged from operating in Minnesota or have been denied approval.

In 1987 and the first eight months of 1988, the Coordinating Board approved one Minnesota institution and three out-of-state schools to offer degrees in Minnesota; another non-Minnesota institution also was approved to use the term "institute" in its name while operating in Minnesota. In addition, one Minnesota institution was approved by the Board to offer a new degree. Five schools discontinued operating as post-secondary institutions in Minnesota, one discontinued offering a degree. In addition, one school's approval was changed to conditional approval and was to be reviewed by November 30, 1988. Table III.34 lists the changes in the list of registered and approved institutions from January 1987 through August 31, 1988.

Table III.34
Changes in the List of Registered and Approved Institutions January 1, 1987-August 31, 1988

New Name Approvals	
Institute for Cortext Research and Development	
New Degree Approvals	
Cardinal Stritch College	Bachelor of Science Master of Science
College of St. Thomas	Doctor of Education
Illinois School of Professional Psychology	Master of Arts Doctor of Psychology
Pillsbury Baptist Bible College	Associate of Applied Science Bachelor of Arts[1] Bachelor of Science[1]
Vermont College of Norwich University	Master of Arts[2]
Approval Changed to Conditional Approval	
National College	Associate of Applied Science[3] Bachelor of Science[3]
Institutions No Longer Offering Post-Secondary Education in Minnesota	
Central Michigan University	
Fairview Deaconess Hospital	
Montana State University	
Northwood Institute	
Stephens College	Associate of Arts Bachelor of Arts Bachelor of Science
Degrees No Longer Offered in Minnesota	
Augsburg College	Associate of Arts
Institutions No Longer Registered and Operating Under Different Names or Corporate Identities Than That for Which They Were Approved	
Hastings Beauty School	Hastings (formerly the Hastings College of Hair Design and now no longer under the purview of the Private Institutions Registration program)
Cosmetology Training Centers	Richfield, Columbia Heights (formerly called the Glamour Beauty Academy and the Glamour Central Beauty Academy; both no longer fall under the purview of the Private Institutions Registration Program but are licensed by the Department of Commerce)

[1]Conditional approval until June 30, 1989
[2]Conditional approval until January 26, 1989
[3]Conditional approval until November 30, 1988

Source: Minnesota Higher Education Coordinating Board

Minnesota Post-High School Planning Program

The Minnesota Post-High School Planning Program is a statewide education and career guidance, testing and information and planning program for all secondary students in grades 8 through 12 and adults who wish to participate.

Objective: To provide secondary students and adults with information useful in making post-secondary education and work plans and to provide post-secondary institutions with information useful in the admission, advising, and placement of prospective students.

Statutory Authority: *Minn. Stat.*, Sections 136.A.85-136.A.86 (1988).

Background: The 1978 Legislature directed the Minnesota Higher Education Coordinating Board to administer the Post-High School Planning Program (PSPP) for all 11th grade students who wish to participate.

In fall 1986 the Board endorsed a proposal of the program's advisory task force to establish an integrated system of assessment and information to help residents in eighth grade through adulthood to make better education and career decisions. The Board recommended a biennial funding increase of $1.2 million to cover new and expanded program services.

Legislation was approved in 1987 expanding the program to serve secondary students in grades 8 through 12, and adults.

The legislature continued the base level of $118,000 per year and provided an additional $62,000 in Fiscal Year 1989 to support the improvement of current, basic services.

The advisory task force, which has included representation from secondary and post-secondary education, now is required to have representatives who have knowledge and interest in post-secondary education for adults. A new task force responsibility is to study and make recommendations about a variety of methods to provide assistance to adults considering post-secondary education. Under the program, as amended in 1987, the Board is required to coordinate efforts and develop additional methods of providing information, guidance, and testing services to out-of-school youth and adults.

The Board's initiative to provide information to eighth grade students about post-secondary opportunities, academic standards, and financial aid was incorporated into the Post-High School Planning Program.

The Board had requested additional funding to target information to parents of eighth grade students, high school students, and out-of-school youth and adults. No new appropriations were approved, but base funding for the eighth grade project, started in 1985, was maintained.

Under the Post-High School Planning Program, the Board is required to make available to all residents from eighth grade through adulthood information about planning and preparing for post-secondary education. Information is to be provided to all eighth grade students and their parents by January 1 of each year about the need to plan for their post-secondary education. The Board also may provide information to high school students and their parents, to adults, and to out-of-school youth.

Status: Approximately 38,000 Minnesota high school juniors, or 62 percent, participated in the program in the 1987-88 school year, down from a high of nearly 57,000 in 1979-80. The decline parallels the trends of decreasing high school class sizes that can be expected to continue for the next four years.

The Coordinating Board in 1988 established a five year contract with the American College Testing Company (ACT) to provide (1) an assessment for college admission, (2) a plans and background survey, and (3) an interest inventory. ACT also will provide data base management services.

The previous contract had been with the College Board and included the Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT), the School and College Ability Test (SCAT), a plans and background survey, and an interest inventory. The data base administration had been serviced by the University of Minnesota's Office of Measurement Services.

Table III.35
Minnesota Post-High School Planning Program
Fiscal Year 1989 Funding Sources

Task	Estimated Number of Students Served	Student Cost	Total Students Cost	State Contribution per Student	State Funds	Total Program Costs
PSPP/APP (college admission test, plans and background survey, and interest inventory)	35,000*	$9.50	$332,500	$2.00	$ 70,000	$402,500
or						
Plans and Background Survey (for students not taking the ACT Assessment)	16,000			$1.50	$ 24,000	$ 24,000
Interest Inventory (for students not taking the ACT Assessment)	16,000	$ .75	$ 12,000			$ 12,000
Data Base Administration (standard reports to students, high schools, and post secondary institutions, follow-up studies, search service)	51,000				$ 85,000	$ 85,000
Program Materials						
Minnesota College Admission Form (250,000 copies)					$ 5,450	$ 5,450
Brochures and Posters (75,000/500 copies)					$ 3,650	$ 3,650
Reports and Services Brochure and order forms (500 copies)					$ 850	$ 850
Total Operating Costs			$344,500		$188,950	$533,450

Source: Minnesota Higher Education Coordinating Board

A consensus had emerged to seek improvements both in the test and data base administration. After extensive consultation, the Coordinating Board staff developed a request for proposal seeking new and creative approaches.

