

Trends in Higher Education Series

Trends in Student Aid **2018**





See the **Trends in Higher Education** website at trends.collegeboard.org for figures and tables in this report and for more information and data.

About the College Board

The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success—including the SAT® and the Advanced Placement Program®. The organization also serves the education community through research and advocacy on behalf of students, educators, and schools. For further information, visit www.collegeboard.org.

Trends in Higher Education

The Trends in Higher Education publications include the annual *Trends in College Pricing* and *Trends in Student Aid* reports and the *Education Pays* series, along with other research reports and topical analysis briefs. These reports are designed to provide a foundation of evidence to strengthen policy discussions and decisions.

The tables supporting all of the graphs in this report, a PDF version of the report, and a PowerPoint file containing individual slides for all of the graphs are available on our website trends.collegeboard.org.

Please feel free to cite or reproduce the data in this report for noncommercial purposes with proper attribution.

For inquiries or requesting hard copies, please contact: trends@collegeboard.org.

© 2018 The College Board. College Board, Advanced Placement Program, SAT, and the acorn logo are registered trademarks of the College Board. All other marks are the property of their respective owners.

Visit the College Board on the web: collegeboard.org.

Highlights

Trends in Student Aid 2018 reveals a continuing decline in total annual education borrowing, which fell (in inflation-adjusted dollars) in 2017-18 for the seventh consecutive year. Federal education loans per full-time equivalent (FTE) undergraduate fell from a peak of \$5,830 (in 2017 dollars) in 2010-11 to \$4,510 in 2017-18. However, the average amount borrowed by graduate students increased for the third year in a row—to \$17,990. (Figure 1)

This report also documents some of the variation in student loan repayment patterns. Although 29% of federal borrowers in repayment are now in income-driven repayment plans, 17% of all borrowers are in default. (Figures 13A, 13B). About 11% of those who entered repayment in FY14 defaulted within three years (U.S. Department of Education). Just two-thirds of federal student loan borrowers who entered repayment in 2009-10 and 2010-11 after earning a degree or certificate—and less than half of those who left school without a credential—had paid down at least one dollar of their loan principal after five years. In addition to noncompleters, the problem is particularly severe for those who attended for-profit institutions and for independent students. (Figures 14A, 14B)

The focus on student debt sometimes obscures the importance of grant aid, which has grown much more rapidly for undergraduate than for graduate students in recent years. Between 2007-08 and 2012-13, grant aid from all sources grew rapidly. However, institutional grant aid—aid awarded by colleges and universities as a discount from published prices—is the only type of grant aid that increased significantly in the last five years.

TYPES OF STUDENT AID

In 2017-18, undergraduate students received an average of \$14,790 per FTE student in financial aid: \$8,970 in grants, \$4,510 in federal loans, \$1,240 in education tax credits and deductions, and \$70 in Federal Work-Study (FWS). (Figure 1, Table 3)

- Graduate students received an average of \$27,230 per FTE student in financial aid: \$8,460 in grants, \$17,990 in federal loans, \$730 in tax credits and deductions, and \$50 in FWS. (Figure 1, Table 3)
- Grant aid per FTE undergraduate rose by 42% between 2007-08 and 2012-13, from \$5,560 (in 2017 dollars) to \$7,890, and by another 14% to \$8,970 by 2017-18. (Figure 1)
- Grant aid per graduate student rose by 10% (\$740 in 2017 dollars) between 2007-08 and 2012-13 and by another 6% (\$490) between 2012-13 and 2017-18. Federal loans per graduate student rose by 13% (\$2,110) over the first five years of the decade and fell by \$30 over the next five years. (Figure 1)
- Undergraduate and graduate students received \$241.3 billion in grants from all sources, FWS, federal loans, and federal tax credits and deductions in 2017-18. In addition, students borrowed about \$12 billion from nonfederal sources. (Table 1)
- Total federal grant aid increased by 88% in inflation-adjusted dollars between 2007-08 and 2017-18. Pell Grants increased

by 64%; veterans benefits, which rose by 282%, grew from 15% of federal grants in 2007-08 to 31% in 2017-18. (Table 1)

- Federal loans to undergraduates increased by 9% between 2007-08 and 2017-18, rising by 41% over the first five years, but declining by 23% between 2012-13 and 2017-18. (Figure 3)
- FWS and Federal Supplemental Educational Opportunity Grants (FSEOG) combined provided \$1.6 billion to undergraduate students in 2017-18—1% of the total aid. (Figure 3)

SOURCES OF GRANT AID

Between 2012-13 and 2017-18, institutional grant aid for undergraduate students increased by \$10.4 billion in 2017 dollars (27%), rising from 37% to 44% of total grants (and from 20% to 26% of total financial aid) to undergraduates. (Figure 3)

- Colleges and universities increased their grant aid for undergraduate and graduate students by 24%, from \$48.4 billion (in 2017 dollars) in 2012-13 to \$60.0 billion in 2017-18. Over these five years, federal grant aid declined by 12%, and grant aid from states and from employers and other private sources rose by less than 10%. (Figure 5)
- In 2015-16, low-income students enrolled full time at private nonprofit four-year colleges and universities received 63% of their total grant aid from their institutions—an average of \$16,590 per student out of a total of \$26,220. (Figure 19)
- In 2015-16, full-time students received an average of \$7,300 in grant aid at public four-year institutions and \$4,680 at public two-year institutions. (Figure 18)
- State grant aid per FTE undergraduate student rose for the fifth consecutive year in 2016-17, to \$820—an increase of \$120 (17%) since 2011-12. State grant aid per student ranged from under \$200 in nine states to over \$1,000 in 13 states. (Figures 23A, 24A)

PELL GRANTS

Pell Grant expenditures rose from \$17.2 billion (in 2017 dollars) in 2007-08 to \$40.1 billion in 2010-11, but declined to \$28.2 billion by 2017-18. (Figure 20B)

- The number of Pell Grant recipients fell in 2017-18 for the sixth consecutive year, but the 7.0 million recipients represented a 27% increase from 5.5 million in 2007-08. (Figure 20B)
- The number of undergraduate students rose by 290,000 between 2007-08 and 2017-18. The number of Pell Grant recipients increased by 1.5 million. The share of undergraduates receiving Pell Grants rose from 25% to 32% over the decade. (Figure 20A)
- The average Pell Grant per recipient was \$2,590 (in 2017 dollars) in 1997-98. It increased to \$3,110 in 2007-08, peaked at \$4,300 in 2010-11, and fell to \$4,010 in 2017-18. (Figure 21A)
- The maximum Pell Grant covered 60% of average public four-year tuition and fees and 17% at private nonprofit four-year institutions in 2018-19. (Figure 21B)

DISTRIBUTION OF STUDENT AID

In 2016-17, 49% of Pell Grant recipients were dependent students. Seventy-three percent of this group came from families with incomes below \$40,000. (Figure 22B)

- In 2016-17, 20% of Pell Grant recipients were over the age of 30. (Figure 22A)
- The share of the savings from education tax credits and deductions going to households with adjusted gross income (AGI) below \$25,000 rose from 14% in 2006 to 22% in 2016. The share going to those with AGI over \$100,000 rose from 1% to 24%. (Figure 26A)
- In 1981-82 and before, virtually all state grant aid was based on students' financial circumstances. The share that was need-based declined gradually to a low of 71% in 2010-11. From 2013-14 through 2016-17, 76% of state grant aid was need-based. (Figure 23A)
- In 2016-17, half of the states considered students' financial circumstances in allocating at least 95% of their state grant aid. Fifteen states considered students' financial circumstances when awarding less than half of their state grant aid. (Figure 23B)
- In 2015-16, private nonprofit four-year institutions with tuition and fees of \$45,000 or higher awarded, on average, about two and a half times as much grant aid to dependent students from families with incomes below \$35,000 as to those from families with incomes of \$120,000 or higher (\$33,260 vs. \$12,840). At institutions with tuition and fees of less than \$25,000, students from families with incomes of \$70,000 or higher received more institutional grant aid, on average, than those from families with lower incomes. (Figure 25A)
- In 2015-16, public doctoral universities distributed 62% of their institutional grant aid without regard to students' financial need; at public master's universities, it was 71%. (Figure 25B)

STUDENT BORROWING

In 2017-18, annual education borrowing declined for the seventh consecutive year. Students and parents borrowed \$105.5 billion, down from \$127.7 billion (in 2017 dollars) in 2010-11. (Figure 6)

- Federal loans per FTE undergraduate student declined in 2017-18 for the seventh consecutive year—from \$5,830 (in 2017 dollars) in 2010-11 to \$4,510 in 2017-18. (Figure 1)
- Federal loans per FTE graduate student declined from a peak of \$19,180 in 2010-11 to \$17,340 in 2014-15, before rising to \$17,990 in 2017-18. (Figure 1)
- The share of federal loans going to graduate students increased from 32% to 40% between 2002-03 and 2017-18. The percentage of FTE postsecondary students who were graduate students increased from 13% to 14% over these 15 years. (Figure 9A)
- In 2017-18, 29% of undergraduates borrowed an average of \$6,570 in subsidized and unsubsidized Direct Loans, a decline from 37% borrowing an average of \$6,790 in 2012-13; in 2007-08, 30% of undergraduates borrowed an average of \$6,360. (Figures 9B, 12)

- The number of parents borrowing PLUS Loans in 2017-18 was 12% of the number of undergraduates taking subsidized and unsubsidized Direct Loans, but the average parent loan was \$16,450, 2.5 times as much as the average undergraduate student loan. (Figure 9B)
- Borrowing through the Grad PLUS program rose by 27% (\$2.2 billion in 2017 dollars) between 2012-13 and 2017-18. (Figure 6)
- Nonfederal education loans fell from about \$26 billion (in 2017 dollars) in 2007-08 to \$9 billion from 2009-10 through 2011-12, and rose to about \$12 billion in 2017-18. (Figure 6)


STUDENT DEBT

As of March 2018, 52% of the outstanding federal education loan debt was held by the 14% of borrowers owing \$60,000 or more; 56% of borrowers with outstanding debt owed less than \$20,000. (Figure 11)

- The share of 2015-16 bachelor's degree recipients who borrowed \$50,000 or more for their undergraduate studies ranged from 7% of those who earned their degrees at public institutions to 32% of those who graduated from for-profit institutions. Overall, 11% borrowed this much. (Figure 16)
- In 2015-16, 5% of master's degree recipients, 20% of doctoral degree recipients, and 50% of professional degree recipients borrowed \$100,000 or more to fund their graduate school study. (Figure 17)
- In 2016-17, the 59% of bachelor's degree recipients from public and private nonprofit institutions who borrowed graduated with an average of \$28,500 in debt. (Figure 15)
- Average debt among public four-year college graduate borrowers rose by 16% (\$3,700 in 2017 dollars) between 2006-07 and 2011-12 and by 3% (\$700) between 2011-12 and 2016-17. Among private nonprofit bachelor's degree recipients, the increases were 6% (\$1,700) between 2006-07 and 2011-12 and 3% (\$900) between 2011-12 and 2016-17. (Figure 15)
- In 2015-16, parents of 9% of dependent undergraduate students borrowed through the Parent PLUS program. (Figure 10A)
- The share of undergraduate students taking private student loans fell from 14% in 2007-08 to 6% in both 2011-12 and 2015-16. (Figure 10B)
- Sixty-seven percent of federal student loan borrowers who entered repayment in 2009-10 and 2010-11 after earning a degree or certificate had paid down at least one dollar of their loan principal after five years. This repayment rate was 41% for noncompleters. (Figure 14A)
- After seven years, 41% of borrowers from for-profit institutions had reduced their loan balances by at least one dollar. This repayment rate was lower than the one-year repayment rates in all other sectors. (Figure 14B)


Contents

3	Highlights		
7	Introduction		
9	Total Student Aid	TABLE 1	Total Student Aid and Nonfederal Loans in 2017 Dollars over Time
		 TABLE 2	Total Student Aid and Nonfederal Loans in Current Dollars over Time
10	Aid per Student	FIGURE 1	Average Aid per Student over Time
		 TABLE 3	Average Aid per Student over Time: All Postsecondary Students, Undergraduate Students, and Graduate Students
11	Grants, Loans, and Other Aid	FIGURE 2	Composition of Total Aid and Nonfederal Loans over Time
		 TABLE 4	Total Aid and Nonfederal Loans in Current and Constant Dollars over Time: All Students, Undergraduate Students, and Graduate Students
12	Total Undergraduate Student Aid by Type	FIGURE 3	Total Undergraduate Student Aid by Source and Type over Time
13	Total Graduate Student Aid by Type	FIGURE 4	Total Graduate Student Aid by Source and Type over Time
		 TABLE 1	Total Undergraduate and Graduate Student Aid by Source and Type over Time
14	Sources of Grant Aid	FIGURE 5	Total Grant Aid by Source over Time
15	Types of Loans	FIGURE 6	Total Federal and Nonfederal Loans by Type over Time
16	Federal Aid	FIGURE 7	Number of Recipients by Federal Aid Program, 2017-18
		FIGURE 8	Percentage Distribution of Federal Aid Funds by Sector, 2016-17
		 TABLE 5	Federal Aid per Recipient by Program over Time in Current and Constant Dollars
		 TABLE 7	Percentage Distribution of Federal Aid Funds by Sector over Time
17	Federal Loans: Annual Borrowing	FIGURE 9A	Total Annual Amount Borrowed in Federal Loans over Time
		FIGURE 9B	Average Annual Amount Borrowed in Federal Loans over Time
		 TABLE 6	Federal Loans in Current and Constant Dollars over Time: All Postsecondary Students, Undergraduate Students, and Graduate Students
18	Annual Undergraduate Borrowing: Parent PLUS and Private Loans	FIGURE 10A	Share of Dependent Undergraduate Students with Parent PLUS Loans over Time
		FIGURE 10B	Share of Undergraduate Students with Private Loans over Time
19	Federal Loans: Borrowing and Balances	FIGURE 11	Distribution of Borrowers and Debt by Outstanding Balance, 2018
		FIGURE 12	Percentage of Undergraduates Borrowing Federal Loans over Time
		 FIGURE 2016_11A	Median Debt by Institution Type, 2013-14
20	Outstanding Federal Loans	FIGURE 13A	Distribution of Outstanding Federal Direct Loan Dollars and Borrowers by Repayment Plan
		FIGURE 13B	Repayment Status of Federal Education Loan Portfolio
21	Federal Loans: Repayment Rates	FIGURE 14A	Federal Student Loan Repayment Rate by Completion Status and by Dependency Status
		FIGURE 14B	Federal Student Loan One-Year, Three-Year, Five-Year, Seven-Year Repayment Rate by Sector
Default Rates	 FIGURE 2016_11B	Five-Year Student Loan Default Rates by Institution Type over Time	
	 FIGURE 2016_12A	Two-Year Default Rates by Sector and Completion Status	
	 FIGURE 2016_12B	Share of Defaulters and Three-Year Default Rates by Loan Balance	
22	Cumulative Debt: Bachelor's Degree Recipients	FIGURE 15	Average Cumulative Debt of Bachelor's Degree Recipients at Four-Year Institutions over Time

 Figures and tables that are only available online at trends.collegeboard.org. Additional figures on student debt and grant aid from the 2014 and 2015 reports are available online.

Contents—Continued

23 Cumulative Debt: Undergraduate Degree Recipients	FIGURE 16	Distribution of 2015-16 Degree or Certificate Completers by Cumulative Amount Borrowed for Undergraduate Study
24 Cumulative Debt: Graduate Degree Recipients	FIGURE 17	Distribution of 2015-16 Advanced Degree Recipients by Cumulative Amount Borrowed for Graduate Study
25 Sources of Grant Aid: Public Institutions	FIGURE 18	Sources of Grant Aid in 2015-16: Public Institutions
26 Sources of Grant Aid: Private Institutions	FIGURE 19	Sources of Grant Aid in 2015-16: Private Institutions
27 Pell Grants	FIGURE 20A	Undergraduate Enrollment and Percentage Receiving Pell Grants over Time
	FIGURE 20B	Total Pell Grant Expenditures and Number of Recipients over Time
28 Pell Grants	FIGURE 21A	Maximum and Average Pell Grants over Time
	FIGURE 21B	Maximum Pell Grant and Published Prices at Four-Year Institutions over Time
	 TABLE 8	Federal Pell Grant Awards in Current and Constant Dollars over Time
29 Pell Grants	FIGURE 22A	Distribution of Pell Grant Recipients by Age, 2016-17
	FIGURE 22B	Distribution of Pell Grant Recipients by Dependency Status and Family Income, 2016-17
30 State Grants	FIGURE 23A	Need-Based and Non-Need-Based State Grants per Undergraduate Student over Time
	FIGURE 23B	Percentage of State Grant Based on Need by State, 2016-17
31 State Grants	FIGURE 24A	State Grant Aid per Undergraduate Student by State, 2016-17
	FIGURE 24B	State Grant Expenditures as a Percentage of Total State Support for Higher Education by State, 2016-17
32 Institutional Grants	FIGURE 25A	Average Institutional Grant Aid per Student in 2015-16: Private Nonprofit Four-Year Institutions
	FIGURE 25B	Average Institutional Grant Aid per Student in 2015-16: Public Doctoral and Master's Institutions
	 FIGURE 2017_21	Average Institutional Grant Aid per First-Time Full-Time Undergraduate Student over Time
33 Education Tax Credits and Tuition Deductions	FIGURE 26A	Distribution of Education Tax Credits by Income over Time
	FIGURE 26B	Total Education Tax Credits and Tuition Deductions over Time
34 Notes and Sources	 TABLE A1	Consumer Price Index over Time

 Figures and tables that are only available online at trends.collegeboard.org. Additional figures on student debt and grant aid from the 2014 and 2015 reports are available online.

Introduction

Trends in Student Aid 2018 provides detailed information about the different types and amounts of financial aid awarded to both undergraduate and graduate students over time. Some of the indicators in the report focus on total amounts of aid; others focus on aid per student. Both of these perspectives are important—as is distinguishing between them.

Total amounts of aid disbursed can capture attention because of the large numbers. This phenomenon explains the widespread attention paid to the total amount of outstanding student debt since it passed the \$1 trillion mark. Similarly, when total Pell Grant expenditures increased from \$20.4 billion (in 2017 dollars) in 2008-09 to \$40.1 billion in 2010-11, members of Congress and others focused on federal spending became concerned about the trajectory of the program.

However, changes over time in enrollment levels and patterns can make it difficult to interpret these aggregate numbers. Even if the typical student gets the same amount of aid, if enrollment grows, total spending on aid will grow. The number of Pell Grant recipients increased by more than 50% between 2008-09 and 2010-11—from 6.2 million to 9.3 million. This change, combined with a 30% increase in the average award from \$3,310 (in 2017 dollars) to \$4,300, generated a doubling of total Pell expenditures. As the economy recovered from the Great Recession, total enrollment declined, and the financial circumstances of students became stronger, diminishing their financial need. As a result, Pell expenditures declined to \$28.2 billion in 2017-18.

Understanding student debt and its impact requires knowing how much students are borrowing in the aggregate each year. That total rose from \$49.3 billion (in 2017 dollars) in 1997-98 to \$107.0 billion in 2007-08 and to \$127.7 billion in 2010-11, but declined in each of the next seven years, reaching \$105.5 billion in 2017-18. But it also requires taking into account enrollment changes. The rise and fall of total annual borrowing during and after the Great Recession does reveal a real change in students' borrowing behavior, but also results from fluctuations in the number of students going to school. Total borrowing per full-time equivalent student (including both federal and nonfederal loans for borrowers and nonborrowers) rose from \$4,720 (in 2017 dollars) in 1997-98 to \$7,870 in 2007-08 and to \$8,120 in 2010-11, before declining for seven years to \$7,250 in 2017-18. Total borrowing was more than two and a half times as high in 2010-11 as in 1997-98. But borrowing per student was about 70% higher as enrollment rose by 50% over these years. Because enrollment has fallen since 2010-11, the 11% decline in borrowing per FTE student between 2010-11 and 2017-18 is smaller than the 17% decline in total borrowing over these years.

The purpose of student aid is to increase educational opportunities for individual students. Keeping this goal in mind helps to interpret and evaluate the information in *Trends in Student Aid*, which is more meaningful if viewed together with the companion publication, *Trends in College Pricing*. The rapid upward trend in published prices reported there makes increases in student aid more critical.

Institutional grant aid, in the form of discounts to students, is most closely linked with tuition prices. The data in this report reveal that institutional grant aid rose from 40% of total grant aid in 2012-13 to 46% in 2017-18. This means on one hand that the increases in published prices have less impact than they otherwise would, and on the other hand that the increases in grant aid do less to diminish financial barriers than they would in a stable price environment.

