Status on FY2001 Research Funding at the University of Missouri

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EXECUTIVE SUMMARY

This report highlights research funding at the University of Missouri using data provided by the National Science Foundation (NSF). More specifically, it examines research funding at the public AAU institutions and at the four campuses of the University of Missouri. Please note that data from Texas A&M University and SUNY Stony Brook were added to all tables in the 2000 version of this report. In all reports before 2000, only the thirty-two public institutions classified as AAU institutions. The current report will be the second report to have information for thirty-four public AAU institutions.

Data used in this study are from fiscal year 2001. Although more recent data are available for the University of Missouri, this is the most recent data available for all public AAU institutions. References to the "University of Missouri" or the "University" refer to the four-campus system. Trends in research funding have been examined from 1990 to 2001 and from 1995 to 2001.

The key findings include:

Federal Research Expenditures

On average, federal research expenditures at the University of Missouri have increased 104% since 1995 and 188% since 1990. This compares to an increase of 39% and 97%, respectively, at the public AAU institutions (Table 1).

From 1995 to 2000, the University's market share in federal research expenditures among the public AAU institutions increased from 1.06% to 1.57%. However from 2000 to 2001, the University's market share decreased from 1.57 to 1.55. (Table 2).

In terms of federal research expenditures, the University of Missouri ranked 28th among the 34 public AAU institutions in 2001. The Univ

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SECTION I:
FEDERAL RESEARCH EXPENDITURES

The federal research expenditures reported in this section include expenditures classified as science and engineering (S&E) research and development (R&D) funds. When trend data are examined, increases or decreases in funding are noted from 1990 to 2001 and from 1995 to 2001. In addition, a definition of *federal research expenditures* is provided in Section IV: Definitions and Technical Notes.

Federal Flow-Through Expenditures
Beginning in 1996, federal research expenditures for the University of Missouri include federal flow-through expenditures. Originating from a federal agency, these expenditures have been awarded to industry, state agencies in Missouri, foundations, or another college or university and then passed on to the University of Missouri. The University has typically classified these expenditures based on the intermediary (i.e., industry, etc.). In 1996, however, the University of Missouri began classifying these expenditures based on their original source, the federal government. Consequently, the increase in federal research expenditures in fiscal years 1996 to 2001 for the University of Missouri can be partially attributed to this NSF-accepted classification method.

Please note that annual totals in research expenditures for FY1996 and FY1997 were retroactively changed in 1999. Consequently, these revised totals will not match previously published figures for these two fiscal years.

Table 1:
Public AAU Institutions: Trends in Federal Research Expenditures for Science and Engineering

Table 1 shows the trend in federal research expenditures for the public AAU institutions and the four campuses of the University of Missouri. Percentage increases in funds are displayed since 1990 and 1995.

On average, federal research expenditures at the University of Missouri have increased 104% over the past five years and 188% over the past ten years. This compares to an increase of 39% and 97%, respectively, at the public AAU institutions.

Only one other institution (University of Pittsburgh) had a higher percentage gain from 1990-2001 than the University of Missouri. In the period from 1995-2001, no other institution had as high a percentage gain as the University of Missouri.