After evaluating proposals, the Coordinating Board preferred ACT because it appeared to be superior in meeting the needs of students, high schools, and post-secondary education institutions.

This three-part ACT program modified for Minnesota will be called the PSPP/AAP. The assessment for college admission is a curriculum-based test that measures educational development and predicts academic performance during the first year of college. All colleges in Minnesota will accept the ACT assessment for college admission. The plans and background survey is a

questionnaire that asks students for information about their backgrounds, plans after high school, interests, needs and achievements. The interest inventory collects information about students' likes, dislikes or indifference to work related activities. All high schools in Minnesota will be eligible to serve as test centers. In the winter of each year, high school juniors will have an opportunity to take all or parts of the ACT Assessment Program. The school day and testing week will be determined annually by the Coordinating Board. The Coordinating Board will contribute $2.00 per student participating in the entire ACT Assessment Program so that the fee paid by Minnesota students will be $2.00 less than the prevailing national fee for the year and subsequent years. Students electing not to take the college admission test are encouraged to take the plans and background survey, free of charge, and the interest inventory for $.75, which is retained by ACT.

To make the plans and background survey available for students who do not take the PSPP/AAP, the Coordinating Board will contribute a fee of $1.50 per student up to a maximum of $25,000 per year regardless of the number of students involved. If all funds are not spent, the Coordinating Board may redirect the balance to underwrite the cost of the interest inventory.

To provide data base administration and related services, the Coordinating Board will pay $85,000 annually to ACT.

For the past four years the Coordinating Board has provided copies of a booklet *(Future Choices)* and planning chart to all eighth grade students attending public and private junior high and middle schools in Minnesota. Schools also can obtain a videotape. The *Future Choices* materials are also available in Spanish and Hmong as part of a project funded in 1986 by The Saint Paul Foundation. Responses to evaluations of the booklet and videotape have been positive.

To learn more about what parents do and don't know about post-secondary education and financial aid, their attitudes and plans, and what they need and would like to know, the Board staff in Spring 1988 surveyed a sample of parents of eighth graders. (See page 104.)

In December 1987, the Board adopted a set of recommendations on methods to provide information and assessment services for adults. (See page 102.) It was based on the report and proposals of the program's advisory task force.

Osteopathy and Optometry Contracts

Objective: To provide opportunities for Minnesota residents to pursue professional studies in optometry and osteopathy and to ensure a stable supply of qualified professionals in optometry and osteopathy for the state by contracting for student spaces in institutions located in other states.

Statutory Authority: *Minn. Stat.* Section 136A.225 (1988).

Background: The Optometry and Osteopathy Contracting Program was established in 1977 to respond to projections of a diminishing supply of professionals in both health areas in Minnesota. Since there are no professional programs in either optometry or osteopathy in Minnesota, the method of contracting for a specified number of seats in each entering class is designed to assure a stable pool of professionals committed to practicing in the state.

The Board is authorized by statute to contract for placement of up to 10 seats in colleges of osteopathy and up to 13 seats in schools of optometry.

Status: The 1987 Legislature appropriated $283,000 for Fiscal Year 1988 and $187,500 for 1989 to the Coordinating Board for the program. These amounts were based on continual funding for 10 existing optometry seats in Fiscal Years 1988 and 1989, 14 existing osteopathy seats in Fiscal Year 1988 and 9 in 1989, and no new seats. With the program being phased out, final contract payments will occur in Fiscal Year 1990.

In a related action, the 1987 Legislature directed the Coordinating Board to study the potential expansion of the Graduated Repayment Income Protection Program (GRIP) to include graduates of optometry and osteopathic medicine programs.

In response to a Coordinating Board recommendation, the 1988 Legislature adopted language to include in GRIP

Table III.36
Number of Seats and Costs in Optometry and Osteopathy Contracting Program Fiscal Years 1983 to 1989 and Estimates for Fiscal Years 1990-91

	FY 1983 Actual	FY 1984 Actual	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Actual	FY 1989 Actual	FY 1990 Estimated	FY 1991 Estimated
Optometry									
No. of Continuing Seats	31	18	5	0	5	10	10	5	0
No. of New Seats	0	0	0	5	5	0	0	0	0
Cost per Seat	4,500-5,500	4,900-5,500	4,900-5,500	5,400	5,400	5,400-6,500	5,400-6,500	5,400-6,500	0
No. of Optometry Scholarships				13	10	5	0	0	0
Total Optometry Cost	$156,700	$ 91,800	$ 26,900	$ 52,000	$ 79,000	$ 74,000	$ 59,000	$ 31,000	0
Osteopathy									
No. of Continuing Seats	21	13	8	16	15	14	9	4	0
No. of New Seats	0	5	11	5	5	0	0	0	0
Cost per Seat	14,500	16,000	11,250-16,000	11,250-16,000	12,000-16,000	12,000-16,000	12,000-16,000	16,000	0
Total Osteopathy Cost	$304,500	$288,000	$283,000	$315,000	$304,000	$208,000	$128,000	$64,000	0

Source: Minnesota Higher Education Coordinating Board

Minnesota residents graduating from optometry and osteopathy programs.

Table III.36 shows actual and projected participation and cost figures.

As of August 1988 there were 44 osteopathy graduates eligible to begin practice in Minnesota. Of these, 17 had requested and been granted a delay of service in order to specialize, 13 had established a practice in Minnesota, and 5 were repaying the state for the contract. Nine were in residency and had not stated their future plans. Four of the 13 had completed the practice obligation.