THE DISTRIBUTION OF STUDENT AID

The effectiveness of student aid in increasing educational opportunities depends largely on how the funds are distributed to students in different financial circumstances. For students with limited resources, grant aid makes pursuing postsecondary education possible. For others, grant aid makes going to a particular institution or type of institution feasible. For the remaining students, aid is a pure transfer, reducing the price of the educational paths they would take even without assistance.

Federal Pell Grants are carefully targeted to low- and moderate-income students. However, this aid declined from 53% to 47% of non-loan federal aid over the decade from 2007-08 to 2017-18, as aid to veterans has grown. Tax benefits, a much less targeted form of aid that disburses about a quarter of its funds to students from households with incomes between \$100,000 and \$180,000, account for more than one quarter of non-loan federal aid.

More than three-quarters of state grant dollars are allocated on the basis of financial need, but patterns vary considerably across states. Half of all states considered students' financial circumstances in allocating at least 95% of their state grant aid in 2016-17, while 15 states considered these circumstances for less than half of their aid. Data from the 2016 National Postsecondary Student Aid Study included in this report show that in 2015-16, public doctoral universities distributed 62% of their institutional grant aid without regard to students' financial need; at public master's universities, it was 71%. Monitoring the use of need-based and non-need-based grant aid by states and institutions is critical to ensuring the effectiveness of these funds in increasing educational opportunities and attainment.

THE STUDENT AID SYSTEM

Trends in Student Aid reports on a complex array of grant, loan, tax-based, and work programs that support postsecondary students. Grant aid and tax benefits lower the overall price of education for students and families, making the net price of college less than the published price. Education loans do not lower the price, but they do make it possible to spread payments out over time. The Federal Work-Study program is small relative to other federal programs: only 601,000 students benefited from the \$960 million federal allocation to this program in 2017-18. From the student perspective, these dollars are compensation for their work, not financial assistance. Work-Study earnings frequently replace earnings from other work, but may increase the employment opportunities available for students.

Understanding how these forms of funding—grants, loans, tax benefits, and work-study aid—are distributed and how the distribution has changed over time is critical to understanding the effectiveness of the student aid system and evaluating potential changes.

The student aid system is continually evolving. In 2017-18, federal funding available to support students' postsecondary pursuits totaled \$153.5 billion. Monitoring potential policy changes is vital to the future of the federal funding available to support students' postsecondary pursuits.

Similarly, state and institutional policies change over time. These sources provided \$11.2 billion and \$60.0 billion, respectively, in grant aid in 2017-18. If well designed and targeted, these funds can go a long way toward diminishing financial barriers to educational attainment.

Much of the data on which *Trends in Student Aid* is based come from the Federal Student Aid office of the U.S. Department of Education, which provides precise information about the volume of federal student aid disbursed. The figures for 2016-17 in *Trends in Student Aid 2018* are revisions of the numbers published last year, based on the U.S. Department of Education's updated data. Next year we will revise the 2017-18 figures in accordance with their updates.

Some of the other figures reported here are less precise. For example, the latest data on federal tax credits and deductions are for calendar year 2016. We have developed a methodology to translate IRS data into estimates of these policies' benefits for tax filers. Similarly, our estimate of the volume of nonfederal student loans is based on reports from MeasureOne and estimates of their share of the market. We base our current estimate of private grant aid on information from the 2016 National Postsecondary Student Aid Study and more recent information from the College Board's Annual Survey of Colleges. These and other figures represent best estimates of the amount of aid that students receive, rather than exact reporting. Each year we review our data sources and methodology and make some modifications.

The tables supporting all of the graphs in the Trends publications, PDF versions of the publications, PowerPoint files containing individual slides for all of the graphs, and other detailed data on student aid and college pricing are available on our website at trends.collegeboard.org. Please feel free to cite or reproduce the data in Trends for noncommercial purposes with proper attribution.

Total Student Aid

In 2017-18, undergraduate and graduate students received a total of \$241.3 billion in student aid in the form of grants from all sources, Federal Work-Study (FWS), federal loans, and federal tax credits and deductions.

TABLE 1 Student Aid and Nonfederal Loans in 2017 Dollars (in Millions), Undergraduate and Graduate Students Combined, 2007-08 to 2017-18

	Academic Year										Preliminary 17-18	10-Year % Change	
	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17			
Federal Aid													
Grants													
Pell Grants	\$17,247	\$20,355	\$34,092	\$40,059	\$36,379	\$34,255	\$32,985	\$31,467	\$29,293	\$27,356	\$28,232	\$28,232	64%
FSEOG	\$906	\$843	\$836	\$850	\$797	\$783	\$768	\$753	\$752	\$746	\$733	\$733	-19%
LEAP	\$76	\$71	\$72	\$69	—	—	—	—	—	—	—	—	—
Academic Competitiveness Grants	\$363	\$378	\$544	\$621	—	—	—	—	—	—	—	—	—
SMART Grants	\$241	\$222	\$408	\$486	—	—	—	—	—	—	—	—	—
Veterans	\$3,334	\$3,827	\$8,799	\$11,037	\$10,894	\$12,466	\$12,581	\$12,694	\$12,952	\$12,252	\$12,723	\$12,723	282%
Total Federal Grants	\$22,167	\$25,696	\$44,751	\$53,122	\$48,070	\$47,504	\$46,333	\$44,914	\$42,996	\$40,354	\$41,688	\$41,688	88%
Loans													
Perkins Loans	\$1,626	\$1,070	\$930	\$962	\$1,028	\$1,079	\$1,228	\$1,192	\$1,072	\$902	\$803	\$803	-51%
Subsidized Stafford	\$34,195	\$36,756	\$43,274	\$45,599	\$43,962	\$29,704	\$27,709	\$25,338	\$23,545	\$22,026	\$21,005	\$21,005	-39%
Unsubsidized Stafford	\$32,187	\$44,986	\$52,933	\$52,976	\$50,878	\$60,361	\$57,975	\$54,175	\$52,027	\$50,778	\$48,959	\$48,959	52%
Parent PLUS	\$9,043	\$8,556	\$10,120	\$11,892	\$12,001	\$10,493	\$10,776	\$11,010	\$12,269	\$12,784	\$12,817	\$12,817	42%
Grad PLUS	\$3,618	\$4,815	\$6,461	\$7,814	\$8,104	\$8,124	\$8,496	\$8,580	\$9,070	\$9,811	\$10,319	\$10,319	185%
Total Federal Loans	\$80,669	\$96,182	\$113,717	\$119,243	\$115,974	\$109,762	\$106,185	\$100,296	\$97,983	\$96,300	\$93,903	\$93,903	16%
Federal Work-Study	\$1,144	\$1,084	\$1,105	\$1,094	\$1,054	\$1,031	\$1,028	\$1,008	\$1,007	\$976	\$960	\$960	-16%
Education Tax Benefits	\$9,060	\$13,770	\$21,370	\$24,120	\$21,850	\$19,680	\$19,350	\$18,510	\$17,610	\$17,000	\$16,990	\$16,990	88%
Total Federal Aid	\$113,040	\$136,732	\$180,944	\$197,579	\$186,947	\$177,978	\$172,896	\$164,728	\$159,596	\$154,630	\$153,540	\$153,540	36%
State Grants	\$9,458	\$9,530	\$10,088	\$10,378	\$10,182	\$10,248	\$10,414	\$10,796	\$11,014	\$11,178	\$11,178	\$11,178	18%
Institutional Grants	\$33,543	\$35,257	\$39,842	\$43,032	\$45,140	\$48,362	\$50,632	\$53,199	\$56,064	\$58,269	\$60,033	\$60,033	79%
Private and Employer Grants	\$13,540	\$13,830	\$14,140	\$14,920	\$15,270	\$15,410	\$15,470	\$15,520	\$15,870	\$16,130	\$16,540	\$16,540	22%
Total Federal, State, Institutional, and Other Aid	\$169,581	\$195,349	\$245,014	\$265,909	\$257,539	\$251,998	\$249,412	\$244,243	\$242,544	\$240,207	\$241,291	\$241,291	42%
Nonfederal Loans	\$26,300	\$12,900	\$9,200	\$8,500	\$8,800	\$9,800	\$10,000	\$10,500	\$10,600	\$11,200	\$11,600	\$11,600	-56%
Total Student Aid and Nonfederal Loans	\$195,881	\$208,249	\$254,214	\$274,409	\$266,339	\$261,798	\$259,412	\$254,743	\$253,144	\$251,407	\$252,891	\$252,891	29%

NOTES: Table 1 excludes a variety of small federal grant and loan programs as well as some small programs for veterans and members of the military. Federal Supplemental Educational Opportunity Grant (FSEOG) and Federal Work-Study (FWS) funds reflect federal allocations and do not include the required matching funds from institutions. 2017-18 FSEOG, FWS, tax benefits, state grants, institutional grants, private and employer grants, and nonfederal loans are estimated from earlier data. Components may not sum to totals because of rounding.

SOURCES: See page 34 for a list of sources for data included in Table 1.

- The federal government's share of total student aid increased from 67% in 2007-08 to 74% in 2010-11, but fell to 64% in 2017-18.
- Loans made up 71% of federal student aid in 2007-08, but fell to 61% of the total in 2017-18.
- Nonfederal loans fell from 25% of all education loans in 2007-08 to 7% in 2009-10. In 2017-18, 11% of total loans were nonfederal loans.
- The share of federal student aid in the form of grants increased from 20% in 2007-08 to 27% in 2017-18.
- Total federal grant aid rose by 88% in inflation-adjusted dollars between 2007-08 and 2017-18. During this 10-year period, veterans benefits nearly quadrupled and Pell Grants increased by 64% in inflation-adjusted dollars. Over the decade, Pell Grants fell from 78% to 68% as a share of federal grant aid and veterans benefits increased from 15% to 31% of the total.

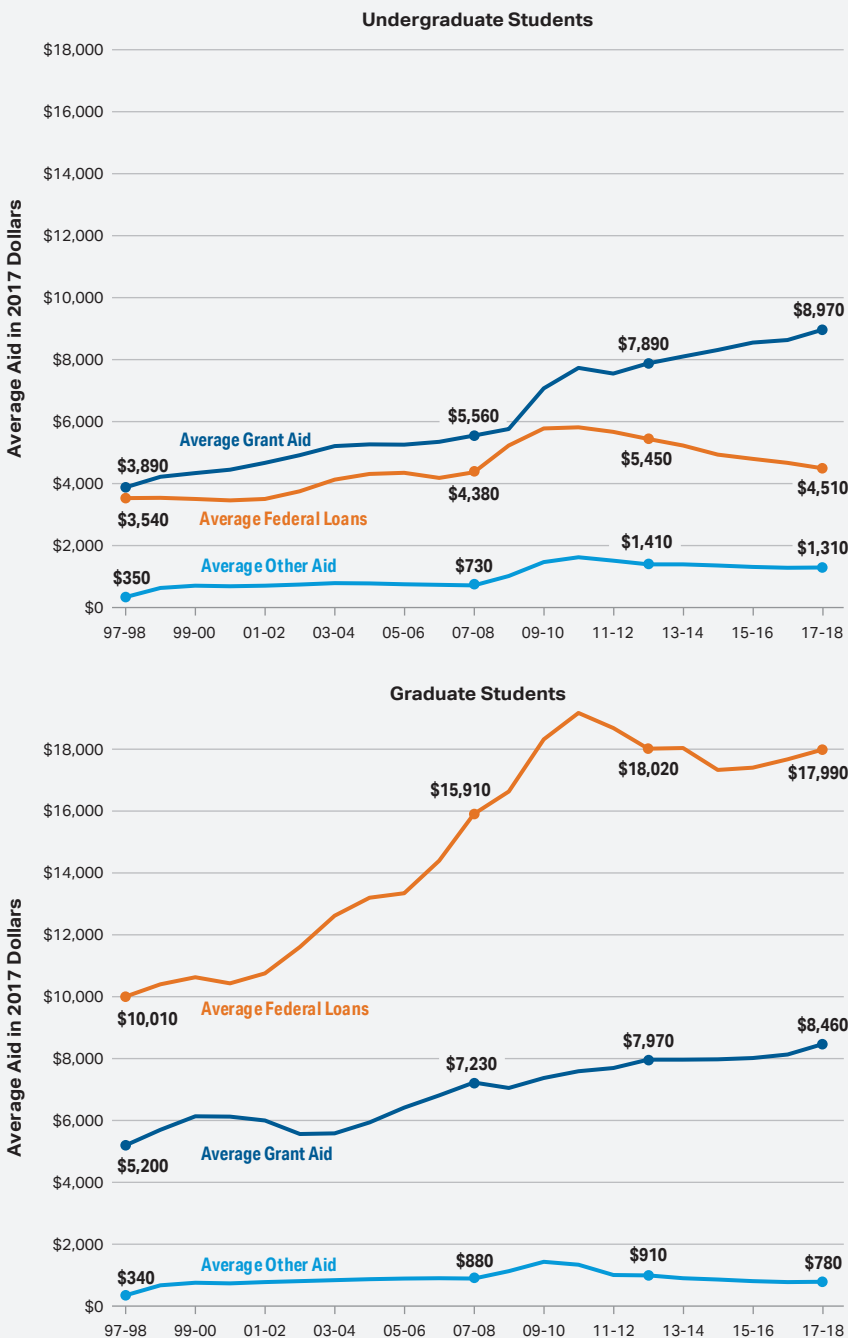
ALSO IMPORTANT:

- In 2017-18, undergraduate students received 76% (\$184.1 billion) of total student aid, including 95% of federal grants and 60% of federal loans. They received 86% of total grant aid from all sources and 63% of all loans, including nonfederal loans. The remainder of the aid funded graduate students. (Table 1 online)

Aid per Student

Federal loans per full-time equivalent (FTE) undergraduate student declined in 2017-18 for the seventh consecutive year. Loans per student declined from \$5,830 (in 2017 dollars) in 2010-11 to \$4,510 in 2017-18.

FIGURE 1 Average Aid per Full-Time Equivalent (FTE) Student in 2017 Dollars, 1997-98 to 2017-18



- Federal loans per FTE graduate student declined from a peak of \$19,180 in 2010-11 to \$17,340 in 2014-15 before rising to \$17,990 in 2017-18.
- Grant aid per FTE undergraduate rose by 42% between 2007-08 and 2012-13, from \$5,560 (in 2017 dollars) to \$7,890, and by another 14% to \$8,970 by 2017-18.
- Grant aid per FTE graduate student rose by 10%, from \$7,230 (in 2017 dollars) in 2007-08 to \$7,970 in 2012-13, and by another 6% to \$8,460 in 2017-18.
- In 2017-18, undergraduates received an average of \$14,790 in financial aid per FTE student, an increase from \$7,780 (in 2017 dollars) in 1997-98 and from \$10,670 in 2007-08.
- In 2017-18, graduate students received an average of \$27,230 in financial aid per FTE student, an increase from \$15,550 (in 2017 dollars) in 1997-98 and from \$24,020 in 2007-08.

ALSO IMPORTANT:

- In 2017-18, 95% of the "Other Aid" for undergraduate students and 94% of the "Other Aid" for graduate students were from education tax credits and deductions. The remainder was from FWS.

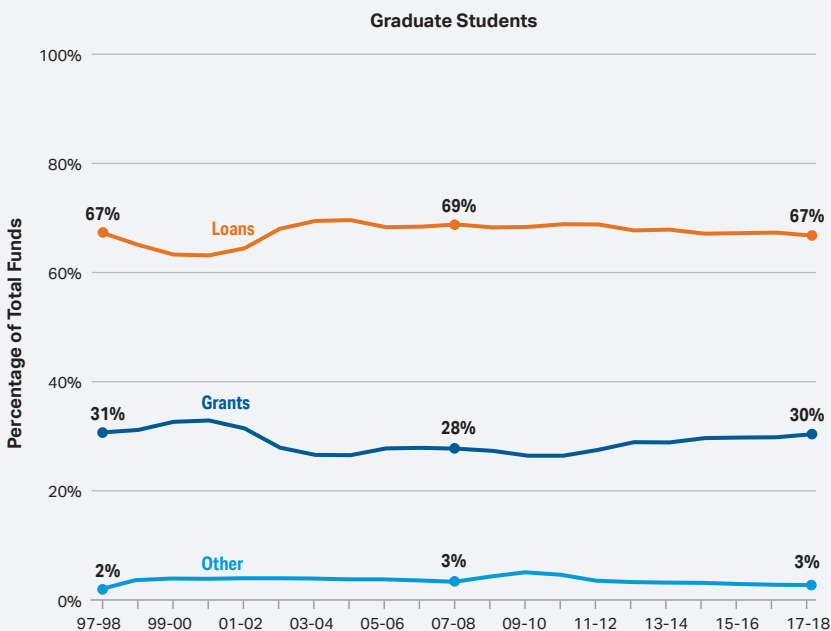
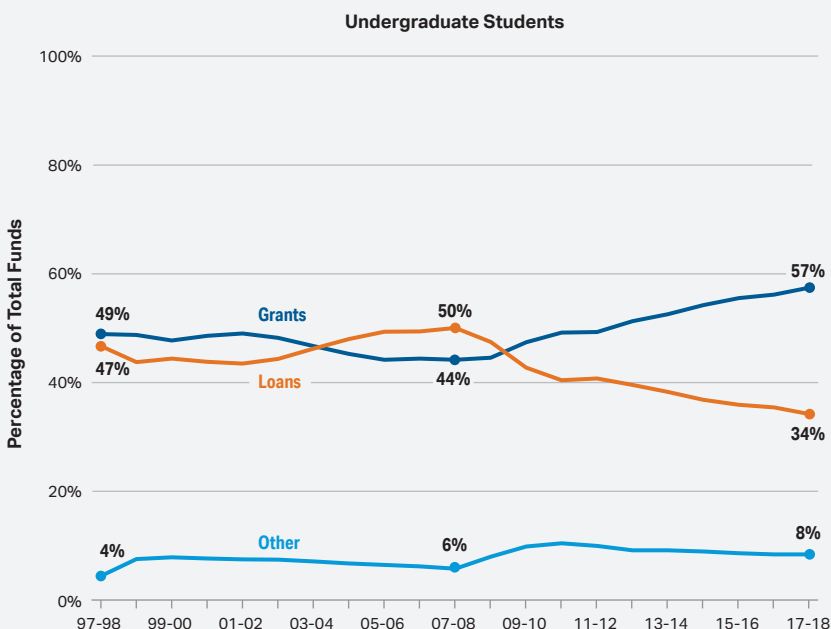
NOTES: Loans reported here include only federal loans to students and parents. Grants from all sources are included. "Other Aid" includes federal education tax credits and deductions and Federal Work-Study (FWS). Undergraduate and graduate shares of some forms of aid were estimated using NPSAS data and were updated. Dollar values are rounded to the nearest \$10.

SOURCE: Trends in Student Aid website (trends.collegeboard.org), Table 3.

Grants, Loans, and Other Aid

Between 2007-08 and 2017-18, loans (including both federal and nonfederal borrowing) fell from 50% to 34% of the funds used by undergraduate students to supplement their own and their family resources. Grants rose from 44% to 57% of total funding over the decade.

FIGURE 2 Composition of Total Aid and Nonfederal Loans, 1997-98 to 2017-18



- In contrast, between 1997-98 and 2017-18, loans consistently made up about two-thirds of the funds used by graduate students to supplement their own resources to finance their studies.
- In 2017-18, the combination of federal tax credits and deductions and Federal Work-Study (FWS) made up 8% of all student aid and nonfederal loans for undergraduate students and 3% for graduate students.

