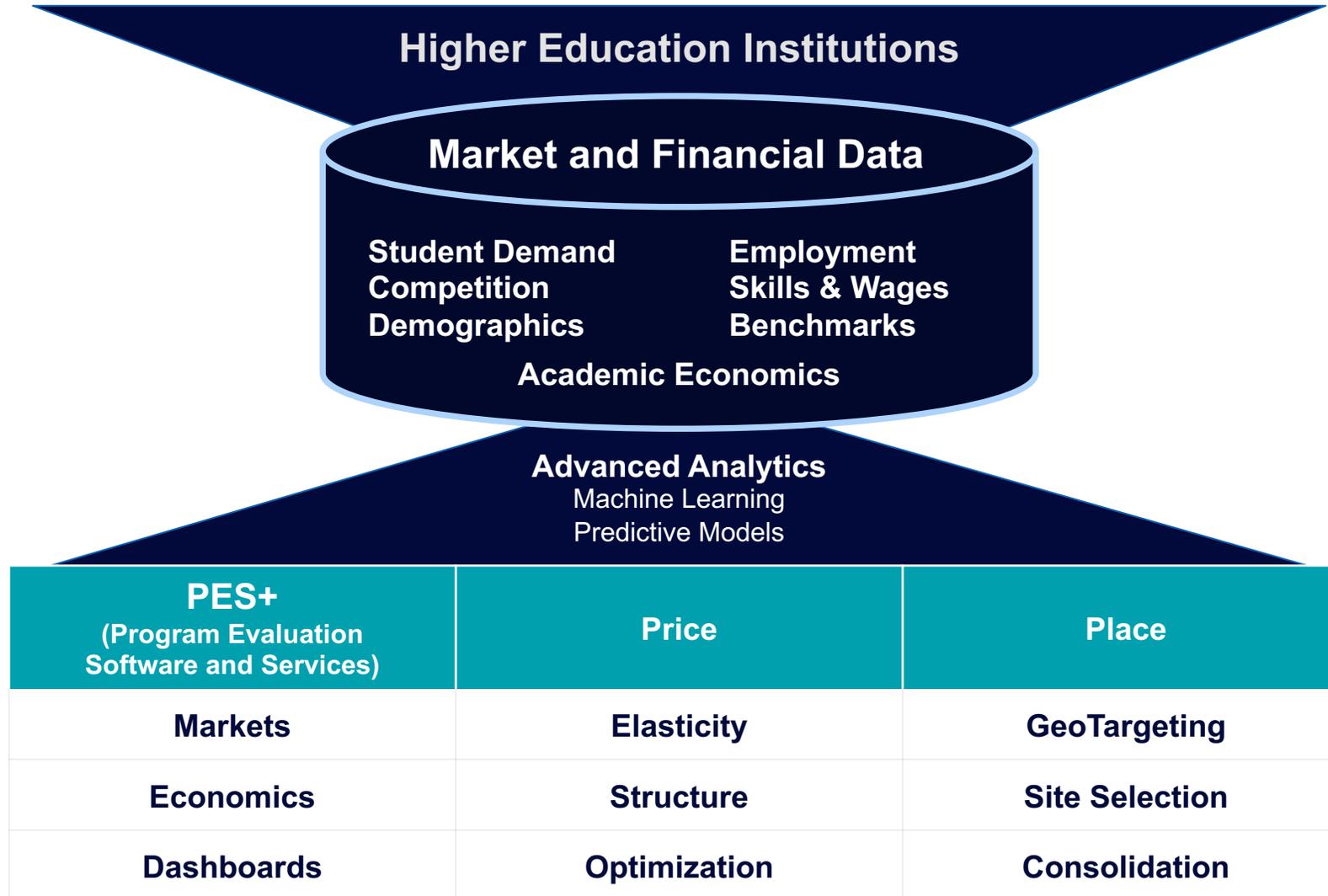




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Demand for Higher Education Programs

Results through February 2022



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Google Search

International Student Demand

Enrollment

Employment Trends

Non-Degree Courses

Program of the Month

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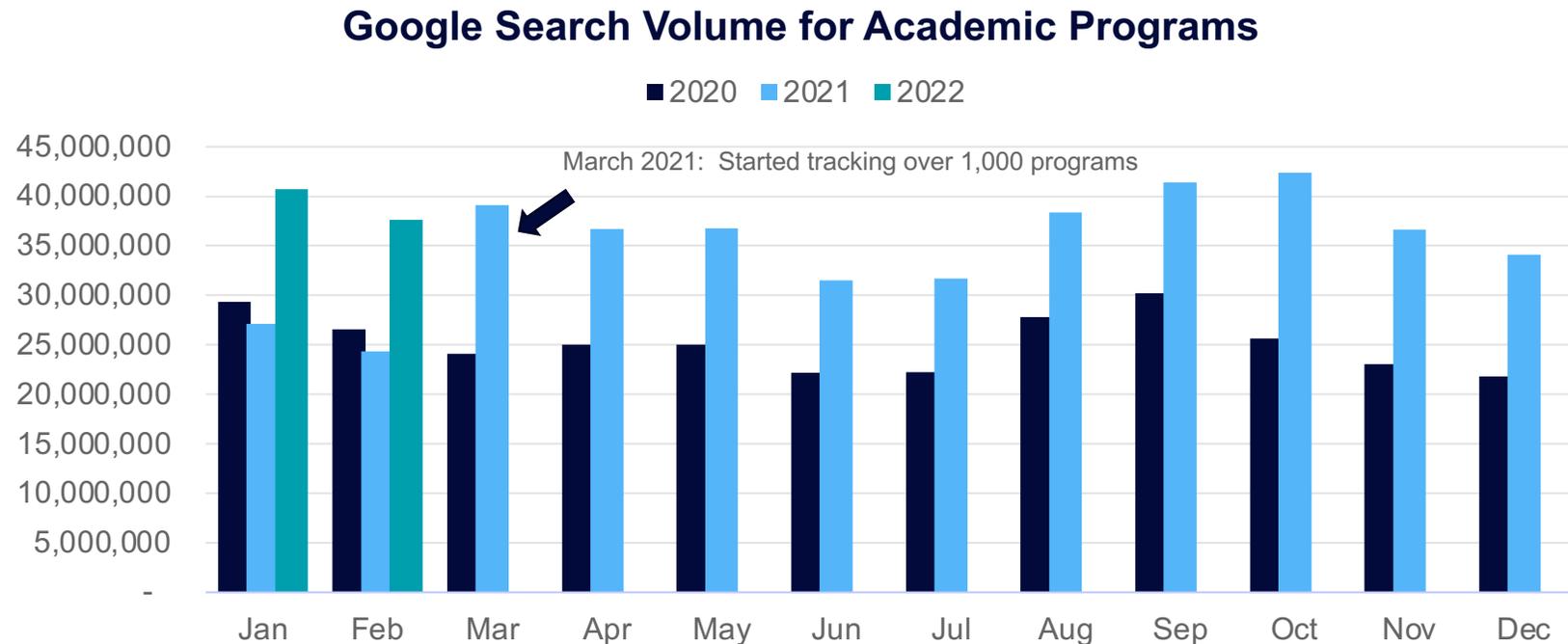
Program of the Month

Summary

Google Search Trends: Programs

Gray now tracks a curated list of approximately 70 keywords for over 1,000 programs.

- This is an expansion from about 25 keywords for 200 programs.



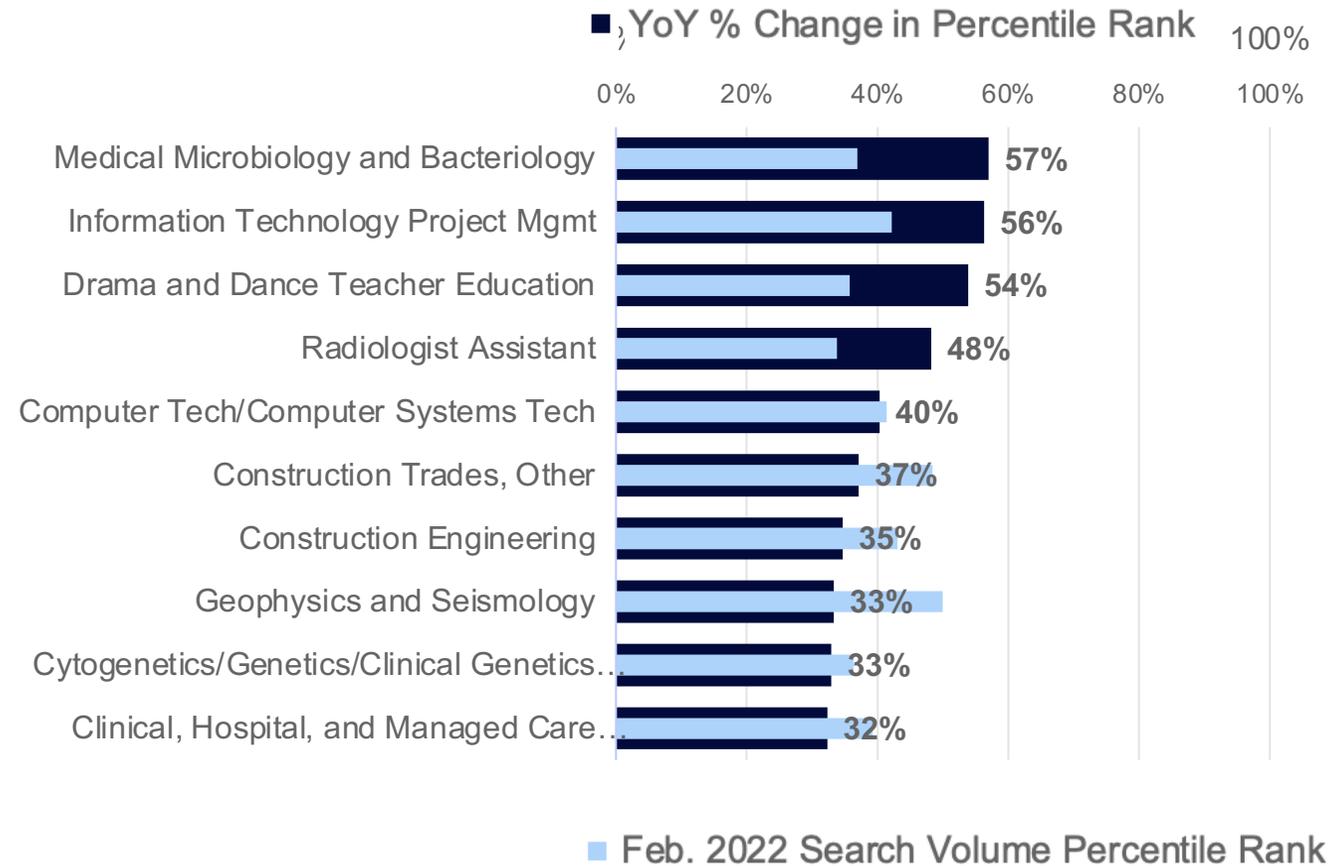
Source: Gray's Keyword Search Dashboard

Google: Fastest-Growing

In February, the search rank for Medical Microbiology and Bacteriology rose 57% year-over-year.

- Geophysics and Seismology ranked the highest for search volume.

Google Searches for Programs*
Percentile Rank and YoY % Change in February 2022



*Google search volume for standardized list of approximately 70 academic keywords for 1,037 programs.

