

2001

# A Longitudinal Analysis of Funding for Student Affairs in Public Institutions

John H. Schuh

*Iowa State University*, [jschuh@iastate.edu](mailto:jschuh@iastate.edu)

Mack C. Shelley II

*Iowa State University*, [mshelley@iastate.edu](mailto:mshelley@iastate.edu)

Follow this and additional works at: [http://lib.dr.iastate.edu/stat\\_las\\_pubs](http://lib.dr.iastate.edu/stat_las_pubs)



Part of the [Educational Assessment, Evaluation, and Research Commons](#), [Educational Leadership Commons](#), [Higher Education Commons](#), and the [Higher Education Administration Commons](#)

The complete bibliographic information for this item can be found at [http://lib.dr.iastate.edu/stat\\_las\\_pubs/41](http://lib.dr.iastate.edu/stat_las_pubs/41). For information on how to cite this item, please visit <http://lib.dr.iastate.edu/howtocite.html>.

---

# A Longitudinal Analysis of Funding for Student Affairs in Public Institutions

## **Abstract**

This study examines longitudinal funding for 513 public institutions over the time period 1995-1999 using the IPEDS database. A comparison across institutional types is presented, and student affairs funding also is compared with other major campus units.

## **Disciplines**

Educational Assessment, Evaluation, and Research | Educational Leadership | Higher Education | Higher Education Administration

## **Comments**

This article is from *Journal of College Student Development* 42 (2001): 456. Posted with permission.

# A Longitudinal Analysis of Funding for Student Affairs in Public Institutions

John H. Schuh    Mack C. Shelley, II

*This study examines longitudinal funding for 513 public institutions over the time period 1995-1999 using the IPEDS database. A comparison across institutional types is presented, and student affairs funding also is compared with other major campus units.*

Higher education is an enterprise in competition for resources. Woodard and von Destinon (2000), for example, observed that higher education competes for resources with other elements in the public sector. They also pointed out that during the 1990s, financial support for public higher education did not increase. Both Balderston (1995) and Lennington (1996) asserted that higher education is hard pressed to find additional revenues to satisfy the requirements of colleges and universities.

State and federal support of higher education has declined from 1981 through 1996 according to the National Center for Education Statistics (NCES) (2001). This decline has led institutions to search for additional ways to generate revenue to compensate for the decline in governmental aid. The primary resource used to address this problem has been tuition, which has become an increasingly important source of revenue for higher education. Public institutions derived 12.9% of their income from tuition during 1980-1981, but this percentage grew to 19% in 1996-1997, while over the same period, revenue from state governments fell from 45.6% to 32.5% (NCES).

Student affairs is not insulated from this fiscal situation. In 1990 Schuh observed, "This is not a pleasant time to be responsible for financing institutions of higher education" (p. 1). A decade later he suggested, "This is not an easy time to be a budget officer or financial manager in an institution of higher education" (2000, p. 73). According to these citations, little, if anything, changed in the fiscal environment over that 10-year period. But did the percentage of institutional budgets devoted to student affairs change during that decade?

One of the concerns that has been expressed from time to time about student affairs is that funding for student affairs operations is limited, and student affairs suffers from inequality when compared with other aspects of institutions of higher education (Woodard, Love, & Komives, 2000). Among the charges about student affairs financing are the following: student affairs is financed at lower levels than the rest of the institution, student affairs absorbs cuts to a greater degree than academic affairs, and funding for student affairs had declined over time. Although Woodard et al. concluded that these assertions are not necessarily true, the common folklore among student affairs officers is that student affairs suffers disproportionately in a difficult fiscal environment (T. Miller, personal communication, March 21, 2000).

This study was undertaken to gain a better understanding of how student affairs

---

John H. Schuh is Professor of Educational Leadership and Policy Studies at Iowa State University. Mack C. Shelley, II is Professor of Statistics and Educational Leadership and Policy Studies at Iowa State University.

has been financed in recent years. The following research questions guided the study:

1. How have expenditures for student affairs compared with other major institutional expenditure categories from 1980 through 1997?
2. How have expenditures for student affairs changed from 1995 through 1999?
3. Does institutional type have an effect on the expenditures for student services?
4. How did adjustments in student affairs expenditures compare with changes in the consumer price index (CPI)?

## METHOD

One of the problems of doing comparisons across institutions is that they may not use the same definitions when reporting data. To address this problem, the NCES and the Integrated Postsecondary Education Data System (IPEDS) were the sources of the data for this study. The NCES uses specifically defined categories to collect annual IPEDS data from all postsecondary institutions. Thus, the financial categories are consistent for all institutions. The period of 1995 through 1999 was chosen because data before 1995 are incomplete.

