Chapter 7—Minority-Serving Institutions

Highlights

- The 80 research-performing, minority-serving institutions (institutions designated as Historically Black Colleges and Universities (HBCUs), institutions whose enrollments are at least 25 percent black but are not HBCUs, and institutions whose enrollments are at least 25 percent Hispanic) represent 12 percent of all research-performing institutions and contain 3 percent, or 3.9 million net assignable square feet, of the total science and engineering research space (table 7-1).

- At least 60 percent of the minority-serving institutions reported that the amount of S&E research space they had was inadequate for current research commitments in eight fields: engineering; psychology; the social sciences; the physical sciences; the computer sciences; the biological sciences outside medical schools; the earth, atmospheric, and ocean sciences; and the medical sciences outside medical schools (table 7-2).

- Twenty-four percent of the minority-serving institutions began new S&E research construction projects in fiscal years 1996 and 1997 totaling approximately $120 million. Thirty percent of these institutions began new repair/renovation projects totaling about $36 million (table 7-3).

- The amount of S&E research space in a group of 29 HBCUs that have been in the study sample since 1988 increased from 1.1 million NASF in 1988 to 1.9 million NASF in 1998 (table 7-5).

- Construction activity at the 29 original HBCUs increased considerably between the 1994–95 and 1996–97 fiscal years, from 4 HBCUs starting construction projects totaling $3.5 million dollars to 11 institutions starting such projects at a cost of $64.3 million (table 7-6).

Introduction

Since its inception, the Survey of Scientific and Engineering Research Facilities at Colleges and Universities has included a sample of HBCUs. These institutions have been recognized for their contributions to the education of black students in general and for their role in preparing students for science and engineering careers. NSF has recognized the growth in minority enrollments in higher education overall and, thus, added two other types of minority-serving institutions to the 1998 sample. The inclusion of non-HBCU-Black institutions acknowledges the fact that there are many colleges and universities that enroll large percentages of black students but are not designated as HBCUs. Non-HBCU-Black institutions are defined as colleges and universities whose enrollments are at least 25 percent black. Similarly, as Hispanic enrollments in higher education increase, there is a need to examine institutions serving these students. Hispanic-serving Institutions (HSIs) are defined as colleges and universities whose enrollments are at least 25 percent Hispanic. The group of minority-serving institutions varies in size and focus; it is composed of both nondoctorate and doctorate-granting institutions, and includes one of the top 100 research-performing institutions.[29]

In prior years, only HBCUs were included in the sample, and trend data were reported for these institutions. Because non-HBCU-black institutions and HSIs are included in the sample for the first time, no trends can be reported for the full group of minority-serving institutions. Trend data are presented for a group of 29 larger HBCUs that have been part of the sample since 1988.

[29] Although the importance of institutions that serve Asian-American students as well as institutions that serve students from more than one ethnic group is recognized (see Merisotis and O'Brien, *Minority Serving Institutions: Distinct Purposes, Common Goals*, 1998), this chapter only examines minority-serving institutions that enroll large percentages of specific groups of students, black or Hispanic.

Findings

S&E Space in Minority-Serving Institutions

The 80 research-performing, minority-serving institutions had 28 million net assignable square feet of space in all academic fields in 1998; 44 percent of this space (12.4 million NASF) was in science and engineering fields. About 31 percent of the S&E space was research space (3.9 million NASF). Research-performing, minority-serving institutions represent 12 percent of all research-performing institutions and contain 3 percent of all S&E research space (table 7-1):

- HBCUs represent 71 percent of all research-performing, minority-serving institutions and contain 61 percent of all the S&E research space in these institutions;
- Non-HBCU-Black institutions represent 16 percent of the research-performing, minority-serving institutions and contain 11 percent of the S&E research space in these institutions; and
- Hispanic-serving institutions represent 13 percent of the research-performing, minority-serving institutions and contain 28 percent of the S&E research space in these institutions.

Minority-serving institutions were most likely to have S&E research space in the biological sciences outside medical schools; 93 percent of these colleges and universities reported research space in this field. Eighty-four percent of the minority-serving institutions reported S&E research space in the physical sciences. The percent of minority-serving institutions reporting S&E research space in other fields drops to 50 percent for the computer sciences and 48 percent for psychology.