Source: Gray's Keyword Search Dashboard

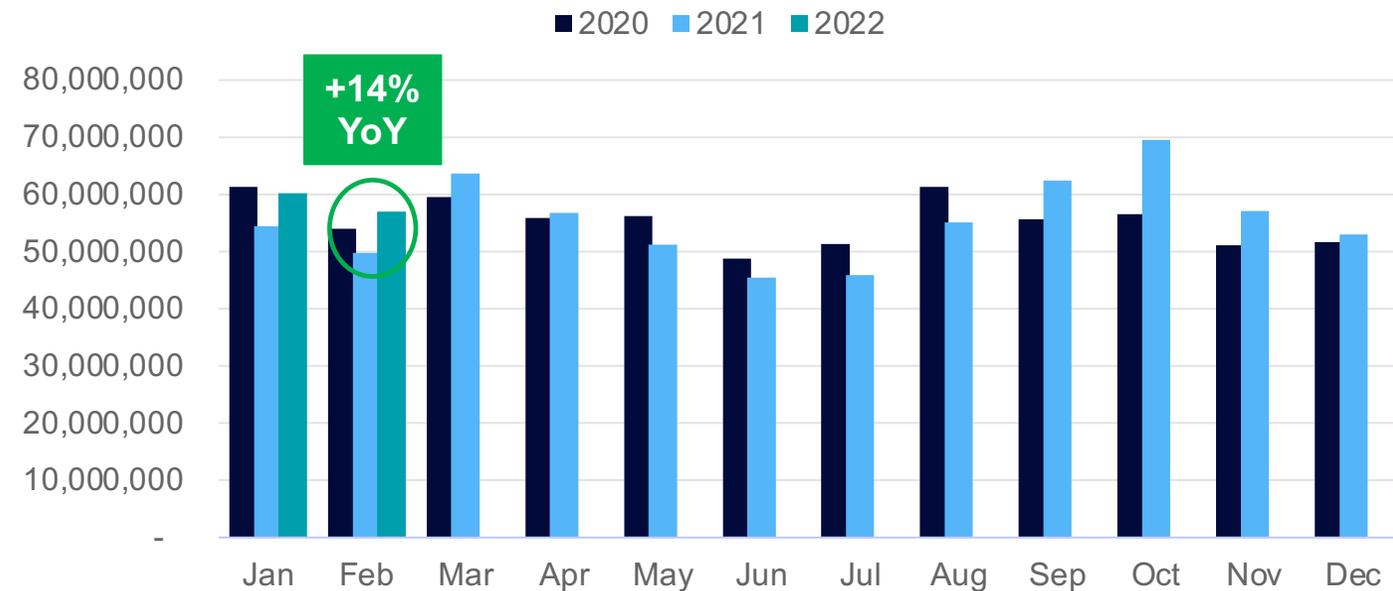
Google Brand Search

Searches for college brands rose 14% in February.

- Searches for higher-education brands have risen every month since August.



Google Search Volume for Brands



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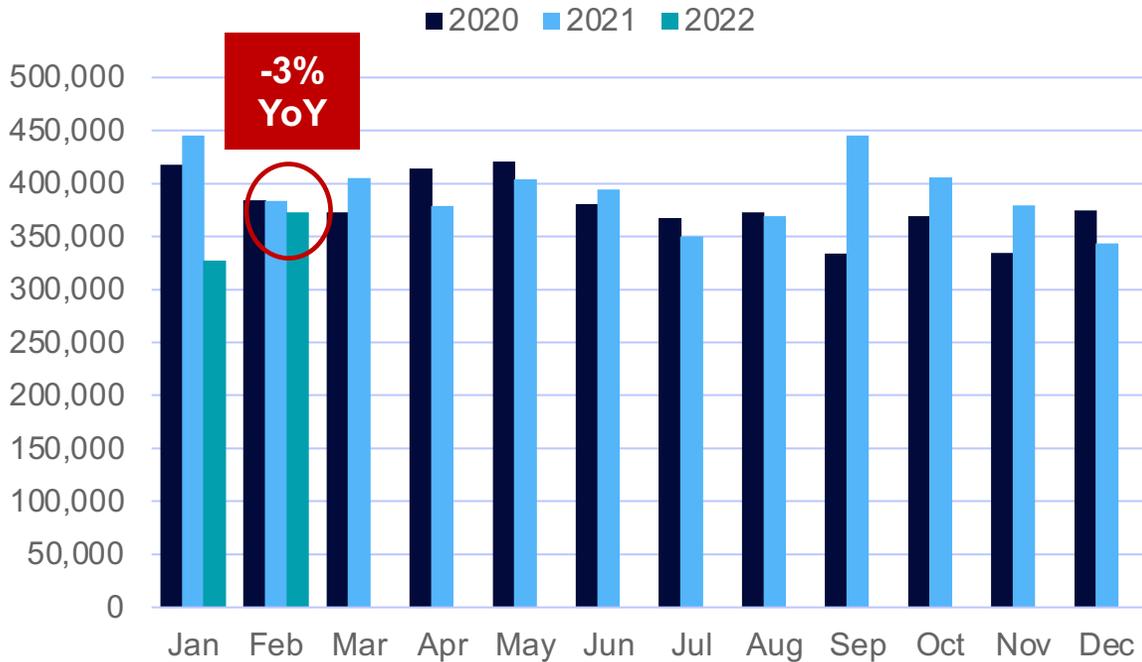
Summary

International Student Demand

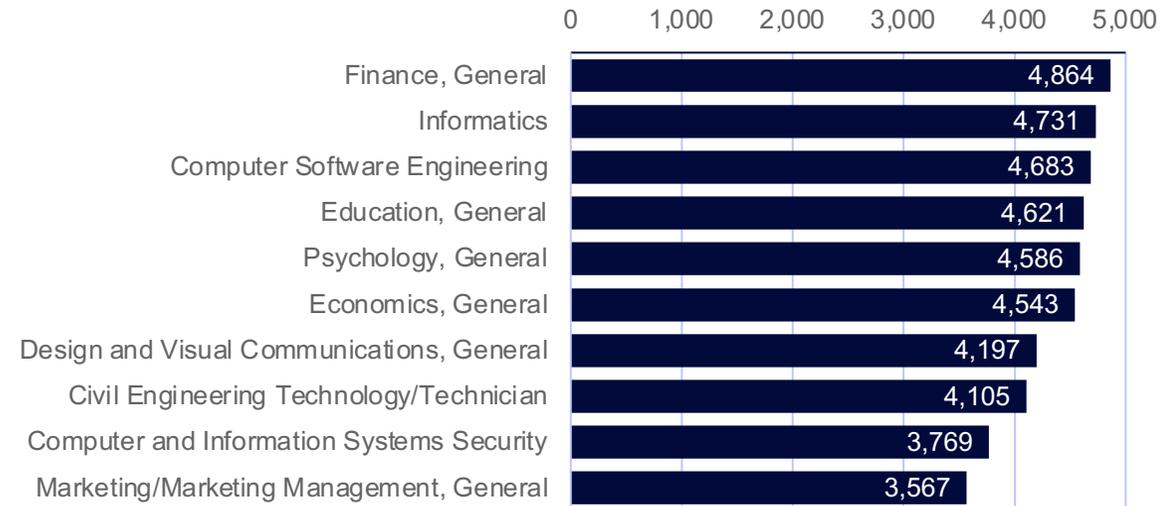
International student interest in U.S. programs decreased 3% YoY in February.

Excluding the top 10, the most-viewed programs were Finance and Informatics.

International Page Views



Top 11-20 Programs: February 2022
International Page Views

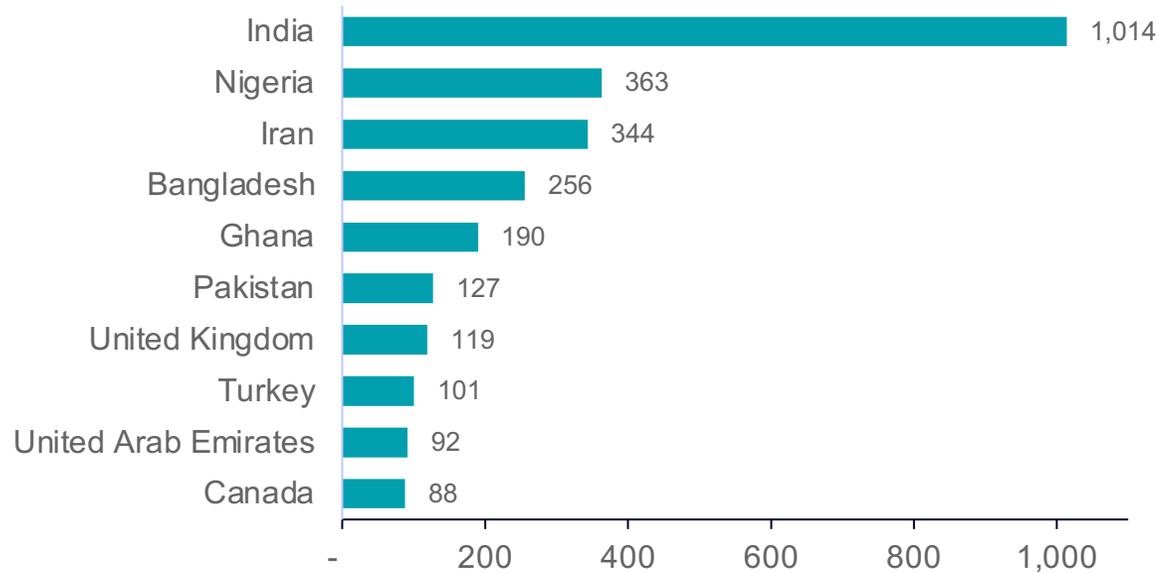


Source: Gray's International Student Demand Dashboard

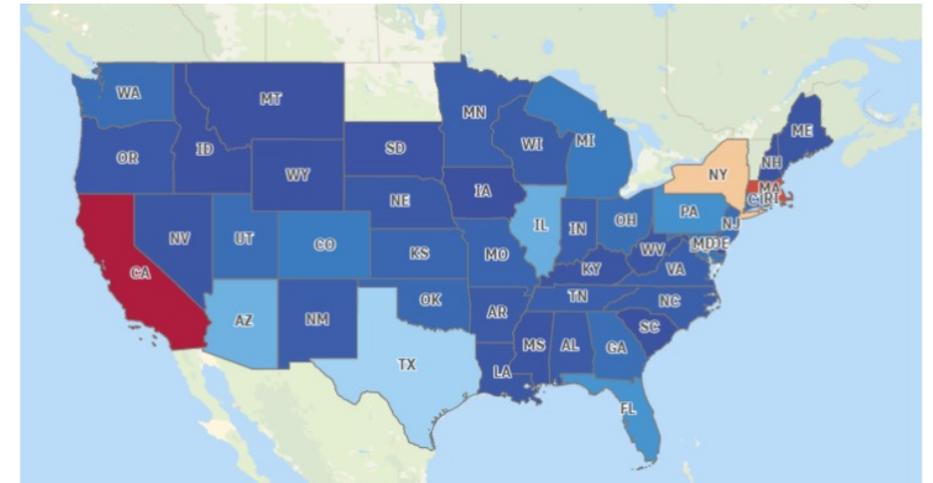
International Page Views: Finance

India led the page views for Finance.

International Page Views by Originating Country
Finance, February 2022



California was the most popular destination.



