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Finishing the First Lap:
*The Cost of First-Year Student Attrition
in America's Four-Year Colleges
and Universities*

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Executive Summary

The Obama administration is calling for the United States to regain its status as the nation with the highest concentration of college-educated adults in the world. In response to this challenge, the president, governors, foundations, individual campuses, and many others are pursuing a “college completion agenda” that aims to get more students across the finish line. However, far too many are stumbling soon after they sprint off the mark.

In this report, we focus on the high costs associated with the large number of students who do not return for a second year at the college where they first enroll. Using data from the U.S. Department of Education’s Integrated Postsecondary Education Data System (IPEDS), we show that during the five years between 2003 and 2008 (the latest years for which we have data):

- States appropriated almost \$6.2 billion to colleges and universities to help pay for the education of students who did not return for a second year.

- States gave over \$1.4 billion and the Federal government over \$1.5 billion in grants to students who did not return for a second year.

“In recent years, we have failed to live up to our opportunity legacy, especially in higher education. In just a decade, we’ve fallen from first to ninth in the proportion of young people with college degrees. That not only represents a huge waste of potential; in the global marketplace it represents a threat to our position as the world’s leading economy.”
(President Barack Obama)

The nation will have a difficult time reaching the administration’s policy goals unless we find ways to increase the number of students who return to complete their college degrees. In the meantime, we continue to spend far too much money on students who don’t even finish the first lap, let alone fail to cross the finish line.

Introduction

The United States spends more on higher education than any other nation in the world. We spend about twice as much per student as the United Kingdom, Germany, or Japan and about three times as much as most other industrialized countries in Europe and Asia, according to the Organization for Economic Cooperation and Development (OECD) Factbook. We also devote about twice as much of our wealth, measured by proportion of gross domestic product, to higher education than the average spent by the other countries represented in the OECD.

Most parents with children in high school or already in college know another basic fact of American higher education: the cost of attending college has increased dramatically. Indeed, since the 1980s, the cost of tuition has increased far faster than inflation, and, by some calculations, even faster than the rising costs of health care.

Yet American students' success is not commensurate with these world-class expenditures. Approximately 30 percent of students who start college this fall will

not return to that college next year. Alarming, only about 60 percent of students graduate from "four-year" colleges and universities within six years.

When students enroll in a college or university and drop out before the second year, they have invested time and money only to see their hopes and dreams of a college degree dashed. These costs can be heartbreaking for students and their families, but the financial costs to states are enormous.

Most students attend public colleges and universities, which are subsidized by taxpayers through state appropriations and through state grants to students. Nationwide, these subsidies approach \$10,000 per student per year; in some states the average is higher. Taxpayers also subsidize the costs of private colleges and universities, sometimes through state programs that support students in private schools, occasionally through state appropriations, and always through the tax-exempt status of private not-for-profit institutions. These costs are mounting, even as state treasuries are running dry. This report shows just how high these costs are.

This report is not about *why* students fail to return for a second year or why some colleges and universities have high dropout rates while other institutions with similar students have low ones. Indeed, arguments abound over the causes of student failure: Some argue that far too many students are entering college unprepared for the rigors they are about to face. Some say colleges and universities aren't doing their job in educating their students. Others say that states have not held their public campuses accountable for low student success and are therefore allowing their campuses to take advantage of lax state policies and oversight.

Compared to the complexity of that debate (and the lack of evidence needed to resolve it), the goal of this report is modest. Our goal is to show the cost to taxpayers of the failure of first-year, full-time students to progress beyond that year. We use the best data available from the Federal government to calculate these costs for the Federal government and states. Because of limitations in the national data, we have developed these cost estimates only for first-time, full-time students. Compared to part-time students or returning students, the students used in our calculations are more likely to return to their schools and indeed to graduate. In short, our estimates are only a fraction of the total costs of first-year attrition the nation and the states face. (The technical appendix gives more information about data limitations and the assumptions we used in creating our measures.)

President Obama, in his first speech to a joint session of Congress in February of 2009, laid out a challenge that “by 2020, America will once again have the highest proportion of college graduates in the world.” He presented this challenge in terms of protecting the future economic competitiveness of the nation. While the president talks about America's future, the data presented here and the associated web site

(<http://collegemeasures.org>) emphasize the immediate monetary outlays associated with student failure (the full accounting of these costs including such things as the “opportunity costs” of the time first-year-only students spent in school are beyond the scope of this report). The nation urgently needs to solve the low graduation rate problem and to increase the pressure on colleges and universities to be held accountable for the success and failure of their students.

