THE UNIVERSITY OF KANSAS Institute for Public Policy and Business Research School of Business Department of Economics

RESEARCH PAPERS

Fifth Assessment of the Science, Engineering, and Math Infrastructure at Three Universities in Kansas

prepared for

K*STAR

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EXECUTIVE SUMMARY

Kansas received its first NSF EPSCoR grant in 1992. The second NSF EPSCoR grant, received in 1995, is a cooperative agreement, negotiated on a yearly renewal basis. Assessment of the status of science, engineering, and math (SEM) research and infrastructure at the state's three Ph.D. granting institutions (Kansas State University, University of Kansas - Lawrence, and Wichita State University) has occurred annually. Assessment revealed that, at the end of the first three years of NSF EPSCoR funding, the state's competitive position was improving, especially for faculty who received EPSCoR funds.

Phase II of the NSF EPSCoR funding has begun, and the state has renewed its efforts to improve its competitive position. However, maintaining past gains has proven to be a challenge. Current assessment revealed several important findings.

- The number of SEM faculty fell slightly in academic year 1995 compared to 1994. The largest decreases were seen at KU, which had a hiring freeze in place to help solve budgetary problems. Unfilled faculty positions may increase teaching loads, decrease the number of graduate students that can be accepted into programs, and decrease the number of grants submitted.
- The number of women and minority SEM faculty continued to be above 1991 levels, but showed little change over 1994 levels.
- The number of assistant professors was lower in 1995 than in 1994 at all three institutions, as was the number of student research assistants. This may have a negative impact upon research and grant productivity.
- Faculty salaries continue to be lower than those paid at peer institutions.
- SEM graduate enrollment was five percent lower than 1994 levels but six percent above 1991 levels. The number of science graduate students fell nine percent below 1994 levels and three percent below 1991 levels.
- Number of women and minorities enrolled in SEM graduate programs declined in 1995.
- Number of graduate students receiving financial support in the form of teaching assistantships or research assistantships was slightly lower than the previous year but, due to decreases in enrollment, the percentage receiving support increased slightly.
- NSF dollars (excluding NSF EPSCoR) awarded to the state continued to increase.

 The number and dollars awarded by all funding sources declined in FY 1995. FY 1995 data are incomplete since some grants were still pending at the time data were collected.

The 1995 data revealed declines in number of assistant professors, student research assistants, and graduate enrollment. While disturbing, these decreases must be put into context. With hiring freezes lifted, the number of faculty will increase and the number of students accepted into graduate programs should also increase. With more faculty hired, number of grants submitted and funded should improve which will also increase the number of student research assistants that can be supported. If the hiring freeze was responsible for the declines seen in the 1995 infrastructure, then past improvements in Kansas' competitive position may indeed be very fragile. The state must focus upon protecting gains made during the first three years of NSF EPSCoR and encouraging growth in key areas such as number of faculty, graduate enrollment, and graduate student support that will drive future growth

INTRODUCTION

In 1992, Kansas became an NSF EPSCoR state to improve its ability to compete for federal research and development (R&D) dollars. At that time, a plan was developed to assess progress in making Kansas more competitive for federal R&D dollars. Annual assessment of the status of science, engineering and math (SEM) research and infrastructure at the state's three Ph.D. granting institutions occurred. That assessment relied upon a database which described and monitored the SEM infrastructure (human resources, facilities) and grant activity. The database was created using data provided by Kansas State University (KSU), University of Kansas-Lawrence (KU) and Wichita State University (WSU). It contained information about personnel, graduate enrollment, degrees, facilities, and grant activity. Assessment of the impact of the first three years of NSF EPSCoR funding revealed that the state's competitive position was improving, especially for faculty who received EPSCoR funds.

In 1995, Kansas' NSF EPSCoR funding was negotiated for a Phase II, three year cooperative agreement. Annual assessment will continue to monitor growth in number of science, engineering, and math personnel, graduate students, degrees awarded, and grant activity. This report presents the fifth annual assessment of SEM research and infrastructure.

SCIENCE, ENGINEERING AND MATH INFRASTRUCTURE

Personnel

The total number of SEM faculty at KSU, KU-Lawrence¹ and WSU has not changed dramatically since 1991 (Figure 1). In 1991, the state had a total of 1,231 SEM faculty and had 1,245 in 1995, an increase of one percent (Table 1). Both KSU and WSU showed little change in number of faculty from 1994 to 1995.² KU showed a three percent decrease from 420 in 1994 to 406 in 1995. This decrease was due to a temporary hiring freeze imposed for budgetary purposes and this decrease brought the state total for 1995 to 1,245, a decrease of one percent over 1994 levels.

¹All data reported for the University of Kansas are for the Lawrence campus only. Medical Center data are not included.

²Appendix A lists all departments and academic units included in the database.

Figure 2 shows that the number of minority faculty members continued to grow while the number of women faculty held steady in 1995. Table 2 shows that each institution had very small changes from 1994 to 1995 in number of female faculty, and that women were 11 percent of the total SEM faculty at KSU, 17 percent at KU, and 24 percent at WSU. The 186 women SEM faculty comprised 15 percent of the state's SEM faculty. The number of women on the SEM faculty did not change dramatically from 1994 to 1995 (Table 2). The total of 186 decreased by 1 percent over 1994 levels. This slight decrease interrupted the slow but steady increase that had occurred since 1991, but the 1995 total did show a 14 percent increase over 1991 levels.

Minority members of the SEM faculty made up 13 percent of the total SEM faculty in 1995 (Table 3). The total number of minorities increased by three percent from 157 in 1994 to 162 in 1995. The total number of minority SEM faculty was 26 percent greater in 1995 than in 1991. From 1994 to 1995 at KSU, the number of minority faculty increased nine percent, decreased eight percent at KU, and increased eight percent at WSU.

The total percentage of women and minority SEM faculty in the state remained low, but the slow, steady increase in number of minority faculty was encouraging. Hopefully, the 1995 decrease in number of female faculty and the slight decrease in total SEM faculty will be reversed in the future.

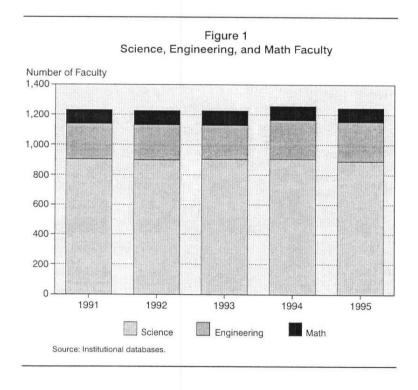


Table 1 NUMBER OF SCIENCE, ENGINEERING AND MATH FACULTY: KSU, KU AND WSU

	1991	1992	1993	1994	1995	Percent 1994-1995	Change: 1991-1995
KSU		,				1774-1775	1771-1775
Science	479	471	472	482	479	-1%	0%
Engineering	115	111	106	128	130	2%	13%
Math	29	31	33	32	32	0%	10%
Subtotal	623	613	611	642	641	0%	3%
KU-Lawrence							
Science	286	295	300	296	283	-4%	-1%
Engineering	76	76	75	86	87	1%	14%
Math	37	38	40	38	36	-5%	-3%
Subtotal	399	409	415	420	406	-3%	2%
WSU							
Science	138	132	130	126	127	1%	-8%
Engineering	44	46	45	45	46	2%	5%
Math	27	26	25	25	25	0%	-7%
Subtotal	209	204	200	196	198	1%	-5%
STATE							
Science	903	898	902	904	889	-2%	-2%
Engineering	235	233	226	259	263	2%	12%
Math	93	95	98	95	93	-2%	0%
TOTAL	1,231	1,226	1,226	1,258	1,245	-1%	1%

Figure 2 Science, Engineering, and Math Female and Minority Faculty

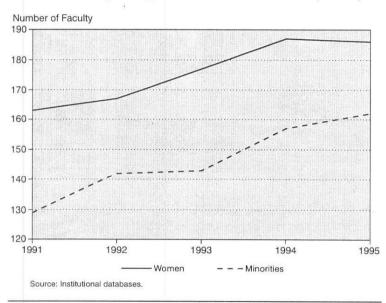


Table 2 NUMBER OF FEMALE FACULTY

	Percent Change						
	1991	1992	1993	1994	1995		1991-1995
KSU							
Science	54	54	60	64	64	0%	19%
Engineering	4	4	5	6	8	33%	100%
Math	0	0	0	0	0	0%	0%
Total Female	58	58	65	70	72	35%	24%
Total Faculty	623	613	611	642	641	0%	3%
% Female	9%	9%	11%	11%	11%		
KU-Lawrence							
Science	45	53	57	60	58	-3%	29%
Engineering	2	2	4	5	6	20%	200%
Math	3	3	3	3	3	0%	0%
Total Female	50	58	64	68	67	-1%	34%
Total Faculty	399	409	415	420	406	-3%	2%
% Female	13%	14%	15%	16%	17%	3 70	2 70
WSU							
Science	52	49	46	47	44	-6%	-15%
Engineering	2	2	2	2	3	50%	50%
Math	1	0	0	0	0	0%	100%
Total Female	55	51	48	49	47	-4%	-15%
Total Faculty	209	204	200	196	198	1%	-5%
% Female	26%	25%	24%	25%	24%		
STATE							
Science	151	156	163	171	166	-3%	10%
Engineering	8	8	11	13	17	31%	113%
Math	4	3	3	3	3	0%	-25%
Total Female	163	167	177	187	186	-1%	14%
Total Faculty	1,231	1,226	1,226	1,258	1,245	-1%	1%
% Female	15%	14%	14%	15%	15%		

Table 3
NUMBER OF MINORITY FACULTY

						Percent (Change:
	1991	1992	1993	1994	1995	1994 - 1995	1991-1995
KSU					70.0		
Science	36	40	40	39	42	8%	17%
Engineering	16	16	14	22	26	18%	63%
Math	6	8	9	9	8	-11%	33%
Total Minority	58	64	63	70	76	9%	31%
Total Faculty	623	613	611	642	641	0%	3%
% Minority	9%	10%	10%	11%	12%		
KU-Lawrence							
Science	24	25	24	27	24	-11%	0%
Engineering	10	12	12	14	13	-7%	20%
Math	5	6	9	9	9	0%	80%
Total Minority	39	43	45	50	46	-8%	18%
Total Faculty	399	409	415	420	406	-3%	2%
% Minority	10%	11%	11%	12%	11%		
WSU							
Science	15	16	17	15	16	7%	7%
Engineering	10	12	12	14	15	7%	50%
Math	7	7	6	8	9	13%	29%
Total Minority	32	35	35	37	40	8%	25%
Total Faculty	209	204	200	196	198	1%	-5%
% Minority	15%	17%	18%	19%	20%		
STATE							
Science	75	81	81	81	82	1%	9%
Engineering	36	40	38	50	54	8%	50%
Math	18	21	24	26	26	0%	44%
Total Minority	129	142	143	157	162	3%	26%
Total Faculty	1,231	1,226	1,226	1,258	1,245	-1%	1%
% Minority	10%	12%	12%	12%	13%		

A similar trend was seen in total number of SEM personnel. Figure 3 shows no large change in number of personnel from 1994 to 1995, but 1995 levels were 11 percent above 1991 levels (Table 4). While the total number of SEM personnel was lower in 1995 than in 1994, Table 4 shows increases in some areas: number of associate professors, number of post doctoral students, and number of graduate teaching assistants. The increase in number of associate professors is tempered by the decrease in number of assistant professors. Those promoted to the associate level were not replaced by new hires at the assistant level. The number of assistant professors fell below 1991 levels for the first time since data collection began.

A similar drop occurred for the first time in the number of research associates and assistants and student research assistants. The number of post doctoral students and graduate teaching assistants continued to rise. The decrease to below 1993 levels in number of student research assistants is of special concern since these positions reflect the number of graduate students supported in research positions. The 1995 decrease was nine percent below 1994 levels.

Appendix B contains detailed information on the number of faculty and personnel by year and by institution.

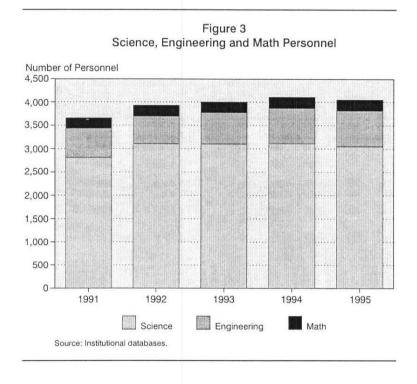


Table 4
NUMBER OF SEM PERSONNEL:
KSU, KU, AND WSU COMBINED

						Percen	t Change:
	1991	1992	1993	1994	1995	1994-1995	1991-1995
Professor	557	558	555	562	556	-1%	0%
Associate Professor	334	322	326	331	355	7%	6%
Assistant Professor	340	346	345	365	334	-8%	-2%
Acad. Staff, Director & Technical Staff	s 376	616	514	499	495	-1%	32%
Subtotal:	1,607	1,842	1,740	1,754	1,740	-1%	8%
Research Associates & Assistants	341	352	344	310	293	-5%	-14%
Post Doctoral	45	58	65	52	65	25%	44%
Graduate Teaching Assistants	846	789	868	924	982	6%	16%
Student Research Assistants	817	885	985	1,065	970	-9%	19%
Subtotal:	2,049	2,084	2,262	2,351	2,310	-2%	13%
TOTAL	3,656	3,926	4,002	4,108	4,050	-1%	11%

Faculty Salaries

Low salaries place Kansas' doctoral granting institutions in a less competitive position for attracting and retaining quality faculty. Faculty salaries in Kansas continued below the average salaries of faculty at peer institutions³ (Table 5). In comparison to last year's data, KU salaries remained at 89 percent of salaries at peer institutions while WSU salaries decreased to 88% in 1995. KSU faculty salaries, rose to 91.5 percent in FY 1995.

Table 5
COMPARISON OF PEER INSTITUTIONS' AVERAGE FACULTY SALARY: FY 1995

	KSU	KU	WSU
Weighted average *	\$45,969	\$51,210	\$45,140
Weighted average of peer institutions	\$50,243	\$57,498	\$51,229
Kansas institutions as % of peer institutions	91.5%	89%	88%

^{*}Includes instructors, assistant, associate, and full professors Source: Institutional databases.

Graduate Enrollment

Graduate enrollment in science, engineering and math decreased from 4,380 in 1994 to 4,140 in 1995 (Figure 4). Compared to 1991 (Table 6), enrollment in 1995 was down slightly in the sciences, up slightly in math, and showed an increase in engineering. The increase in engineering was due to an 11 percent increase at KSU, which offset slight enrollment decreases at KU and WSU (see Appendix C). Enrollment in 1995 showed a nine percent decrease over 1994

³KSU's peer institutions are Colorado State University, Iowa State University, North Carolina State University, Oklahoma State University and Oregon State University. KU's peer institutions are University of Colorado, University of Iowa, University of North Carolina, University of Oklahoma and the University of Oregon. WSU's peer institutions are University of Akron, Portland State University, Oakland University, Old Dominion University, and the University of Nevada/Las Vegas..

enrollment in the sciences, while enrollment in engineering and math held steady.

Figure 4 Science, Engineering, and Math Graduate Enrollment Number of Graduate Students 5,000 4,500 4,000 -3,500 -3,000 2,500 2,000 -1,500 1,000-500 0 1991 1992 1993 1994 1995 Science Engineering Math Source: Institutional databases.

Table 6
SEM GRADUATE ENROLLMENT

						% Cha	inge:
STATE:	1991	1992	1993	1994	1995	1994-1995	1991-1995
Science	2,683	2,732	2,779	2,862	2,603	-9%	-3%
Engineering	1,089	1,179	1,251	1,362	1,382	1%	27%
Math	146	158	165	156	155	-1%	6%
TOTAL	3,918	4,069	4,195	4,380	4,140	-5%	6%

Figure 5 shows no dramatic changes occurred in number of women and minority graduate students enrolled in 1995. Table 7 presents number of SEM women graduate students enrolled. In 1995, the number enrolled in the sciences decreased slightly over 1991 levels, while the number enrolled in engineering and math increased. The total number of women enrolled was slightly lower in 1995 than in 1994, with both math and science loosing ground. Women comprised 34 percent of the total SEM graduate enrollment. Total SEM graduate enrollment increased six percent from 1991 to 1995, while the number of women enrolled increased two percent.

Table 8 presents similar data for minority graduate enrollment. Number of minority graduate students enrolled in 1995 in the sciences decreased over 1992 levels, while the number enrolled in engineering increased substantially. In 1995, minorities comprised nine percent of the total SEM graduate enrollment. While total SEM graduate enrollment increased six percent from 1992 to 1995, minority enrollment increased by five percent. Compared to 1994, 1995 minority enrollment decreased in the sciences and math, while engineering posted a small gain for an overall decrease of five percent. Appendix C contains detailed information on the number of SEM graduate students enrolled by year and by institution.

Funding for graduate students rose slightly in 1995 (Table 9). Enrollment declined and the number supported decreased, but the number supported decreased less. This resulted in an overall increase in the percent of graduate students receiving financial support. KSU enrollment increased but number funded showed no change. KU's enrollment and number supported declined. WSU supported more students but enrollment declined.

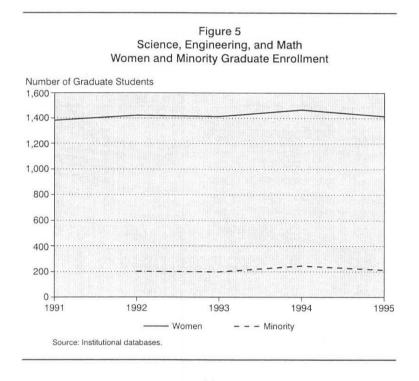


Table 7
SEM WOMEN GRADUATE ENROLLMENT

						% CI	hange:
STATE:	1991	1992	1993	1994	1995	1994-1995	1991-1995
Science	1,212	1,222	1,198	1,235	1,179	-5%	-3%
Engineering	126	145	161	179	190	6%	51%
Math	44	56	55	53	47	-11%	7%
Total Women	1,382	1,423	1,414	1,467	1,416	-3%	2%
Total Enroll.	3,918	4,069	4,195	4,380	4,140	-5%	6%
% Women	35%	35%	34%	33%	34%		

Table 8
SEM MINORITY GRADUATE ENROLLMENT

					% Change:		
STATE	1992	1993	1994	1995	1994-1995	1992-1995	
Science	145	132	160	127	-21%	-12%	
Engineering	50	59	76	79	4%	58%	
Math	7	8	10	7	-30%	0%	
Total Minority	202	199	246	213	-13%	5%	
Total Enroll.	4,069	4,195	4,380	4,140	-5%	6%	
% Minority	5%	5%	6%	9%			

Table 9
POSTGRADUATES* RECEIVING FINANCIAL SUPPORT COMPARED
TO GRADUATE ENROLLMENT

	1991	1992	1993	1994	1995
KSU					
Supported	841	809	961	1,057	1,057
Enrolled	1,216	1,282	1,361	1,442	1,474
% Supported	69%	63%	71%	73%	72%
KU					
Supported	1,003	1,103	1,090	1,039	978
Enrolled	1,702	1,819	1,817	1,880	1,701
% Supported	59%	61%	60%	55%	57%
WSU					
Supported	205	172	211	255	275
Enrolled	1,000	968	1,017	1,058	965
% Supported	21%	18%	21%	24%	28%
State					
Supported	2,049	2,084	2,262	2,351	2,310
Enrolled	3,918	4,069	4,195	4,380	4,140
% Supported	52%	51%	54%	54%	56%

^{*} Includes research associates/assistants, post docs, graduate teaching assistants, student research assistants. Student hourly positions are not included in the count of graduate students receiving support. Also, graduate students must be enrolled full-time to receive teaching or research assistantships. For example, 38 percent were part-time enrollment at KSU 1994 and were not eligible for assistantships.

Degrees Awarded

Figure 6 presents the number of science, engineering and math degrees awarded from 1991 to 1995. The total number of degrees awarded showed no change over 1994 levels. From 1991 to 1995, the number of Ph.Ds awarded increased 31 percent, the number of masters' degrees increased 48 percent, and the number of bachelor degrees increased 15 percent (Table 10). The number of Ph.D. and Master degrees awarded in 1995 increased over 1994 levels while number of Bachelor degrees awarded decreased slightly. Table 11 shows that, while WSU increased the number of Ph.D. degrees awarded dramatically since 1991, KSU and KU awarded the majority of Ph.D. degrees in the state.

Figure 6
Science, Engineering, and Math Degrees Awarded

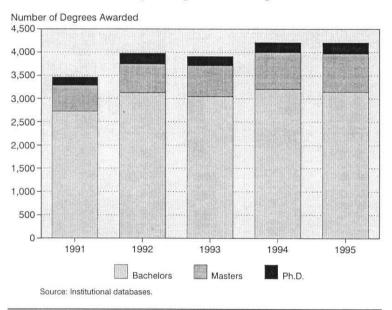


Figure 7 shows the slow but steady increase in number of degrees awarded to women and minorities from 1991 to 1995. While the number of Ph.D. degrees awarded remained small and showed no change from 1994 to 1995, the number of women who earned Ph.D. degrees in 1995 increased 43 percent over 1991 levels (Table 10). The number of minorities earning Ph.D. degrees continued to increase. Appendix D contains detailed information regarding degrees awarded at the three universities.

Figure 7 Degrees Awarded to Women and Minorities

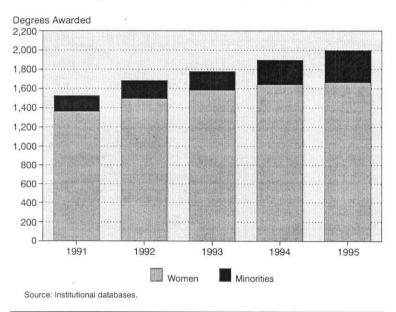


Table 10 SEM Degrees Awarded: KSU, KU, and WSU

						% Ch	ange:
	1991	1992	1993	1994	1995	1994-1995	1991-1995
Total Population							
Ph.D.	182	236	197	218	238	9%	31%
Master	559	621	675	787	828	5%	48%
Bachelor	2,723	3,123	3,039	3,205	3,140	-2%	15%
Subtotal	3,464	3,980	3,911	4,210	4,206	0%	21%
Women Only							
Ph.D.	40	60	61	57	56	-2%	40%
Master	210	202	285	327	348	6%	66%
Bachelor	1,111	1,233	1,235	1,257	1,260	0%	13%
Subtotal	1,361	1,495	1,581	1,641	1,664	1%	22%
% Women	39%	38%	40%	39%	40%		
Minorities Only*							
Ph.D.	1	2	11	9	26	*	
Master	16	15	34	29	37		
Bachelor	147	172	154	218	269		
Subtotal	164	189	199	256	332		
% Minorities	5%	5%	5%	6%	8%		

^{*} KSU ethnic data for science and math were not available from the institution's database until 1995. Source: Institutional databases.

Table 11 SEM Ph.D. Degrees Awarded by Institution

						% Change	e:
	1991	1992	1993	1994	1995	1994-1995	1991-1995
Total Population							
KSU	80	111	87	97	105	8%	13%
KU	93	112	91	97	113	16%	22%
WSU	9	13	19	24	20	-17%	122%
Subtotal	182	236	197	218	238	9%	31%
Women Only							
KSU	15	23	25	14	25	79%	67%
KU	23	33	32	37	26	-30%	13%
WSU	2	4	4	6	5	-17%	150%
Subtotal	40	60	61	57	56	-2%	40%
% Women	22%	25%	31%	26%	24%		
Minorities Only*							
KSU	*	*	*	*	12		
KU	1	2	7	3	9		
WSU	0	0	4	6	5		
Subtotal	1	2	11	9	26		
% Minorities	1%	1%	6%	4%	11%		

^{*} KSU ethnic data for science and math were not available from the institution's database until 1995. Source: Institutional databases.