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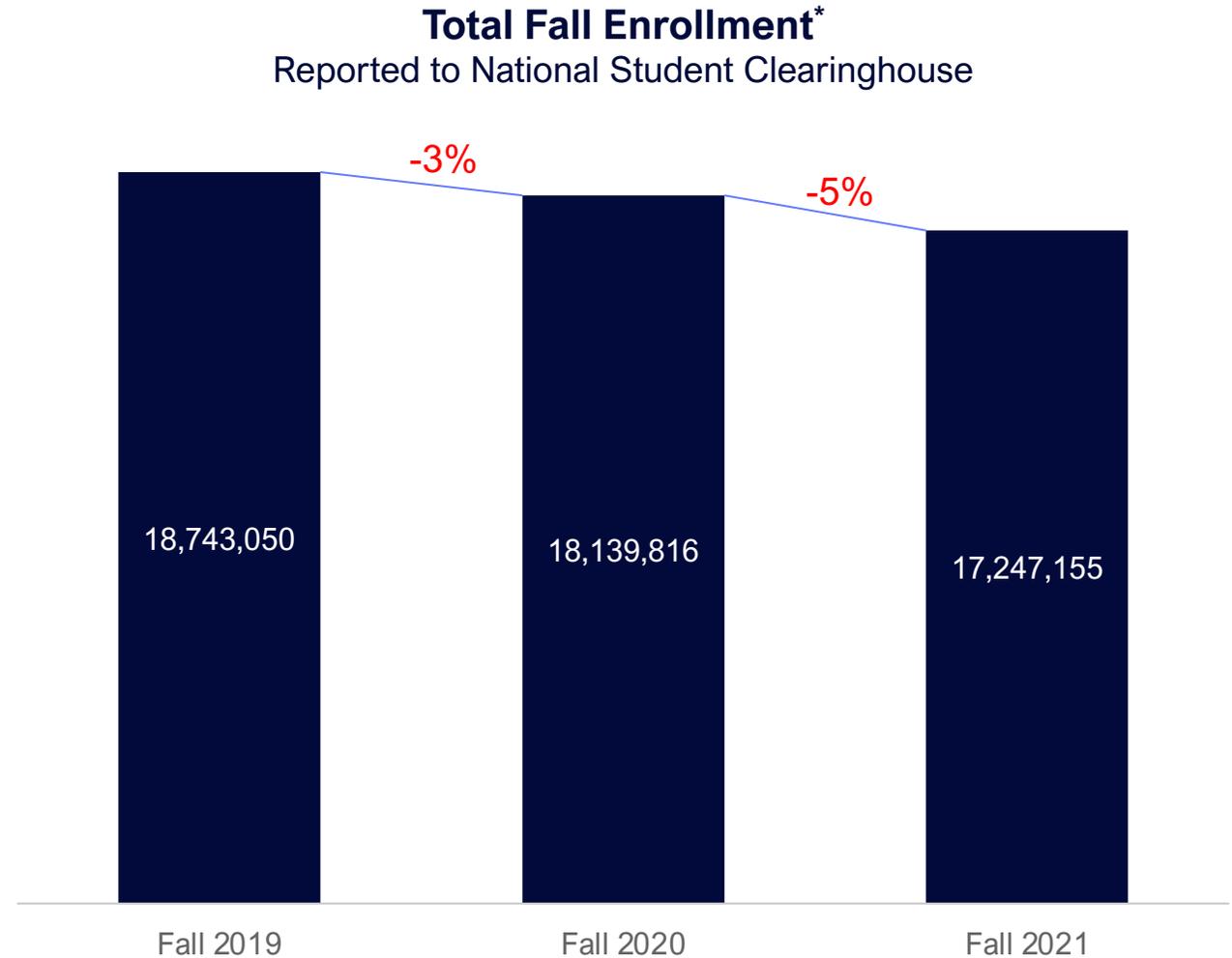
Non-Degree Courses

Program of the Month

Summary

Year-over-year enrollment in U.S. higher education was down by 5% in Fall 2021.

- Enrollment is down 1.5 million from 2019.



*Excludes Doctoral

Source: National Student Clearinghouse, Gray Analysis

Not all award-level enrollment declined.

- Enrollment in Master's degrees and Post-Master's certificates both increased year-over-year.
- Doctoral enrollment fell slightly.
- Bachelor's enrollment decreased 3%.
- Associate enrollment fell 10%.

2021 Fall Enrollment*



Source: National Student Clearinghouse, Gray Analysis

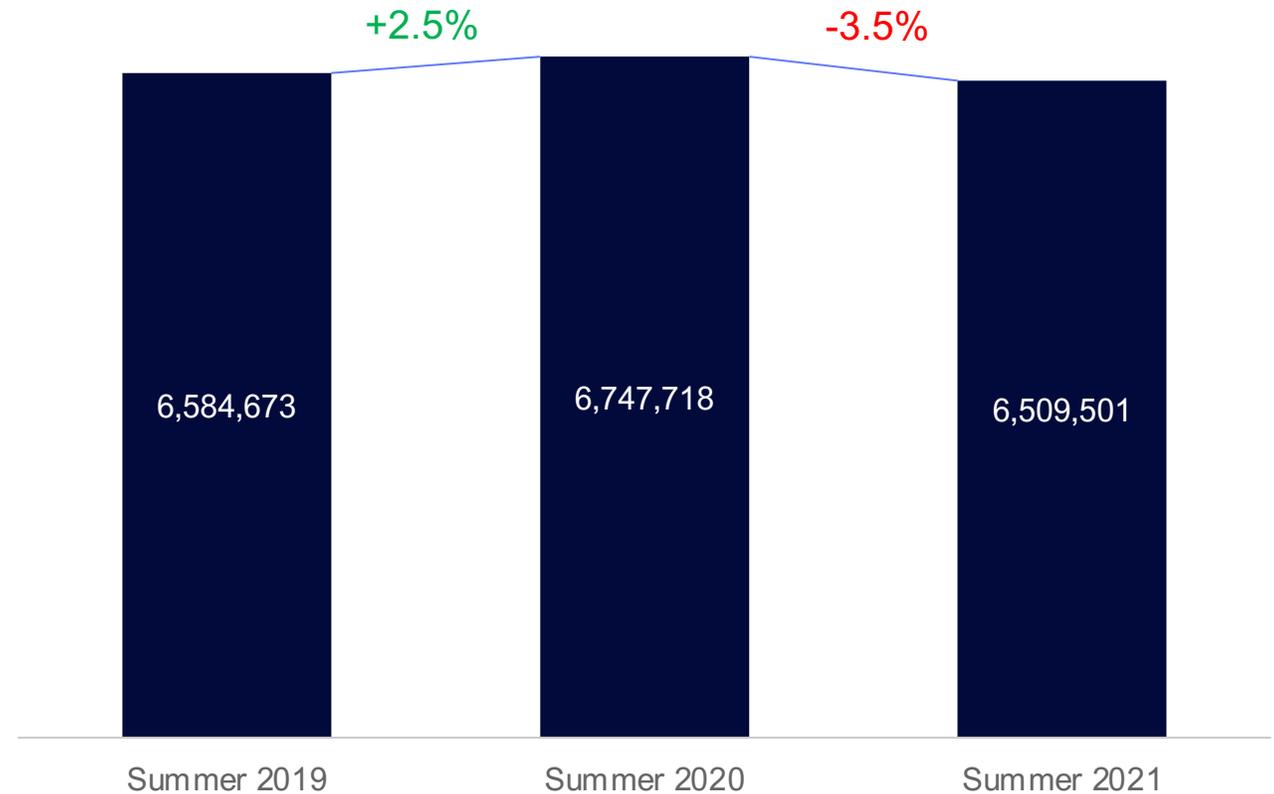
Total enrollment was down from Summer 2020 to 2021.

- Summer enrollment increased by 2.5% in 2020, but declined by 3.5% in 2021.

Position as “Planning for summer 2022”.

Spring 2022 will be the next data update we get in April.
ZP

Total Summer Enrollment*
Reported to National Student Clearinghouse



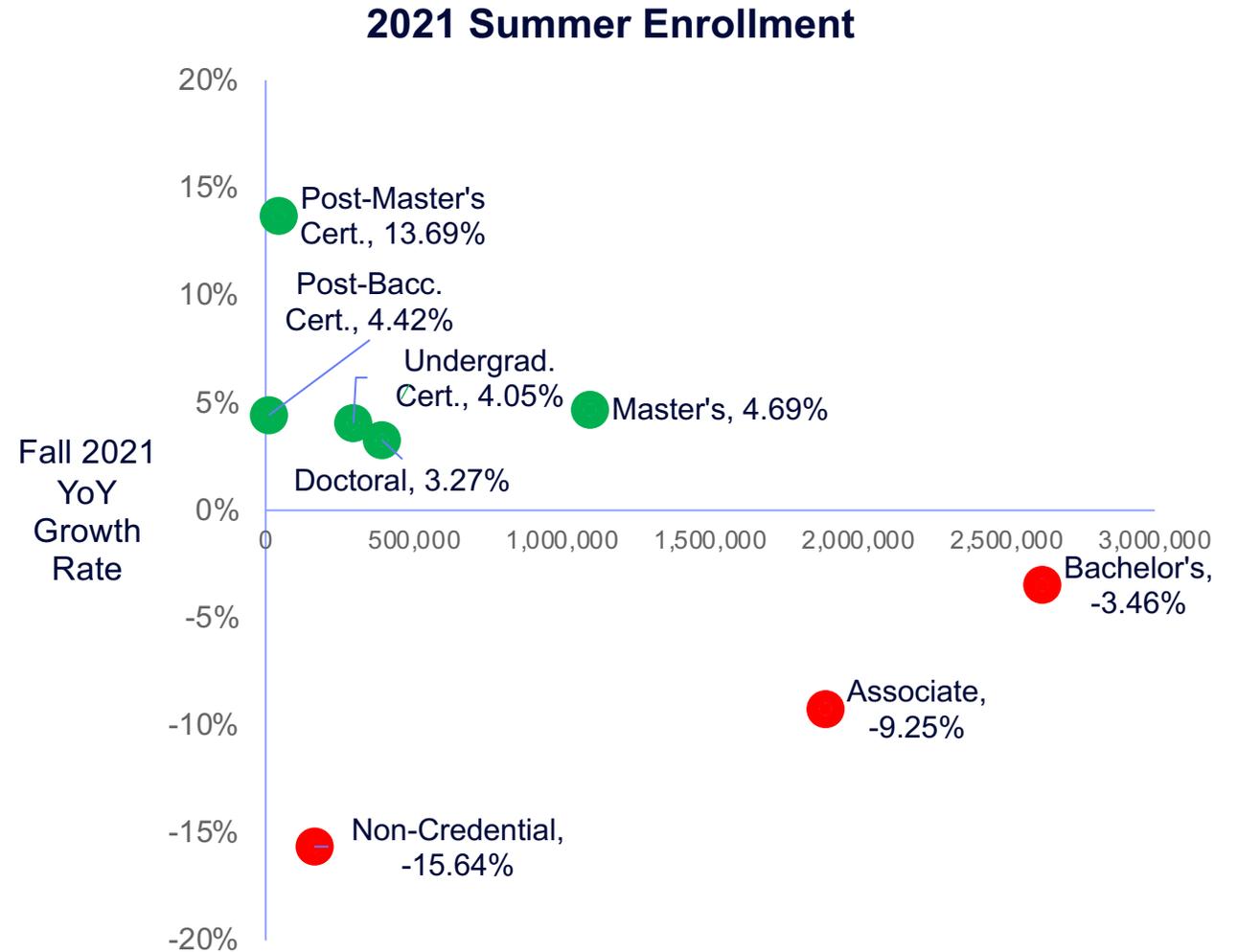
Source: National Student Clearinghouse, Gray Analysis

Many award levels increased enrollment during Summer 2021.