ALSO IMPORTANT:

- For undergraduate students, total grant aid increased by 71% and total loan volume fell by 10% between 2007-08 and 2017-18, after adjusting for inflation. (Table 1 online)
- For graduate students, total grant aid increased by 34% and total loan volume increased by 19% between 2007-08 and 2017-18. (Table 1 online)

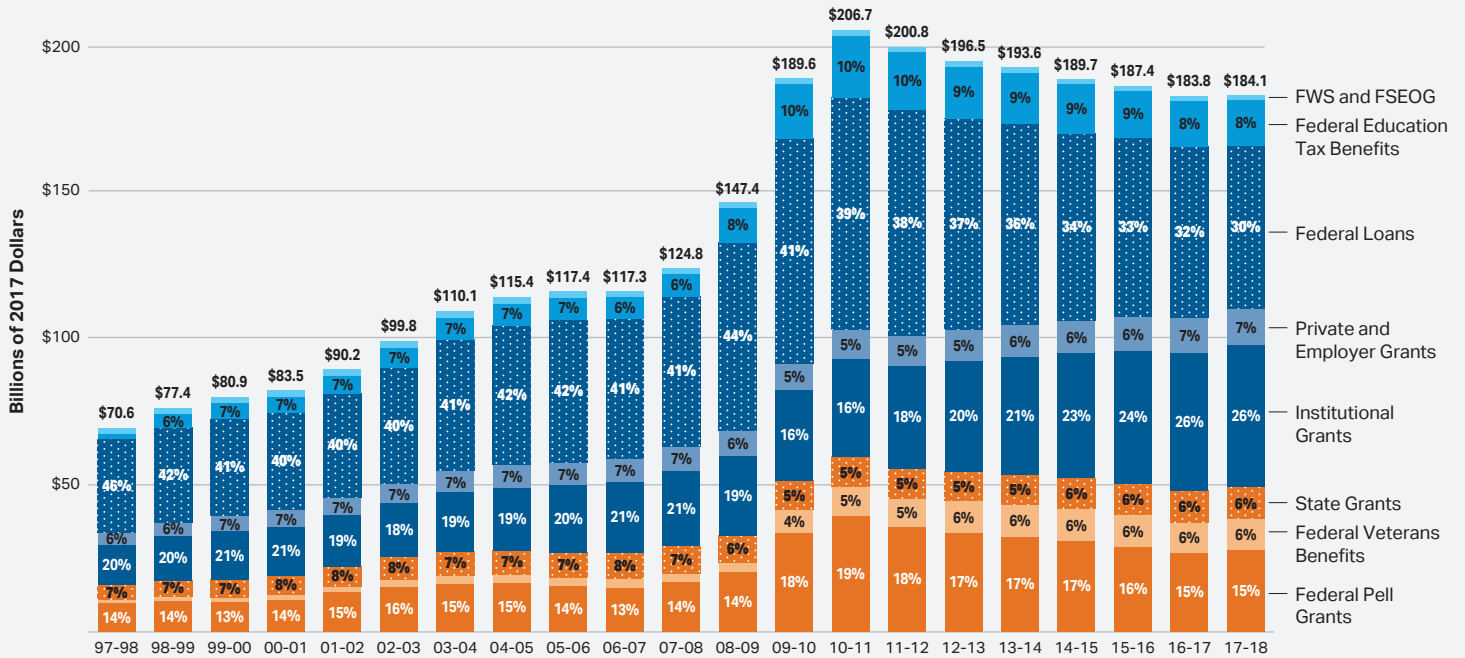
NOTES: Nonfederal loans are included to show the total education borrowing by students and parents. "Other Aid" includes Federal Work-Study (FWS) and federal education tax credits and deductions. Percentages may not sum to 100 because of rounding.

SOURCE: *Trends in Student Aid* website (trends.collegeboard.org), Table 4.

Total Undergraduate Student Aid by Type

Between 2012-13 and 2017-18, institutional grant aid for undergraduate students increased by \$10.4 billion in 2017 dollars (27%), rising from 20% to 26% of total financial aid to undergraduates.

FIGURE 3 Total Undergraduate Student Aid in 2017 Dollars by Source and Type (in Billions), 1997-98 to 2017-18



NOTE: Percentages may not sum to 100 because of rounding.

SOURCE: Trends in Student Aid website (trends.collegeboard.org), Table 1 online.

- Total institutional grant aid to undergraduates rose by 48% (\$12.4 billion in 2017 dollars) between 2007-08 and 2012-13 and by another 27% (\$10.4 billion) between 2012-13 and 2017-18.
- Pell Grants rose by 99% (\$17.0 billion in 2017 dollars) over the first half of the past decade and then declined by 18% (\$6.0 billion).
- Federal loans rose by 41% (\$21.1 billion in 2017 dollars) between 2007-08 and 2012-13 before declining by 23% (\$16.4 billion) over the next five years. Federal loans declined from 41% to 30% of total aid to undergraduates over the decade.
- The largest percentage growth in aid to undergraduates between 2007-08 and 2017-18 was in veterans benefits, which more than tripled, from \$3.0 billion (in 2017 dollars) in 2007-08 to \$10.8 billion in 2017-18. Federal tax credits and deductions doubled from \$7.6 to \$15.5 billion.

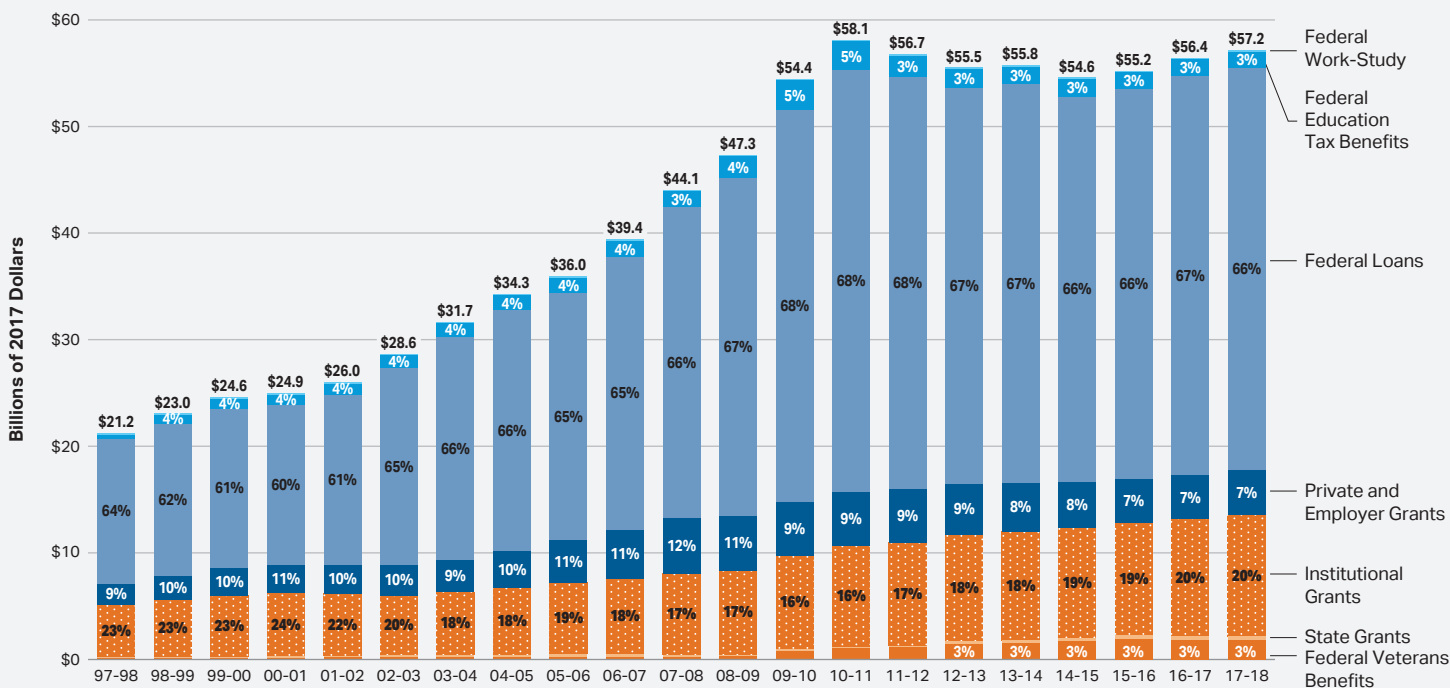
ALSO IMPORTANT:

- Figure 3 reports total aid amounts to undergraduate students. The 47% increase (\$58.6 billion in 2017 dollars) in total financial aid to undergraduates between 2007-08 and 2017-18 supported enrollment growth of 6%, from 11.8 million to 12.4 million full-time equivalent (FTE) undergraduate students, yielding an increase of 39% (\$4,120) in total aid per FTE student.

Total Graduate Student Aid by Type

Grant aid increased from 27% of total aid for graduate students in 2010-11 to 31% in 2017-18. Loans declined from 68% to 66% of the total.

FIGURE 4 Total Graduate Student Aid in 2017 Dollars by Source and Type (in Billions), 1997-98 to 2017-18



NOTE: Percentages may not sum to 100 because of rounding.

SOURCE: Trends in Student Aid website (trends.collegeboard.org), Table 1 online.

- Grant aid made up 35% of graduate student aid in 1999-00 and 2000-01, when loans were between 60% and 61% of the total.
- Between 2012-13 and 2017-18, institutional grants to graduate students rose by \$1.3 billion in 2017 dollars (13%). Federal loans rose by \$589 million (2%) and veterans benefits rose by \$432 million (30%).
- Between 1997-98 and 2007-08, federal loans for graduate students more than doubled, increasing from \$13.6 billion to \$29.2 billion in 2017 dollars. Federal loans for these students grew by another 29% over the next decade to \$37.8 billion in 2017-18.
- Between 1997-98 and 2007-08, institutional grants for graduate students rose by 55%, from \$4.9 billion to \$7.6 billion in 2017 dollars. Institutional grants grew by another 49% over the next decade to \$11.3 billion in 2017-18.

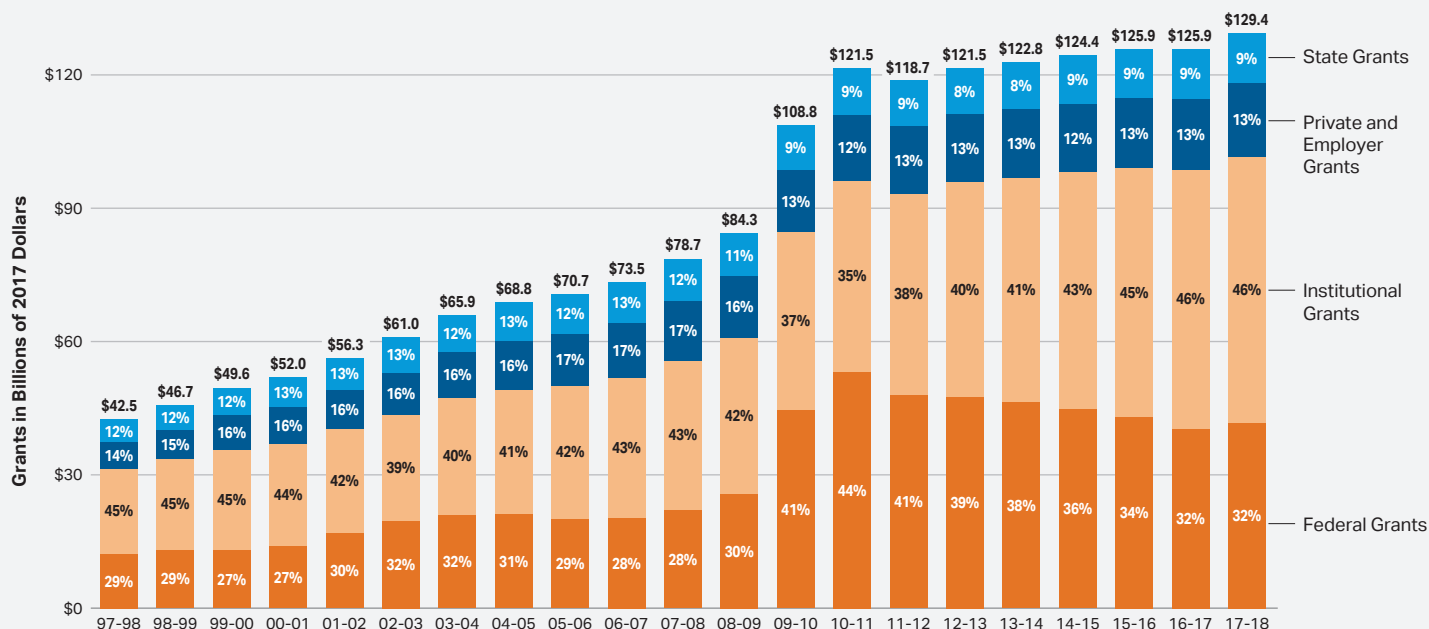
ALSO IMPORTANT:

- Figure 4 reports total aid amounts to graduate students. The 30% increase (\$13.1 billion in 2017 dollars) in total financial aid to graduate students between 2007-08 and 2017-18 supported enrollment growth of 14%, from 1.8 million to 2.1 million full-time equivalent (FTE) graduate students, yielding an increase of 13% (\$3,210) in total aid per FTE student.

Sources of Grant Aid

The total amount of grant aid supporting postsecondary students increased by 85% (after adjusting for inflation) between 1997-98 and 2007-08 and by another 64% between 2007-08 and 2017-18, reaching a total of \$129.4 billion.

FIGURE 5 Total Grant Aid in 2017 Dollars by Source of Grant, 1997-98 to 2017-18



NOTE: Percentages may not sum to 100 because of rounding.

SOURCES: See page 34 for a list of sources for grants included in Figure 5.

- Almost all of the growth in total grant aid over the last decade occurred between 2007-08 and 2012-13, as full-time equivalent (FTE) enrollment increased by 13%. Between 2012-13 and 2017-18, FTE enrollment declined by 5% and total grant aid increased by 7%.
- Federal grants fluctuated between 27% and 32% of all grant aid for undergraduate and graduate students between 1997-98 and 2007-08. This share rose to 44% in 2010-11, but declined to 32% in 2017-18.
- Institutional aid is the only type of grant aid that grew rapidly between 2012-13 and 2017-18. Colleges and universities increased their aid by 24%, from \$48.4 billion (in 2017 dollars) in 2012-13 to \$60.0 billion in 2017-18.
- From 1997-98 to 2007-08, state grant aid was between 12% and 13% of all grant aid. From 2009-10 to 2017-18, it was between 8% and 9% of all grant aid. Total state grant aid grew by 83% (after adjusting for inflation) between 1997-98 and 2007-08 and by another 18% over the decade ending in 2017-18.
- Grants from employers and other private sources were between 12% and 17% of total grant aid to postsecondary students for the entire two decades from 1997-98 through 2017-18 and were 13% of the total in 2017-18.

ALSO IMPORTANT:

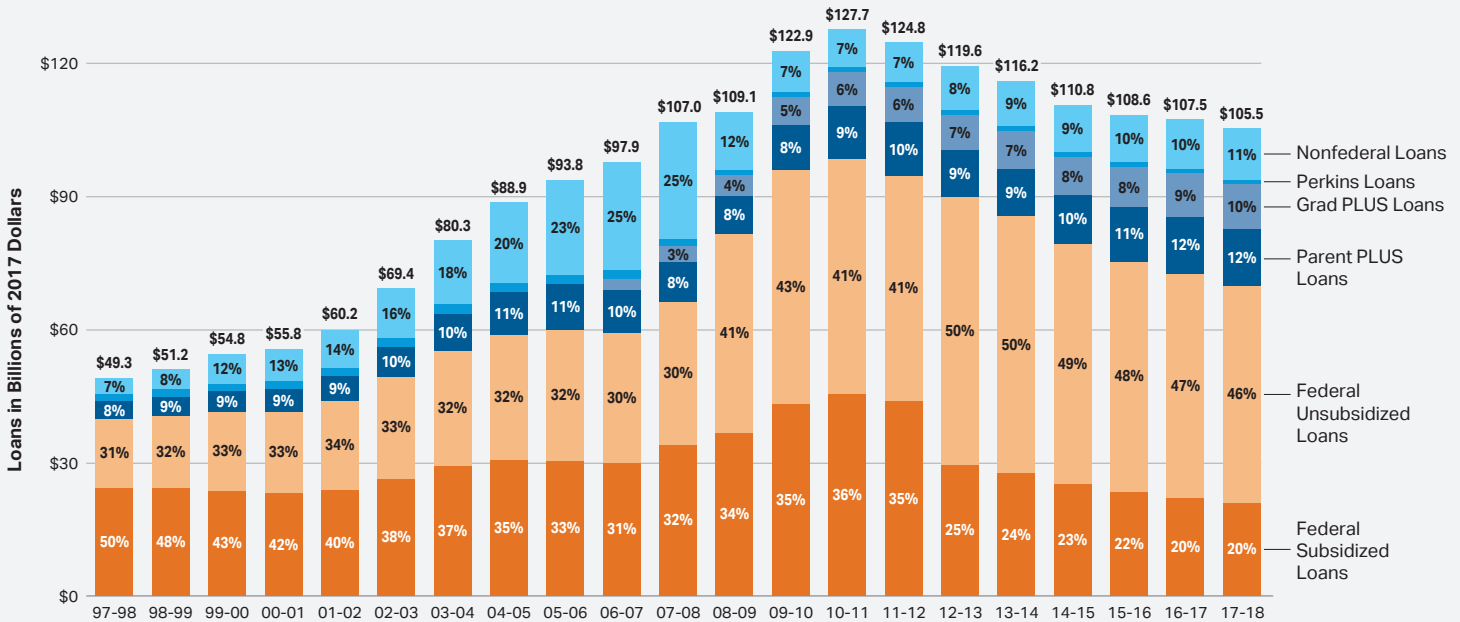
- Grant aid for veterans, which grew from \$3.3 billion (in 2017 dollars) to \$12.7 billion over the decade, increased from 15% of federal grant aid in 2007-08 to 31% in 2017-18. At the same time, Pell Grants, which rose from \$17.2 billion to \$28.2 billion, declined from 78% to 68% of the total. (Table 1)
- The composition of grant aid for graduate students is quite different from that for undergraduate students—and from the totals in Figure 5. In 2017-18, 11% of graduate student grant aid came from the federal government (including aid to veterans), 64% from institutions, 24% from employers and other private sources, and 2% from states. For undergraduate students, the percentages were 36%, 44%, 11%, and 10%, respectively. (Table 1 online)



Types of Loans

Total annual student and parent borrowing for postsecondary education declined (in inflation-adjusted dollars) for the seventh consecutive year, to \$105.5 billion in 2017-18.

FIGURE 6 Total Federal and Nonfederal Loans in 2017 Dollars by Type of Loan, 1997-98 to 2017-18



NOTES: Nonfederal loans include loans to students from states and institutions in addition to private loans issued by banks, credit unions, and other lenders. Values for nonfederal loans are best estimates and are less precise than federal loan amounts.

SOURCES: See page 34 for a list of sources for loans included in Figure 6.

- In 1997-98, 61% of Stafford Loans were subsidized loans—the interest is paid by the government while students are in school. This percentage declined to 52% in 2007-08 and to 33% in 2012-13, when graduate students were no longer eligible for the program. In 2017-18, 30% of Stafford Loans were subsidized.
- Between 2012-13 and 2017-18, total annual borrowing from the subsidized and unsubsidized Direct Loan programs declined by 22% to \$70.0 billion. Total annual borrowing from the Parent PLUS Loan program increased by 22% to \$12.8 billion and borrowing from the Grad PLUS program increased by 27% to \$10.3 billion.
- Students borrow nonfederal education loans from banks, credit unions, and other private lenders, including some states and postsecondary institutions. These loans, which are not part of the student aid system and typically do not involve subsidies, fell from about \$26 billion (in 2017 dollars) in 2007-08 to \$9 billion in 2009-10, but increased to almost \$12 billion by 2017-18, when they accounted for about 11% of all education loans.

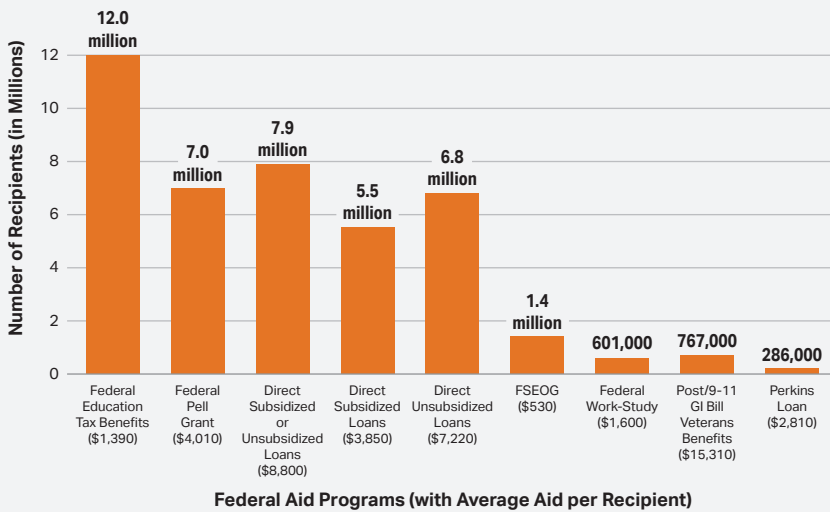
ALSO IMPORTANT:

- There are no credit requirements for subsidized and unsubsidized Direct Loans or Perkins Loans. To qualify for PLUS loans, borrowers cannot have an "adverse credit history," defined as being 90 days or more delinquent on any debts greater than \$2,085 or being the subject of default determination, bankruptcy discharge, foreclosure, repossession, tax lien, wage garnishment, or write-off of a federal education debt during the five years preceding the date of the credit report.