Transparency is the first step to accountability. These data should attract the attention of policy makers, college and university trustees, and other stakeholders. We document nationally and state by state how much money has been spent in the last five years for which we have data. (The website makes these numbers, plus other measures, available at the institution level.)

We begin this report by documenting the costs that the nation as a whole has incurred as a result of first-year student attrition. We look at these expenditures at all four-year degree-granting institutions (public and private). We then present these numbers state by state and present separate estimates of expenditures for just public colleges and universities in each state.

While the Federal government provides substantial aid to college students (mostly in the form of Pell grants aimed at increasing the access of low-income students to postsecondary institutions), the states provide far more money overall, especially to taxpayer-supported public institutions.

As the nation focuses its efforts on increasing student completion, states will have to take the lead. The state by state tables documenting the costs of student attrition will (we hope) drive states to hold their colleges and universities more accountable for their students' success.

How much does first-year attrition cost the nation?

Figure 1 presents an estimate of the amount of money states spent through appropriations on full-time first-year students who started in the fall and didn't come back the following year. Starting out at just under \$1.2 billion in the 2003 academic year, costs increased by about 15 percent, to \$1.35 billion, by the 2007 academic year (the last year for which data are available). The graph shows that these costs are accelerating.

Figure 1: State Losses Through Appropriations Are Increasing

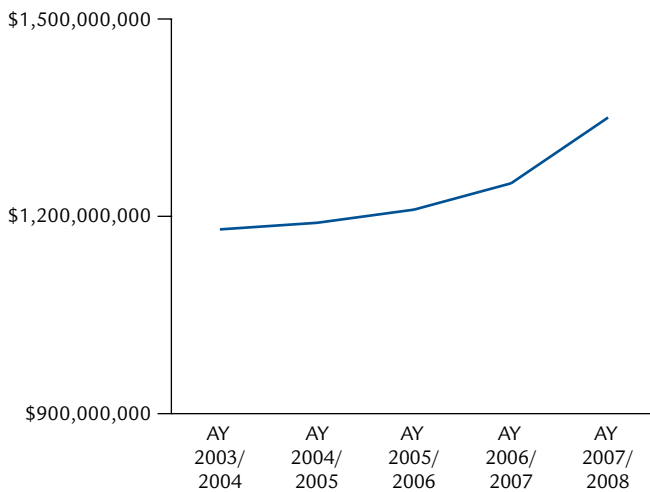
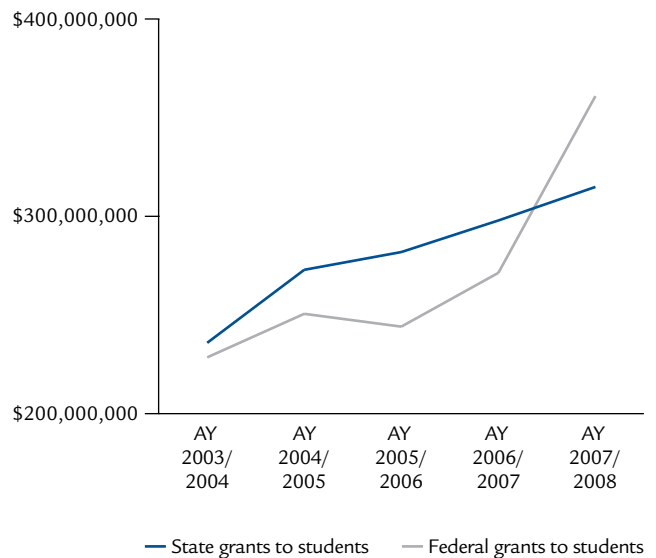


Figure 2 shows the pattern for state grants to students, another avenue through which states are sending increasing amounts of money to their colleges and universities for first-year-only students. The figure also shows the dollar amounts of the federal grants given to students, especially low-income ones, to help them defray the cost of attendance. Most of these come in the form of Pell grants. Both the Bush and Obama administrations increased the funding for the Pell program, and the losses through that program are substantial.