### Instrumentation

The instruments used for this study were the annual questionnaires distributed by the NCES. These included IPEDS Finance Survey for survey years 1995 through 1999 and the Fall Enrollment Survey for survey years 1995 through 1999. At the time of this study, these were the 5 most recent years that these instruments were completed. All postsecondary institutions participate in these

studies each year under Title IV of the Higher Education Act of 1965 as amended (IPEDS Finance Survey, 1999 [NCES, 1999a]; IPEDS Institutional Characteristics Survey, 1999-2000 [NCES, 1999b]).

*Definitions.* Definitions of the various areas included in this study are important in understanding the meaning of the data. Student services is defined on the IPEDS Finance Survey form as the following:

Admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instructional program. Examples are career guidance, counseling, financial aid administration, and student health services (except when operated as a self-supporting auxiliary enterprise). Include the administration . . . for Pell Grants.

The definition of enrollment is as follows:

All students enrolled in courses creditable toward a diploma, certificate, degree, or other formal award. Include students enrolled in courses that are part of a vocation or occupational program, INCLUDING those enrolled in off-campus centers.

Include high school students taking regular college classes for credit . . . in the classification in which they are recorded by the institution.

Be sure to include full-time students taking remedial courses if the student is considered degree-seeking for the purpose of student financial aid determination.

The definition of the CPI, according to the *Statistical Abstract of the United States* (U.S. Census Bureau, 1999), is: "A measure of the average change in prices over time in

a 'market basket' of goods and services purchased either by urban wage earners and clerical workers or all urban consumers" (p. 491). The CPI was chosen because the Higher Education Price Index has not been published for all of the years examined in this study (NCES, 2001). However, readers should remember that the CPI usually understates the increase in cost of higher education year after year (see NCES, 2001, Table 37).

### Sampling

All public four-year institutions in the United States participate in the annual surveys identified above. The Carnegie classification system that was in place at the time of data collection provided the taxonomy for identifying institutions that participated in this study. Institutions that were included in this study included all Research I ( $N = 59$ ), Research II ( $N = 27$ ), Doctoral I ( $N = 28$ ), Doctoral II ( $N = 37$ ), Master's I ( $N = 249$ ), Master's II ( $N = 28$ ), Bachelor's I ( $N = 7$ ), and Bachelor's II ( $N = 78$ ) public institutions that completed the survey forms identified above for survey years 1995 through 1999. A total of 513 institutions were included in this study. Private institutions were not included because IPEDS did not possess current information about their financial circumstances at the time of this inquiry.

### Data Collection

All data were collected using the IPEDS relational database that is available through the Internet (<http://nces.ed.gov/ipeds>).

### Data Analysis

The IPEDS relational database allows for analyses to be conducted on-line. For the purpose of this study, the amount of money spent per student (head count) per survey

year was computed and used for comparison purposes. For example, the amount of money spent in survey year 1995 on student services was divided by the headcount enrollment for survey year 1995. Headcount enrollment was used rather than full time equivalent enrollment (FTE) because the definition of FTE can vary from institution to institution, and the cost of student affairs is affected more by headcount than FTE (Rhatigan, 1986). For each year of the study, measures of central tendency were computed, including means and medians. Medians are reported in this study to better control for institutional anomalies (see Gall, Borg, & Gall, 1996), meaning that either very large or very small expenditures would have a smaller influence on the data for the entire cohort using median amounts rather than means. The annual change in expenditures per student was compared, and the resulting percentage change was compared with the CPI for the same year.

Means of the median expenditures by institutional type were calculated to allow for further statistical analysis. Analysis of variance was used to compare the influence of Carnegie type and the year on expenditures for student affairs. The Scheffé post hoc test was used to compare pairwise means. The level of significance chosen was .05.

## RESULTS

The analysis of the data generated by this study begins with the baseline data reported by the NCES (2001). These data reflect the percentage of current fund expenditures devoted to commonly accepted categories of expenditures over a 16-year period, from 1980-1981 through 1996-1997. These were the most current data published by NCES at the time of this study. As is summarized in

Table 1, the percentage of current fund expenditures devoted to student services has increased slightly over this period, increasing from 4.6% to 5.0%. Readers should note that community colleges are included in these data, which may have an unknown effect. Nevertheless, the data reported reflect stability in expenditures for student services, a pattern reflected in a report of education and general expenditures of public universities (NCES, 2001, p. 378). During the same period, the percentage of institutional expenditures devoted to instruction has declined from 35.1% to 32.1%. Similarly, physical plant and auxiliary services expenditures have declined, whereas increases were experienced by public service, research, academic support, institutional support, hospitals, and scholarships and fellowships.