Federal Aid

Federal education tax credits and deductions reached an estimated 12.0 million students in 2016-17, 5.0 million more than the 7.0 million Pell Grant recipients in 2017-18.

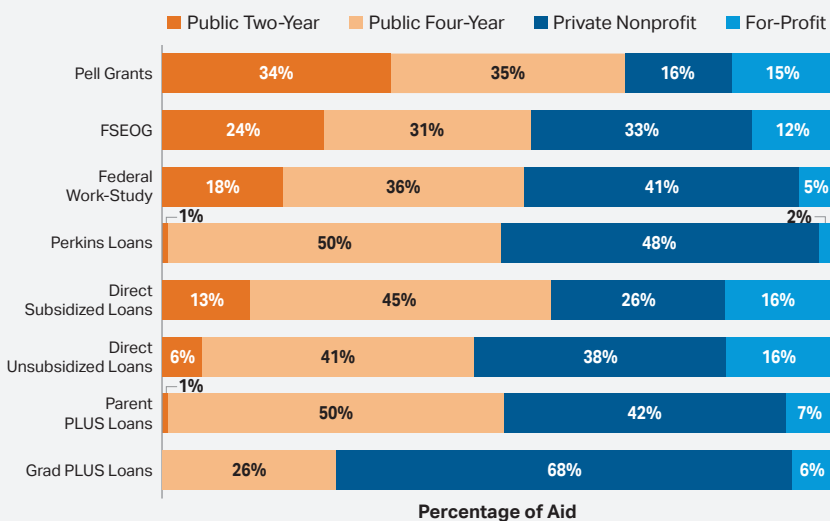
FIGURE 7 Number of Recipients by Federal Aid Program (with Average Aid Received), 2017-18



NOTES: Data on tax benefits are estimated for 2016-17. FSEOG and FWS amounts represent federal funds only. Institutions provide matching funds so the awards that students receive under these programs are larger than these federal aid amounts. Perkins Loans are made from revolving funds on campus. No new federal outlays have been provided since 2005-06, but originally the funds came partly from the federal government and partly from institutional sources.

SOURCES: See page 34 for a list of sources of data on federal aid programs.

FIGURE 8 Percentage Distribution of Federal Aid Funds by Sector, 2016-17



NOTES: Excludes aid to students enrolled in public less-than-two-year colleges and to students enrolled in foreign institutions. Percentages may not sum to 100 because of rounding.

SOURCES: See page 34 for a list of sources of data on federal aid programs.

- In 2017-18, an estimated 601,000 students received Federal Work-Study (FWS) funding.
- In 2017-18, the total number of borrowers in the subsidized and unsubsidized Direct Loan programs was 7.9 million—less than the sum of the number of recipients in each program because about two-thirds of all borrowers participated in both programs.
- In 2016-17, public two-year college students, who made up 32% of full-time equivalent (FTE) undergraduate enrollment, received 34% of Pell Grant funds. Students in this sector received less than their proportionate share of funds from all other federal student aid programs.
- In 2016-17, students in the private nonprofit sector accounted for 18% of undergraduate and 22% of total postsecondary FTE enrollment. They received 68% of Grad PLUS, 48% of Perkins Loans, and 41% of FWS funds.

ALSO IMPORTANT:

- Pell Grants, FSEOG, and Direct Subsidized Loans are for undergraduates only. Grad PLUS Loans are for graduate students only. Parent PLUS Loans are for parents of undergraduate students. FWS, Perkins Loans, Direct Unsubsidized Loans, and Post-9/11 GI Bill benefits are available to both undergraduate and graduate students.
- The number of students receiving FWS funds declined from 698,000 in 2007-08 to 601,000 in 2017-18. (Table 5 online)
- In 2012-13, 41% of Post-9/11 GI Bill veterans benefits went to students in the for-profit sector (U.S. Senate HELP Committee, 2014, "Is the New G.I. Bill Working?"). In 2017, Congress passed legislation known as the "Forever GI Bill," increasing the generosity of education benefits for veterans.

Distribution of Fall 2016 Enrollment by Sector

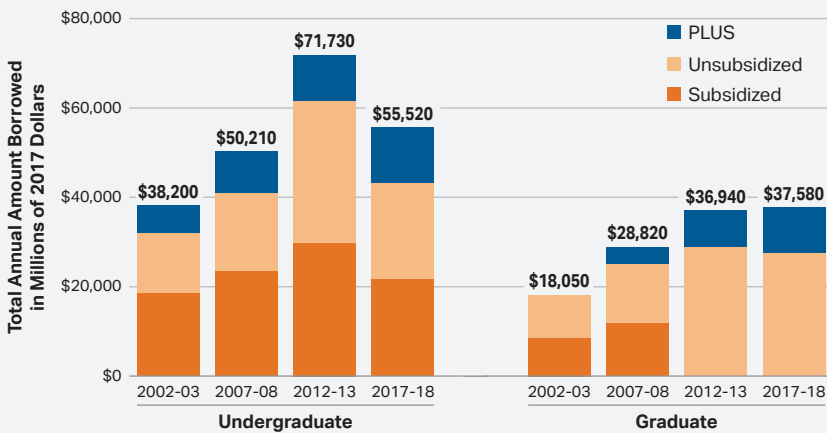
	FTE Undergraduate Students	All FTE Students
Public Two-Year	32%	27%
Public Four-Year	42%	43%
Private Nonprofit Four-Year	18%	22%
For-Profit	7%	7%

SOURCE: NCES, IPEDS Enrollment data.

Federal Loans: Annual Borrowing

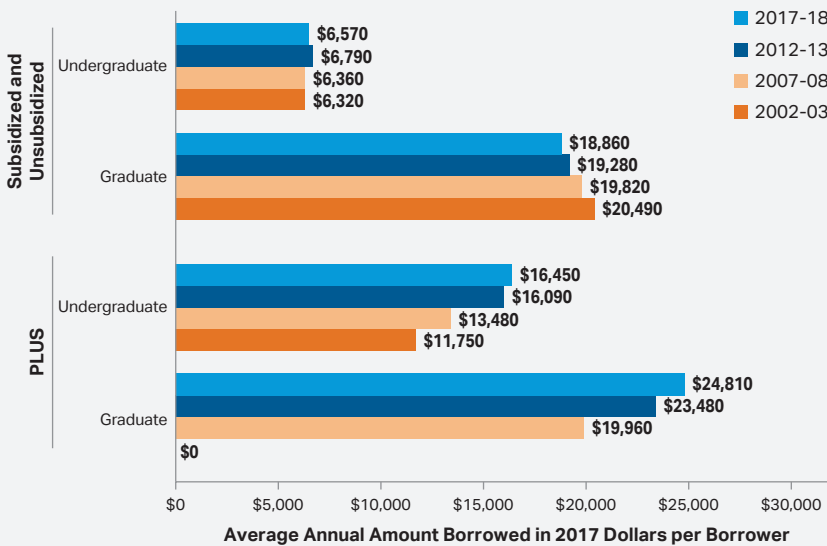
After a decade of rapid growth in annual borrowing, total federal loans to undergraduate students declined by 23% between 2012-13 and 2017-18 after adjusting for inflation, and federal loans to graduate students rose by 2%.

FIGURE 9A Total Annual Amount Borrowed from Federal Subsidized, Unsubsidized, and PLUS Loans in Millions of 2017 Dollars, 2002-03 to 2017-18, Selected Years



- The share of federal education loans going to graduate students (who constitute about 14% of all postsecondary students) rose from 32% (\$18.1 billion out of \$56.3 billion in 2017 dollars) in 2002-03 to 40% (\$37.6 billion out of \$93.1 billion) in 2017-18.
- In 2017-18, undergraduates taking subsidized and/or unsubsidized Direct Loans borrowed an average of \$6,570—\$210 more (in 2017 dollars) than a decade earlier and \$220 less than in 2012-13.
- The number of parents borrowing Parent PLUS Loans in 2017-18 was 12% of the number of undergraduates taking subsidized and unsubsidized Direct Loans (779,000 vs. 6.5 million). However, the average parent loan was \$16,450, 2.5 times as much as the average undergraduate student loan.
- In 2017-18, 416,000 graduate students borrowed through the Grad PLUS program; 1.4 million borrowed unsubsidized Direct Loans. The average amount borrowed through the PLUS program was \$5,950 higher than the average Direct Loan (\$24,810 vs. \$18,860).

FIGURE 9B Average Annual Amount Borrowed in Federal Subsidized, Unsubsidized, and PLUS Loans in 2017 Dollars, 2002-03 to 2017-18, Selected Years



ALSO IMPORTANT:

- The aggregate federal student loan limit for dependent undergraduate students is \$31,000. No more than \$23,000 can be subsidized loans. Independent students and dependent students whose parents are not eligible for Parent PLUS Loans can borrow an additional \$26,500 in unsubsidized loans.
- Graduate and professional students can borrow up to a lifetime total of \$138,500 from the subsidized and unsubsidized loan programs, including their undergraduate borrowing. Each year students are enrolled, they can borrow up to the full cost of attendance, including living expenses and books and supplies in addition to tuition and fees through the Grad PLUS program.
- Like the Grad PLUS program, the Parent PLUS program allows borrowing to cover students' entire budgets less other aid received for an unlimited number of years of enrollment.

Number of Borrowers (in Thousands), 2002-03 to 2017-18, Selected Years

		2002-03	2007-08	2012-13	2017-18
Subsidized and Unsubsidized	Undergraduate	5,003	6,473	9,024	6,504
	Graduate	881	1,272	1,495	1,446
	Total	5,884	7,745	10,519	7,950
PLUS	Undergraduate	563	671	652	779
	Graduate	0	181	346	416
	Total	563	852	998	1,195

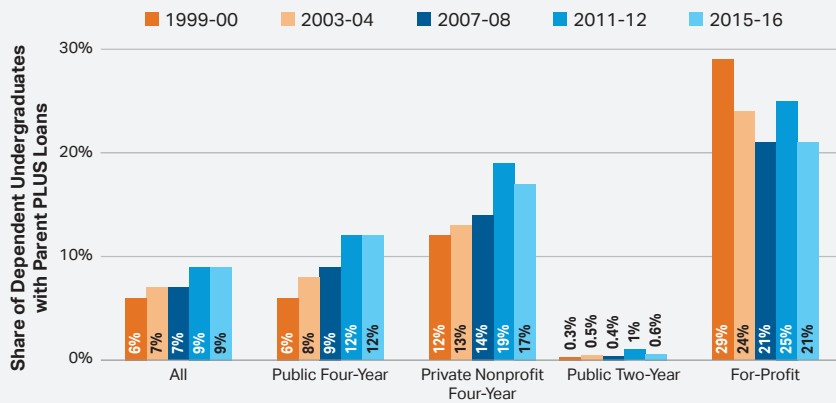
NOTE: Graduate students became eligible to borrow PLUS Loans in 2006-07.

SOURCE: *Trends in Student Aid* website (trends.collegeboard.org), Table 6.

Annual Undergraduate Borrowing: Parent PLUS and Private Loans

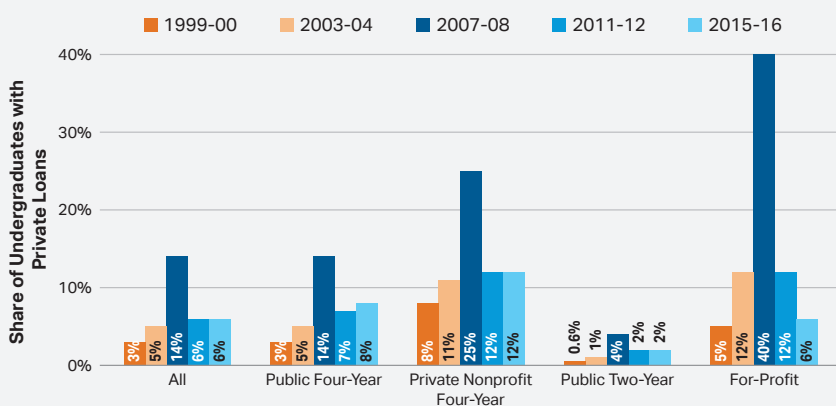
In 2015-16, parents of 9% of dependent undergraduate students borrowed through the Parent PLUS program. The shares of parents taking these loans ranged from less than 1% of dependent public two-year college students to 21% of dependent for-profit college students.

FIGURE 10A Share of Dependent Undergraduate Students with Parent PLUS Loans, 1999-00 to 2015-16



	Average Parent PLUS Loans Among Borrowers (2016 Dollars)				
	1999-00	2003-04	2007-08	2011-12	2015-16
All	\$9,800	\$11,300	\$11,700	\$12,700	\$14,000
Public Four-Year	\$8,600	\$9,800	\$10,500	\$11,700	\$12,800
Private Nonprofit Four-Year	\$12,100	\$14,300	\$15,300	\$15,500	\$17,500
Public Two-Year	—	\$6,900	\$5,100	\$9,100	\$7,700
For-Profit	\$8,200	\$11,000	\$9,900	\$11,900	\$12,600

FIGURE 10B Share of Undergraduate Students with Private Loans, 1999-00 to 2015-16



	Average Private Loans Among Borrowers (2016 Dollars)				
	1999-00	2003-04	2007-08	2011-12	2015-16
All	\$7,000	\$7,500	\$7,000	\$6,100	\$8,700
Public Four-Year	\$5,400	\$6,800	\$6,700	\$5,700	\$7,800
Private Nonprofit Four-Year	\$8,400	\$10,000	\$10,100	\$8,200	\$12,400
Public Two-Year	\$5,500	\$4,100	\$3,800	\$3,300	\$4,100
For-Profit	\$8,400	\$7,000	\$6,600	\$6,300	\$8,100

- The average annual amount borrowed through the Parent PLUS program has increased over time in all sectors except public two-year colleges. At private nonprofit colleges and universities, these loan amounts rose from an average of \$12,100 (in 2016 dollars) for 12% of dependent students in 1999-00 to \$15,300 for 14% of dependent students in 2007-08 and to \$17,500 for 17% of dependent students in 2015-16.
- The share of undergraduate students taking private student loans fell from 14% in 2007-08 to 6% in both 2011-12 and 2015-16.
- In 2007-08, 40% of undergraduates at for-profit institutions took private student loans, but that share had fallen to 6% by 2015-16—lower than the 12% at private nonprofit four-year and the 8% at public four-year colleges in 2015-16.
- In 2015-16, the average size of private student loans among the students who used them ranged from \$4,100 for 2% of public two-year college students to \$12,400 for 12% of private nonprofit four-year college students.

ALSO IMPORTANT:

- Among 2015-16 bachelor's degree recipients, 20% of dependent students' parents had borrowed PLUS loans at some point during the students' undergraduate study. Of those who borrowed Parent PLUS Loans, the average cumulative amount borrowed was \$36,800. (NPSAS, 2016; calculations by the authors)
- Among 2015-16 bachelor's degree recipients, 16% had borrowed private loans at some point during their undergraduate study. Of those who borrowed private loans, the average cumulative amount borrowed was \$21,300. (NPSAS, 2016; calculations by the authors)
- In addition to using Parent PLUS Loans, parents may borrow through home equity loans, credit cards, or other sources of credit. This borrowing is not reflected in the data reported here.
- Private student loans do not carry the borrower protections included in federal student loan programs, including the option of repaying through income-driven plans that base monthly payments on earnings. Like federal student loans, private loans are more difficult to discharge in bankruptcy than other personal loans.

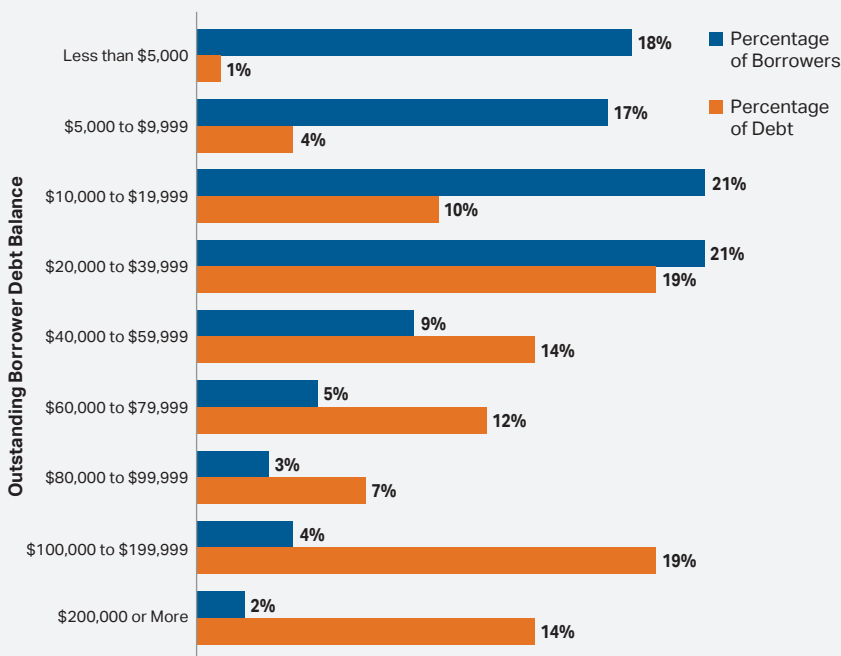
SOURCES: NCES, NPSAS 2000, 2004, 2008, 2016; calculations by the authors.



Federal Loans: Borrowing and Balances

As of March 2018, 40% of the outstanding federal education loan debt was held by the 9% of borrowers owing \$80,000 or more.

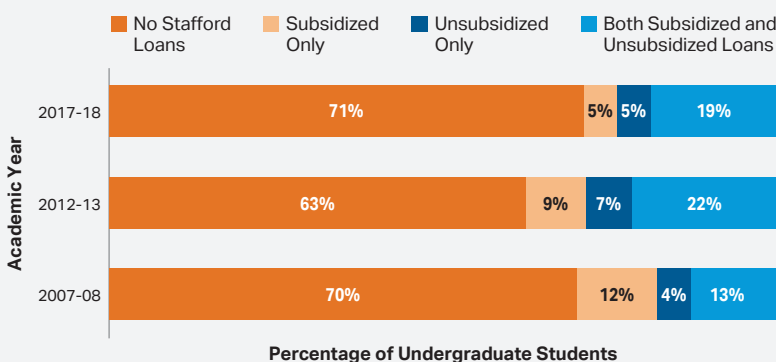
FIGURE 11 Distribution of Borrowers and Debt by Outstanding Balance, 2018



NOTE: Includes both loans made under the Federal Direct Loan Program (FDLP) and loans made under the Federal Family Education Loan (FFEL) Program, which ended in 2009-10. Data were as of March 31, 2018, the end of the second quarter of FY18.

SOURCE: U.S. Department of Education, Federal Student Aid Center, Federal Student Loan Portfolio.

FIGURE 12 Percentage of Undergraduate Students Borrowing Federal Subsidized and Unsubsidized Student Loans, 2007-08, 2012-13, and 2017-18



NOTES: IPEDS headcount enrollments are adjusted for the difference between total headcount, which counts students more than once if they are enrolled in more than one institution at the same time, and unduplicated headcount reported by the National Student Clearinghouse (NSC). Twelve-month undergraduate headcount for 2017-18 is estimated from NSC data. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, *Postsecondary Institutions and Cost of Attendance in 2017-18; Degrees and Other Awards Conferred, 2016-17, and 12-Month Enrollment, 2016-17: First Look (Preliminary Data)* and earlier editions; National Student Clearinghouse, *Current Term Enrollment Estimates: Spring 2018*; U.S. Department of Education, Federal Student Aid Data Center, Title IV Program Volume Reports and Aid Recipients Summary; calculations by the authors.

- As of March 2018, 56% of borrowers owed less than \$20,000. These borrowers held 15% of the outstanding federal debt.
- In 2017-18, 71% of undergraduates did not borrow either subsidized or unsubsidized Stafford Loans. That percentage was 70% in 2007-08 and 63% in 2012-13.
- In 2017-18, 5% of undergraduate students borrowed subsidized loans only, 5% borrowed unsubsidized loans only, and 19% borrowed from both programs. In other words, two-thirds of the 29% who borrowed Stafford Loans took both subsidized and unsubsidized loans.
- A decade earlier, in 2007-08, 12% of undergraduates borrowed only subsidized loans. Among the 29% who borrowed, less than half of the students borrowed both subsidized and unsubsidized loans.