SCIENCE, ENGINEERING, AND MATH GRANT ACTIVITY

Grant Database

The guidelines used to compile the grant database were as follows:

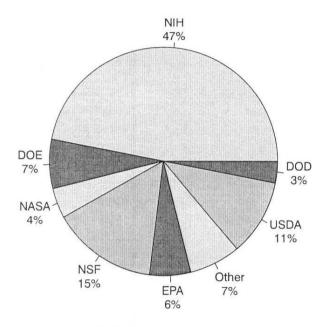
- 1. Multi-year awards were counted once in the year awarded (e.g., a three-year \$300,000 grant awarded was counted as one \$300,000 grant, not as three \$100,000 grants).
- 2. Grants with more than one investigator were counted once as the "lead" PI's grant.
- 3. Grants submitted in one fiscal year but awarded in the next fiscal year were counted in the year submitted.
- 4. Grants submitted in one fiscal year, not funded, then resubmitted in another fiscal year were counted as a new submission.
- 5. Competitive renewals or continuations were counted as new grant submissions.
- 6. Grants pending after two years were considered "rejected" or not funded.

NSF Submissions and Awards

Kansas. In FY 1994, 15 percent of all federal R&D academic obligations in Kansas came from NSF (Figure 8). Figure 9 shows that the number of grants submitted to NSF by SEM faculty continued to rise in FY 1995, but the number awarded plateaued. However, the number awarded could increase further because some grants were still pending when data were collected. The number awarded in FY 1994 was 113 (Table 12), while the number awarded so far in FY 1995 was 112. Although FY 1995 NSF grant activity data were incomplete, the number awarded increased 56 percent over FY 1991 levels.

While the number awarded to date for FY 1995 was one percent below FY 1994 levels, Figure 10 shows that the total dollars requested increased to an all time high of \$71,469,949. Total dollars awarded decreased from \$11,289,373 in FY 1994 to \$8,939,447 in FY 1995 (Table 12). FY 1995 data are incomplete due to grants still pending, and the totals reported in Table 12 for FY 1995 do not include NSF EPSCoR funding. Dollars awarded in 1995 increased by 49 percent over FY 1991 levels. Dollars awarded in FY 1994 increased 88 percent over FY 1991 levels, or 73 percent when adjusted for inflation. See Appendix E for complete NSF grant data by year and by institution.

Figure 8
Federal R&D Academic Obligations in Kansas, by Agency
FY 1994 Total \$57,070,000



Source: Quantum Research Corporation.

Figure 9 Number of Science, Engineering, and Math NSF Grants

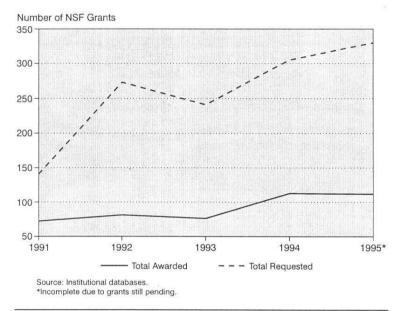


Figure 10 Science, Engineering, and Math NSF Grant Dollars

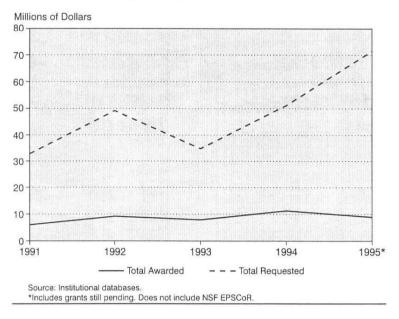


Table 12 NSF Grant Activity: FY 1991 - FY 1995

	Tota	al Awarded		Tota	l Requested
$\mathbf{F}\mathbf{Y}$	No.	Dollars	(Adjusted for Inflation)	No.	Dollars
1991	72	\$6,009,723	(\$4,411,136)	141	\$32,853,113
1992	81	\$9,179,127	(\$6,544,717)	273	\$49,144,694
1993	76	\$7,912,298	(\$5,475,310)	241	\$34,816,659
1994	113	\$11,289,373	(\$7,620,327)	305	\$51,153,897
1995*	112	\$8,939,447		330	\$71,469,949
% CHA	NGE:				
	Tota	l Awarded		Total R	equested
FY	No.	Dollars	(Adjusted for Inflation)	No.	Dollars
94-95*	-1%	-21%		8%	40%
91-94	57%	88%	(73%)	116%	56%
91-95*	56%	49%		134%	118%

^{*} Includes grants still pending. NSF EPSCoR funds are **not** included.

Nation. While these NSF funding trends are encouraging, Kansas still has not reached competitive levels. Figure 11 shows that the US average for NSF R&D academic obligations was \$32 million in FY 1994, while the level of NSF funding awarded to academic institutions in Kansas (including NSF EPSCoR awarded in 1992) peaked at arount \$10 million in 1992 and fell to around \$8.5 in 1994. Even when taking into account the smaller size of the state, Kansas has not competed successfully for its share of NSF R&D dollars. Figure 12 shows that Kansas was well below the U.S. average in dollars awarded per 1000 population.

Total Grants Submitted and Awarded

Kansas. The number of proposals submitted (total requested) by SEM faculty to all agencies and funding sources rose steadily from FY 1991 to FY 1994. In FY 1995, fewer grants were submitted (Figure 13). While some grants were still pending from FY 1995, the number awarded was below the previous year's level at the time data were collected. Not surprisingly, the total grant dollars requested and awarded also declined in FY 1995 (Figure 14).

Figure 11 NSF R&D Academic Obligations, FY 1980-FY 1994

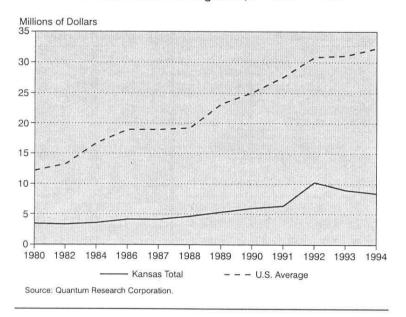


Figure 12 Total NSF R&D Academic Obligations Per 1000 Population, FY 1980-FY 1994

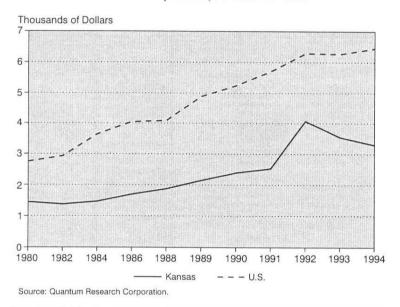


Figure 13 Number of Science, Engineering, and Math Grants: All Agencies

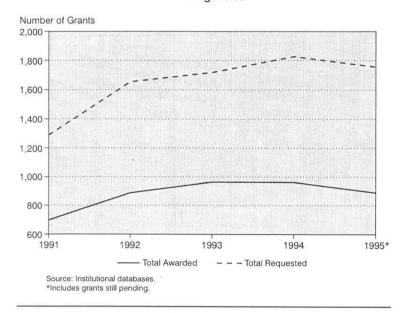


Figure 14
Science, Engineering, and Math Total Grant Dollars Awarded

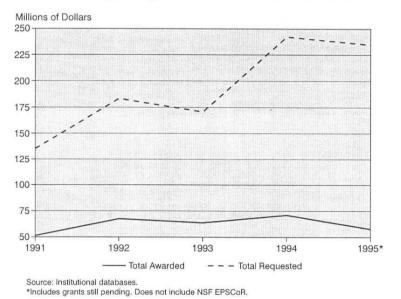


Table 13 presents the total number of grants awarded to Kansas SEM faculty. The total number of grants awarded decreased 8 percent from 962 in FY 1994 to 889 in FY 1995. Dollars awarded in FY 1995 decreased 19 percent or approximately \$13 million over FY 1994 levels, with some 1995 grants still pending. However, even with some grants still pending, the number of grants awarded in FY 1995 increased 37 percent over FY 1991 and dollars awarded increased 12 percent. Total dollars awarded increased 38 percent from FY 1991 to 1994, or 27 percent when adjusted for inflation. Appendix F presents detailed grant information by year and by institution.

Table 13 Total Grant Activity

	Tota	al Awarded		Total	Requested
$\mathbf{F}\mathbf{Y}$	No.	Dollars	(Adjusted for Inflation)	No.	Dollars
1991	697	\$51,385,542	(\$37,716,987)	1,289	\$135,262,380
1992	888	\$67,505,762	(\$48,131,608)	1,655	\$183,299,474
1993	964	\$63,797,151	(\$44,147,628)	1,718	\$170,734,664
1994	962	\$71,074,517	(\$47,975,298)	1,826	\$241,977,778
1995*	889	\$57,757,345		1,755	\$234,339,330
% CHA	NGE:				
	Tota	al Awarded		Total	Requested
$\mathbf{F}\mathbf{Y}$	No.	Dollars	(Adjusted for Inflation)	No.	Dollars
94-95*	-8%	-19%		-4%	-3%
	2001	38%	(27%)	42%	79%
91-94	38%	3670	(2170)	12 10	1 / 10

^{*} Includes grants still pending. Does **not** include NSF EPSCoR. Source: Institutional databases.

Nation. Table 14 shows Kansas doctoral granting institutions received more federal dollars in FY 1994 than Nebraska, and ranked below all neighboring states except Oklahoma in R&D dollars per capita. When corrected for the smaller population, and hence smaller number of faculty applying for grants, Kansas funding levels were also well below the national average (Figure 15). Figure 16 shows that, in the early 1980s, Kansas lost ground in the competition for federal R&D academic obligations. In recent years, the state's increase paralleled the national trend, but did not close the gap created a decade ago. And in 1994, the gap actually widened as the percent increase in Kansas declined while the U.S. total continued to increase.

Table 14
Federal Obligations for Science and Engineering Research and Development to
Universities and Colleges by State

State	FY 1986 (in thousands)	FY 1994 (in thousands	% Change	1990 Census (in thousands)	\$ per Capita
Colorado	\$108,473	\$283,096	161%	3,294	\$86
Missouri	\$111,289	\$261,041	135%	5,117	\$51
Iowa	\$74,279	\$176,398	137%	2,777	\$64
Oklahoma	\$29,468	\$77,091	162%	3,146	\$25
Kansas	\$33,239	\$72,154	117%	2,478	\$29
Nebraska	\$24,524	\$55,209	125%	1,578	\$35

Source: NSF Statistical Reports on Research and Development Funding and Performance. Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1994. (Table B3).

Figure 15 Total Federal R&D Academic Obligations Per 1,000 Population, FY 1980-FY 1994

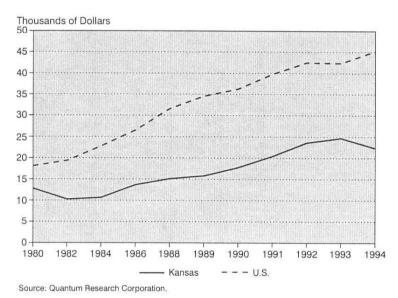


Figure 16
Percent Increase in Federal R&D Academic Obligations,
FY 1980-FY 1994

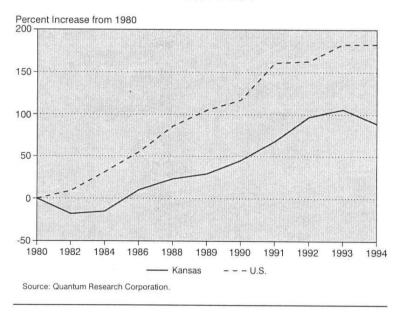


Table 15 presents the R&D expenditures at universities in neighboring states in FY 1993. Kansas's institutions ranked lower than most neighboring institutions, several of which were also peer institutions. For example, KSU ranked much lower than its peer institutions Iowa State University and Colorado State University. KU also ranked lower than the University of Colorado, University of Iowa and University of Oklahoma, its neighboring peer institutions.

Table 15
R&D Expenditures at Universities by Source of Funds
FY 1994 (Dollars in Thousands)

Neighboring State	Total	\$ Federal	State &
Institution	(rank)	Gov.	Local Gov.
U. of Colorado	\$228,067 (24)	\$158,163	\$3,604
U. of Iowa	157,036 (42)	99,536	4,180
Iowa State U.	155,982 (43)	56,439	42,811
U. of Missouri	121,256 (59)	31,299	14,438
Colorado State U.	112,457 (64)	66,464	4,511
U. of Nebraska	102,746 (70)	29,781	36,088
U. of Oklahoma	95,747 (72)	35,266	10,319
U. of Kansas	95,701 (73)	40,816	5,914
Oklahoma State U.	70,808 (100)	20,440	7,909
Kansas State U.	65,696 (103)	21,547	27,101*
Wichita State University	Not included in the	listing of the top	200 institutions.

^{*} In FY 1993, this included \$3.7 million from other Kansas agencies and \$22.1 million in state appropriations for the Agricultural Experimental Station and the Engineering Experimental Station.

Source: NSF Statistical Reports on R&D Funding and Performance. Federal Support to Universities, Colleges, and Nonprofit Institutions. Table B-35.

EPSCoR Faculty Grant Activity

The first three-year NSF EPSCoR grant (Phase 1) was awarded to the state of Kansas and funded SEM faculty from FY 1992 through FY 1994. The current three-year cooperative agreement (Phase 2) is projected from FY 1996 through FY 1998. The faculty supported by the first grant will be referred to as Group I and the group funded by the 1995 renewal will be referred to as Group II. Grant activity for Group I has been tracked since FY 1992 and will continue to be collected for two years to track their performance. Similar analysis will occur for Group II, using FY 1994 grant activity as their baseline.

Table 16 presents the grant activity of Group I faculty who received NSF EPSCoR funding during the first funding phase. The data include only those grants where faculty served as the principal investigator and do **not** include NSF EPSCoR awards. Number of proposals submitted has grown steadily and the percentage awarded has been very good for Group I. For FY 1995, the number of grants awarded and the dollars awarded at the time data were collected

was lower than the previous year. However, some grants were still pending so 1995 data were incomplete. The change in dollars awarded from almost \$5.5 million in 1992 to \$9.9 million in 1994 was 83 percent. However, when adjusted for inflation, the dollars awarded to this group from 1992 to 1994 grew 73 percent.

Table 17 presents the same data for Group II. In FY 1994, before the second group was funded by NSF EPSCoR Phase II, this group submitted 185 proposals and 36 percent were funded for approximately \$5.6 million. The same group submitted 225 proposals in FY 1995 and 77 had been funded (with some still pending) at \$6.6 million at the time data were collected.

Table 16
Total Grant Activity of EPSCoR Funded Faculty: Group I

	FY 1992	FY 1993	FY 1994	FY 1995**
Proposals Submitted*	190	202	220	233
Grants Awarded	91	110	109	95
Percent Awarded	48%	54%	50%	41%
Dollars Awarded	\$5.450m	\$6.072m	\$9.957m	\$8.656m
(Adjusted for Inflation)	(\$3.886m)	(\$4.202m)	(\$6.721m)	
% Change Dollars Awarded:				
1992 to 1994	83%			
(Adjusted for Inflation)	(73%)			

^{*}Includes only those grants where faculty served as principal investigator. Does not include NSF EPSCoR.

^{**}Incomplete data due to grants still pending.

Table 17
Total Grant Activity of EPSCoR Funded Faculty: Group II

	FY 1994	FY 1995**
Proposals Submitted*	185	225
Grants Awarded	65	77
Percent Awarded	36%	34%
Dollars Awarded	\$5,655,292	\$6,615,222

^{*}Includes only those grants where faculty served as principal investigator. Does not include NSF EPSCoR.

Figure 17 shows how faculty funded by the first EPSCoR grant increased the total dollars awarded to them. In FY 1992, the first year of funding, 15 EPSCoR funded faculty were awarded grants totaling less than \$50,000, six were awarded between \$50,00 and \$99,999, and 19 were awarded grants totaling in the six-figure range (\$100,000 to \$999,999). In FY 1995, with some grants still pending, funding for Group I increased dramatically in the \$50,000-\$99,999 range and in the \$100,000-\$999,999 range.

Table 18 presents the distribution of total dollars awarded to Group I by institution. Awards totaling between \$50,000 and \$99,999 showed increases at all three institutions in number of faculty within that funding range.

^{**}Incomplete data due to grants still pending.

Figure 17
Change in Distribution of Total Dollars Awarded to Group I:
Number of EPSCoR Faculty Within Each Funding Range

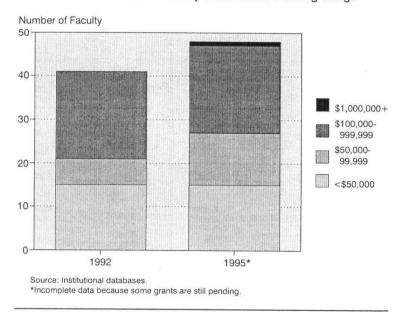


Table 18
EPSCoR Funded Faculty and Distribution of Dollars Awarded: Group I

	1	Number of	EPSCo	R Faculty	Within E	ach Fund	ing Ran	ge:*
Dollars	KS	\mathbf{SU}	KU		WSU		STATE	
Awarded:	1992	1995**	1992	1995**	1992	1995**	1992	1995**
\$1 - \$49,999	6	6	6	6	3	3	15	15
\$50,000-\$99,999	3	4	3	7	0	1	6	12
\$100,000-\$999,999	8	9	12	11	0	0	20	20
\$1,000,000 +	0	1	0	0	0	O	0	1
Total:	17	20	21	24	3	4	41	48
(Group N)	(32)	(33)	(39)	(42)	(14)	(20)	(85)	(95)
Percent of Total:	53%	61%	54%	57%	21%	20%	48%	51%

^{*}Includes only those grants where faculty served as principal investigator. Does **not** include NSF EPSCoR awards.

^{**1995} data are incomplete due to grants still pending.

Table 19 begins to track the distribution of dollars awarded to Group II in FY 1994, before NSF EPSCoR II was funded, and in FY 1995, the first year that Group II received EPSCoR funds. Data reported in Table 18 and 19 do not include NSF EPSCoR funds. It was difficult to assess 1995 data since some grants were still pending at the time data were collected. Group II does include some faculty who were also part of Group I funding. Group II began with most faculty accumulating between \$100,000 and \$999,999 in FY 1994 and thus far in FY 1995. See Appendix G for a complete listing of faculty included in Group I and Group II.

Table 19
EPSCoR Funded Faculty and Distribution of Dollars Awarded: Group II

		Number of	f EPSCo	R Faculty	Within I	Each Fund	ing Ran	ge:*
Dollars	K	\mathbf{SU}	K	\mathbf{U}	\mathbf{W}	\mathbf{SU}	STATE	
Awarded:	1994	1995**	1994	1995**	1994	1995**	1994	1995**
\$1 - \$49,999	0	5	6	6	4	5	10	16
\$50,000-\$99,999	3	4	5	8	1	2	9	14
\$100,000-\$999,999	10	9	8	6	1	2	19	17
\$1,000,000 +	0	O	0	0	0	0	0	0
Total Number:	13	18	19	20	6	9	38	47
(Total Group)	(33)	(33)	(40)	(40)	(21)	(21)	(94)	(94)
Percent of Total:	39%	55%	48%	50%	29%	43%	40%	50%

^{*}Includes only those grants where faculty served as principal investigator. Does **not** include NSF EPSCoR awards. **1995 data are incomplete due to grants still pending.

Source: Institutional databases.

IMPACT OF FUNDING UPON INFRASTRUCTURE

Have changes in grant funding affected the growth of the science, engineering, and math infrastructure? Table 20 shows that, if 1995 funding levels remain below 1994 levels when data collection is completed, there may be a relationship between funding levels and number of post doctoral students, with the effect of funding upon post docs lagging by one year. For example, when funding increased from 1991 to 1992, the number of post docs increased in 1993. Decreased funding from 1992 to 1993 resulted in a decrease in number of post docs in 1994. Certainly the level of change in dollars awarded from 1991 to 1994 (83 percent change) was not reflected in the same magnitude in the number of post doctoral students (16 percent change), faculty (two percent), or graduate student enrollment (12 percent).

Table 20 SEM Infrastructure and Funding Growth

	Total Dollars			Graduate
Year	Awarded	Post Docs	Faculty	Enrollment
1991	\$51,385,542	45	1,231	3,918
1992	\$67,505,762	58	1,226	4,069
1993	\$63,797,151	65	1,226	4,195
1994	\$71,074,517	52	1,258	4,280
1995	\$57,757,345*	65	1,245	4,140
'91 to '94				
% change	38%	16%	2%	12%
	20			

^{*}Data incomplete due to grants still pending.

CONCLUSIONS

Kansas participated in the NSF EPSCoR program for three years, from 1992 through 1994. In 1995, funding was renewed for another three years and a second group of SEM faculty began receiving funds. The state has made progress since funding began in 1992, but renewed funding requires renewed efforts to improve the state's competitive position even further. Current assessment revealed several important findings.

- The number of SEM faculty fell slightly in academic year 1995 compared to 1994. The largest decreases were seen at KU, which had a hiring freeze in place to help solve budgetary problems. Unfilled faculty positions may increase teaching loads, decrease the number of graduate students that can be accepted into programs, and decrease the number of grants submitted.
- The number of women and minority SEM faculty continued to be above 1991 levels but showed little change from 1994 to 1995. While women were 15 percent of the faculty in 1995 (well below levels seen in the general population), minorities, at 13 percent, were very close to the proportion found in the general population.
- The number of assistant professors was lower in 1995 than in 1994 at all three institutions, as was the number of student research assistants. This may have a negative impact upon research and grant productivity.

- Faculty salaries continue to be lower than those paid at peer institutions.
- SEM graduate enrollment was five percent lower than 1994 levels but six percent above 1991 levels. The number of science graduate students fell nine percent below 1994 levels and three percent below 1991 levels.
- Number of women and minorities enrolled in SEM graduate programs declined in 1995.
- In 1995, 34 percent of SEM graduate students were women and nine percent were minorities. Compared to the general population, the number of women graduate students was low while the number of minority graduate students was closer to levels found in the general population.
- Number of graduate students receiving financial support in the form of teaching assistantships or research assistantships was slightly lower than the previous year but, due to decreases in enrollment, the percentage receiving support increased slightly.
- NSF dollars (excluding NSF EPSCoR) awarded to the state continued to increase.
- The number and dollars awarded by all funding sources declined in FY 1995. FY 1995 data were incomplete since some grants were still pending at the time data were collected.

