



Demand for Higher-Education Programs

January 24, 2024



Agenda

What is a Program Evaluation System?

Student Demand

- Leading Indicators: Google
- Recent Trends: Enrollment
- Non-Degree Courses

Employment: Current Indicators

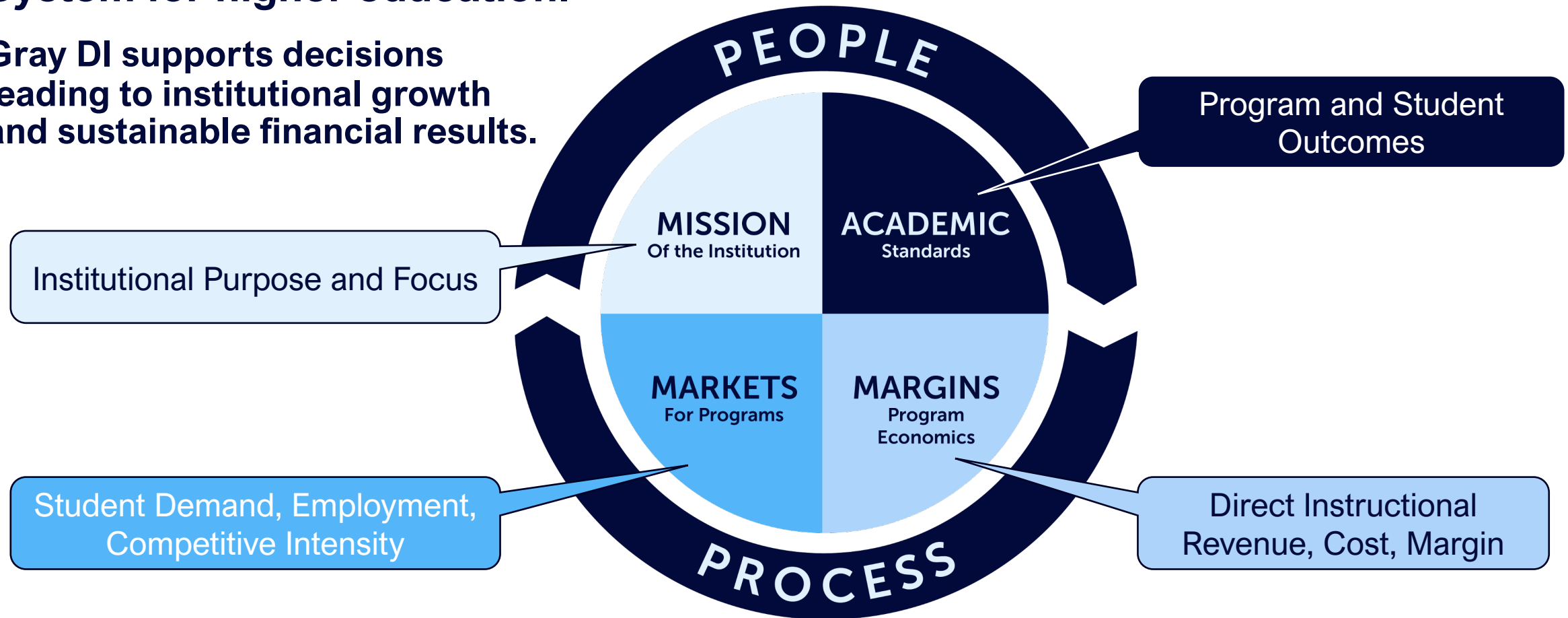
Program of the Month

Summary



Gray Decision Intelligence provides the only complete Program Evaluation System for higher education.

Gray DI supports decisions leading to institutional growth and sustainable financial results.





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IPEDS, Enrollment, and Google Search: Past, Present, Future

Insights on Student Demand



IPEDS



Enrollment



Google



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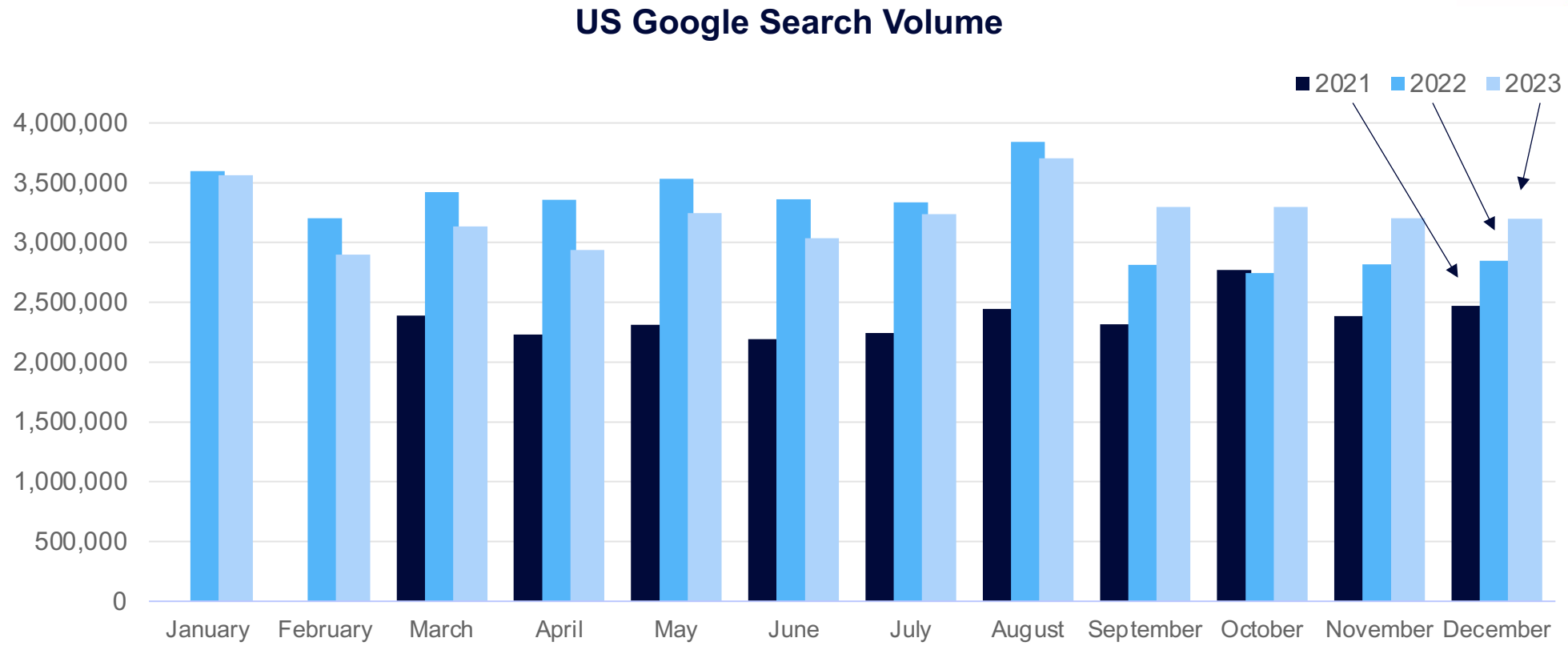
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Google Search Trends: Programs

Gray tracks searches for over 900 programs (90% of all US completions).

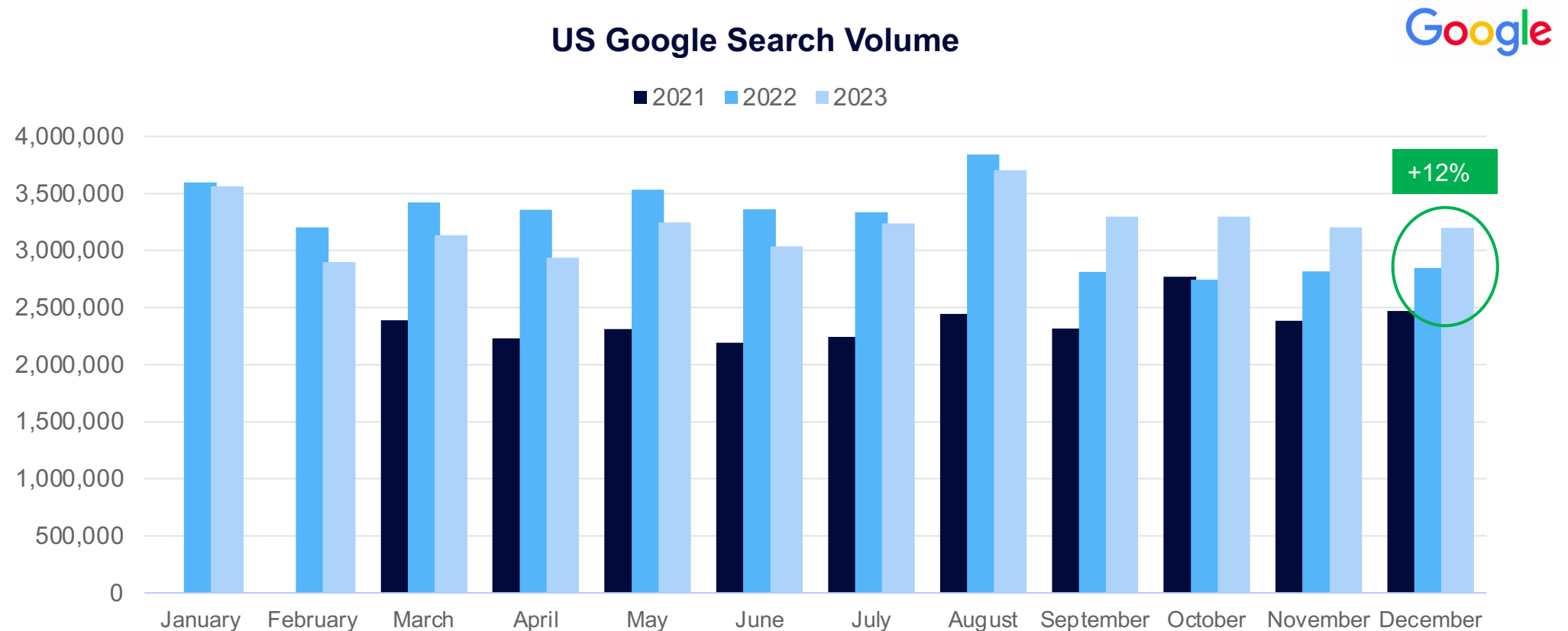


Source: PES Keyword Search Dashboard



Google Search Trends: Programs

In December 2023, Google searches for workforce programs grew 12% year-over-year.