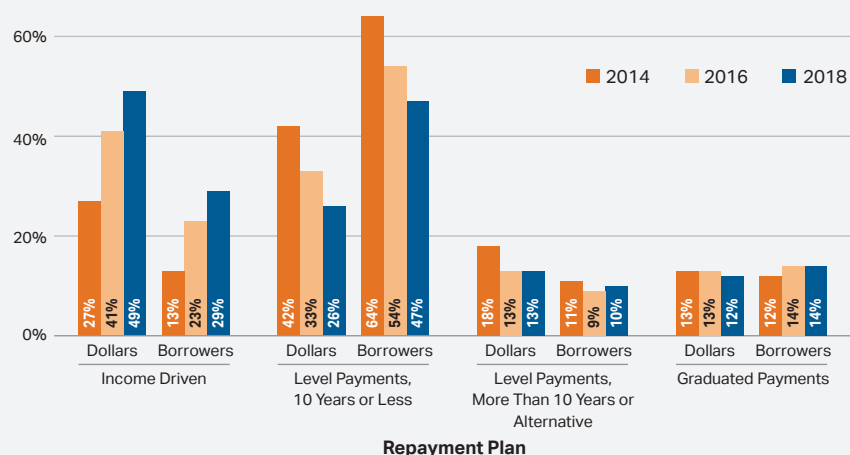
ALSO IMPORTANT:

- Figure 12 shows that 29% of undergraduates took federal student loans in 2017-18. This percentage is lower than the share of students who graduate with debt for a number of reasons. Many students who borrow do not borrow every year. In 2015-16, among enrolled students who had borrowed at some point as undergraduates, 70% borrowed federal student loans. (NPSAS, 2016)
- Part-time students borrow at lower rates than full-time students. In 2015-16, half of all full-time undergraduates used federal student loans, compared with just 18% of those who were enrolled exclusively part time. (NPSAS, 2016)

Outstanding Federal Loans

Participation in Income-Driven Repayment (IDR) plans for federal student loans has grown dramatically in recent years. In March 2018, 29% of the borrowers in repayment on federal Direct Loans were in programs limiting their payments to an affordable percentage of their discretionary incomes, up from 13% in 2014.

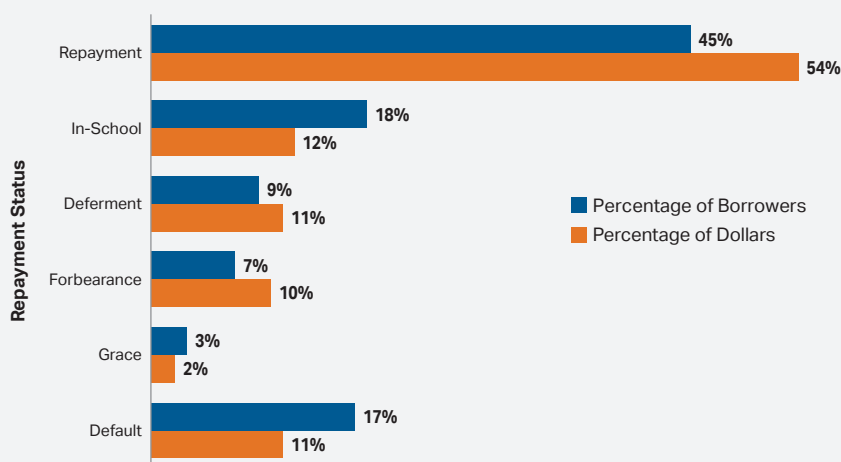
FIGURE 13A Distribution of Outstanding Federal Direct Loan Dollars and Borrowers by Repayment Plan, Second Quarter 2014, 2016, and 2018



NOTES: Includes Direct Loan borrowers in repayment, deferment, and forbearance. Because some borrowers have multiple loans, recipients may be counted multiple times across varying loan statuses. Income-driven plans include REPAYE, Pay As You Earn, Income-Contingent Repayment, and Income-Based Repayment. Level payment plans require monthly payments that are the same over a fixed period of time. Alternative repayment plans are customized to borrowers' circumstances. Under the graduated payment plan, monthly payments increase over time. The second quarter of FY18 ended on March 31, 2018. Percentages may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, Federal Student Aid Data Center, Federal Student Loan Portfolio.

FIGURE 13B Repayment Status of Federal Education Loan Portfolio, Second Quarter FY18



NOTES: Includes both loans made under the Federal Direct Loan Program and loans made under the Federal Family Education Loan Program (FFEL) and held by the U.S. Department of Education. Excludes the \$200 billion in outstanding FFEL loans not held by the federal government. The second quarter of FY18 ended on March 31, 2018.

SOURCE: U.S. Department of Education, Federal Student Aid Data Center, Federal Student Loan Portfolio.

- In March 2018, borrowers in IDR plans held 49% of the outstanding debt in repayment under the federal Direct Loan program, up from 27% in 2014.
- In March 2018, 17% of borrowers—but 11% of outstanding dollars—were in default. The average balance on defaulted loans was \$18,600, compared with \$29,200 for all outstanding loans.

ALSO IMPORTANT:

- Borrowers in IDR plans have higher average balances than those in other repayment plans—\$56,200 vs. \$24,000 in March 2018.
- There are several IDR plans. Just over 40% of borrowers in IDR plans are in the Income-Based Repayment plan which, after July 2014, limits payments for new borrowers to 10% of income above 150% of the poverty line and forgives remaining debt after 20 years of eligible payments. Earlier borrowers pay 15% of income above 150% of the poverty line for 25 years.
- Revised Pay As You Earn (REPAYE), launched in 2015, makes all federal Direct Loan borrowers eligible for IDR plans. In March 2018, among IDR plans, about 30% of borrowers and 30% of the dollars were in the REPAYE plan.

Average Federal Loan Balance, Number of Borrowers, and Total Balance by Repayment Status, Second Quarter 2018

Repayment Status	Average Balance	Number of Borrowers (in Millions)	Total Balance (in Billions)
Repayment	\$34,600	18.6	\$643.0
In-School	\$19,800	7.2	\$142.5
Deferment	\$33,200	3.8	\$126.3
Forbearance	\$42,600	2.8	\$119.3
Grace	\$19,300	1.3	\$25.1
Default	\$18,600	7.0	\$130.3
Other	\$32,000	0.3	\$9.6
Total	\$29,200	41.0	\$1,196.1

NOTE: Repayment: in active repayment status; In-School: borrower is still enrolled, never entered repayment; Deferment: payments postponed because of economic hardship, military service, or returning to school; Forbearance: payment temporarily suspended or reduced because of financial hardships; Grace: six-month period after borrower is no longer enrolled at least half time; Default: more than 360 days delinquent. "Other" category includes loans that are in non-defaulted bankruptcy and in a disability status.

Federal Loans: Repayment Rates

Sixty-seven percent of federal student loan borrowers who entered repayment in 2009-10 and 2010-11 after earning a degree or certificate had paid down at least one dollar of their loan principal after five years. This repayment rate was 41% for noncompleters.

FIGURE 14A Federal Student Loan Five-Year Repayment Rate by Completion Status and by Dependency Status: Borrowers Entering Repayment in 2009-10 and 2010-11

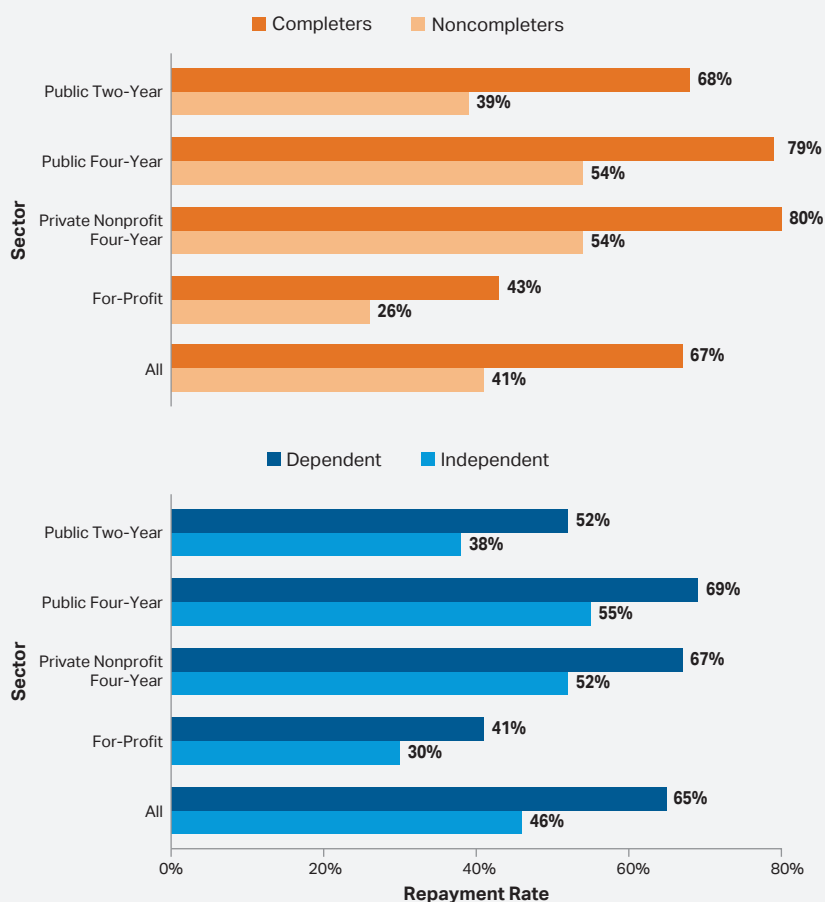
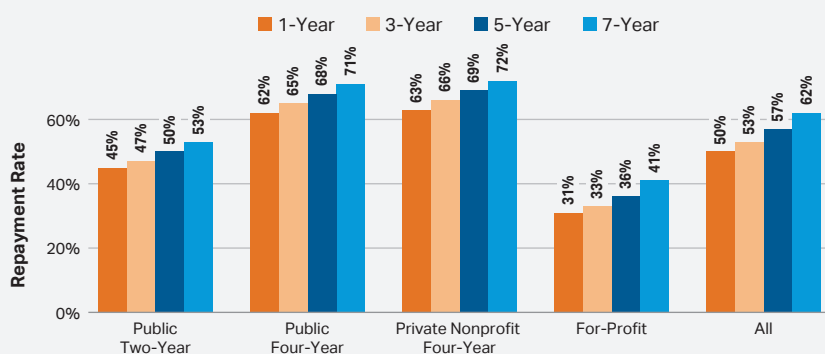


FIGURE 14B Federal Student Loan One-Year, Three-Year, Five-Year, and Seven-Year Repayment Rates by Sector, Borrowers Entering Repayment in 2007-08 and 2008-09



- Completers had higher repayment rates than noncompleters in all sectors, but completers from the for-profit sector had lower repayment rates than noncompleters from the public and private nonprofit four-year sectors.
- In all sectors, dependent students had higher repayment rates than independent students. Repayment rates ranged from 30% for independent students from the for-profit sector and 38% for those from public two-year colleges to 67% for dependent students from the private nonprofit four-year sector and 69% for those from the public four-year sector.
- In all sectors, the share of borrowers who have made some progress paying down their student debt increases as time in repayment increases. The largest increments are for borrowers from for-profit institutions, where the repayment rate for borrowers who entered repayment in 2007-08 and 2008-09 rose from 31% after one year to 41% after seven years.
- After seven years, 41% of borrowers from for-profit institutions had reduced their loan balances by at least one dollar. This repayment rate was lower than the one-year repayment rates in all other sectors, including public two-year colleges, where the repayment rate rose from 45% after one year to 53% after seven years.

ALSO IMPORTANT:

- Borrowers can be in good standing without paying down the principal owed. They may be enrolled in an Income-Driven Repayment (IDR) plan. Some may have no required payments and, for others, the required payments may be too small to cover the interest charged, leading to increases in the balance owed. In addition, borrowers may be in deferment or forbearance and not required to make payments in their current circumstances.

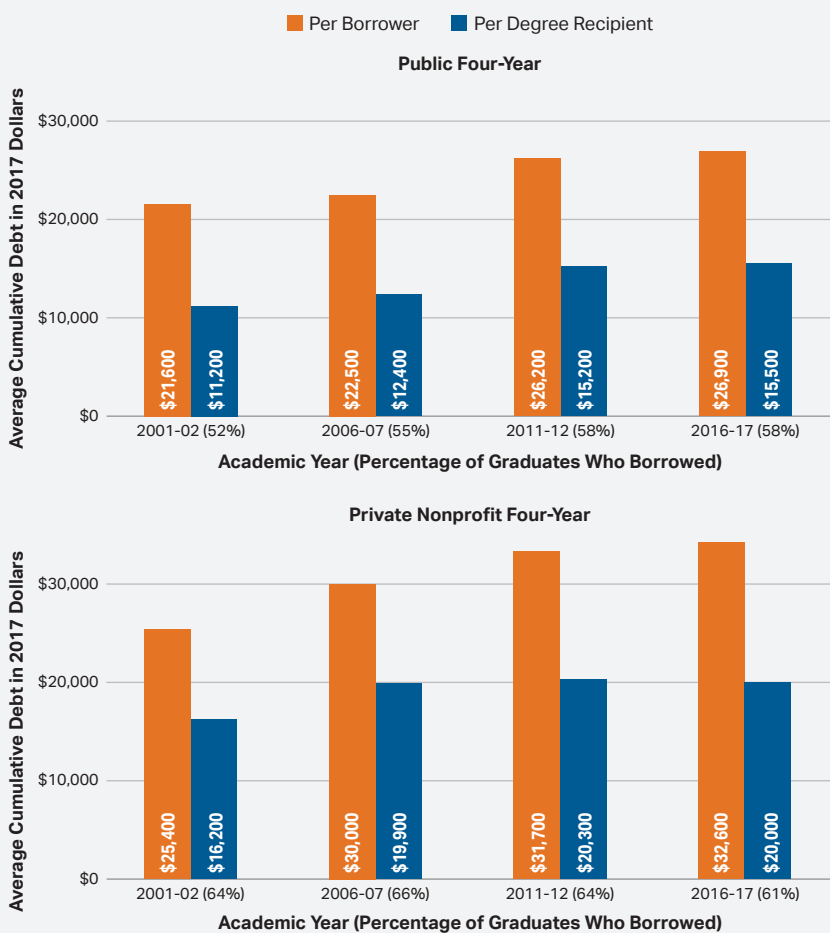
NOTES: The repayment rate is defined as the percentage of borrowers in each repayment cohort whose payments reduced the loan principal by at least one dollar after the specified number of years. Repayment status on each loan is attributed to the school for which the loan was taken. Therefore, a student can be counted in the repayment cohorts of more than one institution.

SOURCES: U.S. Department of Education, College Scorecard data; calculations by the authors.

Cumulative Debt: Bachelor's Degree Recipients

In 2016-17, the 59% of bachelor's degree recipients from public and private nonprofit institutions who borrowed graduated with an average of \$28,500 in debt, an increase of 3% in inflation-adjusted dollars over the average amount borrowed in 2011-12.

FIGURE 15 Average Cumulative Debt Levels in 2017 Dollars: Bachelor's Degree Recipients at Public and Private Nonprofit Four-Year Institutions, 2001-02 to 2016-17, Selected Years



NOTES: Figures include federal and nonfederal loans taken by students who began their studies at the institution from which they graduated. Parent PLUS loans are not included. The orange bars represent the average cumulative debt levels of bachelor's degree recipients who took student loans. The blue bars represent the average debt per bachelor's degree recipient, including those who graduated without student debt. Calculations are based on the number of bachelor's degrees awarded, which typically exceeds the number of students receiving degrees. The available data are not adequate to allow comparable calculations for for-profit institutions.

SOURCES: College Board, Annual Survey of Colleges, 2002 to 2017; calculations by the authors.

Average Cumulative Debt in 2017 Dollars: Bachelor's Degree Recipients at Public and Private Nonprofit Four-Year Institutions: 2001-02 to 2016-17, Selected Years

Academic Year	Percentage with Debt	Average Debt per Borrower	Average Debt per Graduate
2001-02	56%	\$23,000	\$12,800
2006-07	58%	\$25,000	\$14,600
2011-12	60%	\$27,800	\$16,600
2016-17	59%	\$28,500	\$16,700

- In 2016-17, average debt per bachelor's degree recipient, including both those who borrowed and those who did not, was \$16,700 for the two sectors combined, 1% higher than in 2011-12.
- Average debt among public four-year college graduate borrowers rose by 3% (\$700 in 2017 dollars) between 2011-12 and 2016-17, following a 16% (\$3,700) increase over the previous five years. Average debt per graduate (including those who did not borrow) increased by 23% (\$2,800) between 2006-07 and 2011-12 and by 2% (\$300) between 2011-12 and 2016-17.
- Borrowing among private nonprofit four-year college graduates rose rapidly between 2001-02 and 2006-07, but slowed over the next 10 years. Average debt per borrower increased by 6% (\$1,700 in 2017 dollars) between 2006-07 and 2011-12 and by 3% (\$900) between 2011-12 and 2016-17. Average debt per graduate rose by 2% (\$400) between 2006-07 and 2011-12 and fell by 1% (\$300) between 2011-12 and 2016-17.
- The share of public four-year college bachelor's degree recipients graduating with debt rose from 52% in 2001-02 to 58% in 2011-12, but remained at 58% in 2016-17. The share of private nonprofit four-year college bachelor's degree recipients graduating with debt rose from 64% in 2001-02 to 66% in 2006-07, but fell to 61% over the following decade.

ALSO IMPORTANT:

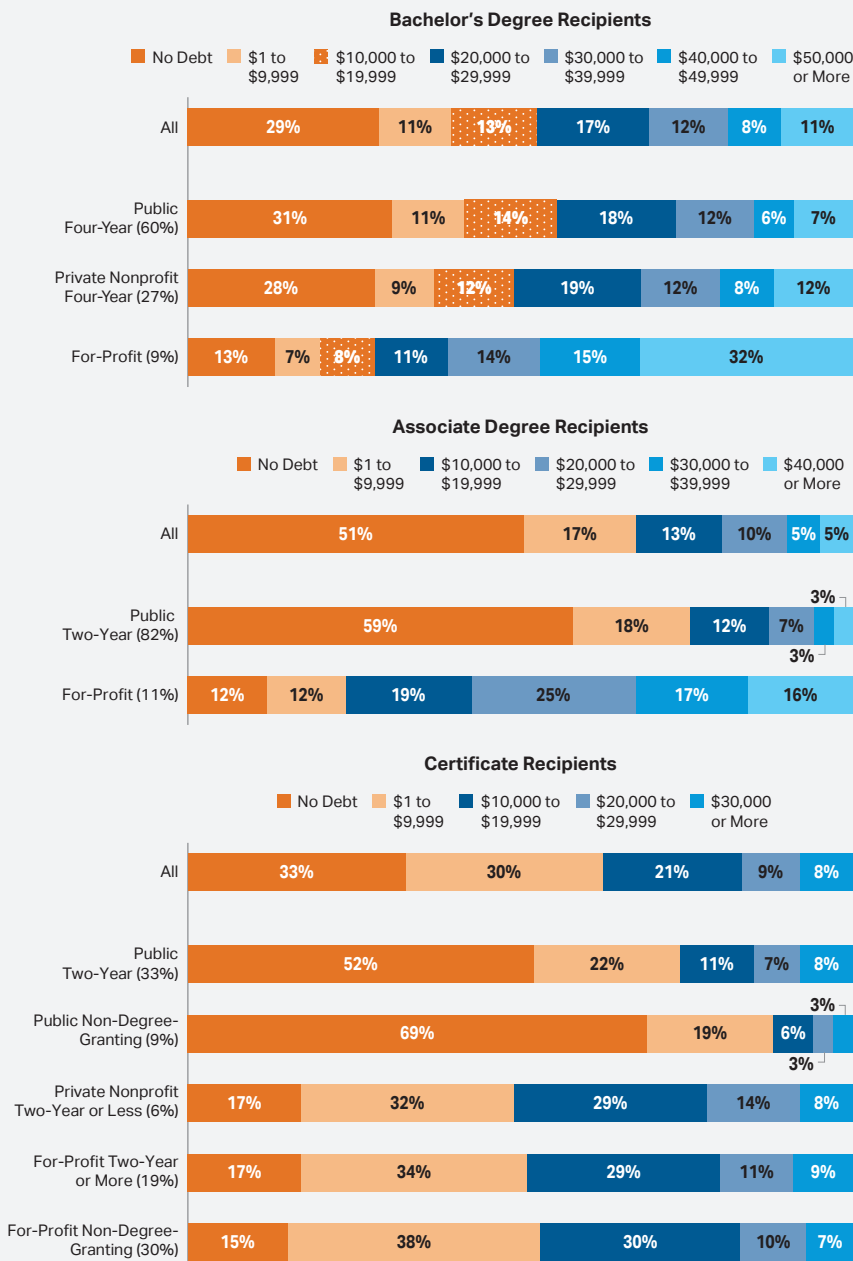
- Students who earn their bachelor's degrees at for-profit institutions, not included in Figure 15, are more likely to borrow and accumulate higher average levels of debt than those who graduate from public and private nonprofit four-year colleges. (Figure 16)
- Figure 15 includes only students who earned their bachelor's degrees at the institutions in which they first enrolled. Students who attend two or more institutions may have different borrowing patterns.