Although only 40 percent of minority-serving institutions reported S&E research space in engineering, this field contained more space than any other single field, 960 thousand NASF. The agricultural sciences followed with another 710 thousand NASF of research space. It should be noted that engineering and the agricultural sciences are more space intensive than other S&E fields. These fields represent relatively larger proportions of S&E research space in all research-performing institutions.

Adequacy of the Amount of S&E Research Space and Its Condition in Minority-Serving Institutions

At least 60 percent of minority-serving institutions reported that the amount of S&E research space was inadequate for meeting current research commitments in eight fields (table 7-2):

- Engineering—69 percent;
- Psychology—67 percent;
- Physical sciences—66 percent;
- Computer sciences—66 percent;
- Biological sciences outside medical schools—65 percent;
- Social sciences—65 percent;
- Earth, atmospheric, and ocean sciences—61 percent; and
- Medical sciences outside medical schools—61 percent.

Minority-serving institutions reported that 38 percent (1.5 million NASF) of their current research space was suitable for use in the most scientifically sophisticated research and another 44 percent (1.7 million NASF) was effective for most uses, but needs limited repair/renovation. Seventeen percent (0.7 million NASF) of the current S&E research space was rated as requiring either major renovation or replacement (see table 7-1 for amount of current research space).

New S&E Facilities Construction and Repair/Renovation Projects at Minority-Serving Institutions

In fiscal years 1996 and 1997, almost a quarter (24 percent) of all minority-serving, research-performing institutions initiated new S&E research facilities construction projects costing over $100,000. These construction projects are expected to yield close to 0.5 million NASF of new research space at a cost of $120 million. In terms of space and dollars, the S&E construction activity at minority-serving institutions represents approximately 4 percent of all S&E research construction activity started in 1996 and 1997 (table 7-3).

Table 7-1. Amount of instructional and research space and the percentage of institutions with science and engineering (S&E) research space by field in minority-serving institutions: 1998

Indicator	HBCUs	Non-HBCU-Black institutions	Hispanic-serving institutions	All minority-serving institutions	All institutions
Number of institutions	57	13	10	80	660
Amount of instructional and research space [NASF in thousands]					
Total instructional and research space (all fields)	18,326	2,707	6,949	27,982	487,656
Total instructional and research space (S&E fields)	8,734	1,283	2,359	12,376	286,239
Total S&E research space	2,339	426	1,092	3,857	143,288
Percentage of institutions with S&E research space by field					
Biological sciences—					
inside medical schools	5	20	0	7	19
outside medical schools	96	70	100	93	84
Physical sciences	83	80	100	84	83
Psychology	50	30	61	48	70
Social sciences	51	20	26	43	63
Mathematics	48	30	36	43	60
Computer sciences	48	60	49	50	56
Earth, atmospheric, and ocean sciences	29	20	49	30	53
Engineering	33	30	87	40	44
Agricultural sciences	32	0	36	27	16
Medical sciences—					
inside medical schools	5	10	0	6	19
outside medical schools	28	20	0	23	40
Other sciences	11	10	36	14	23
Amount of S&E research space by S&E field [NASF in thousands]					
Biological sciences—					
inside medical schools	181	96	0	277	11,642
outside medical schools	305	66	148	519	19,425
Physical sciences	321	58	164	543	18,191
Psychology	31	18	26	75	3,360
Social sciences	56	17	6	79	4,620
Mathematics	31	3	16	50	889
Computer sciences	65	18	30	114	2,018
Earth, atmospheric, and ocean sciences	57	8	17	82	7,524
Engineering	388	23	549	960	22,833
Agricultural sciences	635	0	75	710	24,607
Medical sciences—					
inside medical schools	87	40	0	127	18,128
outside medical schools	95	24	0	119	7,001
Other sciences	86	56	60	202	3,050

KEY: NASF = net assignable square feet.
HBCU = Historically Black Colleges or Universities.