University of Pittsburgh	90,700	144,487	149,960	160,833	168,511	194,618	228,155	268,571	196%	86%
University of Colorado	116,394	169,666	177,517	192,201	228,342	244,686	300,394	308,643	165%	82%
University of Kansas	26,786	42,209	41,858	46,733	50,567	57,272	68,950	74,494	178%	76%
University of Florida	64,614	79,361	86,973	94,231	106,510	122,296	120,374	139,744	116%	76%
U CA Los Angeles	164,442	201,773	236,635	238,919	233,702	251,999	274,162	312,858	90%	55%
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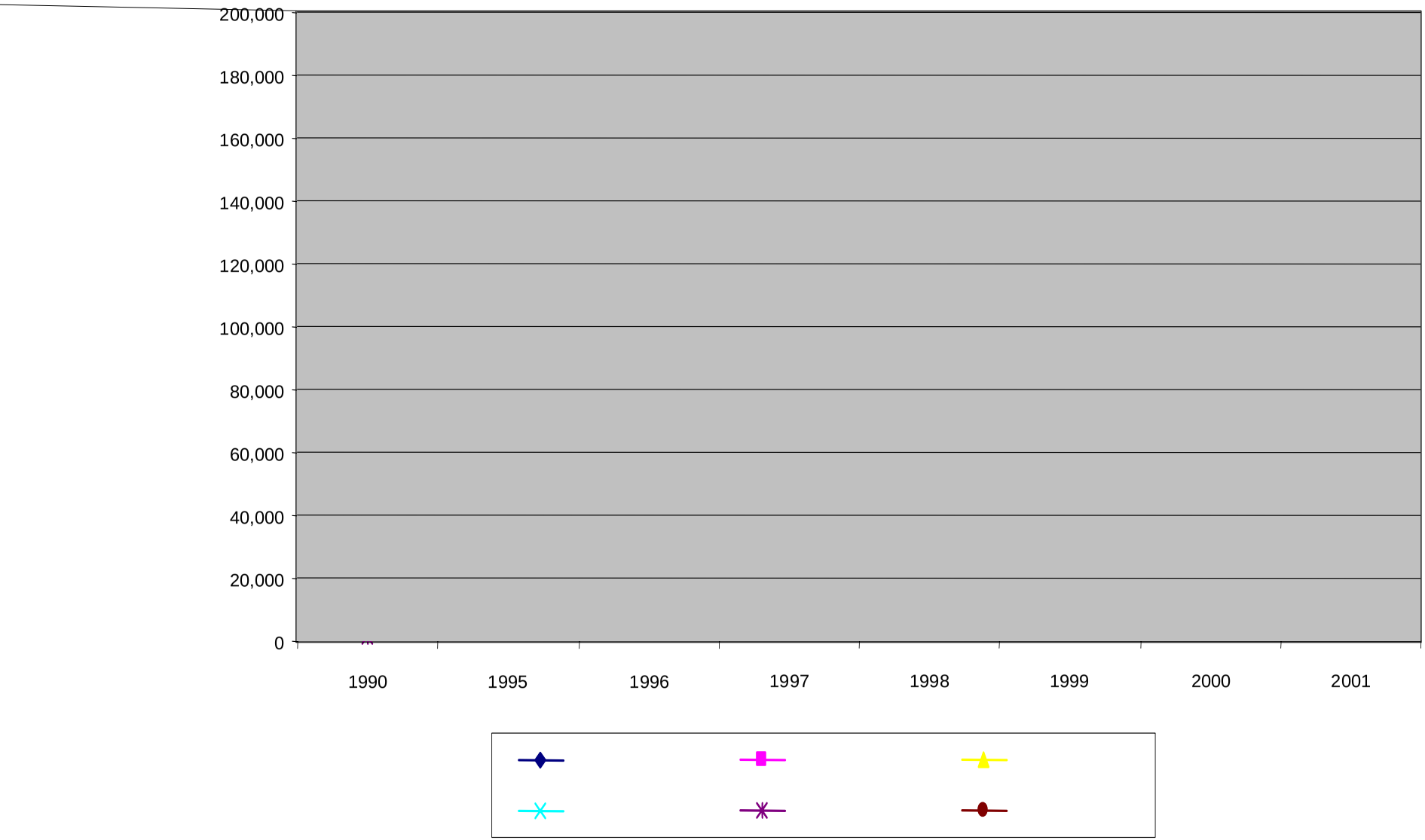
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1990
1995
1996
1997
1998
1999
2000
2001

Table 2:
Public AAU Institutions: Market Share Increases and Decreases in Federal Research Expenditures

An alternative approach to understanding how well the University of Missouri has "competed" with other public AAU institutions is to examine the market share of each institution over time. That is, of the total federal research expenditures secured by the public AAU institutions in a given year, what percentage of that total has each institution secured? How has that institution's market share shifted from year to year? One advantage of market share analysis is that it helps to level the playing field among major and less-than-major players who compete for research dollars. In Table 2, the market share of federal research expenditures has been calculated for the public AAU institutions in 1995, 2000, and 2001.

Among the public AAU institutions, the market share for the University of Missouri increased from 1.06 in 1995 to 1.57 in 2000. However from 2000 to 2001, the University's market share decreased from 1.57 to 1.55.

Table 3:
Public AAU Institutions: The

Table 4:
Distribution of Federal Research

8,151
7,156
6,595
3,265

6,828

3,877

4,494

8,435
1,929

Table 5:
Public AAU Institutions: Market Share of Federal Research Expenditures within Each iscipline Area

’s market share within the eight discipline areas. The

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SECTION II:
RESEARCH E

able 6:

able 6 shows the growth in industry-sponsored research expenditures for the public AAU

arra ease note that a definition of
dustry-sponsored research expenditures is provided in Section III: Definitions and Technical

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earch are
Pennsylvania State University ($67.7 million) and Ohio State University ($55 million)

The University of Missouri secured $7.7 million in industry-sponsored research expenditures in 2000 and $9.8 million in 2001.

