Research Brief

Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion

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Highlights

- In fall 2014, 42% of all and 25% of full-time undergraduate students were enrolled in community colleges.
- Hispanic students were overrepresented in the public two-year sector; black students were overrepresented in the for-profit sector.
- While inflation-adjusted published prices for community college students increased between 1995-96 and 2015-16, average net prices declined.
- In 2015-16, the average published indistrict public two-year tuition and fee price ranges from \$1,420 in California and \$1,680 in New Mexico to \$6,510 in New Hampshire and \$7,530 in Vermont.
- Although community college students are less likely to borrow and on average borrow less than other students, a higher percentage of borrowers in this sector default on their federal student loans than students in other sectors.
- National Student Clearinghouse data show that 39% of first-time community college students in 2008 earned a credential within six years, including 10% who completed a degree at a four-year institution.

Community colleges play a crucial role in American higher education. Their open admission policy, coupled with low tuition and geographic proximity to home, makes them an important pathway to postsecondary education for many students, especially first-generation college students and those who are from low-income families, as well as adults returning to school to obtain additional training or credentials.

In fall 2014, 42% of all undergraduate students and 25% of all full-time undergraduate students were enrolled in community colleges¹ (Figure 1). According to a recent report from the National Student Clearinghouse (NSC), nearly half (46%) of all students who completed a degree at a four-year institution in 2013-14 had enrolled at a two-year institution at some point in the previous 10 years. These enrollment patterns are not just picking up the occasional community college course taken by students; of those students who had attended a two-year institution, 47% had enrolled in that sector for five or more terms (NSC, spring 2015).

Recent discussions of increasing the proportion of Americans with a college

^{1.} In this brief, we use "community colleges" and "public two-year colleges" interchangeably.



credential have focused considerable attention on community colleges, which offer primarily associate degrees and short-term certificates, often involving preparation for specific occupations. President Obama's proposal for making community college tuition-free has intensified this attention. Understanding the students this sector serves, how they finance their education, and whether they succeed in earning the credentials they seek is critical to policy development.

In this brief, we summarize key data about community college enrollment, the characteristics of students in this sector, the sticker and net prices students face, student debt, and completion rates.

Enrollment and Student Characteristics

Enrollment in both the public two-year sector and the for-profit sector of postsecondary education increased rapidly between 2000 and 2010, but it has declined since then. As shown in Figure 1, all postsecondary sectors saw significant undergraduate enrollment growth from 2000 to 2010. During this 10-year period, total enrollment in the public two-year sector increased from 5.7 million to 7.9 million: full-time enrollment increased from 2.0 million to 3.3 million. The for-profit sector saw the fastest growth in enrollment over this decade: its share of total undergraduate students more than tripled, and its share of full-time undergraduate students nearly tripled. The share of full-time undergraduate enrollment in community colleges

increased by four percentage points over the decade, while the share of all undergraduate enrollment in the sector remained stable.

Between 2010 and 2014, both full-time and all undergraduate enrollments declined at public two-year and forprofit colleges while increasing slightly at public and private nonprofit fouryear institutions. During this period, community colleges' enrollment share declined from 29% to 25% of full-time undergraduate and from 44% to 42% of all undergraduate students.2

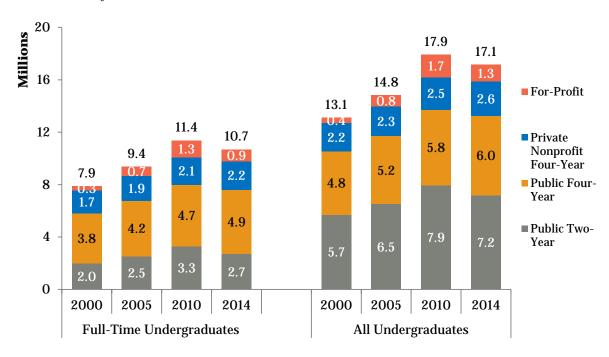
Variation across states

There is wide variation in enrollment patterns across states. In fall 2014, the number of students in the public two-year sector ranged from under 10,000 in three states to 729,000 in Texas and 1.46 million in California (Figure 2). The percentage of all public undergraduate students in the two-year sector ranged from 20% in South Dakota and Montana to over 65% in Wyoming, Illinois, and California (Figure 3).3

^{2.} In this brief, four-year institution categories include only those institutions where more than 50% of degrees/certificates awarded are bachelor's degrees or higher.

^{3.} Alaska does not have a separate community college system. Data from IPEDS categorize an institution that awards any four-year degree as a four-year institution. By that definition, less than 10% of Florida's public undergraduate enrollment is in the two-year sector, compared to 63% by our definition. Florida is one of 22 states that have authorized their community colleges to confer four-year degrees (Radwin & Horn, 2014).