Source: PES Keyword Search Dashboard

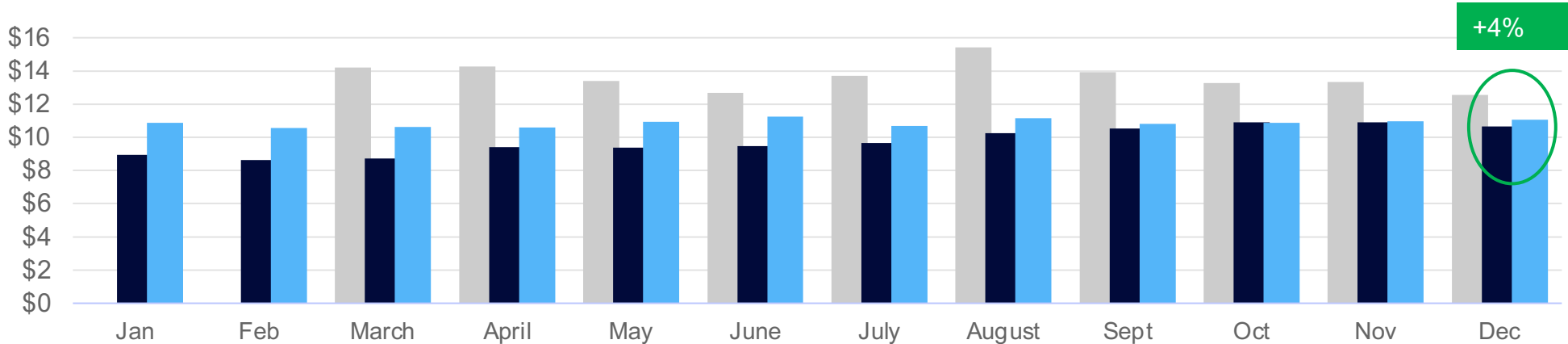


Google Search Trends: Cost-per-Click

In December 2023, the average Google cost-per-click increased 4% year-over-year.

US Google Cost-per-Click
Workforce Programs Only
March 2021 –December 2023

2021 2022 2023

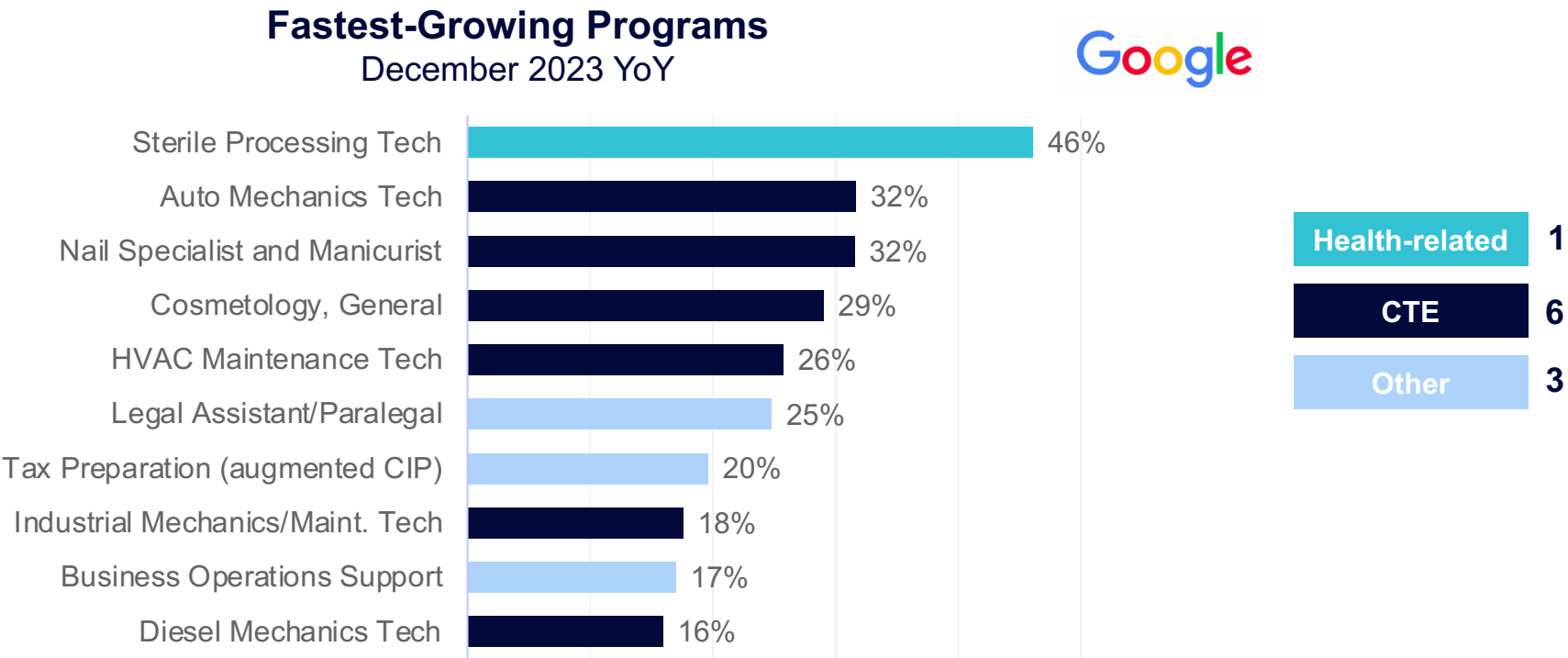


2021			\$14.19	\$14.25	\$13.38	\$12.69	\$13.69	\$15.41	\$13.91	\$13.28	\$13.35	\$12.55
2022	\$8.94	\$8.63	\$8.71	\$9.40	\$9.38	\$9.47	\$9.64	\$10.26	\$10.53	\$10.91	\$10.92	\$10.67
2023	\$10.89	\$10.57	\$10.62	\$10.59	\$10.93	\$11.26	\$10.68	\$11.16	\$10.80	\$10.86	\$10.97	\$11.07

Source: PES Keyword Search Dashboard

Google: US Fastest-Growing Programs

In December, searches for Sterile Processing Tech increased 46% year-over-year.



Google search volume for standardized direct-to-workforce academic programs.

Source: PES Keyword Search Dashboard

*Minimum 10,000 searches December 2022

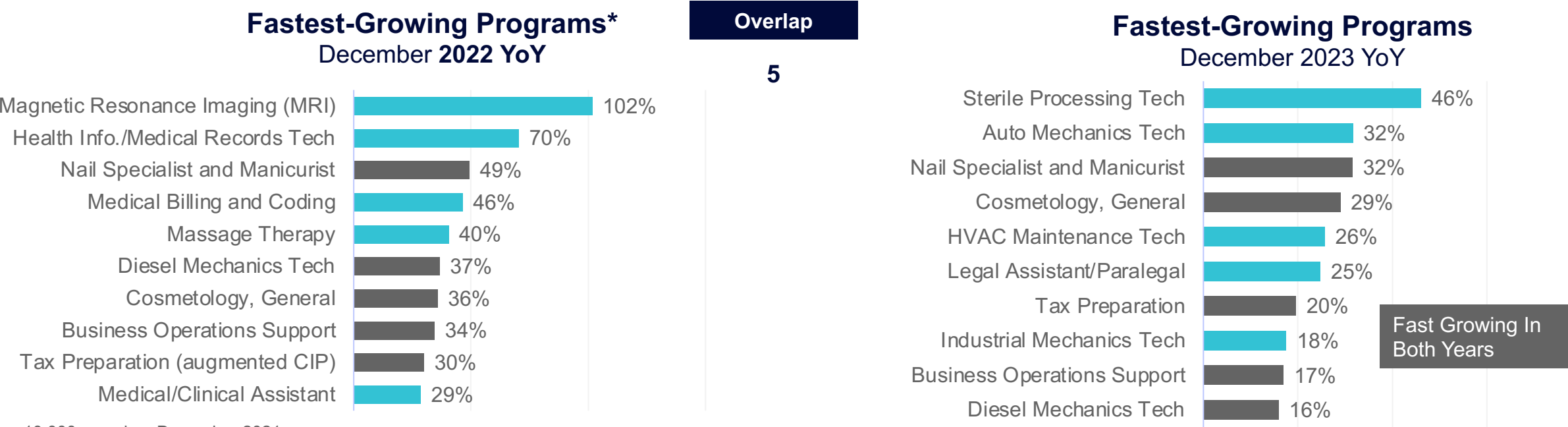


Google: Program searches can be volatile.



Only half of the 10 fastest-growing programs in 2022 also made the list in 2023.

- The fastest growers in 2022 included more healthcare programs.