There were 50 optometry graduates eligible to begin practice in Minnesota. Of these, 1 had requested and been granted a delay of service, 40 had established a practice, and 4 were repaying the state for the contracted amount. Five were in residency and had not stated their future plans. Twenty-four of the 40 had completed their practice obligations.

Enterprise Development Partnership Centers

Objective: To increase the success rate of new and expanding businesses through the cooperative efforts of all available community resources from the business, government, education, and financial sectors.

Statutory Authority: *Laws of Minnesota for 1987,* Chapter 401, Section 2, Subd. 8. *Laws of Minnesota for 1988,* Chapter 703, Article 1, Subd. 4(d).

Background: The 1985 Minnesota Legislature directed the Higher Education Coordinating Board to administer a pilot program of enterprise development partnership centers. Four communities were selected in January 1986 to receive grants — Bemidji, Crookston, Otter Tail County, and the Iron Range.

The 1987 Legislature provided only partial funding, $200,000, for Fiscal Year 1988 and no funding for Fiscal Year 1989. The Coordinating Board had requested $349,700 in 1988 and $336,500 in 1989 to provide the state share for the four existing centers; the governor proposed funding for three new centers. The 1988 Legislature provided $200,000 for Fiscal Year 1989 to support existing and new model enterprise development and innovation centers. The program was directed to seek future funding from the Greater Minnesota Corporation.

Status: In June 1988 the Coordinating Board approved funding of up to $38,000 for the

Bemidji Cooperation Office, $50,000 for the Crookston Enterprise Development Center, and $20,000 for the Otter Tail County Business Development Center.

Funding for two new centers was approved — up to $50,000 for the Minnesota Cooperation Office, and up to $50,000 for the Women's Economic Development Corporation. In July 1988, the Iron Range Center closed.

After 2½ years of operation and a state expenditure of $721,000, the original four centers have:

- served 814 businesses.
- started 84 businesses.
- helped 51 businesses expand.
- helped 36 businesses to stay in business.
- created 423.5 new jobs.
- saved 236 existing jobs.
- leveraged more than $7 million in financing for businesses.

This translates into a state investment of $1,000 per job created or maintained, or about $1,700 per new job. Currently, 40 percent of operating costs for the centers are raised locally.[3]

Based on the successful three years of operation of the pilot program, the Coordinating Board has recommended that the pilot program end after Fiscal Year 1989 and a more permanent, statewide program be developed and funded in the future. The Board recommends the program be connected to an economic development agency rather than the Coordinating Board and be part of a coordinated business development program that supports community-level business development centers funded through the Greater Minnesota Corporation, the state, and urban and rural development funds.

Minnesota Job Skills Partnership

Objective: To extend the education and training resources of the state to provide Minnesota employers with a well trained workforce.

Statutory Authority: *Minn. Stat.* 116L.02 — 116L.05 (1988).

Background: The Minnesota Job Skills Partnership was created in 1983 to serve as a catalyst for cooperation between business and education. It brings employers with specific training needs together with education or other nonprofit institutions that design programs to fill those needs. The program assists with the economic development of the state by assisting businesses in obtaining the trained workforce necessary to remain competitive and prosperous; it provides economic opportunity to individuals through education and training that will result in their obtaining gainful employment.

From its inception through Fiscal Year 1987, the Partnership was an independent agency governed by a 21-member board. The 1987 Minnesota Legislature reduced the size of the board to 11 directors. The board now consists of eight members appointed by the governor, the commissioner of trade and economic development, the commissioner of jobs and training, and the state director of vocational technical education.[4] The legislature gave the Higher Education Coordinating Board responsibility for providing staff and administrative support. The Board received $150,000 for Fiscal Year 1988.[5] Also, the 1987 Legislature appropriated $500,000 for each year of the 1988-89 biennium to the Board. Language also was adopted repealing the program June 30, 1989.

The Partnership funds grants serving a wide variety of Minnesota businesses and industry. These include high tech electronics, machine tool manufacturing, health care, transportation, garment, forest products, and agriculture-related businesses. The business can be existing, expanding, or new. Business involvement covers five areas: recruitment or selection of trainees; curriculum development; program operations; placement; and contribution of financial resources. Participating businesses must match the grant on a 50/50 basis. The maximum grant is $200,000.

Eligible education institutions include colleges, universities, and technical institutes, both public and private. The institutions may offer several types of training, including: entry level, retraining, or advanced training.

[3] For a progress report on the first 7 1/2 months of the program, see: Minnesota Higher Education Coordinating Board. *Evaluation Report, Enterprise Development Program* with Coordinating Board Recommendations (January 15, 1987).

[4] *Laws of Minnesota for 1987*, Chapter 386, Article 10, Sections 1-5, 7, and 9.

[5] *Laws of Minnesota for 1987*, Chapter 401, Section 2, Subd. 2., Section 36 and Section 39.

Development of new methods, curriculum and materials pertinent to business employee needs by the institutions are encouraged. Most instruction results in credit, certification, diplomas, or, in some cases, degrees.

Although it provided no new funding for the Minnesota Job Skills Partnership program, the 1988 Legislature authorized the Partnership to use for administrative expenses up to $75,000 of the program's Fiscal Year 1989 appropriation, $500,000, for grants. The legislature also stated that the Partnership is to seek future funding from the Greater Minnesota Corporation.[6]

Status: Since it was established, the Partnership has awarded, through a competitive grant process, more than 50 grants totaling over $2.4 million. This has generated matching contributions of cash or in-kind from businesses totaling over $4.7 million. Other participating organizations, including educational institutions receiving grants, have contributed an additional $1.2 million. Total program effort in four years of operation totals over $8.3 million.

According to the Partnership's *1987 Progress Report,* by the end of 1987, 31 projects had been funded involving 36 education and training institutions and nearly 100 companies. More than 2,100 people had completed training and 900 more were receiving training.[7]

Of those trained, 49 percent were displaced or potentially displaced workers, 50 percent were unemployed individuals including displaced homemakers, and 37 percent were women. Three fourths of the projects served rural Minnesota. Of the 31 grants, 9, have concentrated solely on training entry-level employees. Another 13 have benefited those needing entry-level and/or retraining or advanced training. Seventeen of the 31 grants involve businesses employing fewer than 500 persons.