Figure 1: Full-Time and All Undergraduate Fall Enrollment at Degree-Granting Institutions by Sector, 2000 to 2014, Selected Years



Distribution of Undergraduate Fall Enrollment at Degree-Granting Institutions by Sector, 2000 to 2014, Selected Years

	Full-	Full-Time Undergraduates				All Undergraduates			
Sector	2000	2005	2010	2014	2000	2005	2010	2014	
Public Two-Year	25%	27%	29%	25%	44%	44%	44%	42%	
Public Four-Year	48%	45%	41%	46%	37%	35%	32%	35%	
Private Nonprofit Four-Year	22%	20%	19%	20%	16%	15%	14%	15%	
For-Profit	4%	8%	11%	8%	3%	6%	10%	7%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	

Notes: Private nonprofit two-year institutions are not included. Percentages may not sum to 100 because of rounding. **Sources:** National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), fall enrollment data, 2000, 2005, 2010 and 2014; calculations by the authors.

2,500 **Thousands** ■ Public Four-Year 2,000 ■ Public Two-Year 1,500 1,000 500 0

Figure 2: Undergraduate Fall Enrollment in Public Two-Year and Four-Year Institutions by State, 2014

Sources: NCES, IPEDS fall enrollment data, 2014; calculations by the authors.

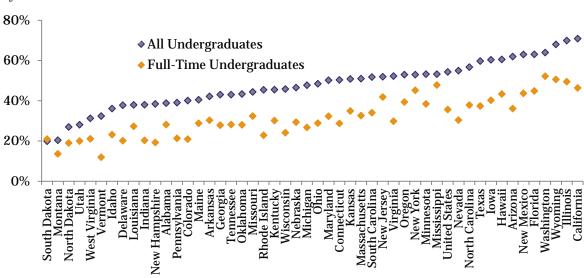


Figure 3: Proportion of Public Undergraduate Fall Enrollment in the Two-Year Sector by State, 2014

Sources: NCES, IPEDS fall enrollment data, 2014; calculations by the authors.

Because community college students are more likely to enroll part time than students in the public four-year sector, the proportion of full-time students enrolled in the two-year sector was smaller than the proportion of all students in this sector, ranging from 12% in Vermont to 52% in Washington in fall 2014. While community colleges in all states except South Dakota enrolled a lower percentage of full-time than of all undergraduates in fall 2014, the relatively high proportions of students who were enrolled full time in this sector in states such as Mississippi, New York, and Washington make the two percentages similar. In contrast, as Figure 3 shows, in Vermont, the gap between the percentage of all undergraduates and the percentage of full-time undergraduates enrolled in public two-year colleges was large, indicating that a high percentage of community college students were enrolled part time.

Demographics: race and ethnicity

It is well documented that community colleges serve a large proportion of minority, first-generation, low-income, and adult students. Data from the Department of Education show that Hispanic students disproportionately enrolled in the public two-year sector and black students disproportionately enrolled in the for-profit sector. In fall 2014, while 16% of all undergraduate students were Hispanic, 22% of undergraduate students in community colleges were Hispanic. A quarter of undergraduate students in the for-profit sector were black, compared to 13% overall (Table 1).

Table 2 looks at the same data from a different angle, showing sector choices by race/ethnicity. Similar percentages of Asian and white undergraduates enrolled in the public two-year and public four-year sectors. But 44% of black and 56% of Hispanic students were in the public two-year sector in 2014, compared to 29% from these groups in the public four-year sector. The disproportionate enrollment of black students in for-profit institutions is also evident here.

Asian and white first-time full-time students are much more likely to be enrolled at public four-year institutions than at community colleges, while black and Hispanic first-time full-time students are disproportionately represented in the public two-year and for-profit sectors. As Table 2 indicates, 31% of all first-time full-time undergraduates were enrolled in community colleges, including 36% of blacks and 43% of Hispanics. Five percent of all first-time full-time undergraduates were enrolled in for-profit institutions, including 10% of blacks and 7% of Hispanics.

Table 3 shows that although Hispanic students accounted for 16% of all undergraduates in the nation in fall 2014, they accounted for more than a third of all undergraduates in California and Texas. Hispanic students constituted 22% of community college students in the nation, 43% in California, and 39% in Texas. In California, Hispanic undergraduate students were the largest racial/ethnic group in public two-year and public four-year sectors. In Texas, Hispanic and white students constituted similar shares of the student body in the public two-year sector.

Table 1: Distribution of Fall Undergraduate Enrollment at Degree-Granting Institutions
 by Race/Ethnicity Within Sector, 2014

	Asian	Black	Hispanic	White	Other	Total
All Undergraduates						
Public Two-Year	5%	14%	22%	49%	10%	100%
Public Four-Year	7%	11%	13%	58%	11%	100%
Private Nonprofit Four-Year	5%	11%	9%	58%	16%	100%
For-Profit	3%	25%	15%	37%	21%	100%
All	6%	13%	16%	53%	12%	100%
All First-Time Full-Time Undergraduates						
Public Two-Year	4%	15%	22%	49%	10%	100%
Public Four-Year	8%	11%	14%	58%	10%	100%
Private Nonprofit Four-Year	6%	11%	10%	60%	14%	100%
For-Profit	2%	23%	20%	31%	24%	100%
All	6%	13%	16%	54%	12%	100%

Table 2: Distribution of Fall Undergraduate Enrollment at Degree-Granting Institutions
 by Sector Within Race/Ethnicity, 2014

