APPENDIX
AFFORDABILITY

The Affordability indicator reflects the employment responsibilities students at public colleges and universities would need to undertake to work their way through to a degree without taking out student loans, as well as the percentage of students that complete their degree on time.

The state categorizations are based on the following elements:

1. The number of hours average state resident students would need to work during the school year (assuming full-time employment during the summer) to cover the annual cost of their education at public two- and four-year institutions.
2. The number of hours state resident students from the lowest income group (whose families earn no more than $30,000 per year) would need to work during the school year (assuming full-time employment during the summer) to cover the annual cost of their education at public two- and four-year institutions.
3. The percentage of students of four-year public institutions who complete their degree within four years.

Approach

The two-year sample includes institutions classified under College Scorecard as public, and either predominantly certificate-degree granting or predominantly associate degree granting (*preddeg*). The four-year sample includes institutions classified as public, and predominantly bachelor's degree granting.

Methodology

Element 1, the number of hours of work needed, uses the average state resident net price to attend in-state, public two- and four-year institutions, as reported to the College Scorecard (*num4_pub*), calculating net price as the total cost of attending an institution for one year–including tuition, fees, books, supplies, and living expenses–minus all grants and scholarship awards the student receives. Two- and four-year state net prices are weighted according to the undergraduate enrollment of Title IV students (*npt4_pub*). To determine the hours of work needed to pay the net price, the weighted average net price is divided by the state median wage for students.[1]

Element 2 uses the net price state resident students whose families earn no more than $30,000 per year pay to attend in-state, public institutions, as reported to the College Scorecard (*num41_pub*). Two- and four-year state net prices are weighted according to the undergraduate enrollment of Title IV students in the $30,000 or under income bracket (*npt41_pub*). To determine the hours of work needed to pay the net price, the weighted average net price is divided by the state median wage for students.[2]

[1, 2] Data on net price are from the 2021-22 academic year, and data on median wage are from 2023.

Median wage for college students in each state is calculated from the American Community Survey 2019-2023 data for respondents ages 18-30 with a high school diploma but no further degrees who are currently enrolled in school and are working fewer than 35 hours per week.[3]

Hours needed to pay is based on the following calculation:

$$\text{Hours of work needed to pay net cost, average student} = \frac{\text{Average state net price}}{\text{State hourly median wage for students}}$$

$$\text{Hours of work needed to pay net cost, low} - \text{income student} = \frac{\text{State net price for low} - \text{income students}}{\text{State hourly median wage for students}}$$

The thresholds used to create the categories assumed 10 weeks of full-time work (40 hours per week) during the summer and 30 weeks of work during the school year. Each of the elements is rated and categorized according to the following thresholds:

Table 1: Thresholds for categories for elements 1 and 2

Element Category	Threshold	Element Rating
Leading	Less than than 700 hours of work Can pay by working fewer than 10 hours per week during the school year and 40 hours per week during the summer.	4
Advanced	700 to less than 1000 hours of work Can pay by working 10 to less than 20 hours per week during the school year and 40 hours per week during the summer.	3
Developing	1000 to less than 1300 hours of work Can pay by working 20 to less than 30 hours per week during the school year and 40 hours per week during the summer.	2
Foundational	1300 hours of work or more Cannot pay even if working 30 hours or more per week during the school year and 40 hours per week during the summer.	1

[3] Median wage data is trimmed according to the Economic Policy Institute (EPI)'s 2019 guidelines, with limits adjusted for inflation rates according to the U.S. Bureau of Labor Statistics (BLS).
Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Grace Cooper, Julia A. Rivera Drew, Stephanie Richards, Renae Rogers, Jonathan Schroeder, and Kari C.W. Williams. IPUMS USA: Version 16.0 [dataset]. Minneapolis, MN: IPUMS, 2025. https://doi.org/10.18128/D010.V16.0

Element 3 is the 100% completion rate of students enrolled at public four-year institutions (*c100_4*), as published in College Scorecard, weighted by the adjusted cohort enrollment (*d100_4*). It is rated and categorized according to the following thresholds:

Table 2: Thresholds for categories for element 3

Element Category	Threshold	Element Rating
Leading	65% or more of four-year students at public institutions complete their degrees within four years.	4
Advanced	50% to less than 65% of four-year students at public institutions complete their degrees within four years.	3
Developing	35% to less than 50% of four-year students at public institutions complete their degrees within four years.	2
Foundational	Less than 35% of four-year students at public institutions complete their degrees within four years.	1

Overall state categories

Then, state composites are determined at the four- and two-year levels. The four-year composite is the average of the scores of elements 1, 2, and 3 – the hours needed to pay net price at four-year institutions, hours needed to pay net price at four-year institutions for low-income students (less than $30,000 family income), and the percentage of four-year students who complete their degrees on time. The two-year composite is the average of the scores of elements 1 and 2.

Table 3: Category thresholds for state Affordability progress

Category	Threshold (weighted average of Element Ratings)
Leading	Greater than 3
Advanced	Greater than 2.5 and less than or equal to 3
Developing	Greater than or equal to 2 and less than or equal to 2.5
Foundational	Less than 2

Further detail on the data sources and variables can be found below. For institution-specific data, please consult these spreadsheets.

Definitions

College Scorecard

The College Scorecard is an interactive college search tool created by the United States Department of Education that provides interactive and downloadable data on college costs, graduation rates, typical debt levels, and post-college earnings. Data are updated annually and available at the institution and program level.

Many data elements are drawn directly from, or derived from, data reported to the Integrated Postsecondary Education Data System (IPEDS), to which all institutions that participate in or are applicants of any federal student financial aid program are required to report. IPEDS is a system of interrelated surveys conducted annually. The database gathers information from every college, university, and technical and vocational institution in the United States and other jurisdictions, such as Puerto Rico. Some colleges report combined data that pertain to more than one IPEDS institution. The reporting institution (called the "parent") also indicates an estimated proportion of the data that applies to each of the institutions for which it is reporting (called "child" institutions). In the Scorecard data, these proportions are used to allocate data reported by parent institutions to the child institutions to simplify both consumer and research use of the data.

Table 4: College Scorecard Variable Definitions.[4]

Variable Name	Variable Description
control	*Control of institution* 1=Public 2=Private nonprofit 3=Private for profit
preddeg	*Predominant undergraduate degree awarded* 0=Not classified 1= Predominantly certificate-degree granting 2=Predominantly associate degree granting 3=Predominantly bachelor's degree granting 4=Entirely graduate-degree granting
num4_pub	*Number of Title IV students (public institutions)* The number of full-time, first-time, degree-/certificate-seeking undergraduates who received Title IV aid (public institutions). This metric is limited to full-time, first-time, degree-/certificate-seeking undergraduates who pay in-state tuition and receive Title IV aid. [2] For academic-year institutions, this metric includes full-time, first-time, degree-/certificate-seeking undergraduates who first enrolled in the fall term. For non-academic year institutions (program or continuous enrollment), this metric represents the program with the largest enrollment at the institution, and it includes full-time, first-time, degree-/certificate-seeking undergraduates who first enrolled at any time during the academic year.

[4] For full descriptions of variables, see the College Scorecard data dictionary.