- Bachelor's, Associate, and Non-Credential programs declined year-over-year in summer 2021.

Position as "Planning for summer 2022".

Spring 2022 will be the next data update we get in April.
ZP



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International Student Demand

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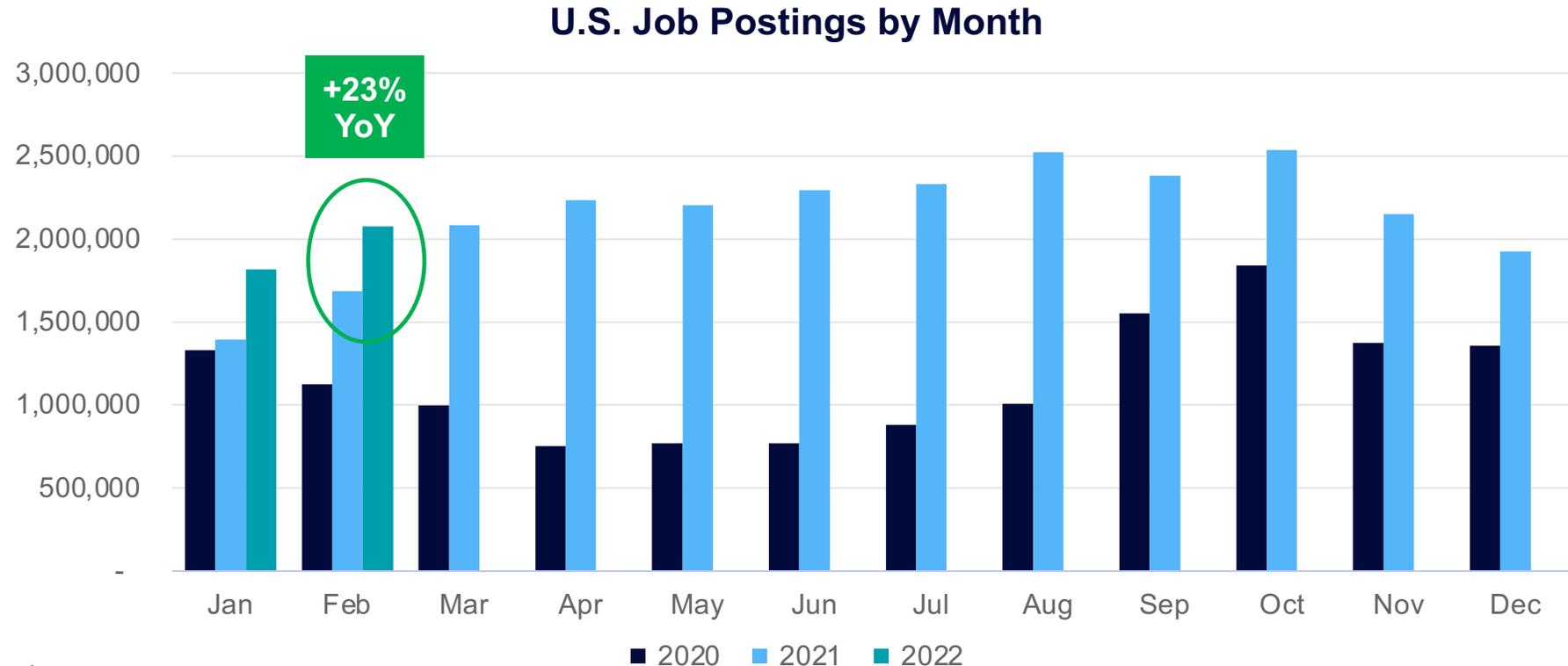
Employment Trends

Non-Degree Courses

Program of the Month

Summary

In February 2022, job postings grew 23% year-over-year.



Source: Gray's Job Postings Dashboard

Job Posting Volumes: February 2022

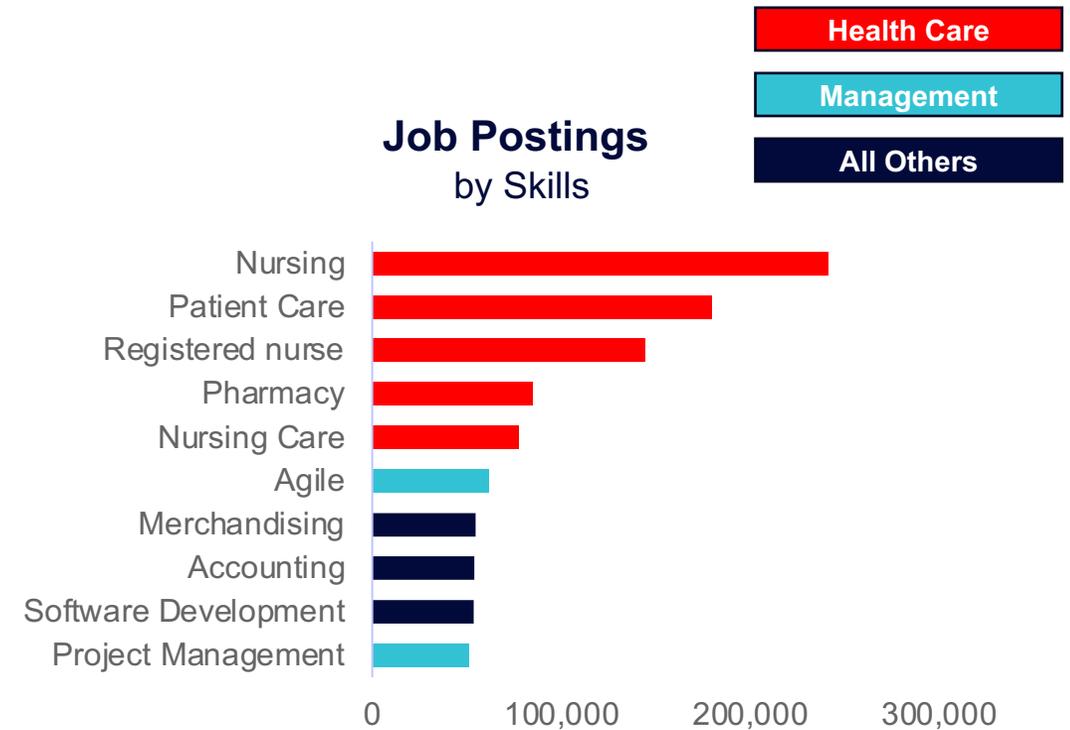
In February, the largest number of job postings requiring a post-secondary degree were for Registered Nurses.

The most in-demand skills were in Nursing.

Job Postings
by Standard Occupational Code



Job Postings
by Skills



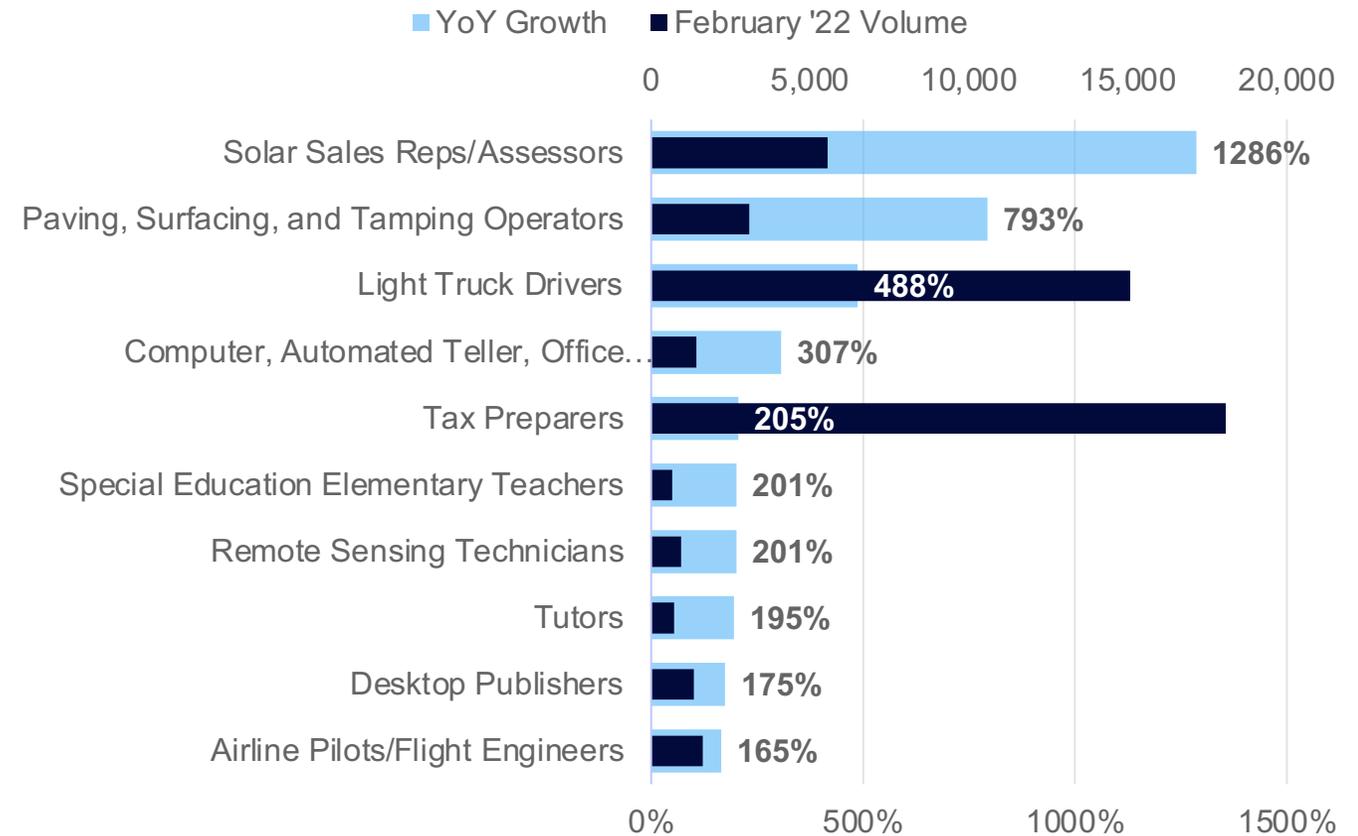
Prior year had minimum 500 jobs.
Excludes postings for retail jobs.
Source: Gray's Job Postings Dashboard

Job Postings Trends: February 2022

Solar Sales Representatives and Assessors increased 1286%.

- Demand for various technicians grew.
- Tax preparers had the highest volume of postings among the top ten.

February Job Postings 2021-22



Prior year had minimum 500 jobs.