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	Public Two-Year	Public Four-Year	Private Nonprofit Four-Year	For-Profit	Total
All Undergraduates					
Asian	40%	43%	14%	3%	100%
Black	44%	29%	13%	14%	100%
Hispanic	56%	29%	8%	7%	100%
White	39%	39%	17%	5%	100%
All	42%	35%	15%	7%	100%
All First-Time Full-Time Undergraduates					
Asian	23%	54%	21%	2%	100%
Black	36%	36%	17%	10%	100%
Hispanic	43%	37%	13%	7%	100%
White	28%	46%	23%	3%	100%
All	31%	43%	21%	5%	100%

Notes: All the race categories in this brief are non-Hispanic. Private nonprofit two-year institutions are not included. Percentages may not sum to 100 because of rounding.

Sources: NCES, IPEDS fall enrollment data, 2014; calculations by the authors.

Since California and Texas enroll a large percentage of all community college students, and both states have large Hispanic populations, it could be that these states explain the national patterns. When California and Texas are excluded from the national totals, the

overpresentation of Hispanic students in community colleges continues to exist, although to a lesser extent. Excluding California and Texas, 13% of community college students were Hispanic in fall 2014, compared to 11% of all undergraduate students.

Table 3: Distribution of Fall Undergraduate Enrollment at Degree-Granting Institutions by Race/Ethnicity Within Sector, 2014

	Asian	Black	Hispanic	White	Other	Total
All Undergraduates						
Public Two-Year	5%	14%	22%	49%	10%	100%
Public Four-Year	7%	11%	13%	58%	11%	100%
Private Nonprofit Four-Year	5%	11%	9%	58%	16%	100%
For-Profit	3%	25%	15%	37%	21%	100%
All	6%	13%	16%	53%	12%	100%
Nation Excluding CA and TX						
Public Two-Year	4%	16%	13%	57%	10%	100%
Public Four-Year	5%	12%	9%	63%	11%	100%
Private Nonprofit Four-Year	5%	12%	8%	60%	16%	100%
For-Profit	2%	27%	11%	39%	21%	100%
All	4%	14%	11%	58%	13%	100%
California						
Public Two-Year	12%	7%	43%	28%	9%	100%
Public Four-Year	22%	4%	32%	26%	16%	100%
Private Nonprofit Four-Year	13%	5%	22%	40%	19%	100%
For-Profit	7%	16%	27%	28%	21%	100%
All	14%	7%	38%	29%	13%	100%
Texas						
Public Two-Year	4%	14%	39%	36%	6%	100%
Public Four-Year	7%	11%	33%	41%	7%	100%
Private Nonprofit Four-Year	4%	12%	23%	50%	10%	100%
For-Profit	2%	24%	38%	22%	14%	100%
All	5%	14%	36%	38%	7%	100%

Notes: Private nonprofit two-year institutions are not included. Percentages may not sum to 100 because of rounding. **Sources:** NCES, IPEDS fall enrollment data, 2014; calculations by the authors.

Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion

Demographics: age, dependency status, family income, and parents' education level

Community college students tend to be older than undergraduates overall. Data from the National Postsecondary Student Aid Study (NPSAS)⁴ show that in 2011-12, about 20% of the lower-level (first or second year) undergraduate students in the public and private nonprofit four-year sectors were 25 or older, compared to 44% in the public two-year sector and 59% in the forprofit sector. Among full-time lowerlevel undergraduate students in 2011-12, about 10% were 25 or older in the public four-year and private nonprofit fouryear sectors, compared to 35% in the public two-year sector and 58% in the for-profit sector (Table 4).

While about 80% of public and private nonprofit four-year students started postsecondary education while they were under the age of 20, only 58% of students in the public two-year sector were this young when they first enrolled. Twenty-two percent of public two-year students began their postsecondary studies between the ages of 20 and 24, and 20% began after they turned 25.

Table 4 also shows that 49% of undergraduate students across all sectors were dependent on their parents for financial aid purposes. Among the 40% of students in the public two-year

sector who were dependent students, 31% were from the lowest family-income quartile, compared to 22% in the public four-year and 18% in the private nonprofit four-year sectors (where 64% and 67% were dependent, respectively). In the for-profit sector, where only 20% of the students were dependent, 46% of this group came from the lowest income quartile.

Consistent with the family income differences, in 2011-12, 36% of dependent students in the public twoyear sector were first-generation college students, compared to 24% of those in the public four-year sector and 19% in the private nonprofit nonprofit four-year sector. Almost half of all undergraduate students in the for-profit sector were first-generation college students.

Financing patterns

Even though low-income students were disproportionately enrolled in the public two-year sector, students in this sector in 2011-12 were least likely to apply for aid, with 61% having applied for federal aid and 70% for any aid. In other sectors, more than 70% of undergraduate students applied for federal aid in 2011-12 and more than 80% applied for any aid (Table 5).

Table 5 also shows that between 36% and 38% of undergraduate students in the public two-year, public four-year, and private nonprofit four-year sectors were Pell Grant recipients in 2011-12, while 64% of undergraduate students in the for-profit sector were Pell recipients.

