2021

Georgia Institute of Technology

U.S. News & World Report Undergraduate Rankings Analysis

Office of Institutional Research and Planning

EXECUTIVE SUMMARY

Each year *U.S. News & World Report* (USNWR) releases its annual Best Colleges rankings. Georgia Tech moved from 35 in the 2021 ranking to 38 in the 2022 national universities ranking, while falling from 8th place in public universities rankings to 10th place. This report provides a deeper look into the data measures behind the *U.S. News & World Report* rankings and Georgia Tech's performance based on these measures.

It is important for Georgia Tech constituents to understand the measures and the assumptions behind the U.S News rankings.

- Georgia Tech's Strategic focus area *Expand Access* may have an effect on *Retention and Graduation Rate* metrics given the attention on removing barriers for financially vulnerable students and those traditionally underrepresented at Georgia Tech. This particular strategic focus area expands access to populations that have traditionally had lower retention and graduation rates, and may impact the *Retention and Graduation Rate* performance metrics (weighted at 30%) for Georgia Tech. Conversely, expanding access slightly improves the *Social Mobility* measures (weighted at 5%). Georgia Tech should develop communication strategies that focus on societal impacts of expanding access to underrepresented populations against potential impact(s) or changes in rankings.

- Class size within the *Faculty Resources* category also played a significant factor in Georgia Tech's change in rank. Georgia Tech has a low percentage (33%) of classes that have 20 or fewer students and a high percentage (28%) of classes with 50 or more students. Only one institution in the top 50 national universities, the University of California-Davis, had a lower percentage of classes with 20 or less students (32%). (Table 2).

- Approximately 40% of Georgia Tech's 2020 undergraduate students obtain student loans during their undergraduate careers. The average indebtedness for Georgia Tech students after graduating with a bachelor's degree is $31,545. Both (a.) the percentage of most recent graduates with debt and (b.) the average amount of debt incurred are used to calculate the indebtedness. Student indebtedness is weighted at five percent (5%) in the overall rankings.

- Georgia Tech's six-year Pell graduation rate reported to IPEDS for 2020 was 86% compared to the institution's overall six-year graduation rate of 90%. U.S. News compares the six-year graduation rate for Pell recipients and divides this number by the overall graduation rate, then adjusts to give much more credit to schools with larger Pell proportions. Although Georgia Tech has a high graduation rate for Pell students, institutions with much lower retention rates score higher in this metric due to the adjustments made for high Pell populations. The Chronicle of Higher Education (August 2021) listed Georgia Tech as 12th place in Public Colleges with the best graduation rates for Pell students in the public 4-year institution category. This is in stark contrast to the 259th place ranking on *Social Mobility* in the U.S. News ranking.

- Georgia Tech ranked 59th in the *Financial Resources per Student* measure. This measure uses the average spending per student on instruction, research, student services and related educational expenditures in the 2020 and 2021 fiscal years. Georgia Tech has the lowest instructional expenses per FTE ($12,188) and lowest academic support expenses per FTE ($2,741) of all its peer institutions (Figure 3 & 4). Georgia's low-cost of living and non-union workforce are factors that lower Georgia Tech's overall instructional expenses and academic support expenses per FTE student. Although Georgia Tech is not the lowest in student service expenses per FTE student, it is at the bottom third in expenses for its peer group. Georgia Tech has a disadvantage in this particular metric due to the lower price parities in the Southeastern United States compared to higher-cost areas like the Northeastern United States and California.

Listed below are the metrics used in the *U.S. News & World Report Best Colleges* rankings and the impact in rankings. Each metric is discussed in greater detail within the report.

Metric	Weighting	Impact
Graduation and Graduation Rate Performance	30%	**High impact**. Georgia Tech scores very well in graduation metrics. The weighting of graduation measures is higher than all other rankings.
Social Mobility	5%	**Minimal impact**. There is very little Georgia Tech can do to improve the social mobility score (ranked 327th) since many schools have much higher percentages of Pell students and improvement in this area must be above and beyond the overall average to move up in the rankings. Georgia Tech's Pell graduation rate (86%) is much higher than many of the institutions that score above it in this measure.
Faculty Resources	20%	**High impact**. Georgia Tech can improve in this area by decreasing class sizes, particularly the number of classes with more than 50 students.
Financial Resources per Student	10%	**Some impact**. Since Georgia is a low-cost state, the amounts spent per student in instructional, academic, research, and student support are much lower than our peers. The research expenditures per FTE student have been the key factor in Georgia Tech's scores in this ranking. There is very little that Georgia Tech can do in improving this metric.
Student Selectivity	7%	**Some impact**. Georgia Tech is a selective institution and scores well in the student selectivity measure.
Graduate Indebtedness	5%	**Minimal impact**. Although Georgia Tech tuition and fees are lower than many of the top-ranked colleges, 40% of undergraduates obtain student loans with maximum loan amounts. Of interest is the number of in-state students with Hope and/or Zell who borrow at maximum loan amounts.
Peer Assessment Survey	20%	**High impact**. Georgia Tech scores well in the peer rankings, indicating positive reputation and peer perceptions of the institution.

INTRODUCTION

Each year *U.S. News & World Report* (USNWR) releases its Best Colleges rankings. U.S. News collects data on approximately 1,466 schools with over 1,000 schools described as "rank not published." U.S. News releases its rankings each fall as many prospective students are deciding where to attend college. Consumers of the data often look to rankings reports to determine the "quality" of an institution.

The survey methodology is continuously refined each year based on user feedback, literature reviews, trends in data, and the availability of new data. Yearly changes to the rankings methodology make it difficult to make comparisons from one year to the next. A college that is ranked 3rd one year and 6th the next may have had no change in its performance relative to other schools, yet still move in rank because of changes in the ranking methodology. It is important to understand that changes in rankings often do not correlate to changes in quality at an institution, but rather to changes in survey methodology.

This report provides a deeper look into some of the data elements behind the USNWR rankings and Georgia Tech's performance based on these measures.

ANALYSIS OF RANKING METRICS

UNDERSTANDING HOW THE RANKINGS WORK

USNWR Best Undergraduate College rankings are the sum of weighted, normalized scores across 17 indicators of academic quality to determine each school's overall score and rank. The top performers in each ranking display an overall score of 100. Schools that are not the top performer in the rankings score 0 to 99 points reflecting the distance from each ranking's top-performing school(s).

Critics have pointed out that the use of overall scores to rank schools magnifies small—and often insignificant—differences among schools and that small changes by the school or the magazine can move a college half a dozen places up or down the ranking list (Crenshaw, 1999).

It is important to recognize and understand how USNWR measures relate to the Georgia Tech environment and overall ranking. Although Georgia Tech has made significant improvements in several measures, it is important to recognize that a school does not go up in the rankings by simply improving certain metrics. **The improvement in each metric must be above and beyond what the overall average improvement is for all schools**. For example, Georgia Tech traditionally performs well in terms of graduation rates. Graduation rates have also been increasing nationally. Georgia Tech has improved its graduation rate by 8% in the past five years, surpassing the national average improvement of 2.6% in the same time period.

Scores that are well above the average for each measure are strongly rewarded with points in the scoring measure, while scores below the average are severely punished with few or no points for the scoring measure. The rewards or punishments to the institution vary based on the factor weight. Schools that are the highest ranked are those that have scored significantly above their competitors in a few key elements. Further examination of why one or a few schools are ranked above Georgia Tech, comes down to just a few specific categories wherein the higher ranked school outperformed both the national average and those schools that are close in rank.