Source: Gray's Job Postings Dashboard

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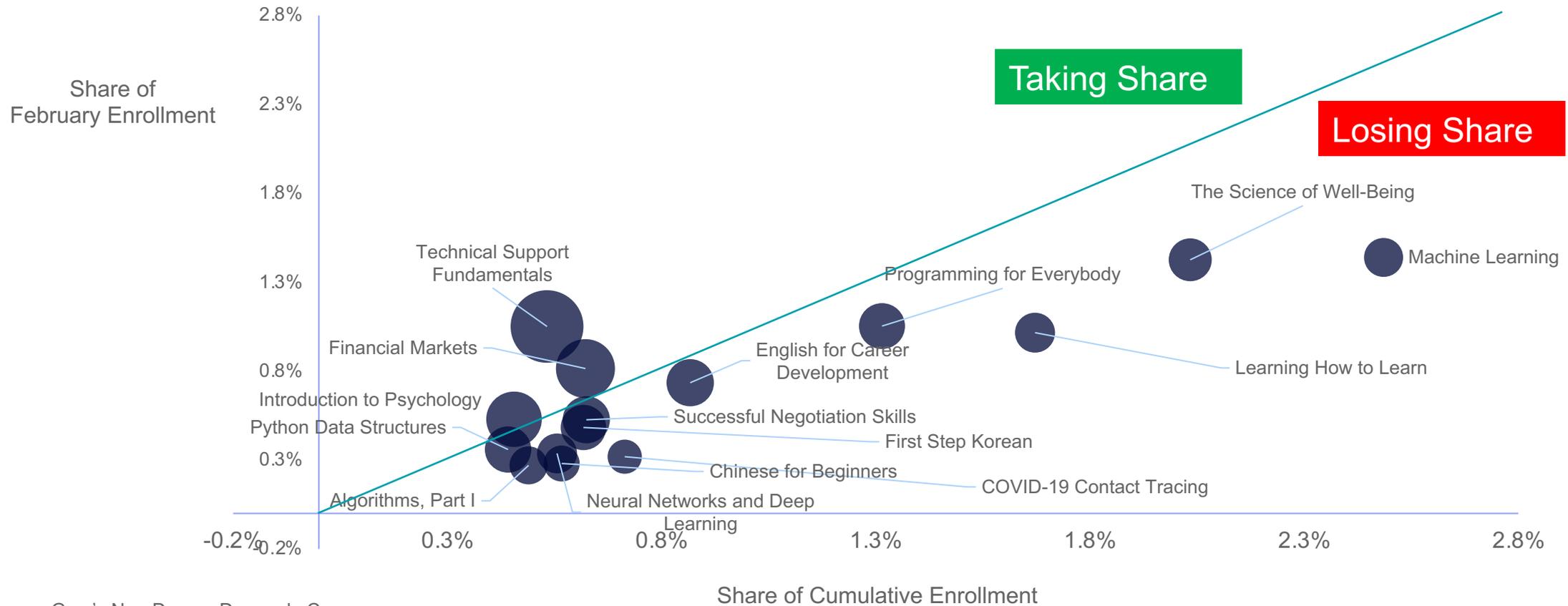
Non-Degree Courses

Program of the Month

Summary

Coursera: Largest Courses

February 2022 vs. Cumulative Enrollment



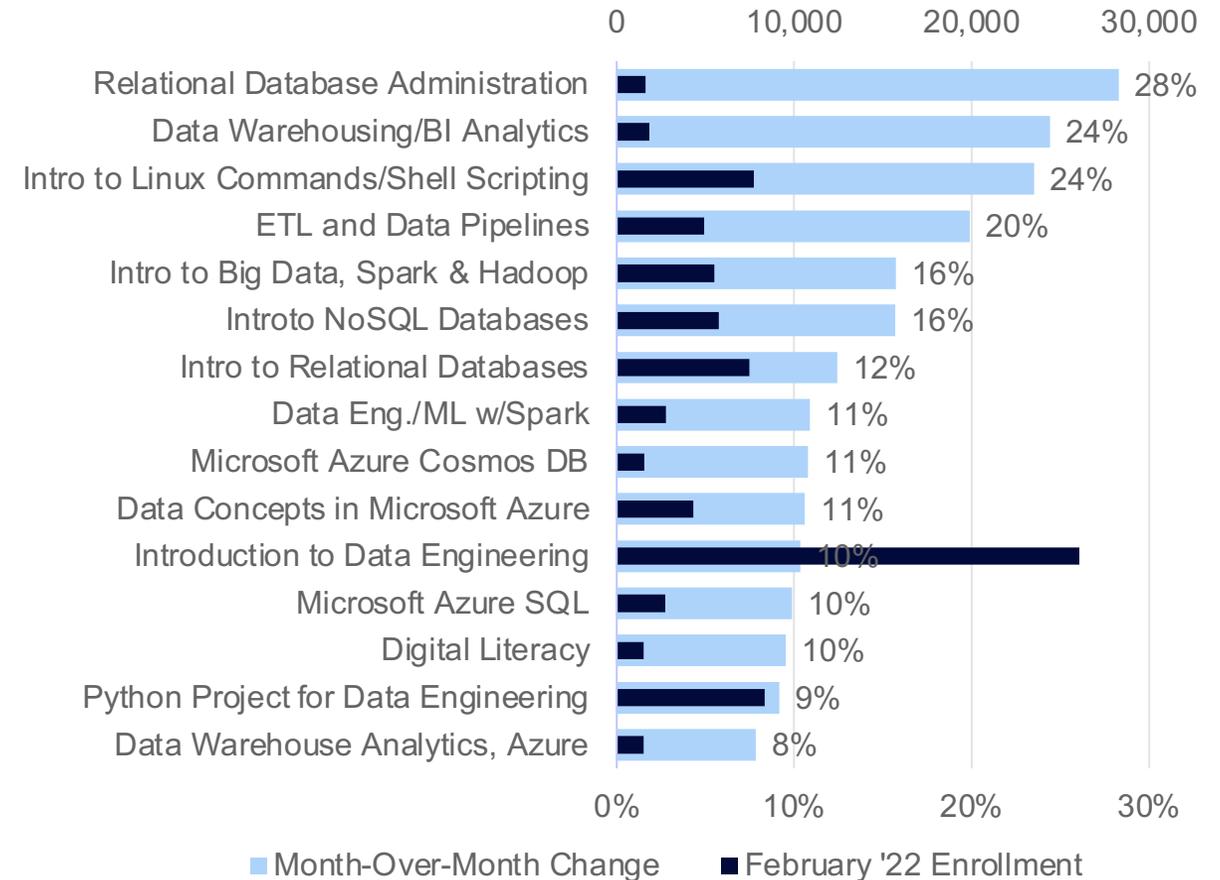
Source: Gray's Non-Degree Demand: Coursera

Data Management grew 53%.

This was the fastest-growing Coursera category.

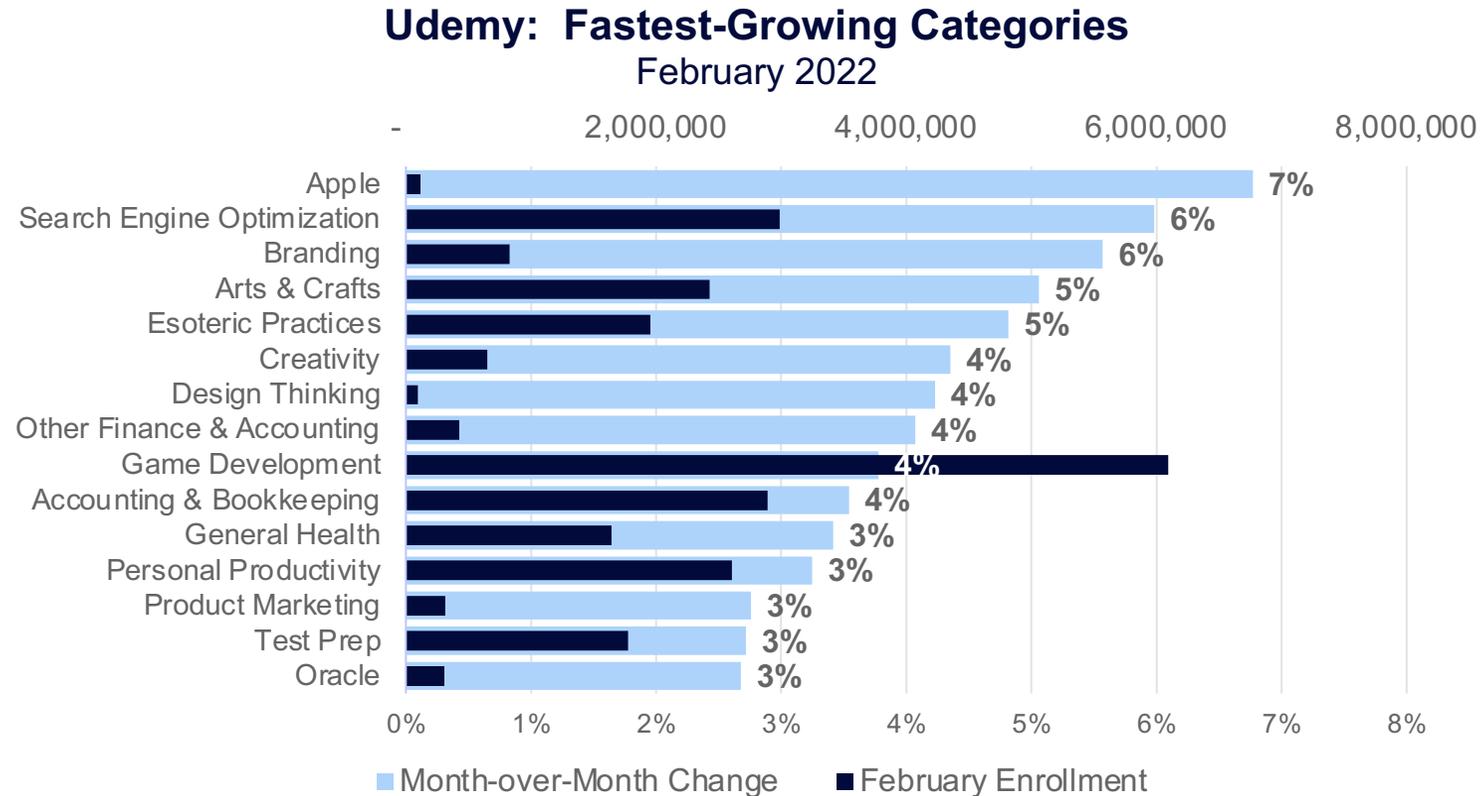
- Within the category, enrollment in the course Relational Database Administration grew 28% month-over-month.
- Introduction to Data Engineering dwarfs the other courses for February enrollment.

Enrollment and Month-Over-Month Change Data Management Category



Udemy: Fastest-Growing Categories

On Udemy, only two of the fastest-growing categories are in software.