*Minimum 10,000 searches December 2021



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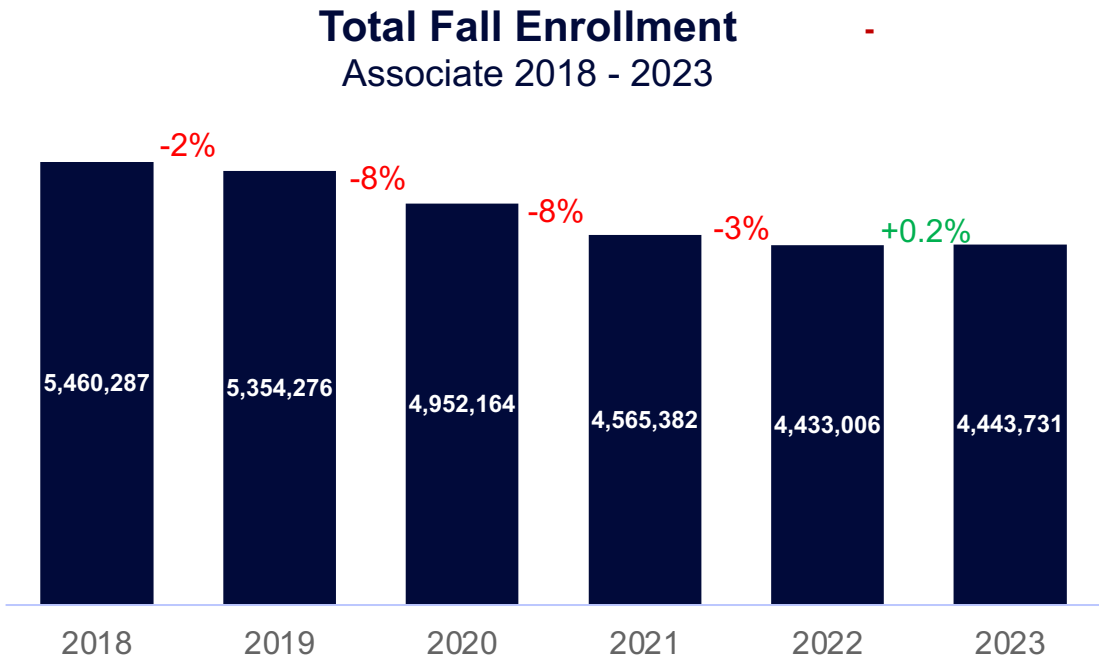
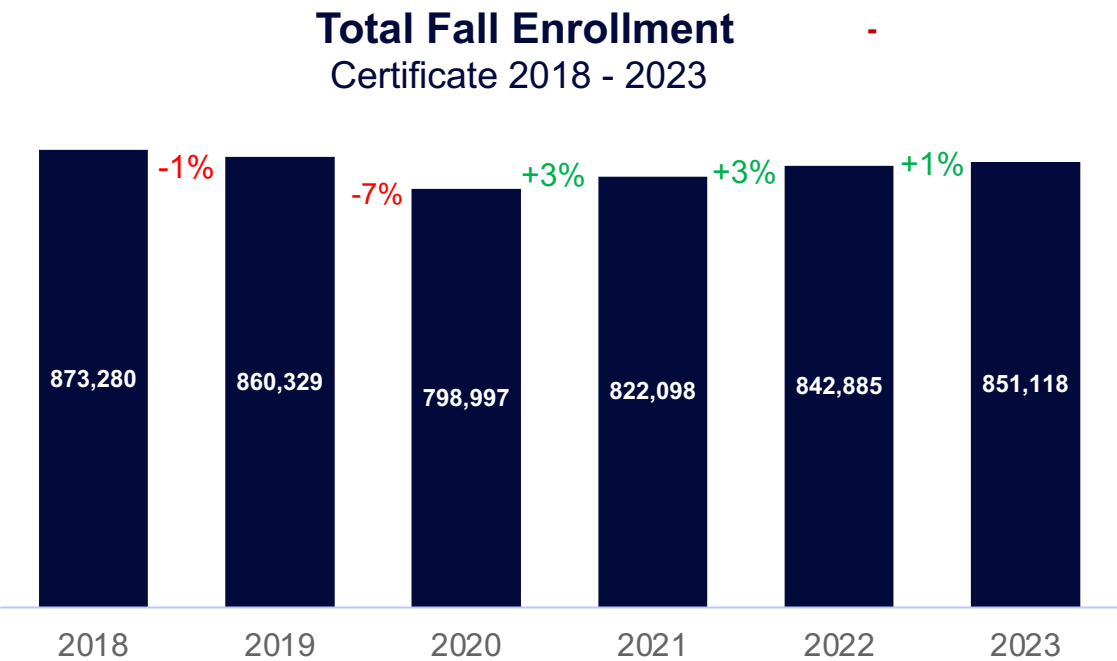
Summary



Total Fall Enrollment

In Fall 2023, US total enrollment rose for certificates.

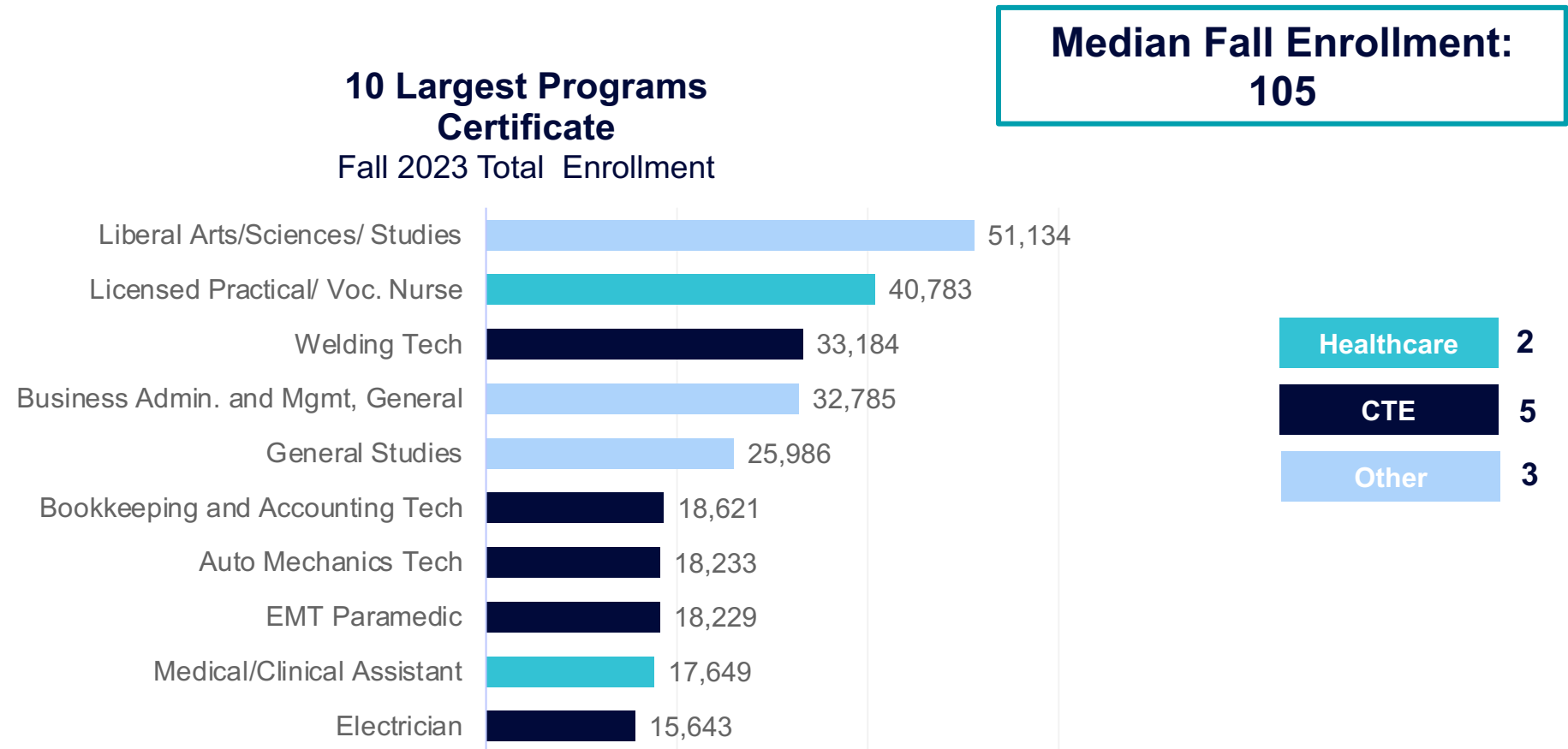
- Associate programs were almost flat but might be making a comeback.



Source: PES Student Enrollment Dashboard



Certificate: In Fall 2023, the 10 largest programs accounted for 32% of total enrollment.

