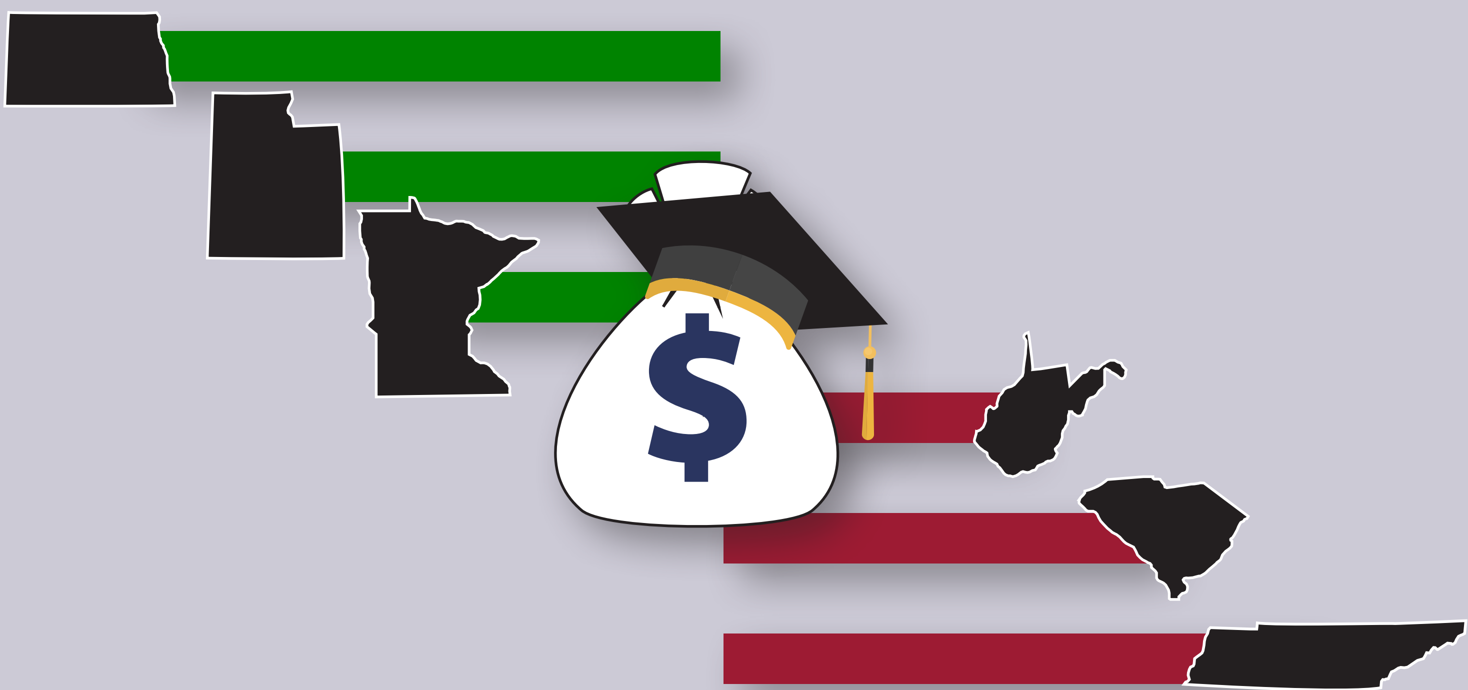
State Ranking of Public Higher Education Based on Student Loan Debt and Earnings: 2021



October 2021

by Andrew Gillen, PhD

Texas Public Policy Foundation

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The Texas Public Policy Foundation is pleased to release its second annual ranking of public higher education systems. Rankings are based on the student loan debt and earnings of recent college graduates. The higher a state's graduates' earnings and the lower their student loan debt, the higher the state's ranking (see the methodology section for details). We conduct several different tests that compare student loan debt to college graduate earnings 2 years after graduation to determine which states are setting their students up for success and which states are saddling their students with excessive student loan debt.