Source: Gray's Non-Degree Demand: Udemy

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Google Search

International Student Demand

Enrollment

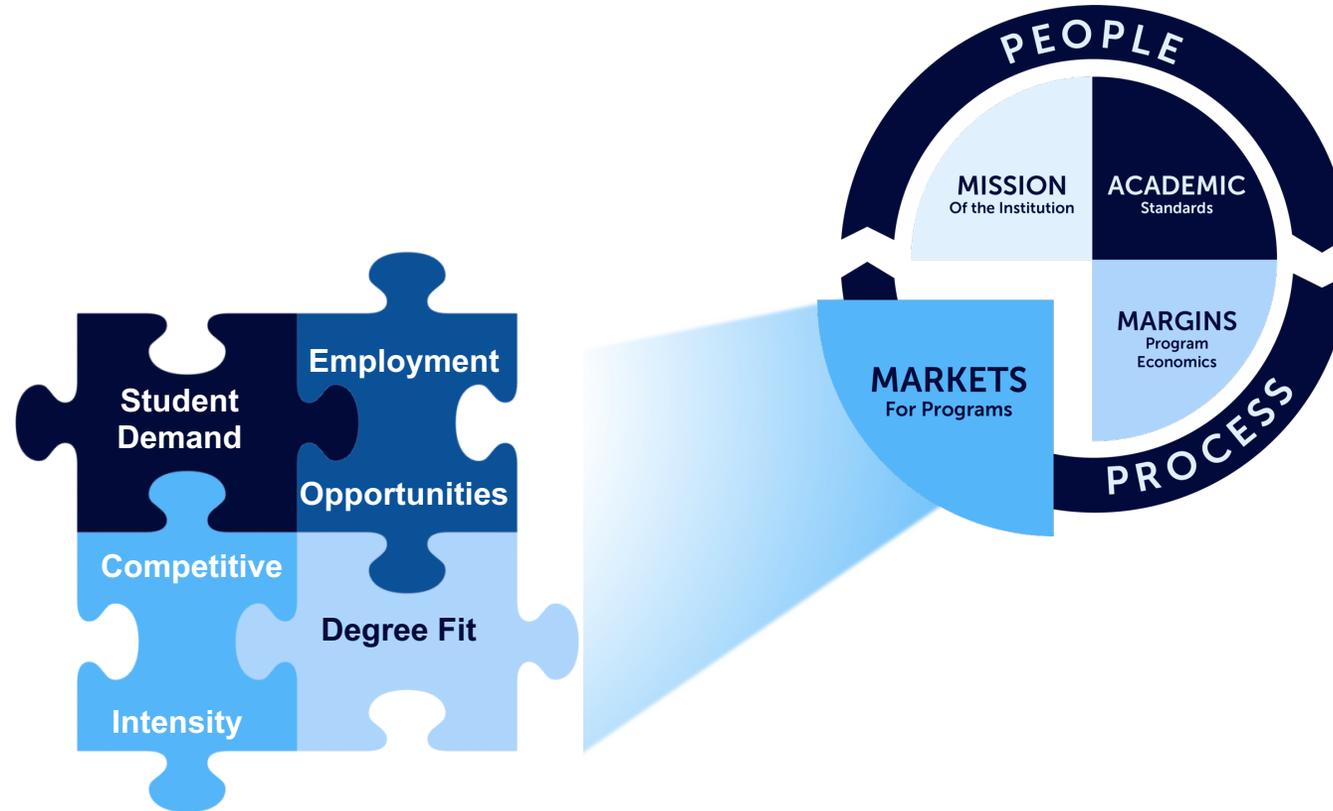
Employment Trends

Non-Degree Courses

Program of the Month

Summary

Integrated Program Evaluation



Program Markets: Program Rank

We score on Student Demand, Employment, Competitive Intensity, and Degree Fit.

- Let's focus on the Bachelor's of Econometrics and Quantitative Economics.

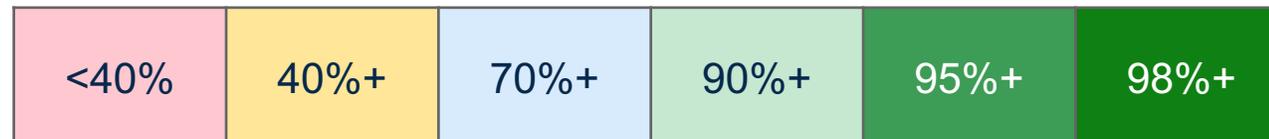
National Program Ranking Bachelor's Award Level

CIP	Total Percentile	Student Demand Percentile	Competitive Intensity Percentile	Employment Percentile	Degree Fit Percentile
51.3801 Registered Nursing	100	100	96	97	50
26.0101 Biology/Biological Sciences, Gen'l	99	99	93	88	50
52.0201 Business Admin. and Mgmt, General	99	99	86	92	50
52.0801 Finance, General	99	99	37	99	50
11.0701 Computer Science	99	99	37	92	50
52.0301 Accounting	99	99	18	98	50
14.1901 Mechanical Engineering	99	98	93	99	50
14.0801 Civil Engineering, General	99	98	90	99	50
30.7102 Business Analytics	99	98	50	95	50
45.0601 Economics, General	99	98	37	96	50
52.0203 Logistics, Materials, and Supply Chain Mgmt	99	98	37	95	50
14.1001 Electrical/Electronics Engin'g	99	97	29	98	50
45.0603 Econometrics and Quantitative Economics	99	96	97	95	50
14.0501 Bioengineering and Biomedical Engineering	99	96	95	94	50
01.0901 Animal Sciences, General	99	95	99	82	50
14.0201 Aero/Astro/Space Engineering	99	95	98	99	50
14.3501 Industrial Engineering	99	94	96	97	50
14.0701 Chemical Engineering	99	92	98	96	50
11.0103 Information Technology	98	99	10	92	50

Program Scorecard: Percentiles

All data are color-coded by their percentile rank in the local market compared to over 1,400 IPEDS programs (CIP codes).

Percentile Color-Code:



Program Scorecard: Student Demand

Econometrics scores in the 98th percentile for Student Demand.

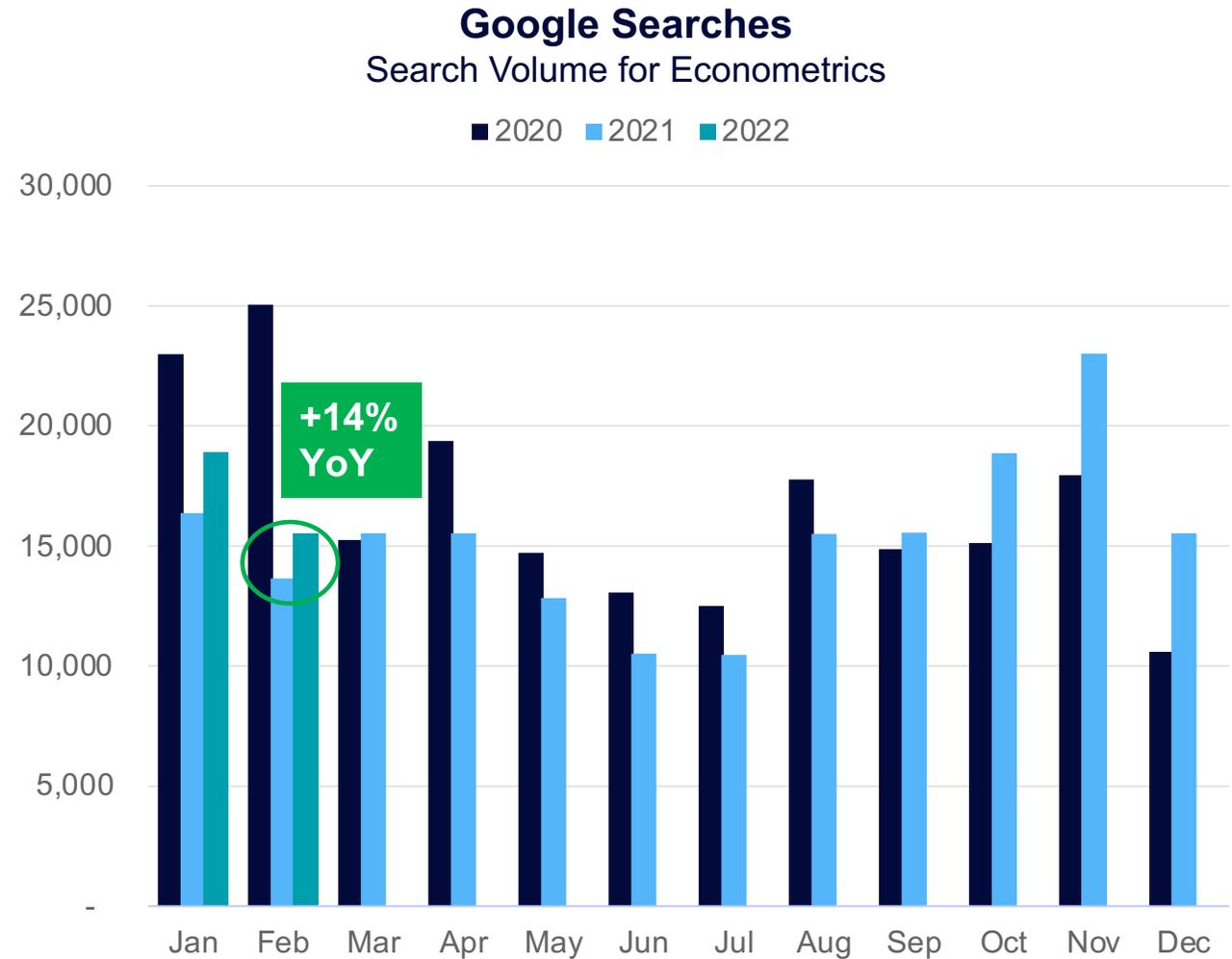
- A good number of international students are interested in Econometrics programs in the U.S.
- Google search volume is moderate but grew 32% year-over-year.
- Completions are strong for this program.
 - Completions are mostly on-campus.
 - Completion volume grew 35% year-over-year.

Student Demand				
Score: 21 Percentile: 98				
Catego...	Pctl	Criterion	Value	Score
Size	0	Inquiry Volume (12 Months)	0	0
	90	Int'l Page Views (12 Months)	177	NS
	40	Google Search Volume (3 Months)*	57,410	2
	98	On-ground Completions at In-Market Institutions	12,025	8
	83	Online Completions by In-Market Students	41	1
	98	Sum of On-ground and Online Completions	12,066	4
Growth	95	Inquiry Volume YoY Change (Units)	0	NS
	83	Google Search YoY Change (Units)*	13,742	1
	99	Completion Volume YoY Change (Units)	3,126	3
		Inquiry Volume YoY Change (%)	NA	NS
	95	Google Search YoY Change (%)*	32%	1
	90	Completion Volume YoY Change (%)	35%	1