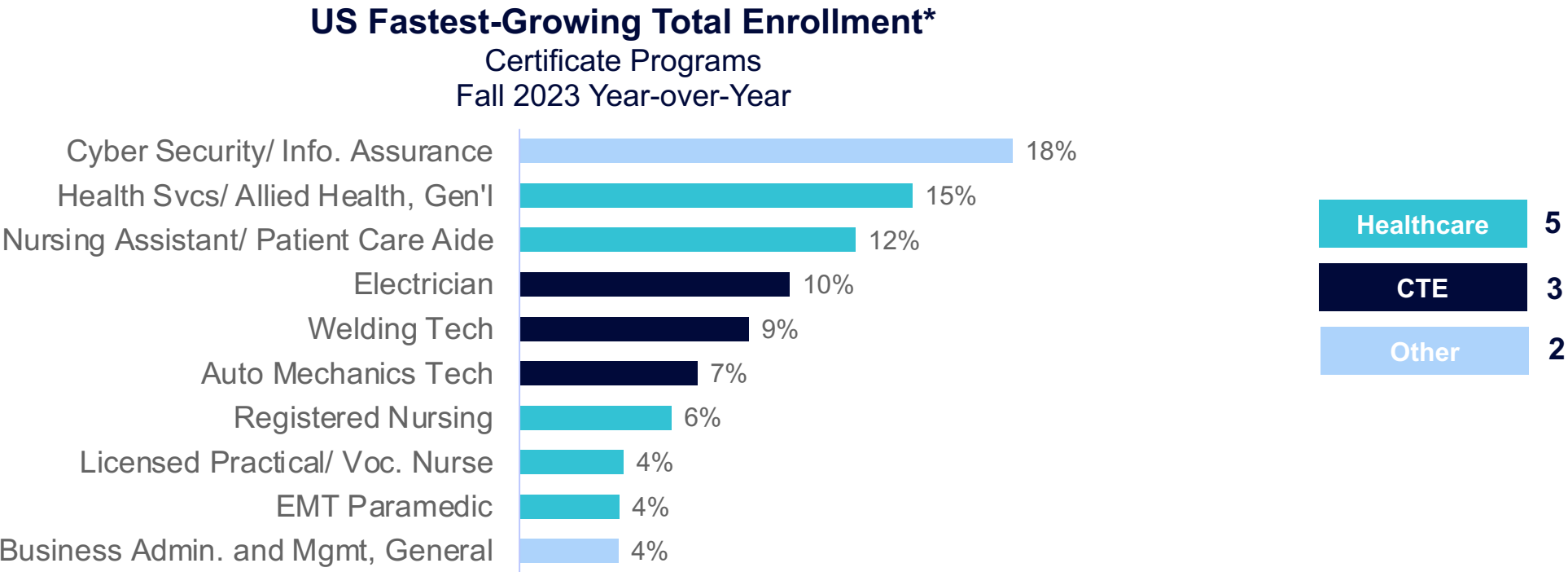


Source: PES Program Enrollment Dashboard



Certificate: Fall 2023 Fastest-Growing Total Enrollment

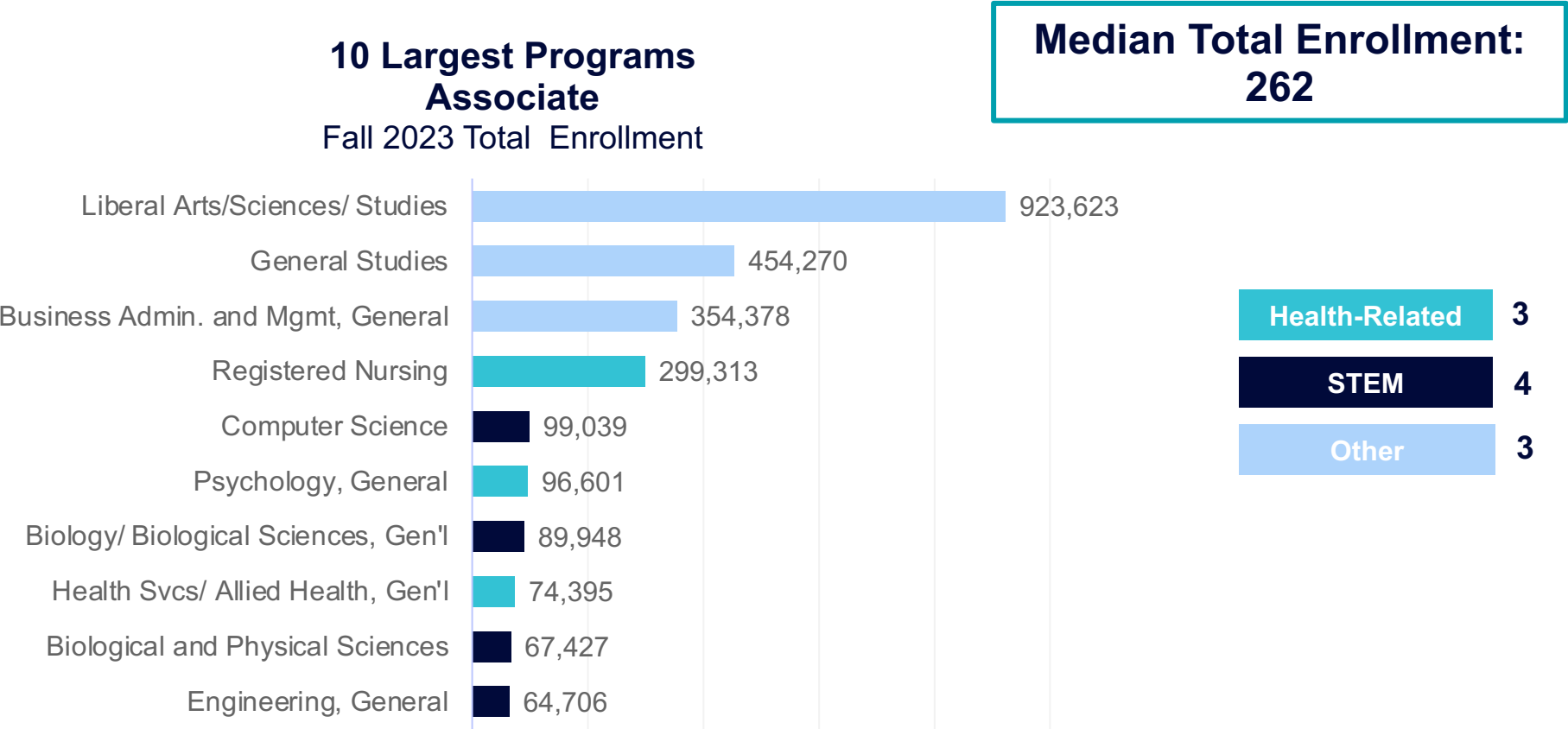
In Fall 2023, Cybersecurity grew 18% year-over-year.



Source: PES Program Enrollment Dashboard

*Minimum enrollment prior year: 3,000

Associate: In Fall 2023, the 10 largest programs accounted for 58% of enrollment.



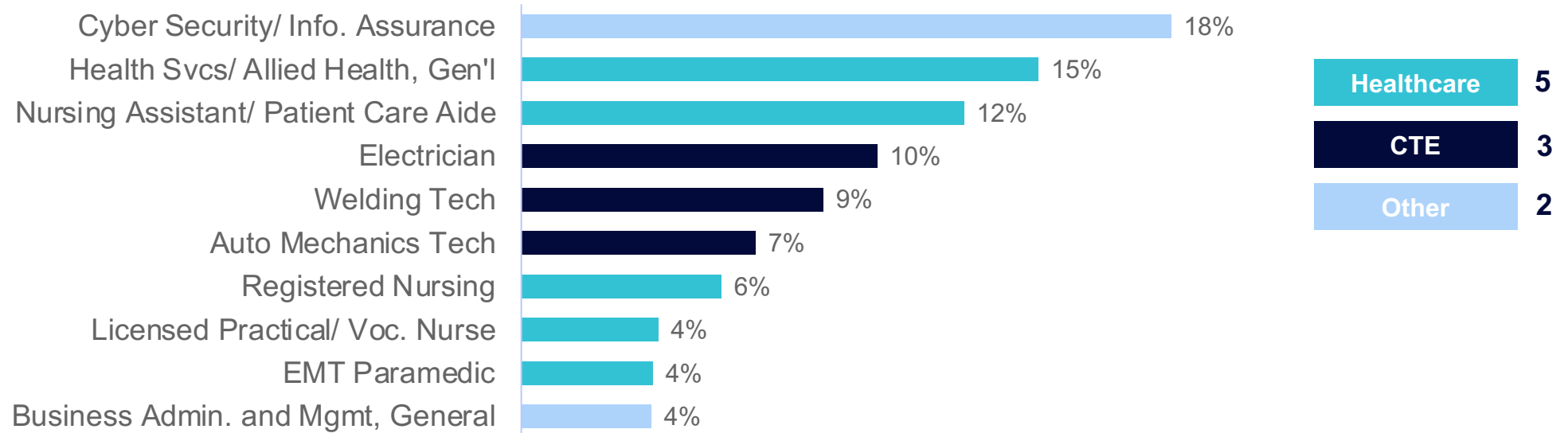


Associate: Fall 2023 Fastest-Growing Total Enrollment

In Fall 2023, Cybersecurity grew 18% year-over-year.

US Fastest-Growing Total Enrollment*

Associate Programs
Fall 2023 Year-over-Year



Source: PES Program Enrollment Dashboard

*Minimum enrollment prior year: 5,000

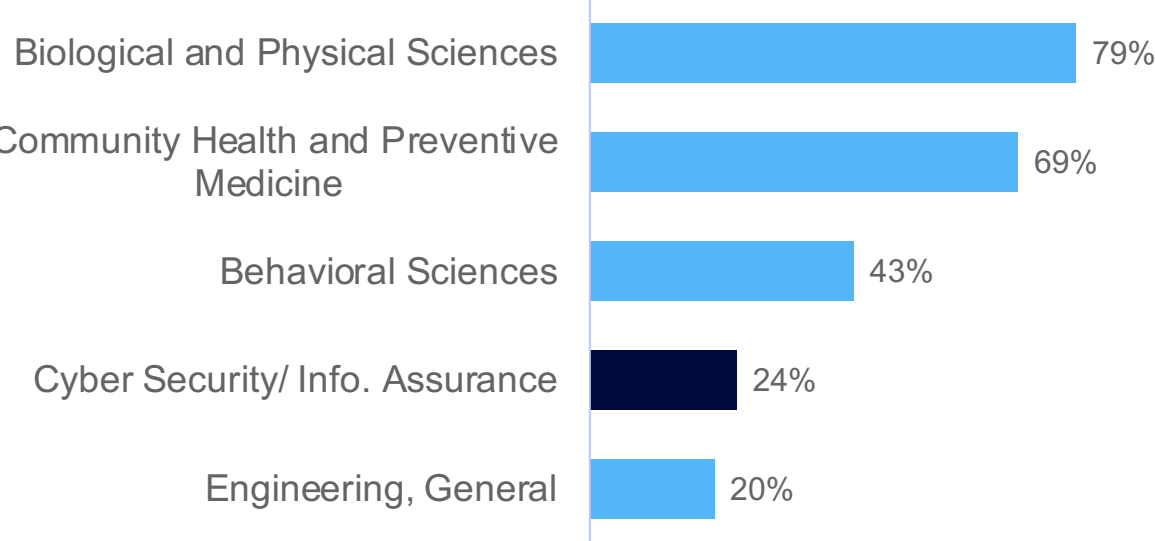


Enrollment growth varies by location.