Key Points

- New data from the U.S. Department of Education reveal the typical earnings and student loan debt of recent college graduates.
- We use these data to rank each state on the debt-to-earnings outcomes of their graduates.
- The five highest performing states are North Dakota, Minnesota, Utah, Alaska, and California.
- The five worst performing states are Tennessee, South Carolina, West Virginia, Louisiana, and Montana.
- Associate degree programs do very well—41 states have more than 90% of graduates finishing at programs with excellent outcomes. No state achieves this at the bachelor's degree level.

State Rankings

Figure 1 presents a map of the performance of state public higher education systems.

Figure 1
State Public Higher Education Performance
Based on the percentage of each state's public college students who graduate from programs with excellent earnings relative to student loan debt

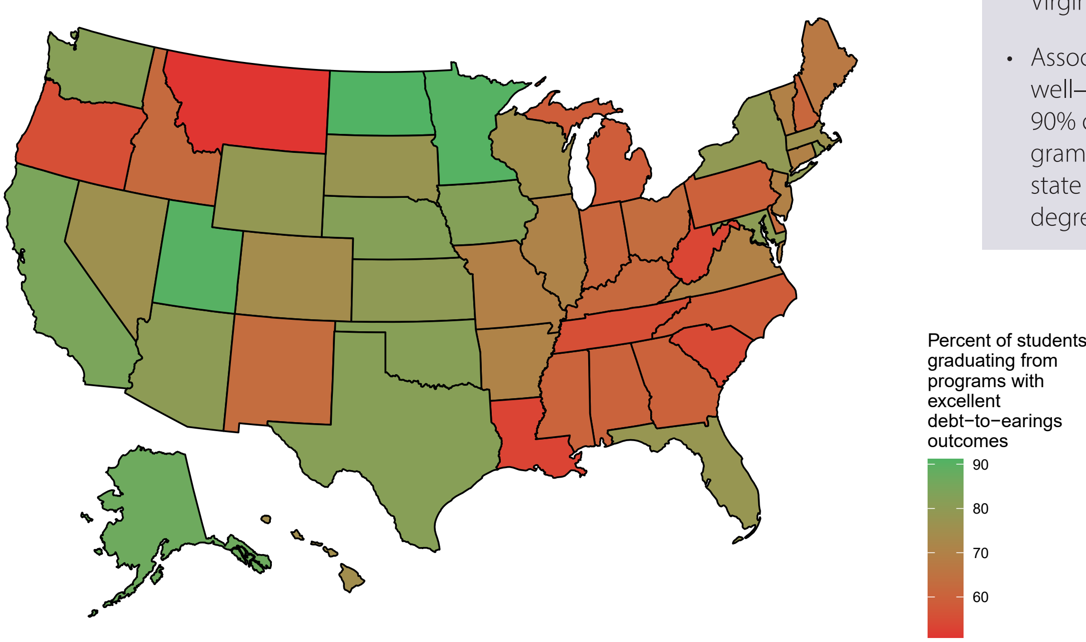
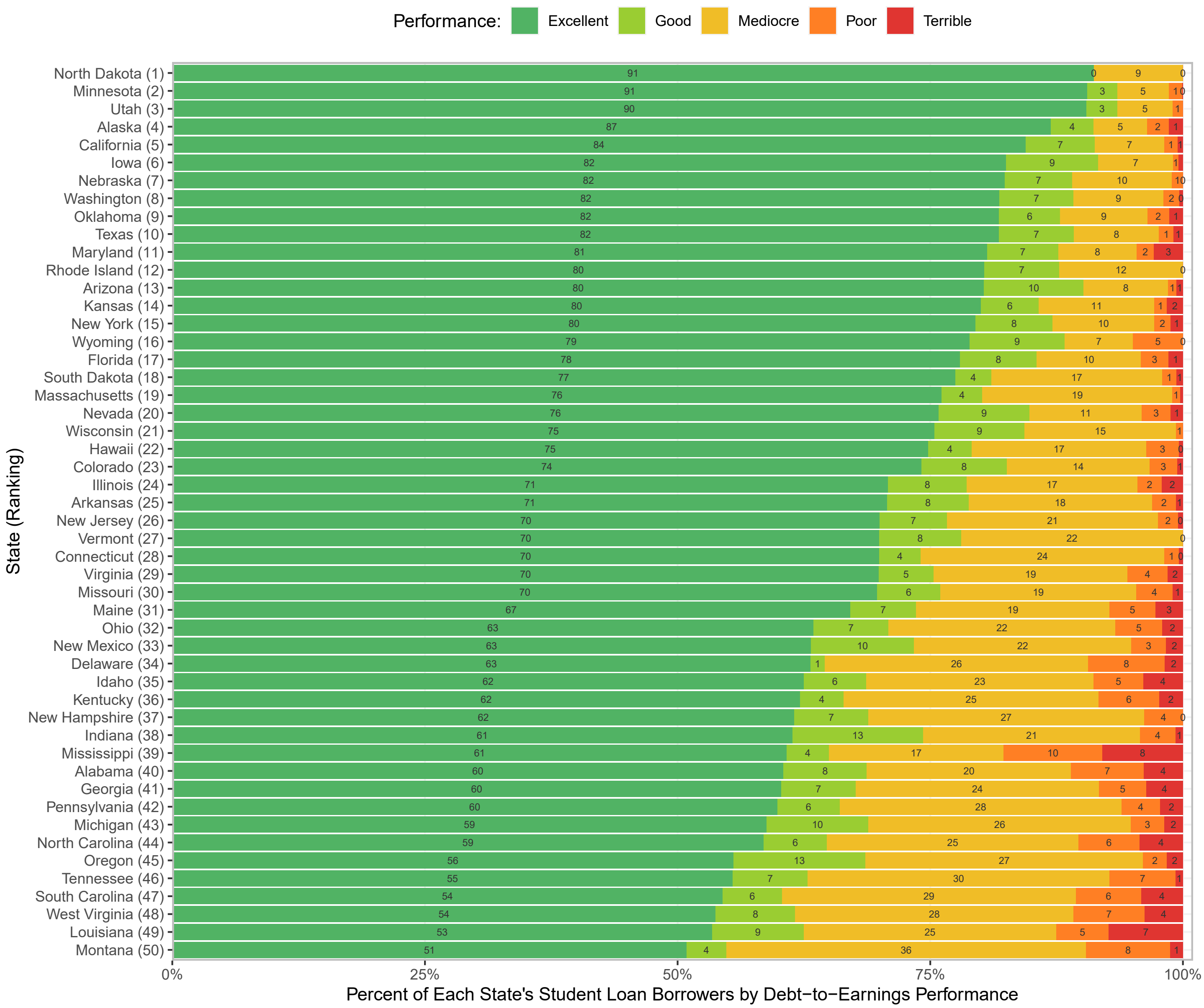