Figure 2: State and Federal Grants to First-Year-Only Students



Among four-year colleges, in the 2003 academic year, about \$240 million in state grants and \$270 million in federal student grants went to students who did not return for a second year at the same college. State and Federal government grants to college students who dropped out before starting their second year increased dramatically: state grants to these students increased by a third; federal ones by close to 40 percent.

The high costs of failure

So far we have looked at these costs on an annual basis. In Table 1, we show the costs of first-year student attrition over the last five years.

Over the course of the last five years:

- States appropriated almost \$6.2 billion to colleges and universities to help pay for the education of students who did not return to school for a second year.
- States gave over \$1.4 billion to support students who did not return to their college or university for a second year.
- The Federal government gave over \$1.5 billion in grants to support students who did not return for a second year.

Table 1: Five-Year Total Costs Incurred by First-Year Attrition (2003–2008)

	All Four-Year Total Costs Incurred by First-Year Attrition
State subsidies through appropriations	\$6.18 billion
State grants to students	\$1.4 billion
Federal grants to students	\$1.5 billion

State Results

States spend more money on higher education than the Federal government, and they have substantial financial, regulatory, and legislative authority over higher education practices within their borders. While this is clearly true for public higher education systems—where state subsidies through legislation often represent the lion's share of funding for campuses—states also affect practices in private institutions.

States have a direct stake in the well-being of the students who attend colleges and universities within their borders, and they also have a clear interest in saving taxpayer money—especially at a time when their treasuries are scraping bottom. Table 2 highlights just how expensive the lack of student success can be for different states. Remember that we are focused on money that states spend to support students who don't return for a second year. (Losses would be even higher if we included the students who drop out later.)

Combining both state appropriations and state grants over the last five years, California leads the list with close to half a billion dollars in state monies going to first-year-only students. New York and Texas also come close to the half billion dollar mark. There are in

total 14 states that spent more than \$200 million on students who didn't start a second year at their school, and while size clearly affects the list, some large states such as New Jersey and Virginia fall below \$200 million, while some smaller states spend more.

In the last few years, there have been increases in the amount of federal grants going to low-income students. Most of this money comes through Pell grants—the primary means by which the Federal government supports low-income students who might otherwise not be able to afford higher education. Both the Bush and the Obama administrations struggled to find more money for this laudable program. But over the last five years, approximately \$1.5 billion in federal grants went to first-year-only students.

Table 3 presents the order of states in which federal student grant dollars went to students who did not return for a second year. New York leads the list with over \$140 million, followed at some distance by Texas and California. Over the last five years, Federal student aid to first-year-only students topped \$40 million in 11 states and was over \$20 million in over half.

Table 2: States in Order of State Money Spent on First-Year Dropouts

Position	State	Total State Expenditures on First-Year-Only Students
1	California	\$490,800,000
2	New York	\$481,000,000
3	Texas	\$470,500,000
4	Illinois	\$321,000,000
5	North Carolina	\$315,200,000
6	Florida	\$308,700,000
7	Ohio	\$300,400,000
8	Indiana	\$287,800,000
9	Georgia	\$254,000,000
10	Michigan	\$251,200,000
11	Pennsylvania	\$232,900,000
12	Tennessee	\$221,200,000
13	Louisiana	\$217,400,000
14	Kentucky	\$216,900,000
15	Virginia	\$177,700,000
16	Massachusetts	\$175,500,000
17	New Jersey	\$173,100,000
18	Alabama	\$171,420,000
19	South Carolina	\$147,700,000
20	Missouri	\$142,500,000
21	Arizona	\$142,100,000
22	Wisconsin	\$140,900,000
23	Oklahoma	\$132,400,000
24	Minnesota	\$129,400,000
25	New Mexico	\$121,000,000
26	Arkansas	\$106,800,000
27	Maryland	\$102,500,000
28	West Virginia	\$99,600,000
29	Kansas	\$93,500,000
30	Iowa	\$92,800,000
31	Washington	\$81,300,000
32	Idaho	\$73,800,000
33	Mississippi	\$70,700,000
34	Utah	\$69,600,000
35	Nevada	\$68,400,000
36	Connecticut	\$68,300,000
37	Colorado	\$60,500,000
38	Nebraska	\$57,600,000
39	Oregon	\$56,400,000
40	Montana	\$41,000,000
41	Alaska	\$39,300,000
42	North Dakota	\$37,500,000
43	Maine	\$37,400,000
44	South Dakota	\$36,100,000
45	Hawaii	\$32,600,000
46	Wyoming	\$30,800,000
47	Delaware	\$27,700,000
48	Rhode Island	\$25,800,000
49	New Hampshire	\$13,200,000
50	Vermont	\$7,300,000
51	Washington, DC	\$6,200,000