CHANGES OR ADJUSTMENTS TO THE 2022 RANKINGS

The following are changes made to the 2022 Best Colleges' rankings:

- **Adjustments to how SAT/ACT scores are assessed**. If the combined percentage of the fall 2020 entering class submitting test scores was less than 50% then the combined SAT/ACT percentile distribution value used in the rankings was discounted by 15%.
- Graduate indebtedness total and graduate indebtedness proportion were changed to average schools' scores from the 2021 and 2020 rankings to mitigate year-to-year volatility due to COVID.
- Course size for the 2022 rankings included courses designed for in-person instruction but delivered remotely due to COVID-19 were included and a 2-year average was calculated.
- Faculty salary data is calculated based on a 2-year average using the AAUP definition.
- Other changes include average class size and the student indebtedness indicators are now based on two-year averages when previously, only one year of data was used.

GEORGIA TECH OVERALL RANKINGS (2018-2022)

Table 1: Five-year U.S. News rankings trend for Georgia Tech, 2018 – 2022

Year	2018	2019	2020	2021	2022
Overall Ranking	34	35	29	35	38
Overall Score (0-100)	68	69	72	75	74
Graduation and Retention rank (30%)	**41**	**37**	**40**	**35**	**36**
Average six-year graduation rate (17.6%)	86%	85%	87%	90%	90%
Predicted 6yr graduation rate (part of Grad rate performance measure)	90%	89%	89%	89%	91%
Graduation rate performance (8%)	-4	-4	-2	1	-1
Average first-year retention rate (4.4%)	97%	97%	97%	97%	97%
Social Mobility Rank (5%)			**224**	**259**	**327**
Pell Graduation rate (2.5%)			81%	84%	86%
Peer Assessment Score (1-5 scale, 20%)	**4.2**	**4.3**	**4.3**	**4.3**	**4.3**
Faculty resources rank (20%)	**178**	**117**	**42**	**84**	**176**
Percent of classes under 20 (8%)	38%	39%	45%	44%	33%
Student/faculty ratio (1%)	20 to 1	22 to 1	21 to 1	19 to 1	18 to 1
Student Excellence Rank (7%)	**22**	**19**	**18**	**19**	**20**
SAT/ACT 25th-75th percentile (5%)	1320-1500	1370-1520	1390-1540	1370-1530	1370-1530
First-year students in the top 10% of HS class (2%)	87%	88%	89%	90%	88%
Financial Resources Rank (10%)	**55**	**61**	**58**	**59**	**59**
Alumni Giving Rank (3%)	**26**	**32**			
Alumni Giving Rate	24%	21%	19%	17%	15%
Graduate Indebtedness Rank (5%)*					**35**
Graduate indebtedness total (3%)					$31,545
Graduate indebtedness proportion with debt (2%)					40%

*New for the 2022 Edition.

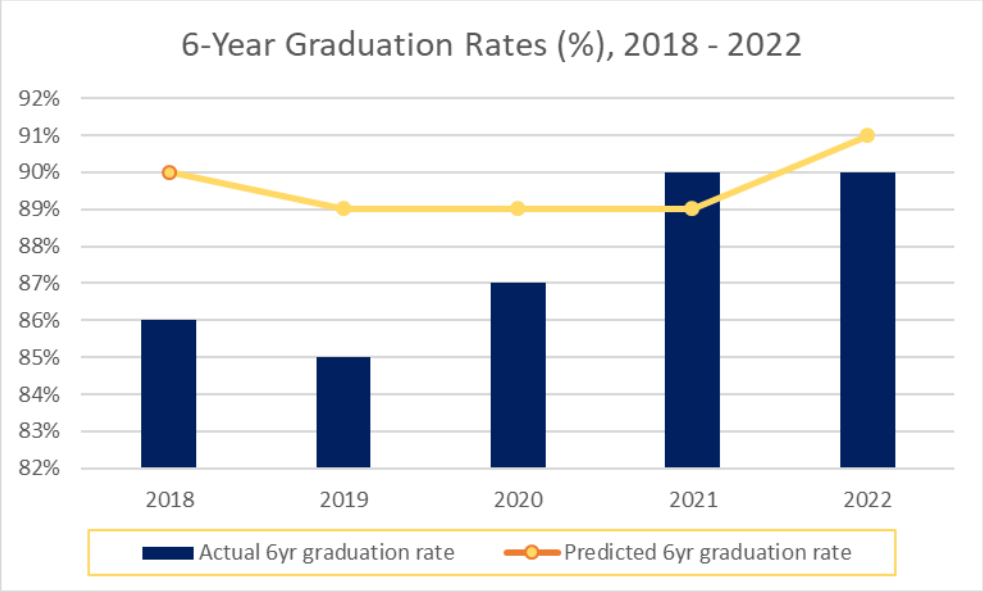
- From 2018 to 2021, Georgia Tech's overall score rose steadily from 68 to 75 out of 100. Comparing the overall score from 2021 to 2022, the two schools who tied in rank with Georgia Tech - Boston College and University of California (Irvine) both moved up in the overall score from 75 to 76 points advancing both colleges to 36th in the national university rankings. **Even if Georgia Tech's score remained at 75 instead of decreasing to 74, Georgia Tech's 2022 rank would still be 38th**.
- Georgia Tech has increased its six-year graduation rate over the past five years from 86% to 90%.
- Overall, there are several metrics where Georgia Tech is ranked very low compared to other top schools.
    - The *Social Mobility* rank for Georgia Tech is 327, which was the 8th lowest ranking of the top 50 institutions.
    - Georgia Tech's faculty resources rank is the third-lowest for top universities (176) followed by Ohio State University-Columbus (189) and University of California-Davis (189). The low ranking is due in part to class size counting 8% of the ranking score. Georgia Tech has the lowest percentage of classes with enrollment at 20 or fewer students (33%) followed only by Ohio State University-Columbus (32%) and University of California-Davis (30%).

Graduation, Retention and Graduation Performance Rates (Weighted at 30% combined)

Georgia Tech's ranking in this category is 36th nationally.

i. Six-year Graduation Rate (17.6%)
ii. First-year Retention Rate (4.4%)
iii. Graduation Rate Performance (8%) (Calculated separate

Figure 1



Six-year Graduation Rate (17.6%)

The six-year graduation is a four-year rolling average of the proportion of each entering class (fall 2011-2014) earning a degree in six years or less. Data for this measure is obtained using the IPEDS Graduation Rate Survey.

- Georgia Tech's most recent graduation rate is 90%. Seven schools that are ranked above Georgia Tech had lower graduation rates (University of California-Irvine (85%), -San Diego (87%), and -Santa Barbara (89%); University of Rochester (86%), Wake Forest (89%), University of Florida (89%), New York University (88%)).
- Georgia Tech's improvement in the six-year graduation rate had the greatest impact on the Graduation/Retention metric. Georgia Tech's graduation rate increased from 82% in 2016 to 90% in 2021 – an increase of 8%. The average trend for National Universities is an increase of 2.6% over the same time period.

Schools with the highest graduation rates are also the colleges with the most selective standards. These colleges only accept exceptional, high-performing students, as a result, more of these students graduate. Graduation rates tend to be a direct measure of the inputs (high school GPA, SAT/ACT, socioeconomic status) into a college. With both a selectivity measure (7%) and graduation rate metrics (30%), the type of students a college selects for admission can play a large part in an individual college's ranking.

Georgia Tech's Strategic Plan has a strategic focus area of **expanding access**. In meeting this goal, Georgia Tech is removing all barriers for financially vulnerable students and those traditionally underrepresented at Georgia Tech. This particular strategic focus area will expand access to populations that are traditionally harder to retain and may have some impact on the graduation measure for Georgia Tech.

Georgia Tech meets the needs of traditionally underrepresented students by offering services such as strong advising, coaching, tutoring, and mentoring to ensure successful outcomes. Georgia Tech has these resources in place and may need to ensure that these resources continue to be optimized.