Figure 2 provides the state ranking of public higher education systems including all credential levels, from certificates to doctoral degrees. North Dakota earns the #1 spot, with 91% of its graduates graduating from a program with excellent debt-to-earnings outcomes. Montana comes in #50 with only 51% of its graduates graduating from a program with excellent debt-to-earnings outcomes.

Figure 2

State Ranking of Public Higher Education Systems

Based on student loan debt-to-earnings tests for college graduates



Note. Data from U.S. Department of Education and author's calculations.

Table 1 provides the number of higher education programs within each performance category by state.

Table 1

Number of Programs in Each State by Debt-to-Earnings Outcome Performance

State	Excellent	Good	Mediocre	Poor	Terrible
Alaska	31 (82%)	2 (5%)	3 (8%)	1 (3%)	1 (3%)
Alabama	241 (56%)	39 (9%)	86 (20%)	34 (8%)	27 (6%)
Arkansas	196 (67%)	20 (7%)	60 (21%)	11 (4%)	4 (1%)
Arizona	277 (77%)	26 (7%)	42 (12%)	6 (2%)	8 (2%)
California	1117 (81%)	108 (8%)	111 (8%)	20 (1%)	15 (1%)
Colorado	335 (70%)	40 (8%)	78 (16%)	20 (4%)	6 (1%)
Connecticut	133 (69%)	11 (6%)	41 (21%)	5 (3%)	2 (1%)
Delaware	42 (63%)	2 (3%)	17 (25%)	4 (6%)	2 (3%)
Florida	572 (72%)	68 (9%)	96 (12%)	33 (4%)	22 (3%)
Georgia	426 (58%)	67 (9%)	146 (20%)	43 (6%)	50 (7%)
Hawaii	69 (74%)	5 (5%)	17 (18%)	1 (1%)	1 (1%)
Iowa	249 (83%)	15 (5%)	31 (10%)	3 (1%)	3 (1%)
Idaho	101 (59%)	16 (9%)	35 (20%)	12 (7%)	7 (4%)
Illinois	444 (72%)	41 (7%)	97 (16%)	21 (3%)	16 (3%)
Indiana	334 (66%)	53 (11%)	90 (18%)	22 (4%)	5 (1%)
Kansas	249 (77%)	20 (6%)	44 (14%)	5 (2%)	6 (2%)
Kentucky	277 (61%)	27 (6%)	105 (23%)	30 (7%)	15 (3%)
Louisiana	195 (53%)	35 (9%)	88 (24%)	21 (6%)	30 (8%)
Massachusetts	278 (74%)	17 (5%)	71 (19%)	6 (2%)	5 (1%)
Maryland	288 (75%)	34 (9%)	43 (11%)	9 (2%)	11 (3%)
Maine	69 (66%)	7 (7%)	23 (22%)	4 (4%)	1 (1%)
Michigan	546 (61%)	82 (9%)	189 (21%)	53 (6%)	32 (4%)
Minnesota	538 (88%)	21 (3%)	48 (8%)	5 (1%)	2 (0%)
Missouri	322 (71%)	25 (5%)	81 (18%)	20 (4%)	7 (2%)
Mississippi	138 (47%)	12 (5%)	43 (18%)	26 (11%)	24 (10%)
Montana	60 (54%)	4 (4%)	37 (33%)	8 (7%)	2 (2%)
North Carolina	402 (58%)	54 (8%)	150 (22%)	52 (7%)	37 (5%)
North Dakota	115 (90%)	2 (2%)	11 (9%)	0 (0%)	0 (0%)
Nebraska	178 (83%)	12 (6%)	21 (10%)	3 (1%)	0 (0%)
New Hampshire	71 (58%)	10 (8%)	30 (25%)	10 (8%)	1 (1%)
New Jersey	308 (73%)	26 (6%)	70 (17%)	12 (3%)	6 (1%)
New Mexico	114 (63%)	20 (11%)	30 (17%)	10 (6%)	7 (4%)
Nevada	93 (76%)	10 (8%)	16 (13%)	2 (2%)	1 (1%)
New York	881 (77%)	80 (7%)	139 (12%)	28 (2%)	21 (2%)
Ohio	620 (64%)	73 (8%)	194 (20%)	52 (5%)	31 (3%)
Oklahoma	192 (74%)	19 (7%)	35 (13%)	7 (3%)	7 (3%)
Oregon	181 (57%)	34 (11%)	85 (27%)	12 (4%)	7 (2%)
Pennsylvania	502 (59%)	62 (7%)	217 (25%)	47 (5%)	30 (3%)
Rhode Island	71 (74%)	6 (6%)	18 (19%)	0 (0%)	1 (1%)
South Carolina	211 (54%)	30 (8%)	96 (24%)	33 (8%)	22 (6%)

State	Excellent	Good	Mediocre	Poor	Terrible
South Dakota	105 (75%)	8 (6%)	24 (17%)	2 (1%)	1 (1%)
Tennessee	252 (58%)	37 (9%)	109 (25%)	29 (7%)	8 (2%)
Texas	1212 (78%)	116 (7%)	172 (11%)	35 (2%)	21 (1%)
Utah	193 (84%)	14 (6%)	18 (8%)	4 (2%)	0 (0%)
Virginia	437 (70%)	37 (6%)	98 (16%)	34 (5%)	15 (2%)
Vermont	43 (61%)	6 (8%)	21 (30%)	0 (0%)	1 (1%)
Washington	321 (80%)	30 (8%)	38 (10%)	7 (2%)	4 (1%)
Wisconsin	510 (77%)	46 (7%)	95 (14%)	11 (2%)	0 (0%)
West Virginia	114 (55%)	19 (9%)	52 (25%)	14 (7%)	9 (4%)
Wyoming	45 (80%)	5 (9%)	5 (9%)	1 (2%)	0 (0%)