Table 3: States in Order of How Much Federal Student Aid Was Spent on First-Year Dropouts

Position	State	Total Federal Grants to First-Year-Only Students
1	New York	\$142,000,000
2	Texas	\$91,100,000
3	California	\$81,200,000
4	Illinois	\$74,900,000
5	Ohio	\$66,800,000
6	North Carolina	\$56,700,000
7	Pennsylvania	\$56,000,000
8	Louisiana	\$49,900,000
9	Arizona	\$44,900,000
10	Florida	\$41,500,000
11	Georgia	\$40,800,000
12	Indiana	\$39,100,000
13	Michigan	\$39,100,000
14	Massachusetts	\$36,900,000
15	Alabama	\$34,400,000
16	Virginia	\$33,700,000
17	Tennessee	\$33,500,000
18	Kentucky	\$30,700,000
19	South Carolina	\$30,500,000
20	Missouri	\$30,300,000
21	Oklahoma	\$25,800,000
22	New Jersey	\$25,300,000
23	Colorado	\$24,300,000
24	Wisconsin	\$23,400,000
25	Arkansas	\$21,800,000
26	West Virginia	\$21,500,000
27	Minnesota	\$18,800,000
28	Missouri	\$18,800,000
29	Maryland	\$16,700,000
30	Iowa	\$16,200,000
31	Kansas	\$14,200,000
32	Idaho	\$13,400,000
33	Oregon	\$12,000,000
34	New Mexico	\$11,700,000
35	Washington	\$10,800,000
36	Wyoming	\$9,700,000
37	Nebraska	\$9,300,000
38	Connecticut	\$9,200,000
39	Maine	\$9,100,000
40	Montana	\$9,000,000
41	South Dakota	\$8,100,000
42	Rhode Island	\$7,600,000
43	Utah	\$7,400,000
44	Washington, DC	\$6,700,000
45	North Dakota	\$5,700,000
46	New Hampshire	\$4,600,000
47	Delaware	\$3,870,928
48	Hawaii	\$3,500,000
49	Vermont	\$3,400,000
50	Nevada	\$2,994,306
51	Alaska	\$1,700,000

State Data Tables

In this section of the report, we present state-by-state tables showing the cumulative expenditures sent to campuses to support first-year-only students. We duplicate the national data, focused on state subsidies through appropriations and state and federal grants. We also break out the expenditures for public institutions in the state.

We believe that these numbers should alert taxpayers and their representatives to the high costs a state incurs when, as is unfortunately the case, large numbers of students fail to return to the college or university for a second year.

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 4: Alabama

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$171,400,000	\$168,000,000	\$3,400,000	\$34,400,000
Public	\$167,400,000	\$165,000,000	\$2,400,000	\$24,100,000

Table 5: Alaska

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$39,400,000	\$38,700,000	\$700,000	\$1,800,000
Public	\$39,300,000	\$38,700,000	\$600,000	\$1,700,000

Table 6: Arizona

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$142,100,000	\$141,000,000	\$1,100,000	\$44,900,000
Public	\$141,900,000	\$141,000,000	\$900,000	\$10,500,000

Table 7: Arkansas

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$106,800,000	\$97,800,000	\$9,000,000	\$21,800,000
Public	\$105,100,000	\$97,800,000	\$7,300,000	\$18,400,000

Table 8: California

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$490,800,000	\$425,000,000	\$65,800,000	\$81,200,000
Public	\$466,700,000	\$425,000,000	\$41,700,000	\$60,900,000

Table 9: Colorado

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$60,500,000	\$45,600,000	\$14,900,000	\$24,300,000
Public	\$59,800,000	\$45,600,000	\$14,200,000	\$18,000,000

Table 10: Connecticut

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$68,300,000	\$57,100,000	\$11,200,000	\$9,300,000
Public	\$62,300,000	\$56,300,000	\$6,000,000	\$3,800,000

Table 11: Delaware

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$27,800,000	\$25,700,000	\$2,000,000	\$3,900,000
Public	\$27,400,000	\$25,700,000	\$1,700,000	\$2,700,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 12: Florida