SECTION III:

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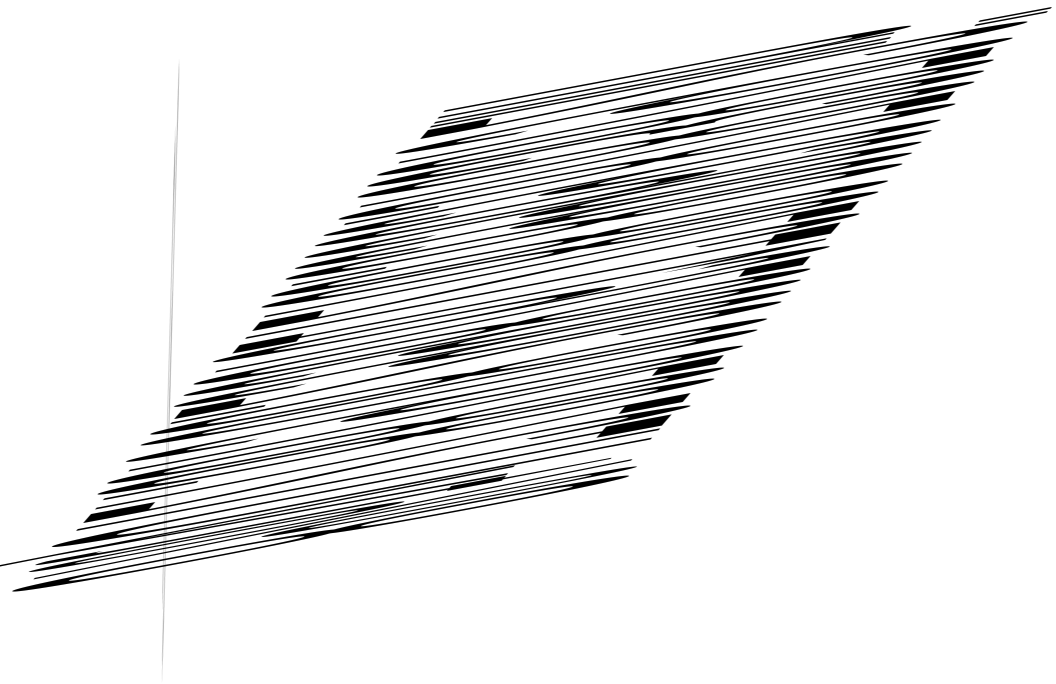
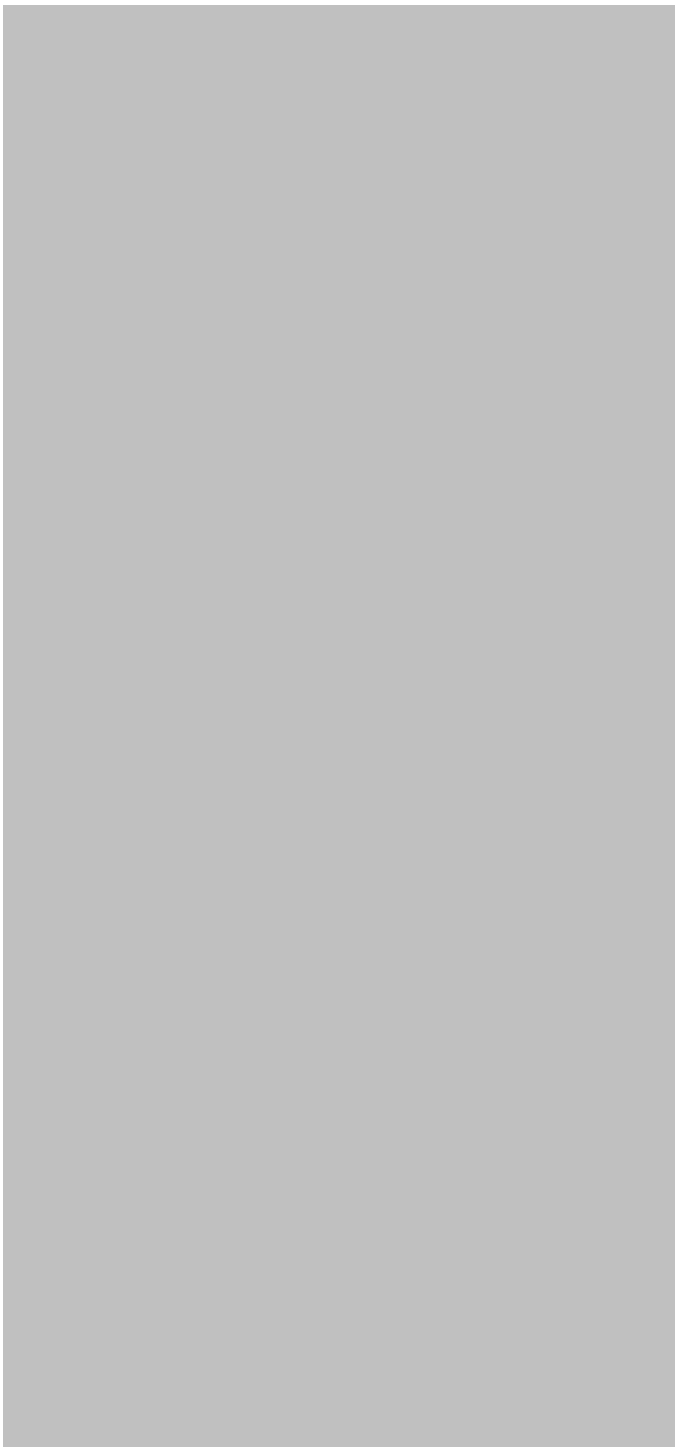
es have sources, other than federal agencies, for funding research operations. These
unds that are provided
y the institution itself and other funding sources.