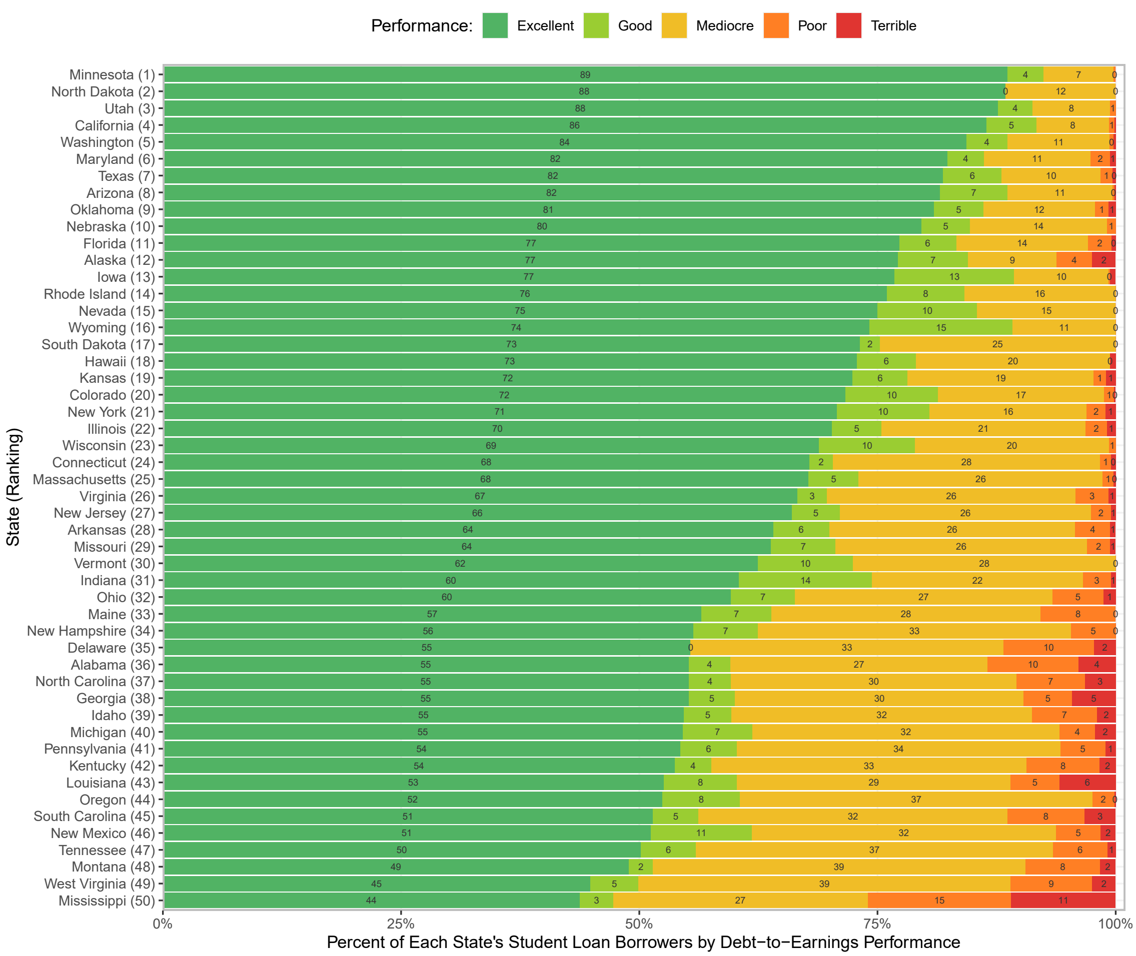
Note. Data from U.S. Department of Education and author's calculations.