First-year Retention Rate

A four-year rolling average of the proportion of first-year entering students (fall 2016-fall 2019) who returned the following fall (4.4%). The data source used in IPEDS.

- Georgia Tech's retention rate has been at 97% for the past five years. Georgia Tech has a high retention rate which is indicative of a selective admissions process.
- Only six universities in the top 50 rankings have a higher first-year retention rate than Georgia Tech. Georgia Tech's retention rate of 97% was higher than 17 of the institutions ranked above it.

Graduation Rate Performance

Graduation rate performance is measured by calculating a predicted graduation rate for each institution. The predicted rates were modeled from factors including admissions data, the proportion of undergraduates who were awarded Pell Grants, school financial resources, the proportion of federal financial aid recipients who are first-generation college students, and National Universities' math and science orientations. Each school's actual graduation rate was calculated by dividing its predicted rate by a two-year average of the quotients in the rankings.

- Georgia Tech does very well in those areas that increase the predicted graduation rate (STEM, class standing, standardized test scores), but poorly in the factors that discount the predicted graduation rate (first-generation, Pell Grant recipients). In particular, Georgia Tech has among the lowest proportions of first-generation and Pell Grant recipients among national universities.
- Georgia Tech's six-year graduation rate of 90% is higher than the USNWR national average of 72%.

Note: Improving six-year graduation rates will continue to have a significant impact on USNWR ranking since the weighting for this measure is high.

Social Mobility (5%)

i. Pell Grant Graduation Rate (2.5%)
ii. Pell Grant Graduation Performance (2.5%)

The *Social Mobility* ranking looks at two factors: the graduation rates of Pell Grant recipients and the other compares Pell-recipient graduation rates to those of all students. Both of those figures are adjusted for the share of students who are Pell recipients.

Pell Grant graduation rates *incorporate six-year graduation rates of Pell Grant students, adjusted to give more credit to schools with larger Pell student proportions. This is computed as a two-year rolling average.*

Pell Grant graduation rate performance *compares each school's six-year graduation rate among Pell recipients with its six-year graduation rate among non-Pell recipients by dividing the former into the latter, then adjusting to give more credit to schools with larger Pell student proportions. The higher a school's Pell graduation rate relative to its non-Pell graduation rate up to the rates being equal, the better it scores. This, too, is computed as a two-year rolling average.*

If two colleges have the same Pell graduation rates, but one has a larger number of Pell recipients, the second college would earn more points in the formula. Georgia Tech has a very low percentage of Pell Grant recipients (14%), which accounts for the *Social Mobility* ranking of 259 in this category.

- Most of the top-ranked institutions are ranked low in the *Social Mobility* category; however, many top institutions have a higher ranking in *Social Mobility* than Georgia Tech (327). (Princeton (192), Harvard (211), Columbia (192), MIT (179), Stanford (249), John Hopkins (297), Brown (169), and Rice (265)).
- Georgia Tech's Pell graduation rate reported to IPEDS was 86% in 2020 compared to the overall institution graduation rate of 90%. Although Georgia Tech has a high graduation rate for Pell students, institutions with much lower retention rates score higher in this metric due to adjustments made for larger Pell populations.
- The Chronicle of Higher Education (August 2021) listed Georgia Tech as 12th in colleges with the best graduation rates for Pell students in the public 4-year institution category. This is in stark contrast to the 259th place ranking on *Social Mobility* in the U.S. News ranking.

Note: The *Social Mobility* metric has minimal impact on the overall ranking for Georgia Tech based on the weighting and adjustments to the formula for colleges with larger Pell grant recipients. Changes made by Georgia Tech will have little to no impact on this particular measure.

Peer Assessment (20%)

The peer assessment is a subjective metric in which institution presidents, provosts, and deans of admissions rate the academic quality of peer institutions with which they are familiar on a scale of 1 to 5. A two-year weighted average of the ratings is used for the ranking.

Critics of USNWR say the peer assessment component asks college officials to rate the relative merits of other schools about which they know very little. Malcolm Gladwell stated that the reputational measure is simply a collection of "prejudices" that turn the U.S. News rankings into a "self-fulfilling prophecy." Overall, Georgia Tech's peer assessment is 4.3 on a scale of 1 to 5. This score indicates that Georgia Tech's reputation is strong amongst our peers.

- Georgia Tech's score of 4.3 is higher than fourteen (14) of the Universities ranked above it indicating Georgia Tech's excellent reputation.
- If Georgia Tech was ranked on peer assessment (i.e. reputation) alone, we would have tied in the rankings at 19th overall and 4th among public institutions.

Note: The peer assessment has a high impact on the USNWR ranking for Georgia Tech.

Faculty Resources (20%)

i. Class size (8%)
ii. Percent faculty with a terminal degree in their field (3%)
iii. Faculty compensation (7%)
iv. Percent faculty that is full time (1%)
v. Student-Faculty ratio (1%)

Georgia Tech's faculty resource rank has increased over time jumping from 116 in 2016 to its highest rating of 42 in 2020 and 84 in the 2021 rankings and down to 176 in 2022.

Class size.
At eight percent (8%), class size is the most heavily weighted *Faculty Resource* measure. Schools score better with greater proportions of smaller classes for fall 2020. For fall 2020 schools were instructed to include classes designed for in-person instruction, even if they were temporarily taught online because of the coronavirus. To minimize the influence of an irregular year due to the pandemic, schools' scores on the fall 2020 data were averaged against their scores from the fall 2019 data.

- Class size played a significant factor in the change of rank within the faculty resources category. Only one institution in the top 50 national universities, the University of California-Davis had a lower percentage of classes under 20 students (32%). Georgia Tech has approximately 33% of class offerings that are under 20 students. (Table 2).
- Georgia Tech's class size of 50 or over was 28%. Of the top 50 universities, only the University of California-Davis (31%) had a higher percentage. (Table 2).

Figure 2
Georgia Tech AY2021 Class Size

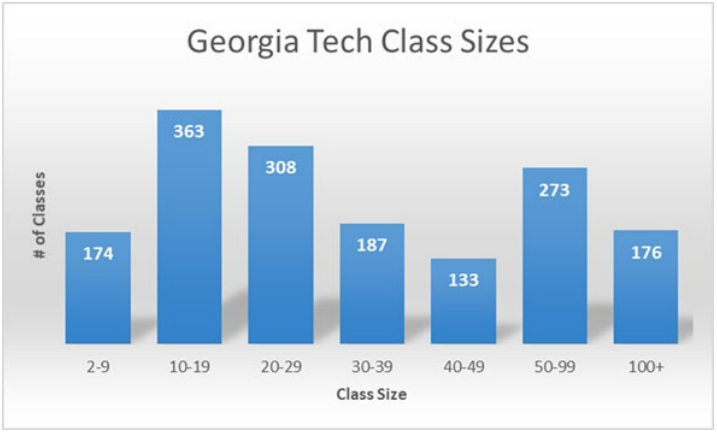


Table 2 Top 40 Ranked Institutions

Institutions by Percentage of Class Sizes		
Institution	**% 20 students or less**	**% 50 students or above**
Columbia University	83%	9%
University of Chicago	79%	6%
University of Rochester	79%	8%
Princeton University	78%	9%
Northwestern University	78%	6%
Yale University	77%	8%
Harvard University	76%	10%
Duke University	75%	7%
Johns Hopkins University	74%	9%
Massachusetts Institute of Technology	70%	11%
University of Pennsylvania	70%	9%
Brown University	70%	11%
Stanford University	69%	12%
Rice University	69%	7%
California Institute of Technology	67%	9%
Washington University in St. Louis	67%	8%
Carnegie Mellon University	67%	12%
Tufts University	66%	7%
Boston College	65%	1%
Dartmouth College	63%	6%
Cornell University	63%	14%
University of Southern California	63%	12%
New York University	63%	9%
Case Western Reserve University	63%	13%
Georgetown University	60%	6%
University of Notre Dame	59%	11%
Vanderbilt University	57%	13%
Emory University	57%	13%
University of Michigan--Ann Arbor	57%	17%
Tulane University	57%	8%
Boston University	56%	15%
University of California--Berkeley	55%	21%
Brandeis University	55%	10%
University of California--Santa Barbara	54%	20%
University of Florida	53%	9%
University of Virginia	52%	14%
University of California--Irvine	51%	23%
Wake Forest University	50%	1%
William & Mary	49%	8%
University of California--Los Angeles	48%	23%
University of Texas at Austin	48%	14%
University of Wisconsin--Madison	47%	24%
University of North Carolina--Chapel Hill	46%	12%
University of California--San Diego	46%	24%
Georgia Institute of Technology	33%	28%
University of California--Davis	32%	31%