Cumulative Debt: Undergraduate Degree Recipients

The share of 2015-16 bachelor's degree recipients who borrowed \$50,000 or more for their undergraduate studies ranged from 7% of those who earned their degrees at public four-year colleges and universities to 32% of those who graduated from for-profit institutions.

FIGURE 16 Distribution of 2015-16 Degree or Certificate Completers by Cumulative Amount Borrowed for Undergraduate Study



- Half of the students who completed associate degrees in 2015-16 graduated without taking student loans. This included 59% of those who graduated from public two-year colleges and 12% of those who earned their degrees from for-profit institutions.
- In 2015-16, non-degree-granting for-profit institutions granted 30% of all undergraduate certificates. Among students completing these programs, 15% did not take student loans and 17% borrowed \$20,000 or more. More than half of certificate completers who attended public two-year institutions graduated without debt and 15% borrowed \$20,000 or more.

ALSO IMPORTANT:

- Undergraduate certificate programs are short-term programs that prepare students for gainful employment in a recognized occupation. To qualify for federal financial aid, they must meet program hour specifications.
- In 2015-16, 24% of the 3.9 million undergraduate credentials conferred were certificates, 26% were associate degrees, and 50% were bachelor's degrees. (NCES, *Digest of Education Statistics 2017*, Table 318.40)
- Average debt by type of degree conceals considerable variation across borrowers of different backgrounds. For example, among bachelor's degree recipients, 11% of dependent students borrowed \$40,000 or more, while 28% of independent students borrowed this much. And among dependent students, the share of students borrowing to fund their bachelor's degrees goes down as family incomes go up.

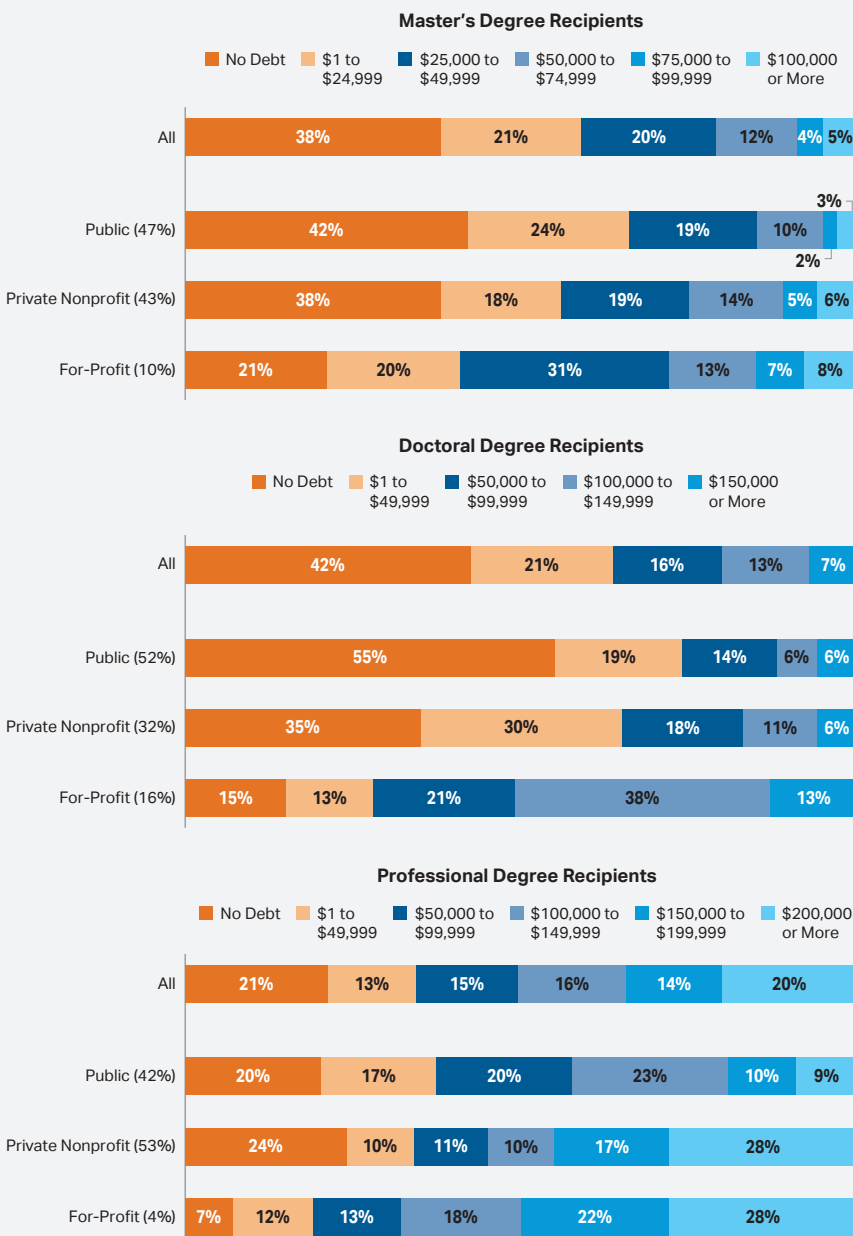
NOTES: Percentages in parentheses on vertical axes represent the share of students earning their credentials in the specified sectors. These percentages do not sum to 100 because a small percentage of students earn degrees at institutions not included in the sectors reported. For example, the bachelor's degree graph excludes students who earned their bachelor's degrees at public and private nonprofit two-year schools and the associate degree and certificate graphs exclude students who earned their credentials at public and private nonprofit four-year schools.

SOURCES: NCES, National Postsecondary Student Aid Study (NPSAS), 2016; calculations by the authors.

Cumulative Debt: Graduate Degree Recipients

In 2015-16, 5% of master's degree recipients, 20% of doctoral degree recipients, and 50% of professional degree recipients borrowed \$100,000 or more to fund their graduate school study.

FIGURE 17 Distribution of 2015-16 Advanced Degree Recipients by Cumulative Amount Borrowed for Graduate Study



- The share of master's degree recipients who did not borrow for graduate school ranged from a low of 21% at for-profit institutions to a high of 42% at public universities.
- More than half of public university doctoral degree recipients avoided borrowing for graduate school, while 12% borrowed \$100,000 or more.
- Sixteen percent of 2015-16 doctoral degree recipients earned their degrees at for-profit institutions; 51% of these students borrowed \$100,000 or more for graduate school.
- More than one-quarter of students who earned professional degrees at private nonprofit universities in 2015-16 borrowed \$200,000 or more for graduate study, as did 9% of those who graduated with professional degrees from public universities.

ALSO IMPORTANT:

- Almost three-quarters of graduate-level credentials earned are master's degrees; 12% are professional degrees; 5% are research doctoral degrees; and the remaining credentials are post-baccalaureate certificates. (NPSAS, 2016)
- Professional degrees include those in chiropractic medicine, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, and veterinary medicine.
- In 2016, median earnings among adults 25 and older were \$91,600 for those with doctoral degrees and \$100,100 for those with professional degrees. (U.S. Census Bureau, Table PINC-03)

NOTES: Includes all loans borrowed for graduate study. Percentages on the vertical axis represent shares of graduates from each sector. Percentages may not sum to 100 because of rounding.

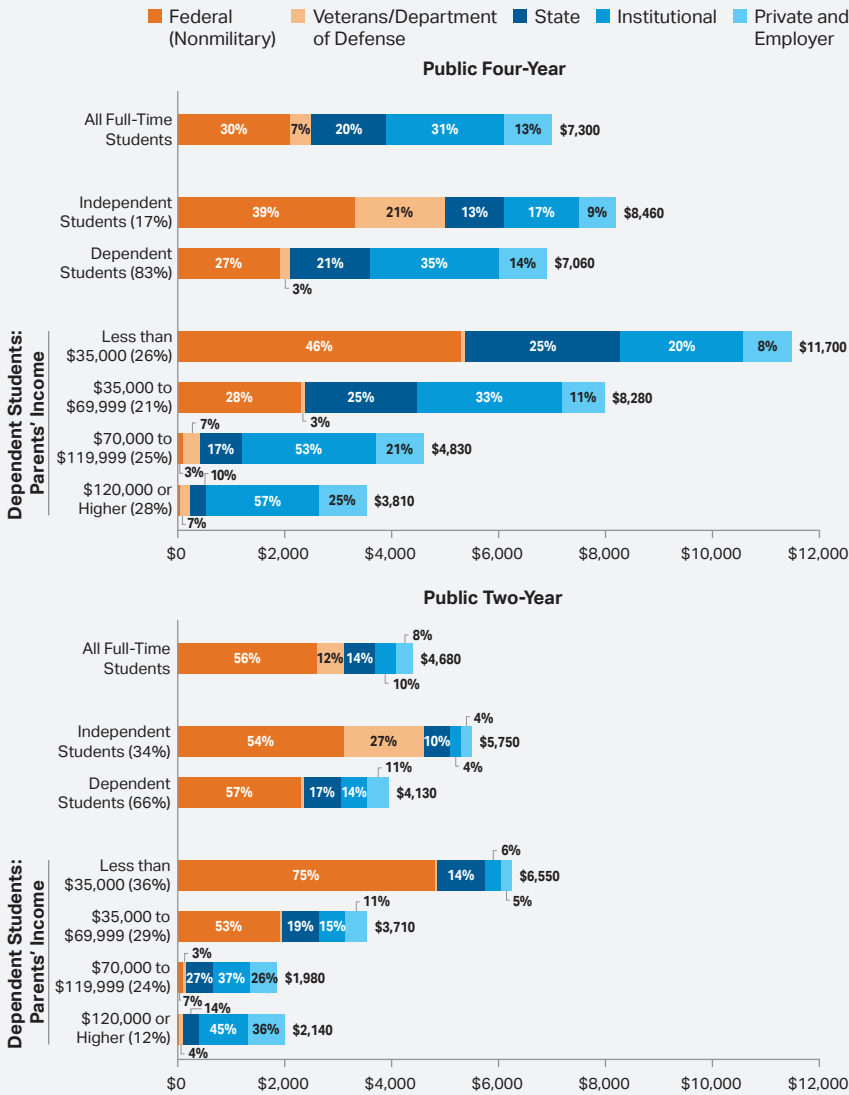
SOURCES: NCES, National Postsecondary Student Aid Study (NPSAS), 2016; calculations by the authors.



Sources of Grant Aid: Public Institutions

In 2015-16, full-time students received an average of \$7,300 in grant aid at public four-year institutions and \$4,680 at public two-year institutions.

FIGURE 18 Sources of Grant Aid, Full-Time Students at Public Institutions, 2015-16



NOTES: Includes full-time undergraduate students who were U.S. citizens or permanent residents. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, NPSAS, 2016; calculations by the authors.

- At both public four-year and public two-year institutions, full-time independent students received more grant aid, on average, than dependent students. Independent students received less funding from state, institutional, and private and employer grants, but more from federal grants and, particularly, veterans and military grants.
- At public four-year colleges and universities, dependent students from families with incomes less than \$35,000 received almost half of their grant aid from the federal government. Those from families with incomes of \$70,000 or more received very little federal aid; more than half of the grant aid these students received came from their institutions.
- At public two-year colleges, dependent students from families with incomes less than \$35,000 received three-quarters of their grant aid from the federal government. Institutional grant aid in this sector was skewed toward more affluent students, with average grants ranging from \$230 per independent student and \$380 per dependent student from families with incomes less than \$35,000 to \$970 for those from families with incomes of \$120,000 or higher.

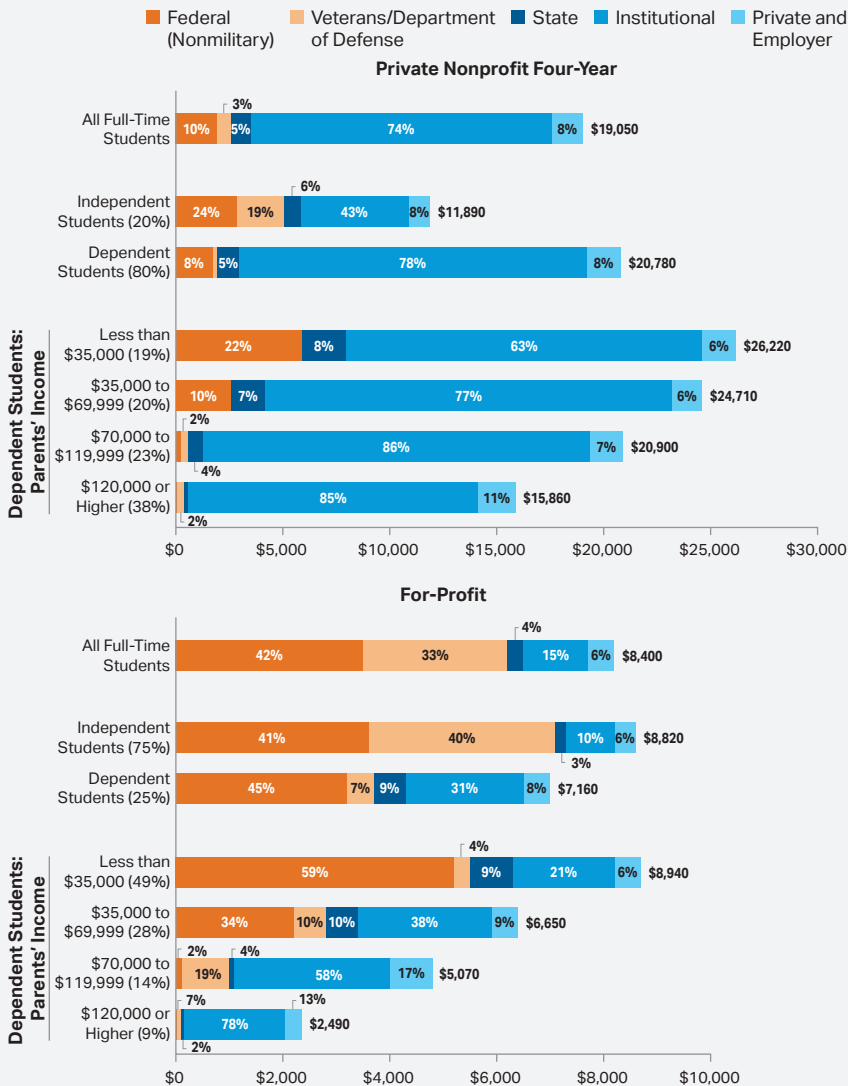
ALSO IMPORTANT:

- In 2015-16, public doctoral universities awarded institutional aid averaging \$5,750 to 43% of their full-time domestic undergraduate students—an average of \$2,490 per student. Public nondoctoral universities awarded institutional aid averaging \$3,730 to 30% of their full-time domestic undergraduate students—an average of \$1,110 per student.
- Students from higher-income families attending public four-year institutions are more likely than those from lower-income families to attend doctoral universities. In 2015-16, 76% of dependent students from the lowest family income quartile attended doctoral universities and 24% attended non-doctoral-granting institutions. Among those from the highest income quartile, these shares were 85% and 15%, respectively.

Sources of Grant Aid: Private Institutions

In 2015-16, low-income students enrolled full time at private nonprofit four-year colleges and universities received 63% of their total grant aid from their institutions—an average of \$16,590 per student out of a total of \$26,220 of grant aid from all sources.

FIGURE 19 Sources of Grant Aid, Full-Time Students at Private Institutions, 2015-16



NOTES: Includes full-time undergraduate students who were U.S. citizens or permanent residents. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, NPSAS, 2016; calculations by the authors.

- Students from families with incomes of \$120,000 or higher received 85% of their total grant aid from their institutions—an average of \$13,510 per student out of a total of \$15,860.
- Average total grant aid for independent students at private nonprofit institutions was only about 60% of the average amount received by dependent students in 2015-16. Independent students received more funding from federal grants including aid to veterans and the military, but less from states, from private sources and employers and, particularly, from institutions.
- In 2015-16, full-time students at for-profit institutions received 42% of their grant aid from federal nonmilitary grants, 33% from veterans and military grants, and 15% from their institutions.
- Average institutional grant aid per student in the for-profit sector ranged from \$910 for independent students and \$1,920 for dependent students from families with incomes below \$35,000 to \$2,920 for those with incomes between \$70,000 and \$120,000.

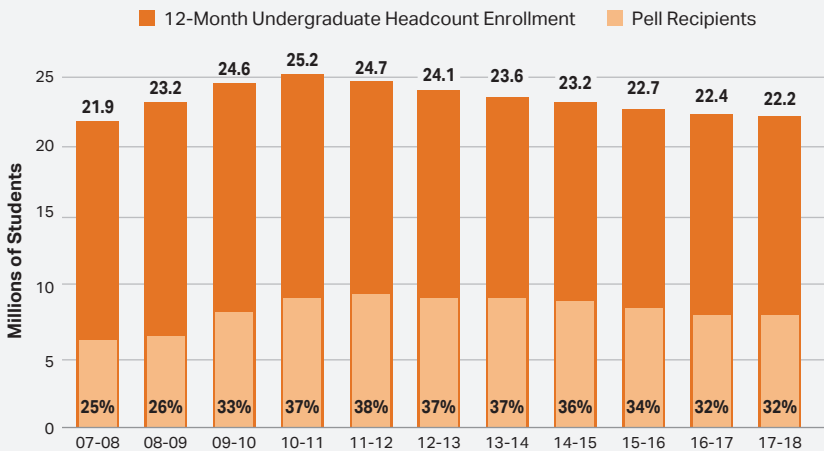
ALSO IMPORTANT:

- In 2015-16, very selective private nonprofit four-year institutions awarded 73% of their full-time domestic students an average of \$24,340 in grant aid—an average of \$17,670 per student. Forty-five percent of dependent students from families with incomes of \$120,000 or more enrolled in the private nonprofit sector attended these very selective institutions, as did 25% to 30% of those from lower-income families and 21% of independent students. (Selectivity is defined by NPSAS based on the share of students admitted and SAT®/ACT scores.)
- Minimally selective and open admission four-year private nonprofit institutions awarded 43% of their full-time students an average of \$11,450 in grant aid—an average of \$4,910 per student. Four percent of dependent students from families with incomes of \$120,000 or more enrolled in the private nonprofit sector attended these institutions, compared with 20% of those from the lowest-income families and 34% of independent students in this sector.

Pell Grants

The share of undergraduate students receiving Pell Grants rose from 25% in 2007-08 to a peak of 38% in 2011-12. It then declined steadily to 32% in 2017-18.

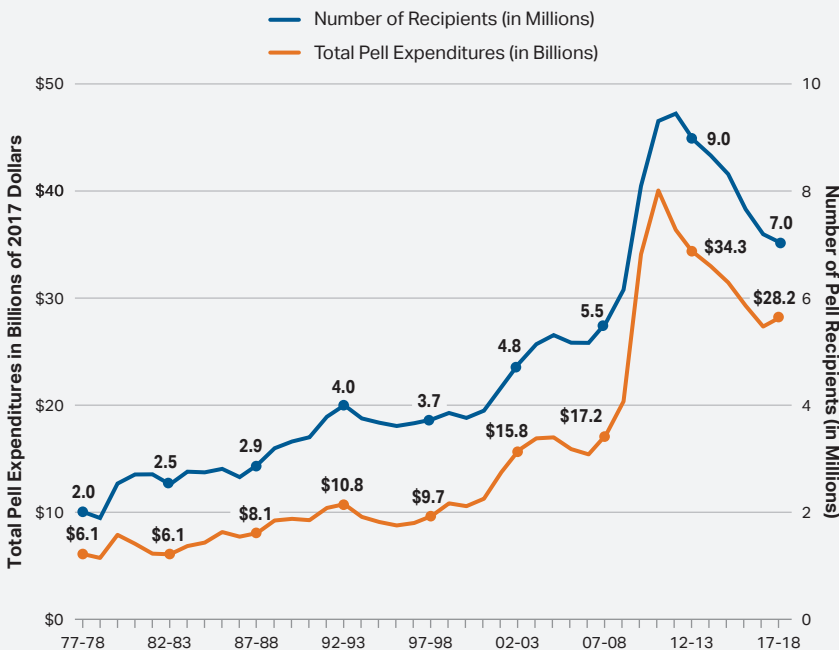
FIGURE 20A Undergraduate Enrollment and Percentage of Undergraduate Students Receiving Pell Grants, 2007-08 to 2017-18



NOTES: IPEDS headcount enrollments are adjusted for the difference between total headcount, which counts students more than once if they are enrolled in more than one institution at the same time, and unduplicated headcount reported by the National Student Clearinghouse (NSC). Twelve-month undergraduate headcount for 2017-18 is estimated from NSC data.