Figure 3 presents the rankings restricted to just bachelor's degree programs. Minnesota comes in #1, with 89% of bachelor's degree graduates graduating from a program with excellent debt-to-earnings outcomes. Mississippi comes in #50, with only 44% of bachelor's degree graduates graduating from a program with excellent debt-to-earnings outcomes.

Figure 3

State Ranking of Public Higher Education Systems: ***Bachelor's Degree***

Based on student loan debt-to-earnings tests for college graduates



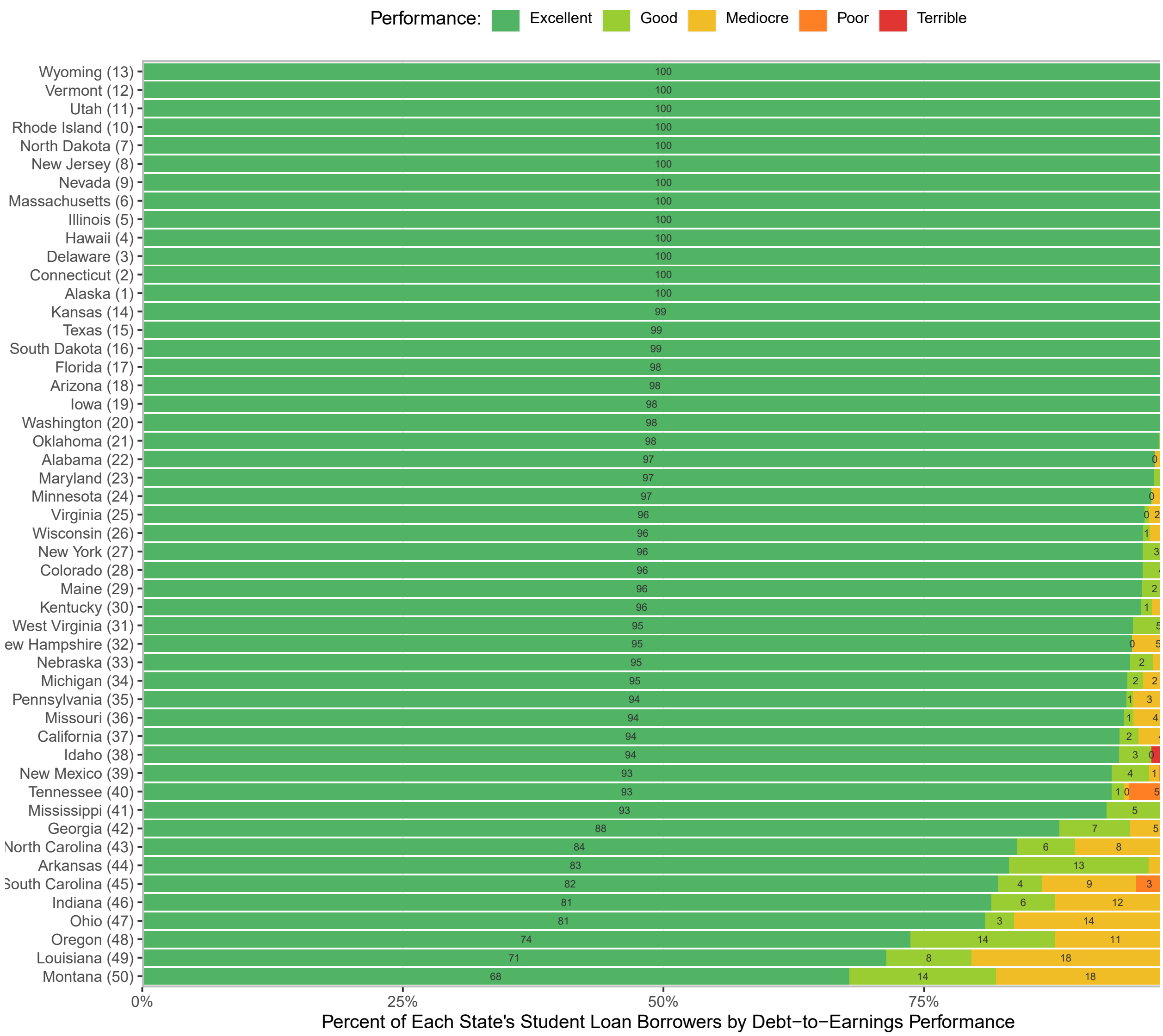
Note. Data from U.S. Department of Education and author's calculations.