The five fastest-growing programs in AZ and NJ overlap by one program.

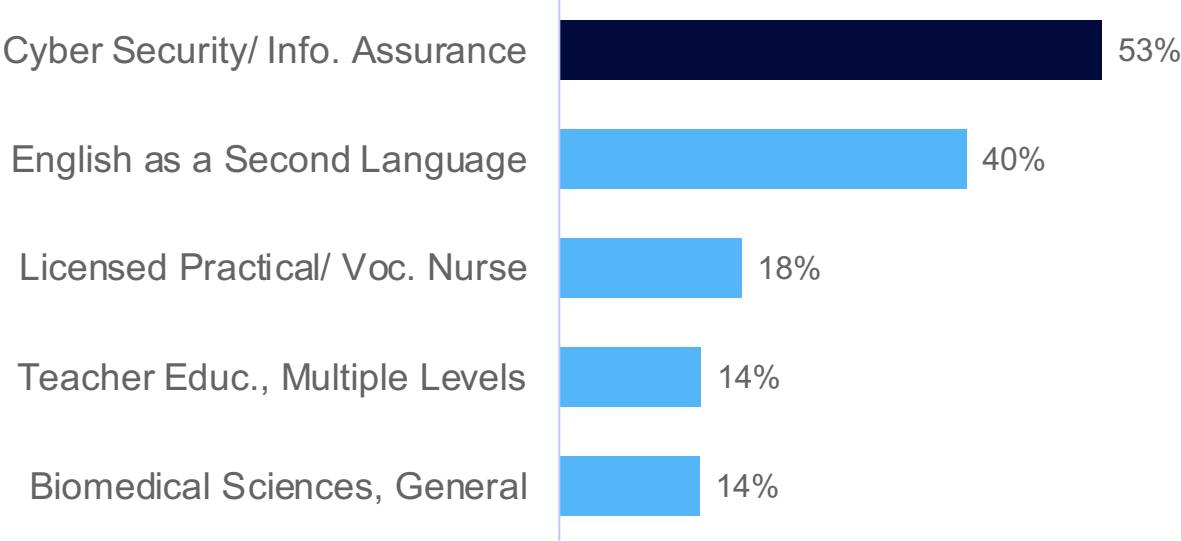
Arizona Fastest-Growing Total Enrollment*

Certificate and Associate Programs
Fall 2023 Year-over-Year



New Jersey Fastest-Growing Total Enrollment*

Certificate and Associate Programs
Fall 2023 Year-over-Year



Source: PES Student Enrollment Dashboard

*Minimum enrollment prior year: 5,000



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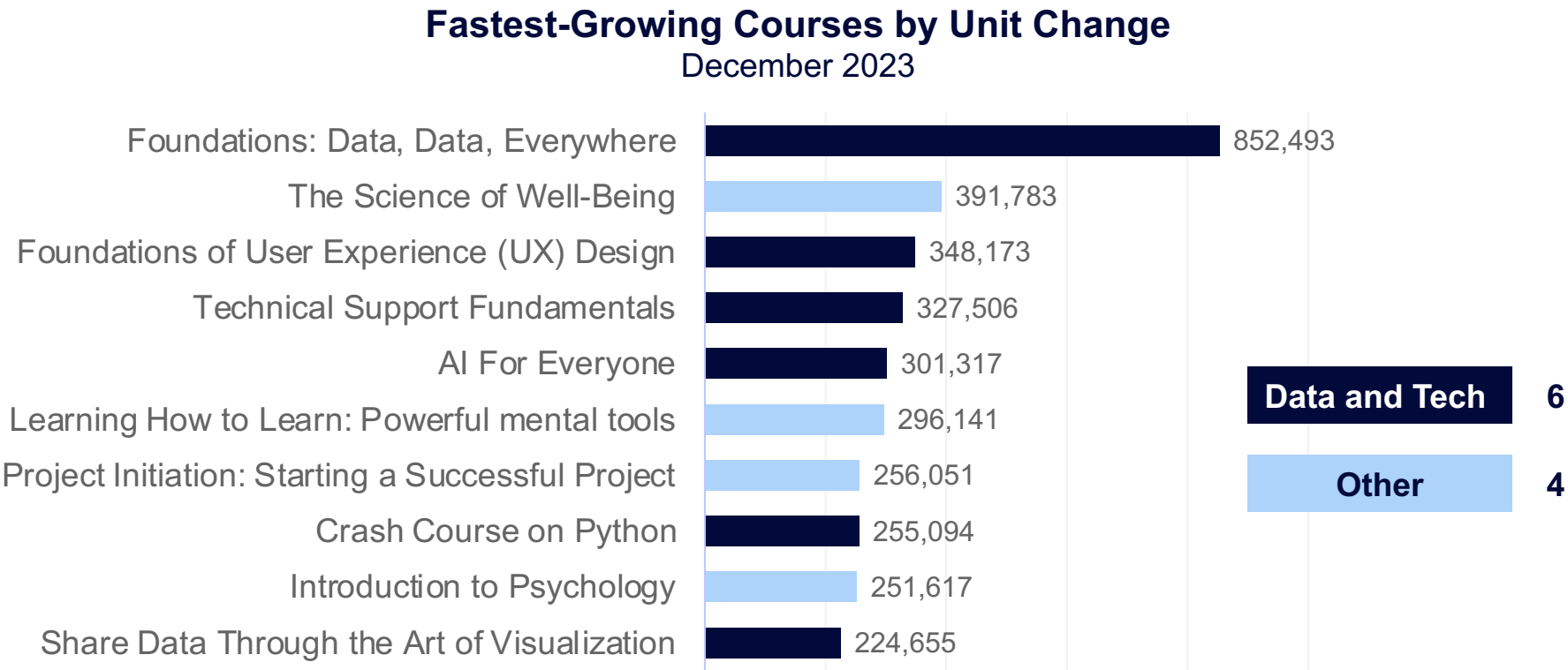
There is a large volume of student demand outside Title IV programs.

Coursera alone has enrolled over 125 million students.



Non-Degree Demand: Coursera

In 2023, Coursera added more than 18.5 million learners.



Source: PES Non-Degree Dashboard, Coursera



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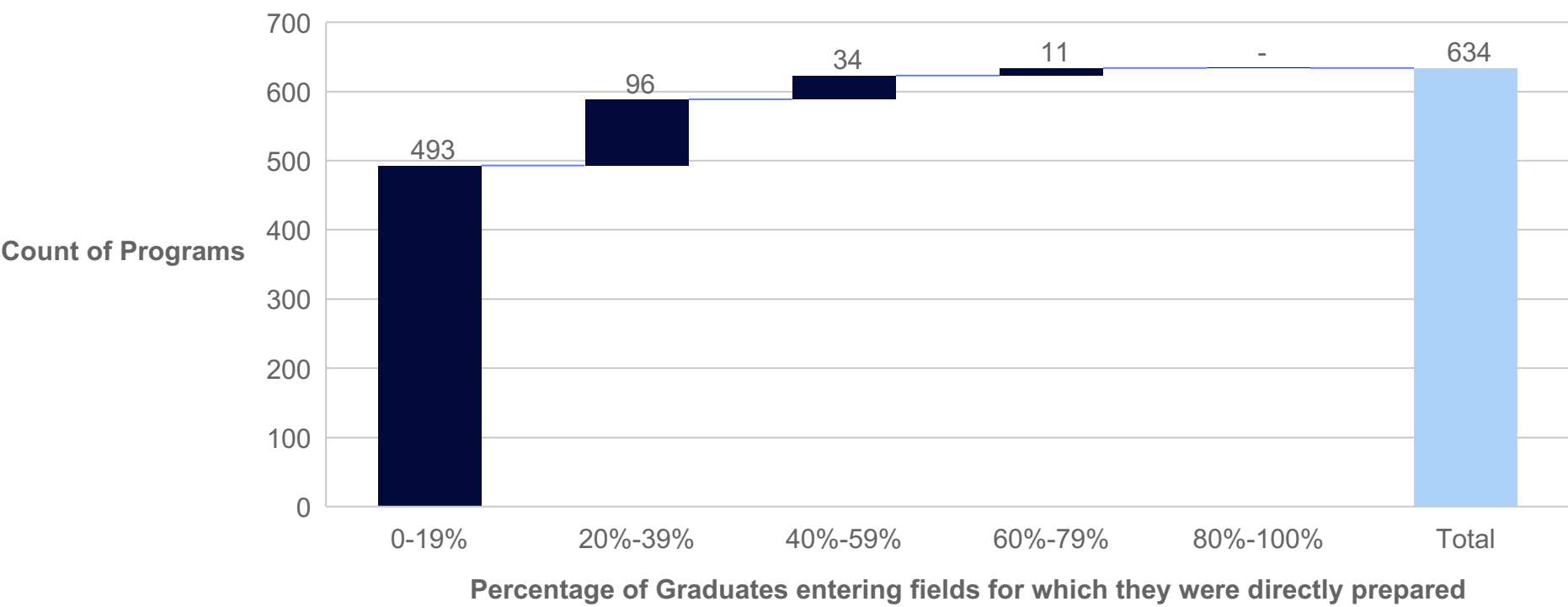
Program of the Month

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77% of programs place less than 20% of graduates in direct prep jobs.