SOURCES: NCES, *Postsecondary Institutions and Cost of Attendance in 2017-18, Degrees and Other Awards Conferred, 2016-17, and 12-Month Enrollment, 2016-17: First Look (Preliminary Data)* and earlier editions; National Student Clearinghouse, *Current Term Enrollment Estimates: Spring 2018*; U.S. Department of Education, *Federal Pell Grant Program End-of-Year Report 2016-17*; U.S. Department of Education, Federal Student Aid Data Center, Title IV Program Volume Reports and Aid Recipients Summary; calculations by the authors.

FIGURE 20B Total Pell Grant Expenditures and Number of Recipients, 1977-78 to 2017-18



- The number of undergraduates declined by 2.6 million (10%) between 2011-12 and 2017-18. The number of Pell Grant recipients declined by 2.4 million (26%) over these six years.
- Total Pell Grant expenditures increased from \$6.1 billion (in 2017 dollars) in 1977-78 to \$9.7 billion in 1997-98 and to \$28.2 billion in 2017-18. Over the decade from 2007-08 to 2017-18, expenditures spiked from \$17.2 billion in 2007-08 to \$40.1 billion in 2010-11, before falling back to \$28.2 billion in 2017-18.
- The percentage of Pell Grant recipients who are independent students, with eligibility determined by their own financial circumstances rather than those of their parents, increased from 39% in 1977-78 to 57% in 1997-98. This percentage declined from 58% in 2007-08 and 2012-13 to 51% in 2016-17.

ALSO IMPORTANT:

- Changes in Pell Grant expenditures result from changes in the legislated maximum grant, the formula for determining expected family contributions, the number of enrolled students, the share of students enrolling full time, and the financial circumstances of students and families.

Percentage of Recipients Who Were Independent, 1977-78 to 2016-17, Selected Years

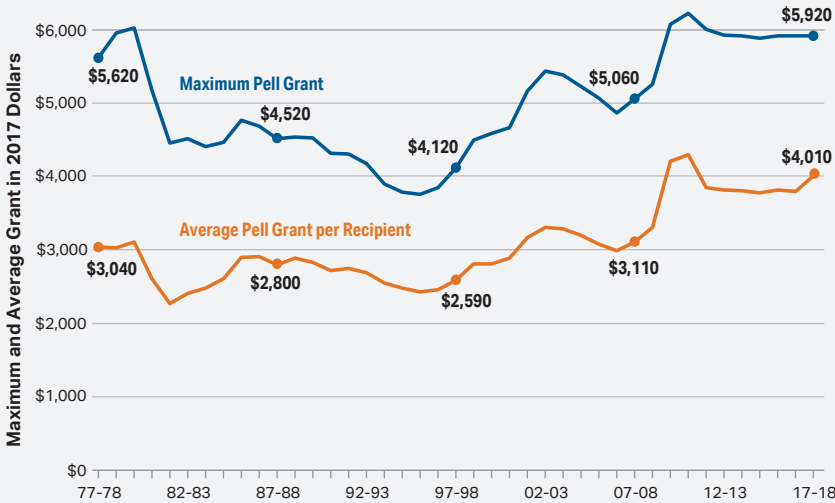
Year	Percentage of Recipients Who Were Independent
1977-78	39%
1987-88	58%
1997-98	57%
2007-08	58%
2012-13	58%
2013-14	56%
2014-15	55%
2015-16	53%
2016-17	51%

SOURCES: U.S. Department of Education, *Federal Pell Grant Program End-of-Year Report, 1977-78 through 2016-17*; U.S. Department of Education, Federal Student Aid Data Center, Title IV Program Volume Reports and Aid Recipients Summary; calculations by the authors.

Pell Grants

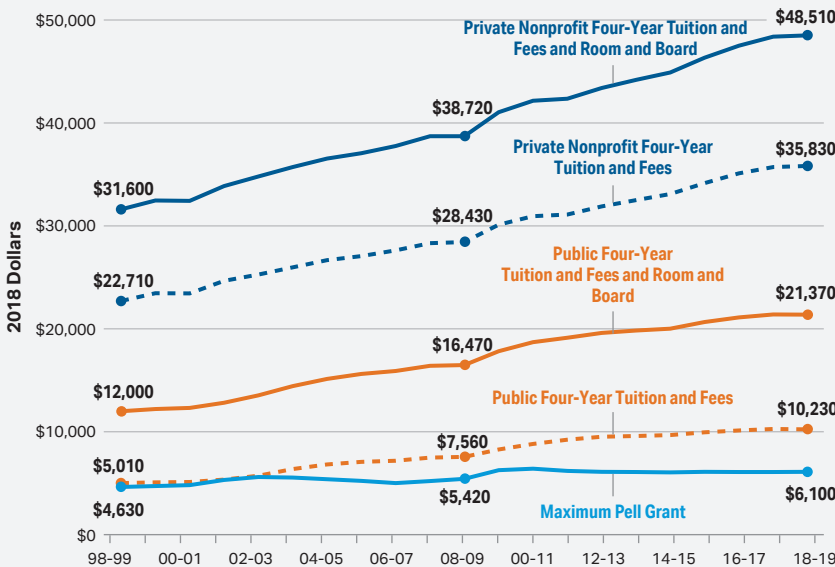
The maximum Pell Grant amount, which is legislated by Congress, has fluctuated over time. The \$5,920 maximum Pell Grant in 2017-18 was 44% higher in inflation-adjusted dollars than it was 20 years earlier, but only 5% higher than it was 40 years earlier, in 1977-78.

FIGURE 21A Maximum and Average Pell Grants in 2017 Dollars, 1977-78 to 2017-18



SOURCES: U.S. Department of Education, *Federal Pell Grant Program End-of-Year Report, 1977-78 through 2016-17*; U.S. Department of Education, Federal Student Aid Data Center, Title IV Program Volume Reports and Aid Recipients Summary; calculations by the authors.

FIGURE 21B Inflation-Adjusted Maximum Pell Grant and Published Prices at Public and Private Nonprofit Four-Year Institutions in 2018 Dollars, 1998-99 to 2018-19



SOURCES: The College Board, *Trends in College Pricing 2018*, Table 2 online; U.S. Department of Education, Federal Student Aid Data Center.

- The maximum Pell Grant is the most frequently cited measure of per-student subsidies provided by the program. However, most students receive smaller grants because they are enrolled part time or because their family incomes and assets reduce their aid eligibility. In 2017-18, when the maximum Pell Grant was \$5,920, the average grant was \$4,010.
- The percentage of average public four-year in-state published tuition and fees covered by the maximum Pell Grant declined from 92% in 1998-99 to 72% in 2008-09 and to 60% in 2018-19.
- The percentage of average private nonprofit four-year published tuition and fees covered by the maximum Pell Grant declined from 20% in 1998-99 to 19% in 2008-09 and to 17% in 2018-19.

ALSO IMPORTANT:

- The maximum Pell Grant for 2018-19 is \$6,095, about the same as in 2017-18 after adjusting for the 3.0% increase in the Consumer Price Index.
- In 2016-17, 27% of recipients received the maximum grant of \$5,815. (U.S. Department of Education, *Federal Pell Grant Program End-of-Year Report 2016-17*, Table 3A)
- Between 2008-09 and 2018-19, published tuition and fees increased by 3.1% per year at public four-year institutions and by 2.3% per year at private nonprofit institutions, while the maximum Pell Grant increased by 1.2% per year, after adjusting for inflation.

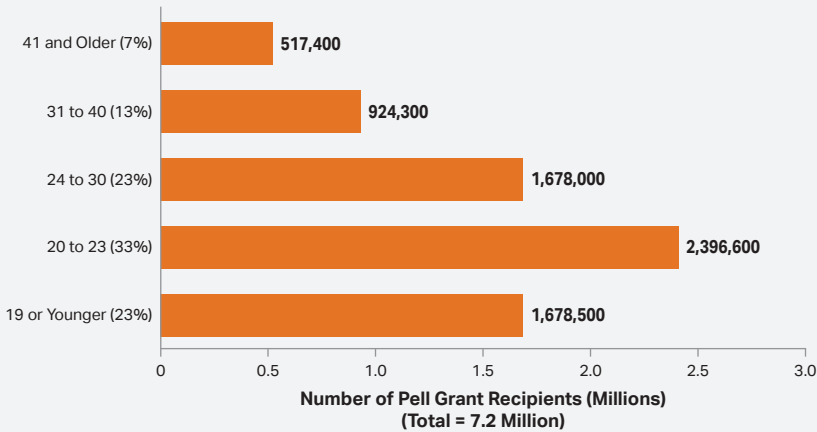
Maximum Pell Grant as a Percentage of Published Prices in 2018 Dollars, 1998-99 to 2018-19, Selected Years

	Public Four-Year In-State		Private Nonprofit Four-Year	
	Tuition and Fees	Tuition and Fees and Room and Board	Tuition and Fees	Tuition and Fees and Room and Board
98-99	92%	39%	20%	15%
03-04	87%	38%	21%	16%
08-09	72%	33%	19%	14%
13-14	64%	31%	19%	14%
18-19	60%	29%	17%	13%

Pell Grants

In 2016-17, 56% of Pell Grant recipients were younger than 24, 23% were between 24 and 30, and 20% were older than 30.

FIGURE 22A Distribution of Pell Grant Recipients by Age, 2016-17



NOTES: Percentages on the vertical axis represent percentages of recipients in each age group. Percentages may not sum to 100 because of rounding.

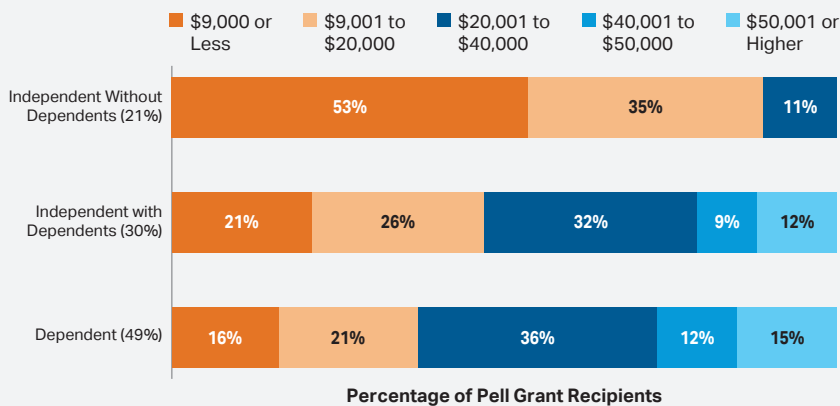
SOURCE: U.S. Department of Education, 2016-17 Federal Pell Grant Program End-of-Year Report, Table 11A.

- In 2016-17, 49% of Pell Grant recipients were dependent students; 37% of these students came from families with incomes of \$20,000 or less, and another 36% came from families with incomes between \$20,000 and \$40,000.
- Fifty-one percent of 2016-17 Pell Grant recipients were independent students; 30% had dependents of their own; and 21% were independent students without dependents.
- Among independent Pell Grant recipients with dependents, 47% had family incomes of \$20,000 or less, and another 32% had incomes between \$20,000 and \$40,000.
- Fifty-three percent of independent Pell Grant recipients without dependents had family incomes of \$9,000 or less; another 35% had incomes between \$9,000 and \$20,000.

ALSO IMPORTANT:

- The age distribution of Pell Grant recipients in 2016-17 was similar to the age distribution in 1996-97. In both years, 56% of recipients were 23 or younger and 20% were over age 30. However, between 2009-10 and 2011-12, about one-quarter of Pell Grant recipients were over the age of 30. (*Federal Pell Grant Program End-of-Year Reports, 1996-97 and 2016-17*)
- In 2016-17, 63% of Pell Grant recipients had zero expected family contribution (EFC). This included 51% of dependent recipients, 63% of independent recipients without dependents, and 81% of independent recipients with dependents. (*2016-17 Federal Pell Grant Program End-of-Year Report, Table 2*)
- In 2016-17, 12% of dependent recipients received a Pell Grant of less than \$1,500 and 38% received \$5,400 or more. (*2016-17 Federal Pell Grant Program End-of-Year Report, Table 3B*)

FIGURE 22B Distribution of Pell Grant Recipients by Dependency Status and Family Income, 2016-17



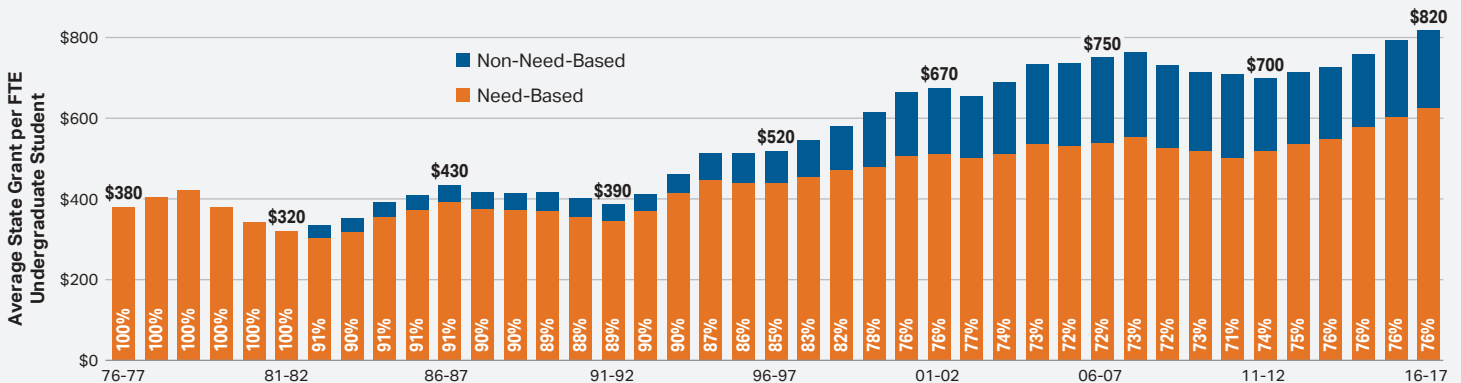
NOTES: Percentages on the vertical axis represent percentages of recipients in each group. Percentages may not sum to 100% because of rounding.

SOURCE: U.S. Department of Education, 2016-17 Federal Pell Grant Program End-of-Year Report, Table 2.

State Grants

State grant aid per full-time equivalent undergraduate student rose for the fifth consecutive year in 2016-17, to \$820—an increase of \$120 (17%) since 2011-12.

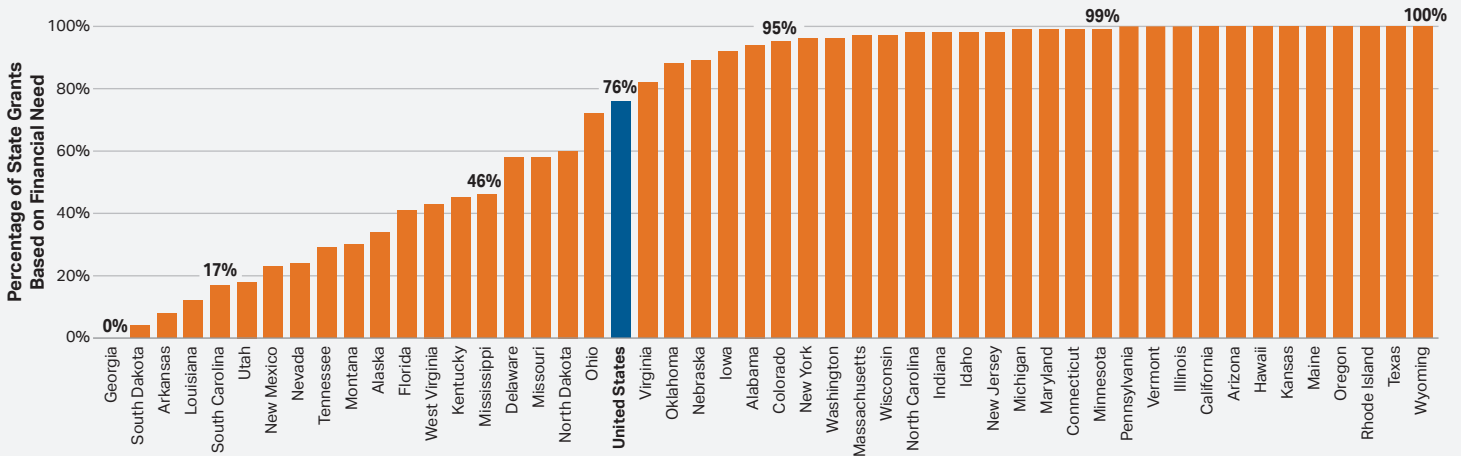
FIGURE 23A Need-Based and Non-Need-Based State Grants per Full-Time Equivalent Undergraduate Student in 2016 Dollars, 1976-77 to 2016-17



NOTE: Percentages displayed represent percentages of total undergraduate state grant aid for which students' financial circumstances were considered.

SOURCE: National Association of State Student Grant and Aid Programs (NASSGAP) Annual Survey, 1976-77 to 2016-17, Tables 1 and 12.

FIGURE 23B Need-Based State Grant Aid as a Percentage of Total Undergraduate State Grant Aid by State, 2016-17



NOTES: Need-based aid includes any grants for which financial circumstances contribute to eligibility. Non-need-based aid refers to grants for which financial circumstances have no influence on eligibility. New Hampshire did not award state grant aid to undergraduate students in 2016-17.

SOURCE: NASSGAP Annual Survey, 2016-17, Table 1.

- In 1981-82 and earlier years, virtually all state grant aid was based on students' financial circumstances. The share that was need-based declined gradually to a low of 71% in 2010-11. From 2013-14 through 2016-17, 76% of state grant aid was need-based.
- In 2016-17, half of the states considered students' financial circumstances in allocating at least 95% of their state grant aid. Fifteen states considered students' financial circumstances when awarding less than half of their state grant aid.

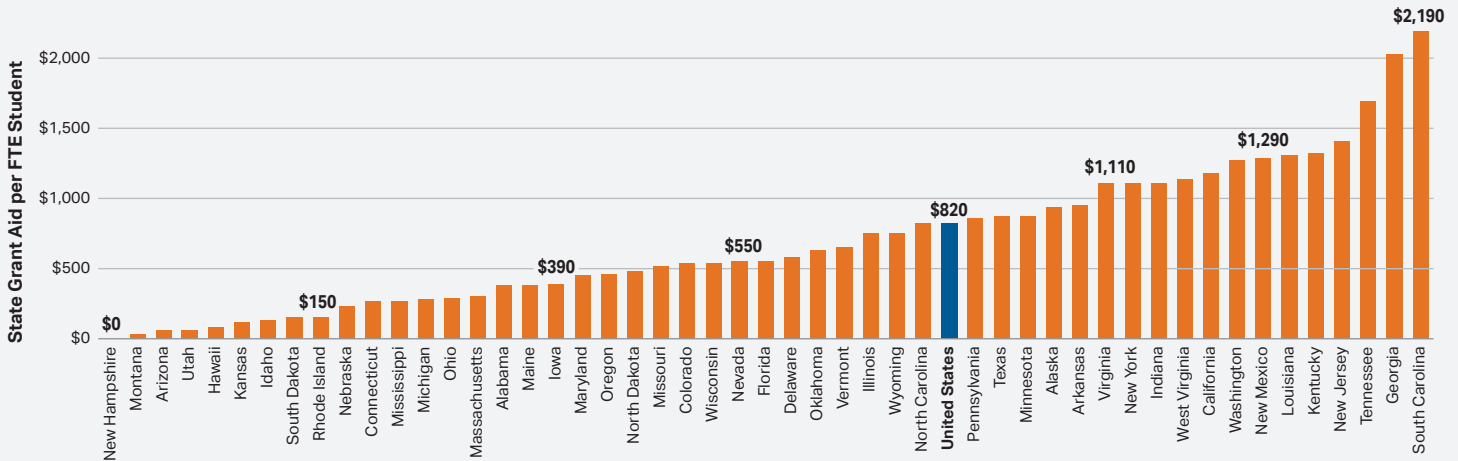
ALSO IMPORTANT:

- Total spending on state grant aid increased from \$9 billion (in 2016 dollars) in 2006-07 to \$10 billion in 2011-12, and to \$11 billion in 2016-17. (NASSGAP Annual Survey, 2006-07, 2011-12, and 2016-17)

State Grants

In 2016-17, state grant aid per full-time equivalent (FTE) undergraduate student ranged from under \$200 in nine states to over \$1,000 in 13 states.