Since 1987 the Partnership has been participating in Project MORE — more education for more people for Minnesota's economic vitality. Together with the Department of Trade and Economic Development, the Minnesota State University System, the Minnesota Community College System, the Minnesota Technical Institute System, and the Department of Jobs and Training, the Partnership pledged to increase interagency networking at all levels. The project's goals include better awareness by Minnesota businesses of the services available to help with employee retraining needs, small business development, and the transfer of technology as well as development of state university, community college, and technical institute partnerships to meet economic development needs in their respective communities and regions.

The Partnership has submitted a budget request to the executive branch for the 1990-91 biennium. It includes administrative funds of $155,000 in Fiscal Year 1990 and $160,000 in Fiscal Year 1991. The Partnership is requesting $1.5 million per year to fund an estimated 30 educational cooperative ventures annually. Also, the Partnership is seeking $1.5 million each year to target education-business training projects in the metropolitan area to serve at-risk adult working and nonworking populations. The budget request is being transmitted through the Coordinating Board's budget request although the Coordinating Board has not approved or disapproved it.

Title II Grants for Science, Math Instruction

Objective: To help states improve the quality of science and mathematics instruction.

Authority: Title II of the Education for Economic Security Act (P.L. 98-377).

Background: Title II allocates financial assistance by formula to the states to improve the skills of teachers and the quality of instruction in mathematics, science, foreign language, and computer learning.

1987 Program: Minnesota received $1,228,277 for 1987-88. The State Department of Education administered 70 percent of the state's allocation for training and retraining of elementary and secondary teachers, and the Coordinating Board about 30 percent, which was available to post-secondary institutions on a competitive basis.

The Coordinating Board in August 1987 approved the awarding of 18 grants totaling

[6] *Laws of Minnesota for 1988,* Chapter 703, Article 1, Section 2, Subd. 4 (a).

[7] Minnesota Job Skills Partnership, *Progress Report* (1987).

$350,742 to 12 higher education institutions and 2 education-related organizations.

The 12 institutions were: College of St. Catherine, Mankato State University, St. Cloud State University, University of Minnesota-Twin Cities, University of Minnesota-Rochester Center, College of St. Thomas, Moorhead State University, St. Olaf College, Northland Community College, Concordia College-Moorhead, Augsburg College, and University of Minnesota-Morris. Also selected were the Science Museum of Minnesota and the Minnesota Council of Teachers of Math.

St. Cloud State was awarded three grants totaling $87,000, and the University of Minnesota-Twin Cities three totaling $52,000.

1988 Program: Minnesota was to receive $1,804,109 for 1988-89. In August 1988 the Coordinating Board approved the awarding of 22 grants totaling $514,171 to 14 higher education institutions and 2 museums.

The 14 post-secondary institutions are: University of Minnesota-Twin Cities, University of Minnesota-Duluth, University of Minnesota-Morris, Augsburg College, College of St. Catherine, College of St. Thomas, St. Olaf College, Bethel College, College of St. Scholastica, Inver Hills Community College, Mankato State University, Winona State University, Moorhead State University, and St. Cloud State University. Also selected were the Science Museum of Minnesota (St. Paul) and the Children's Museum (St. Paul).

The University of Minnesota was awarded three grants totaling $63,328; a fourth grant to the University will be implemented cooperatively by the Bell Museum of the University and the Minnesota Environmental Science Foundation, Inc.

Prior to 1988-89, under the first three years of the program, the Board approved 39 projects in mathematics and science education using $988,429 of Title II funds. Approximately 3,500 teachers and 350 students have been served by these projects.

Appendix

The appendix contains summaries of the annual meetings of governing boards and symposia sponsored by the Coordinating Board. It also includes the Board's comments on annual reports of the Higher Education Facilities Authority and contains a listing of Board advisory committees during the biennium. Last is a list of Coordinating Board reports and publications completed during the past two years.

Summary of Meetings With Governing Boards

Governing board meetings were held December 10, 1986 and February 17, 1988. They are summarized below.

Quality Assessment

The opportunity to put assessment programs in place at the institutional level is not likely to last more than two or three years, and the opportunity may disappear without a response by institutions and might be replaced with centralized planning efforts.

That was the view of Patrick M. Callan, vice president of the Education Commission of the States, who was keynote speaker at the Annual Meeting of Minnesota Education Governing Boards February 17 in St. Paul.[1]

States should see that the issue of assessment is confronted but not dictate how to do it, Callan said. He emphasized the importance of viewing assessment as part of a larger vision; assessment will work only in the context of the larger educational vision and with a disciplined determination about quality.

The assessment movement must be assessed, Callan said. Will it touch the lives of students and faculty in a constructive way? Will it signify a qualitative improvement? At worst, it will be merely a conversation among bureaucrats, and a great deal of energy will be expended without making a difference, Callan said. The ultimate criterion of success for the movement will be: "Did we improve education?"

William T. Coulter, chancellor of the Ohio Board of Regents, urged state boards to be visionary, to assess education against our visions of what it should be, and not against hurried prejudgments of where weaknesses may lie. He described the Ohio regents "selective excellence" program which in four years has channeled $134 million to institutions through a variety of challenge grants. The program challenges institutional leaders to make strategic choices about mission priorities and to match their institutions' strengths with the broader needs of society. It encourages faculty, and administrators to set learning objectives, measure their results, and report them, he said.

Michael Nettles, senior research scientist, Educational Test. Service, described the Tennessee approach in which allocations are increased to institutions that demonstrate excellence through outcomes assessment. Currently, Tennessee is looking for the instruments that will help the state develop different forms of teaching to complement different styles of learning.

Governor Rudy Perpich stressed the importance of assessing and assuring quality in education. He issued challenges for improvement in education to the state's business leaders and to trustees and administrators of post-secondary education institutions. Perpich said that assessment begins with self assessment. A state's economic success is related to its support for education, he said.