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$308,700,000	\$225,000,000	\$83,700,000	\$41,500,000
Public	\$274,900,000	\$223,000,000	\$51,900,000	\$18,400,000

Table 13: Georgia

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$254,000,000	\$168,000,000	\$86,000,000	\$40,800,000
Public	\$236,700,000	\$166,000,000	\$70,700,000	\$22,400,000

Table 14: Hawaii

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$32,700,000	\$32,500,000	\$200,000	\$3,600,000
Public	\$32,700,000	\$32,500,000	\$200,000	\$2,000,000

Table 15: Idaho

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$73,900,000	\$70,600,000	\$3,300,000	\$13,400,000
Public	\$73,400,000	\$70,600,000	\$2,800,000	\$11,000,000

Table 16: Illinois

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$321,000,000	\$244,000,000	\$77,000,000	\$74,900,000
Public	\$290,100,000	\$244,000,000	\$46,100,000	\$30,400,000

Table 17: Indiana

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$287,800,000	\$233,000,000	\$54,800,000	\$39,100,000
Public	\$267,700,000	\$233,000,000	\$34,700,000	\$28,700,000

Table 18: Iowa

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$92,800,000	\$79,800,000	\$13,000,000	\$16,200,000
Public	\$80,700,000	\$79,800,000	\$900,000	\$4,500,000

Table 19: Kansas

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$93,600,000	\$88,400,000	\$5,200,000	\$14,200,000
Public	\$90,600,000	\$88,400,000	\$2,200,000	\$9,600,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 20: Kentucky

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$216,900,000	\$171,000,000	\$45,900,000	\$30,700,000
Public	\$200,800,000	\$171,000,000	\$29,800,000	\$21,200,000

Table 21: Louisiana

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$217,400,000	\$170,000,000	\$47,400,000	\$49,900,000
Public	\$213,200,000	\$169,000,000	\$44,200,000	\$43,800,000

Table 22: Maine

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$37,400,000	\$34,500,000	\$2,900,000	\$9,100,000
Public	\$36,500,000	\$34,500,000	\$2,000,000	\$6,300,000

Table 23: Maryland

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$102,500,000	\$88,300,000	\$14,200,000	\$16,700,000
Public	\$96,900,000	\$85,700,000	\$11,200,000	\$13,500,000

Table 24: Massachusetts

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$175,500,000	\$150,000,000	\$25,500,000	\$36,900,000
Public	\$168,800,000	\$150,000,000	\$18,800,000	\$21,400,000

Table 25: Michigan

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$251,200,000	\$201,000,000	\$50,200,000	\$39,100,000
Public	\$238,900,000	\$200,000,000	\$38,900,000	\$30,600,000

Table 26: Minnesota

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$129,400,000	\$110,000,000	\$19,400,000	\$18,800,000
Public	\$122,400,000	\$110,000,000	\$12,400,000	\$12,800,000

Table 27: Mississippi

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$70,800,000	\$66,700,000	\$4,100,000	\$18,800,000
Public	\$69,900,000	\$66,700,000	\$3,200,000	\$14,300,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 28: Missouri

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$142,500,000	\$129,000,000	\$13,500,000	\$30,300,000
Public	\$136,500,000	\$129,000,000	\$7,500,000	\$19,000,000

Table 29: Montana

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$41,100,000	\$37,100,000	\$4,000,000	\$9,000,000
Public	\$41,000,000	\$37,100,000	\$3,900,000	\$8,200,000

Table 30: Nebraska

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$57,700,000	\$55,400,000	\$2,300,000	\$9,400,000
Public	\$57,100,000	\$55,400,000	\$1,700,000	\$5,500,000

Table 31: Nevada

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$68,400,000	\$60,600,000	\$7,800,000	\$3,000,000
Public	\$68,400,000	\$60,600,000	\$7,800,000	\$2,800,000

Table 32: New Hampshire

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$13,300,000	\$12,300,000	\$1,000,000	\$4,700,000
Public	\$12,600,000	\$12,300,000	\$300,000	\$2,000,000

Table 33: New Jersey

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$173,100,000	\$129,000,000	\$44,100,000	\$25,300,000
Public	\$152,200,000	\$126,000,000	\$26,200,000	\$16,200,000

Table 34: New Mexico

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$121,000,000	\$106,000,000	\$15,000,000	\$11,700,000
Public	\$120,700,000	\$106,000,000	\$14,700,000	\$10,900,000