Google Searches: Econometrics

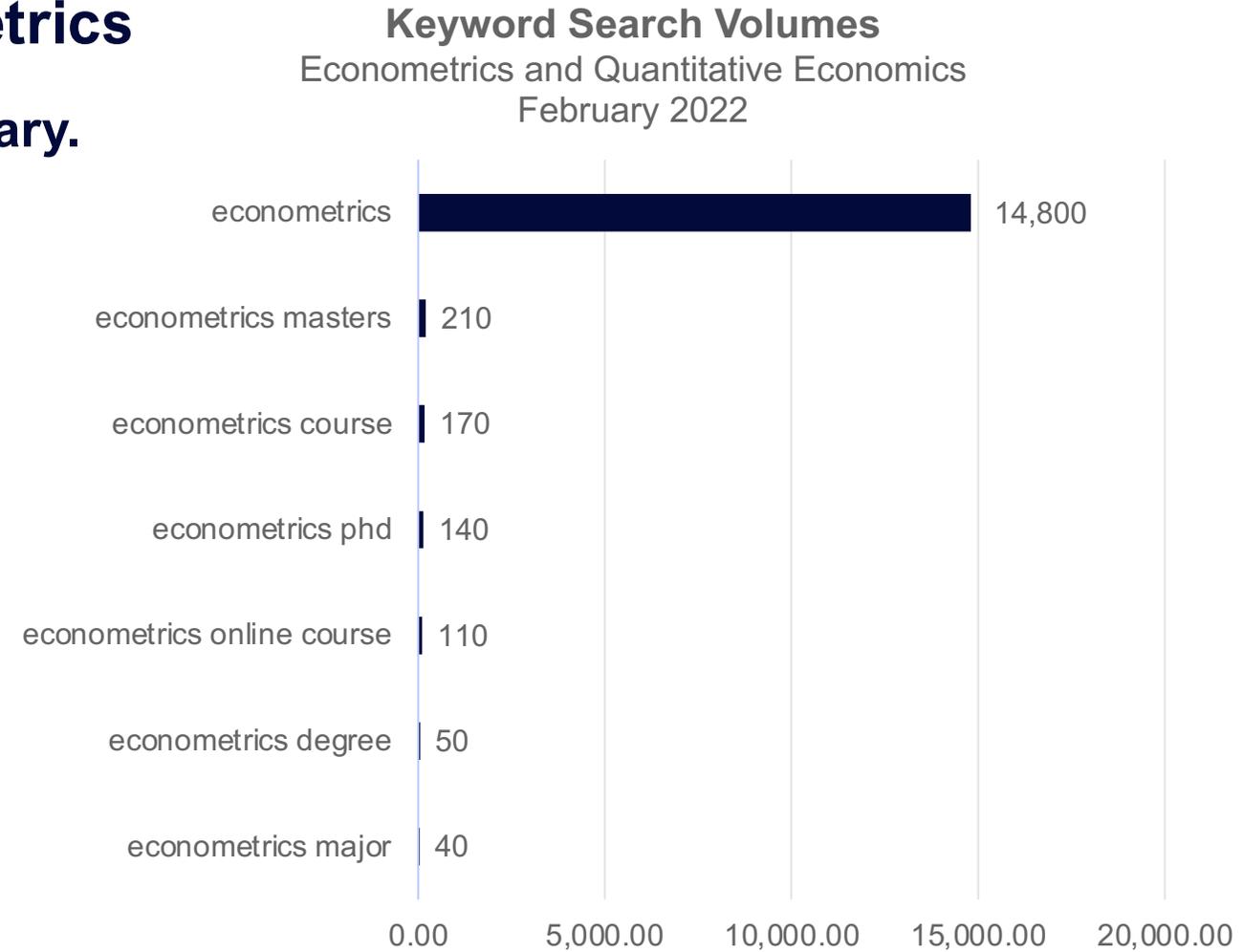
Searches for Econometrics programs rose 14% year-over-year in February.

- Searches for this program have been rising since September 2021.



Most-Searched Keywords: Econometrics

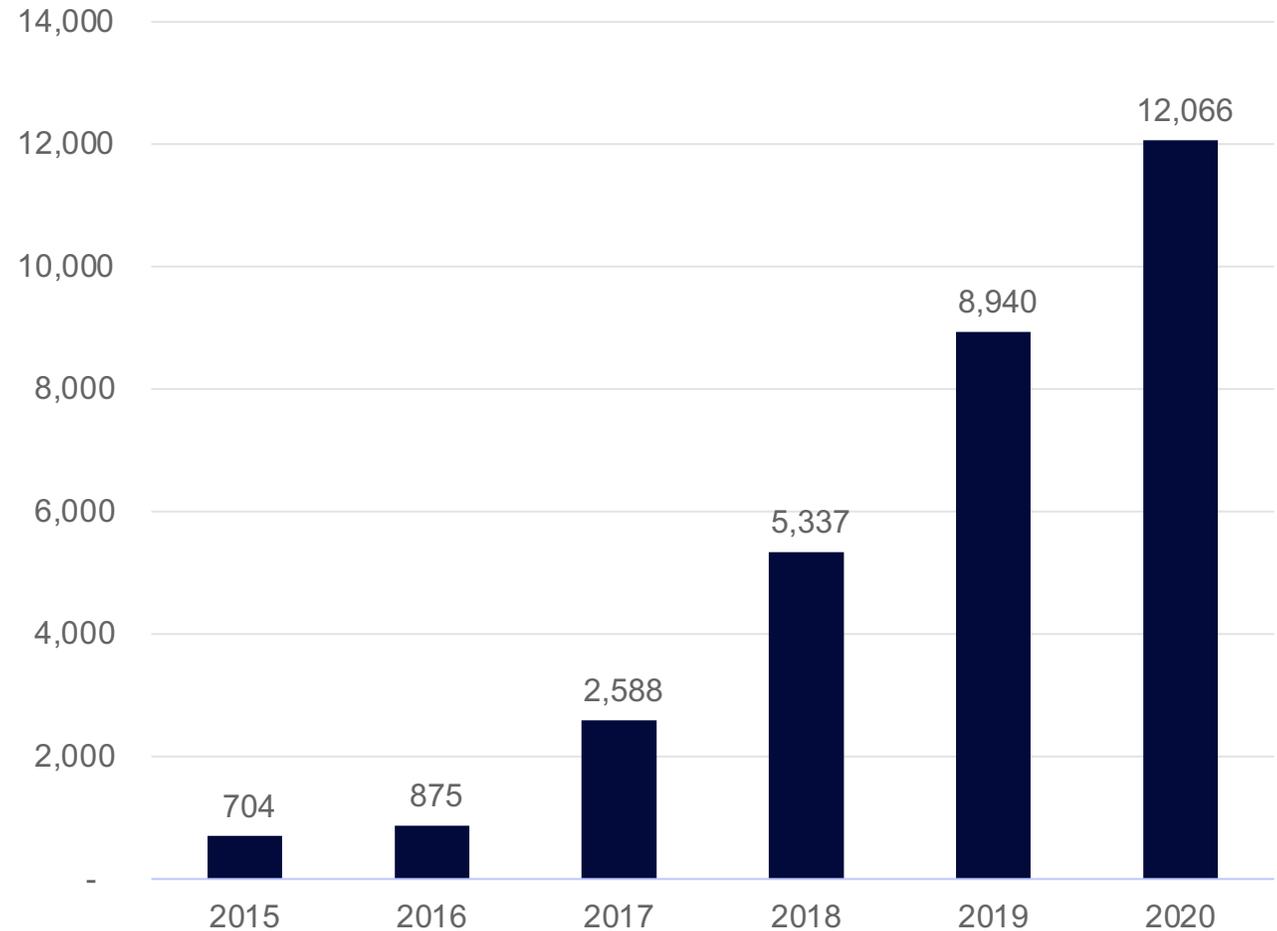
Econometrics had 14,800 searches in February.



Bachelor's Degrees in Econometrics and Quantitative Economics (CIP 45.0603)

The compound annual growth rate in Bachelor's completions in Econometrics was 77% from 2015 to 2020.

Bachelor's Degrees Awarded



Schools with Most Growth in Bachelor's Econometrics

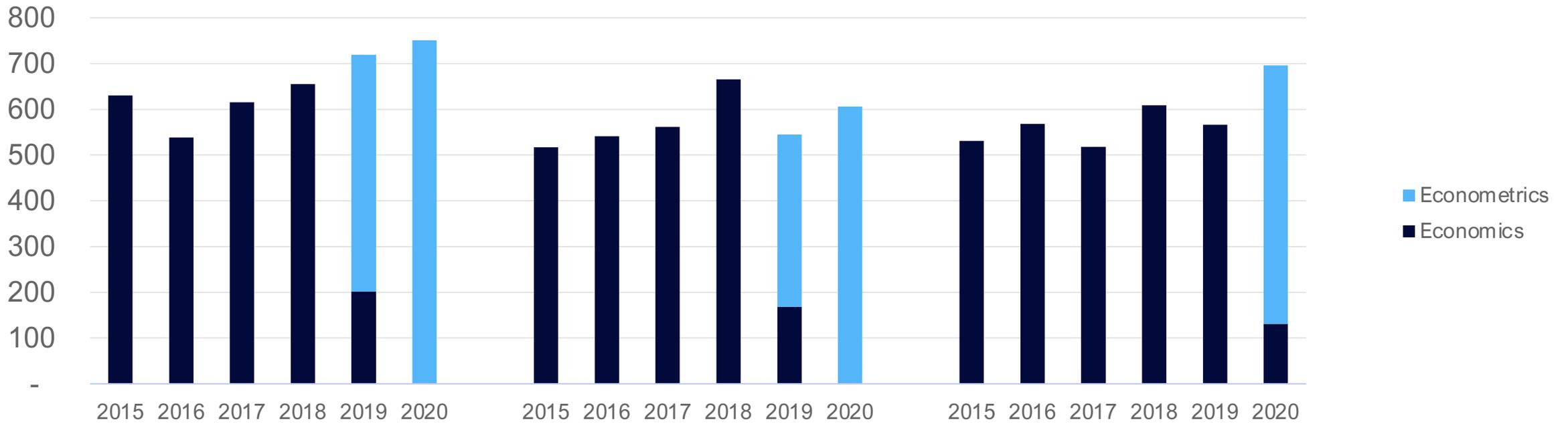
In 2017, programs began appearing mature at launch.

Campus	Q	2015 Completions	2016 Completions	2017 Completions	2018 Completions	2019 Completions	2020 Completions	5-year Unit Change
University of California-Berkeley		0	0	0	0	517	751	751
University of California-Davis		0	0	0	0	377	606	606
University of California-Los Angeles		0	0	0	0	0	565	565
New York University		0	0	437	475	413	464	464
University of Chicago		0	0	366	349	404	423	423
University of California-San Diego		0	0	0	0	299	403	403
University of California-Santa Barbara		313	365	387	362	582	703	390
Northwestern University		0	0	0	382	364	331	331
Columbia University in the City of New York		7	9	43	270	290	311	304
Boston College		0	0	0	0	357	304	304

Top Three Schools in Bachelor's Econometrics and Quantitative Economics

UC Berkeley, UC Davis, and UCLA no longer report their programs to the "Economics, General" CIP code.

Bachelor's Completions in General Economics and in Econometrics



The Real Story: STEM Qualification

The Economics CIP code (45.0601) is not STEM-qualified, but Econometrics (45.0603) is.

- Foreign students who graduate from a STEM-qualified program are allowed to work in the U.S. for three years after graduation. That compares with only one year for other programs.
- Foreign students represent a high share of these programs:
 - 26% of Bachelor’s Econometrics graduates
 - 63% of Master’s Econometrics graduates (which saw a similar shift from Economics)
 - 65% of Doctoral Economics graduates (which saw a similar shift from Economics)
- This pattern is not unique to Economics and Econometrics.
 - From 04.0201 Architecture to 04.0902 Architectural and Building Sciences/Tech (45% foreign for Master’s)
 - From 52.0801 Finance to 30.7104 Financial Analytics (72% foreign for Master’s)

Program Scorecard: Employment

Econometrics ranks in the 95th percentile for Employment.