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

Table 7-2. Adequacy of the amount of science and engineering (S&E) research space and its condition by field in minority-serving institutions: 1998

Indicator	HBCU's	Non-HBCU-Black institutions	Hispanic-serving institutions	All minority-serving institutions	All institutions
Number of institutions	57	13	10	80	660
Adequacy of current amount of S&E research space [percentage of institutions reporting current space not sufficient]					
Total	88	70	100	87	83
Biological sciences—					
inside medical schools	--	--	--	36	70
outside medical schools	68	50	61	65	64
Physical sciences	73	50	51	66	64
Psychology	76	--	21	67	51
Social sciences	62	--	--	65	61
Mathematics	46	--	--	44	44
Computer sciences	72	50	--	66	56
Earth, atmospheric, and ocean sciences	72	--	--	61	62
Engineering	74	--	59	69	60
Agricultural sciences	48	--	--	46	55
Medical sciences—					
inside medical schools	--	--	--	--	67
outside medical schools	52	--	--	61	54
Condition of existing S&E research space [percentage of research space]					
Suitable for use in the most sophisticated scientific research	35	51	41	38	39
Effective for most levels of research in the field, but may need limited repair/renovation	48	38	37	44	38
Requires major renovation to be used effectively	15	9	18	15	18
Requires replacement	1	2	4	2	5

KEY: -- = number of institutions with nonmissing data is less than 5. These institutions are included in the total.
HBCU = Historically Black Colleges or Universities.

NOTE: Components may not add to totals due to rounding. Percentages are based on the number of institutions that have existing and/or needed research space in a given field.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

Across all minority-serving institutions, State and local governments were the largest source of funds for construction projects. However, this results from the fact that the HBCUs dominate this group in terms of number of institutions, and three quarters (76 percent) of their construction funding came from State and local governments. The one project reported by non-HBCU-black institutions was funded by internal sources (institutional funds in particular) and HSIs funded their S&E research construction primarily with funds from internal sources (63 percent—all of which was derived from other debt financing) and the Federal Government (37 percent).

In fiscal years 1996 and 1997, 30 percent of all research-performing, minority-serving institutions began repair/renovation projects. These projects affect 602 thousand NASF and were expected to cost about $36 million. This repair/renovation activity would thus alter approximately 16 percent of all S&E research space in minority-serving institutions and represents 4 percent of all repair/renovation activity in research-performing institutions (table 7-1).

State and local governments were the primary source of funding for repair/renovation projects for all minority-serving institutions. This results from the fact that this

Table 7-3. Construction and repair/renovation of science and engineering research facilities and sources of funds in minority-serving institutions: 1996–97

Indicator	HBCUs	Non-HBCU-minority serving institutions	All minority-serving institutions	All institutions
Number of institutions	57	23	80	660
Construction projects: 1996–97 fiscal years				
Number of institutions with projects >$100,000	14	5	19	197
S&E research space to be constructed [NASF in thousands]	347	148	495	11,101
Total cost [in thousands of dollars]	66,241	53,758	119,999	3,110,318
Repair/renovation projects: 1996–97 fiscal years				
Number of institutions with projects >$100,000	15	9	24	343
S&E research space to be repaired or renovated [NASF in thousands]	150	452	602	15,058
Total cost [in thousands of dollars]	13,178	22,882	36,060	1,324,524

KEY: NASF = net assignable square feet.
HBCU = Historically Black Colleges or Universities.

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

source dominated the funding at both non-HBCU-Black institutions and HSIs. HBCUs funded repair/renovation projects primarily with funds from internal sources; 47 percent of their funding for these projects were derived from this source, institutional funds, in particular.

Minority-Serving Institutions' Need for S&E Research Facilities

In 1998, minority-serving institutions reported $420 million in combined capital projects (construction and repair/renovation) and central campus infrastructure projects that had to be deferred because of insufficient funds. This represents approximately 3 percent of all deferred projects reported by research-performing institutions. HBCUs accounted for 79 percent of the deferred costs at minority-serving institutions (table 7-4).

Construction and repair/renovation projects represent 86 percent of the total deferred S&E capital project costs ($363 million). Construction projects account for 71 percent of the total deferred capital project costs (both those in and not in institutional plans).

Central campus infrastructure projects represent 14 percent of the total deferred projects ($57 million). Construction projects account for 24 percent of all deferred central campus infrastructure projects and repair/renovation projects account for 76 percent of these projects.

A Look at HBCUs Over Time

Since the inception of the facilities survey, NSF has collected data from a continuing group of 29 HBCUs that reported separately budgeted research and development expenditures in 1988. In 1992, NSF identified an additional 41 HBCUs that had separately budgeted R&D expenditures. Only those institutions with S&E research space were retained in the sample each year. Since that time, the facilities survey has included both the original group of 29 HBCUs as well as all other HBCUs that report any R&D expenditures.