The 1995 data revealed declines in number of assistant professors, student research assistants, and graduate enrollment. While disturbing, these decreases must be put into context. With hiring freezes lifted, the number of faculty will increase and the number of students accepted into graduate programs should also increase. With more faculty hired, number of grants submitted and funded should improve, which will also increase the number of student research assistants that can be supported. If the hiring freeze was responsible for the declines seen in the 1995 infrastructure, then past improvements in Kansas' competitive position may indeed be very fragile. The state must focus upon protecting gains made during the first three years of NSF EPSCoR and encouraging growth in key areas such as number of faculty, graduate enrollment, and graduate student support that will drive future growth

Appendix A

Departments/Units Included in Database

DEPARTMENTS/UNITS INCLUDED IN DATABASE⁴

KSU Information Systems Geology Gerontology Ctr. Electrical & Computer Science Industrial/Manufacturing Herbarium Animal Science Operations Research Higuchi Biosciences Ctrs. Food Science Human Development Mechanical Genetics Nuclear Public Policy & Bus. Res. Agronomy Interdisc. Environ. Studies Biochemistry Entomology **KU** (Lawrence Campus) Kansas Biological Survey Grain Science Kansas Geological Survey Science Mass Spec Lab Horticulture Academic Computing Medicinal Chemistry Plant Pathology Animal Care Unit Microbiology Biology Anthropology Microbiology Anthropology Museum Museum Natural History Chemistry **Biological Sciences** Museum Inv. Paleontol. Biochemistry NMR Lab Geology Paleontological Inst. **Physics** Biology Pharmaceutical Chemistry Political Sci/Publ. Admin. Botany Psychology Entomology Pharmacol. & Toxicology Sociology/Anthro/ **Environmental Studies** Pharmacy Practice Social Work Physiol. & Cell Bio. Physics & Astronomy Statistics Systematics & Ecology Psychology Science Instrument Lab **Economics** Biomedical Research Geography Biological Survey Sociology Foods & Nutrition Bureau of Child Research/ Anatomy & Physiology Life Span Institute Math Clinical Sciences Chemistry Pathology/Microbiology Child Development Lab Engineering Computer Science Aerospace Ctr. Bioanalytical Res. Math Applied Remote Sensing Architectural Engineering Ctr. Biomedical Research Engineering Ctr. Drug Delivery CRINC Chemical & Petroleum Agricultural Ctr.Neurobiol.& Immun. Agricultural Technology Civil Early Childhood Institute Architectural **Economics** Ctr. Energy Res/Dev.

Entomology Museum

Geography

Exper. & Applied Ecology

Ctr. Excel/CECASE

Electrical & Computer

Engineering Management

Chemical

Computer Science

Civil

⁴Departments listed under Science, Engineering, and Math are included in all databases: faculty, personnel, graduate enrollment, degrees, facilities, and grants. Those listed under Other are also included in reports of NSF grant activity because of grants submitted to NSF.

Mechanical Space Technology Ctr. Tertiary Oil Recovery Transportation Res. Ctr. Water Resources Institute

WSU

Science Curriculum & Instruction Industrial Technology Communicative Disordrs. **Biological Sciences** Chemistry Geology Computer Science Physics Psychology Anthropology Clinical Sciences Health Adm. & Gerontol. Nursing Dental Hygiene Respiratory Therapy Medical Technology Gerontology Ctr. Physical Therapy Physician Assistant

Math

Engineering
Aerospace
Electrical
Industrial
Mechanical
Special Projects
Wind Tunnel
NIAR

Appendix B

SEM Faculty and Personnel

NUMBER OF SEM FACULTY

						1994-1995	1991-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
Science	479	471	472	482	479	-1%	0%
Engineering	115	111	106	128	130	2%	13%
Math	29	31	33	32	32	0%	10%
Subtotal	623	613	611	642	641	-0%	3%
KU-Lawrence							
Science	286	295	300	296	283	-4%	-1%
Engineering	76	76	75	86	87	1%	14%
Math	37	38	40	38	36	-5%	-3%
Subtotal	399	409	415	420	406	-3%	2%
			9				
WSU							
Science	138	132	130	126	127	1%	-8%
Engineering	44	46	45	45	46	2%	5%
Math	27	26	25	25	25	0%	-7%
Subtotal	209	204	200	196	198	1%	-5%
STATE							
a :	00-	0.00	20-		005	200	200
Science	903	898	902	904	889	-2%	-2%
Engineering	235	233	226	259	263	2%	12%
Math	93	95	98	95	93	-2%	0%
TOTAL	1,231	1,226	1,226	1,258	1,245	-1%	1%

NUMBER OF WOMEN FACULTY

KSU	1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
Science	54	54	60	64	64	0%	19%
Engineering	4	4	5	6	8	33%	100%
Math	0	0	0	0	0		
Subtotal	58	58	65	70	72	3%	24%
% of Total	9%	9%	11%	11%	11%		
KU-Lawrence							
Science	45	53	57	60	58	-3%	29%
Engineering	2	2	4	5	6	20%	200%
Math	3	3	3	3	3	0%	0%
Subtotal	50	58	64	68	67	-1%	34%
% of Total	13%	14%	15%	16%	17%		
WSU							
Science	52	49	46	47	44	-6%	-15%
Engineering	2	2	2	2	3	50%	50%
Math	1	0	0	0	0		-100%
Subtotal	55	51	48	49	47	-4%	-15%
% of Total	26%	25%	24%	25%	24%		
STATE							
Science	151	156	163	171	166	-3%	10%
Engineering	8	8	11	13	17	31%	113%
Math	4	3	3	3	3	0%	-25%
TOTAL	163	167	177	187	186	-1%	14%
% of TOTAL	13%	14%	14%	15%	15%		

NUMBER OF MINORITY FACULTY

	ě					1994-1995	1991-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
G.	26	10	10	20	40	201	1.70
Science	36	40	40	39	42	8%	17%
Engineering	16	16	14	22	26	18%	63%
Math	6	8	9	9	8	-11%	33%
Minority total	58	64	63	70	76	9%	31%
% of Total	9%	10%	10%	11%	12%		
KU-Lawrence							
Science	24	25	24	27	24	-11%	0%
Engineering	10	12	12	14	13	-7%	30%
Math	5	6	9	9	9	0%	80%
Subtotal	39	43	45	50	46	-8%	18%
% of Total	10%	11%	11%	12%	11%		
WSU							
Science	15	16	17	15	16	7%	7%
Engineering	10	12	12	14	15	7%	50%
Math	7	7	6	8	9	13%	29%
Subtotal	32	35	35	37	40	8%	25%
% of Total	15%	17%	18%	19%	20%		
STATE							
Science	75	81	81	81	82	1%	9%
Engineering	36	40	38	50	54	8%	50%
Math	18	21	24	26	26	0%	44%
TOTAL	129	142	143	157	162	3%	26%
% of TOTAL	10%	12%	12%	12%	13%		

FACULTY DEMOGRAPHICS FOR KSU, KU, WSU: ASSISTANT, ASSOCIATE, FULL PROFESSORS

ACADEMIC YEAR BEGINNING FALL OF

	TOTAL	723	991	688	%61	808	9	3	70	3	887	%6		DTAL	90	3	93	3%	13	5 0	7	24	0	93	28%
	WSU TO	83	44	127	35%	111	2	0	14	0	127	13%		WSU TOTAL	25	0	25	%0	71	0	0	6	0	25	36%
	KU 1	225	28	283	20%	257	2	0	21	_	281	%6		KU V	33	3	36	%8	7.0	0	. —	8	0	36	25%
1995	KSU	415	64	479	13%	437	7	3	35	7	479	%6	1995	KSU	32	0	32	%0	7.0	0		7	0	32	25%
		733	171	904	19%	823	S	3	71	2	904	%6		TOTAL	92	3	95	3%	07	3 -	3	23	0	95	27%
	WSU TOTAL	79	47	126	37%	111	2	0	13	0	126	12%		WSU TO	25	0	25	%0	17	0	-	7	0	25	32%
	KU V	236	09	296	20%	269	3	0	23	-	296	%6		KU V	35	3	38	%8	20	0	-	8	0	38	24%
1994	KSU	418	64	482	13%	443	0	3	35	—	482	%8	1994	KSU	32	0	32	%0	23	0	-	8	0	32	78%
		739	163	902	18%	821	3	3	73	2	902	%6		TOTAL	95	3	86	3%	1,1	. 0	4	20	0	86	24%
	WSU TOTAL	84	46	130	35%	113	П	0	16	0	130	13%		WSU TO	25	0	25	%0	10	0	_	5	0	25	24%
	KU V	243	57	300	19%	276	2	0	21	-	300	8%		KU W	37	3	40	%8	31	0	2	7	0	40	23% 2
1993	KSU	412	09	472	13%	432	0	3	36	-	472	%8	1993	KSU	33	0	33	%0	<i>PC</i>	0	-	8	0	33	27%
		742	156	868	17%	818	3	ব	73	-	899	%6		TOTAL 1	92	3	95	3%	7.4	0	4	17	0	95	22%
	WSU TOTAL	83	49	132	37%	116	П	0	15	0	132	12%		WSU TC	26	0	56	%0	10	0	-	9	0	26	27%
	KU V	242	53	295	%81	270	7	0	22	1	295	8% 1		KU W	35	3	38	%8	33	0	2	4	0	38	%9
1992	KSU	417	54	471	11%	432	0	4	36	0	472	%8	1992		31	0	31	%0	23	0	Ι	7	0	31	26% 1
	WSU TOTAL KSU	752	151	903	17%	812	3	3	89	1	887	%8		WSU TOTAL KSU	68	4	93	4%	75	0	4	14	0	93	%61
	VSU TO	98	52	138	38%	123		-	13	0	138	11%		/SU TC	26	_	27	4%	20	0	_	9	0	27	26%
	KU W	241	45	286	16%	262	2	0	22	0	286	8% 1		KU W	34	3	37	%8	33	0	7	3	0	37	14% 2
1991	KSU	425	54	479	11%	427	0	7	33	1	463	%8	1991	KSU	29	0	29	%0	23	0	-	5	0	53	21%
10025	NCE	Male	Female	Total	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am.Ind/Alaskan	Total *	% Minority	3	MATH	Male	Female	Total	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am. Ind./Alaskan	Total	% Minority

	OTAL	246	17	263	%9	,200	3	2	48	-	263	21%			TOTAL	1059	186	1245	15%	1081	6	00	143	2	1243	13%
	WSU TOTAL	43	3	46	7%	31	2	1	12	0	46	33%			WSU 1	151	47	198	24%	158	4	-	35	0	198	20%
	KU	81	9	87	7%	74	1	1	Ξ	0	87	15%			KU	339	19	406	17%	358	3	2	40	_	404	%11
1995	KSU	122	8	130	%9	104	0	0	25	_	130	20%		1995	KSU	995	72	641	11%	595	2	5	89	_	641	12%
	WSU TOTAL	246	13	259	2%	209	2	3	44	1	259	19%			TOTAL	1071	187	1258	15%	1101	7	6	138	3	1258	12%
	WSU	43	2	45	4%	31	П	-	12	0	45	31%			WSU 7	147	49	196	25%	159	3	2	32	0	196	%61
	KU	81	5	98	%9	72	-	_	12	0	98	16%			KU	352	89	420	16%	370	4	2	43	1	420	12%
1994	KSU	122	9	128	%5	106	0	1	20	1	128	17%		1994	KSU	572	70	642	11%	572	0	5	63	2	642	%11
	WSU TOTAL	215	11	226	2%	188	2	3	33	0	226	17%			TOTAL	1049	177	1226	14%	1083	2	10	126	2	1226	12%
	WSU 1	43	2	45	4%	33	-	-	10	0	45	27%	(4		WSU 1	152	48	200	24%	165	7	2	31	0	200	18%
	KU	71	4	75	2%	63	_	-	10	0	75	%91			KU	351	64	415	15%	370	3	3	38	-	415	11%
1993	KSU	101	5	106	%5	92	0	-	13	0	106	13%		1993	KSU	546	9	611	11%	548	0	5	57	Т	611	10%
	TOTAL	225	90	233	3%	192	7	3	35	0	232	17%			TOTAL	1059	167	1226	14%	1084	3	11	125	1	1226	12%
	WSU 1	44	7	46	4%	34	_	_	10	0	46	26%			WSU 1	153	51	204	25%	169	2	7	31	0	204	17%
	KU	74	7	92	3%	64	1	_	10	0	92	%91			KÜ	351	28	409	14%	366	3	3	36	_	409	11%
1992	KSU	107	4	111	4%	94	0	1	15	0	110	15%		1992	KSU	555	28	613	%6	549	0	9	58	0	613	10%
	WSU TOTAL	227	8	235	3%	199	2	7	32	0	235	15%			WSU TOTAL	1068	163	1231	13%	1086	3	6	114	1	1215	11%
	WSU 1	42	7	44	2%	34	П	_	8	0	44	23%			WSU	154	55	209	26%	177	2	3	27	0	209	15%
	KU	74	7	94	3%	99	П	0	6	0	92	13%			KU	349	50	399	13%	360	3	2	34	0	399	%01
1991	KSU	1111	4	115	3%	66	0	_	15	0	115	14%		1991	KSU	565	58	623	%6	549	0	4	53	1	209	10%
	ENGINEERING	Male	Female	Total	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am.Ind./Alaskan	Total	% Minority		SCIENCE, MATH	& ENGINEERING	Male	Female	Total	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am.Ind/Alaskan	Total *	% Minority

 Total number of faculty by ethnicity does not always equal total number of faculty by sex because ethnicity data are not available in all cases.

Personnel Totals by Year

					,		
						% Change	% Change
	1991	1992	1993	1994	1995	1994-1995	1991-1994
Science	2,813	3,103	3,101	3,111	3048	-2%	8%
Math	224	235	231	239	237	-1%	6%
Engineering	619	588	670	758	765	1%	24%
SEM TOTAL	3,656	3,926	4,002	4,108	4,050	-1%	11%
Professor	557	558	555	562	556	-1%	-0 %
Assoc. Professor	334	322	326	331	355	7%	6%
Assist. Professor	340	346	345	365	334	-8%	-2%
Academic Staff,							
Directors, &							
Technical Staff	376	616	514	499	495	-1%	32%
			207				
Subtotal	1,607	1,842	1,740	1,757	1,740	-1%	8%
Research Assoc.							
& Assist.	341	352	344	310	293	-5%	-14%
Post Doctoral	45	58	65	52	65	25%	44%
Grad. Teaching							
Assist.	846	789	868	924	982	6%	16%
Student Research							
Assistants	817	885	985	1065	970	-9%	19%
Subtotal	2,049	2,084	2,262	2,351	2,310	-2 %	13%
TOTAL	3,656	3,926	4,002	4,108	4,050	-1%	11%

SME PERSONNEL BY TITLE FOR KSU, KU, AND WSU

ACADEMIC YEAR BEGINNING FALL OF

	TOTAL	403	244	242	281	278	64	671	726	139	3,048		TOTAL	37	37	19	18	0	0	124	1	1	237
	WSU T	28	47	52	55	0	0	126	7	0	315		WSU T	9	12	7	15	0	0	21	0	0	61
	KU	149	99	89	124	116	64	329	333	115	1,364		KU	18	13	5	2	0	0	53	1	П	93
1995	KSU	226	131	122	102	162		216	386	24	1,369	1994	KSU	13	12	7	_	0		50	0	0	83
	TOTAL	408	233	263	268	297	50	636	819	137	3,111		TOTAL	38	32	25	16	0	-	124	2	П	239
	WSU T	25	45	99	39	0	0	102	∞	0	275		WSU T	9	Ξ	8	Ξ	0	0	25	0	0	61
	KU	155	89	73	118	122	50	353	398	115	1,452		KU	18	12	8	3	0	-	52	2	-	26
1994	KSU	228	120	134	111	175		181	413	22	1,384	1994	KSU	14	6	6	2	0		47	0	0	81
	TOTAL	408	236	258	264	329	64	209	785	150	3,101		TOTAL	35	35	28	16	0	0	115	Т	-	231
	WSU TO	27	44	59	34	0		88	Ξ	0	263		WSU TO	5	13	7	13	0		17	0	0	25
	KU V	158	73	69	121	136	64	350	411	128	1,510		KU V	18	14	8	7	0	0	49	1	П	93
1993	KSU	223	119	130	109	193		691	363	22	1,328	1993	KSU	12	∞	13	_	0		49	0	0	83
	TOTAL	405	237	256	229	330	57	597	731	261	3,103		TOTAL	36	32	27	14	0	0	104	0	22	235
	WSU T	30	40	62	. 12	-		9/	8	23	252		WSU T	9	12	∞	12	0		18	0	0	99
	KU	154	72	69	125	152	57	348	427	217	1,621		KU	17	14	7	2	0	0	49	0	22	1111
1992	KSU	221	125	125	92	177		173	296	21	1,230	1992	KSU	13	9	12	0	0	0	37	0	0	89
	WSU TOTAL KSU	399	244	260	222	316	45	969	640	91	2,813		WSU TOTAL KSU	36	34	23	14	0	0	117	0	0	224
	VSU TO	29	41	89	20	2		9/	1	18	255		VSU TO	2	14	∞	12	0		24	0	0	63
	KU V	158	89	09	111	133	45	334	365	99	1,330		KU V	17	14	9	_	0	0	90	0	0	88
1991	KSU	212	135	132	91	181		186	274	17	1,228 1,330	1991	KSU	14	9	6	1	0		43	0	0	73
SCIENCE		Professor	Associate Prof.	Assistant Prof.	Acad. Staff*	Res Assoc/Asst.	Post Docs	Teaching Assist.	Student Res. Asst.	Technical Staff **	TOTAL	MATH		Professor	Associate Prof.	Assistant Prof.	Academic Staff	Res. Assoc/Asst.	Post Docs	Teaching Assist.	Student Res. Asst.	Technical Staff	TOTAL

	TOTAL	116	74	73	36	15		187	243	20	292		TOTAL	556	355	334	335	293	99	982	970	160	4,050
	WSU T	13	16	17	7	0	0	91	30	0	174		WSU T	47	75	92	17	0	0	238	37	0	550
	KU	42	26	19	14	2	-	45	34	14	197		KU	209	105	92	140	118	9	427	368	130	1,654
1995	KSU	61	32	37	15	13		51	179	9	394	1995	KSU	300	175	166	118	175	0	317	595	30	1,846
	TOTAL	116	99	77	52	13	1	164	244	25	758		TOTAL	562	331	365	336	310	52	924	1065	163	4,108
	WSU T	14	11	20	19	0	0	75	45	0	184		WSU T	45	19	84	69	0	0	202	53	0	520
	KU	43	23	20	19	3	_	44	13	16	182		KU	216	103	101	140	125	52	449	413	132	1,731
1994	KSU	59	32	37	14	10		45	186	6	392	1994	KSU	301	161	180	127	185	0	273	599	31	1,857
	TOTAL	112	55	59	59	15	-	146	199	24	029		FOTAL	555	326	345	339	344	65	898	985	175	4,002
	WSU T	17	Ξ	17	21	0		99	39	0	161		WSU T	49	89	83	89	0	0	191	50	0	479
	KU	39	18	18	19	3	_	48	27	16	189		KU	215	105	95	142	139	9	447	439	145	1,792
1993	KSU	99	26	24	19	12		42	133	8	320	1993	KSU	291	153	167	129	205	0	260	496	30	1,731
	TOTAL	117	53	63	37	22	П	88	154	53	288		OTAL	258	322	346	280	352	28	789	885	336	3,926
	WSU T	17	6	20	7	7		35	27	13	135		WSU T	53	19	90	31	∞	0	129	35	36	443
	KU	43	16	17	12	3	_	44	22	35	193		KU	214	102	93	139	155	58	441	449	274	1,925
1992	KSU	57	28	26	18	12		6	105	5	260	1992	KSU	291	159	163	110	189	0	219	401	26	1,558
	WSU TOTAL KSU	122	26	57	23	25	0	133	177	26	619		OTAL	557	334	340	259	341	45	846	817	117	3,656 1,558
	WSU T	18	6	17	7	3		69	30	13	166		WSU TOTAL	52	64	93	39	2	0	169	31	31	484
	KU	45	18	13	8	4	0	43	29	1	171		KU	220	100	79	120	137	45	427	394	19	1,589
1991	KSU	59	29	27	∞	18		21	118	2	282	1991	KSU	285	170	168	100	199	0	250	392	19	1,583 1,589
ENGINEERING ** 1991		Professor	Associate Prof.	Assistant Prof.	Academic Staff	Res. Assoc/Asst.	Post Docs	Teaching Assist.	Student Res. Asst.	Technical Staff	TOTAL	SCIENCE, MATH	& ENGINEERING	Professor	Associate Prof.	Assistant Prof.	Academic Staff	Res. Assoc/Asst.	Post Docs	Teaching Assist.	Student Res. Asst.	Technical Staff	TOTAL

^{*} Adjunct faculty, asst/assoc/sr scientists, lecturers, instructors and directors are included under Academic Staff.

^{**} WSU's Directors and Post Doctoral Fellows are included under Technical Staff.

^{***} WSU's Engineering data include the Natl. Inst. for Aviation Res.