Table 2 shows data related to the change in the amount of money devoted to student services expenditures on a per student basis from 1995 through 1999. Using the formula described above, per student expenditures for student services are reported, and then compared with the commensurate change in the CPI. Table 2 includes detail by institutional type.

### **Research I Institutions**

A total of 59 institutions were classified as Research I institutions. Expenditures by these institutions for student services grew every year. The percentage change each year was greater than the CPI, except for the 1999 survey year. The growth in expenditures from 1995 through 1999 was 14.0%.

### **Research II Institutions**

Twenty-seven institutions were defined in this category. As was the case for the Research I institutions, the median amount of money spent on student services per year grew faster

than the CPI except for one year, 1998. That shortfall was recovered in the next survey year. The overall growth in expenditures was 24.3% over the 5 survey years.

### **Doctoral I Institutions**

Expenditures for the 28 Doctoral I institutions grew faster than the CPI for the 5 survey years included in this report. The overall increase in expenditures for student services was 25.0%.

### **Doctoral II Institutions**

For the first year (1995-1996), expenditures for student services declined for the 37 Doctoral II institutions a total of 0.87%. After the decline, the growth in expenditures for student services grew at a rate greater than the CPI. Overall, expenditures for student services grew 18.7%.

### **Master's I Institutions**

The pattern of adjustments in funds spent per student for student affairs for Master's I institutions mirrored the experiences of Doctoral I institutions. A decline was experienced from 1995 to 1996, but this was quickly accounted for from 1996 to 1997 and thereafter. The actual change from 1995 to 1999 was a 33.2% increase.

### **Master's II Institutions**

Master's II institutions experienced more of a roller coaster approach to financing than the other institutions in this study. Funding declined in 1996 compared to 1995, but quickly recovered, and these institutions experienced a major increase from 1996 to 1997. Funding declined in 1998 and recovered some in 1999, but still at a level below 1997. Overall, funding increased by just 6.4%, an amount below the cumulative CPI for the period studied.

TABLE 1.  
Current-Fund Expenditures of Public Degree Granting Institutions,  
1980-1981 to 1996-1997  
Percentage Devoted to Each Category

Year	Instruction	Research	Public Service	Academic Support	Student Services	Institutional Support	Phys. Plant	Scholarships/ Fellowships	Mandatory Transfers	Auxiliary Enterprises	Hospitals	Independent Operations
1980-81	35.1	9.0	4.1	7.2	4.6	8.4	8.7	2.5	1.2	11.0	8.0	.2
1985-86	34.6	9.0	4.0	7.4	4.6	9.0	8.2	2.5	1.2	10.8	8.5	.2
1990-91	33.7	10.1	4.3	7.5	4.7	8.8	7.2	2.9	1.0	9.7	10.0	.2
1991-92	33.2	10.1	4.3	7.4	4.7	8.5	6.9	3.3	1.1	9.7	10.6	.2
1992-93	32.8	10.1	4.4	7.3	4.9	8.7	6.8	3.8	1.1	9.6	10.6	.2
1993-94	32.6	10.2	4.3	7.4	4.9	8.5	6.8	3.9	1.1	9.7	10.4	.2
1994-95	32.6	10.2	4.4	7.3	4.9	8.6	6.6	4.0	1.2	9.7	10.2	.2
1995-96	32.3	10.1	4.4	7.5	4.9	9.0	6.7	4.3	1.2	9.5	9.9	.2
1996-97	32.1	10.1	4.6	7.6	5.0	9.0	6.6	4.4	1.2	9.6	9.6	.2

Source: *Digest of Education Statistics, 2000*, Table 343.

TABLE 2.

## Dollars Spent on Student Affairs Per Student by Institutional Type, 1995-1999

Institutional Type	Median 1995	Median 1996	% Change	Median 1997	% Change	Median 1998	% Change	Median 1999	% Change
RI N = 59	604.58	629.09	4.05%	656.27	4.32%	685.38	4.44%	689.28	0.57%
RII N = 27	513.07	531.87	3.66%	560.26	5.34%	568.86	1.54%	638.14	12.18%
DI N = 28	561.67	582.76	3.75%	629.29	7.98%	669.34	6.36%	702.23	4.91%
DII N = 37	525.12	520.56	-0.87%	563.05	8.16%	605.25	7.49%	623.63	3.04%
MI N = 249	544.31	519.94	-4.48%	598.63	15.13%	672.71	12.37%	725.55	7.85%
MII N = 28	647.84	612.95	-5.38%	752.33	22.74%	642.72	-14.57%	689.38	7.26%
BI N = 7	767.67	774.67	0.91%	823.58	6.31%	824.62	-0.13%	884.77	7.29%
BII N = 78	576.97	621.07	7.64%	627.78	0.08%	694.64	10.65%	731.58	5.32%
CPI			3.00%		2.30%		1.60%		2.20%