^{4.} The National Postsecondary Student Aid Study (NPSAS) is a nationally representative survey of postsecondary students. The NPSAS survey has been repeated every few years since the late 1980s. The most recent study, conducted in 2011-12, included 95,000 undergraduate respondents.

Table 4: Characteristics of Undergraduate Students by Sector, 2011-12

	Public Two-Year	Public Four-Year	Private Nonprofit Four-Year	For-Profit	Total
Age as of 12/31/2011 — All Lower-	Level Studen	ts			
Under 20	21%	50%	59%	11%	29%
Between 20 and 24	34%	30%	23%	30%	32%
Between 25 and 29	16%	8%	4%	21%	14%
30 or older	28%	12%	13%	38%	25%
Age as of 12/31/2011 — Full-Time	Lower-Level	Students			
Under 20	30%	63%	68%	12%	40%
Between 20 and 24	35%	28%	22%	29%	31%
Between 25 and 29	13%	4%	3%	21%	11%
30 or older	22%	5%	7%	37%	19%
Age at the Beginning of College					
Under 20	58%	80%	78%	40%	66%
Between 20 and 24	22%	13%	11%	27%	19%
Between 25 and 29	8%	3%	4%	14%	7%
30 or older	12%	4%	6%	19%	9%
Dependency Status					
Dependent	40%	64%	67%	20%	49%
Independent Without Dependents	27%	20%	16%	29%	24%
Independent with Dependents	32%	15%	17%	52%	28%
Dependent Students' Parents Inco	me				
Less than \$30,000	31%	22%	18%	46%	25%
Between \$30,000 and \$64,999	28%	23%	22%	26%	24%
Between \$65,000 and \$99,999	25%	26%	27%	17%	25%
\$100,000 or More	17%	29%	33%	11%	25%
Parents' Highest Education Level					
Bachelor's Degree or Higher	33%	54%	61%	26%	24%
No College Experience	36%	24%	19%	47%	29%

Source: NCES, National Postsecondary Student Aid Study (NPSAS), 2012.

Community college students were more likely to work while in school than students in other sectors. In 2011-12, more than two-thirds of community college students worked; one-third worked full time, compared to about one out of five students in the public and private nonprofit four-year sectors and 36% in the for-profit sector. When only dependent students are considered, 21% of students in the public two-year and for-profit sectors worked full time in

2011-12, compared to 11% and 8% of students in the public four-year and private nonprofit four-year sectors, respectively. Full-time students in the public two-year sector were twice as likely to work full time as full-time students in the public and private nonprofit four-year sectors (23% vs. 12% and 11%). The percentage of part-time students working full time was similar across sectors.

Table 5: Characteristics of Undergraduate Students by Sector, 2011-12

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	Public Two-Year	Public Four-Year	Private Nonprofit Four-Year	For-Profit	Total
Applied for Aid					
Federal	61%	71%	76%	87%	70%
Any	70%	82%	89%	95%	80%
Percentage Receiving Pell	38%	38%	36%	64%	41%
Job While Enrolled in School –	- All Students				
No Job	31%	35%	36%	39%	34%
Part-Time	36%	46%	46%	25%	39%
Full-Time	33%	20%	18%	36%	27%
Job While Enrolled in School –	- Dependent Stu	dents			
No Job	31%	39%	40%	42%	36%
Part-Time	47%	51%	53%	37%	49%
Full-Time	21%	11%	8%	21%	14%
Job While Enrolled in School –	- Full-Time Stud	ents			
No Job	37%	39%	39%	40%	39%
Part-Time	40%	50%	50%	26%	43%
Full-Time	23%	12%	11%	34%	18%
Job While Enrolled in School –	- Part-Time Stud	ents			
No Job	28%	25%	27%	36%	28%
Part-Time	33%	37%	32%	24%	34%
Full-Time	38%	37%	42%	41%	38%

Source: NCES, National Postsecondary Student Aid Study (NPSAS), 2012.

Published Prices, Cost of Attendance, Student Aid, and Net Prices

Consistent with its role as a gateway to postsecondary education for low-income and first-generation students, the public two-year sector has lower published (sticker) prices than other sectors. In 2015-16, the average published tuition and fee price is \$3,435 for full-time public two-year in-district students, 37% of the average price for public four-year in-state students and 11% of that for private nonprofit four-year students (Table 6).

For community college students, tuition and fees constitute a relatively small

portion of the estimated annual budget. In 2015-16, tuition and fees are 20% of the estimated budget, which averages \$16,833 after adding food and housing, books and supplies, transportation, and other miscellaneous expenses (Table 6). Many of these nontuition expenses (such as food and housing, some transportation, and other miscellaneous expenses) are not specific to attending college. Rather, they are expenses people face whether or not they are in school. Nevertheless, the cost of living poses a significant hurdle for many community college students because it is difficult for them to work full time to support themselves and their families while in school.