This section examines changes over time in S&E research facilities for the original group of 29 HBCUs, hereafter called, "the 29 original HBCUs."

Amount and Distribution of S&E Research Space

The amount of S&E research space in the 29 original HBCUs increased by 70 percent, from 1.1 million NASF in 1988 to 1.9 million NASF in 1998. The amount of

Table 7-4. The cost of deferred construction and repair/renovation projects by project type and whether the project is included in institutional plans in minority-serving institutions: 1998

Indicator	HBCUs	Non-HBCU-Black institutions	Hispanic-serving institutions	All minority-serving institutions	All institutions
Number of institutions	57	13	10	80	660
Deferred S&E capital projects [in thousands of dollars]					
Total	297,088	6,325	59,171	362,584	11,380,790
Included in institutional plans	274,783	5,155	56,600	336,538	8,690,853
Construction	242,671	5,070	0	247,741	5,856,685
Repair/renovation	32,112	85	56,600	88,796	2,834,167
Not included in institutional plans	22,305	1,170	2,572	26,047	2,689,937
Construction	7,706	1,170	1,543	10,419	1,142,157
Repair/renovation	14,599	0	1,029	15,627	1,547,780
Deferred central campus infrastructure projects [in thousands of dollars]					
Total	33,882	0	23,143	57,025	2,597,305
Included in institutional plans	33,251	0	3,857	37,108	2,007,813
Construction	13,475	0	0	13,475	633,967
Repair/renovation	19,776	0	3,857	23,634	1,373,846
Not included in institutional plans	631	0	19,286	19,916	589,492
Construction	207	0	0	207	209,502
Repair/renovation	424	0	19,286	19,709	379,991
Total deferred costs	330,970	6,325	82,314	419,609	13,978,095

KEY: S&E = science and engineering.
HBCU = Historically Black Colleges or Universities.

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

space increased the most in absolute terms during this time period in the two fields that also currently have the most S&E research space (table 7-5):

- In engineering, the amount of research space more than doubled, from 152 thousand NASF to 363 thousand NASF; and
- In the agricultural sciences, the amount of research space increased from 259 thousand NASF to 471 thousand NASF.

Over the decade, S&E research space also increased in every field except for the computer sciences and the medical sciences in medical schools, which experienced declines in research space as follows:

- In the medical sciences in medical schools, the amount of research space declined from 141 thousand NASF to 87 thousand NASF; and
- In the computer sciences, the amount of research space declined from 43 thousand NASF to 40 thousand NASF.

Between the last survey period (1996) and the current one, the amount of S&E research space at the 29 original HBCUs increased by 5 percent or 88 thousand NASF. While almost half the S&E fields experienced slight increases in research space, only psychology did not experience any growth, and two fields experienced declines:

- In the social sciences, the amount of research space declined from 56 thousand NASF to 46 thousand; and
- In mathematics, the amount of research space declined from 24 thousand NASF to 20 thousand NASF.

Table 7-5. Trends in the amount of science and engineering research space by field in the 29 original Historically Black Colleges and Universities (HBCUs): 1988–98

Field	1988	1990	1992	1994	1996	1998
	NASF in thousands					
Number of research-performing HBCUs	29	29	29	28*	29	29
Total	1,112	1,440	1,782	1,759	1,797	1,885
Biological sciences–						
inside medical schools	91	121	121	159	150	181
outside medical schools	141	170	254	250	208	216
Physical sciences	179	190	235	212	229	234
Psychology	14	19	16	18	16	16
Social sciences	28	47	57	43	56	46
Mathematics	12	26	29	19	24	20
Computer sciences	43	30	42	31	36	40
Earth, atmospheric, and ocean sciences	10	26	35	27	42	43
Engineering	152	167	285	315	349	363
Agricultural sciences	259	433	414	470	451	471
Medical sciences—						
inside medical schools	141	158	160	69	84	87
outside medical schools	37	50	133	134	63	82
Other sciences	4	4	0	12	88	86

* One HBCU did not report R&D expenditures in 1994. Its research space was not included in the totals.

KEY: NASF = net assignable square feet.