Do Graduates Go into Fields for Which They Are Directly Prepared?



Sources: IES NCES: “CIP SOC Crosswalk”, July 2021 <https://nces.ed.gov/ipeds/cipcode/post3.aspx?y=56>,
US Census, American Community Survey, Gray Analysis. Bachelor degree programs with over 100 completions.



Commonly available data sources only count direct prep jobs.

In a traditional construct, Psychology majors enter six occupations.

- Gray DI data on almost 55,000 graduates of Associate in Psychology programs identifies 733 occupations.
- These occupations are entry-level positions.

Myth
NCES
Managers, All Other
Industrial-Organizational Psychologists
Clinical and Counseling Psychologists
Psychologists, All Other
Social Science Research Assistants
Psychology Teachers, Postsecondary



* Note: CEO is often the most senior manager in a small business or sole proprietorship.



Associate in Psychology grads work in 147 industries.
They work at 35,602 companies.

Industry

Industry ▾	Count
Retail	4,545
Hospital & Health Care	3,463
Higher Education	2,534
Non-Profit Organization Management	1,636
Financial Services	1,455
Mental Health Care	1,390
Restaurants	1,347
Education Management	1,340
Health, Wellness And Fitness	1,114
Government Administration	1,003
Real Estate	975
Insurance	943
Hospitality	935
Individual & Family Services	892

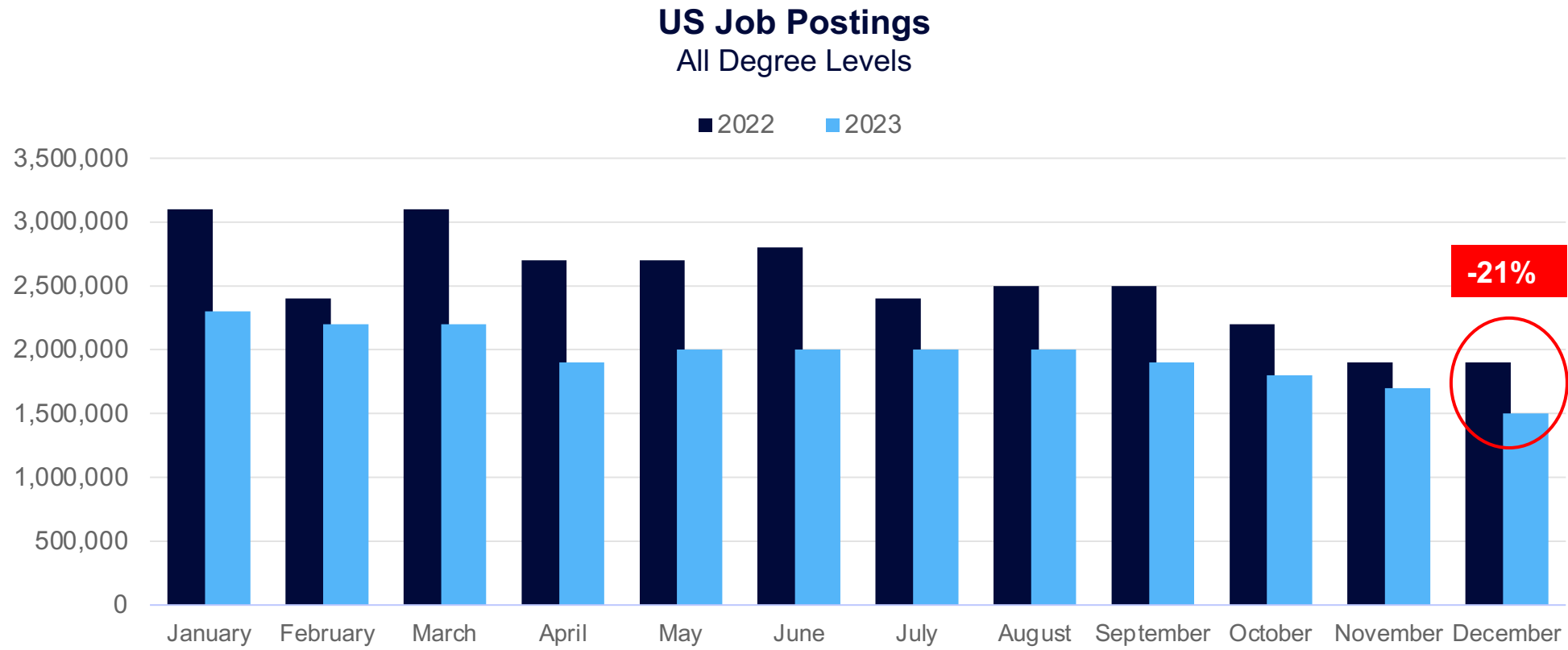
Company

Company ▾	Count
Starbucks	216
Walmart	207
Target	199
Wells Fargo	154
Us Army	140
The Home Depot	136
Lowe's Companies, Inc.	121
Bank Of America	119
Att	111
Amazon	109
Best Buy	108
Apple	98
Walgreens	95
Verizon	92



US Job Postings Trends

In December, job postings dropped 21% across all degree levels.

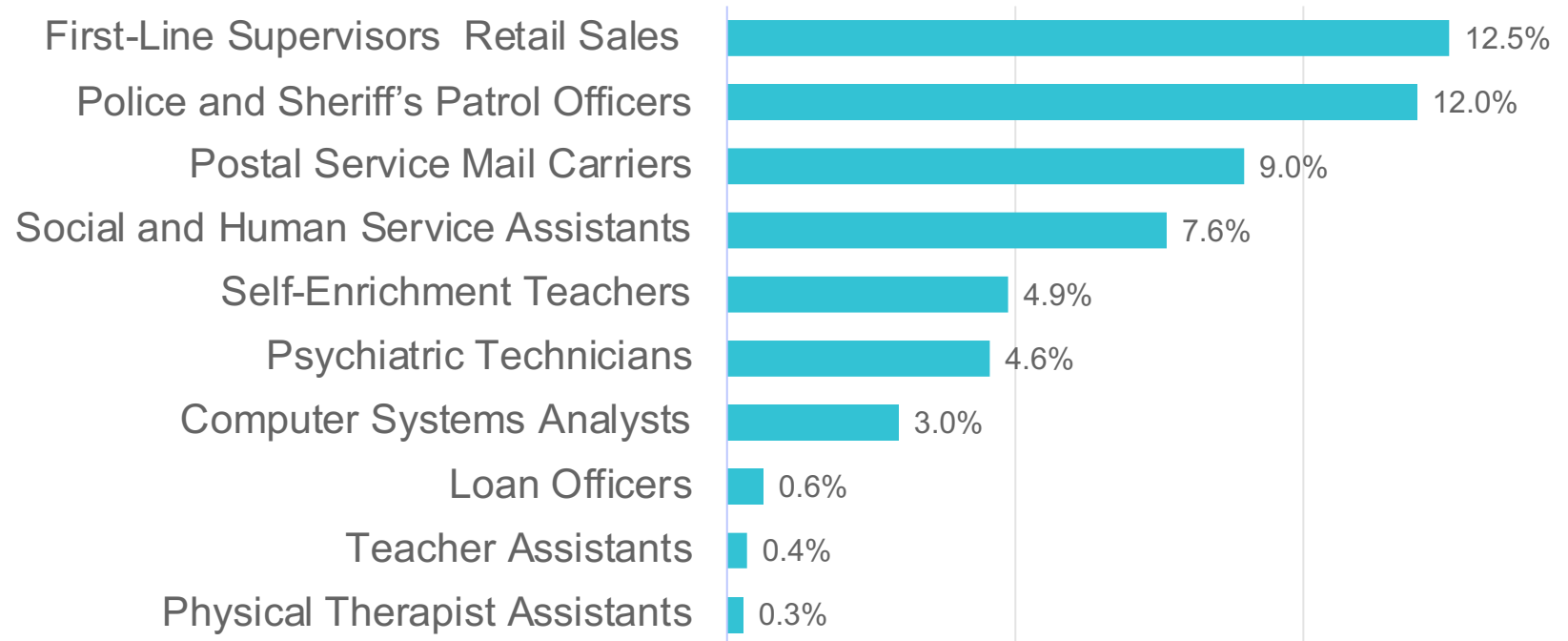


Source: PES Job Postings Dashboard



Which occupations have growing demand?