Note. RI = Research I, RII = Research II, DI = Doctoral I, DII = Doctoral II, MI = Master's I, MII = Master's II, BI = Bachelor's I, BII = Bachelor's II public institutions of higher education

### Bachelor's I Institutions

Just seven institutions fit the classification of Bachelor's I colleges. These institutions did not experience steady growth over the period studied, growing slightly in 1996 and 1998, with healthier growth in the other years. Over the period studied, the growth experienced by these institutions was 15.2%.

### Bachelor's II institutions

The final set included in this study was the Bachelor's II colleges, which included a total of 78 institutions. These institutions experienced growth each of the years of the study. The overall growth experienced by these institutions was 26.7%.

Institutional expenditures per student were compared by Carnegie type and reporting year using analysis of variance. The resulting model indicates that both Carnegie type and year of expenditure had a significant

influence on the variance of expenditures. The aggregate influence of Carnegie type and year of expenditure accounted for over 92% of the variance in expenditures. These findings are summarized in Table 3.

In examining the differences between institutional types, the Scheffé post hoc test revealed a number of significant differences. Clearly, the Bachelor's I institutions taken together, with an admittedly small number of institutions, were an anomaly in this study. These institutions provided more support, on a per student basis, for student affairs than the other institutions. Other significant differences were identified, but the patterns were less dramatic than what was found for the Bachelor's I institutions. These results are depicted in Table 4.

### Comparison with CPI

The final guiding question for this inquiry

TABLE 3.  
Analysis of Variance for Carnegie  
Type and Reporting Year

Source	df	F	Eta Squared
Carnegie Type	7	36.914*	.902
Year	4	23.237*	.768

Note.  $r^2 = .926$ . Adjusted  $r^2 = .897$ .

\*  $p < .001$ .

was how increases in student affairs compared with increases in the CPI. In this comparison, increases in funding for student affairs were quite robust. For every institutional type except Master's II institutions, growth in funding exceeded growth in the CPI, which grew an aggregate of 9.1%. The change in the CPI is reported in Table 2 on a year-by-year basis.

## CONCLUSIONS

In reviewing the data from this study, an obvious conclusion is that student affairs has had a favorable experience during the years included in this study. Taken together, student affairs has exceeded the CPI, a common measure of inflation, and has held its own against other categories of institutional expenditures. Does this mean that student affairs has been of increasing importance as an institutional priority? That question cannot be answered definitively based on this study, but Balderston (1995) did point out that "increasing weight is now given to explicit decisions about the allocation of resources" (p. 6)

By institutional type, some universities and colleges have done better than others. The

Master's II group of institutions did not match the inflation rate, and the Research I institutions exceeded the inflation rate by less than 5%. On the other hand, some of the institutional types did extremely well, including Bachelor's II, Research II, Doctoral I, and Master's I institutions. In these cases, funding for student affairs was more than triple the inflation rate. As was suggested above, the model incorporating Carnegie type and year of expenditure explained over 92% of the variance between expenditures. Bachelor's I institutions provided the most generous expenditures of the institutional types studied in this inquiry, which may be explained by their focus on undergraduate education. If that is the case, however, the study does not explain why such dramatic differences were not noted between Bach-

TABLE 4.  
Comparison of Pairwise Means Using  
Carnegie Type

	BII	BI	MII	MI	DII	DI	RII	RI
BII								
BI	*							
MII		*						
MI		*						
DII	*	*	*					
DI		*						
RII	*	*	*					
RI		*			*		*	

Note. BII = Bachelor's II Colleges; BI = Bachelor's I Colleges; MII = Master's II Universities; MI = Master's I Universities; DI = Doctoral I Universities; DII = Doctoral II Universities; RII = Research II Universities; RI = Research I Universities.

\*  $p < .05$ .

elor's II institutions and the other institutional types included in this inquiry.