- The percent faculty with a terminal degree in their field was an area that Georgia Tech had difficulty providing. Initial extraction of data from the system of record (Peoplesoft) had many tenure and tenure-track faculty missing degree information. In many cases, faculty members had only bachelor's degrees listed in the system of record. Faculty data should be reviewed by data owners and stewards of the data to ensure that data on terminal degree, rank, and tenure status is complete and accurate in the system of record.
- Georgia Tech fares well in the faculty compensation metric, due to changes in the metrics that take into account faculty salary and price parity adjustments based on the cost of living.
- Georgia Tech has a high percentage of faculty members who are full-time with a solid rank in this component of faculty resource rank.
- Georgia Tech's student to faculty ratio (19:1) is higher than all but one institution in the top 50 national university ranking. Only the University of California – Davis had a higher ratio at 20:1.

Note: The faculty resource metric is another area that Georgia Tech could significantly improve to increase USNWR rank by controlling for class size (8% weighting) and by keeping faculty data current within data systems.

Student Selectivity Rank (7%)

SAT and Composite ACT scores (5%)

High school class standing in top 10% (2%)

Georgia Tech is ranked 20th in student excellence due to the high SAT and Composite ACT scores for entering freshmen. In addition to high standardized test scores, Georgia Tech has 90% of entering students in the top 10% of their high school class. Georgia Tech performs well in this category; however, with changes to test-optional admissions nationwide, this category may change over time.

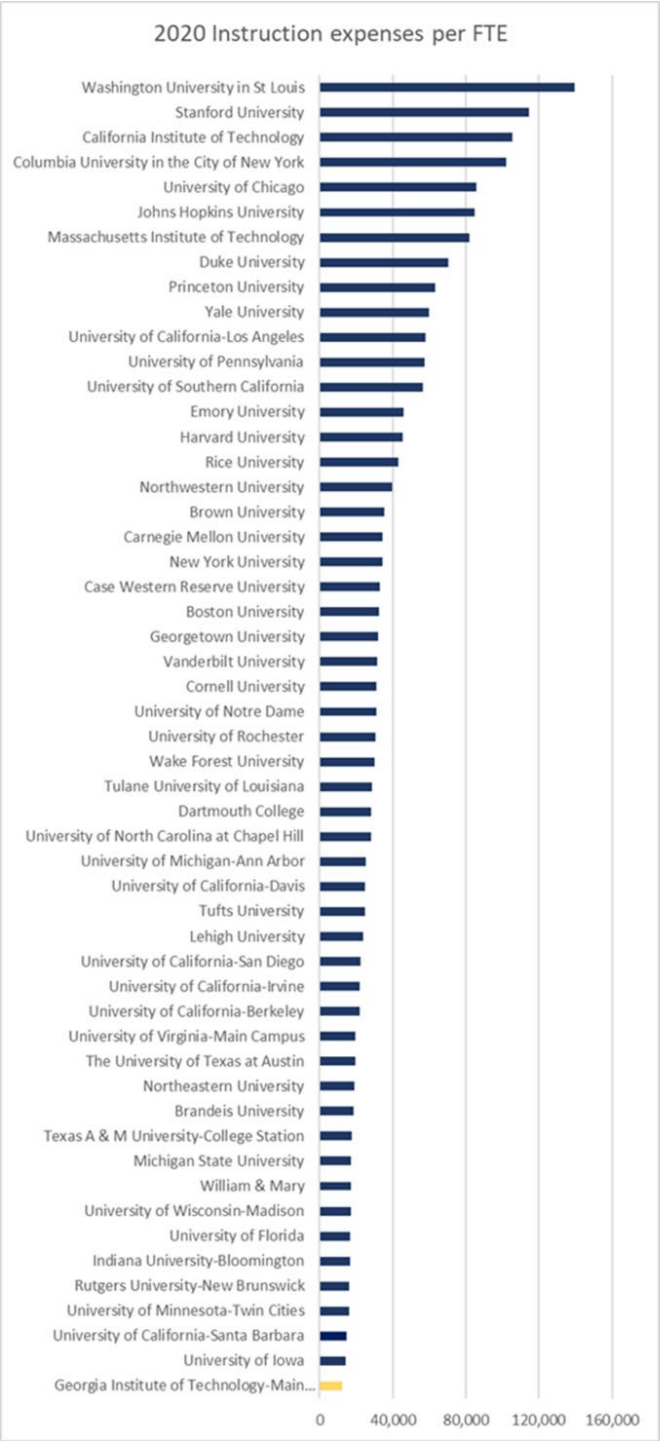
Financial Resources per student (10%)

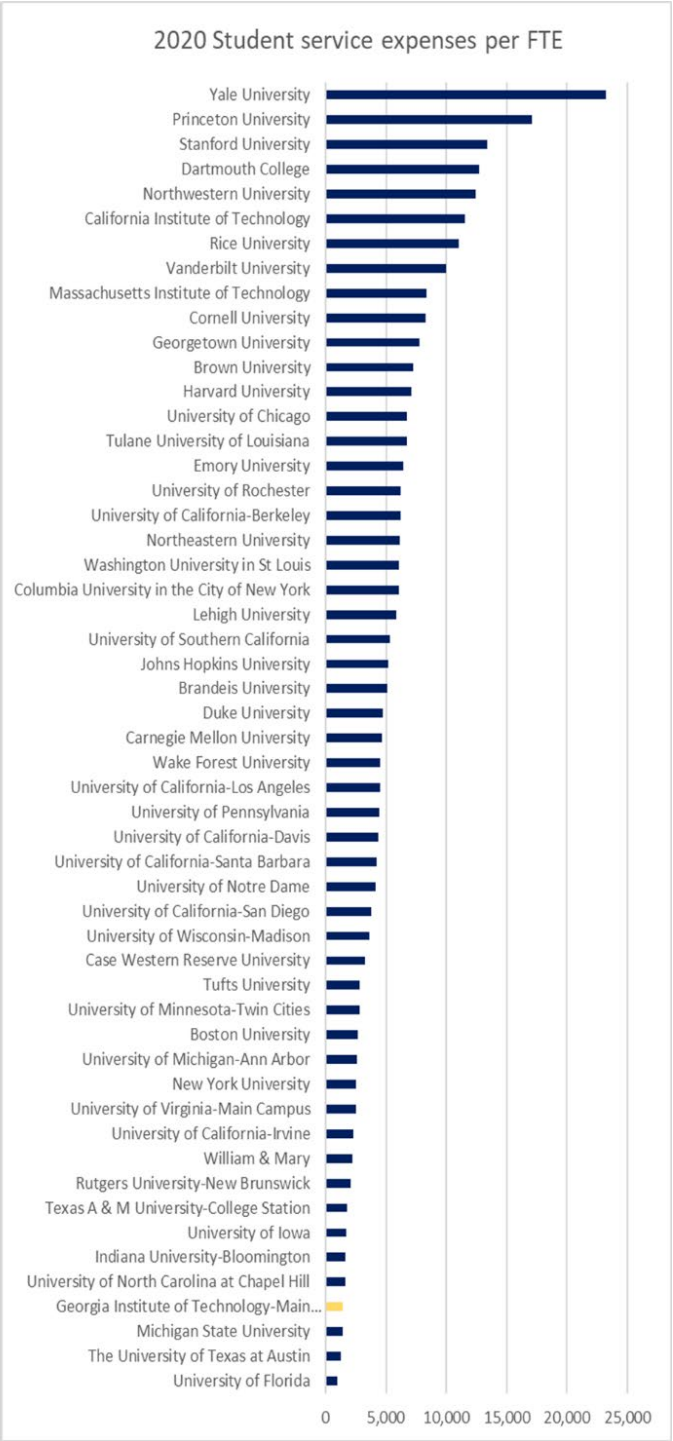
The financial resources per student uses the average spending per student on instruction, research, student services and related educational expenditures in the 2020 and 2021 fiscal years.