SME PERSONNEL* DEMOGRAPHICS FOR KSU, KU, AND WSU

ACADEMIC YEAR BEGINNING FALL OF

	OTAL	1,939	1,109	36%	2,385	09	55	537	11	22%		TOTAL	185	52	22%	170	4	7	55	1	28%
	WSU TOTAL	169	146	46%	256	5	2	51	_	19%		WSU T	46	15	25%	39	3	4	15	0	36%
	KU	803	561	41%	1,076	36	31	214	7	21%		KU	69	24	26%	73	0	2	18	0	22%
1995	KSU	196	402	29%	1,053	19	22	272	3	23%	1995	KSU	70	13	16%	58	-	-	22	1	30%
	TOTAL	1,990	1,121	36%	2,418	99	54	571	12	22%		TOTAL	188	50	21%	166	2	7	28	2	30%
	WSU	149	126	46%	227	5	0	42	_	17%		WSU	49	12	20%	41	3	4	13	0	33%
	KU	864	588	40%	1,135	32	26	252	7	22%		KU	75	22	23%	75	-	2	17	2	23%
1994	KSU	776	407	29%	1,056	19	28	277	4	24%	1994	KSU	64	16	20%	50	-	_	28	0	38%
	WSU TOTAL	2,012	1,089	35%	2,422	99	59	555	6	22%		TOTAL	186	45	19%	166	5	∞	50	2	28%
	WSU 1	145	118	45%	221	5	7	34	_	%91		WSU 1	44	11	20%	41	3	4	7	0	25%
	KU	917	593	36%	1,183	31	29	263	4	22%		KU	73	20	22%	70	_	3	17	7	25%
1993	KSU	950	378	28%	1,018	20	28	258	4	23%	1993	KSU	69	14	17%	55	-	_	26	0	34%
	COTAL	1,714	920	35%	2,114	41	31	437	11	20%		TOTAL	158	40	20%	144	3	9	43	2	27%
	WSU TOTAL	136	116	46%	212	2	-	35	2	16%		WSU 1	47	6	16%	43	1	3	6	0	23%
	KU	066	631	39%	1,241	34	25	313	∞	23%		KU	80	31	28%	78	2	2	27	2	30%
1992	KSU	588	173	23%	199	5	5	68	-	13%	1992	KSU	31	0	%0	23	0	-	7	0	26%
	WSU TOTAL KSU	1,594	759	32%	1,895	31	38	356	17	%61		WSU TOTAL KSU	145	36	20%	137	7	9	35	1	24%
	WSU 1	138	117	46%	214	2	_	35	3	16%		WSU 1	51	12	19%	47	2	3	11	0	25%
	KU	861	469	35%	910,1 599	25	32	245	12	24%		KU	64	24	27%	99	0	7	19	1	25%
1991	KSU	565	173	23%	999	4	5	92	2	12%	1991	KSU	30	0	%0	24	0	-	5	0	20%
SCIENCE		Male	Female	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am.Ind/Alaskan	% Minority	MATH		Male	Female	% Female	White	African Amer.	Hispanic	Asian/Pac.Isl.	Am.Ind/Alaskan	% Minority

ENGINEERING	1991				1992				1993				1994				1995			
	KSU	KU	WSU 1	KU WSU TOTAL KSU	KSU	KU	WSU TOTAL		KSU	KU	WSU TOTAL		KSU	KU	WSU TOTAL		KSU	ΚU	WSU TOTAL	OTAL
Male	134	156	147	437	138	168	121	427	289		144	593	348	162	168	829	347	175	159	681
Female	10	17	19	46	8	25	14	47	31	29	17	11	43	20	16	79	47	22	15	84
% Female	7%	10%	11%	10%	2%	13%	10%	10%	10%	15%	11%	11%	11%	%11%	%6	10%	12%	11%	%6	11%
200											ċ		,	;	C	;		,	Č	9
White	119	128	86	345	118	140	81	339	182	139	81	402	211	144	68	444	215	145	0/	430
African Amer.	0	9	2	00	0	6	7	11	1	5	2	00	_	2	2	S	3	5	3	, 11
Hispanic	-	3	4	80	-	3	П	3	7	2	9	10	4	4	3	11	3	5	7	10
Asian/Pac.Isl.	24	35	90	109	26	41	42	109	133	42	19	242	173	32	98	291	172	42	94	308
Am. Ind/Alaskan	0	_	12	13	-	0	6	10	7	_	5	∞	7		4	9	П		5	9
% Minority	17%	26%	41%	29%	19%	27%	40%	28%	43%	79%	%09	40%	46%	21%	52%	41%	45%	26%	%09	44%
													751							
SCIENCE, MATH	1991				1992				1993				1994				1995			
& ENGINEERING	KSU	KU	WSU 1	WSU TOTAL	KSU	KU	WSU T	TOTAL	KSU	KU	WSU T	TOTAL	KSU	KU	WSU T		KSU	KU	WSU T	TOTAL
Male	759	1,081	336	2,176	757	1,238	304	2,299	1,308	1,150	333	2,791	1,389	1,101	366	2,856	1,384	1,047	374	2,805
Female	183	510	148	841	181	C84	139			642	146	1,211	466	630	154	1,250	462			1,245
% Female	19%	32%	31%	28%	19%	36%	31%	30%	24%	36%	30%	30%	25%	36%	30%	30%	25%	37%	32%	31%
White	808	1,210	359	2,377	802	1,459	336		1,255	1,392	343			1,354	357	3,028		1,294	365	2,985
African Amer.	4	31	9	41	5	45	5			37	10			35	10		23	41	Ξ	75
Hispanic	7	37	8	52	7	30	5	42	31	34	12	11	33	32	7	72	26	38	8	72
Asian/Pac.Isl.	105	299	96	200	122	381	98	589		322	108		478	301	141		466	274	160	006
Am.Ind./Alaskan	2	14	15	31	2	10	11	23		7	9		9	6	5		2	7	9	18
% Minority	13%	24%	79%	21%	14%	24%	24%	21%	27%	22%	78%	25%	29%	22%	31%	79%	28%	22%	34%	26%
+ D	71		III othor	10000	to a notice	to and	10000	ohing	nd moon	o Hono	and mosachand accietante									

* Personnel includes faculty plus all others (academic staff, graduate teaching and research assistants, research associates and assistants, student research assistants, technical staff)

RESEARCH PERSONNEL* RECEIVING FINANCIAL SUPPORT VS. GRADUATE ENROLLMENT

		KSU			
	1991	1992	1993	1994	1995
Supported	841	809	961	1,057	1,057
Enrolled	1,216	1,282	1,361	1,442	1,474
% Supported	69%	63%	71%	73%	72%
		KU			
	1991	1992	1993	1994	1995
Supported	1,003	1,103	1,090	1,039	978
Enrolled	1,702	1,819	1,817	1,880	1,701
% Supported	59%	. 61%	60%	55%	57%
		WSU			
	1001		1993	1994	1995
G 1	1991	1992			DESCRIPTION OF THE PARTY OF THE
Supported	205	172	211	255	275
Enrolled	1,000		1,017	1,058	965
% Supported	21%	18%	21%	24%	28%
		211			
		State			
	1991	1992	1993	1994	1995
Supported	2,049	2,084	2,262	2,351	2,310
Enrolled	3,918	4,069	4,195	4,380	4,140
% Supported	52%	51%	54%	54%	56%

^{*}Includes research associates/assistants, post docs., graduate teaching assistants, student research assistants

Appendix C

SEM Graduate Enrollment

SEM GRADUATE ENROLLMENT

KSU	1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
Science	894	930	988	1,009	991	-2%	11%
Engineering	270	297	314	380	421	11%	56%
Math	52	55	59	53	62	17%	19%
Subtotal	1,216	1,282	1,361	1,442	1,474	2%	21%
KU-Lawrence							
Science	1,095	1,161	1,168	1,210	1,057	-13%	-3%
Engineering	553	597	587	606	588	-3%	6%
Math	54	61	62	64	56	-13%	4%
Subtotal	1,702	1,819	1,817	1,880	1,701	-10%	-0%
Wsu							
Science	694	641	623	643	555	-14%	-20%
Engineering	266	285	350	376	373	-1%	40%
Math	40	42	44	39	37	-5%	-8%
Subtotal	1,000	968	1,017	1,058	965	-9%	-4%
STATE							
Science	2,683	2,732	2,779	2,862	2,603	-9 %	-3%
Engineering	1,089	1,179	1,251	1,362	1,382	1%	27%
Math	146	158	165	156	155	-1%	6%
TOTAL	3,918	4,069	4,195	4,380	4,140	-5%	6%

WOMEN GRADUATE ENROLLMENT

KSU	1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
Science	226	224	254	342	341	-0%	51%
Engineering	25	35	39	52	62	19%	148%
Math	11	18	18	18	15	-17%	36%
Subtotal	262	277	311	412	418	1%	60%
% of Total	22%	22%	23%	29%	28%		
KU-Lawrence							
Science	464	514	533	569	524	-8%	13%
Engineering	75	80	84	92	88	-4%	17%
Math	22	22	20	19	20	5%	-9%
Subtotal	561	616	637	680	632	-7%	13%
% of Total	33%	34%	35%	36%	37%		
WSU							
Science	522	484	411	324	314	-3%	-40%
Engineering	26	30	38	35	40	14%	54%
Math	11	16	17	16	12	-25%	9%
Subtotal	559	530	466	375	366	-2 %	-35%
% of Total	56%	55%	46%	35%	38%		
STATE							
Science	1,212	1,222	1,198	1,235	1,179	-5%	-3%
Engineering	126	145	161	179	190	6%	51%
Math	44	56	55	53	47	-11%	7%
TOTAL	1,382	1,423	1,414	1,467	1,416	-3%	2%
% of Total	35%	35%	34%	33%	34%		

MINORITY GRADUATE ENROLLMENT

YZCYI	1001	1004	1000	74.00.00		1994-1995	1992-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
Science	* *	46	36	36	42	17%	-9%
Engineering	* *	13	9	9	31	244%	138%
Math	* *	3	2	2	3	50%	0%
Subtotal	* *	62	47	47	76	62%	23%
% of Total	* *	9%	6%	6%	9%		
KU-Lawrence							
Science	43	51	57	63	61	-3%	20%
Engineering	19	20	26	25	29	16%	45%
Math	2	4	5	6	2	-67%	-50%
Subtotal	64	75	88	94	92	-2%	23%
% of Total	7%	8%	9%	10%	10%		
WSU	э.						
Science	38	48	39	61	24	-61%	-50%
Engineering	15	17	24	42	19	-55%	12%
Math	1	0	1	2	2	0%	ERR
Subtotal	54	65	64	105	45	-57%	-31%
% of Total	7%	9%	9%	15%	6%		
STATE							
Science	**	145	132	160	127	210/	120/
Engineering	1,53	50	59	160 76	127 79	-21% 4%	-12%
Math		7	8	10	79		58%
TOTAL		202	199	246	213	-30% -13%	0% 5%
% of TOTAL		8%	8%	10%	9%	-1376	370

^{**}KSU ethnic data are not available. Unable to calculate percent change due to missing data.

SME GRADUATE ENROLLMENT DEMOGRAPHICS FOR KSU, KU, AND WSU

	1994				1995				1994-1995	1991-1995
SCIENCE	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL	% Change	% Change
Male	667	641	319	1,627	650	533	241	1,424	-12%	-1%
Female	342	569	324	1,235	341	524	314	1,179	-5%	8%
TOTAL	1,009	1,210	643	2,862	991	1,057	555	2,603	-9%	3%
% Female	34%	47%	50%	43%	34%	50%	57%	45%		
									=1.7	
White	550	551	478	1,579	550	489	428	1467	-7%	*
African Amer.	8	17	17	42	8	18	1	27	-36%	
Hispanic	17	17	12	46	15	19	7	41	-11%	
Asian/Pac.Isl.	9	25	31	65	17	20	15	52	-20%	
Am.Ind/Alaskan	2	4	. 1	7	2	4	1	7	0%	
Nonresident Alien	423	320	104	847	399	264	103	766	-10%	
Not Reported	0	276	0	276	0	243	0	243	-12%	
% Minority**	6%	10%	11%	9%	7%	11%	5%	8%		
	1994				1995				1994-1995	1991-1995
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL	% Change	
Male	35	45	23	103	47	36	25	108	5%	-2%
Female	18	19	16	53	15	20	12	47	-11%	-15%
TOTAL	53	64	39	156	62	56	37	155	-1%	-6%
% Female	34%	30%	41%	34%	24%	36%	32%	30%		
White	21	28	17	66	23	30	17	70	6%	*
African Amer.	O	2	1	3	1	1	1	3	0%	
Hispanic	O	0	0	0	1	0	I	2	ERR	
Asian/Pac.Isl.	2	2	1	5	O	1	O	1	-80%	
Am.Ind/Alaskan	O	2	O	2	1	O	O	1	-50%	
Nonresident Alien	30	17	21	68	36	15	18	69	1%	
Not Reporting	O	13	O	13	O	9	0	9	-31%	
% Minority	9%	18%	11%	13%	12%	6%	11%	9%		
	1994				1995					1991-1995
ENGINEERING	KSU	KU			KSU	KU			% Change	
Male	328	514	341	1,183	359	500	333	1,192	1%	-19%
Female	52	92	35	179	62	88	40	190	6%	-32%
TOTAL	380	606	376	1,362	421	588	373	1,382	1%	-21%
% Female	14%	15%	9%	13%	15%	15%	11%	14%		
1171. 'A -	144	206	114	561	104	202	104	590	5%	*
White	144	306	114	564	184	302				
African Amer.	2	1	3	6	8	3	4	15	150%	
Hispanic	4	4	6	14	3	6	0	9	-36%	
Asian/Pac.Isl.	3	19	31	53	20	19	13	52	-2%	
Am.Ind/Alaskan	0	1	2	3	0	1	2	3	0%	
Nonresident Alien	227	177	219	623	206	167	250	623	0%	
Not Reporting	0	98	0	98	0	90	0	90	-8%	ē.
% Minority	6%	8%	27%	12%	14%	9%	15%	12%		

SCIENCE, MATH	1994				1995				1994-1995	1991-1995
& ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL	% Change	% Change
Male	1,030	1,200	683	2,913	1,056	1,069	599	2,724	-6%	-9%
Female	412	680	375	1,467	418	632	366	1,416	-3%	2%
TOTAL	1,442	1,880	1,058	4,380	1,474	1,701	965	4,140	-5%	-5%
% Female	29%	36%	35%	33%	28%	37%	38%	34%		
White	715	885	609	2,209	757	821	549	2,127	-4%	*
African Amer.	10	20	21	51	17	22	6	45	-12%	
Hispanic	21	21	18	60	19	25	8	52	-13%	
Asian/Pac.Isl.	14	46	63	123	37	40	28	105	-15%	
Am.Ind/Alaskan	2	7	3	12	3	5	3	11	-8%	
Nonresident Alien	680	514	344	1,538	641	446	371	1,458	-5%	
Not Reporting	0	387	0	387	0	342	0	342	-12%	
% Minority	6%	10%	15%	10%	9%	10%	8%	9%		

^{*}KU data are by fiscal year, KSU & WSU data by academic year (e.g., 1991 data are based upon fall 1990 enrollment). KSU ethnic data are not availab

^{**} Formula used: African American + Hispanic + Asian/Pacific Islander + American Indian/Alaskan Native divided by all groups

SME GRADUATE ENROLLMENT DEMOGRAPHICS FOR KSU, KU, AND WSU

1991-1994 TOTAL % Change 1,627 1,235 2,862 43% 7%		7%/
OTAL 9 1,627 1,235 2,862 43%	1,579 42 46 65 65 7 847 276	103 53 156 34% 66 5 5 68 13%
319 324 643 50%	478 17 12 31 1 104 0	WSU 723 23 16 39 41% 17 17 17 17 0 0 0 21 0 0 11%
KU 641 569 1,210 47%	551 17 17 25 25 4 320 276 10%	KU 45 19 64 30% 50 0 0 0 2 2 13 18%
1994 KSU 667 342 1,009	550 8 17 9 2 423 0 6%	35 18 53 34% 0 0 0 0 0 0 0 0 0 0 0 0
TOTAL 1,509 1,270 2,779 46%	1,632 42 42 39 793 77%	110 55 165 33% 33% 2 4 4 4 4 67 67 9%
WSU 212 411 623 66%	543 16 13 8 8 2 2 41 0 7%	WSU 27 117 444 39% 23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
KU 635 533 1,168 46%	546 15 17 22 3 343 222 9%	KU 42 20 20 62 32% 32% 29 19 9 15%
1993 KSU 662 326 988 33%	543 11 12 9 4 4 409 0 6%	KSU 411 18 59 31% 29 0 0 0 0 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0
TOTAL 1,417 1,315 2,732 48%	1,626 59 42 35 759 7789	109 49 158 31% 73 0 0 0 5 5 72 6 6
WSU 7 157 484 641 76%	545 24 112 9 48 0 8%	WSU 26 26 42 38% 22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
KU 647 514 1,161 44%	572 12 17 20 20 336 202 8%	KU 39 22 61 36% 0 0 0 2 2 24 24 6 13%
1992 KSU 613 317 930	509 23 13 6 4 4 375 0 8%	KSU 44 111 55 20% 20% 0 0 0 0 0 28 0 0 111%
WSU TOTAL 172 1,412 522 1,271 694 2,683 75% 47%	1,170 29 22 20 10 10 155	106 40 40 146 27% 39 0 0 0 1 48 48
WSU 172 522 694 75%	609 17 9 3 9 47 0 6%	WSU 29 211 440 28% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
KU 631 464 1,095 42%	561 13 17 17 336 155 7%	KU 32 22 24 41% 60 0 0 1 1 22 4 7%
1991* KSU 609 285 894 32%	*	45 7 52 13% *
SCIENCE Male Female TOTAL % Female	White African Amer. Hispanic Asian/Pac.Isl. Am.Ind/Alaskan Nonresident Alien Not Reported % Minority**	MATH Male Female TOTAL % Female White African Amer. Hispanic Asian/Pac.Isl. Am.Ind/Alaskan Nonresident Alien Not Reporting % Minority

10
0
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25%

ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU		TOTAL	KSU	KU		FOTAL	KSU	KU		FOTAL
Male	242	478	240	096	270	517		1,042	279	503		1,094	328	514		1,183
Female	28	75	26	129	27	80		137	35	84		157	52	92		179
TOTAL	270	553	266	266 1,089	297	597	285	1,179	314	587	350	1,251	380	909	376	1,362
% Female	10%	14%	%01	12%	%6	13%		12%	11%	14%		13%	14%	15%		13%
White	*	314	112	426	129	314	118	561	135	302	117	554	144	306	114	264
African Amer.		1	3	4	2	3	4	6	2	1	_	4	2	_	3	9
Hispanic		3	2	3	2	4	3	6	2	5	8	15	4	4	9	14
Asian/Pac.Isl.		14	6	23	6	12	6	30	5	19	13	37	3	19	31	53
Am.Ind/Alaskan		-	_	2	0	-	1	2	0	1	2	3	0	1	2	3
Nonresident Alien		160	139	299	155	190	150	495	170	181	209	260	227	177	219	623
Not Reporting		09	0	09	0	73	0	73	0	78	0	78	0	86	0	86
% Minority		%9	12%	7%	%6	%9	13%	%8	%9	%8	17%	10%	%9	%8	27%	12%
												,				
SCIENCE, MATH	1991				1992				1993				1994			
& ENGINEERING	KSU	KU	WSU	TOTAL		KU	WSU	TOTAL	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Male	968	1,141	441	2,478	927	1,203	438	2,568	982	1,180	551	2,713	1,030	1,200	683	2,913
Female	320	561	559	1,440		616	530	1,501	379	637	466	1,482	412	089	375	1,467
TOTAL	1,216	1,702	1,000	3,918		1,819	896	4,069	1,361	1,817	1,017	4,195	1,442	1,880	1,058	4,380
% Female	79%	33%	%95	37%		34%	25%	37%	28%	35%	46%	35%	29%	36%	35%	33%
																i
White	*	901	734	1,635		913	685	2,260	707	877		2,267	715	885	609	2,209
African Amer.		13	20	33		15	28	89	13	17		47	10	20	21	51
Hispanic		16	=	27		21	15	51	14	22		28	21	21	18	09
Asian/Pac.Isl.		32	13	45	18	34	18	70	16	43	21	80	14	46	63	123
Am. Ind/Alaskan		3	10			5	4	13	4	9		14	2	7	3	12
Nonresident Alien		518	212			550	218	1,326	209	543		1,420	089	514	344	1,538
Not Reporting		219	0	219		281	0	281	0	309		309	0	387	0	387
% Minority		7%	7%	7%		%8	%6	%8	%9	%6		%8	%9	10%	15%	10%

^{*}KU data are by fiscal year, KSU & WSU data by academic year (e.g., 1991 data are based upon fall 1990 enrollment). KSU ethnic data are not available for 1991.

^{**} Formula used: African American + Hispanic + Asian/Pacific Islander + American Indian/Alaskan Native divided by all groups

Appendix D

SEM Degrees Awarded

SEM DÉGREES AWARDED

TOTAL						1994-1995	1991-1995
POPULATION	1991	1992	1993	1994	1995	% Change	% Change
Ph.D.	182	236	197	218	238	9%	31%
Masters	559	621	675	787	828	5%	48%
Bachelors	2,723	3,123	3,039	3,205	3,140	-2%	15%
mom. r							
TOTAL	3,464	3,980	3,911	4,210	4,206	-0%	21%
WOMEN							
VI OMEN							
Ph.D.	40	60	61	57	56	-2%	40%
Masters	210	202	285	327	348	6%	66%
Bachelors	1,111	1,233	1,235	1,257	1,260	0%	13%
Subtotal	1,361	1,495	1,581	1,641	1,664	1%	22%
% of Total	39%	38%	40%	39%	40%		
MINODITURE							
MINORITIES *							
Ph.D.	1	2	11	9	26		
Masters	16	15	34	29	37		
Bachelors	147	172	154	218	269		
		.,.	157	210	209		
Subtotal	164	189	199	256	332		
% of Total	5%	5%	5%	6%	8%		9

^{*} KSU ethnic data for science and math are not available from the institution's database.

SEM Ph.D. DEGREES AWARDED

TOTAL POPULATION	1991	1992	1993	1994	1995		1991-1995 % Change
KSU	80	111	87	97	105	8%	31%
KU	93	112	91	97	113	16%	22%
WSU	9	13	19	24	20	-17%	122%
TOTAL	182	236	197	218	238	9%	31%
WOMEN							
KSU	15	23	25	14	25	79%	67%
KU	23	33	32	37	26	-30%	13%
WSU	2	4	4	6	5	-17%	150%
Subtotal	40	60	61	57	56	-2%	40%
% of Total	22%	25%	31%	26%	24%		
MINORITIES *							8
KSU*	*	*	*	*	12		
KU	1	2	7	3	9		
WSU	0	0	4	6	5		
Subtotal	1	2	11	9	26		
% of Total	1%	1%	6%	4%	11%		

^{*} KSU ethnic data for science and math are not available from the institution's database.

SEM Ph.D. DEGREES AWARDED

KSU						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	65	94	70	75	78	4%	20%
Engineering	13	14	13	14	24	71%	85%
Math	2	3	4	8	3	-63%	50%
Subtotal	80	111	87	97	105	8%	31%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	76	89	69	73	97	33%	28%
Engineering	16	18	21	19	14	-26%	-13%
Math	1	5	1	5	2	-60%	100%
Subtotal	93	112	91	97	113	16%	22%
WSU						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	5	5	5	9	4	-56%	-20%
Engineering	4	7	12	13	15	15%	275%
Math	0	1	2	2	1	-50%	ERR
Subtotal	9	13	19	24	20	-17%	122%
KSU, KU, WSU (COMBINE	CD					
						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	146	188	144	157	179	14%	23%
Engineering	33	39	46	46	53	15%	61%
Math	3	9	7	15	6	-60%	100%
TOTAL	182	236	197	218	238	9%	31%

Ph.D. DÉGREES EARNED BY WOMEN

KSU						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	13	20	25	14	21	50%	62%
Engineering	2	2	0	0	3	ERR	50%
Math	0	1	0	0	1	ERR	ERR
Subtotal	15	23	25	14	25	79%	67%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	23	33	30	30	25	-17%	9%
Engineering	0	0	1	4	1	-75%	ERR
Math	0	0	1	3	0	-100%	ERR
Subtotal	23	33	32	37	26	-30%	13%
WSU						1994-1995	1991-1995
		1992	1993	1994	1995	% Change	% Change
	1991	1992	1993	1774	1//0	' CTICLE DO	
Science	1991 1	2	2	5	3	-40%	200%
Science Engineering							100
	1	2	2	5	3	-40%	200%
Engineering	1	2 2	2	5 1	3 2	-40% 100%	200% 100%
Engineering Math	1 1 0 2	2 2 0 4	2 0 2	5 1 0	3 2 0	-40% 100% ERR	200% 100% ERR
Engineering Math Subtotal	1 1 0 2	2 2 0 4	2 0 2	5 1 0	3 2 0	-40% 100% ERR	200% 100% ERR
Engineering Math Subtotal	1 1 0 2	2 2 0 4	2 0 2	5 1 0	3 2 0	-40% 100% ERR -17%	200% 100% ERR 150%
Engineering Math Subtotal	1 0 2 COMBINE	2 2 0 4	2 0 2 4	5 1 0 6	3 2 0 5	-40% 100% ERR -17%	200% 100% ERR 150%
Engineering Math Subtotal KSU, KU, WSU	1 1 0 2 COMBINE	2 2 0 4 D	2 0 2 4	5 1 0 6	3 2 0 5	-40% 100% ERR -17% 1994-1995 % Change	200% 100% ERR 150% 1991-1995 % Change
Engineering Math Subtotal KSU, KU, WSU C	1 0 2 COMBINE 1991 37	2 2 0 4 50 1992 55	2 0 2 4 1993 57	5 1 0 6	3 2 0 5 1995 49	-40% 100% ERR -17% 1994-1995 % Change 0%	200% 100% ERR 150% 1991-1995 % Change 32%
Engineering Math Subtotal KSU, KU, WSU C Science Engineering	1 0 2 COMBINE 1991 37 3	2 2 0 4 50 1992 55 4	2 0 2 4 1993 57	5 1 0 6 1994 49 5	3 2 0 5 1995 49 6	-40% 100% ERR -17% 1994-1995 % Change 0% 20%	200% 100% ERR 150% 1991-1995 % Change 32% 100%

Ph.D. DEGREES: MINORITIES

KSU*						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change**
Science					6	*	*
Engineering	0	0	1	2	6	200%	ERR
Math					0		
Subtotal	0	0	1	2	12		
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	1	1	6	1	8	700%	700%
Engineering	0	1	1	1	1	0%	ERR
Math	0	0	0	1	0	-100%	ERR
Subtotal	1	2	7	3	9	200%	800%
WSU						1001100	
***50	1001	1002	1000	1004	100#	1994-1995	1991-1995
C .	1991	1992	1993	1994	1995	% Change	% Change
Science	0	0	1	2	0	-100%	ERR
Engineering	0	0	3	4	5	25%	ERR
Math	0	. 0	0	0	0	ERR	ERR
Subtotal	0	0	4	6	5	-17%	ERR
KSU, KU and WSI	U COMB	INED					
out the state of t		- 1				1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change

						277 . 2770	TOTAL TOTAL
	1991	1992	1993	1994	1995	% Change	% Change
Science	1	1	7	3	14	*	*
Engineering	0	1	5	7	12	71%	
Math	0	0	0	1	0		
TOTAL	1	2	12	11	26		

^{*1991-1994} KSU ethnic data for science and math are not available from the institution's database.