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

Construction of S&E Research Space

In fiscal years 1996 and 1997, 11 of the 29 original HBCUs initiated S&E research facilities construction projects. This is the same number of institutions that reported new construction starts in 1986 and 1987. However, in the intervening years, the number of institutions starting such projects was lower, particularly in the 1992–93 and 1994–95 periods, when 4 of the 29 original HBCUs began new construction projects (table 7-6).

In fiscal years 1996 and 1997, the 29 original HBCUs committed $64.3 million to new construction projects costing over $100,000. These projects will result in 335 thousand NASF of new S&E research space, which is the equivalent of 18 percent of existing research space (see table 7-5). Particularly noteworthy is the increase in construction between the last survey period (fiscal years 1994 and 1995) and the current one (fiscal years 1996 and 1997). While the number of institutions starting new construction projects almost tripled from 4 institutions to 11, the amount of research space under construction increased almost 5-fold (from 68 thousand NASF to 335 thousand NASF) and the amount of funds committed to new construction projects increased 18-fold (from $3.5 million to $64.3 million).

The Repair/Renovation of S&E Research Facilities

Unlike construction starts, fewer of the 29 original HBCUs began S&E repair/renovation projects costing over $100,000 in 1996 and 1997 than in any other survey period, except for 1990 and 1991. In both of these survey periods, 5 of the 29 original HBCUs reported new S&E repair/renovation projects. The amount of funds these institutions committed to these projects in 1996 and 1997 ($7.6 million) is also less than in any prior survey period.

Table 7-6. Science and engineering research facility construction and repair/renovation projects at the 29 original Historically Black Colleges and Universities (HBCUs) project characteristics: 1986–97

Capital project activity	1986–87	1988–89	1990–91	1992–93	1994–95	1996–97
Construction projects:						
Number of HBCUs with projects	11	10	6	4	4	11
Total estimated completion cost [in millions of dollars]	95.5	68.3	27.0	9.8	3.5	64.3
NASF [in thousands]	481	319	328	88	68	335
Repair/renovation projects costing over $100,000:						
Number of HBCUs with projects	13	10	5	11	7	5
Total estimated completion cost [in millions of dollars]	18.8	26.2	13.9	9.9	22.7	7.6
NASF [in thousands]	137	308	129	106	343	114
Repair/renovation projects costing $5,000–$100,000:						
Number of HBCUs with projects	--	--	10	13	11	13
Total estimated completion cost [in millions of dollars]	--	--	0.7	3.8	0.8	1.4

KEY: NASF = net assignable square feet.
-- = data were not collected.

NOTE: Components may not add to totals due to rounding. Current dollars have been adjusted to constant 1997 dollars using the Bureau of the Census' Composite Fixed-Weighted Price Index for Construction.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

Almost half (13) of the 29 original HBCUs began S&E repair/renovation projects costing between $5,000 and $100,000 in 1996 and 1997; the same number that began them in 1992 and 1993, but fewer than in 1994 and 1995 (11 institutions). These 13 institutions committed $1.4 million to these types of repair/renovation projects, bringing total repair/renovation commitments in 1996 and 1997 by the 29 original HBCUs to $9.0 million (table 7-6).

Sources of Funds for S&E Construction and Repair/Renovation Projects

Between 1986–87 and 1992–93, the Federal Government was the largest source of construction funds for the 29 original HBCUs. In 1994–95 and 1996–97, funds from State and local governments exceeded those from the Federal Government. Even though the Federal Government's dollar contribution increased between 1994–95 and 1996–97, its relative contribution in 1996–97 (7 percent) was the smallest it has been since the survey began. By contrast, State and local governments' dollar and relative contributions in 1996–97 were the largest they have been since the survey began—$50.5 million and 79 percent, respectively (table 7-7).

The source of funds for S&E repair/renovation projects at the 29 original HBCUs has varied more over time than funds for construction projects. The Federal Government was the largest source of funds for these projects in 4 out of 6 survey periods, and its relative contribution has been in decline since 1992–93 (from 57 percent of all repair/renovation funds in 1992–93 to 29 percent in 1996–97). The continuous increase in the relative contribution from internal sources over the last three survey periods, despite fluctuations in the dollar contribution from this source of funds, parallels a decline in the relative contribution of Federal funds to repair/renovate S&E facilities. In 1988–89, institutions contributed 1 percent of all repair/ renovation funds from internal sources; by 1996–97 their relative contribution had risen to 47 percent—and this was the largest source of funds for repair/renovation projects during this time period (table 7-8).