npt4_pub	*Average net price for Title IV institutions (public institutions)* Net price is the average cost of tuition, fees, books and supplies, and living expenses, minus the average grant/scholarship aid. It is calculated for all full-time, first-time, degree-/certificate-seeking undergraduates who receive Title IV aid. It is calculated for in-state students.
num41_pub	*Number of Title IV students, $0-$30,000 family income (public institutions)* The number of full-time, first-time, degree/certificate-seeking undergraduates who received Title IV aid, by income category $0-$30,000, included in the IPEDS Student Financial Aid component. This metric is limited to full-time, first-time, degree/certificate-seeking undergraduates who pay in-state tuition and receive Title IV aid. For academic-year institutions, this metric includes full-time, first-time, degree/certificate-seeking undergraduates who first enrolled in the fall term. For non-academic-year institutions (program or continuous enrollment), this metric represents the program with the largest enrollment at the institution, and it includes full-time, first-time, degree/certificate-seeking undergraduates who first enrolled at any time during the academic year.
npt41_pub	*Average net price for $0-$30,000 family income (public institutions)* The average annual total cost of attendance, including tuition and fees, books and supplies, and living expenses, minus the average grant/scholarship aid, by detailed income category $0-$30,000. It is calculated for all full-time, first-time, degree/certificate-seeking undergraduates who receive Title IV aid. This metric is limited to full-time, first-time, degree/certificate-seeking undergraduates who pay in-state tuition and receive Title IV aid. For academic-year institutions, net price represents an average of all programs and includes only full-time, first-time, degree/certificate-seeking undergraduates who first enrolled in the fall term. For non-academic-year institutions (program or continuous enrollment), net price represents the program with the largest enrollment at the institution and it includes full-time, first-time, degree/certificate-seeking undergraduates who first enrolled at any time during the academic year. For programs less than 1 year in length, this represents the net price for the full program. The total cost of attendance depends on whether full-time, first-time, degree/certificate-seeking undergraduates live on campus, off campus (not with family), or off campus (with family). Income categories are calculated from the income values used by the institution to calculate financial aid eligibility. For a dependent student, this includes the student's and the parents' income. For an independent student, this includes the student's adjusted gross income and, if the student is married, the spouse's income.

c100_4	*Completion rate for first-time, full-time students at four-year institutions (100% of expected time to completion)* The proportion of full-time, first-time, degree/certificate-seeking undergraduates who completed a degree or certificate at the 4-year institution within 100 percent of normal time. This metric is calculated as the number of full-time, first-time, undergraduates who completed a degree or certificate divided by the number of full-time, first-time, undergraduates in the corresponding completion rate cohort. For full-time, first-time, bachelor's degree-seeking undergraduates, 100 percent of normal time is typically 4 years, and for full-time, first-time, associate's degree-seeking undergraduates it is typically 2 years. For full-time, first-time, certificate-seeking undergraduates, the normal time period varies by the length of the program (for example, 6 months for a certificate with a normal completion time of 6 months).
d100_4	*Adjusted cohort count for completion rate at four-year institutions (denominator of 100% completion rate)* The number of full-time, first-time, degree/certificate-seeking undergraduates used by the 4-year institution to calculate completion rate within 100 percent of normal time. This metric is based on the number of full-time, first-time, degree/certificate-seeking undergraduates who initially enrolled in the fall term (for institutions that primarily follow an academic year calendar system) or any time during the academic year (for institutions that primarily follow a continuous enrollment or program-based calendar system). Institutions may exclude full-time, first-time, degree/certificate-seeking undergraduates who left the institution due to death, total and permanent disability, active military duty, service in the Peace Corps or other federal foreign aid program, or service on an official church mission . Four-year institutions use full-time, first-time, degree/certificate-seeking undergraduates who started at the institution 6 years earlier.

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Table 5: Four-year net price, Four-year hours needed, Four-year low-income net price, Four-year low-income hours needed, by state

State	Four-year institution net price	Hours needed to pay net price at four-year institution	Four-year institution net price, $0-$30,000 family income	Hours needed to pay net price at four-year institution, $0-$30,000 family income
USA	$15,077	1,333	$ 9,835	870
Alabama	$17,554	1,982	$ 14,570	1645
Alaska	$10,092	775	$ 6,221	478
Arizona	$13,813	1,122	$ 9,312	757
Arkansas	$14,430	1,425	$ 11,517	1137
California	$11,902	906	$ 7,186	547
Colorado	$17,716	1,418	$ 11,964	957
Connecticut	$17,918	1,417	$ 13,061	1033
Delaware	$16,545	1,631	$ 11,401	1124
District of Columbia	$14,144	1,061	$ 13,708	1028
Florida	$8,615	798	$ 5,081	470
Georgia	$14,851	1,485	$ 12,441	1244
Hawaii	$11,796	1,052	$ 7,922	707
Idaho	$16,230	1,492	$ 12,903	1186
Illinois	$14,523	1,333	$ 8,712	799
Indiana	$13,178	1,216	$ 6,379	589
Iowa	$17,128	1,645	$ 10,438	1003
Kansas	$15,817	1,580	$ 11,329	1132
Kentucky	$12,920	1,224	$ 10,366	982