^{**} Formula: New-Old/Old Percent change cannot be calculated when the "old" year (e.g., 1991) is zero.

SME Ph.D. DEGREES FOR KSU, KU, AND WSU

	TOTAL	130	49	179	27%		89	1	2	90	8	89	11	14%		TOTAL	S	2	7	29%	14	0	1	0	0	S	0	1%
	WSU	-	3	4	75%		4	0	0	0	0	0	0	%0		WSU	П	0	1	%0	0	0	0	0	0		0	%0
	KU	72	25	76	26%		46	0	2	3	3	35	1	15%		KU		0	- 7	%0	-	0	0	0	0	1	0	%0
1995	KSU	57	21	78	27%		39	1	0	5	0	33	0	13%	1995	KSU	2	2	4	20%	13	0	П	0	0	3	0	1%
	TOTAL KSU	108	49	157	31%		44	0	0	3	0	33	2	%9		TOTAL	12	3	15	20%	2	0	0	0	1	4	0	33%
	MSU	4	5	6	26%		4	0	0	2	0	3	0	33%		WSU 1	7	0	7	%0	0	0	0	0	0	2	0	%0
	KU	43	30	73	41%		40	0	0	П	0	30	2	2%		KU	2	3	, vo	%09	2	0	0	0	1	7	0	33%
1994	KSU	61	14	75	19%		*								1994	KSU	8	0	90	%0	*							
	TOTAL	87	57	144	40%		47	2	1	4	0	18	2	13%		TOTAL	4	3	7	43%	1	0	0	0	0	7	0	060
	NSM	3	2	w	40%		3	1	0	0	0	1	0	25%		WSU 1	0	2	2	100%	1	0	0	0	0	1	0	%0
	KU	39	30	69	43%		44	1	_	4	0	17	2	12%		KU	0	-	П	100% 1	0	0	0	0	0	-	0	%0
1993	KSU	45	25	70	36%		*								1993	KSU	4	0	4	0%	*							
	TOTAL	133	55	188	29%		64	1	0	0	0	28	1	2%		TOTAL	∞	1	6	11%	4	0	0	0	0	7	0	%0
	MSU	3	2	S	40%		4	0	0	0	0	1	0	%0		WSU 1	1	0	1	%0	П	0	0	0	0	0	0	%0
	KU	26	33	68	37%		09	1	0	0	0	27	1	2%		KU	5	0	S	%0	3	0	0	0	0	2	0	%0
1992	KSU	74	20	94	21%	ò	*								1992	KSU	2	П	3	33%	*							
	KU* WSU*TOTAL KSU	109	37	146	25%		64	1	0	0	0	16	0	2%		WSU TOTAL KSU	3	0	3	%0	1	0	0	0	0	0	0	%0
	WSU*	4	Ĺ,	S	20%	,	2	0	0	0	0	o.	0	%0		NSU 1	0	0	0	ERR	0	0	0	0	0	0	0	%0
	KU*	53	23	9/	30%	,	59	1	0	0	0	16	0	2%		KU	1	0	1	%0	1	0	0	0	0	0	0	%0
*1661	KSU	52	13	9	20%	,	*								1991	KSU	2	0	7	0%0	*							
	SCIENCE	Male	Female	TOTAL	% Female		Caucasian	African Amer.	Hispanic	Axian/Pac. Isl.	Am.Ind/Alaskan	Nonresident Alien	Not Reported	% Minority**		MATH	Male	Female	TOTAL	% Female	Caucasian	African Amer.	Hispanic	Axian/Pac. Isl.	Am.Ind/Alaskan	Nonresident Alien	Not Reported	% Minority

	TOTAL	47	. 4	23	11%		CI o	۰ ر	7 01	0	26	0	44%			TOTAL	182	57	239	24%	110	110	- u	. 9	10	o 9	66	11	19%
	MSI		C	7 4	13%	7	† <) (7 6	0	9	0	26%			NSU 1	15	5	20	25%	0	0 0	٠ ر	1 c	2) (,	0	38%
	KU	13		14	7%	V	2	0 0	o -	0	000	0	17%			KU	87	26	113	23%	C	75) (1 <	٠ ،	n ;	44	11	15%
1005	KSU	21	c	24	13%	4	0 0	0 0	9	0	12	0	50%		1995	KSU	80	26	106	25%	0.4	00 -)	48	0	18%
	TOTAL	41	V	46	11%	16	0 0	- 0	7 9	0	25	-	30%	•		TOTAL	191	57	218		93	9	- ·	1		- :	70	3	13%
	MSU		-	. [%8%	~	r <	-	٦ ،	0	2	0	20%			WSU 1	18	9	24	25%	0	0 0	- 0	· v		,	01	0	43%
	KU	10	4	19	21%	10	9	0 0	· -	0	10	-	%6			KU	09	37	76		63	3 0	0 0	, (۰ -	1 (7 0	3	2%
1994	KSU	14	0	14	%0	C	1 C		2	0	10	0	20%	1004	1994	KSU	83	14	76	14%	*								
	TOTAL	45	_	46	2%	8	-		4	0	23	0	22%	-		TOTAL	136	19	197	31%	64	,	, ,	1		, ,		7	15%
	. OSM	12	0	12	%0	V	0	0	, w	0	4	0	38%			L OSW	15	4	19	21%	0		0	, «	0) 4	0 0		31%
	KU	20	1	21	2%	=	C		0	0	6	0	8%			KU	59	32	16	35%	55		2	4	C	7,	ĩ		11%
1993	KSU	13	0	13	%0	2	0	0	Π	0	10	0	33%	1003		KSU	62	25	87	29%	*								
	TOTAL	35	4	39	10%	11	0	0	Т	0	19	0	8%			TOTAL	176	09	236	25%	92	1	0	1	0	38	? -	-	3%
	MSU	5	2	7	29%	-	0	0	0	0	9	0	%0			MSU 1	6	4	13	31%	9	0	0	0	0	7		>	%0
	KU	18	0	18	%0	7	0	0	1	0	2	0	13%				79	33	112	29%	70	1	0	-	0	31	-	4	3%
1992	KSU	12	2	14	14%	3	0	0	0	0	11	0	%0	1992		KSU	88	23	111	21%	*								
	WSU TOTAL KSU	30	3	33	%6	12	0	0	0	0	21	0	%0			WSU TOTAL KSU	142	40	182	22%	75	1	0	0	0	26	•	> 1	1%
	MSU	3	1	4	25%	2	0	0	0	0	2	0	%0			VSU T	7	2	6	22%	7	0	0	0	0	2	0	2	%0
	KU	16	0	16	%0	∞	0	0	0	0	∞	0	%0				70	23	93	25%	89	-	0	0	0	24	0	,	1%
1991	KSU	11	2	13	15%	2	0	0	0	0	11	0	%0	1991		KSU	9	15		19%	*								
	ENGINEERING	Male	Female	TOTAL	% Female	Caucasian	African Amer.	Hispanic	Axian/Pac. Isl.	Am.Ind/Alaskan	Nonresident Alien	Not Reported	% Minority	SCIENCE, MATH, 1991	O DISTRIBUTION O	GINEERING	Male	Female	TOTAL	% Female	Caucasian	African Amer.	Hispanic	Axian/Pac. Isl.	Am.Ind/Alaskan	Nonresident Alien	Not Reported		% Minority

* KU data are by fiscal year. KSU and WSU data are by academic year. KSU ethnic data are not available from the institution's database.

^{**} Formula used: African American + Hispanic + Asian/Pacific Islander + American Indian/Alaskan Native divided by all groups.

SME Ph.D. DEGREES FOR KSU, KU, AND WSU

	1004				1005			
SCIENCE	1994 KSU	KU	XXICTI		1995	YEYI	TUCTI	TOTAL
Male	61		WSU	TOTAL		KU	WSU	TOTAL
Female	14	43 30	4 5	108	57	72	1	130
TOTAL	75		9	49	21	25	3	49
% Female	19%	73 41%	56%	157 31%	78	97	4	179
% remaie	19%	41%	30%	31%	27%	26%	75%	27%
Caucasian	*	40	4	44	39	46	4	89
African Amer.		0	0	0	1	0	0	1
Hispanic		0	0	0	0	2	0	2
Axian/Pac. Isl.		1	2	3	5	3	0	8
Am.Ind/Alaskan		0	0	0	0	3	0	3
Nonresident Alien		30	3	33	33	35	0	68
Not Reported		2	0	. 2	0	11	0	11
% Minority**		2%	33%	6%	13%	15%	0%	14%
-								
	1994				1995			
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Male	8	2	2	12	2	2	1	5
Female	0	3	0	3	2	0	0	2
TOTAL	8	5	2	15	4	2	1	7
% Female	0%	60%	0%	20%	50%	0%	0%	29%
Caucasian	*	2	0	2	10			
African Amer.		2	0	2	13	1	0	14
Hispanic		0	0	0	0	0	0	0
Axian/Pac. Isl.		0	0	0	1	0	0	1 0
Am.Ind/Alaskan		1	0	1	0	0	0	0
Nonresident Alien		2	2	4	3	1	1	5
Not Reported		0	0	0	0	0	0	0
% Minority		33%	0%	33%	7%	0%	0%	7%
		00 10	0 /0	33 70	1 70	0 70	0 70	7 70
	1994				1995			
ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Male	14	15	12	41	21	13	13	47
Female	0	4	1	5	3	1	2	6
TOTAL	14	19	13	46	24	14	15	53
% Female	0%	21%	8%	11%	13%	7%	13%	11%
Caucasian	2	10	4	16	6	5	4	15
African Amer.	0	0	0	0	0	0	0	0
Hispanic	0	0	1	1	0	0	2	2
Axian/Pac. Isl.	2	1	3	6	6	1	3	10
Am.Ind/Alaskan	0	0	0	0	0	0	0	0
Nonresident Alien	10	10	5	25	12	8	6	26
Not Reported	0	1	0	1	0	0	0	0
% Minority	50%	9%	50%	30%	50%	17%	56%	44%

SCIENCE, MATH	1994				1995			
& ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Male	83	60	18	161	80	87	15	182
Female	14	37	6	57	26	26	5	57
TOTAL	97	97	24	218	106	113	20	239
% Female	14%	38%	25%	26%	25%	23%	25%	24%
Caucasian	*	52	8	60	58	52	8	118
African Amer.		0	0	0	1	0	0	1
Hispanic		0	1	1	1	2	2	5
Axian/Pac. Isl.		2	5	7	11	4	3	18
Am.Ind/Alaskan		1	0	1	0	3	0	3
Nonresident Alien		42	10	52	48	44	7	99
Not Reported		3	0	3	0	11	0	11
% Minority		5%	43%	13%	18%	15%	38%	19%

^{*} KU data are by fiscal year. KSU and WSU data are by academic year. KSU ethnic data are not availab

SEM MASTERS DEGREES

						1994-1995	1991-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
Science	113	147	143	175	151	-14%	34%
Engineering	64	70	67	76	114	50%	78%
Math	2	7	4	9	4	-56%	100%
Subtotal	179	224	214	260	269	3%	50%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	129	143	119	144	142	-1%	10%
Engineering	94	112	116	95	118	24%	26%
Math	12	14	6	12	9	-25%	-25%
Subtotal	235	269	241	251	269	7%	14%
WSU	545					1994-1995	1991-1995
WSU	1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
WSU Science	1991 91	19 92 78	1993 164	1994 190	1995 194	% Change 2%	% Change 113%
						% Change	% Change
Science	91	78	164	190	194	% Change 2%	% Change 113%
Science Engineering	91 53	78 48	164 48	190 78	194 87	% Change 2% 12%	% Change 113% 64%
Science Engineering Math	91 53 1	78 48 2	164 48 8	190 78 8	194 87 9	% Change 2% 12% 13%	% Change 113% 64% 800%
Science Engineering Math	91 53 1 145	78 48 2	164 48 8	190 78 8	194 87 9	% Change 2% 12% 13% 5%	% Change 113% 64% 800% 100%
Science Engineering Math Subtotal	91 53 1 145	78 48 2	164 48 8	190 78 8	194 87 9	% Change 2% 12% 13%	% Change 113% 64% 800% 100%
Science Engineering Math Subtotal KU, KSU, AND W	91 53 1 145	78 48 2	164 48 8	190 78 8	194 87 9 290	% Change 2% 12% 13% 5%	% Change 113% 64% 800% 100%
Science Engineering Math Subtotal KU, KSU, AND W	91 53 1 145 SU	78 48 2 128	164 48 8 220	190 78 8 276	194 87 9 290	% Change 2% 12% 13% 5% 1994-1995 % Change -4%	% Change 113% 64% 800% 100% 1991-1995 % Change 46%
Science Engineering Math Subtotal KU, KSU, AND W COMBINED	91 53 1 145 SU	78 48 2 128	164 48 8 220	190 78 8 276	194 87 9 290	% Change 2% 12% 13% 5% 1994-1995 % Change	% Change 113% 64% 800% 100% 1991-1995 % Change 46% 51%
Science Engineering Math Subtotal KU, KSU, AND W COMBINED	91 53 1 145 SU 1991 333	78 48 2 128 1992 368	164 48 8 220 1993 426	190 78 8 276 1994 509	194 87 9 290 1995 487	% Change 2% 12% 13% 5% 1994-1995 % Change -4%	% Change 113% 64% 800% 100% 1991-1995 % Change 46%

MASTERS DEGREES EARNED BY WOMEN

KSU .						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	47	59	62	75	67	-11%	43%
Engineering	7	6	7	9	24	167%	243%
Math	0	1	3	6	2	-67%	ERR
Subtotal	54	66	72	90	93	3%	72%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	64	59	60	74	73	-1%	14%
Engineering	7	17	16	12	15	25%	114%
Math	6	5	2	4	4	0%	-33%
Subtotal	77	81	78	90	92	2%	19%
9							
WSU	9					1994-1995	1991-1995
	1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
WSU Science	1991 73	52	132	1994 138	1995 144		% Change 97%
	1991 73 6	52 3		138 4	144 16	% Change 4% 300%	% Change 97% 167%
Science	1991 73	52 3 0	132 2 1	138 4 5	144 16 3	% Change 4% 300% -40%	% Change 97%
Science Engineering	1991 73 6	52 3	132	138 4	144 16	% Change 4% 300%	% Change 97% 167%
Science Engineering Math Subtotal	73 6 0 79	52 3 0	132 2 1	138 4 5	144 16 3	% Change 4% 300% -40%	% Change 97% 167% ERR
Science Engineering Math Subtotal KU, KSU, AND W	73 6 0 79	52 3 0	132 2 1	138 4 5	144 16 3	% Change 4% 300% -40% 11%	% Change 97% 167% ERR 106%
Science Engineering Math Subtotal	1991 73 6 0 79	52 3 0 55	132 2 1 135	138 4 5 147	144 16 3 163	% Change 4% 300% -40% 11%	% Change 97% 167% ERR 106%
Science Engineering Math Subtotal KU, KSU, AND W COMBINED	1991 73 6 0 79 SU	52 3 0 55	132 2 1 135	138 4 5 147	144 16 3 163	% Change 4% 300% -40% 11% 1994-1995 % Change	% Change 97% 167% ERR 106% 1991-1995 % Change
Science Engineering Math Subtotal KU, KSU, AND W COMBINED	1991 73 6 0 79 SU 1991 184	52 3 0 55 1992 170	132 2 1 135 1993 254	138 4 5 147 1994 287	144 16 3 163 1995 284	% Change 4% 300% -40% 11% 1994-1995 % Change -1%	% Change 97% 167% ERR 106% 1991-1995 % Change 54%
Science Engineering Math Subtotal KU, KSU, AND W COMBINED Science Engineering	1991 73 6 0 79 SU 1991 184 20	52 3 0 55 1992 170 26	132 2 1 135 1993 254 25	138 4 5 147 1994 287 25	144 16 3 163 1995 284 55	% Change 4% 300% -40% 11% 1994-1995 % Change -1% 120%	% Change 97% 167% ERR 106% 1991-1995 % Change 54% 175%
Science Engineering Math Subtotal KU, KSU, AND W COMBINED	1991 73 6 0 79 SU 1991 184	52 3 0 55 1992 170	132 2 1 135 1993 254	138 4 5 147 1994 287	144 16 3 163 1995 284	% Change 4% 300% -40% 11% 1994-1995 % Change -1%	% Change 97% 167% ERR 106% 1991-1995 % Change 54%

MASTERS DEGREES: MINORITIES

*						1994-1995	1991-1995
KSU*	1991	1992	1993	1994	1995	% Change	% Change
Science					2	*	*
Engineering	2	3	1	1	10	900%	-50%
Math					0		
Subtotal	2	3	1	1	12		
						1994-1995	1991-1995
KU-Lawrence	1991	1992	1993	1994	1995	% Change	% Change
Science	4	3	6	7	4	-43%	0%
Engineering	6	1	5	4	2	-50%	-67%
Math	0	O	O	0	1	ERR	ERR
Subtotal	10	4	11	11	7	-36%	-30%
WSU	9					1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	1	5	14	11	14	27%	1300%
Engineering	3	3	7	6	3	-50%	0%
Math	0	O	1	0	1	ERR	ERR
Subtotal	4	8	22	17	18	6%	350%
KSU, KU, AND V	VSU	81					
COMBINED	VSU	į.				1994-1995	1991-1995
150 5	VSU 1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
150 5		1992 8	1993 20	1994 18	1995 20		
COMBINED	1991					% Change	
COMBINED Science	1991 5	8	20	18	20	% Change	% Change

^{*1991-1994} KSU ethnic data for science and math are not available from institution's database.

SEM BACHELOR DEGREES

						1994-1995	1991-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
Science	571	429	721	788	745	-5%	30%
Engineering	352	618	416	403	387	-4%	10%
Math	12	19	7	12	15	25%	25%
Subtotal	935	1,066	1,144	1,203	1,147	-5%	23%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	894	1,037	1,078	1,091	1,096	0%	23%
Engineering	283	239	295	311	293	-6%	4%
Math	33	26	26	31	18	-42%	-45%
Subtotal	1,210	1,302	1,399	1,433	1,407	-2%	16%
WSU	,					1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	421	456	333	375	399	6%	-5%
Engineering	143	285	147	182	169	-7%	18%
Math	14	14	16	12	18	50%	29%
Subtotal	578	755	496	569	586	3%	1%
KSU, KU, AND V	WSU						
COMBINED						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
							100 100 100
Science	1,886	1,922	2,132	2,254	2,240	-1%	19%
Science Engineering	1,886 778	1,922 1,142	2,132 858	2,254 896	2,240 849	-1% -5%	19% 9%

BACHELOR DEGREES EARNED BY WOMEN

*						1994-1995	1991-1995
KSU	1991	1992	1993	1994	1995	% Change	% Change
Science	223	248	338	343	296	-14%	33%
Engineering	44	56	55	53	50	-6%	14%
Math	4	7	6	5	3	-40%	-25%
Subtotal	271	311	399	401	349	-13%	29%
KU-Lawrence						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	459	516	555	556	579	4%	26%
Engineering	34	37	40	42	60	43%	76%
Math	12	10	9	9	5	-44%	-58%
Subtotal	505	563	604	607	644	6%	28%
WSU	34					1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	312	325	206	226	238	5%	-24%
Engineering	15	30	17	19	21	11%	40%
Math	8	4	9	4	8	100%	0%
Subtotal	335	359	232	249	267	7%	-20%
		1/2					
KSU, KU, AND W	$\mathbf{S}\mathbf{U}$						
COMBINED						1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	994	1089	1099	1125	1113	-1%	12%
Engineering	93	123	112	114	131	15%	41%
Math	24	21	24	18	16	-11%	-33%
TOTAL	1,111	1,233	1,235	1,257	1,260	0%	13%

BACHELOR DEGREES: MINORITIES

						1994-1995	1991-1995
KSU*	1991	1992	1993	1994	1995	% Change	% Change
Science					37	*	*
Engineering	19	21	21	24	34	42%	26%
Math					3		
Subtotal	19	21	21	24	74		
						1994-1995	1991-1995
KU-Lawrence	1991	1992	1993	1994	1995	% Change	% Change
Science	49	73	57	92	113	23%	131%
Engineering	21	21	18	20	13	-35%	-38%
Math	2	1	2	0	1	ERR	-50%
Subtotal	72	95	77	112	127	13%	76%
WSU	10					1994-1995	1991-1995
	1991	1992	1993	1994	1995	% Change	% Change
Science	36	30	36	55	47	-15%	31%
Engineering	20	24	17	24	19	-21%	-5%
Math	0	2	3	3	2	-33%	ERR
Subtotal	56	56	56	82	68	-17%	21%
		40					
KSU, KU AND WS	SU	£					
KSU, KU AND WS	SU	iii				1994-1995	1991-1995
ACTION EXPLORED STREET, MAIN	SU 1991	1992	1993	1994	1995	1994-1995 % Change	1991-1995 % Change
ACTION EXPLORED STREET, MAIN			1993 93	1994 147	1995 197		
COMBINED	1991	1992	37.5			% Change	% Change
COMBINED Science	1991 85	1 992 103	93	147	197	% Change *	% Change

^{*1991-1994} KSU ethnic data for science and math are not available from institution's database.

Appendix E

NSF Grant Activity

NSF GRANT ACTIVITY: PERCENT CHANGE

Funde	d plus	Not	Funa	led:
Lunue	puis	LYOL	runa	eu.