The *Preliminary Report of the Task Force on Post-Secondary Quality Assessment* was summarized during separate panels for two and four-year institutions. The program also included a series of discussion groups for participants.

Mission Revisited

"Mission Revisited" was the theme of the annual meeting December 10, 1986 in Minneapolis. The meeting was planned as a further step in the "dialogue on mission" that the Board initiated in spring 1984.

The meeting focused on the progress report on mission differentiation issued by the Higher Education Advisory Council in October 1986. The meeting provided an opportunity to revisit and review the mission issue, to assess progress, to see what remains to be done.[2]

The keynote speaker was Frank Newman, president of the Education Commission of the States. He commented on "political intrusion in higher education," highlighting material from his study of relationships between states and their universities. He said he found two important elements about mission. First, it is the single largest cause of friction between states and their universities. Second, states must create multiple pyramids of prestige corresponding to appropriate missions. If only the research university can be seen

[1] Minnesota Higher Education Coordinating Board, *Quality Assessment, Proceedings, Annual Meeting of Education Governing Boards* (February 17, 1988).

[2] Minnesota Higher Education Coordinating Board, *Mission Revisited, Proceedings, Annual Meeting of Education Governing Boards* (December 10, 1986).

as prestigious, every institution will want to be a research university.

Members of the Higher Education Advisory Council participated in a panel to discuss their report on mission differentiation. Members of a panel responding to the Advisory Council's report were David Longanecker, executive director, Higher Education Coordinating Board; David Graven, the Citizens League of the Twin Cities; State Senator Eugene Waldorf; and State Representative Ben Boo.

Observations on the issue were made by a panel of representatives from each of Minnesota's post-secondary systems. Panelists were Duane C. Scribner, president, Higher Education Coordinating Board; Charles McGuiggan, president, University of Minnesota Board of Regents; Clarence Harris, president, State Board for Community Colleges; Rod Searle, president, State University Board; Douglas Knowlton, president, Board of Vocational Technical Education, and W.C. Nemitz, president, Minnesota Association of Private Postsecondary Schools.

Symposia

Financing One's Post-Secondary Education: Perceptions and Realities

The financial need analysis must stop looking at a snapshot of family liquidity when the family applies for financial aid, and instead look at the family's finances in the decades before application, according to Haskell Rhett, vice president for Student Assistance Services at the College Board.

The need analysis process should provide incentives for families to save and prepare for the cost of post-secondary education, said Rhett who was keynote speaker at a January 21, 1988 symposium in St. Paul on "Financing One's Post-Secondary Education: Perceptions and Realities."[3]

The symposium, held at the Brady Education Center, College of St. Thomas, was presented to by the Coordinating Board and co-sponsored by the HEAF and HEMAR groups. Approximately 90 people attended, including members of the Coordinating Board and staff, students, representatives of Minnesota post-secondary institutions, legislators and their staff, the news media, representatives of private financial organizations and foundations, and officials from out of state.

Rhett said that people still believe in post-secondary education and in working hard for it, but rising costs will change how they go about it. The College Board is worried about these shifts in behavior, which are not well documented, he said.

Coordinating Board Executive Director David A. Longanecker said that college costs are not out of control nor are they likely to be beyond the reach of middle-class families in the future. Minnesota's well established public policy assures that college will remain affordable, with responsibility for paying the costs shared reasonably by students, their families, and government.

"People need to know that recent trends suggest a need for concern but not panic," he said. "And they need to know that the facts simply don't support some of the common perceptions about student debt and financial aid funding."

David J. Berg, assistant to the president of the University of Minnesota, said that while there are problems in financing a post-secondary education, the dimensions of those problems have been exaggerated. Costs have gone up mostly due to state policy requiring more of users. It is a situation worth studying, but it is not a crisis, he said.

Berg said that the University of Minnesota is concerned that many students attend part time and take more than four years to graduate. The University doesn't completely understand this, but students overwhelmingly cite economic factors for their decisions, he said. Recent evidence suggests that fear of debt causes students to extend or discontinue their studies, he said.

Prepaid tuition and saving incentive plans were discussed. Mitchell Rubinstein, senior research associate for the Coordinating Board, summarized findings of the staff study on the issue; he was the principal staff analyst. Longanecker presented the staff recommendations.

[3]Minnesota Higher Education Coordinating Board, *Financing One's Post-Secondary Education. Perceptions and Realities, Symposium Proceedings* (January 21, 1988)

Also commenting were Rick Smith, vice president of the Minnesota Private College Council, whose task force studied prepaid tuition plans; Ross Levin, president of the Twin Cities Association for Financial Planners and member of the advisory group for the HECB study, and Susan Eyestone, legislative chairperson for the PTA-PTSA.

Smith said that recommendations in the Council report and HECB staff study are generally similar, with an emphasis on savings over prepayment plans.

Levin said that he thinks there is a "tremendous crisis in education financing" and that options are increasingly restricted. While considering risks involved in various tuition financing plans, we also should consider the risks involved in not implementing some plan, he said. The primary risk is that people will make poor investment decisions. Many tax-motivated people are using their home equity to finance college educations because it is tax deductible and are risking their greatest asset, Levin said.

Eyestone said that it often is overlooked that grandparents pay for children's education, and there should be more tax incentives and other programs targeted to grandparents.

Underrepresentation of Women and Minorities in Mathematics and Science

Exploring ways to increase the enrollment of females and minorities in mathematics and science and to correct discrepancies in enrollment and achievement by these students in college preparatory classes was the subject of a conference September 23, 1988 in Bloomington. More than 300 people attended the conference sponsored by the Coordinating Board, the Minnesota Department of Education, and the American Association for the Advancement of Science. Financial support was provided by the Bush Foundation of St. Paul and the Carnegie Corporation of New York.