 Table 6: Average Estimated Undergraduate Budgets (Enrollment-Weighted), 2015-16

	Tuition and Fees	Room and Board	Books and Supplies	Transportation	Other Expenses	Total Budget
Public Two-Year In-District Commuter	\$3,435	\$8,003	\$1,364	\$1,774	\$2,257	\$16,833
Public Four-Year In-State On-Campus	\$9,410	\$10,138	\$1,298	\$1,109	\$2,106	\$24,061
Public Four-Year Out-of-State On-Campus	\$23,893	\$10,138	\$1,298	\$1,109	\$2,106	\$38,544
Private Nonprofit Four-Year On-Campus	\$32,405	\$11,516	\$1,249	\$1,033	\$1,628	\$47,831

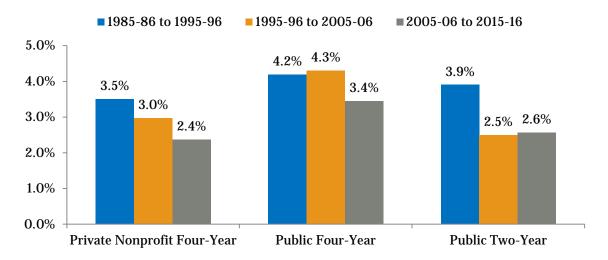
Notes: Expense categories are based on institutional budgets for students as reported by colleges and universities in the College Board's Annual Survey of Colleges. Books and supplies, transportation, and other expenses are the average amounts allotted in determining the total cost of attendance and do not necessarily reflect actual student expenditures.

Source: Ma, Baum, Pender, & Bell (2015), Figure 1.

Nationally, published prices in all sectors have been increasing faster than the rate of inflation for decades. As shown in Figure 4, the published indistrict tuition and fee price at public two-year colleges increased at an average annual rate of 2.6% in the most

recent decade, after adjusting for inflation. This rate is slightly higher than the 2.5% annual increase in the previous decade, but it is much lower than the 3.9% average annual increase between 1985-86 and 1995-96.

Figure 4: Average Annual Percentage Increase in Inflation-Adjusted Published Tuition and Fees by Decade, 1985-86 to 2015-16



Source: Ma, Baum, Pender, & Bell (2015), Figure 5.

Despite the lower costs of attendance in community colleges, the income profile of students in this sector makes financial aid crucial for their access and success. Federal Pell Grants are the foundation of this aid and students in community colleges receive a much larger proportion of the funding of this program than of other types of federal aid. In 2013-14, when they constituted over 40% of total undergraduate students and about a quarter of full-time undergraduate students, community college students received 36% of Pell Grants, but only 23% of Federal

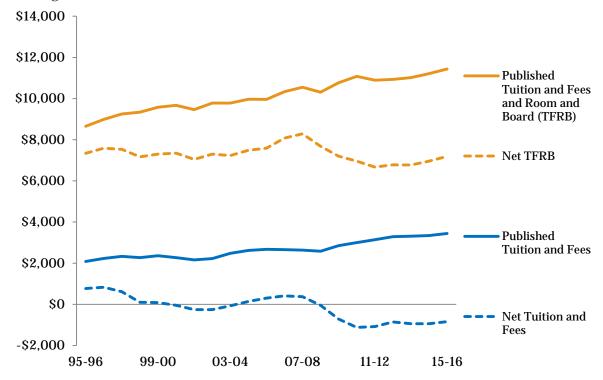
Supplemental Education Opportunity Grant (FSEOG) aid, 18% of Federal Work-Study funding, 16% of Subsidized, and 7% of Unsubsidized Stafford Loans. Their parents borrowed 1% of Parent PLUS loans (Baum, Ma, Pender, & Bell, 2015).5

^{5.} Pell Grants, FSEOG, and Subsidized Stafford Loans are available only to undergraduate students. Parent PLUS Loans are for parents of undergraduate students. Federal Work-Study, Perkins Loans, Unsubsidized Stafford Loans, and Post-9/11 GI benefits are available to both undergraduate and graduate students.

Both grant aid and education tax benefits make the average net prices students pay much lower than published prices. As shown in Figure 5, while inflation-adjusted published prices for full-time community college students increased steadily between 1995-96 and 2015-16, the average net tuition price declined over time. It was lower in 2005-06 than in 1995-96 and even lower in 2015-16. In 2015-16, full-time students in the public two-year sector received an estimated average of about \$4,210 in total grant aid and education

tax benefits. This amount is enough to cover the average published tuition and fee price of about \$3,440 in this sector, as well as a portion of other expenses. After adding housing and food, the average net price of tuition and fees and room and board in public two-year colleges is about \$7,230 in 2015-16. In other words, although on average, tuition and fees are covered, many students must still earn or borrow funds to cover living expenses if their families cannot provide assistance.

Figure 5: Average Published and Net Prices in 2015 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1995-96 to 2015-16



Notes: Because information on grant aid and education tax benefits for 2015-16 is not yet available, the net price for 2015-16 is estimated based on 2014-15 financial aid data. Room and board in this sector refers to housing and food costs for commuter students since few community colleges provide on-campus housing. Prices and grant aid are rounded to the nearest \$10.

Source: Ma, Baum, Pender, & Bell (2015), Figure 11.