Table 35: New York

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$481,000,000	\$322,000,000	\$159,000,000	\$142,000,000
Public	\$402,500,000	\$313,000,000	\$89,500,000	\$75,100,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 36: North Carolina

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$315,200,000	\$260,000,000	\$55,200,000	\$56,700,000
Public	\$285,100,000	\$259,000,000	\$26,100,000	\$32,000,000

Table 37: North Dakota

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$37,500,000	\$36,800,000	\$700,000	\$5,600,000
Public	\$37,400,000	\$36,800,000	\$600,000	\$4,700,000

Table 38: Ohio

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$300,400,000	\$259,000,000	\$41,400,000	\$66,800,000
Public	\$276,500,000	\$258,000,000	\$18,500,000	\$45,200,000

Table 39: Oklahoma

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$132,400,000	\$113,000,000	\$19,400,000	\$25,800,000
Public	\$130,000,000	\$113,000,000	\$17,000,000	\$22,100,000

Table 40: Oregon

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$56,500,000	\$52,800,000	\$3,700,000	\$12,000,000
Public	\$55,400,000	\$52,800,000	\$2,600,000	\$9,300,000

Table 41: Pennsylvania

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$232,900,000	\$168,000,000	\$64,900,000	\$56,000,000
Public	\$198,400,000	\$165,000,000	\$33,400,000	\$30,000,000

Table 42: Rhode Island

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$25,900,000	\$23,900,000	\$2,000,000	\$7,600,000
Public	\$25,100,000	\$23,900,000	\$1,200,000	\$3,000,000

Table 43: South Carolina

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$147,700,000	\$78,000,000	\$69,700,000	\$30,500,000
Public	\$124,800,000	\$78,000,000	\$46,800,000	\$15,200,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 44: South Dakota

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$36,200,000	\$32,400,000	\$3,800,000	\$8,100,000
Public	\$36,000,000	\$32,400,000	\$3,600,000	\$6,400,000

Table 45: Tennessee

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$221,200,000	\$157,000,000	\$64,200,000	\$33,500,000
Public	\$205,000,000	\$157,000,000	\$48,000,000	\$19,200,000

Table 46: Texas

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$470,500,000	\$386,000,000	\$84,500,000	\$91,100,000
Public	\$440,500,000	\$386,000,000	\$54,500,000	\$66,000,000

Table 47: Utah

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$69,700,000	\$67,000,000	\$2,700,000	\$7,500,000
Public	\$69,600,000	\$67,000,000	\$2,600,000	\$5,400,000

Table 48: Vermont

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$7,400,000	\$5,800,000	\$1,600,000	\$3,500,000
Public	\$6,300,000	\$5,800,000	\$500,000	\$1,000,000

Table 49: Virginia

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$177,700,000	\$141,000,000	\$36,700,000	\$33,700,000
Public	\$161,400,000	\$141,000,000	\$20,400,000	\$17,400,000

Table 50: Washington

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$81,300,000	\$70,300,000	\$11,000,000	\$10,800,000
Public	\$78,400,000	\$70,300,000	\$8,100,000	\$6,500,000

Table 51: Washington, DC

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$6,300,000	\$2,200,000	\$4,200,000	\$6,700,000
Public	\$2,800,000	\$2,200,000	\$600,000	\$2,400,000

Five-Year Cumulative Expenditures on First-Year-Only Students, by State (2003–2008)

Table 52: West Virginia

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$99,600,000	\$77,200,000	\$22,400,000	\$21,500,000
Public	\$96,800,000	\$77,200,000	\$19,600,000	\$16,600,000

Table 53: Wisconsin

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$140,900,000	\$123,000,000	\$17,900,000	\$23,400,000
Public	\$134,800,000	\$123,000,000	\$11,800,000	\$16,700,000

Table 54: Wyoming

	Total State Expenditures	State Appropriations	State Student Grants	Federal Student Grants
All institutions	\$30,900,000	\$25,700,000	\$5,200,000	\$1,000,000
Public	\$30,900,000	\$25,700,000	\$5,200,000	\$1,000,000

Technical Appendix

The data for this report are from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS). All postsecondary institutions in the country whose students receive federal student aid (authorized under Title IV of the Higher Education Assistance Act of 1965 (Pub. L. No. 89-329) and reauthorized most recently in 2008) are required to report certain statistics to IPEDS. This data system collects and reports data at the aggregate level, not at the individual student level, which limits the level of detailed analysis that can be done.