Fastest-Growing Occupations*
Associate and Certificate, December 2023

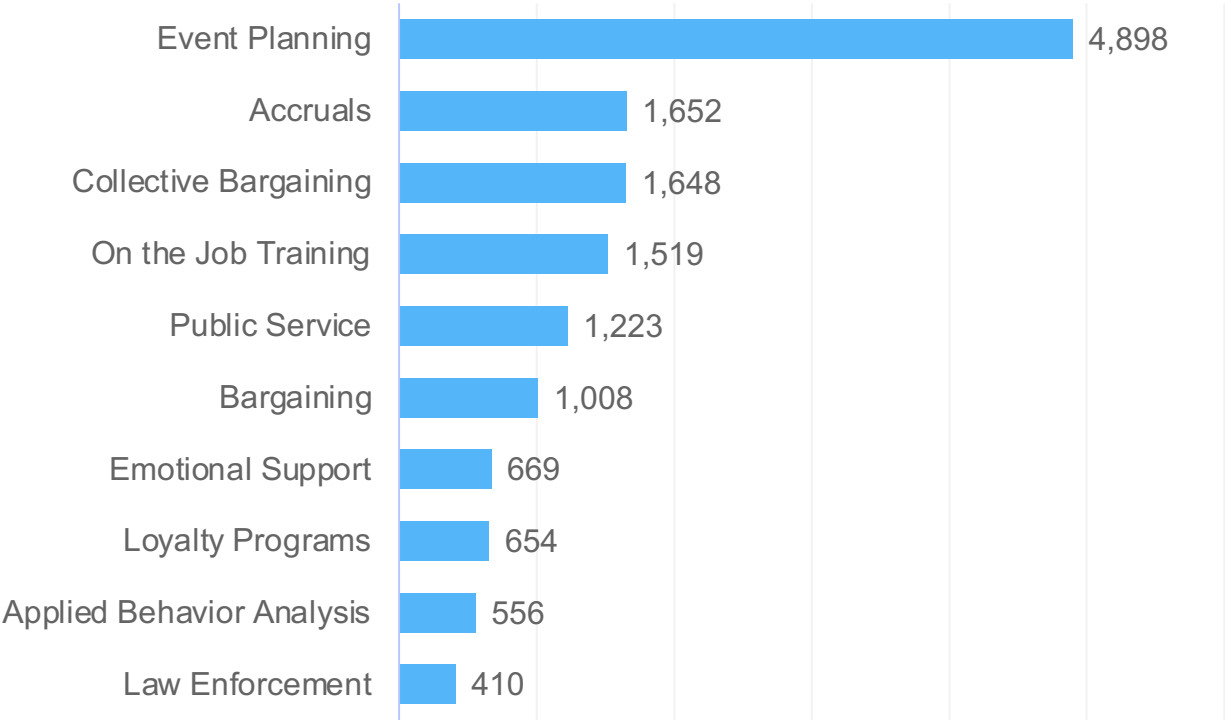


*Minimum 1,000 jobs December 2023



Microsoft Office is the most sought-after skill, but others are growing faster.

Highest Growth in Skills
Mentions in Job Postings
December 2023





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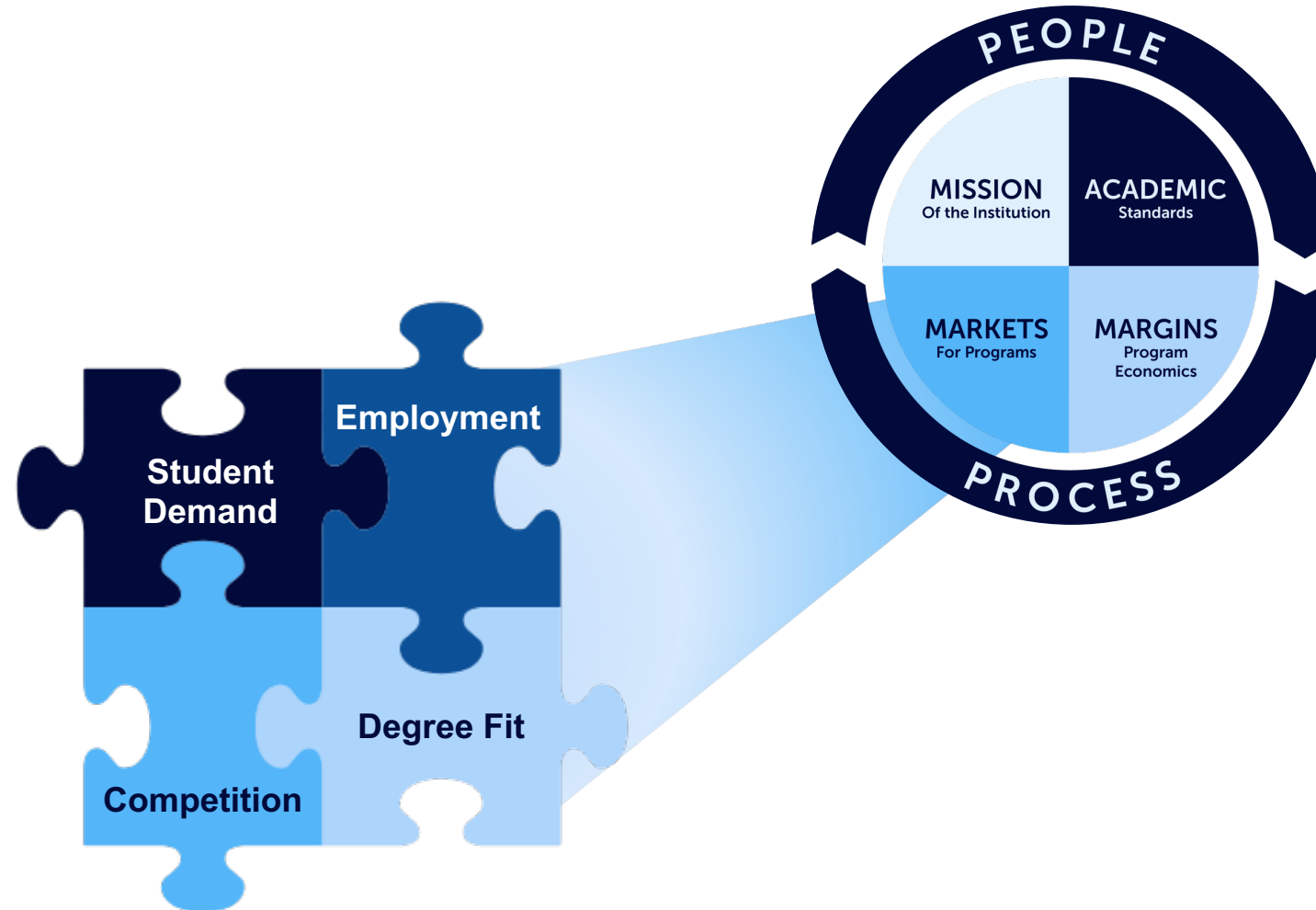
Employment: Current Indicators

Program of the Month

Summary



Market Demand





US Program Ranking (Associate and Below)

Program	Overall Score	Student Demand	Competitive Intensity	Jobs	Degree Fit
15.0612 Industrial Tech	97	91	50	97	100
51.0908 Respiratory Care Therapy	97	91	14	98	100
46.0303 Lineworker	97	90	95	93	100
46.0412 Building/ Construction Site Mgmt	97	90	14	99	100
29.0201 Intelligence, General	97	83	97	95	100
49.0304 Diver, Professional and Instructor	97	78	99	85	100
12.0302 Funeral Direction/ Service	97	78	95	98	100
47.0609 Avionics Maintenance Tech	97	78	50	99	100
51.0601 Dental Assisting	96	98	3	80	100
52.0302 Bookkeeping and Accounting Tech	96	98	0	90	100
01.8301 Vet/Animal Health Tech and Vet Asst	96	97	14	80	100
51.0805 Pharmacy Technician/ Assistant	96	97	1	92	100
52.0411 Customer Svce Support/Call Center	96	96	95	50	100
30.9999 Multi-/Interdisc. Studies, Other	96	96	82	80	100
51.1009 Phlebotomy Tech/ Phlebotomist	96	96	11	88	100
46.0301 Electrical/ Power Transm'n Instal., Gen'l	96	90	50	96	100
51.0810 Emergency Care Attendant (EMT Ambulance)	96	88	98	82	100
15.0399 Electrical Engin'g Tech, Other	96	88	82	96	100
15.0101 Architectural Engineering Tech	96	83	50	98	100
<div> <div>Total Percentile</div> <div>020+40+70+90+95+98+100</div> </div> <div> <div>Total Score</div> <div>-62-31-19-210182768</div> </div>					



Student Demand: Size

Bookkeeping and Accounting Tech scores in the 98th percentile for Student Demand.

- Google search volume – a future indicator of demand – is in the 87th percentile.
- New enrollment is strong: 99th percentile
- Completions are also strong: 99th percentile.
 - They are strong both online and on-campus.

Student Demand				
Score: 22 Percentile: 98				
Category	Pctl	Criterion	Value	Score
Size	87	Google Search Volume (3 Months)*	64,304	2
	0	International Page Views (12 Months)	0	NS
	99	New Student Enrollment Volume (12 Mo.)	26,929	8
	99	On-ground Completions at In-Market Institutions	22,342	4
	99	Online Completions by In-Market Students	6,581	4
	99	Sum of On-ground and Online Completions	28,923	4

Source: PES Markets



Student Demand: Growth

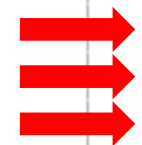
Growth metrics are fair.

- Google searches, a future indicator, grew 24% year-over-year: 84th percentile.
- New student enrollment dropped 13% year-over-year: 35th percentile.
- Completions, a lagging indicator, grew 1%: 53rd percentile.

Student Demand

Score: 22 Percentile: 98

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Size	87	Google Search Volume (3 Months)*	64,304	2
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Growth	96	Google Search YoY Change (Units)*	12,423	NS
	0	New Student Enrollment Vol. YoY Change (Units)	-4,034	NS
	96	Completion Volume YoY Change (Units)	331	NS
	84	Google Search YoY Change (%)*	24%	NS
	35	New Student Enrollment Vol. YoY Change (%)	-13%	NS
	53	Completion Volume YoY Change (%)	1%	NS





Employment

Bookkeeping and Accounting Tech scores in the 90th percentile.

- Entry-level job volume metrics are strong: 99th percentile.
- Underemployment rate is on the lower side.
 - In this case, a lower rank is stronger.
- BLS historical growth is not as positive:
 - 3-year: 27th percentile
 - YoY: 56th percentile
- Job postings per graduate are above average.
- Wages are fair to low for both early and mid-career.