Attending from Minnesota were representatives of state agencies, post-secondary education system officials, elementary and secondary and post-secondary system science and math educators, business, industry, and foundations. Also attending were several people from out-of-state agencies and institutions.

The conference began with a breakfast briefing for Minnesota legislators. The morning session focused on awareness of the issues. Speakers included Beryl Dorsett, assistant secretary of elementary/secondary education from the U.S. Department of Education; Betty Vetter, executive director of the Commission on Professionals in Science and Technology, Washington D.C.; Jacquelynne Eccles, professor in the Department of Psychology at the University of Colorado, Boulder; Shirley M. Malcom, Office of Opportunities in Science, American Association for the Advancement of Science, Washington D.C.; and Robert C. Johnson, director of the Minority Studies Program at St. Cloud State University.

The afternoon sessions were devoted to programs that work with speakers emphasizing how to start effective programs for women and minority students. Speakers included representatives of the National Urban Coalition, Southern Coalition for Educational Equity, Girls Club of America, Ohio Center for Science and Industry, Lawrence Hall of Science at the University of California-Berkeley, Carnegie Corporation of New York, American Indian Science and Engineering Society of Boulder, Colorado, and equity programs in Minnesota. As a result of the conference, several follow-up activities were being planning in Minnesota and other states.

Review and Comment on Higher Education Facilities Authority Annual Report

The Higher Education Coordinating Board is required to review and comment upon the annual report of the Minnesota Higher Education Facilities Authority and to make recommendations that it deems necessary to the governor and legislature.[4]

In April 1987 the Board approved for transmittal to the governor and legislature a paper commenting on the Fiscal Year 1986 Annual Report of the Higher Education Facilities Authority.[5] In April 1988 the Board approved a paper commenting on the Fiscal Year 1987 Annual Report of the Minnesota Higher Education Facilities Authority.[6] The

[4] *Minn. Stat.* 136A.42 (1988).

[5] Minnesota Higher Education Coordinating Board. *Review and Comment on Fiscal Year 1986 Annual Report of the Minnesota Higher Education Facilities Authority* (March 1987).

[6] Minnesota Higher Education Coordinating Board *Review and Comment on Fiscal Year 1987 Annual Report of the Minnesota Higher Education Facilities Authority* (March 1988)

Board's papers provide background on the Authority and review and comment on the Authority's reports and issues in the use of tax-exempt financing for educational facilities.

1986 Report: Four projects totaling $12,470,000 were financed in Fiscal Year 1986. The College of St. Scholastica received financing for the renovation and expansion of the college's library ($1,065, 000). The College of St. Thomas used proceeds from an issue to add to and furnish additional on-campus student residences, and to construct additional campus parking facilities ($5,500,000). Macalester College received financing to remodel the student union, renovate the gymnasium and construct and equip a natatorium ($5,075,000). And the Minneapolis College of Art and Design used proceeds from an issue to acquire, construct, and furnish a bookstore, student gallery, and artist work space. The project also included remodeling the main college building and purchasing equipment for the computer lab ($830,000).

An analysis of the Authority's financial report shows that it is fiscally sound. The accumulated unrestricted funds in the General Operating Fund increased to $614,220 at the end of Fiscal Year 1986, an increase of 23 percent. This balance now equals approximately 400 percent of the annual operating expenses of the Authority. As a result of a study in 1984 which analyzed the administrative fiscal requirements, the Authority changed its method of charging fees. It also established a formula which will rebate a pro-rata share of the excess funds that it has accumulated in the General Operating Fund to all colleges with outstanding bond issues of the Authority.

The Authority also appears to have responded appropriately to the default by Golden Valley Lutheran College. The Authority is working with the Bond Trustee and Lutheran Bible Institute on a speedy resolution to this situation. Currently, interest and principal payments on the outstanding bond issue ($1,525,000) are being made from the General Bond Reserve. Because of the asset value of the Golden Valley Lutheran campus, the Authority believes that no losses will occur because of the default, and that the General Bond Reserve will be reimbursed in full when the campus is sold. The 1986 federal Tax Reform Act contained provisions that allow the Authority to continue to issue tax-exempt financing. This eliminated the uncertainty that prevailed last year.

1987 Report: As of June 30, 1987, the Authority had financed 53 projects with 44 bond issues totaling $142,960,000, of which $101,360,000 was outstanding as of June 30, 1987. The funds received from 37 of the 44 issues were used for construction projects, funds from three issues were used to refinance prior debt for facilities, funds from one issue were used partially for construction and partially for refinancing prior debt, funds from two issues were used to refinance earlier Authority projects, and the final issue was a pool project in which 10 institutions funded projects included in one bond issue.

During 1987, the Authority financed $2.5 million for a variety of projects at St. Mary's College in Winona, reviewed and approved the final application of Gustavus Adolphus College for $2.5 million, and worked on a project to finance the construction of a residence hall at Vermilion Community College in Ely — the first issue ever for a public institution under the program.

An analysis of the financial report shows that the Authority is fiscally sound. The accumulated unrestricted funds in the General Operating Fund increased to $711,118 at the end of Fiscal Year 1987, an increase of 16 percent. This balance now equals approximately 425 percent of the annual operating expenses of the Authority. As a result of the study in 1984 which analyzed the administrative fiscal requirements, the Authority changed its method of charging fees. It also established a formula that will rebate a pro-rata share of any excess funds that it has accumulated in the General Operating Fund to all colleges with outstanding bond issues of the Authority. Based on the established formula, no rebate of the $711,118 balance will occur for Fiscal Year 1987.

With regard to the Golden Valley Lutheran default, interest and principal payments on the outstanding bond issue ($1,435,000) are being made from the General Bond Reserve. Because of the asset value of the Golden Valley Lutheran College campus, the Authority believes that no losses will occur because of the default, and that the General Bond Reserve will be reimbursed in full when the campus is sold.

Appendix

Advisory Committees

Advisory committees are an important source of information and advice on issues considered by the Coordinating Board. Under a policy adopted in January 1979 and amended in September 1987, the Board uses the following kinds of advisory committees:

1. Standing Committees — They advise the Board and its staff on matters that relate to their areas of special competence and concern on an ongoing basis.