An even more severe restriction is that most of the data for students are focused on first-time, full-time beginning students. When it was first authorized in 1965, most students in the country would likely have been covered by IPEDS, but as our higher education system has evolved and as access has broadened, these "traditional" students have become a smaller and smaller part of the nation's college population, representing less than half of today's student population. Moreover, the students covered by IPEDS are the ones most likely to succeed in college. For example, and central to the analysis presented in this report, the freshman retention rate for full-time students across the bachelor degree-granting schools

we study in this report is just over 70 percent. But for these same schools the retention rate for part-time students is less than 50 percent.

We do not include part-time students, since, besides the retention rate, IPEDS has very little data about them; hence, the losses we document in this report are lower than the losses across all students. On the other hand, we know that some of the students who leave during their first-year at college will enroll in another school and some of them will eventually graduate. However, national estimates put that figure at less than 10 percent of all students—and it is probably lower for students who leave during their first year. Our inability to account for transfer students could lead us to overestimate the losses, since some students do indeed succeed elsewhere. Unfortunately, we can't sort out these conflicting biases using IPEDS—and at this time we have no other national data source that could more accurately track losses.

Finally, we know that there are advantages to taking college courses even if the student doesn't complete college. However, there is a clear "sheepskin effect"—the payoff for a college degree is far more than the benefits of taking credits and not earning the degree.

In addition, very few students enroll in college planning to get just a few credits—their goal, consistent with the nation's evolving “completion agenda,” is to earn a degree that will offer them more opportunities in their career and in their life.

Creating the measures

To construct this data set, we downloaded IPEDS data for the last five years available from the IPEDS data center (<http://nces.ed.gov/ipeds/datacenter/login.aspx>), ending with the 2007/2008 academic year. We chose U.S. Title IV degree-granting institutions that were predominantly baccalaureate and above. This produced a list of 2,070 institutions. However, data were missing from some of these institutions. Others were classified as “special focus institutions” (such as theology schools), which we excluded. After various data-cleaning exercises, the database contains information for 1,521 schools (73 for-profit, 920 not-for-profit, and 528 public colleges and universities).

For each of these schools we used IPEDS “Graduation Rate Survey” (GRS) data that enumerated the size of the incoming “GRS cohort” (this is the number of first-time, full-time, beginning students tracked by IPEDS) and that cohort's full-time retention rate. Multiplying these two numbers yields the number of students who returned for a second year. Subtracting the number of returning students from the initial size of the cohort yields the annual student loss for each campus in the database. Note that the retention rate is measured over the course of the year and we don't know how many students left after one semester and how many lasted the entire year, which affected our numbers by an unknown factor.

The state subsidy is calculated from the Delta Project on Postsecondary Education Costs, Productivity, and Accountability (<http://www.deltacostproject.org>), which provides a user-friendly interface to IPEDS data.

Here we calculated the state subsidy using the Delta Project's calculation of state revenues to the campus from appropriations divided by FTE for each of the five years in our database. This is the average payment by the state to that campus—but the subsidy is affected by the number of graduate students on the campus and by the distribution of students across majors. (States often recognize that some fields are more expensive to support than others and adjust their subsidies accordingly.) While the measure is flawed, it is the best measure we have. We take the this average per student state subsidy and multiply it by the number of students who did not return after their freshman year.

All students attending college or university benefit from the state subsidy; however, state and especially federal grants are usually income contingent—so not all students get them. Indeed, across the schools in this database, on average, just slightly more than a third of students received grants from either (or both) their state or Federal government. IPEDS also reports the average amount of each of these types of grants. Since we do not have the detailed data at the individual level to calculate which students who dropped out actually had grants, we take the campus averages and apply them to the number of students who did not return.

For instance, using numbers in line with national averages, let's say a campus has a GRS cohort of 1,000 students and 300 did not return for year two. Say 35 percent of students on the campus have federal grants with an average of \$3,800. The amount of federal grants lost to first-year attrition is then 300 students \times 35% (estimate of the percentage of students with grants) \times \$3,800 (average amount of grant), or \$399,000. Since grants to students are income contingent and students with low incomes are at greater risk of dropping out than more affluent students, this is probably a low estimate of the loss.