- Georgia Tech is ranked 59th in the *Financial Resources per Student* category. Only three of the top 40 national universities have a lower financial resources ranking than Georgia Tech (UC Irvine (64), UT Austin (70), and William & Mary (109)).

To provide better context to financial data including Georgia Tech's expenditures in these areas, data from the 2020 IPEDS Finance Survey is used to compare expenditures with top-ranked institutions for instructional expenses per FTE and student service expenses per FTE.

Figure 3 & 4

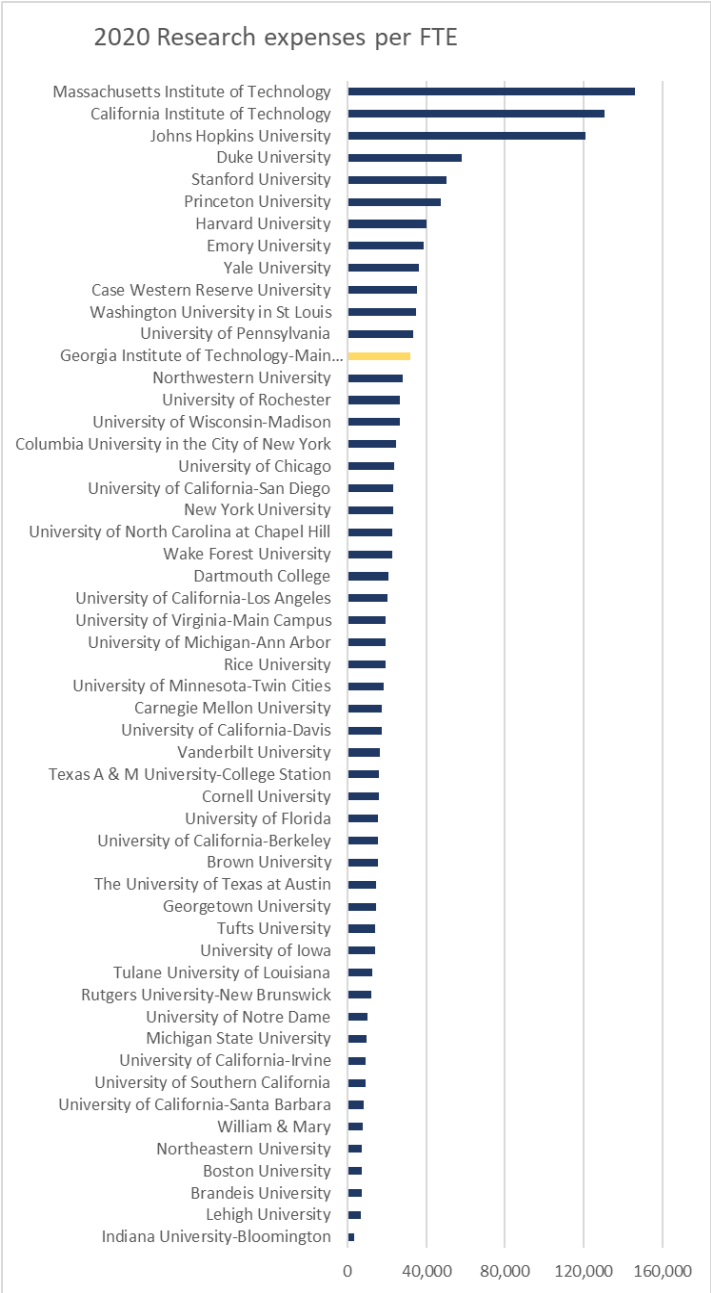


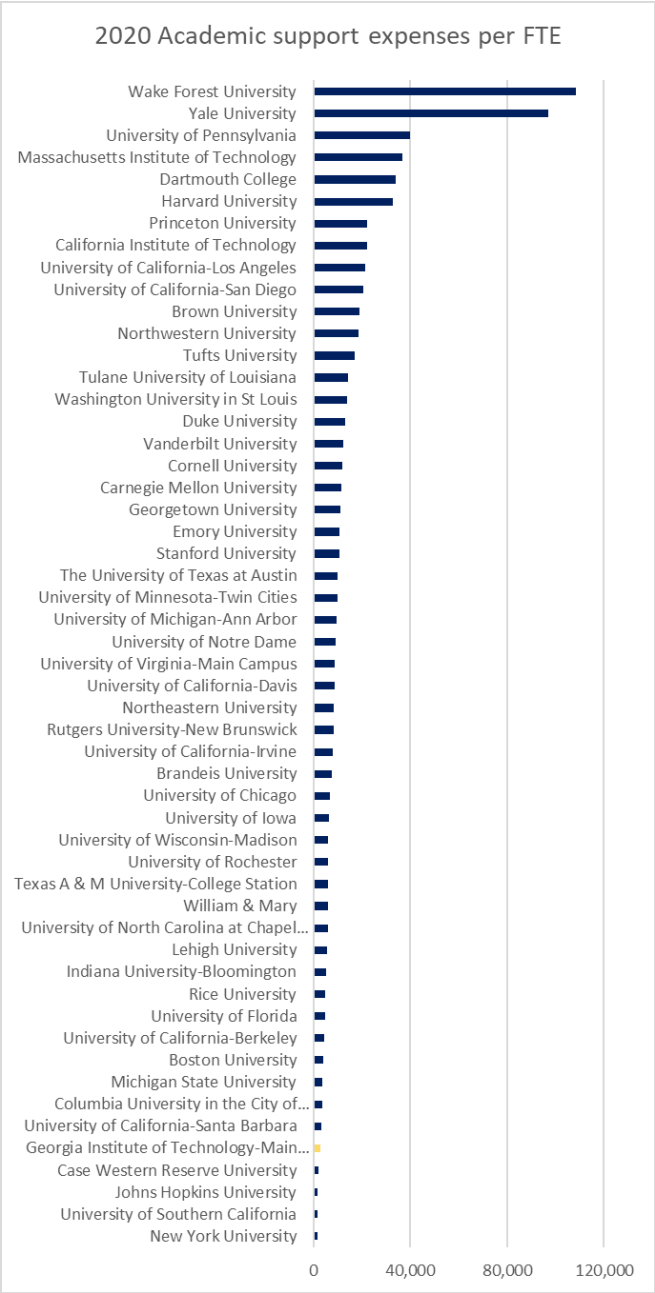


Source: IPEDS Finance Survey 2019

- Georgia Tech has the lowest instructional expenses per FTE and lowest academic support expenses of all its peer institutions. Georgia's low cost of living and non-union workforce are factors that lower Georgia Tech's overall instructional expenses and academic support expenses per FTE student. Although Georgia Tech is not the lowest in student service expenses per FTE student, it is at the bottom third in expenses for its peer group. Georgia Tech has a disadvantage in this particular metric due to the lower price parities in the Southeastern United States compared to higher-cost areas like the Northeastern United States and California.