2. Special Advisory Committees or task forces. They are established from time to time as required to advise the Board and its staff on matters of special but temporary concern. Such special advisory committees or task forces shall have specific charges and scheduled dates for completing their work. They are disbanded at the scheduled completion of requested work or by a specified date, whichever occurs first, within the provisions of current law governing advisory task forces.

Each year the Board receives a staff report on advisory committees.[7] It includes a review of the policy governing advisory committees, a list of the Board's committees, statements of their purpose, membership, and membership expiration dates.[8]

Standing Committees

1. Financial Aid Advisory Committee
2. MINITEX Advisory Committee
3. Program Advisory Committee
4. Minnesota Post-High School Planning Program Advisory Committee
5. Higher Education Advisory Council
6. Intersystem Planning Group
7. Student Advisory Council
8. Summer Scholarship for Academic Enrichment Program Advisory Committee

Special Advisory Committees

1. Design for Shared Responsibility Advisory Committee
2. Credit Transfer Advisory Committee

Task Forces

1. Average Cost Funding Task Force
2. Instructional Technology Task Force
3. Quality Assessment Task Force

Advisory Committees That Have Completed Their Work

The following committees have completed their work in the past two years and have been disbanded:

1. Task Force on Teacher Education for Minnesota's Future
2. Advisory Committee for the Graduate Education Study
3. Financial Aid Research Advisory Committee
4. Task Force on Professional Judgment
5. Guaranteed Student Loan Advisory Task Force
6. Common Course Numbering System Task Force
7. Engineering Program Review Task Force
8. Savings Incentive/Prepaid Tuition Study Advisory Committee
9. Discussion Group on State-Level Comparative Data

Higher Education Coordinating Board Reports and Publications

Publications

Report to the Governor and 1987 Legislature (January 1987).

Focus on Financial Aid (1987 and 1988), annual tabloid on financial aid programs.

Mheb report, agency newsletter.

Minnesota Post-Secondary Education Directory, (1987 and 1988).

Minnesota Higher Education Coordinating Board, brochure describing agency (June 1987).

Future Choices (1987 and 1988), booklet for 8th grade students. (Also in Spanish and Hmong.)

Student Guide to Your Future Education (1987).

Get Smart, Summer Scholarship for Academic Enrichment Program, brochure and poster (1987 and 1988).

Post High School Planning Program brochure and poster (1987 and 1988).

Minnesota Post-Secondary Education Profile (1988).

Guide to Minnesota Post-Secondary Education Admissions Criteria (October 1987).

Student Educational Loan Fund brochure (1988).

The CASE for Supporting the HECB (1987).

Transfer (1987).

Your SELF Loan (1987).

[7] Minnesota Higher Education Coordinating Board. *Advisory Groups, Status Report* (September 1987).

[8] Minnesota Higher Education Coordinating Board. *Advisory Groups, Status Report* (September 1988).

Ayuda Económica para estudiantes en Minnesota (1987).

Policy Papers

State Saving Incentive and Prepaid Tuition Plans with Coordinating Board Recommendations (March 1988).

Information Technology in Instruction in Minnesota Post-Secondary Education Institutions with Coordinating Board Recommendations (November 1986).

Minnesota's Vision for Teacher Education: Stronger Standards, New Partnerships, Task Force on Teacher Education for Minnesota's Future (October 1986).

Analysis of Guaranteed Student Loan Program Borrowers, Consultants' Report and Coordinating Board Recommendations (May 1988).

Expansion of the Graduated Repayment Income Protection Program to Cover Academic Programs, Including Optometry and Osteopathy, with Coordinating Board Recommendations (December 1987).

Analysis of the Implications of the Status of the Graduated Repayment Income Protection Program (October 1988).

The Financing of Graduate and Professional Education in Minnesota, Technical Report (January 1987).

The Financing of Graduate and Professional Education with Coordinating Board Recommendations (February 1987).

Financing Policies for High Cost University of Minnesota Health Professions Programs with Coordinating Board Recommendations (March 1988).

Technical Papers and Data Reports

Headcount Enrollment by Racial/Ethnic Group, Fall 1986 (September 1987).

Headcount Enrollment by Racial/Ethnic Group, Fall 1987 (September 1988).

Enrollment Analysis and Projections 1988-89 — 2000-07 (March 1988).

Basic Data Series Report Number 16, Fall 1987 post-secondary education enrollment survey (June 1988).

Basic Data Series Report Number 15, Fall 1986 post-secondary education enrollment survey (June 1987).

Summary of Responses to the Plans and Background Survey and Aptitude Test Score Trends for Minnesota High School Juniors, 1978-87 (September 1987).

Summary of Responses to the Plans and Background Survey and Aptitude Test Score Trends for Minnesota High School Juniors, 1979-1988 (September 1988).

Preliminary Fall 1987 Headcount Enrollment Report (November 1987).

Preliminary Fall 1988 Headcount Enrollment Report (November 1988).

Report of A Project to Publish Annual Data on the Characteristics of Students Admitted to and Graduating From Teacher Education Programs in Minnesota (December 1986).

Other Reports

HECB Advisory Groups: Status Report 1988 (September 1988).

HECB Advisory Groups: Status Report 1987 (September 1987).

Financing One's Post-Secondary Education: Perceptions and Realities, Symposium Proceedings (January 21, 1988).

Management Plan 1989-91 (September 1988).

Management Plan 1987-90 (September 1987).

MINITEX Status Report (March 1988).

MINITEX Status Report (March 1987).

Teacher Education Conferences for Minnesota's Future Phase I and Phase II Proceedings (April 8-9, 1987, June 2-5, 1987).

Evaluation Report, Enterprise Development Centers with Coordinating Board Recommendations (January 1987).

Report on Adults and Out-of-School Youth Considering Post-Secondary Studies by the Advisory Task Force of the Post-High School Planning Program (November 1987).