Variation across states

Published community college prices vary greatly across states. In 2015-16, the average published in-district tuition and fee price ranges from \$1,420 in California and \$1,680 in New Mexico to \$6,510 in New Hampshire and \$7,530 in Vermont (Figure 6). Over the five years from 2010-11 to 2015-16, community college tuition and fees increased by less than \$300 in 11 states and by over \$1,000 in five states, after adjusting for inflation (Ma, Baum, Pender, & Bell, 2015).

There is also considerable variation in grant aid and net prices across states. In 2013-14, the percentage of all firsttime full-time community college students receiving grant aid ranged from 49% in New Hampshire to 94% in South Carolina. These differences result from demographic characteristics that generate differing federal grant amounts, as well as from state grant policies. In 2013-14, six states provided less than \$100 per fulltime equivalent undergraduate student in state grant aid, while 11 states provided more than \$1,000 per student (Baum, Ma, Pender & Bell, 2015). Moreover, some states base all of their aid on financial need, while others distribute all or most of their aid according to academic achievement, without regard to students' financial circumstances (Baum, Ma, Pender & Bell, 2015).

Figure 6 shows that after subtracting grant aid, the average estimated net tuition and fee price for first-time fulltime community college students

ranges from -\$2,290 in New Mexico and -\$1,790 in California to over \$4,000 in Vermont and New Hampshire. 6 Average estimated grant aid exceeds the published tuition and fee prices at community colleges in 19 states, leading to negative net prices when living costs are not considered.

Although the average grant aid is more than enough to cover the published tuition and fees in 19 states, it is not enough to cover all of the housing and food expenses in any state. As shown in Figure 7, the average estimated net price of tuition and fees plus housing and food in 2015-16 ranges from under \$5,500 in Mississippi and Georgia to over \$13,000 in Hawaii, Vermont, and New Hampshire.⁷

It is worth noting that although California and New Mexico have the lowest published and the lowest net tuition and fees, and both prices are highest in Vermont and New Hampshire, published and net tuition and fees at the state level are far from being perfectly correlated, largely because of differences in state grant policies.

^{6.} The national average net prices cited subtract both average grant aid from all sources and federal tax credits and deductions from the published price. However, tax benefit estimates by state are not available.

^{7.} Because of data limitations, we are not able to include other expenses that are part of the cost of attendance.

Figure 6: Average Published and Net Tuition and Fees by State: First-Time Full-Time Undergraduate Students at Public Two-Year Colleges, 2015-16

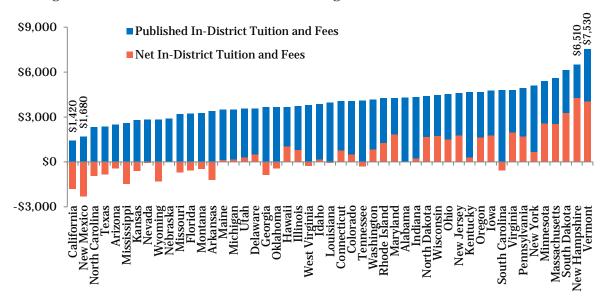
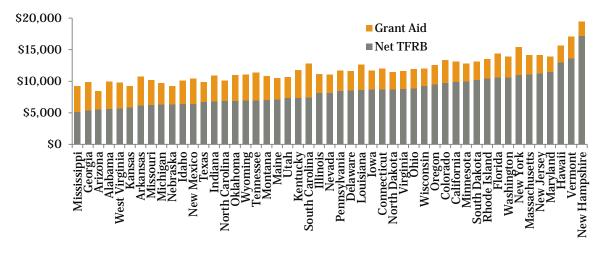


Figure 7: Average Grant Aid and Net Tuition and Fees and Room and Board (TFRB) by State: First-Time Full-Time Undergraduate Students at Public Two-Year Colleges, 2015-16



Notes: 2015-16 grant aid per student is projected using 2013-14 IPEDS student financial aid data and the estimated percentage change in grant aid per student from 2013-14 to 2015-16 from *Trends in Student Aid 2015*. Average tuition and fee data are from *Trends in College Pricing 2015*. Room and board numbers are projected using 2014-15 off-campus housing and food costs from IPEDS and the percentage change in average public two-year room and board from 2014-15 to 2015-16 from *Trends in College Pricing 2015*.

Sources: Ma, Baum, Pender, & Bell (2015), Table 5 and Table 7; NCES, IPEDS data; calculations by the authors.

The \$4,210 gap between average published and net prices for full-time community college students in 2015-16 conceals considerable variation in the subsidies received by students, not just across states, but also by demographic characteristics. Data from NPSAS are not fully comparable because they are for 2011-12 and exclude tax benefits. However, Table 7 reveals that independent students receive more grant aid on average than dependent students (\$4,440 versus \$3,110).