Figures 5 & 6



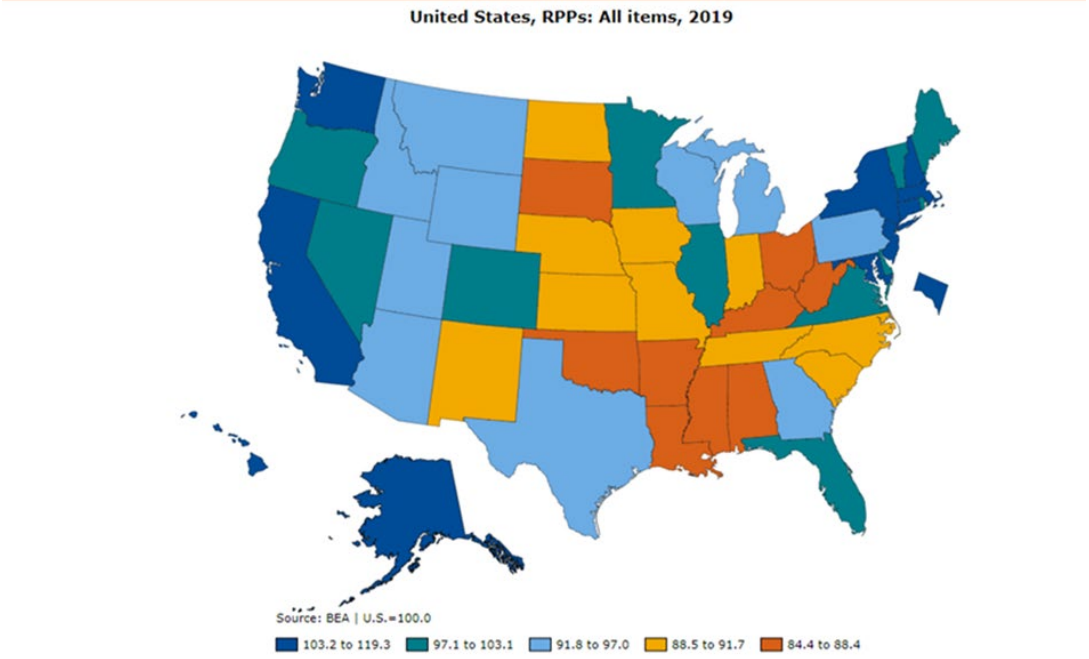


Source: IPEDS Finance

- Georgia Tech does relatively well in research expenditures per FTE student ranking near the top of the 50 highest ranked colleges in the U.S. News Best Colleges rankings.
- Similar to instructional expenses per FTE and student service expenses per FTE - the academic support expenses per FTE are near the bottom for the top-ranked universities.

Although USNWR adjusts faculty salaries for regional price parities, it does not adjust the financial resources per student metric. Regional price parities measure the differences in price levels across states and metropolitan areas for a given year and are expressed as a percentage of the overall national price level.

Figure 7. Regional Price Parities



- 34 of the top 50 ranked colleges are in high-cost areas such as California, New York, Massachusetts, and New Jersey) and states with higher price parities than Georgia. U.S. News does not adjust for these differences when calculating the financial resources per student.
- The rankings incentivize higher costs particularly since the formula used in calculating the rankings rewards schools that spend more money and operate in high-cost states. The amount of money spent per student does not necessarily equate to quality or value but could be more of a reflection of the regional price parities within geographic regions.

Note: Based on the elements used within the *Financial Resources per Student* measurement, there is little that Georgia Tech can do to increase ranking in this metric.

Average Alumni Giving Rate (3%)

The Alumni Giving Rate rank for Georgia Tech is 59th place with the alumni giving rate at 17%. The range of alumni giving for the top 50 nationally ranked universities ranges from a high of 55% at Princeton University to a low of 4% at the University of California-San Diego.

NOTE: The Alumni Giving Rate has minimal on Georgia Tech's overall ranking score.

Graduate Indebtedness (5%)

*In the 2022 edition, scores from the 2021 and 2020 rankings were averaged to mitigate year-to-year volatility

1. **Graduate indebtedness total* (3%)**
   *The **graduate indebtedness total** ranking factor assesses each school's average accumulated federal loan debt among its 2019 and 2020 bachelor's degree graduating classes by comparing it to the median debt amount among ranked schools.*
2. **Graduate indebtedness proportion with debt* (2%)**
   Graduate indebtedness proportion is the percentage of graduates from the 2019 and 2020 bachelor's degree graduating classes who borrowed federal loans. This ranking factor credits schools for meeting the full financial need without loans of their undergraduates (who would not be included in the graduate indebtedness total cohort) by comparing the proportions who borrowed to the median proportion among ranked schools.

Approximately 40% of Georgia Tech's students obtain student loans during their undergraduate careers. The average indebtedness for Georgia Tech students after graduating with a bachelor's degree is $31,545. Harvard ($6,170), Princeton ($9,445), and Yale ($15,379) have the lowest amount of indebtedness of the top-ranked universities.

Table 3. Student Indebtedness by Institution

Rank	University	% Loans	2020 Avg Indebtedness
1	Princeton University (NJ)	17%	$9,445
2	Columbia University	N/A	Not reported
2	Harvard University (MA)	7%	$6,170
2	Massachusetts Institute of Technology	29%	$22,696
5	Yale University (CT)	15%	$15,379
6	Stanford University (CA)	17%	$22,897
6	University of Chicago	29%	$26,619
8	University of Pennsylvania	22%	$23,009
9	California Institute of Technology	30%	$20,192
9	Duke University (NC)	33%	$22,203
9	Northwestern University (IL)	34%	$36,350
9	Johns Hopkins University (MD)	46%	$25,697
13	Dartmouth College (NH)	40%	$25,071
14	Brown University (RI)	31%	$24,304
14	Vanderbilt University (TN)	22%	$22,727
14	Washington University in St. Louis	27%	$22,555
17	Rice University (TX)	25%	$24,292
17	Cornell University (NY)	40%	$27,094
19	University of Notre Dame (IN)	40%	$27,460
20	University of California--Los Angeles	42%	$22,390
21	Emory University (GA)	35%	$24,889
22	University of California--Berkeley	32%	$19,773
23	Georgetown University (DC)	36%	$26,759
23	University of Michigan--Ann Arbor	38%	$25,777
25	Carnegie Mellon University (PA)	52%	$31,342
25	University of Virginia	33%	$26,023
27	University of Southern California	52%	$30,449
28	New York University	39%	$29,242
28	Tufts University (MA)	30%	$27,006
28	University of California--Santa Barbara	51%	$18,995
28	Wake Forest University (NC)	30%	$34,053
28	U. of North Carolina--Chapel Hill	37%	$21,203
28	University of Florida	35%	$20,388
34	University of California – San Diego	41%	$20,536
34	University of Rochester (NY)	51%	$28,503
36	Boston College	47%	$23,136
38	University of California – Irvine	50%	$19,597
38	Georgia Institute of Technology	40%	$31,545

Source: Collegetransitions.com Dataverse

Despite many in-state students receiving HOPE or Zell scholarships for state financial aid, Georgia students take out loans at amounts similar to or higher than some out-of-state students. For the 2020-21 graduating class, approximately 2,492 Georgia students obtained student loans with an average indebtedness of $25,721 (Table 4).