Figure 4 presents state rankings restricted to just associate degrees. There is a 13-way tie for first place with Alaska, Connecticut, Delaware, Hawaii, Illinois, Massachusetts, Nevada, New Jersey, North Dakota, Rhode Island, Utah, Vermont, and Wyoming all having 100% of their associate degree graduates graduating from programs with excellent debt-to-earnings outcomes. Montana comes in #50, with 68% of associate degree graduates graduating from programs with excellent debt-to-earnings outcomes.

Figure 4

State Ranking of Public Higher Education Systems: ***Associate Degree***

Based on student loan debt-to-earnings tests for college graduates



Note. Data from U.S. Department of Education and author's calculations.

Methodology

We use data from the U.S. Department of Education's College Scorecard and a series of debt-to-earnings tests to create the state rankings. The question investigated by these rankings is "Do graduates of this program earn enough to be able to repay their student loans?" This is evaluated from a cash flow/liquidity perspective as opposed to a lifetime wealth/return on investment (ROI) perspective.*

* The lifetime wealth/ROI analysis would require data on lifetime earnings and total costs. Currently, the College Scorecard only has earnings for the first 2 years after graduation, and only the portion of costs paid with federal student loans.

U.S. Department of Education College Scorecard Data

This ranking uses data from the U.S. Department of Education's College Scorecard (U.S. Department of Education, n.d.; 2021), which provides the median earnings (of students receiving federal financial aid) and median student loan debt (for students taking out federal student loans) for recent graduates by program. A program is a college/major/level of degree combination. For example, the bachelor's degree (the level) in accounting (the major) at the University of Texas – Austin (the college) would be one program. Our rankings determine the performance of each program and then aggregate programs by state, with each program weighted by the number of graduates with student loan debt. Thus, the rankings determine which state's college graduate borrowers had the lowest student loan debt relative to their post-graduation earnings.

From the larger dataset, we exclude

- Programs at private nonprofit and for-profit universities (since we are focused on public universities).
- Programs not located in a state (since we are creating a state ranking).
- Professional medical school programs (since we treat residency programs for new medical doctors as a continuation of their education).

This leaves roughly 130,000 programs. Around 10,000 of these programs are at branch campuses, which are aggregated with their parent campus, and around 30,000 have no graduates and are therefore excluded. Theoretically, this leaves around 92,000 programs. However, while the Department of Education does not disclose the precise criteria, it suppresses the data for programs with too few graduates, too few student-loan borrowers, or too few students who are employed. That leaves around 21,000 programs with sufficient data. These programs accounted for 61% of graduates. There is considerable variability in data availability by level of degree. While the included bachelor's degree programs cover 89% of all bachelor's degree graduates, for doctoral degrees, the figure is only 9%.

We focus on earnings and debt for the cohorts of college students who graduated in 2014-15 and 2015-16. Earnings is measured 2 years after graduation, and debt (for students who borrowed) is measured at graduation, excluding any accrued interest.

Debt-to-Earnings Tests

Our ranking subjects each program to two debt-to-earnings tests, one of which is composed of two different subtests. A fuller explanation and justification for these tests can be found in Gillen (2021).