shows the sources of research expenditures for the public AAU institutions. The
stitutions are arranged in descending order, based on the institution’s percentage of research

The University of Oregon, the University of Colorado and the UnivTm(th10.98 0 98 0 0 10.98 405.2288)Tj10.98 0

University of Oregon	87%	1%	0%	8%	4%	36,881
University of Colorado	84%	1%	2%	8%	4%	365,472
University of Virginia	82%	0%	5%	8%	5%	149,547
University of Pittsburgh	77%	1%	4%			





SECTION IV:
DEFINITIONS AND TECHNICAL NOTES

The following definitions, provided by the National Science Foundation (NSF), are most relevant to the tables in this report:

> *Federal research expenditures:* when funds for research from the federal government are actually spent they are then considered "expenditures". For example, if the University received a two-year, two million dollar grant from NASA in FY1993 and spent $1.5 million the first year and $0.5 million in the second year, the federal expenditures would be $1.5 million for FY1993 and $0.5 million for FY1994. The reporting of expenditures, in contrast to obligations, provides a more accurate picture of an institution's research performance because it represents funds that have been alreadyTm(10.98 126.0001 589.1411 Tm(mil516473.2

APPENDIX A AND B:
RESEARCH EXPENDITURES AND CAMPUS COMPARATOR GROUPS

In response to the University-wide Strategic Planning initiative, the following tables were added to the Research Funding Report. Appendix A examines federal research expenditures for science and engineering relative to a different group of comparator institutions for each of the University of Missouri campuses. Specifically, annual growth and market share are reported. Appendix B exam

Appendix A

U of Misso						**57.9%**
Louisiana S						
University o						
NC State U						
Colorado St						.6%
U CA Davis						.3%
University o						1%
Iowa State U						
U of Nebras						
U of Tennes						
West Virgini			26,264	28,013	29,440	0.0%
Polytech Inst & St U	87,657	82,734	75,386	71,127	77,384	-11.7%
Total						
Market Sha						

						57.9%
						52.0%
						4%
		22,018	20,443	21,365	21,876	0.8%
		427,453	439,742	486,915	564,397	
Share for UM-Kansas City	1.4%	1.5%	1.6%	1.5%	1.4%	

7%

22

Appendix B

U CA Davis	9,362	14,077	16,242	17,891	16,989	81.5%	3
West Virginia University	3,719	4,547	5,532	7,185	6,328	70.2%	9
VA Polytech Inst & St U	11,385	12,132	13,287	14,869	18,355	61.2%	2
Iowa State University	8,499	13,717	14,905	15,075	13,177	55.0%	7
Colorado State U	5,712	6,155	7,213	6,519	8,850	54.9%	9
NC State University	26,834	31,429	31,478	32,804	37,858	41.1%	1
University of Georgia	10,283	10,534	11,034	12,276	13,791	34.1%	6
U of Nebraska Lincoln	4,651	4,721	5,466	5,991	5,908	27.0%	10
Louisiana St U, All Campus	13,331	12,157	13,187	15,108	16,648	24.9%	4
U of Missouri Columbia	**3,777**	**4,348**	**3,832**	**4,007**	**4,654**	**23.2%**	**11**
U							