Review and Comment on Proposed Expansion of Post-Secondary Education Services for Rochester Area

with Coordinating Board Recommendations (February 1988).

Review and Comment on the Minnesota State University System's Report "Initiatives for Minnesota's Future in the State University System" (February 1988).

Quality Assessment, Proceedings, Annual Meeting of Education Governing Boards (February 1988).

Engineering Programs in Minnesota: A Status Report, by Engineering Task Force of the Higher Education Coordinating Board (September 1988).

Report of the Task Force on Common Course Numbering (December 1987).

Report of the Task Force to Identify Criteria for the Review of Engineering Programs (January 1988).

Report on Survey of Parents of Eighth Graders (August 1988).

Status Report of the Average Cost Funding Task Force (December 1986).

A Review of Trends in the Number of Graduates from Existing Post-Secondary Education Instructional Programs, 1979-84 (May 1987).

A Review and Comment on Credit Transfer Activity by Minnesota Post-Secondary Education Institutions (February 1987).

Mission Revisited, Proceedings, Annual Meeting of Education Governing Boards (December 10, 1986).

Quality Assessment, Legislative Hearing and Seminar, Proceedings (March 4, 1987).

Review and Comment on System Plans for 1986 (December 1986).

New Roles for Teachers: Can They Improve Retention in the Teaching Profession? (January 1987).

Meeting the Educational Needs of the Duluth-Superior Area (April 1987).

Information Initiative, Status Report (January 1987).

Review and Comment on Advanced Placement Policies (January 1987).

Preliminary Report of the Task Force on Quality Assessment (January 1988).

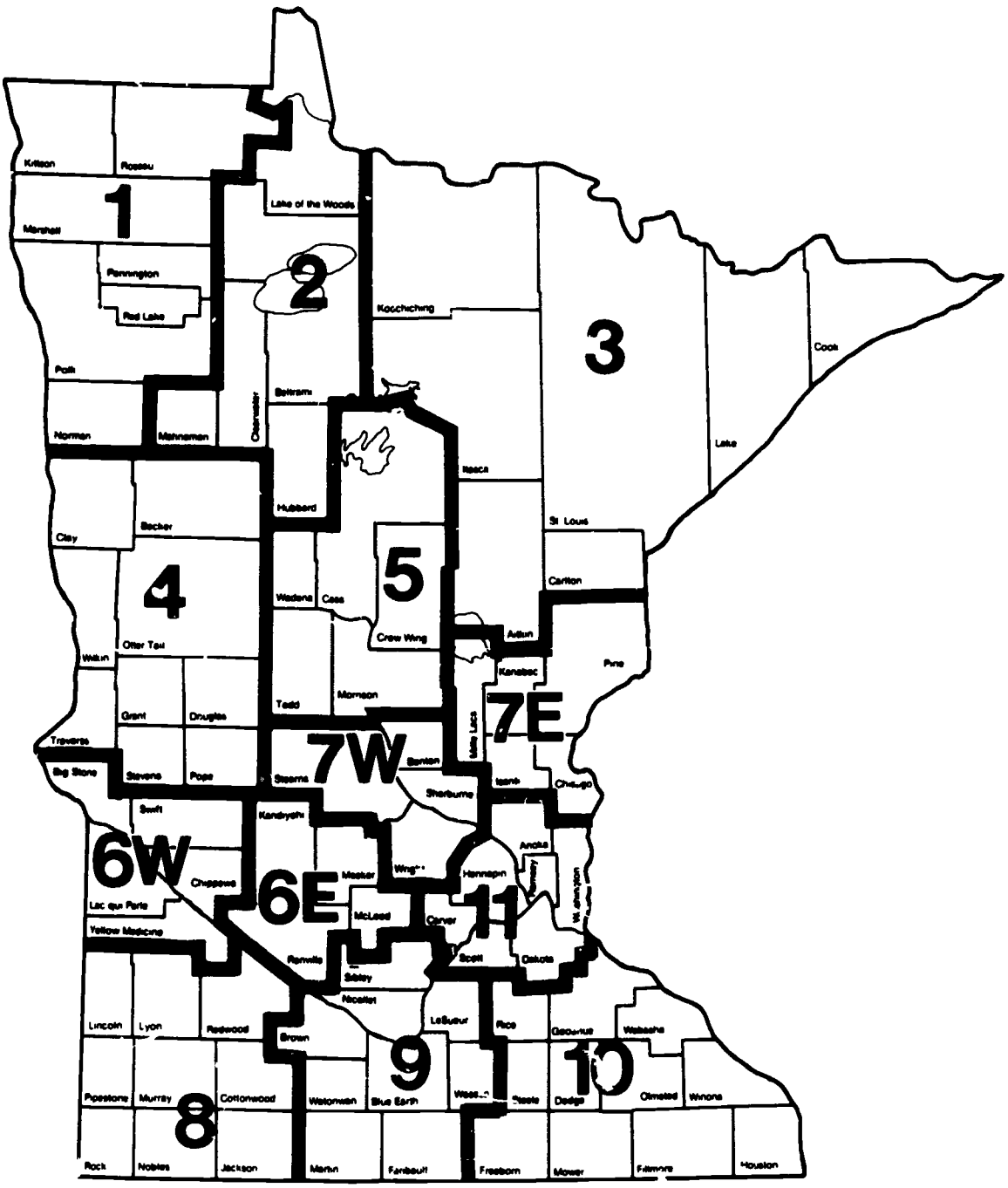
Review and Comment on 1986 Annual Report of the Minnesota Higher Education Facilities Authority (March 5, 1987).

Review and Comment on Fiscal Year 1987 Annual Report of the Minnesota Higher Education Facilities Authority (March 1988).

Commitment to Focus: Its Impact on Students, Prospective Students, and Other Educational Systems in Minnesota (May 1987).

Tuition Reciprocity Agreement Between Minnesota and Contingent States (June 1988).

Minnesota Planning Regions



The Design for Shared Responsibility