The second-largest group of students with student loan debt were resident alien students who did not indicate a state of residency but borrowed an average of $39,534.

Table 4. Georgia Tech Indebtedness of 2020-21
Bachelor's Degree Graduates by Top States of Residency

State Residency	# Graduates	Avg Indebtedness
GA	2,492	25,721.56
Res Alien	365	39,534.03
FL	146	34,878.64
NJ	80	39,582.98
NC	75	34,782.65
CA	67	31,102.41
MD	64	32,516.64
NY	64	28,800.62
VA	59	24,073.80
PA	54	22,800.00
MA	44	25,958.32
TX	43	36,702.17
TN	36	28,138.88
IL	33	37,872.29
OH	30	43,060.86
CT	25	30,032.56
CO	22	14,170.00

CONCLUSION

Rankings have significant effects on the decisions of prospective students to apply for admission, alumni giving, and institutional priorities. Although Georgia Tech tends to rank consistently in the top 50 schools each year, Georgia Tech stakeholders must use caution when conceptualizing the rankings as a sign of institutional quality. The rankings tend to reward elite, high-cost institutions that are selective and cater towards students in the top one percent of income distribution. The formulas used don't capture what is valuable and distinctive about Georgia Tech and the students it serves. The depth of intellectual engagement both in and out of the classroom, student interactions, and the dedication of faculty and staff in serving students is something that cannot be measured by a college rankings system.

Although the USNWR rankings provide a means with which colleges can compare and rank themselves, caution should be used in interpreting changes in rank to changes in quality at the institution. The process of the rankings measurement itself provides a distorted representation of an institution's quality by amplifying insignificant differences between schools. Fluctuation in the ranks of schools occurs due to continuous adjustments to the metrics that create small and statistically insignificant changes in an institution's score. Schools are so similar in the scores calculated by USNWR, that very small changes in scores can have disproportionate effects on an institution's rank.

Appendices

2022 RANKING FACTORS	NATIONAL INDICATOR WEIGHT
GRADUATION AND RETENTION RATES	**22%**
AVERAGE SIX-YEAR GRADUATION RATE	17.6%
AVERAGE FIRST-YEAR STUDENT RETENTION RATE	4.4%
SOCIAL MOBILITY	**5%**
PELL GRANT GRADUATION RATES	2.5%
PELL GRANT GRADUATION RATE PERFORMANCE	2.5%
GRADUATION RATE PERFORMANCE	**8%**
UNDERGRADUATE ACADEMIC REPUTATION	**20%**
PEER ASSESSMENT SURVEY	20%
FACULTY RESOURCES FOR 2019-2020 ACADEMIC YEAR	**20%**
CLASS SIZE INDEX	8%
FACULTY COMPENSATION	7%
PERCENT FACULTY WITH TERMINAL DEGREE IN THEIR FIELD	3%
PERCENT FACULTY THAT IS FULL TIME	1%
STUDENT-FACULTY RATIO	1%
STUDENT SELECTIVITY FOR THE FALL 2019 ENTERING CLASS	**7%**
MATH AND EVIDENCE-BASED READING AND WRITING PORTIONS OF THE SAT AND THE COMPOSITE ACT SCORES	5%
HIGH SCHOOL CLASS STANDING IN TOP 10%	2%
HIGH SCHOOL CLASS STANDING IN TOP 25%	0%
ACCEPTANCE RATE	0%
FINANCIAL RESOURCES PER STUDENT	**10%**
AVERAGE ALUMNI GIVING RATE	**3%**
GRADUATE INDEBTEDNESS	**5%**
GRADUATE INDEBTEDNESS TOTAL	3%
GRADUATE INDEBTEDNESS PROPORTION WITH DEBT	2%
TOTAL	**100%**

Institution Name	2020 Retention Rate	2020 Graduation rate, total cohort	2020 Pell Grant recipients graduation rate
Princeton University	83	98	98
Harvard University	76	98	97
Stanford University	86	95	95
Yale University	65	96	94
University of Chicago	100	96	94
University of Notre Dame	97	97	94
Massachusetts Institute of Technology	98	96	94
Columbia University in the City of New York	95	96	94
Cornell University	96	95	94
Duke University	97	96	94
Georgetown University	94	94	93
Northwestern University	97	95	93
Johns Hopkins University	97	94	93
Tufts University	92	94	93
California Institute of Technology	94	92	92
Washington University in St Louis	94	94	92
University of Pennsylvania	95	96	92
Brown University	92	95	92
University of Southern California	91	92	91
Boston College	93	92	91
Dartmouth College	96	95	91
Brandeis University	90	89	90
University of North Carolina at Chapel Hill	95	91	90
Carnegie Mellon University	96	93	90
Vanderbilt University	96	93	90
Rice University	97	94	90
University of Virginia-Main Campus	97	94	90
University of California-Berkeley	96	92	89
Boston University	92	89	89
University of Michigan-Ann Arbor	96	93	89
University of California-Los Angeles	96	91	88
William & Mary	93	91	88
Emory University	93	90	87
Georgia Institute of Technology-Main Campus	97	91	86
New York University	90	88	86
University of Florida	97	89	85
University of California-San Diego	94	87	84
University of Rochester	92	86	84
University of California-Davis	93	86	83
University of California-Irvine	94	85	83
Rutgers University-New Brunswick	93	84	83
Case Western Reserve University	93	85	83
University of Wisconsin-Madison	95	88	83
Wake Forest University	95	89	82
University of California-Santa Barbara	91	84	81
The University of Texas at Austin	97	88	81
Tulane University of Louisiana	92	86	78
University of Minnesota-Twin Cities	93	84	78
Texas A & M University-College Station	94	83	73
Michigan State University	91	81	70

Expenses per FTE Student				
Institution Name	2020 Instruction expenses per FTE	2020 Research expenses per FTE	2020 Academic support expenses per FTE	2020 Student service expenses per FTE
Washington University in St Louis	139,766	34,660	13,802	6,074
Stanford University	114,640	50,120	10,704	13,401
California Institute of Technology	105,239	130,514	22,031	11,564
Columbia University in the City of New York	102,187	24,932	3,514	6,052
University of Chicago	86,008	23,716	7,023	6,745
Johns Hopkins University	84,825	121,078	1,902	5,177
Massachusetts Institute of Technology	81,726	145,908	36,652	8,360
Duke University	70,393	57,975	13,327	4,756
Princeton University	62,979	47,395	22,363	17,056
Yale University	59,736	36,175	97,042	23,215
University of California-Los Angeles	57,962	20,559	21,322	4,496
University of Pennsylvania	57,279	33,385	39,842	4,467
University of Southern California	56,494	9,127	1,729	5,341
Emory University	45,722	38,719	10,870	6,474
Harvard University	45,396	40,365	32,987	7,100
Rice University	43,201	19,161	5,056	11,002
Northwestern University	39,868	28,173	18,519	12,450
Brown University	35,486	15,386	18,905	7,254
Carnegie Mellon University	34,441	17,678	11,632	4,685
New York University	34,174	23,022	1,658	2,503
Case Western Reserve University	32,736	35,211	2,088	3,224
Boston University	32,434	7,171	4,010	2,650
Georgetown University	31,957	14,302	11,244	7,770
Vanderbilt University	31,711	16,656	12,337	9,956
Cornell University	31,051	15,991	12,159	8,307
University of Notre Dame	30,820	10,359	9,240	4,162
University of Rochester	30,380	26,796	6,179	6,247
Wake Forest University	30,251	22,522	108,394	4,512
Tulane University of Louisiana	28,832	12,828	14,508	6,708
Dartmouth College	28,084	20,690	33,946	12,735
University of North Carolina at Chapel Hill	27,996	22,823	5,969	1,613
University of Michigan-Ann Arbor	25,086	19,284	9,486	2,620
University of California-Davis	24,939	17,337	8,639	4,399
Tufts University	24,748	14,160	16,917	2,839
Lehigh University	23,641	6,621	5,685	5,858
University of California-San Diego	22,312	23,028	20,680	3,779
University of California-Irvine	21,724	9,140	8,033	2,277
University of California-Berkeley	21,700	15,669	4,479	6,237
University of Virginia-Main Campus	19,706	19,604	8,959	2,482
The University of Texas at Austin	19,349	14,509	10,189	1,237
Northeastern University	19,043	7,319	8,572	6,119
Brandeis University	18,616	7,086	7,450	5,137
Texas A & M University-College Station	17,485	16,008	6,052	1,784
Michigan State University	17,219	9,759	3,805	1,400
William & Mary	17,034	7,712	6,026	2,245
University of Wisconsin-Madison	17,029	26,550	6,222	3,630
University of Florida	16,571	15,695	4,939	971
Indiana University-Bloomington	16,549	3,363	5,250	1,647
Rutgers University-New Brunswick	16,407	12,278	8,519	2,105
University of Minnesota-Twin Cities	16,272	18,201	10,122	2,816
University of California-Santa Barbara	14,927	8,198	3,333	4,199
University of Iowa	14,478	14,085	6,459	1,734
Georgia Institute of Technology-Main Campus	12,188	32,190	2,741	1,428