### **Limitations and Recommendations for Further Study**

This study did not examine whether or not spending on student affairs has an effect on the extent to which institutions are able to achieve their mission. In some cases, greater levels of spending on student affairs may reflect an institutional priority of trying to provide assistance for underprepared students, such as through tutorial programs, or programs designed to assist students in their transition to college-level academic work. In other cases, institutions may not spend as much on student activities if their students primarily attend on a part-time basis. So, the reader should not infer a level of success for units of student affairs based on the level of spending reported in this study.

Any study of institutions taken together cannot speak to the experience of individual institutions. Because this is a study of 513 institutions, specific institutions may have done better or worse than the results reported here. Therefore, at best the use of these data can provide benchmarks, which can be useful (See Taylor & Massy, 1996), but they do not tell specific stories. Measuring institutional performance requires a more sophisticated level of analysis than is reported in this study, and needs to be tied to specific institutional goals (Scott, 1994). Nevertheless, senior student affairs officers could determine how

expenditures at their institutions compare with peer institutions. Among other strategies would be the development of a cost analysis on a unit by unit basis to determine where an institution's resources are being targeted (Campanella & Owens, 1999).

This study does not claim to report whether or not student needs have been met over the years studied. Very likely, even with healthy budget adjustments, specific institutions may be less able to meet the needs of their students, as such change over time. Individual case studies could provide useful data as to whether or not institutions are meeting student needs, as Kuh, Schuh, and Whitt (1991) noted.

Finally, although this study indicates that the fiscal environment for student affairs has been stable to improving over the years studied, the extent to which student affairs has had to assume additional tasks, which have the potential to be quite expensive, has not been addressed. An example of this would be providing services for students with disabilities. In absolute terms, a budget could be increased to provide such services, but in reality, the net financial flexibility could actually be worse. This is yet another area of potential investigation.

---

Correspondence concerning this article should be addressed to John H. Schuh, Educational Leadership and Policy Studies, N243 Lagmarcino Hall, Iowa State University, Ames, IA 50011-3195; [jschuh@iastate.edu](mailto:jschuh@iastate.edu)

## REFERENCES

- Balderston, F. E. (1995). *Managing today's university* (2nd ed.). San Francisco: Jossey-Bass.
- Campanella, F. B., & Owens, R. R. (1999). Project Delta: Planning a new student services model. In M. Beede & D. Burnett (Eds.), *Planning for student services: Best practices for the 21st century* (pp. 37-45). Ann Arbor, MI: Society for College and University Planning.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research* (6th ed.). White Plains, NY: Longman.
- Kuh, G. D., Schuh, J. H., & Whitt, E. J. (1991). *Involving colleges*. San Francisco: Jossey-Bass.
- Lenington, R. L. (1996). *Managing higher education as a business*. Phoenix, AZ: ACE/Oryx.
- National Center for Education Statistics. (1999a). *Integrated Postsecondary Education Data System Finance Survey*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (1999b). *Integrated Postsecondary Education Data System Institutional Characteristics Survey*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2001). *Digest of Education Statistics 2000* (NCES 2001-034). Washington, DC: U.S. Department of Education.
- Rhatigan, J. J. (1986). Developing a campus profile of commuting students. *NASPA Journal*, 24 (1), 4-10.
- Schuh, J. H. (1990). Current fiscal and budgetary perspectives. In Author (Ed.), *Financial management for student affairs administrators* (pp. 1-19). Alexandria, VA: ACPA.
- Schuh, J. H. (2000). Fiscal pressures on higher education and student affairs. In M. J. Barr, M. K. Desler, & Associates (Eds.), *The handbook of student affairs administration* (2nd ed.) (pp. 73-96). San Francisco: Jossey-Bass.
- Scott, R. H. (1994). Measuring performance in higher education. In W. F. Massy & J. W. Meyerson (Eds.), *Measuring institutional performance in higher education* (pp. 15-27). Princeton, NJ: Peterson's.
- Taylor, B. E., & Massy, W. F. (1996). *Strategic indicators for higher education*. Princeton, NJ: Peterson's.
- U.S. Census Bureau. (1999). *Statistical abstract of the United States*. Available: [census.gov/prod/www/statistical-abstract-us.html](http://census.gov/prod/www/statistical-abstract-us.html)
- Woodard, D. B., Love, P., & Komives, S. R. (2000). *Leadership and management for a new century* (New Directions for Student Services No. 92). San Francisco: Jossey-Bass.
- Woodard, D. B., & von Destinon, M. (2000). Budgeting and fiscal management. In M. J. Barr, M. K. Desler, & Associates (Eds.), *The handbook of student affairs administration* (2nd ed.) (pp. 327-346). San Francisco: Jossey-Bass.