State	Four-year institution net price	Hours needed to pay net price at four-year institution	Four-year institution net price, $0-$30,000 family income	Hours needed to pay net price at four-year institution, $0-$30,000 family income
Louisiana	$14,397	1,536	$ 12,190	1300
Maine	$14,781	1,229	$ 10,074	838
Maryland	$15,832	1,342	$ 7,893	669
Massachusetts	$19,087	1,323	$ 11,987	831
Michigan	$15,705	1,451	$ 9,054	837
Minnesota	$16,523	1,332	$ 8,417	679
Mississippi	$14,413	1,601	$ 12,194	1355
Missouri	$15,606	1,502	$ 11,752	1131
Montana	$16,296	1,431	$ 13,261	1164
Nebraska	$15,054	1,471	$ 11,453	1119
Nevada	$13,126	1,181	$ 10,944	985
New Hampshire	$21,345	1,809	$ 15,354	1301
New Jersey	$18,553	1,575	$ 11,679	992
New Mexico	$10,721	1,039	$ 9,389	910
New York	$11,752	934	$ 6,201	493
North Carolina	$13,996	1,400	$ 8,473	847
North Dakota	$16,023	1,611	$ 10,995	1105
Ohio	$18,476	1,773	$ 11,942	1146
Oklahoma	$14,442	1,579	$ 10,257	1122
Oregon	$18,389	1,461	$ 14,753	1172
Pennsylvania	$23,002	2,043	$ 15,694	1394

State	Four-year institution net price	Hours needed to pay net price at four-year institution	Four-year institution net price, $0-$30,000 family income	Hours needed to pay net price at four-year institution, $0-$30,000 family income
Rhode Island	$17,850	1,388	$ 10,683	831
South Carolina	$18,115	1,793	$ 12,056	1194
South Dakota	$18,660	1,555	$ 14,471	1206
Tennessee	$14,559	1,417	$ 10,120	985
Texas	$14,861	1,486	$ 10,793	1079
Utah	$11,953	1,118	$ 8,430	788
Vermont	$18,419	1,381	$ 11,368	853
Virginia	$19,012	1,722	$ 12,396	1123
Washington	$14,690	1,046	$ 8,102	577
West Virginia	$11,109	1,079	$ 8,684	844
Wisconsin	$15,372	1,378	$ 8,525	764
Wyoming	$11,995	1,152	$ 7,174	689

Table 6: Two-year net price, Two-year hours needed, Two-year low-income net price, Two-year low-income hours needed, by state

State	Two-year institution net price	Hours needed to pay net price at two-year institution	Two-year institution net price, $0-$30,000 family income	Hours needed to pay net price at two-year institution, $0-$30,000 family income
USA	$7,607	673	$6,193	548
Alabama	$5,987	676	$5,257	593
Alaska	$8,181	628	$7,394	568
Arizona	$9,227	750	$8,058	655
Arkansas	$9,594	947	$8,354	825
California	$5,838	445	$4,991	380
Colorado	$10,023	802	$8,049	644
Connecticut	$9,065	717	$9,007	712
Delaware	$8,028	791	$7,172	707
District of Columbia[5]	-	-	-	-
Florida	$7,109	658	$6,430	595
Georgia	$8,194	819	$6,840	684
Hawaii	$7,430	663	$6,592	588
Idaho	$7,488	688	$5,935	545
Illinois	$5,653	519	$4,145	380
Indiana	$6,851	632	$4,725	436
Iowa	$9,639	926	$7,540	724
Kansas	$9,579	957	$8,061	805