	Dollars:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	\$24,646,160	\$35,931,420	\$23,528,711	\$35,015,844	\$47,225,611	35%	92%
Math	\$3,162,157	\$5,954,566	\$1,241,183	\$2,379,962	\$2,629,378	10%	-17%
Engineering	\$5,044,796	\$7,258,708	\$10,046,765	\$13,758,091	\$25,050,960	82%	397%
TOTAL	\$32,853,113	\$49,144,694	\$34,816,659	\$51,153,897	\$74,905,949	46%	128%
w/o NSF EPS	SCoR .			6	\$71,469,949	40%	118%
	Number:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	53	173	152	189	207	10%	291%
Math	35	46	21	34	27	-21%	-23%
Engineering	53	54	68	82	96	17%	81%
TOTAL	141	273 .	241	305	330	8%	134%
Funded:							
	Dollars:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	\$5,281,202	\$7,512,065	\$5,493,074	\$9,595,508	\$7,684,140	-20%	45%
Math	\$258,118	\$977,796	\$391,164	\$541,216	\$549,576	2%	113%
Engineering	\$470,403	\$689,266	\$2,028,060	\$1,152,649	\$4,141,731	259%	780%
TOTAL	\$6,009,723	\$9,179,127	\$7,912,298	\$11,289,373	\$12,375,447	10%	106%
w/o NSF EPS	CoR				\$8,939,447	-21%	49%
1	Number:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	53	55	55	82	71	-13%	34%
Math	9	13	10	12	11	-8%	22%
Engineering	10	13	11	19	30	58%	200%
TOTAL	72	81	76	113	112	-1%	56%

^{*} Some 1995 grants are still pending so data are incomplete. NSF EPSCoR = \$3,436,000

^{**1995} compared to 1992: percent change

NSF GRANTS AWARDED: PERCENT CHANGE

						1991-1995
KSU	1991	1992	1993	1994	1995 *	% Change
Science	\$2,907,520	\$3,370,874	\$1,889,133	\$6,184,489	\$3,767,038	30%
Engineering	\$103,901	\$425,544	\$167,096	\$597,129	\$572,467	451%
Math	\$73,445	\$135,134	\$40,668	\$219,972	\$183,900	150%
TOTAL	\$3,084,866	\$3,931,552	\$2,096,897	\$7,001,590	\$4,523,405	47%
KU	1991	1992	1993	1994	1995 *	% Change
Science	\$2,314,026	\$4,042,787	\$3,224,209	\$2,850,728	\$3,126,162	35%
Engineering	\$366,502	\$24,510	\$1,750,511	\$545,015	\$3,375,705	821%
Math	\$117,919	\$699,015	\$177,384	\$169,907	\$231,187	96%
TOTAL	\$2,798,447	\$4,766,312	\$5,152,104	\$3,565,650	\$6,733,054	141%
w/o NSF EPSCol	R				\$3,297,054	18%
WSU	1991	1992	1993	1994	1995 *	% Change
Science	\$59,656	\$98,404	\$379,732	\$560,291	\$790,940	1226%
Engineering	\$0	\$239,212	\$110,453	\$10,505	\$193,559	ERR
Math	\$66,754	\$143,647	\$173,112	\$151,337	\$134,489	101%
TOTAL	\$126,410	\$481,263	\$663,297	\$722,133	\$1,118,988	785%
State Total:	1991	1992	1993	1994	1995 *	% Change
Science	\$5,281,202	\$7,512,065	\$5,493,074	\$9,595,508	\$7,684,140	45%
Engineering	\$470,403	\$689,266	\$2,028,060	\$1,152,649	\$4,141,731	780%
Math	\$258,118	\$977,796	\$391,164	\$541,216	\$549,576	113%
TOTAL	\$6,009,723	\$9,179,127	\$7,912,298	\$11,289,373	\$12,375,447	106%
w/o NSF EPSCoF	t				\$8,939,447	49%

^{*} Some grants still pending so dollars awarded could increase. KU engineering dollars include NSF EPSCoR

NUMBER	AND DOLL	ARSFOR	NSF GRANTS:	EV 1005*
ALIVIDER	A VIII IIVII II	MINDELIN	VOC UTCALLO	F I 1 7 7 1

NUMBER					AMOUNT			
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	29	29	13	71	\$3,767,038	\$3,126,162	\$790,940	\$7,684,140
Not Funded	35	55	14	104	\$11,432,157	\$15,289,580	\$3,690,784	\$30,412,521
Pending	19	13	0	32	\$5,788,860	\$3,340,090	\$0	\$9,128,950
Total *	83	97	27	207	\$20,988,055	\$21,755,832	\$4,481,724	\$47,225,611
% Awarded	35%	30%	48%	34%	18%	14%	18%	16%
Avg. \$ Awarded					\$129,898	\$107,799	\$60,842	\$108,227
MATH								
Awarded	3	5	3	11	\$183,900	\$231,187	\$134,489	\$549,576
Not Funded	6	3	5	14	\$656,883	\$640,020	\$570,569	\$1,867,472
Pending	1	1	0	2	\$115,015	\$97,315	\$0	\$212,330
Total *	10	9	8	27	\$955,798	\$968,522	\$705,058	\$2,629,378
% Awarded	30%	56%	38%	41%	19%	24%	19%	21%
Avg. \$ Awarded				*	\$61,300	\$46,237	\$44,830	\$49,961
ENGINEERING								
Awarded	12	8	10	30	\$572,467	\$3,375,705	\$193,559	\$4,141,731
Not Funded	24	14	13	51	\$5,610,007	\$4,643,735	\$1,789,657	\$12,043,399
Pending	8	6	1	15	\$2,451,813	\$5,214,017	\$1,200,000	\$8,865,830
Total*	44	28	24	96	\$8,634,287	\$13,233,457	\$3,183,216	\$25,050,960
% Awarded	27%	29%	42%	31%	7%	26%	6%	17%
Avg. \$ Awarded					\$47,706	\$421,963	\$19,356	\$138,058
					w/o NSF EPSCoR	\$9,797,457		\$21,614,960
OTHER								
Awarded	2	2	0	4	\$104,910	\$57,462	\$0	\$162,372
Not Funded	3	2	0	5	\$7,909,390	\$208,608	\$0	\$8,117,998
Pending	2	1	0	3	\$4,229,180	\$49,700	\$0	\$4,278,880
Total*	7	5	0	12	\$12,243,480	\$315,770	\$0	\$12,559,250
% Awarded	29%	40%	ERR	33%	1%	18%	ERR	1%
Avg. \$ Awarded					\$52,455	\$28,731	ERR	\$40,593
SME TOTAL								
Awarded	44	42	26	112	\$4,523,405	\$6,733,054	\$1,118,988	\$12,375,447
Not Funded	65	72	32	169	\$17,699,047	\$20,573,335	\$6,051,010	\$44,323,392
Pending	28	20	1	49	\$8,355,688	\$8,651,422	\$1,200,000	\$18,207,110
Total*	137	134	59	330	\$30,578,140	\$35,957,811	\$8,369,998	\$74,905,949
% Awarded	32%	31%	44%	34%	15%	19%	13%	17%
Avg. \$ Awarded					\$102,805	\$160,311	\$43,038	\$110,495
CMTO TOTAL	TZCIT	TZYI	WOII		w/o NSF EPSCoR	\$32,521,811	Wen	\$71,469,949
SMEO TOTAL	KSU	KU		NUMBER		KU	WSU	AMOUNT \$12.537.810
Awarded	46	44	26	116	\$4,628,315	\$6,790,516	\$1,118,988	\$12,537,819
Not Funded	68	74	32	174	\$25,608,437	\$20,781,943	\$6,051,010	\$52,441,390
Pending	30	21	1	52	\$12,584,868	\$8,701,122	\$1,200,000	\$22,485,990
Total	144	139	59	342	\$42,821,620	\$36,273,581	\$8,369,998	\$87,465,199
% Awarded	32%	32%	44%	34%	11%	19%	13%	14%
Avg. \$ Awarded					\$100,616	\$154,330	\$43,038	\$108,085

^{*}Includes NSF EPSCoR. Total may not equal total \$ submitted since \$ awarded may not equal \$ submitted.

^{*}KU data do not include Medical Center.

¹⁹⁹⁵ data are incomplete due to grants still pending.