Tuition, Fees, and Average Net Price per income level

Institution	Tuition and fees, 2019-20	Average net price-students awarded grant or scholarship aid, 2019-20	.Average net price (income 0-30,000)-students awarded Title IV federal financial aid, 2019-20	Average net price (income 30,001-48,000)-students awarded Title IV federal financial aid, 2019-20	Average net price (income 48,001-75,000)-students awarded Title IV federal financial aid, 2019-20	Average net price (income 75,001-110,000)-students awarded Title IV federal financial aid, 2019-20	Average net price (income over 110,000)-students awarded Title IV federal financial aid, 2019-20
California Institute of Technology	54,600	26,591	-539	12,190	9,755	20,010	44,926
University of California-Berkeley	14,253	19,329	8,450	9,999	13,423	21,601	33,896
University of California-Davis	14,495	17,026	10,006	11,598	14,193	18,728	30,357
University of California-Irvine	13,727	13,106	6,540	8,449	13,275	20,567	29,802
University of California-Los Angeles	13,240	16,474	9,037	9,891	12,644	20,697	30,321
University of California-San Diego	14,415	15,222	9,823	11,176	14,310	20,906	29,132
University of California-Santa Barbara	14,391	17,223	10,568	11,606	14,583	21,581	31,486
Pepperdine University	55,892	46,550	36,264	25,909	32,267	35,375	44,598
University of Southern California	58,195	39,759	17,287	17,345	22,826	32,363	52,917
Yale University	55,500	17,511	961	3,083	2,815	10,008	39,675
Georgetown University	56,058	30,710	3,077	9,871	12,505	27,034	50,627
University of Florida	6,381	10,075	65	2,857	8,394	12,874	13,561
Emory University	53,804	25,672	8,538	8,976	16,646	24,104	45,706
Georgia Institute of Technology-Main Campus	12,682	17,410	8,818	11,712	15,415	17,557	18,916
University of Georgia	12,080	16,580	8,303	10,688	15,037	17,630	17,971
University of Chicago	60,552	36,584	2,500	4,777	8,375	19,895	46,267
University of Illinois Urbana-Champaign	15,122	13,517	4,858	8,036	11,505	22,400	27,285
Northwestern University	56,691	28,344	245	917	5,849	15,686	41,660
Indiana University-Bloomington	10,947	13,191	5,752	7,061	12,369	20,234	22,806
University of Notre Dame	55,553	29,981	9,872	9,136	14,020	18,969	44,972
University of Iowa	9,606	17,452	13,554	15,508	18,026	20,719	22,516
Tulane University of Louisiana	56,800	47,413	12,456	13,380	25,322	36,899	50,469
Johns Hopkins University	55,350	25,241	2,084	4,859	8,457	18,951	40,792
Boston College	57,910	30,192	10,212	7,075	17,098	23,632	50,368
Boston University	55,892	29,154	12,982	11,782	18,458	29,925	50,125
Brandeis University	57,561	41,222	13,389	19,186	24,183	27,781	51,870
Harvard University	51,925	18,037	2,564	1,396	2,669	20,059	42,312
Massachusetts Institute of Technology	53,790	19,998	5,193	-2,603	2,834	14,291	41,635
Northeastern University	53,506	37,738	10,240	7,376	18,389	25,452	43,276
Tufts University	58,578	32,720	8,122	7,987	19,827	28,622	55,083
University of Michigan-Ann Arbor	15,558	17,832	2,670	5,670	10,481	17,207	26,491
Michigan State University	14,460	16,655	6,927	15,170	20,557	25,297	27,534
University of Minnesota-Twin Cities	15,027	17,729	7,698	8,609	12,911	18,938	25,369
Washington University in St Louis	55,292	27,233	1,556	2,446	8,149	23,508	46,759
Dartmouth College	57,638	24,525	6,034	8,718	12,172	16,661	52,251
Princeton University	52,800	18,685	2,958	4,502	5,542	18,205	41,011
Rutgers University-New Brunswick	15,407	17,835	14,935	15,182	20,927	28,245	30,616
Columbia University in the City of New York	61,788	22,126	9,873	4,699	8,106	16,916	44,438
Cornell University	57,222	27,522	5,244	5,133	9,785	21,043	52,887
New York University	53,308	45,417	23,582	24,131	31,355	40,573	55,245
University of Rochester	56,030	36,254	12,915	17,764	23,108	28,633	45,827
Duke University	58,123	26,932	371	-927	7,160	18,113	49,939
University of North Carolina at Chapel Hill	8,980	10,038	3,753	5,729	11,619	19,088	22,881
Wake Forest University	55,440	26,324	10,401	5,612	10,228	24,718	52,236
Case Western Reserve University	50,924	36,002	16,063	15,570	19,864	29,971	43,692
Ohio State University-Main Campus	11,084	18,884	7,068	8,581	13,273	21,575	24,870
Carnegie Mellon University	57,119	36,983	16,456	13,608	21,526	31,094	52,564
Lehigh University	55,240	29,098	15,561	14,995	19,026	27,212	61,351
University of Pennsylvania	57,770	24,167	580	1,938	12,020	20,957	43,447
Villanova University	55,280	38,303	24,907	26,460	28,580	36,160	53,419
Brown University	58,404	27,659	1,468	2,842	10,219	23,160	44,033
Vanderbilt University	52,070	25,804	3,176	4,652	7,694	15,636	40,509
Rice University	49,112	19,215	4,443	1,340	6,152	19,697	42,730
Texas A & M University-College Station	12,153	19,906	11,220	12,949	17,525	25,812	27,994
The University of Texas at Austin	10,824	16,892	13,753	14,977	16,134	20,425	25,888
William & Mary	23,628	18,588	5,972	7,507	10,995	19,472	34,020
University of Virginia-Main Campus	17,798	19,043	12,476	10,063	16,019	22,021	31,495
University of Wisconsin-Madison	10,725	14,030	3,981	4,788	10,364	22,377	25,436
Stanford University	53,529	20,023	1,233	1,581	7,081	13,623	46,746
Purdue University-Main Campus	9,992	12,294	5,995	5,853	8,450	17,124	20,859