Net prices vary considerably by family income as well. Among 2011-12 fulltime dependent students in the public two-year sector, total grant aid ranged from under \$1,100 for those from the

upper half of the income distribution to \$3,160 for those from the second lowest income quartile and \$5,690 for those from the lowest income quartile. The average grant aid is enough to cover tuition and fees for students in the lower half of the income distribution. Net tuition and fees ranged from a negative \$3,080 for those from the lowest income quartile to \$2,050 for those from the highest income quartile. Net cost of attendance (not considering tax credits and deductions and including other expenses in addition to food and housing) ranged from \$8,070 for students from the lowest income quartile to over \$13,000 for those from the upper half of the income distribution.

Table 7: Published and Net Prices of Full-Time Students at Public Two-Year Institutions, 2011-12

	Published Tuition and Fees	Net Tuition and Fees	Total Grants	Cost of Attendance (COA)	Net COA
All Students	\$2,710	-\$940	\$3,650	\$14,030	\$11,280
Independent	\$2,590	-\$1,810	\$4,400	\$16,030	\$11,630
Dependent	\$2,800	-\$310	\$3,110	\$14,130	\$11,020
Dependent Student	s' Family Income Q	uartile			
Lowest	\$2,610	-\$3,080	\$5,690	\$13,760	\$8,070
Second	\$2,850	-\$310	\$3,160	\$14,100	\$10,940
Third	\$2,950	\$1,900	\$1,050	\$14,340	\$13,290
Highest	\$2,870	\$2,050	\$820	\$14,610	\$13,790

Note: Cost of Attendance includes tuition and fees, room and board, books and supplies, and other expenses.

Source: NCES, NPSAS 2012.

Student Debt

Growing concerns over student debt make a focus on this issue critical to understanding differences across postsecondary sectors. Community college students are less likely to borrow than other students, and those who do borrow accumulate lower amounts of debt on average. Although this is primarily a result of the lower prices they face, it is also possible that students in this sector choose to work more instead of borrowing more. As mentioned earlier, community college students are more likely to work full time and be enrolled part time, which makes it difficult for them to complete

their studies and earn credentials in a timely fashion.

As shown in Table 8, 59% of associate degree recipients and 65% of certificate recipients who received their credentials from community colleges in 2011-12 did not borrow. This compares to 12% and 14%, respectively, of those who received similar credentials from for-profit institutions. Only 9% of associate degree recipients from community colleges graduated with \$20,000 or more in debt, compared to 55% of associate degree recipients from for-profit institutions.

Table 8: Distribution of Total Undergraduate Debt by Sector and Type of Degree or Certificate, 2011-12

	No Debt	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 or More	Total
Bachelor's Degree							
Public Four-Year	34%	12%	14%	18%	10%	12%	100%
Private Nonprofit Four-Year	25%	8%	12%	20%	14%	20%	100%
For-Profit	12%	4%	7%	14%	16%	48%	100%
Associate Degree							
Public Two-Year	59%	20%	12%	5%	2%	2%	100%
For-Profit	12%	13%	20%	27%	15%	13%	100%
Certificate							
Public Two-Year	65%	22%	7%	3%	2%	1%	100%
For-Profit	14%	36%	37%	9%	2%	2%	100%

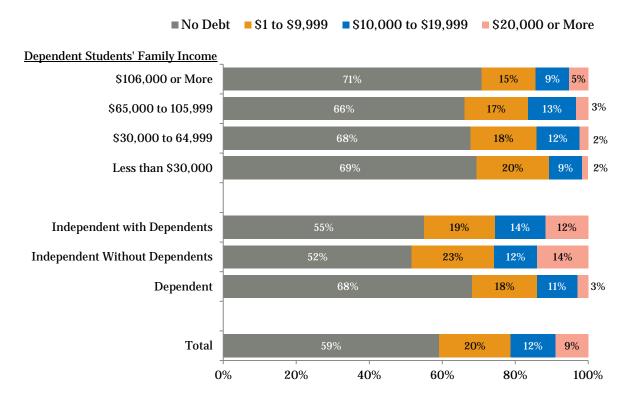
Source: NCES, NPSAS 2012.

Figure 8 shows that a higher percentage of independent students than of dependent students borrowed. While 68% of all dependent associate degree recipients in 2011-12 graduated without education debt, 52% of independent students without dependents and 55% of independent students with dependents did not borrow. Only 3% of dependent students borrowed \$20,000 or more for their community college education, compared to 14% and 12% of independent students without

dependents and with dependents, respectively.

Interestingly, while dependent students from the highest family-income quartile were less likely than others to rely on student loans, there were not significant differences across other family income groups in the percentages of students who borrowed. Furthermore, the percentage of students with \$20,000 or more in debt was slightly higher for students with higher family incomes than for others.

Figure 8: Distribution of Public Two-Year Associate Degree Recipients by Debt Level, 2011-12



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

Source: NCES, NPSAS 2012.

Although community college students are less likely to borrow and on average borrow less than other students, data from the Department of Education show that borrowers in this sector are disproportionately likely to default on their student loans. The latest available data show that 11.8% of student loan borrowers across all sectors who entered repayment in 2012 defaulted within three years. Default rates ranged from 6.3% for the private nonprofit four-year sector and 7.6% for the public four-year sector to 15.8% for the for-profit sector and 19.1% for the public two-year sector (U.S. Department of Education, 2015).