NUMBER AND DOLLARS FOR NSF GRANTS: FY 1994

NUMBER					AMOUNT			
SCIENCE:	KSŲ	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	35	39	8	82	\$6,184,489	\$2,850,728	\$560,291	\$9,595,508
Not Funded	39	54	14	107	\$11,479,661	\$11,767,034	\$2,173,641	\$25,420,336
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	74	93	22	189	\$17,664,150	\$14,617,762	\$2,733,932	
% Awarded	47%	42%	36%	43%	35%	20%	20%	27%
Avg. \$ Awarded					\$176,700	\$73,096	\$70,036	\$117,018
						4500000 6 0000	240.0 40 X 00370 650	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	4	6	2	12	\$219,972	\$169,907	\$151,337	\$541,216
Not Funded	8	9	5	22	\$711,621	\$548,971	\$578,154	\$1,838,746
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	12	15	7	34	\$931,593	\$718,878	\$729,491	\$2,379,962
% Awarded	33%	40%	29%	35%	24%	24%	21%	23%
Avg. \$ Awarded				3	\$54,993	\$28,318	\$75,669	\$45,101
	~~~~							
ENGINEERING			WSU	TOTAL	KSU	KU *	WSU	TOTAL
Awarded	11	7	1	19	\$597,129	\$545,015	\$10,505	\$1,152,649
Not Funded	26	18	19	63	\$3,983,237	\$6,186,435	\$2,435,770	\$12,605,442
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total*	37	25	20	82	\$4,580,366	\$6,731,450	\$2,446,275	\$13,758,091
% Awarded	30%	28%	5%	23%	13%	8%	0%	8%
Avg. \$ Awarded					\$54,284	\$77,859	\$10,505	\$60,666
OTHER	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	5	2	0	7	\$1,009,102	\$116,011	\$0	
Not Funded	4	5	0	9	\$6,503,003	\$1,080,249	\$0	\$1,125,113 \$7,583,252
Pending	0	0	0	0	\$0,505,005	\$1,080,249	\$0	\$7,585,252
Total*	9	7	0	16	\$7,512,105	\$1,196,260	\$0	\$8,708,365
% Awarded	56%		ERR	44%	13%	10%	ERR	13%
Avg. \$ Awarded				,,,,	\$201,820	\$58,006	ERR	\$160,730
and the same of th					0201,020	\$50,000	EKK	3100,730
SME TOTAL	KSU	KU	WSU	TOTAL	KSU	KU *	WSU	TOTAL
Awarded	50	52	11	113	\$7,001,590	\$3,565,650	\$722,133	\$11,289,373
Not Funded	73	81	38	192	\$16,174,519			\$39,864,524
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total*	123	133	49	305	\$23,176,109	\$22,068,090	\$5,909,698	\$51,153,897
% Awarded	41%	39%	22%	37%	30%	16%	12%	22%
Avg. \$ Awarded					\$140,032	\$68,570	\$65,648	\$99,906
SMEO TOTAL	KSU	KU		NUMBER	KSU	KU *	WSU	AMOUNT
Awarded	55	54	11	120	\$8,010,692	\$3,681,661	\$722,133	\$12,414,486
Not Funded	77	86	38	201	\$22,677,522	\$19,582,689	\$5,187,565	\$47,447,776
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	132	140	49	321	\$30,688,214	\$23,264,350	\$5,909,698	\$59,862,262
% Awarded	42%	39%	22%	37%	26%	16%	12%	21%
Avg. \$ Awarded					\$145,649	\$68,179	\$65,648	\$103,454
**Includes NICE EDG	CoD	Total m	ou not on	und total C a	shmitted since \$ asy		1 C l iti	- Lad

^{**}Includes NSF EPSCoR. Total may not equal total \$ submitted since \$ awarded may not equal \$ submitted.

^{**}KU data do not include Medical Center.

NUMBER AND	DOLLARS	FOR NSF	GRANTS:	FY 1993*
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NUMBE	R				AMOUNT			
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	West	TOTAL
Awarded	18				\$1,889,133		WSU 7270 722	TOTAL
Not Funded	42				\$7,252,291	FEMALE SCHOOL STREET	\$379,732	P TOTAL LIBERTY IN
Pending	0				\$7,232,291			180 180
Total	60		-			1000	\$0	\$0
% Awarded	30%		47%			\$13,382,816	\$1,004,471	(A)
Avg. \$ Awarded		3770	4//0	30 /0	21% \$104,952		38%	
in g. w in air ded					\$104,952	\$107,474	\$54,247	\$99,874
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	2	5	3		\$40,668		\$173,112	
Not Funded	5	5	1	11	\$530,759		\$15,723	\$850,019
Pending	0	0	0		\$0	15.	\$0	\$0
Total	7	10	4		\$571,427		\$188,835	\$1,241,183
% Awarded	29%	50%	75%		7%	37%	92%	32%
Avg. \$ Awarded					\$20,334	\$35,477	\$57,704	\$39,116
				9	,	,	007,704	557,110
ENGINEERING	KSU	KU*	WSU	TOTAL	KSU	KU *	WSU	TOTAL
Awarded	3	6	2	11	\$167,096	\$1,750,511	\$110,453	\$2,028,060
Not Funded	30	14	13	57	\$4,797,565	\$2,232,572	\$988,568	\$8,018,705
Pending	0	0	O	0	\$0	\$0	\$0	\$0
Total	33	20	15	68	\$4,964,661	\$3,983,083	\$1,099,021	\$10,046,765
% Awarded	9%	30%	13%	16%	3%	44%	10%	20%
Avg. \$ Awarded					\$55,699	\$291,752	\$55,227	\$184,369
1212200000								
OTHER	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	5	1	2	8	\$263,716	\$378,437	\$117,643	\$759,796
Not Funded	13	5	0	18	\$1,886,435	\$1,434,139	\$0	\$3,320,574
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	18	6	2	26	\$2,150,151	\$1,812,576	\$117,643	\$4,080,370
% Awarded	28%	17%	100%	31%	12%	21%	100%	19%
Avg. \$ Awarded					\$52,743	\$378,437	\$58,822	\$94,975
SME TOTAL	KSU	KU	WSU	TOTAL	VCII	TZTI +	XX/CXI	mom. v
Awarded	23	41	12	76	KSU	KU *	WSU	TOTAL
Not Funded	77	66	22	165	\$2,096,897	\$5,152,104	\$663,297	\$7,912,298
Pending	0	0	0	0	\$12,580,615		\$1,629,030	\$26,904,361
Total	100	107	34	241	\$0	\$17.946.930	\$0	\$0
% Awarded	23%	38%	35%	32%	\$14,677,512 14%		\$2,292,327	\$34,816,659
Avg. \$ Awarded	20 / 0	3070	3370	32 /0		29%	29%	23%
and a samuel					\$91,169	\$125,661	\$55,275	\$104,109
SMEO TOTAL	KSU	KU	WSU	NUMBER	KSU	KU *	WSU	AMOUNT
Awarded	28	42	14	84	\$2,360,613	\$5,530,541	\$780,940	\$8,672,094
Not Funded	90	71	22	183	\$14,467,050			\$30,224,935
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	118	113	36	267	\$16,827,663			\$38,897,029
% Awarded		37%	39%	31%	14%	28%	32%	22%
Avg. \$ Awarded					\$84,308	\$131,680	\$55,781	\$103,239
*Includes NSF EPSCoP	Total was	v not see	I total &	h	001,000	JIJ1,000	Ψυυ,/01	9103,239

^{*}Includes NSF EPSCoR. Total may not equal total \$ submitted since \$ awarded may not equal \$ submitted.

^{*}KU data do not include Medical Center.

TO MEETING D	NUMI		AT THE T	710.1	1 1772	AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	22	30	3	55	\$3,370,874	\$4,042,787	\$98,404	\$7,512,065
Not Funded	39	65	14		\$7,360,841	\$17,940,115	\$3,118,399	
Pending	0	0	0		\$0	\$0	\$5,116,599	\$0
Total	61	95	17		\$10,731,715	\$21,982,902	\$3,216,803	\$35,931,420
% Awarded	36%	32%	18%		31%	18%	35,210,305	21%
Avg. \$ Awarded	3070	3270	10 / 0	3270	\$153,222	\$134,760	\$32,801	\$136,583
Avg. 5 Awarded					5155,222	3134,700	332,801	3130,383
MATH	KSU*	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	5	6	2	13	\$135,134	\$699,015	\$143,647	\$977,796
Not Funded	14	8	11	33	\$3,358,040	\$744,035	\$874,695	\$4,976,770
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	19	14	13	46	\$3,493,174	\$1,443,050	\$1,018,342	\$5,954,566
% Awarded	26%	43%	15%	28%	4%	48%	14%	16%
Avg. \$ Awarded	** Includ	les statisti	cs	ū.	\$27,027	\$116,503	\$71,824	\$75,215
								No. 2000 * 100 100 100 100 100 100 100 100 10
<b>ENGINEERING</b>	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	6	2	5	13	\$425,544	\$24,510	\$239,212	\$689,266
Not Funded	26	11	4	41	\$4,538,113	\$1,861,184	\$170,145	\$6,569,442
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	32	13	9	54	\$4,963,657	\$1,885,694	\$409,357	\$7,258,708
% Awarded	19%	15%	56%	24%	9%	1%	58%	9%
Avg. \$ Awarded					\$70,924	\$12,255	\$47,842	\$53,020
OTHER	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	6	2	0	8	\$1,329,891	\$28,975	\$0	\$1,358,866
Not Funded	5	3	1	9	\$3,220,447	\$293,335	\$634,098	\$4,147,880
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	11	5	1	17	\$4,550,338	\$322,310	\$634,098	\$5,506,746
% Awarded	55%	40%	0%	47%	29%	9%	0%	25%
Avg. \$ Awarded					\$221,649	\$14,488		\$169,858
SME TOTAL	KSU	KU	wsu	TOTAL	KSU	KU	wsu	TOTAL
Awarded	33	38	10	81	\$3,931,552	\$4,766,312	\$481,263	\$9,179,127
Not Funded	79	84	29	192	\$15,256,994	\$20,545,334	\$4,163,239	
Pending	0	0	0	0	\$13,230,994	\$20,343,334	\$4,103,239	\$0
Total	112	122	39	273	\$19,188,546	\$25,311,646	\$4,644,502	\$49,144,694
% Awarded	29%	31%	26%	30%	20%	19%	10%	19%
Avg. S Awarded	23 70	31/0	20 70	30 70	\$119,138	\$125,429	\$48,126	\$113,323
Avg. 5 Awarded					5117,150	3123,427	540,120	3113,023
SMEO TOTAL	KSU	KU	WSU	NUMBER	KSU	KU **	WSU	AMOUNT
Awarded	39	40	10	89	\$5,261,443	\$4,795,287	\$481,263	\$10,537,993
Not Funded	84	87	30	201	\$18,477,441	\$20,838,669	\$4,797,337	\$44,113,447
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	123	127	40	290	\$23,738,884	\$25,633,956	\$5,278,600	\$54,651,440
% Awarded	32%	31%	25%	31%	22%	19%	9%	19%
Avg. \$ Awarded					\$134,909	\$119,882	\$48,126	\$118,404

^{*}Includes NSF EPSCoR. Total may not equal total \$ submitted since \$ awarded may not equal \$ submitted.

^{*}KU data do not include Medical Center.

NUMBER AND DOLLARS FOR NSF GRANTS: FY 1991

NUMBER AND D	NUMI		KNSF	KANIS: F	¥ 1991	AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	TZCTI	AMOUNT	XXIOX1	
Awarded	23	29	l	TOTAL 53	KSU	KU	WSU	TOTAL
Not Funded	32	54	10		\$2,907,520	\$2,314,026	\$59,656	\$5,281,202
Pending	0	0	0		\$5,323,489	\$9,608,102	\$4,433,367	
Total	55	83			\$0	\$0	\$0	\$0
% Awarded	42%	35%	11 9%		\$8,231,009	\$11,922,128	\$4,493,023	\$24,646,160
Avg. S Awarded	4270	3370	970	100%	35%	19%	1%	21%
Avg. 5 Awarded					\$126,414	\$79,794	\$59,656	\$99,645
MATH	KSU*	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	3	4	2	9	\$73,445	\$117,919	\$66,754	\$258,118
Not Funded	13	10	3	26	\$1,708,067	\$1,106,845	\$89,127	\$2,904,039
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	16	14	5	35	\$1,781,512	\$1,224,764	\$155,881	\$3,162,157
% Awarded	19%	29%	40%	26%	4%	10%	43%	8%
Avg. \$ Awarded	* Include	s statistics	i	9	\$24,482	\$29,480	\$33,377	\$28,680
ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	4	6	0	10	\$103,901	\$366,502	\$0	\$470,403
Not Funded	20	16	7	43	\$1,733,744	\$1,717,203	\$1,123,446	\$4,574,393
Pending	0	0	0	0	\$0		\$0	\$0
Total	24	22	7	53	\$1,837,645	\$2,083,705	\$1,123,446	\$5,044,796
% Awarded	17%	27%	0%	19%	6%	18%	0%	9%
Avg. \$ Awarded					\$25,975	\$61,084	\$0	\$47,040
OTHER	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	4	2	1	7	\$333,238	\$605,360	\$92,009	\$1,030,607
Not Funded	8	5	0	13	\$1,896,949	\$570,077	\$0	\$2,467,026
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	12	7	1	20	\$2,230,187	\$1,175,437	\$92,009	\$3,497,633
% Awarded	33%	29%	100%	35%	15%	52%	100%	29%
Avg. \$ Awarded					\$83,310	\$302,680	\$92,009	\$147,230
						***************************************		,
SME TOTAL	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	30	39	3	72	\$3,084,866	\$2,798,447	\$126,410	\$6,009,723
Not Funded	65	80	20	165	\$8,765,300	\$12,432,150	\$5,645,940	\$26,843,390
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	95	119	. 23	237	\$11,850,166	\$15,230,597	\$5,772,350	\$32,853,113
% Awarded	32%	33%	13%	30%	26%	18%	2%	18%
Avg. \$ Awarded					\$102,829	\$71,755	\$42,137	\$83,468
SMEO TOTAL	KSU	KU	WSU	NUMBER	KSU	KU	WSU	AMOUNT
Awarded	34	41	4	79	\$3,418,104	\$3,403,807	\$218,419	\$7,040,330
Not Funded	73	85	20	178	\$10,662,249	\$13,002,227	\$5,645,940	\$29,310,416
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total	107	126	24	257	\$14,080,353	\$16,406,034	\$5,864,359	\$36,350,746
% Awarded	32%	33%	17%	31%	24%	21%	4%	19%
Avg. \$ Awarded					\$100,532	\$83,020	\$54,605	\$89,118
and The beautiful and						2 2 2 2		

^{*}Includes NSF EPSCoR. Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Med. Center.

# Appendix F Total Grant Activity

#### GRANT ACTIVITY ACROSS ALL AGENCIES: PERCENT CHANGE

#### Funded plus Not Funded:

	Dollars:			S#		'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	\$115,545,909	\$144,557,533	\$126,321,749	\$163,557,672	\$173,239,043	6%	50%
Math	\$3,549,641	\$3,740,913	\$2,493,743	\$3,992,524	\$3,549,487	-11%	-0%
Engineering	\$16,166,830	\$35,001,028	\$41,919,172	\$73,802,361	\$60,986,800	-17%	277%
TOTAL	\$135,262,380	\$183,299,474	\$170,734,664	\$241,352,557	\$237,775,330	-1%	76%
w/o NSF EPS	SCoR				\$234,339,330	-3%	73%
	Number:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	996	1,239	1,325	1,324	1,319	-0%	32%
Math	38	57	33	53	41	-23%	8%
Engineering	255	359	360	449	395	-12%	55%
TOTAL	1,289	1,655	1,718	1,826	1,755	-4%	36%
Funded:							
1 M/Idea.							
	Dollars:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	\$44,777,307	\$54,160,045	\$49,530,343	\$53,700,820	\$44,342,331	-17%	-1%
Math	\$407,662	\$1,268,470	\$448,657	\$601,826	\$639,032	6%	57%
Engineer	\$6,200,573	\$12,077,247	\$13,818,151	\$16,771,871	\$16,211,982	-3%	161%
TOTAL	\$51,385,542	\$67,505,762	\$63,797,151	\$71,074,517	\$61,193,345	-14%	19%
w/o NSF EPS	SCoR				\$57,757,345	-19%	12%
]	Number:					'94 to 95	'91 to 95
	1991	1992	1993	1994	1995*	% Change	% Change
Science	535	668	748	756	675	-11%	26%
Math	11	25	13	15	15	0%	36%
Engineer	151	195	203	191	199	4%	32%
TOTAL	697	888	964	962	889	-8%	28%

^{*} Some 1995 grants are still pending so data are incomplete. NSF EPSCoR = \$3,436,000

^{**1995} compared to 1992: percent change

### TOTAL GRANTS AWARDED: PERCENT CHANGE

						1991-1995
KSU	1991	1992	1993	1994	1995 *	% Change
Science	\$17,163,755	\$23,830,079	\$19,780,635	\$22,608,826	\$17,229,095	0%
Engineering	\$1,496,124	\$4,398,110	\$3,387,740	\$8,305,309	\$3,638,842	143%
Math	\$73,445	\$248,415	\$18,168	\$219,972	\$183,900	150%
TOTAL	\$18,733,324	\$28,476,604	\$23,186,543	\$31,134,107	\$21,051,837	12%
KU	1991	1992	1993	1994	1995 *	% Change
Science	\$26,635,884	\$29,258,075	\$28,581,386	\$28,697,341	\$25,518,433	-4%
Engineering	\$3,507,199	\$5,547,943	\$8,739,476	\$7,898,823	\$11,119,076	217%
Math	\$117,919	\$745,197	\$257,377	\$230,517	\$320,643	172%
TOTAL	\$30,261,002	\$35,551,215	\$37,578,239	\$36,826,681	\$36,958,152	22%
w/o NSF EPSCo	R				\$33,522,152	11%
WSU	1991	1992	1993	1994	1995 *	% Change
Science	\$977,668	\$1,071,891	\$1,168,322	\$2,394,653	\$1,594,803	63%
Engineering	\$1,197,250	\$2,131,194	\$1,690,935	\$567,739	\$1,454,064	21%
Math	\$216,298	\$274,858	\$173,112	\$151,337	\$134,489	-38%
TOTAL	\$2,391,216	\$3,477,943	\$3,032,369	\$3,113,729	\$3,183,356	33%
State Total:	1991	1992	1993	1994	1995 *	% Change
Science	\$44,777,307	\$54,160,045	\$49,530,343	\$53,700,820	\$44,342,331	-1%
Engineering	\$6,200,573	\$12,077,247	\$13,818,151	\$16,771,871	\$16,211,982	161%
Math	\$407,662	\$1,268,470	\$448,657	\$601,826	\$639,032	57%
TOTAL	\$51,385,542	\$67,505,762	\$63,797,151	\$71,074,517	\$61,193,345	19%
w/o NSF EPSC					\$57,757,345	12%

^{*} Some grants are still pending so dollars awarded could increase.

TOTAL GRANTS: FY 1995 **

		NUMBE	ER			AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	291	344	40	675	\$17,229,095	\$25,518,433	\$1,594,803	\$44,342,331
Rejected	121	138	48	307	\$36,993,653	\$29,081,275	\$7,255,895	\$73,330,823
Pending	185	152	0	337	\$35,580,532	\$19,985,357	\$0	\$55,565,889
Total *	597	634	88	1,319	\$89,803,280	\$74,585,065	\$8,850,698	\$173,239,043
% Awarded	48.7%	54.3%	45.5%	51.2%	19.2%	34.2%	18.0%	25.6%
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	3	9	3	15 15	\$183,900	\$320,643	\$134,489	\$639,032
Rejected	8	5	8	21	\$870,089	\$686,017		11.50
Pending	2	3	0	5	\$297,192	\$228,656	\$828,501 \$0	\$2,384,607
Total *	13	17	11	41	\$1,351,181	\$1,235,316	\$962,990	\$525,848 \$3,549,487
% Awarded	23.1%	52.9%	27.3%	36.6%	13.6%	26.0%	14.0%	18.0%
70 Awarueu	23.1 /0	34.9 /0	27.370	30.0 /0	13.0 /6	20.070	14.0%	18.0%
ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU**	WSU	TOTAL
ENGINEERING Awarded	<b>KSU</b> 70	<b>KU</b> 94	WSU 35	TOTAL 199	<b>K</b> SU \$3,638,842	<b>KU**</b> \$11,119,076	<b>WSU</b> \$1,454,064	TOTAL \$16,211,982
Awarded	70	94	35	199	\$3,638,842	\$11,119,076	\$1,454,064	\$16,211,982
Awarded Rejected	70 34	94 49	35 27	199 110	\$3,638,842 \$8,095,141	\$11,119,076 \$9,462,314	\$1,454,064 \$7,085,803	\$16,211,982 \$24,643,258
Awarded Rejected Pending	70 34 38	94 49 47	35 27 1	199 110 86	\$3,638,842 \$8,095,141 \$7,970,034	\$11,119,076 \$9,462,314 \$10,961,526	\$1,454,064 \$7,085,803 \$1,200,000	\$16,211,982 \$24,643,258 \$20,131,560
Awarded Rejected Pending <b>Total</b> *	70 34 38 142	94 49 47 190 49.5%	35 27 1 63 55.6%	199 110 86 395	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800
Awarded Rejected Pending <b>Total</b> *	70 34 38 142	94 49 47 190 49.5%	35 27 1 63 55.6%	199 110 86 395 50.4%	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3%	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6%
Awarded Rejected Pending Total * % Awarded	70 34 38 142 49.3%	94 49 47 190 49.5%	35 27 1 63 55.6% w/o NSF	199 110 86 395 50.4% EPSCoR	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982
Awarded Rejected Pending <b>Total</b> *	70 34 38 142	94 49 47 190 49.5%	35 27 1 63 55.6% w/o NSF	199 110 86 395 50.4%	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800
Awarded Rejected Pending Total * % Awarded	70 34 38 142 49.3%	94 49 47 190 49.5%	35 27 1 63 55.6% w/o NSF	199 110 86 395 50.4% EPSCoR	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3%	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9%	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2%
Awarded Rejected Pending Total * % Awarded	70 34 38 142 49.3%	94 49 47 190 49.5%	35 27 1 63 55.6% w/o NSF	199 110 86 395 50.4% EPSCoR	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9%	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected Pending	70 34 38 142 49.3% KSU 364 163 225	94 49 47 <b>190</b> <b>49.5%</b> <b>KU</b> 447 192 202	35 27 1 63 55.6% w/o NSF WSU 78 83	199 110 86 395 50.4% EPSCoR	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU \$21,051,837	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU \$36,958,152	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9% WSU \$3,183,356	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL \$61,193,345
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected Pending Total *	70 34 38 142 49.3% KSU 364 163 225 752	94 49 47 190 49.5% KU 447 192 202 841	35 27 1 63 55.6% w/o NSF WSU 78 83 1 162	199 110 86 395 50.4% EPSCoR TOTAL 889 438 428 1,755	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU \$21,051,837 \$45,958,883 \$43,847,758 \$110,858,478	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU \$36,958,152 \$39,229,606 \$31,175,539 \$107,363,297	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9% WSU \$3,183,356 \$15,170,199 \$1,200,000 \$19,553,555	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL \$61,193,345 \$100,358,688
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected Pending	70 34 38 142 49.3% KSU 364 163 225	94 49 47 190 49.5% KU 447 192 202 841 53.2%	35 27 1 63 55.6% w/o NSF WSU 78 83 1 162 48.1%	199 110 86 395 50.4% EPSCoR TOTAL 889 438 428 1,755 50.7%	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU \$21,051,837 \$45,958,883 \$43,847,758 \$110,858,478 19.0%	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU \$36,958,152 \$39,229,606 \$31,175,539 \$107,363,297 34.4%	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9% WSU \$3,183,356 \$15,170,199 \$1,200,000	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL \$61,193,345 \$100,358,688 \$76,223,297 \$237,775,330 25,7%
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected Pending Total *	70 34 38 142 49.3% KSU 364 163 225 752	94 49 47 190 49.5% KU 447 192 202 841 53.2%	35 27 1 63 55.6% w/o NSF WSU 78 83 1 162 48.1%	199 110 86 395 50.4% EPSCoR TOTAL 889 438 428 1,755	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU \$21,051,837 \$45,958,883 \$43,847,758 \$110,858,478 19.0% Awarded	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU \$36,958,152 \$39,229,606 \$31,175,539 \$107,363,297 34.4% \$33,522,152	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9% WSU \$3,183,356 \$15,170,199 \$1,200,000 \$19,553,555	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL \$61,193,345 \$100,358,688 \$76,223,297 \$237,775,330 25.7% \$57,757,345
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected Pending Total *	70 34 38 142 49.3% KSU 364 163 225 752	94 49 47 190 49.5% KU 447 192 202 841 53.2%	35 27 1 63 55.6% w/o NSF WSU 78 83 1 162 48.1%	199 110 86 395 50.4% EPSCoR TOTAL 889 438 428 1,755 50.7%	\$3,638,842 \$8,095,141 \$7,970,034 \$19,704,017 18.5% Awarded Total % Awarded KSU \$21,051,837 \$45,958,883 \$43,847,758 \$110,858,478 19.0%	\$11,119,076 \$9,462,314 \$10,961,526 \$31,542,916 35.3% \$7,683,076 \$28,106,916 27.3% KU \$36,958,152 \$39,229,606 \$31,175,539 \$107,363,297 34.4%	\$1,454,064 \$7,085,803 \$1,200,000 \$9,739,867 14.9% WSU \$3,183,356 \$15,170,199 \$1,200,000 \$19,553,555	\$16,211,982 \$24,643,258 \$20,131,560 \$60,986,800 26.6% \$12,775,982 \$57,550,800 22.2% TOTAL \$61,193,345 \$100,358,688 \$76,223,297 \$237,775,330 25,7%

^{*} Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Medical Center.

^{** 1995} data incomplete due to grants still pending. KU engineering data include NSF EPSCoR

TOTAL GRANTS: FY 1994

		NUMBE	R			AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	358	357	41	756	\$22,608,826	\$28,697,341	\$2,394,653	\$53,700,820
Rejected	264	262	42	568	\$69,017,337	\$34,977,909	\$5,861,606	\$109,856,852
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	622	619	83	1,324	\$91,626,163	\$63,675,250	\$8,256,259	\$163,557,672
% Awarded	57.6%	57.7%	49.4%	57.1%	24.7%	45.1%	29.0%	32.8%
		NUMBE	'D			AMOUNT		
MATH:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	4	9	2	15	\$219,972	\$230,517	\$151,337	\$601,826
Rejected	15	16	7	38	\$1,613,757	\$982,339	\$794,602	\$3,390,698
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	19	25	9	53	\$1,833,729	\$1,212,856	\$945,939	\$3,992,524
% Awarded	21.1%			28.3%	12.0%	19.0%	16.0%	15.1%
/ U I K I I SEE CE CE	22.27	001070		more / 0				
		NUMBE	R			AMOUNT		
ENGINEERING:	KSU	NUMBE KU	R WSU	TOTAL	KSU	AMOUNT KU	wsu	TOTAL
ENGINEERING: Awarded				TOTAL 191	<b>KSU</b> \$8,305,309		<b>WsU</b> \$567,739	TOTAL \$16,771,871
	KSU	KU	$\mathbf{W}\mathbf{S}\mathbf{U}$			KU		
Awarded	KSU 88	<b>KU</b> 87	<b>WSU</b> 16	191	\$8,305,309	<b>KU</b> \$7,898,823	\$567,739	\$16,771,871
Awarded Rejected	<b>KSU</b> 88 99	<b>KU</b> 87 96	WSU 16 63	191 258	\$8,305,309 \$24,022,749	<b>KU</b> \$7,898,823 \$21,297,125	\$567,739 \$11,710,616	\$16,771,871 \$57,030,490
Awarded Rejected Pending	<b>KSU</b> 88 99 0	<b>KU</b> 87 96 0	WSU 16 63 0	191 258 0	\$8,305,309 \$24,022,749 \$0	<b>KU</b> \$7,898,823 \$21,297,125 \$0	\$567,739 \$11,710,616 \$0	\$16,771,871 \$57,030,490 \$0
Awarded Rejected Pending Total *	88 99 0 <b>187</b>	<b>KU</b> 87 96 0 <b>183</b>	WSU 16 63 0 79	191 258 0 449	\$8,305,309 \$24,022,749 \$0 \$32,328,058	<b>KU</b> \$7,898,823 \$21,297,125 \$0 <b>\$29,195,948</b>	\$567,739 \$11,710,616 \$0 <b>\$12,278,355</b>	\$16,771,871 \$57,030,490 \$0 \$73,802,361
Awarded Rejected Pending Total *	88 99 0 <b>187</b>	<b>KU</b> 87 96 0 <b>183</b>	WSU 16 63 0 79	191 258 0 449	\$8,305,309 \$24,022,749 \$0 \$32,328,058	<b>KU</b> \$7,898,823 \$21,297,125 \$0 <b>\$29,195,948</b>	\$567,739 \$11,710,616 \$0 <b>\$12,278,355</b>	\$16,771,871 \$57,030,490 \$0 \$73,802,361
Awarded Rejected Pending Total * % Awarded	88 99 0 187 47.1%	KU 87 96 0 183 47.5%	WSU 16 63 0 79 20.3%	191 258 0 449 42.5%	\$8,305,309 \$24,022,749 \$0 \$32,328,058 25.7%	<b>KU</b> \$7,898,823 \$21,297,125 \$0 <b>\$29,195,948 27.1%</b>	\$567,739 \$11,710,616 \$0 \$12,278,355 4.6%	\$16,771,871 \$57,030,490 \$0 \$73,802,361 22.7%
Awarded Rejected Pending Total * % Awarded	88 99 0 187 47.1%	KU 87 96 0 183 47.5%	WSU  16 63 0 79 20.3%	191 258 0 449 42.5%	\$8,305,309 \$24,022,749 \$0 \$32,328,058 25.7%	KU \$7,898,823 \$21,297,125 \$0 \$29,195,948 27.1%	\$567,739 \$11,710,616 \$0 \$12,278,355 4.6% WSU	\$16,771,871 \$57,030,490 \$0 \$73,802,361 22.7%
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded	88 99 0 187 47.1% KSU 450	KU 87 96 0 183 47.5% KU 453	WSU 16 63 0 79 20.3%  WSU 59	191 258 0 449 42.5% TOTAL 962	\$8,305,309 \$24,022,749 \$0 <b>\$32,328,058</b> <b>25.7%</b> <b>KSU</b> \$31,134,107	KU \$7,898,823 \$21,297,125 \$0 <b>\$29,195,948</b> <b>27.1%</b> KU \$36,826,681	\$567,739 \$11,710,616 \$0 <b>\$12,278,355</b> <b>4.6%</b> <b>WSU</b> \$3,113,729	\$16,771,871 \$57,030,490 \$0 \$73,802,361 22.7% TOTAL \$71,074,517
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected	88 99 0 187 47.1% KSU 450 378	KU 87 96 0 183 47.5% KU 453 374	WSU 16 63 0 79 20.3%  WSU 59 112	191 258 0 449 42.5% TOTAL 962 864	\$8,305,309 \$24,022,749 \$0 \$32,328,058 25.7% KSU \$31,134,107 \$94,653,843	KU \$7,898,823 \$21,297,125 \$0 \$29,195,948 27.1% KU \$36,826,681 \$57,257,373	\$567,739 \$11,710,616 \$0 \$12,278,355 4.6% WSU \$3,113,729 \$18,366,824	\$16,771,871 \$57,030,490 \$0 \$73,802,361 22.7% TOTAL \$71,074,517 \$170,278,040

^{*} Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Medical Center.

**TOTAL GRANTS: FY 1993** 

		NUMBE	R			AMOUNT		
SCIENCE:	KSU	KU	$\mathbf{W}\mathbf{S}\mathbf{U}$	TOTAL	KSU	KU	$\mathbf{w}\mathbf{s}\mathbf{u}$	TOTAL
Awarded	346	367	35	748	\$19,780,635	\$28,581,386	\$1,168,322	\$49,530,343
Rejected	288	247	42	577	\$40,412,252	\$32,423,372	\$3,955,782	\$76,791,406
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	634	614	77	1,325	\$60,192,887	\$61,004,758	\$5,124,104	\$126,321,749
% Awarded	54.6%	59.8%	45.5%	56.5%	32.9%	46.9%	22.8%	39.2%
MATH	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	1	9	3	13	\$18,168	\$257,377	\$173,112	\$448,657
Rejected	12	6	2	20	\$1,534,427	\$361,418	\$149,241	\$2,045,086