Debt as a Percent of Earnings

The first test is Debt as a Percent of Earnings (DPE). DPE simply divides median student loan debt by median earnings. DPE is expressed as a percent, and the lower the value the better. A program with median student loan debt of \$25,000 and median earnings of \$25,000 would have a DPE of 100%, whereas if earnings increased to \$50,000, DPE would be 50%. Each program received one of four ratings:

- **Reward** (DPE ≤ 75%). Most graduates have low student loan debt relative to earnings, and this program should therefore be rewarded with regulatory relief and/or performance bonuses.
- **Monitor** (75% < DPE ≤ 100%). Many graduates have low student loan debt relative to earnings, but some may have excessive debt so these programs should be monitored.
- **Sanction** (100% < DPE ≤ 125%). Too many graduates of this program have excessive student loan debt, so the program should face heighted regulatory scrutiny and potentially enrollment restrictions.
- **Sunset** (DPE > 125%). Most graduates from this program have excessive student loan debt. The program should be phased out.

Gainful Employment Equivalent

The second test is called Gainful Employment Equivalent (GEE). This test is based on a set of regulations (Gainful Employment) that briefly subjected some higher education programs to two tests (see Gillen, 2021, for more details):

- Annual Earnings Rate (AER) = annual debt payments / earnings
- Discretionary Income Rate (DIR) = annual debt payments / (earnings – 150% of the poverty line)

Under the original regulation, programs were assigned a rating of Pass, Probation (officially called "Zone"), or Fail based on their AER and DIR (the cutoffs are reported in **Table 2**). A program's overall Gainful Employment rating was the highest of their AER or DIR rating.

Table 2

Gainful Employment Cutoffs

	PASS	PROBATION	FAIL
Original Gainful Employment Thresholds	AER ≤ 8 DIR ≤20	8 < AER ≤ 12 20 < DIR ≤ 30	AER > 12 DIR > 30
Regression-Adjusted Gainful Employment Thresholds	AER ≤ 7.8 DIR ≤ 19.6	7.8 < AER ≤ 11.8 19.6 < DIR ≤ 29.4	AER > 11.8 DIR > 29.4

Note. Table replicated from *College Student Loan Debt and Earnings: 2021,* A. Gillen, Texas Public Policy Foundation, 2021 (https://www.texaspolicy.com/college-student-loan-debt-and-earnings-2021).

Because there are differences in how earnings and debt were determined under the Gainful Employment regulations, and how they are determined in the College Scorecard data, we used univariate regression analysis to generate new cutoffs that mimic as closely as possible the original ratings. These new cutoffs are reported in **Table 2**, and they are used to create GEE, which uses the AER and DIR formulas with the new regression-adjusted cutoffs.

Combining Debt as a Percent of Earnings and Gainful Employment Equivalent

To simplify the ranking system, we combined the results from DPE and GEE tests into a single summary measure. **Table 3** shows how DPE and GEE ratings are combined into a summary of performance.

Table 3

Performance Rating Determination

		GAINFUL EMPLOYMENT EQUIVALENT RATING		
		Pass	Probation	Fail
Debt as a Percent of Earnings Rating	Reward	**Excellent**	Good	Good
	Monitor	Good	Mediocre	Poor
	Sanction	Good	Mediocre	Poor
	Sunset	Good	Poor	**Terrible**

Where to Find More Information

This report is just one part of a much broader project. You can find more of our research and analysis at https://www.texaspolicy.com/initiatives/next-generation-texas.

References

Gillen, A. (2021). *College Student Loan Debt and Earnings: 2021*. Texas Public Policy Foundation. https://www.texaspolicy.com/college-student-loan-debt-and-earnings-2021

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ABOUT THE AUTHOR

Andrew Gillen, PhD, is a senior policy analyst at the Texas Public Policy Foundation and an adjunct professor of economics at Johns Hopkins University. Dr. Gillen's recent work has focused on how to reform federal financial aid, how state disinvestment is a myth, and how post-college earnings and debt should be used to inform student choice and government accountability.

Prior to joining the Foundation, Dr. Gillen spent over a decade at nonprofit and philanthropic organizations researching and trying to improve higher education. He was a program officer for the Charles Koch Foundation and served in research roles for American Institutes for Research, Education Sector; the American Council of Trustees and Alumni; and the Center for College Affordability and Productivity. He was also on the U.S. Department of Education's Advisory Committee on Student Financial Assistance.

Andrew has a PhD in economics from Florida State University and a BBA (business) degree from Ohio University.

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