5 Please note that there are no public two-year institutions in the District of Columbia, as reported to IPEDS.

State	Two-year institution net price	Hours needed to pay net price at two-year institution	Two-year institution net price, $0-$30,000 family income	Hours needed to pay net price at two-year institution, $0-$30,000 family income
Kentucky	$5,142	487	$4,295	407
Louisiana	$9,044	965	$8,131	867
Maine	$7,661	637	$5,927	493
Maryland	$8,690	736	$7,421	629
Massachusetts	$8,206	569	$6,607	458
Michigan	$5,913	546	$4,379	405
Minnesota	$11,946	963	$10,205	823
Mississippi	$5,412	601	$4,616	513
Missouri	$7,707	742	$6,622	637
Montana	$9,682	850	$7,234	635
Nebraska	$7,773	760	$5,241	512
Nevada	$7,071	636	$6,166	555
New Hampshire	$17,360	1,471	$15,412	1,306
New Jersey	$7,804	663	$6,760	574
New Mexico	$4,504	437	$3,630	352
New York	$8,124	645	$5,947	473
North Carolina	$5,897	590	$4,992	499
North Dakota	$10,757	1,081	$7,282	732
Ohio	$9,753	936	$7,513	721
Oklahoma	$7,861	860	$6,755	739
Oregon	$9,005	715	$7,514	597

State	Two-year institution net price	Hours needed to pay net price at two-year institution	Two-year institution net price, $0-$30,000 family income	Hours needed to pay net price at two-year institution, $0-$30,000 family income
Pennsylvania	$11,610	1,031	$9,270	824
Rhode Island	$5,460	425	$5,352	416
South Carolina	$5,650	559	$4,511	447
South Dakota	$14,598	1,217	$11,805	984
Tennessee	$6,547	637	$5,844	569
Texas	$7,956	796	$6,534	653
Utah	$9,248	865	$7,371	689
Vermont	$13,428	1,007	$10,699	802
Virginia	$7,813	708	$6,511	590
Washington	$7,308	520	$5,894	420
West Virginia	$5,762	560	$5,014	487
Wisconsin	$10,396	932	$8,288	743
Wyoming	$7,640	734	$6,227	598

Table 7: Median hourly student wage, by state

State	Median hourly student wage
USA	$11.31
Alabama	$8.86
Alaska	$13.02
Arizona	$12.31
Arkansas	$10.13
California	$13.13
Colorado	$12.50
Connecticut	$12.64
Delaware	$10.14
District of Columbia	$13.33
Florida	$10.80
Georgia	$10.00
Hawaii	$11.21
Idaho	$10.88
Illinois	$10.90
Indiana	$10.83
Iowa	$10.41

State	Median hourly student wage
Kansas	$10.01
Kentucky	$10.55
Louisiana	$9.38
Maine	$12.03
Maryland	$11.80
Massachusetts	$14.42
Michigan	$10.82
Minnesota	$12.40
Mississippi	$9.00
Missouri	$10.39
Montana	$11.39
Nebraska	$10.23
Nevada	$11.11
New Hampshire	$11.80
New Jersey	$11.78
New Mexico	$10.32
New York	$12.59
North Carolina	$10.00

State	Median hourly student wage
North Dakota	$9.95
Ohio	$10.42
Oklahoma	$9.14
Oregon	$12.59
Pennsylvania	$11.26
Rhode Island	$12.86
South Carolina	$10.10
South Dakota	$12.00
Tennessee	$10.28
Texas	$10.00
Utah	$10.69
Vermont	$13.33
Virginia	$11.04
Washington	$14.05
West Virginia	$10.29
Wisconsin	$11.15
Wyoming	$10.41

Table 8: 100% time completion rate at four-year institutions, by state

State	100% time completion rate at four-year institutions
USA	46%
Alabama	41%
Alaska	18%
Arizona	52%
Arkansas	40%
California	49%
Colorado	42%
Connecticut	53%
Delaware	65%
District of Columbia	28%
Florida	57%
Georgia	34%
Hawaii	34%
Idaho	34%
Illinois	48%
Indiana	50%
Iowa	52%
Kansas	43%
Kentucky	43%
Louisiana	31%
Maine	36%
Maryland	51%
Massachusetts	52%
Michigan	47%
Minnesota	49%
Mississippi	41%
Missouri	40%
Montana	31%
Nebraska	38%
Nevada	31%
New Hampshire	61%
New Jersey	52%
New Mexico	31%
New York	49%
North Carolina	52%
North Dakota	40%
Ohio	46%
Oklahoma	35%
Oregon	47%
Pennsylvania	47%
Rhode Island	47%
South Carolina	53%
South Dakota	39%
Tennessee	38%
Texas	39%
Utah	28%
Vermont	59%
Virginia	58%
Washington	50%
West Virginia	38%
Wisconsin	44%
Wyoming	39%