Table 7-7. Sources of funds for science and engineering research facility construction projects at the 29 original Historically Black Colleges and Universities (HBCUs): 1986–97

Fiscal years	All sources				Internal sources					
	Dollar contribution				Dollar contribution					
	All sources	Federal	State/ local	Internal sources	Total internal sources	Private donations	Institutional funds	Tax-exempt bonds	Other debt	Other sources
	In millions of constant 1997 dollars				In millions of constant 1997 dollars					
1986–87	95.5	43.5	34.3	17.8	17.8	14.8	3.1	0.0	0.0	0.0
1988–89	68.3	43.4	14.3	10.7	10.7	9.5	1.1	0.0	0.0	0.0
1990–91	27.0	14.5	7.6	5.0	5.0	0.0	5.0	0.0	0.0	0.0
1992–93*	9.8	7.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994–95	3.5	1.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996–97	64.3	4.6	50.5	9.2	9.2	3.0	1.5	3.6	0.0	1.0
	Relative contribution				Relative contribution					
Fiscal years	All sources	Federal	State/ local	Internal sources	Total internal sources	Private donations	Institutional funds	Tax-exempt bonds	Other debt	Other sources
	Percentage				Percentage					
1986–87	100	46	36	19	100	83	17	0	0	0
1988–89	100	64	21	16	100	90	10	0	0	0
1990–91	100	54	28	19	100	0	100	0	0	0
1992–93*	100	76	23	0	100	0	0	0	0	0
1994–95	100	39	61	0	100	0	0	0	0	0
1996–97	100	7	79	14	100	33	17	40	0	11

* One of the HBCUs had no S&E research space.

NOTE: Components may not add to totals due to rounding. Percentages are based on unrounded data that do not appear in the table. Findings are limited to projects with estimated total cost at completion of $100,000 or more for research space. Estimates are prorated to reflect research components only. Current dollars have been adjusted to constant 1997 dollars using the Bureau of the Census' Composite Fixed-Weighted Price Index for Construction.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.

Table 7-8. Sources of funds for science and engineering research facility repair/renovation projects at the 29 original Historically Black Colleges and Universities (HBCUs): 1986–97

	All sources				Internal sources					
	Dollar contribution				Dollar contribution					
Fiscal years	All sources	Federal	State/ local	Internal sources	Total internal sources	Private donations	Institu-tional funds	Tax-exempt bonds	Other debt	Other sources
	In millions of constant 1997 dollars				In millions of constant 1997 dollars					
1986–87	18.8	11.6	6.5	0.7	0.7	0.7	0.0	0.0	0.0	0.0
1988–89[1]	26.2	16.0	9.9	0.2	0.2	0.1	0.1	0.0	0.0	0.0
1990–91	13.9	4.2	9.6	0.2	0.2	0.1	0.1	0.0	0.0	0.0
1992–93[2]	9.9	5.7	2.4	2.1	2.1	1.9	0.1	0.0	0.0	0.0
1994–95	22.7	10.8	6.8	5.3	5.3	0.0	2.7	0.0	2.5	0.0
1996–97	7.6	2.2	1.8	3.6	3.6	0.0	3.6	0.0	0.0	0.0
	Relative contribution				Relative contribution					
Fiscal years	All sources	Federal	State/ local	Internal sources	Total internal sources	Private donations	Institu-tional funds	Tax-exempt bonds	Other debt	Other sources
	Percentage				Percentage					
1986–87	100	62	35	4	100	100	0	0	0	0
1988–89	100	61	38	1	100	50	50	0	0	0
1990–91	100	30	69	2	100	50	50	0	0	0
1992–93[2]	100	57	24	21	100	94	6	0	0	0
1994–95	100	47	30	23	100	0	52	0	48	0
1996–97	100	29	24	47	100	0	100	0	0	0

[1] 1988–89 total has been revised since 1996 report.

[2] One of the HBCUs had no S&E research space.

NOTE: Components may not add to totals due to rounding. Percentages are based on unrounded data that do not appear in the table. Findings are limited to projects with estimated total cost at completion of $100,000 or more for research space. Current dollars have been adjusted to constant 1997 dollars using the Bureau of the Census' Composite Fixed-Weighted Price Index for Construction.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1998 Survey of Scientific and Engineering Research Facilities at Colleges and Universities.