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	13	15	5	33	\$1,552,595	\$618,795	\$322,353	\$2,493,743
% Awarded	7.7%	60.0%	60.0%	39.4%	1.2%	41.6%	53.7%	18.0%
ENGREEDING	TZOTI	*2**	WOX	mom. r	YZGYI	****	W.O.Y.	<b></b>
ENGINEERING	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	71	102	30	203	\$3,387,740	\$8,739,476	\$1,690,935	\$13,818,151
Rejected	66	58	33	157	\$13,897,304	\$8,344,032	\$5,859,685	\$28,101,021
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	137	160	63	360	\$17,285,044	\$17,083,508	\$7,550,620	\$41,919,172
% Awarded	51.8%	63.8%	47.6%	56.4%	19.6%	51.2%	22.4%	33.0%
SME TOTAL	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	418	478	68	964	\$23,186,543	\$37,578,239	\$3,032,369	\$63,797,151
Rejected	366	311	77	754	\$55,843,983	\$41,128,822	\$9,964,708	\$106,937,513
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	784	789	145	1,718	\$79,030,526	\$78,707,061	\$12,997,077	\$170,734,664
% Awarded	53.3%	60.6%	46.9%	56.1%	29.3%	47.7%	23.3%	37.4%
		- 2.0 . 4			22.070	/ 0		27.170

^{*} Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Medical Center.

# TOTAL GRANTS: FY 1992

		NUMBE	R			AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	313	326	29	668	\$23,830,079	\$29,258,075	\$1,071,891	\$54,160,045
Rejected	261	271	39	571	\$40,383,856	\$43,707,888	\$6,305,744	\$90,397,488
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	574	597	68	1,239	\$64,213,935	\$72,965,963	\$7,377,635	\$144,557,533
% Awarded	54.5%	54.6%	42.6%	53.9%	37.1%	40.1%	14.5%	37.5%
		NUMBE	R			AMOUNT		
MATH:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	10	9	6	25	\$248,415	\$745,197	\$274,858	\$1,268,470
Rejected	17	9	6	32	\$1,415,917	\$762,209	\$294,317	\$2,472,443
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	27	18	12	57	\$1,664,332	\$1,507,406	\$569,175	\$3,740,913
% Awarded	37.0%	50.0%	50.0%	43.9%	14.9%	49.4%	48.3%	33.9%
		> 1 × 1 >						
		NUMBE		momit	KSU	AMOUNT KU	WSU	mom. *
TRIGITATION				TOTAL	KSI	KII	WSII	TOTAL
ENGINEERING:	KSU	KU	WSU					
Awarded	75	91	29	195	\$4,398,110	\$5,547,943	\$2,131,194	\$12,077,247
Awarded Rejected	75 89	91 44	29 31	195 164	\$4,398,110 \$14,033,840	\$5,547,943 \$4,823,410	\$2,131,194 \$4,066,531	\$12,077,247 \$22,923,781
Awarded Rejected Pending	75 89 0	91 44 0	29 31 0	195 164 0	\$4,398,110 \$14,033,840 \$0	\$5,547,943 \$4,823,410 \$0	\$2,131,194 \$4,066,531 \$0	\$12,077,247 \$22,923,781 \$0
Awarded Rejected Pending <b>Total</b> *	75 89 0 <b>164</b>	91 44 0 <b>135</b>	29 31 0 <b>60</b>	195 164 0 359	\$4,398,110 \$14,033,840 \$0 \$18,431,950	\$5,547,943 \$4,823,410 \$0 \$10,371,353	\$2,131,194 \$4,066,531 \$0 \$6,197,725	\$12,077,247 \$22,923,781 \$0 \$35,001,028
Awarded Rejected Pending	75 89 0	91 44 0	29 31 0	195 164 0	\$4,398,110 \$14,033,840 \$0	\$5,547,943 \$4,823,410 \$0	\$2,131,194 \$4,066,531 \$0	\$12,077,247 \$22,923,781 \$0
Awarded Rejected Pending <b>Total</b> *	75 89 0 <b>164</b>	91 44 0 <b>135</b>	29 31 0 <b>60</b>	195 164 0 359	\$4,398,110 \$14,033,840 \$0 \$18,431,950	\$5,547,943 \$4,823,410 \$0 \$10,371,353	\$2,131,194 \$4,066,531 \$0 \$6,197,725	\$12,077,247 \$22,923,781 \$0 \$35,001,028
Awarded Rejected Pending <b>Total</b> *	75 89 0 <b>164</b>	91 44 0 <b>135</b>	29 31 0 <b>60</b>	195 164 0 359	\$4,398,110 \$14,033,840 \$0 \$18,431,950	\$5,547,943 \$4,823,410 \$0 \$10,371,353	\$2,131,194 \$4,066,531 \$0 \$6,197,725	\$12,077,247 \$22,923,781 \$0 \$35,001,028
Awarded Rejected Pending Total * % Awarded	75 89 0 <b>164</b> <b>45.7%</b>	91 44 0 135 67.4%	29 31 0 60 48.3%	195 164 0 359 54.3%	\$4,398,110 \$14,033,840 \$0 \$18,431,950 23.9%	\$5,547,943 \$4,823,410 \$0 \$10,371,353 53.5%	\$2,131,194 \$4,066,531 \$0 \$6,197,725 34.4%	\$12,077,247 \$22,923,781 \$0 \$35,001,028 34.5%
Awarded Rejected Pending Total * % Awarded	75 89 0 164 45.7%	91 44 0 135 67.4%	29 31 0 60 48.3%	195 164 0 359 54.3%	\$4,398,110 \$14,033,840 \$0 \$18,431,950 23.9%	\$5,547,943 \$4,823,410 \$0 \$10,371,353 53.5%	\$2,131,194 \$4,066,531 \$0 \$6,197,725 34.4% WSU	\$12,077,247 \$22,923,781 \$0 \$35,001,028 34.5%
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded	75 89 0 164 45.7% KSU 398	91 44 0 135 67.4% KU 426	29 31 0 60 48.3% WSU 64	195 164 0 359 54.3% TOTAL 888	\$4,398,110 \$14,033,840 \$0 \$18,431,950 23.9% KSU \$28,476,604	\$5,547,943 \$4,823,410 \$0 \$10,371,353 53.5% KU \$35,551,215	\$2,131,194 \$4,066,531 \$0 \$6,197,725 34.4% WSU \$3,477,943	\$12,077,247 \$22,923,781 \$0 \$35,001,028 34.5% TOTAL \$67,505,762
Awarded Rejected Pending Total * % Awarded  SME TOTAL Awarded Rejected	75 89 0 <b>164</b> <b>45.7%</b> <b>KSU</b> 398 367	91 44 0 135 67.4% KU 426 324	29 31 0 <b>60</b> <b>48.3%</b> WSU 64 76	195 164 0 359 54.3% TOTAL 888 767	\$4,398,110 \$14,033,840 \$0 \$18,431,950 23.9% KSU \$28,476,604 \$55,833,613	\$5,547,943 \$4,823,410 \$0 \$10,371,353 53.5% KU \$35,551,215 \$49,293,507	\$2,131,194 \$4,066,531 \$0 \$6,197,725 34.4% WSU \$3,477,943 \$10,666,592	\$12,077,247 \$22,923,781 \$0 \$35,001,028 34.5% TOTAL \$67,505,762 \$115,793,712

^{*} Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Medical Center.

TOTAL GRANTS: FY 1991

TOTAL GRAITS.								
		NUMBE	R			AMOUNT		
SCIENCE:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	208	299	28	535	\$17,163,755	\$26,635,884	\$977,668	\$44,777,307
Rejected	204	223	34	461	\$30,787,172	\$29,754,705	\$10,226,725	\$70,768,602
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	412	522	62	996	\$47,950,927	\$56,390,589	\$11,204,393	\$115,545,909
% Awarded	50.5%	57.3%	45.2%	53.7%	35.8%	47.2%	8.7%	38.8%
		NUMBE	R			AMOUNT		
MATH:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	3	4	4	11	\$73,445	\$117,919	\$216,298	\$407,662
Rejected	9	12	6	27	\$1,446,482	\$1,287,543	\$407,954	\$3,141,979
Pending	0	0	0	0	\$0	\$0	\$0	\$0
Total *	12	16	10	38	\$1,519,927	\$1,405,462	\$624,252	\$3,549,641
% Awarded	25.0%	25.0%	40.0%	28.9%	4.8%	8.4%	34.6%	11.5%
		NUMBE	R			AMOUNT		
ENGINEERING:	KSU	KU	WSU	TOTAL	KSU	KU	WSU	TOTAL
Awarded	35	85	31	151	\$1,496,124	\$3,507,199	\$1,197,250	\$6,200,573
Rejected	34	54	1.0	104		and the second of the second o		\$9,966,257
(40)		24	16	104	\$3,807,567	\$3,945,256	\$2,213,434	39,900,237
Pending	0	0	0	0	\$3,807,567 \$0	\$3,945,256 \$0	\$2,213,434 \$0	\$9,966,257
Pending Total *	0 <b>69</b>				S 8	3 33		
		0 <b>139</b>	0	0	\$0	\$0	\$0	\$0
Total * % Awarded	69 50.7%	0 139 61.2%	0 47 66.0%	0 255 59.2%	\$0 \$5,303,691 28.2%	\$0 \$7,452,455 47.1%	\$0 \$3,410,684 35.1%	\$0 \$16,166,830 38.4%
Total * % Awarded SME TOTAL	69 50.7% KSU	0 139 61.2% KU	0 47 66.0% WSU	0 255 59.2% TOTAL	\$0 \$5,303,691 28.2% KSU	\$0 \$7,452,455 47.1%	\$0 \$3,410,684 35.1% WSU	\$0 \$16,166,830 38.4% TOTAL
Total * % Awarded  SME TOTAL Awarded	69 50.7% KSU 246	0 139 61.2% KU 388	0 47 66.0% WSU 63	0 255 59.2% TOTAL 697	\$0 \$5,303,691 28.2% KSU \$18,733,324	\$0 \$7,452,455 47.1% <b>KU</b> \$30,261,002	\$0 \$3,410,684 35.1% WSU \$2,391,216	\$0 \$16,166,830 38.4% TOTAL \$51,385,542
Total * % Awarded  SME TOTAL Awarded Rejected	69 50.7% KSU 246 247	0 139 61.2% KU 388 289	0 47 66.0% WSU 63 56	0 255 59.2% TOTAL 697 592	\$0 \$5,303,691 28.2% KSU \$18,733,324 \$36,041,221	\$0 \$7,452,455 47.1% KU \$30,261,002 \$34,987,504	\$0 \$3,410,684 35.1% WSU \$2,391,216 \$12,848,113	\$0 \$16,166,830 \$38.4% TOTAL \$51,385,542 \$83,876,838
Total * % Awarded  SME TOTAL Awarded Rejected Pending	69 50.7% KSU 246 247 0	0 139 61.2% KU 388 289 0	0 47 66.0% WSU 63 56 0	0 255 59.2% TOTAL 697 592	\$0 \$5,303,691 28.2% KSU \$18,733,324 \$36,041,221 \$0	\$0 \$7,452,455 47.1% KU \$30,261,002 \$34,987,504 \$0	\$0 \$3,410,684 35.1% WSU \$2,391,216 \$12,848,113 \$0	\$0 \$16,166,830 \$38.4% TOTAL \$51,385,542 \$83,876,838 \$0
Total * % Awarded  SME TOTAL Awarded Rejected	69 50.7% KSU 246 247	0 139 61.2% KU 388 289	0 47 66.0% WSU 63 56	0 255 59.2% TOTAL 697 592	\$0 \$5,303,691 28.2% KSU \$18,733,324 \$36,041,221	\$0 \$7,452,455 47.1% KU \$30,261,002 \$34,987,504	\$0 \$3,410,684 35.1% WSU \$2,391,216 \$12,848,113	\$0 \$16,166,830 \$38.4% TOTAL \$51,385,542 \$83,876,838

^{*} Total may not equal total \$ submitted since \$ awarded may be less than \$ submitted. KU data do not include Medical Center.

# Appendix G EPSCoR Faculty

#### Group I

#### KSU

Banks, M. Borovik, A. Chakrabarti, A. Collinson, M. Consigli, R. Dawes, W. Dodds, W. Edgar. J. Erickson, L. Glasgow, L. Govindaraju, R. Jiang, H. Klabunde, K. Koelliker, J. Law, B. Lin, C. Lin, J. Lucas, M. Maata, E. Meloan, C. O'Shea, M. Rahman, T. Rice, C. Rintoul, D. Riordan, C. Roche, T. Rys, A. Schlup, J. Schwab, A. Seib, P. Sherwood, P. Sorensen, C. Wetzel, D. Wysin, G.

#### KU

Adams, R.

Arritt, R. Aube, J. Benson, D. Bigelow, D. Bowman, R. Bowman-James, K. Braaten, D. Busch, D. Byers, R. Chu, S. Cravens, T. Dorfmeister, J. Engler, T. Gegenheimer, P. Givens, R. Heppert, J. Johnson, C. Kuczera, K. Larive, C. Leimkuhler, B. Lerner, D. Lunte, C. Lunte, S. Macpherson, G. Melott, A. Michaelis, E. Michaelis, M. Ralston, J. Richter, M. Shandarin, S. Siahaan, T. Sophocleous, M. Southard, M. Squier, T. Subramanium, B. Terwilliger, V. Wilson, G. Wong, K.

#### WSU

Alexander, D.
Behrman, E.
Chaudhuri, J.
DeLillo, T.
Elcrat, A.
Hamdeh, H.
Kahol, P.
Kuchment, P.
Motavalli, S.
Papanicolaou, V.
Singhal, R.
Skinner, S.
Stevenson, W.
Taylor, M.

KSU         Name (Rank)         Anthony-Twarog, B. (Prof.)         Agarwal, R. (Asst.)           Beeman, R. (Prof.)         Bean, A. (Asst.)         Arakere, N. (Asst.)           Bolton, T. (Assoc.)         Benson, D. (Asst.)         Brinkman, G. (Instr.           Borovik, A. (Asst.)         Besson, D. (Asst.)         Burns, D. (Asst.)           Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc	Group II	KU-Lawrence	WSU
Name (Rank)         Anthony-Twarog, B. (Prof.) Aube, J. (Assoc.)         Agarwal, R. (Asst.)           Beeman, R. (Prof.)         Bean, A. (Asst.)         Arakere, N. (Asst.)           Bolton, T. (Assoc.)         Benson, D. (Asst.)         Brinkman, G. (Inst.)           Borovik, A. (Asst.)         Besson, D. (Asst.)         Burns, D. (Asst.)           Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman, R. (Asst.)         Handeh, H. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)	YZCII	Name (Rank)	Name (Rank)
Beeman, R. (Prof.)         Bean, A. (Asst.)         Arakere, N. (Asst.)           Bolton, T. (Assoc.)         Benson, D. (Asst.)         Brinkman, G. (Instr.)           Borrovik, A. (Asst.)         Besson, D. (Asst.)         Burns, D. (Asst.)           Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman, R. (Asst.)         Hamdeh, H. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Cravens, T. (Prof.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Givens, R. (Prof.)         Stevenson,		and the second s	Agarwal, R. (Asst.) Alexander, D. (Asst.)
Bolton, T. (Assoc.)         Benson, D. (Asst.)         Brinkman, G. (Instr.)           Borovik, A. (Asst.)         Besson, D. (Asst.)         Burns, D. (Asst.)           Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman, R. (Asst.)         Hamdeh, H. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCornick, B. (Pr           Hua, D. (Prof.)         Cravens, T. (Prof.)         McCornick, B. (Pr           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.) <td< td=""><td>Beeman, R. (Prof.)</td><td></td><td></td></td<>	Beeman, R. (Prof.)		
Borovik, A. (Asst.)         Besson, D. (Asst.)         Burns, D. (Asst.)           Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman, R. (Asst.)         Hamdeh, H. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, Y. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.) <td></td> <td></td> <td></td>			
Buszek, K (Asst.)         Bowman-James, K. (Prof.)         Chaudhuri, J. (Asst.)           Collinson, M. (Asst.)         Bowman, R. (Asst.)         Hamdeh, H. (Asst.)           Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar, J. (Asst.)         Chistianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, C. (Prof.)         Johnson, C. (Assoc.)         Wollner, D.		The state of the s	
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Conrad, G. (Prof.)         Burress, D. (Crtsy.)         Hendry, W. (Prof.)           Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar. J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Maata, E. (Prof.)         Johnson, C. (Assoc.)         Asst. = 14           Ray, N. (Prof.)         Lair, YC. (Asst.)         Prof. = 6		Bowman, R. (Asst.)	
Denell, R. (Prof.)         Busch, D. (Prof.)         Hoffman, K. (Prof.)           Edgar. J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Johnson, L. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Kambhampati, S. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (A           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Maata, E. (Prof.)         Johnson, C. (Assoc.)         Asst. = 14           Rahman, T. (Prof.)         Lai, Y-C. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6		Burress, D. (Crtsy.)	Control of the Contro
Edgar. J. (Asst.)         Christianson, M. (Asst.)         Kahol, P. (Prof.)           Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.)           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Lin, J. (Asst.)         Huang, W. (Asst.)         Wollner, D. (Asst.)           Maata, E. (Prof.)         Johnson, C. (Assoc.)         Wollner, D. (Asst.)           Meng, H. (Asst.)         Kuczera, K. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6           Rice, C. (Assoc.)         Laird, B. (Asst.)         Total = 21           Sid		Busch, D. (Prof.)	Company of the Compan
Fox, R. (Asst.)         Chu, S. (Prof.)         Koert, D. (Asst.)           Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof.           Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (Asst.)           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Klabunde, K. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Mata, E. (Prof.)         Johnson, C. (Assoc.)         Wollner, D. (Asst.)           Meng, H. (Asst.)         Kuczera, K. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Lair, C. (Prof.)         Other = 1           Riordan, C. (Assoc.)         Larive, C. (Asst.)         Total = 21           Sidwell, R. (Assoc.)         Leimkuhler, B. (Assoc.)         Total = 21 <td< td=""><td></td><td>Christianson, M. (Asst.)</td><td></td></td<>		Christianson, M. (Asst.)	
Greiger, D. (Asst.)         Cohen, R. (Assoc.)         Kuchment, P. (Prof. Guikema, J. (Prof.)           Hua, D. (Prof.)         Cravens, T. (Prof.)         McCormick, B. (Prof.)           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         McDonald, J.D. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Li, Y. (Asst.)         Huang, W. (Asst.)         Wollner, D. (Asst.)           Mata, E. (Prof.)         Johnson, C. (Assoc.)         Assoc. = 0           Meng, H. (Asst.)         Kuczera, K. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Lair, Y-C. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6           Rice, C. (Assoc.)         Lan, C. (Prof.)         Other = 1           Riordan, C. (Asst.)         Leimkuhler, B. (Assoc.)         Total = 21           Sidwell, R. (Assoc.)         Mason, K. (Asst.)           Stanton, N. (Prof.)         Melott, A		Chu, S. (Prof.)	20, 100
Guikema, J. (Prof.)         Corbin, V. (Asst.)         McCormick, B. (Pr           Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Li, Y. (Asst.)         Huang, W. (Asst.)         Wollner, D. (Asst.)           Mata, E. (Prof.)         Johnson, C. (Assoc.)         Asst. = 14           Rahman, T. (Prof.)         Lai, Y-C. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6           Rice, C. (Assoc.)         Lan, C. (Prof.)         Other = 1           Riordan, C. (Asst.)         Leimkuhler, B. (Assoc.)         Total = 21           Sidwell, R. (Assoc.)         Mason, K. (Asst.)         Total = 21           Sidwell, R. (Assoc.)         Melott, A. (Prof.)         Nguyen, T. (Asst.)           Tordesillas, A. (Asst.)		Cohen, R. (Assoc.)	Kuchment, P. (Prof.)
Hua, D. (Prof.)         Cravens, T. (Prof.)         McDonald, J.D. (A           Jiang, H. (Asst.)         Dorfmeister, J. (Prof.)         Motavalli, S. (Asst.)           Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Lin, Y. (Asst.)         Huang, W. (Asst.)         Wollner, D. (Asst.)           Mata, E. (Prof.)         Johnson, C. (Assoc.)         Wollner, D. (Asst.)           Meng, H. (Asst.)         Kuczera, K. (Asst.)         Asst. = 14           Rahman, T. (Prof.)         Lai, Y-C. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6           Riordan, C. (Assoc.)         Larive, C. (Asst.)         Other = 1           Riordan, C. (Asst.)         Leimkuhler, B. (Assoc.)         Total = 21           Sidwell, R. (Assoc.)         Mason, K. (Asst.)           Stanton, N. (Prof.)         Melott, A. (Prof.)           Tordesillas, A. (Asst.)         Nguyen, T. (Asst.)		Corbin, V. (Asst.)	McCormick, B. (Prof.)
Johnson, L. (Asst.)  Kambhampati, S. (Asst.)  Klabunde, K. (Prof.)  Lin, C. (Prof.)  Lin, J. (Asst.)  Meng, H. (Asst.)  Rajan, V. (Asst.)  Kuczera, K. (Asst.)  Kuczera, K. (Asst.)  Rajan, V. (Asst.)  Schmidt, J. (Asst.)  Stevenson, W. (Prof.)  Twomey, J. (Asst.)  Wollner, D. (Asst.)  Asst. = 14  Assoc. = 0  Resy, N. (Prof.)  Riordan, T. (Prof.)  Riordan, C. (Asst.)  Sherwood, P. (Prof.)  Sidwell, R. (Assoc.)  Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Mason, K. (Asst.)  Sorensen, C. (Prof.)  Mason, K. (Asst.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Nguyen, T. (Asst.)  Shandarin, S. (Prof.)  (KU)		Cravens, T. (Prof.)	McDonald, J.D. (Asst.)
Johnson, L. (Asst.)         Dunn, R. (Asst.)         Rajan, V. (Asst.)           Kambhampati, S. (Asst.)         Engler, T. (Assoc.)         Schmidt, J. (Asst.)           Klabunde, K. (Prof.)         Georg, G. (Assoc.)         Skinner, S. (Asst.)           Lin, C. (Prof.)         Givens, R. (Prof.)         Stevenson, W. (Prof.)           Lin, J. (Asst.)         Heppert, J. (Assoc.)         Twomey, J. (Asst.)           Li, Y. (Asst.)         Huang, W. (Asst.)         Wollner, D. (Asst.)           Mata, E. (Prof.)         Johnson, C. (Assoc.)         Asst. = 14           Meng, H. (Asst.)         Kuczera, K. (Asst.)         Assoc. = 0           Reay, N. (Prof.)         Laird, B. (Asst.)         Prof. = 6           Rice, C. (Assoc.)         Lan, C. (Prof.)         Other = 1           Riordan, C. (Asst.)         Larive, C. (Asst.)         Total = 21           Sidwell, R. (Assoc.)         Lu, X. (Asst.)         Total = 21           Sidwell, R. (Assoc.)         Mason, K. (Asst.)         Total = 21           Stanton, N. (Prof.)         Melott, A. (Prof.)         Nguyen, T. (Asst.)           Tordesillas, A. (Asst.)         Ruden, D. (Asst.)         Shandarin, S. (Prof.)         (KU)	Jiang, H. (Asst.)	Dorfmeister, J. (Prof.)	Motavalli, S. (Asst.)
Klabunde, K. (Prof.)       Georg, G. (Assoc.)       Skinner, S. (Asst.)         Lin, C. (Prof.)       Givens, R. (Prof.)       Stevenson, W. (Prof.)         Lin, J. (Asst.)       Heppert, J. (Assoc.)       Twomey, J. (Asst.)         Li, Y. (Asst.)       Huang, W. (Asst.)       Wollner, D. (Asst.)         Maata, E. (Prof.)       Johnson, C. (Assoc.)       Asst. = 14         Rahman, T. (Prof.)       Lai, Y-C. (Asst.)       Assoc. = 0         Reay, N. (Prof.)       Laird, B. (Asst.)       Prof. = 6         Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Mason, K. (Asst.)         Sorensen, C. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)		Dunn, R. (Asst.)	Rajan, V. (Asst.)
Lin, C. (Prof.)  Lin, J. (Asst.)  Li, Y. (Asst.)  Maata, E. (Prof.)  Reay, N. (Prof.)  Rice, C. (Assc.)  Sherwood, P. (Prof.)  Stevenson, W. (Prof.)  Mason, K. (Asst.)  Sorensen, C. (Prof.)  Stevenson, W. (Prof.)  Twomey, J. (Asst.)  Wollner, D. (Asst.)  Wollner, D. (Asst.)  Asst. = 14  Assoc. = 0  Prof. = 6  Other = 1  Total = 21  Total = 21  Nguyen, T. (Asst.)  Squyen, T. (Asst.)  Squyen, T. (Asst.)  Shandarin, S. (Prof.)  (KU)	Kambhampati, S. (Asst.)	Engler, T. (Assoc.)	Schmidt, J. (Asst.)
Lin, J. (Asst.)  Li, Y. (Asst.)  Maata, E. (Prof.)  Meng, H. (Asst.)  Reay, N. (Prof.)  Rice, C. (Asst.)  Sherwood, P. (Prof.)  Sidwell, R. (Assc.)  Stanton, N. (Prof.)  Stanton, N. (Prof.)  Tin, J. (Asst.)  Heppert, J. (Assoc.)  Huang, W. (Asst.)  Kuczera, K. (Asst.)  Kuczera, K. (Asst.)  Kuczera, K. (Asst.)  Asst. = 14  Assoc. = 0  Laird, B. (Asst.)  Prof. = 6  Other = 1  Total = 21  Total = 21  Mason, K. (Asst.)  Stanton, N. (Prof.)  Mason, K. (Asst.)  Shandarin, S. (Prof.)  KU)	Klabunde, K. (Prof.)	Georg, G. (Assoc.)	Skinner, S. (Asst.)
Li, Y. (Asst.)  Maata, E. (Prof.)  Meng, H. (Asst.)  Rahman, T. (Prof.)  Reay, N. (Prof.)  Rice, C. (Asst.)  Sherwood, P. (Prof.)  Sidwell, R. (Assc.)  Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Mung, W. (Asst.)  Kuczera, K. (Asst.)  Kuczera, K. (Asst.)  Asst. = 14  Assoc. = 0  Laird, B. (Asst.)  Prof. = 6  Cher = 1  Larive, C. (Asst.)  Larive, C. (Asst.)  Leimkuhler, B. (Assoc.)  Mason, K. (Asst.)  Mason, K. (Asst.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)	Lin, C. (Prof.)	Givens, R. (Prof.)	Stevenson, W. (Prof.)
Maata, E. (Prof.)       Johnson, C. (Assoc.)         Meng, H. (Asst.)       Kuczera, K. (Asst.)       Asst. = 14         Rahman, T. (Prof.)       Lai, Y-C. (Asst.)       Assoc. = 0         Reay, N. (Prof.)       Laird, B. (Asst.)       Prof. = 6         Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Lu, X. (Asst.)         Sorensen, C. (Prof.)       Mason, K. (Asst.)         Stanton, N. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)	Lin, J. (Asst.)		Twomey, J. (Asst.)
Meng, H. (Asst.)       Kuczera, K. (Asst.)       Asst. = 14         Rahman, T. (Prof.)       Lai, Y-C. (Asst.)       Assoc. = 0         Reay, N. (Prof.)       Laird, B. (Asst.)       Prof. = 6         Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Lu, X. (Asst.)         Sorensen, C. (Prof.)       Mason, K. (Asst.)         Stanton, N. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)	Li, Y. (Asst.)		Wollner, D. (Asst.)
Rahman, T. (Prof.)       Lai, Y-C. (Asst.)       Assoc. = 0         Reay, N. (Prof.)       Laird, B. (Asst.)       Prof. = 6         Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Lu, X. (Asst.)         Sorensen, C. (Prof.)       Mason, K. (Asst.)         Stanton, N. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)	Maata, E. (Prof.)		
Reay, N. (Prof.)       Laird, B. (Asst.)       Prof. = 6         Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Lu, X. (Asst.)         Sorensen, C. (Prof.)       Mason, K. (Asst.)         Stanton, N. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)	Meng, H. (Asst.)		Asst. = 14
Rice, C. (Assoc.)       Lan, C. (Prof.)       Other = 1         Riordan, C. (Asst.)       Larive, C. (Asst.)         Sherwood, P. (Prof.)       Leimkuhler, B. (Assoc.)       Total = 21         Sidwell, R. (Assoc.)       Lu, X. (Asst.)         Sorensen, C. (Prof.)       Mason, K. (Asst.)         Stanton, N. (Prof.)       Melott, A. (Prof.)         Tordesillas, A. (Asst.)       Nguyen, T. (Asst.)         Zou, Q. (Assoc.)       Ruden, D. (Asst.)         Shandarin, S. (Prof.)       (KU)	Rahman, T. (Prof.)		Assoc. = 0
Riordan, C. (Asst.)  Sherwood, P. (Prof.)  Sidwell, R. (Assoc.)  Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Larive, C. (Asst.)  Leimkuhler, B. (Assoc.)  Lu, X. (Asst.)  Mason, K. (Asst.)  Melott, A. (Prof.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)	Reay, N. (Prof.)		Prof. = 6
Sherwood, P. (Prof.)  Sidwell, R. (Assoc.)  Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Lu, X. (Asst.)  Mason, K. (Asst.)  Melott, A. (Prof.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)	Rice, C. (Assoc.)		Other = 1
Sidwell, R. (Assoc.)  Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Lu, X. (Asst.)  Mason, K. (Asst.)  Melott, A. (Prof.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)	And the second of the second o		
Sorensen, C. (Prof.)  Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Mason, K. (Asst.)  Melott, A. (Prof.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)			Total = 21
Stanton, N. (Prof.)  Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Melott, A. (Prof.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)			
Tordesillas, A. (Asst.)  Zou, Q. (Assoc.)  Nguyen, T. (Asst.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)			
Zou, Q. (Assoc.)  Ruden, D. (Asst.)  Shandarin, S. (Prof.)  (KU)			
Shandarin, S. (Prof.) (KU)			
	Zou, Q. (Assoc.)		
Asst. = 15 Squier, 1. (Asst.) $Asst. = 21$			2
		•	
Assoc. = 4 Subramanium, B. (Prof.) Assoc. = 7			
Prof. = 13 Suppes, G. (Asst.) $Prof. = 11$	Prof. = 13		
Terwilliger, V. (Asst.) $Other = 1$	m		Other = I
Total = 32 Tucker, D. (Asst.)	Total = 32		m 1 12
Wu, J. (Asst.) $Total = 40$		w u, J. (ASSL)	Total = 40