Employment

Score: 6 Percentile: 90

Category	Pctl	Criterion	Value	Score
Size: Entry Jobs	99	Job Postings Total (12 Months)	132,909	NS
	99	BLS Current Employment	378,893	NS
	99	BLS Annual Job Openings	36,619	NS
Underemployed	28	Underemployed Percent of Graduates**	34%	0
Growth: Entry Jobs	56	BLS 1-Year Historical Growth	-3.7%	NS
	27	BLS 3-Year Historic Growth (CAGR)	-1.3%	0
	7	BLS 10-Year Future Growth (CAGR)	-0.2%	-1
Saturation: Entry Jobs	91	Job Postings per Graduate	4.6	4
	93	BLS Job Openings per Graduate	1.3	NS
Weighted Avg BLS Wages	41	Entry 25th Percentile	\$37,477	0
	61	Post Entry Median	\$55,295	3
	37	Post Entry w/Associates Median	\$47,204	NS
	77	Post Entry w/Bachelors Median	\$67,987	NS
	88	Post Entry w/Masters Median	\$90,013	NS
		Post Entry w/Doctoral Median	NA	NS
National American Community Survey Bachelor's Degree Outcomes*		% with Any Graduate Degree*	NA	NS
		% with Masters*	NA	NS
		% with Doct/Prof Degree*	NA	NS
		% Unemp. (Age <30)**	NA	NS
		% in Direct Prep Jobs*	NA	NS

Competitive Intensity

Bookkeeping and Accounting Tech scores in the 0 percentile.

- 904 community college campuses graduated students in this program.
 - 318 were online.
- Median program completions are in the 71st percentile and flat year-over-year.
- Google cost-per-click is high.
- 23% of US institutions offer this program online.

Competitive Intensity

Score: -12 Percentile: 0

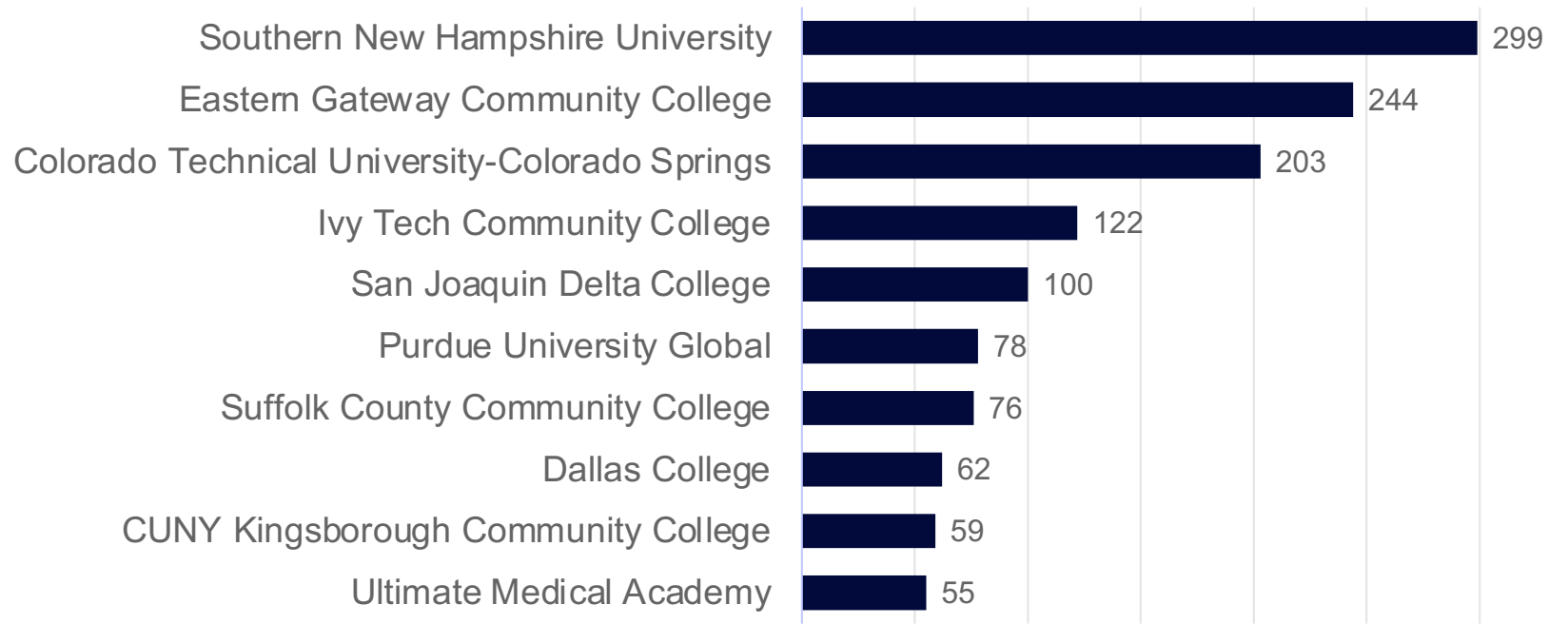
Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	99	Campuses with Graduates**	904	-8
	96	Campuses with Grads YoY Change (Units)**	8	NS
	99	Institutions with Online In-Market Students**	318	NS
In-Market Program Sizes	88	Average Program Completions	25	0
	71	Median Program Completions	7	0
	75	YoY Median Prog. Compl. Change (Units)	0	NS
	75	YoY Median Prog. Compl. Change (%)	0	NS
In-Market Saturation	95	Google Search * Cost per Click**	\$22	-3
	98	Google Competition Index**	0.89	-1
National Online Competition	99	National Online Institutions (Units)**	380	NS
	92	Nat'l Online % of Institutions	29%	NS
	84	Nat'l Online % of Completions	23%	NS



Who are the online competitors for Bookkeeping and Accounting Tech?

SNHU reported 229 completions in 2022.

Highest Online Completions
Bookkeeping and Accounting Tech 2022





Degree Fit

There is an imbalance between the degree level of completers and employees in this field.

- 60% of completions are at the certificate level.
- 40% are at the associate level.
- However, 29% of the national workforce have no college, 35% have some college, 19% have a bachelor's, and only 13% hold an associate degree.
- Median program cost per student credit hour is in the 9th percentile.
 - It is 18 points over the average cost per student credit hour.

Degree Fit Score: 0 Percentile: 100

Category	Pctl	Criterion	Value	Score
Cost Benchmarking**	8	Average Cost per SCH Index**	0.22	NS
	9	Median Cost per SCH Index**	0.40	NS

National Completions by Level Score: 0

National Workforce Ed. Attainment Score: 0

Award Level	Completions (National)	Completions (Market)	Enrollment (Market)	BLS Educational Attainment
No College				29%
Some College				35%
Certificate	60%	60%	28%	
Associates	40%	40%	72%	13%
Bachelors	0%	0%	0%	19%
Postbaccalaureate Certificate	0%	0%	0%	
Masters	0%	0%	0%	4%
Post-masters Certificate	0%	0%	0%	
Doctoral	0%	0%	0%	1%



Demographics

Bookkeeping and Accounting Tech is 75% female.

- 51% of all students are White.
- 10% are Asian.
- 11% are Black/African American.
- 19% are Hispanic/Latino.

-- IPEDS Demographics (Not Scored) -----

Category	Pctl	Criterion	This Program In-Market	All Programs In-Market
IPEDS Gender	70	Female	75%	61%
	29	Male	25%	39%
IPEDS Ethnicity	74	American Indian or Alaska Native	1%	0%
	90	Asian	10%	5%
	61	Black or African American	11%	12%
	59	Hispanic or Latino	19%	25%
	88	Native Hawaiian or Other Pacific Islander	1%	0%
	45	White	51%	47%
	77	International	3%	2%
	48	Other/Unknown	6%	7%



CIP: 52.0302 Bookkeeping and Accounting Tech	Award Level: Associates and Below	Market: National	Total Score: 16	Percentile: 96
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Student Demand

Score: 22 Percentile: 98

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* - Google search do not filter by award level.
** - Color scale in reverse.
NA - No data available/not currently tracked.
NS - Not Scored in Rubrics (values = 0).
PCTL - Percentile

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Postbaccalaureate Certificate	0%	0%	0%	
Masters	0%	0%	0%	4%
Post-masters Certificate	0%	0%	0%	
Doctoral	0%	0%	0%	1%

CIP Description:
A program that prepares individuals to provide technical administrative support to professional accountants and other financial management personnel. Includes instruction in posting transactions to accounts, record-keeping systems, accounting software operation, and general accounting principles and practices.

Total Percentile	0	20+	40+	70+	90+	95+	98+	100
Total Score	-62	-39	-20	-2	9	14	21	45
** Color Scale in Reverse								
Percentile (Reverse)	<02	02+	05+	10+	30+	60+		



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Student Demand

- Leading Indicators: Google
- Recent Trends: Enrollment
- Non-Degree Courses

Employment: Current Indicators

Program of the Month

Summary



Summary

- In December, Google searches for direct-to-workforce programs rose 12% year-over-year.
 - Sterile Processing Tech grew by 46%.
 - Google cost-per-click rose 4%.
- Fall certificate enrollment is up 1% year-over-year.
 - Associate enrollment is flat.
- Cybersecurity grew by 18% at both the certificate and associate levels.
- Most traditional labor market sources rely on direct prep crosswalks.
 - Associate in Psychology grads go into 733 occupations – not six.
 - They work in 147 industries in 35,602 companies.
- Bookkeeping and Accounting Tech programs score in the 96th percentile overall.
 - Volume metrics are strong, but growth in student demand and jobs is declining.
 - Employment opportunities are plentiful for graduates, but wages are moderate.
- Only 13% of the workforce hold an associate degree, with higher numbers in no/some college as well as bachelor's.



Upcoming webinars

Topic	Date
Demand Trends Webcast: Community Colleges	Wednesday February 28 th at 2 PM ET
Demand Trends Webcast: Bachelor's and Above	Thursday February 29 th at 2 PM ET

New format next month!

We will present national data as well as a “state of the month.”

The difference in data by state can be striking. It’s important to know your specific market as well as your competitors’.





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