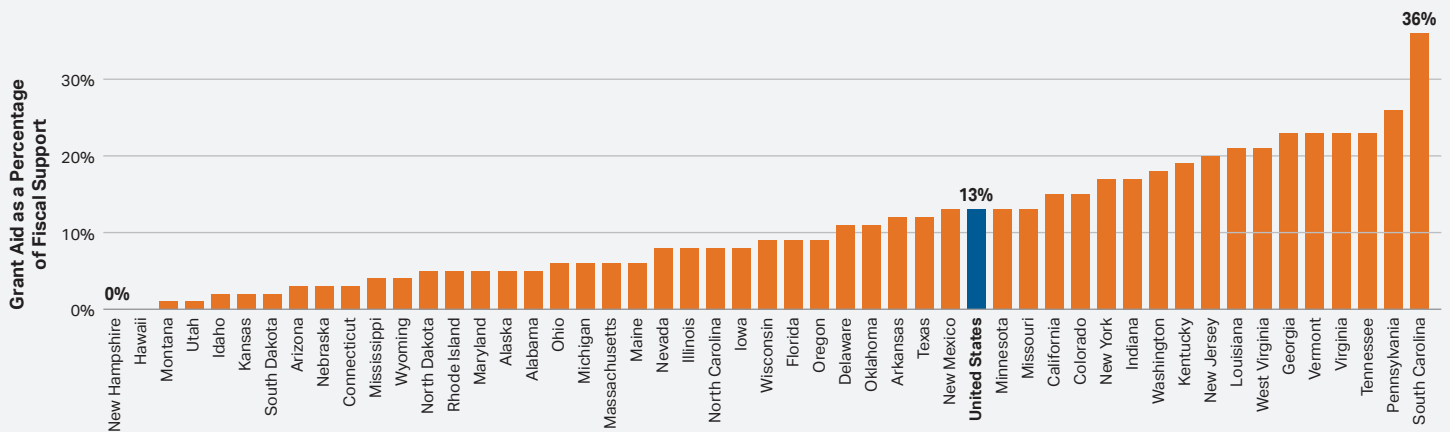
FIGURE 24A State Grant Aid per Full-Time Equivalent (FTE) Undergraduate Student, 2016-17



NOTES: Full-time equivalent students include both state residents and out-of-state students. States do not award grant aid to nonresidents.

SOURCES: NASSGAP Annual Survey, 2016-17, Tables 1 and 12; calculations by the authors.

FIGURE 24B State Grant Expenditures as a Percentage of Total State Support for Higher Education by State, 2016-17



NOTE: State grant expenditures include funding for both undergraduate and graduate students.

SOURCE: NASSGAP Annual Survey, 2016-17, Table 14.

- South Carolina, with the highest grant aid per FTE undergraduate student, considered the financial circumstances of recipients for only 17% of state grant funds in 2016-17. Georgia, the second most generous state, allocates its grant funds without regard to students' financial circumstances. (Figure 23B)
- Overall, state grant expenditures constituted 13% of total state support for higher education in 2016-17. Thirteen states devoted less than 5% of their higher education funding to grant aid for students; nine states directed more than 20% of their funding to individual students rather than to institutions.

ALSO IMPORTANT:

- In 2016-17, four states provided 42% of all state grant aid dollars, with California accounting for 18% of the total.
- Some state-funded grant aid is in the form of "tuition set-aside" programs through which a portion of tuition revenues at public institutions—or of increases in tuition—is dedicated to grant aid. Some of these funds are included in reported state grant aid, but others are not. Tuition remission dollars, not always reported as state grant aid, are sizable in several states.

Institutional Grants

In 2015-16, private nonprofit four-year institutions with tuition and fees of \$45,000 or higher awarded, on average, about two and a half times as much grant aid to dependent students from families with incomes below \$35,000 as to those from families with incomes of \$120,000 or higher (\$33,260 vs. \$12,840).

FIGURE 25A Average Institutional Grant Aid, Full-Time Undergraduates at Private Nonprofit Four-Year Institutions, 2015-16

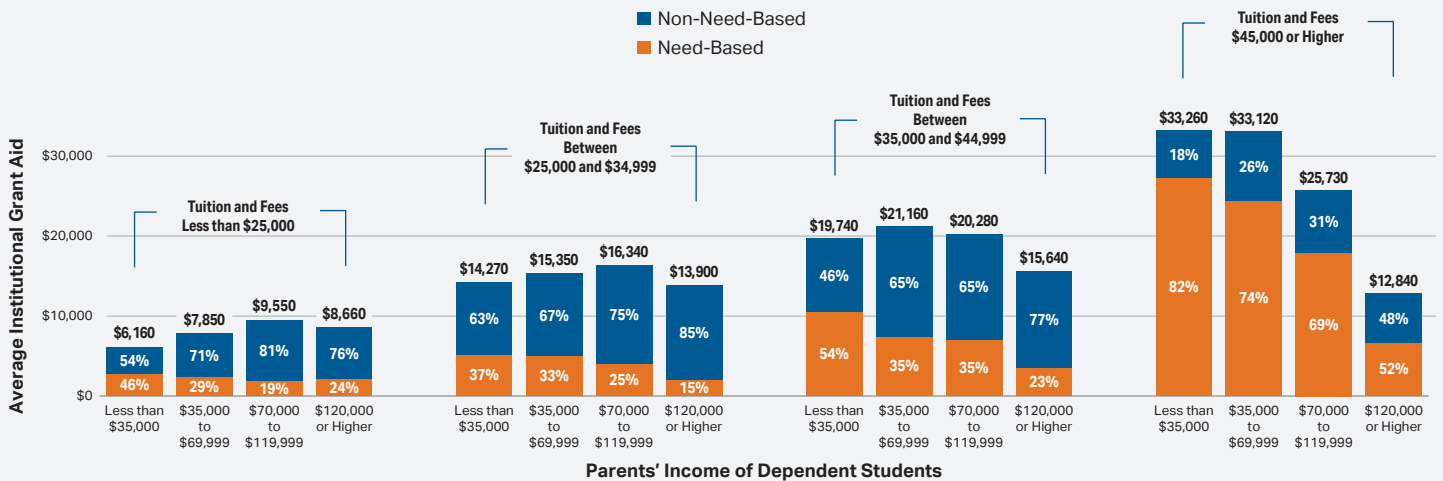
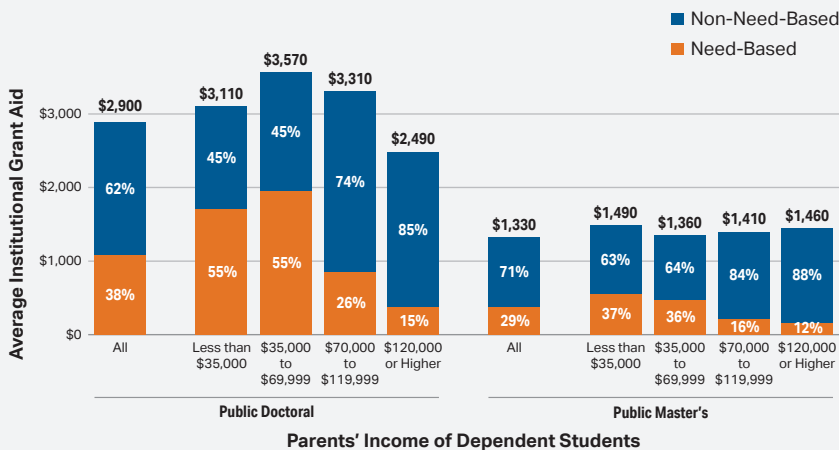


FIGURE 25B Average Institutional Grant Aid, Full-Time Undergraduates at Public Doctoral and Master's Institutions, 2015-16



- Lower-price private nonprofit four-year institutions tend to award larger shares of their grant aid without regard to the financial circumstances of recipients. In 2015-16, the lowest-price institutions (those with tuition and fees of less than \$25,000) awarded more institutional grant aid, on average, to students from families with incomes of \$70,000 or higher than to those from families with lower incomes.
- On average, dependent students from families with incomes below \$35,000 received more than five times as much institutional grant aid at high-tuition private colleges in 2015-16 as similar students at low-tuition private colleges (\$33,260 vs. \$6,160). Students from families with incomes of \$120,000 or higher received, on average, about 50% more grant aid at high-tuition colleges than similar students at low-tuition colleges (\$12,840 vs. \$8,660).
- In 2015-16, public doctoral universities distributed 62% of their institutional grant aid without regard to students' financial need; at public master's universities, it was 71%.
- In 2015-16, the lowest-income dependent students at public doctoral universities received about 25% more institutional grant aid, on average, than those from families with incomes of \$120,000 or higher (\$3,110 vs. \$2,490). At public master's universities, average institutional grants were similar for students from all income groups.

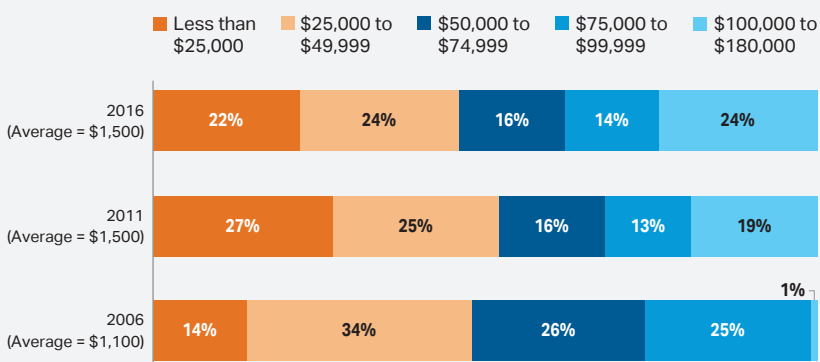
NOTES: Includes full-time undergraduates who were U.S. citizens or permanent residents. Averages are across all full-time students enrolled for the full year at one institution, including those who did not receive institutional grant aid. Non-need-based aid is based entirely on merit or other circumstances not related to need and includes athletic and merit scholarships, tuition waivers of all kinds, and other categories of institutional awards. Each tuition and fee category in Figure 25A includes about one-quarter of full-time undergraduates in the sector. Public bachelor's colleges, which enroll about 5% of undergraduates in the public sector, are not included in Figure 25B.

SOURCES: NCES, NPSAS 2016; calculations by the authors.

Education Tax Credits and Tuition Deductions

The implementation of the American Opportunity Tax Credit in 2009 shifted the benefits of the education tax credits from filers with incomes between \$25,000 and \$100,000 to those with lower and higher incomes.

FIGURE 26A Distribution of Education Tax Credits by Adjusted Gross Income, 2006, 2011, and 2016

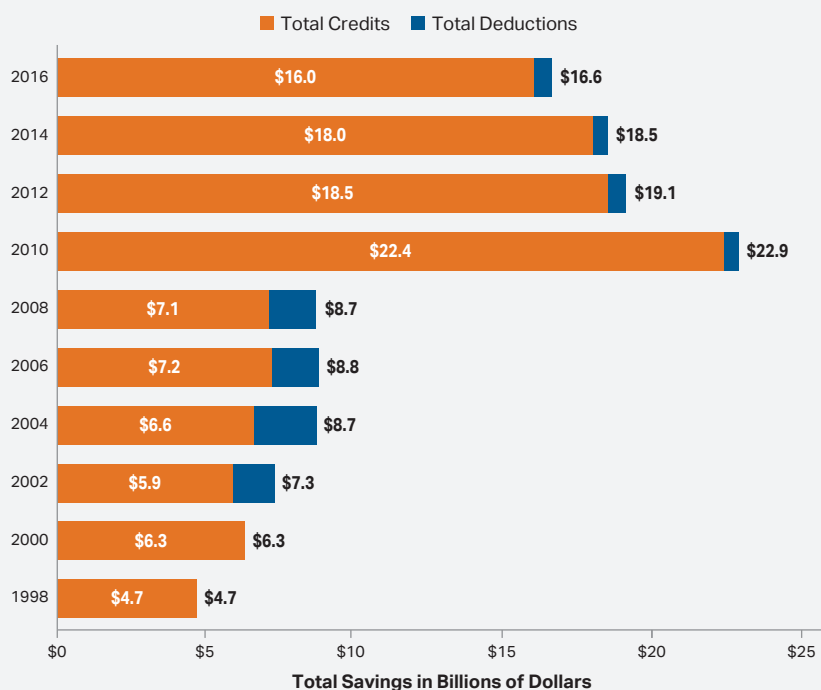


- In 2016, about a quarter of the benefits of the federal education tax credits went to tax filers with incomes between \$100,000 and \$180,000; a slightly smaller share went to filers with incomes of \$25,000 or less; and just over half went to those with incomes between \$25,000 and \$100,000.
- In 2016, students and parents saved about \$16.6 billion on their federal income taxes through tax credits and deductions for higher education expenses. This form of subsidy was \$8.8 billion (in 2016 dollars) in 2006 and \$22.9 billion in 2010.
- Tax savings for students and parents who claimed education tax credits averaged about \$1,500 in 2016.

ALSO IMPORTANT:

- Education tax credits and deductions are “tax expenditures.” They reduce federal income tax liabilities and federal tax revenues and have the same impact on the federal budget as direct expenditures such as Pell Grants.
- The American Opportunity Tax Credit, which accounts for most of the total credits and deductions, is available to taxpayers with adjusted gross incomes as high as \$180,000. The maximum benefit per filer is \$2,500, with up to \$1,000 of that amount available as a refund to filers with no tax liability.
- Because the credit is only partially refundable, many low-income filers who have low or no tax liabilities receive smaller credits than higher-income filers who can subtract the full credit from the amount they owe.
- About one quarter of undergraduates are ineligible for education tax credits because they do not pay tuition out of pocket. Many low-income students receive federal and state grant aid that covers tuition and fees; living costs are not qualifying expenses for education tax credits and deductions. (Delisle and Dancy, “A New Look at Tuition Tax Benefits,” 2015)
- In 2016, 12.4 million taxpayers deducted \$13.4 billion in student loan interest, generating about \$2 billion in tax savings for those borrowers. (Internal Revenue Service, Statistics of Income, 2016, Table 1.4; Fiscal Year 2017, Analytical Perspectives, Budget of the U.S. Government FY18, Table 13-1)

FIGURE 26B Total Education Tax Credits and Savings from Tuition Deductions in Billions of 2016 Dollars, 1998 to 2016, Selected Years



NOTES: The total and average values of tax credits and deductions are best estimates based on data from the Internal Revenue Service. A portion of nonrefundable dollars claimed on nontaxable returns is excluded to account for credits and deductions that do not reduce tax liability. The value of tax deductions is estimated based on applicable marginal tax rates. Percentages may not sum to 100 because of rounding.

SOURCES: Internal Revenue Service, Statistics of Income 1998 to 2016, Tables 1.3, 1.4, 3.3; calculations by the authors.

Notes and Sources

Campus-Based Aid (FWS, Perkins, and FSEOG), Iraq and Afghanistan Service Grants, and ACG/SMART Grants:

U.S. Department of Education, Annual Federal Program Data Books. Federal Work-Study (FWS), and Federal Supplemental Educational Opportunity Grant (FSEOG) amounts include allocated federal funds only. Institutional matching funds required since 1989-90 for FSEOG are reported under institutional grants. No funds have been appropriated for new federal capital contributions to the Perkins Loan program since FY06, and the program is funded from past federal and institutional capital contributions as well as collections from borrowers.

Education Tax Benefits: Income Tax Returns, All Returns, Tables 1.3, 1.4, 2, and 3.3. Data on education tax credits are authors' estimates based on IRS data on the volume of Hope, Lifetime Learning, and American Opportunity credits for tax years 1998 and later. A portion of nonrefundable dollars claimed on nontaxable returns is excluded to account for credits that do not reduce tax liability. Tax deductions are based on IRS Statistics of Income Table 1.4, with associated savings estimated by the authors based on the marginal tax rates applied to the taxable income of the taxpayers in each income bracket claiming the deduction on taxable returns. Calendar year amounts are split between the two associated academic years.

Federal Subsidized and Unsubsidized Student Loans:

2009-10 and prior: unpublished data provided by the U.S. Department of Education staff; 2010-11 and after: Federal Student Aid Data Center, Title IV Program Volume Reports. Because the Federal Student Aid Data Center will continue to update the loan volume after each academic year ends, we adjusted the 2017-18 data (released in September 2018) using the average of the percentage change between July 2015 and July 2016 in the reported 2014-15 loan volume, the percentage change between July 2016 and July 2017 in the reported 2015-16 loan volume, and the percentage change between July 2017 and July 2018 in the reported 2016-17 loan volume.

Prior to 1993-94, federal Subsidized and Unsubsidized Loans for students were made by banks and other private lenders and guaranteed by the federal government. From 1994-95 through 2009-10, the guaranteed loan program, known as the Federal Family Education Loan Program (FFELP), continued alongside the Federal Direct Loan Program (FDLP), which lends federal funds to students. Beginning in 2010-11, all of the loans are Federal Direct Subsidized or Unsubsidized Loans.

Subsidized Loans are need-based student loans for which the federal government pays the interest while the student is in school and during a six-month grace period thereafter. Prior to June 2012, these loans were available to both undergraduate and graduate students, but the Budget Control Act of 2011 eliminated the program for graduate students, whose federal loans are now all Unsubsidized or Grad PLUS loans. Interest accrues on Unsubsidized Loans from the time they are disbursed.

Institutional Grants: 2015-16 and prior: IPEDS Finance data. Estimated for 2016-17 and 2017-18. Estimated figures represent best approximations and are updated each year as additional information becomes available.

Nonfederal Loans: Estimates of nonfederal borrowing rely on data from MeasureOne. Between 2011-12 and 2016-17, we supplemented these data with information from the Consumer Bankers Association and the Consumer Financial Protection Bureau. Earlier data are based on information provided by lenders supplemented by data from annual reports and from NPSAS. Estimates of institutional lending are based on NPSAS, as well as a survey of institutions conducted for the College Board by the National Association of Student Financial Aid Administrators (NASFAA). We no longer report state and institutional loans separately from private loans because of changes in MeasureOne's methodology and data availability issues.

Pell Grant Program: 2016-17 and prior: *Federal Pell Grant Program End-of-Year Report*; 2017-18: Federal Student Aid Data Center, Title IV Program Volume Reports.

Private and Employer Grants: Estimates are based on data included in NPSAS and on National Scholarship Providers Association surveys of major private student grant providers, supplemented by information from annual reports of selected scholarship providers, data from institutional financial aid offices, and the College Board's Annual Survey of Colleges.

State Grant Programs: 20th through 48th Annual Survey Reports of the National Association of State Student Grant and Aid Programs (NASSGAP) for 1988-89 to 2016-17 and estimated for 2017-18.

Veterans Benefits: Benefits Program series (annual publication for each fiscal year), U.S. Department of Veterans Affairs, Office of Budget and Finance. Veterans benefits are payments for postsecondary education and training to veterans and their dependents, including the Post-9/11 Veterans Educational Assistance Program established in 2009-10 and all programs established earlier. The Iraq and Afghanistan Service Grants program, begun in 2010-11, provides non-need-based grants for students whose parent or guardian was a member of the Armed Forces who died in Iraq or Afghanistan as a result of performing military service after Sept. 11, 2001. Estimates include benefits for active duty military members.

Trends in Student Aid was authored by Sandy Baum, nonresident fellow at the Urban Institute; Jennifer Ma, senior policy research scientist at the College Board; Matea Pender, policy research scientist at the College Board; and CJ Libassi, senior policy research analyst at the College Board.

CONTACT INFORMATION FOR THE AUTHORS

sandybaum73@gmail.com
trends@collegeboard.org

Trends in Student Aid and its companion report, *Trends in College Pricing*, are supplemented by a website that makes detailed data available for reference and downloading. The PDF versions of these reports, along with PowerPoint slides of all the graphs, are available on the web: trends.collegeboard.org.

Hard copies may be requested by contacting trends@collegeboard.org.

Tables, graphs, and data in this report or excerpts thereof may be reproduced or cited, for noncommercial purposes only, provided that the following attribution is included:

Source: Baum, Sandy, Jennifer Ma, Matea Pender, and CJ Libassi (2018), *Trends in Student Aid 2018*, New York: The College Board.

© 2018 The College Board.

www.collegeboard.org

ACKNOWLEDGMENTS

Anthony LaRosa and Edward Lu provided critical support for this publication. We also benefited from comments from Dean Bentley, Jessica Howell, Michael Hurwitz, and Melanie Storey. Sandy Alexander provided expert graphic design work. The publication would not have been possible without the cooperation and support of many individuals at the College Board, including Connie Betterton, Robert Gordon, Karen Lanning, Alejandro Leal, George Lilas, Robert Majoros, Jose Rios, and Matt Walsh.

We thank all of those who contributed to the data collection for this publication, especially Charlotte Etier of the National Association of Student Financial Aid Administrators (NASFAA) and Mike Solomon of the Illinois Student Aid Commission.



 collegeboard.org
trends.collegeboard.org

00947-055
October 2018