Although many community college students complete credentials without accruing debt, a significant number of them borrow and a disproportionate number of them face difficulties with repaying their loans after they leave school. On the other hand, resistance to borrowing and lack of access to federal loans at some community colleges may be interfering with student success for some in the public two-year college sector.

Completion Rates

Community colleges have received much attention recently with the unveiling of President Obama's proposal to provide free tuition for community college students meeting specified criteria. With such focus on community colleges, it is important to look not just at who enrolls in this sector and how much they actually pay, but also at their success rates. In this section, we present some data on completion rates. While the

completion rate is one important measure of student outcomes, other outcomes such as employment and earnings are just as important, but they are more difficult to track. Learning outcomes are even more challenging to define and to measure.

Institution-level graduation data from IPEDS do not paint a full picture of completion rates because they include only first-time full-time degreeseeking students who earn a credential from the first institution attended. In other words, students who transfer and earn credentials from other institutions are not considered completers by IPEDS. Therefore, the IPEDS completion rates underestimate actual degree attainment, especially for schools from which a significant percentage of students transfer.

The latest IPEDS data show that of all first-time full-time students who started at community colleges in 2010, 19.5% earned a certificate or an associate degree from the same institution within 150% of the normal time (NCES, 2014, Table 326.20).8

The Beginning Postsecondary Students (BPS) survey is a nationally representative survey of about 16,500 students who were enrolled for the first time in 2003-04. BPS followed them for six years. The BPS data show much higher completion rates. Among all surveyed students who started their

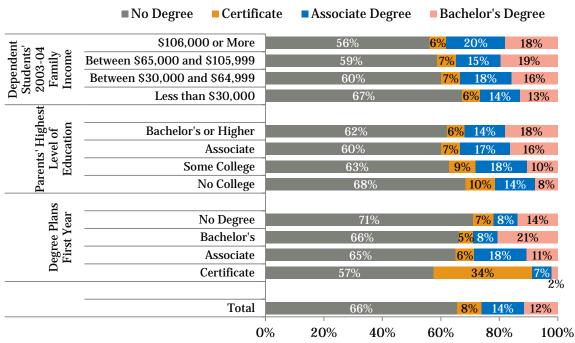
^{8.} For associate degrees, 150% of normal time is three years. For short-term certificates, "normal time" is shorter and depends on how the certificate is defined.

postsecondary study at a community college in 2003-04, about one-third had earned a credential within six years, including 8% with a certificate, 14% with an associate degree, and 12% with a bachelor's degree (Figure 9). Twenty-one percent of those whose initial plan was to earn a bachelor's degree had earned a bachelor's degree six years later, compared to 11% of those whose initial goal was an associate degree and 2% of those whose initial plan was a certificate.

Success rates vary quite a bit across demographic groups. Degree attainment is positively correlated with parents' highest level of

education and with family income. As shown in Figure 9, 18% of community college students with at least one parent with a bachelor's degree and 16% of those with at least one parent with an associate degree had obtained a bachelor's degree within six years, compared to 8% of those whose parents did not attend college and 10% of those whose parents had some college education, but no degree. Dependent students were more likely to earn a credential than independent students. Within each dependency status, Pell Grant recipients were less likely to earn a credential than non-recipients.

Figure 9: Six-Year Outcomes for Students Who Started at Public Two-Year Institutions in 2003-04



Note: Percentages may not sum to 100 because of rounding. Source: NCES, Beginning Postsecondary Students, 2003/2009. Many students who enroll in community colleges do not complete credentials, even allowing six years and counting credentials earned after transferring. However, frequently cited data from the Department of Education overstate the number of non-completers. Moreover, understanding differences across demographic groups and enrollment patterns is vital to finding ways to increase the number of community college students who achieve the goals with which they enter postsecondary education.

Concluding Remarks

Many believe that a college education is the key to success in the 21st century. Community colleges serve a diverse range of students in terms of age, race/ethnicity, and socioeconomic background, providing an important pathway to postsecondary education for many who would not attend college otherwise.

Although community colleges provide easy access for students, the majority of students in this sector do not complete a credential, and completion rates have been stagnant. Many students in this sector arrive underprepared academically, and many need to take developmental courses before they can study at the college level.

Community college students tend to be older and to have family obligations, to enroll part time, and to work while in school. All of these factors create challenges for college success.

A national agenda of increasing the number of students who successfully complete community college credentials will require innovation at the campus level in addition to sound financing structures. There is evidence that more structured pathways promote success (Bailey et al., 2015), and early results from the City University of New York's (CUNY's) Accelerated Study in Associate Programs (ASAP) are promising. A combination of financial aid, guidance and support services, and required fulltime attendance has increased the number of credits taken by participants and almost doubled three-year graduation rates (Scrivener et al., 2015). Although the per-student cost is high, the cost per degree is lower in ASAP than in the standard program because many more students reach that goal.

Constructive policies should incorporate an understanding of who the students enrolling in community colleges are and under what circumstances they are most likely to succeed, in addition to the investment of the resources required to diminish the financial and nonfinancial barriers facing many students in this sector and across postsecondary education.

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