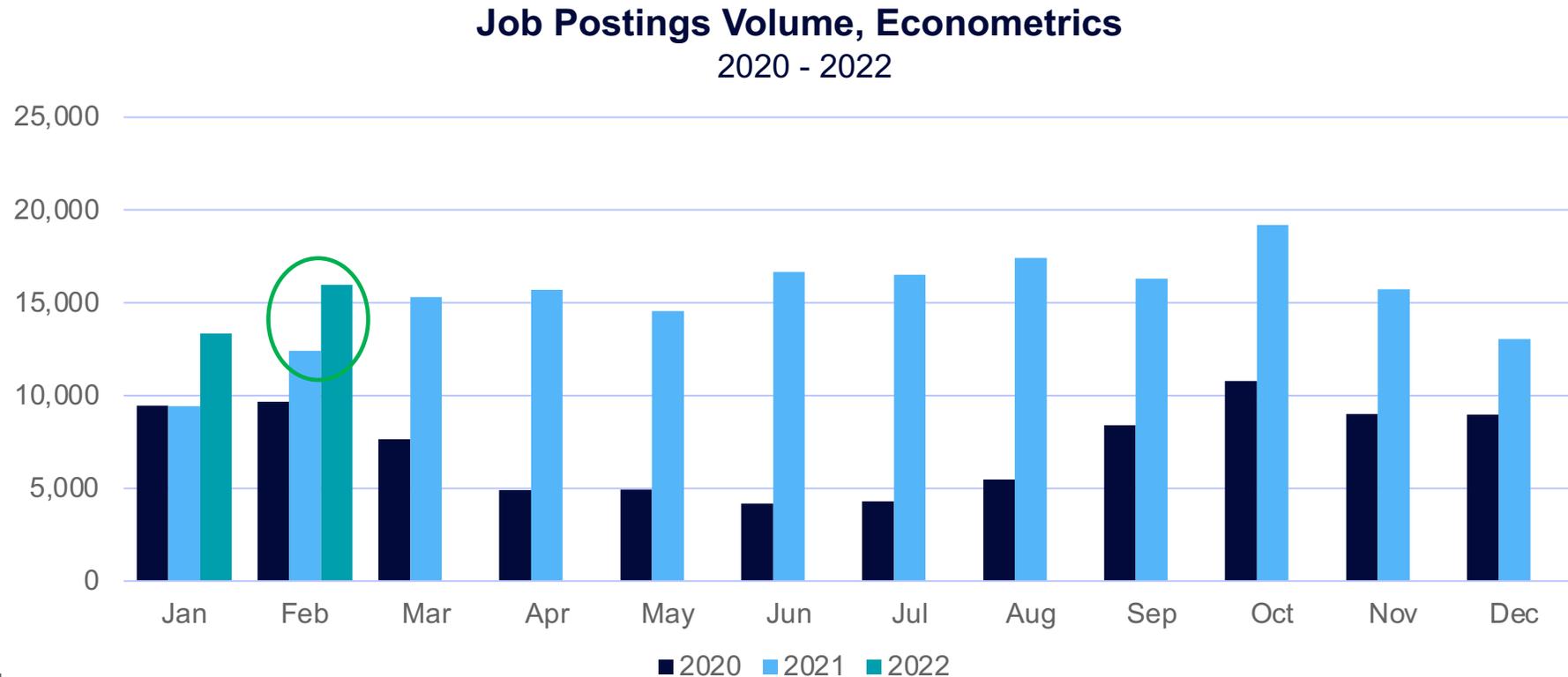
- Total job postings are strong for graduates with a Bachelor's degree.
- Saturation is high.
- ACS Wages for Econometrics graduates are in the 96th percentile.
- Unemployment rates are high.

Employment*

Score: 11 Percentile: 95

Category	Pctl	Criterion	Value	Score
Size: Direct Prep	78	Job Postings Total (12 Months)*	10,936	1
	74	BLS Current Employment*	35,448	0
	74	BLS Annual Job Openings*	3,402	NS
Size: Bachelors with ACS	94	Job Postings Total (12 Months)*	26,275	NS
	94	BLS Current Employment*	122,287	NS
Growth (Direct Prep)	72	BLS 1-Year Historical Growth*	-0.7%	NS
	44	BLS 3-Year Historic Growth (CAGR)*	0.2%	-1
	88	BLS 10-Year Future Growth (CAGR)*	1.6%	0
Saturation (Direct Prep)	37	Job Postings per Graduate*	0.7	-1
	40	BLS Job Openings per Graduate*	0.3	NS
Wages (Direct Prep)	56	BLS 10th-Percentile Wages*	\$41,280	NS
	61	BLS Mean Wages*	\$70,991	NS
American Community Survey Bachelor's Degree Outcomes	96	Wages (Age < 30)	\$66,468	9
	98	Wages (Age 30-60)	\$152,279	6
	62	% with Any Graduate Degree	45%	NS
	64	% with Masters	30%	NS
	75	% with Doct/Prof Degree	15%	NS
	86	% Unemp. (Age < 30)**	4%	-2
	73	% Unemp. (Age 30-60)**	2%	-1
	66	% in Direct Prep Jobs	12%	NS

In February, job postings for Econometrics graduates rose 29% year-over-year.



Job Postings: Econometrics

In February, Program Analysts with Excel skills were in high demand.

- SQL and Data Analysis skills were also in high demand.

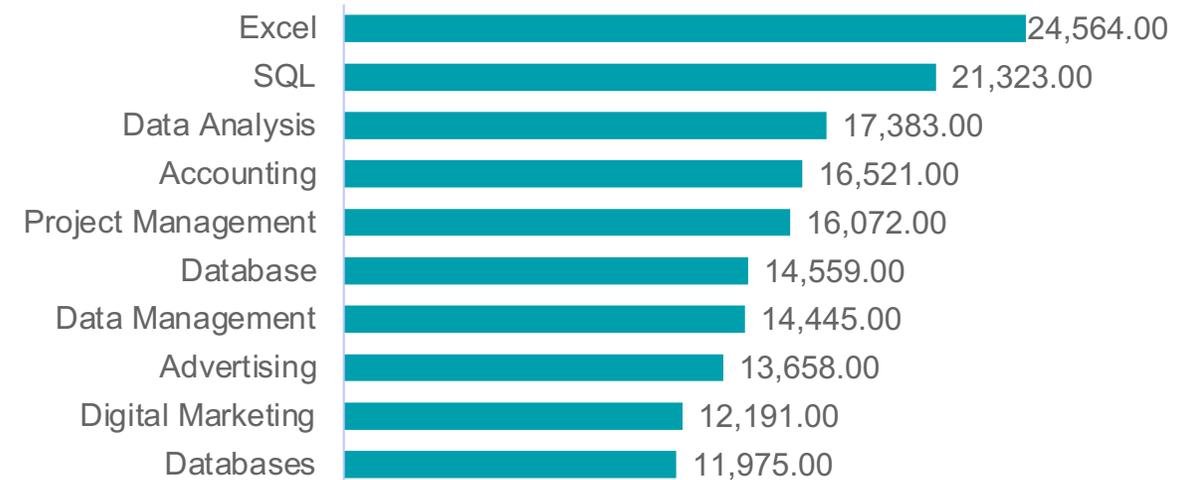
Top Job Postings, Econometrics

February 2022



Top Skills, Econometrics

February 2022



Program Scorecard: Competitive Intensity

Econometrics is in the 98th percentile for Competitive Intensity.

- Students complete this program at 122 institutions.
 - Many competitors have entered the market.
- Median program size is high and growing.
- Google cost-per-click is cheap.
- Only 2 institutions offer the program online.

Competitive Intensity Score: 8 Percentile: 98

Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	92	Campuses with Graduates**	122	-4
	99	Campuses with Grads YoY Change (Units)**	25	-3
	0	Institutions with Online In-Market Students**	0	NS
In-Market Program Sizes	99	Average Program Completions	99	6
	96	Median Program Completions	46	4
	96	YoY Median Prog. Compl. Change (Units)	6	2
In-Market Saturation	80	YoY Median Prog. Compl. Change (%)	15%	1
		Average Cost per Inquiry**	NA	NS
	7	Google Search * Cost per Click**	\$2	1
National Online Competition	0	Google Competition Index**	0.02	1
	81	National Online Institutions (Units)**	2	NS
	61	Nat'l Online % of Institutions	2%	NS
	0	Nat'l Online % of Completions	0	NS

Program Scorecard: Degree Fit

A Bachelor's degree is an appropriate degree level for this program.

- 77% of completions are at the Bachelor's level.
- 38% of the national workforce hold a Bachelor's degree.

National Completions by Level

Score: 0

Award Level	Completions (National)
Certificate	0%
Associates	0%
Bachelors	77%
Postbaccalaureate Certificate	0%
Masters	18%
Post-masters Certificate	0%
Doctoral	5%
Unknown	0%

Degree Fit:

Score: 0 Percentile: 50

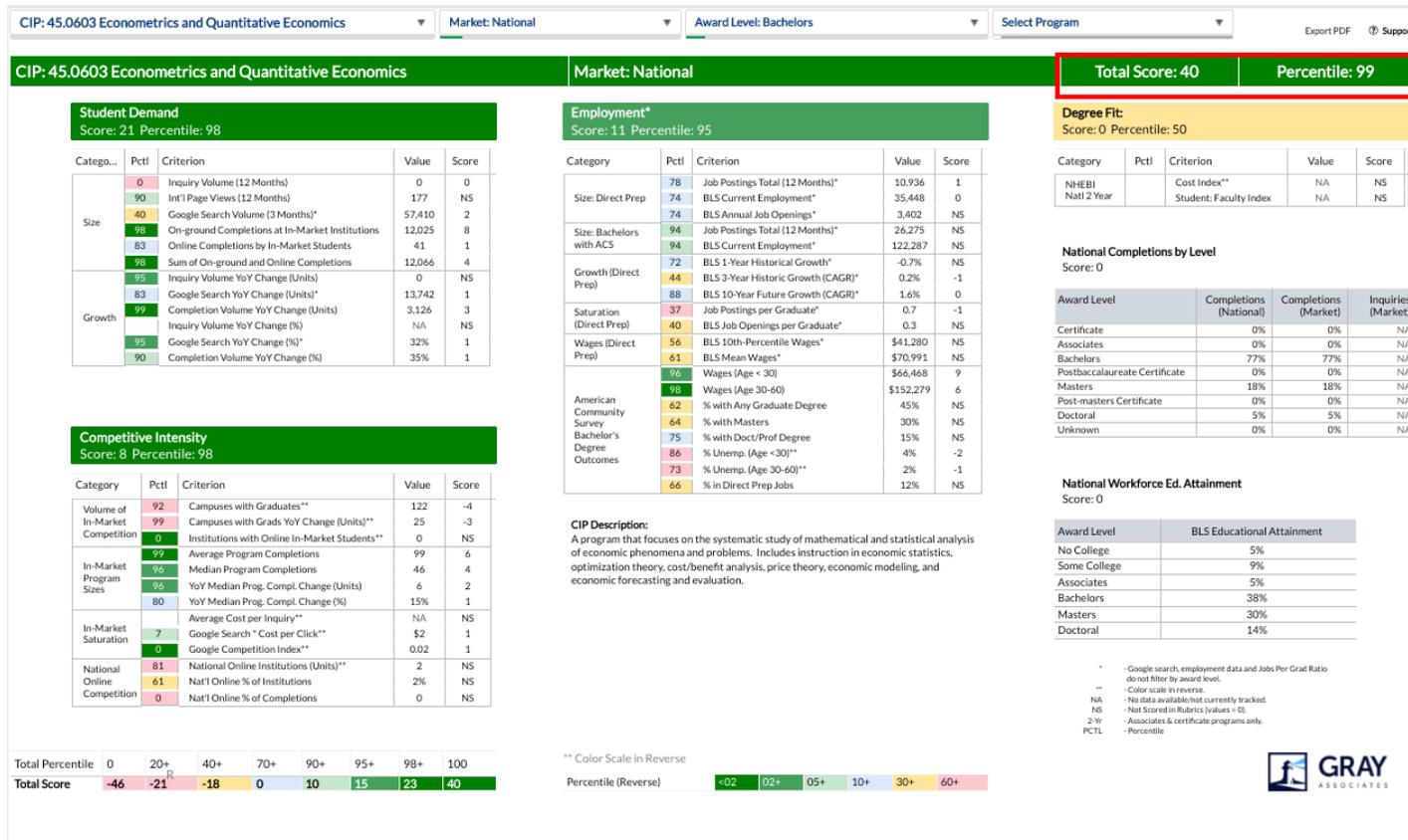
National Workforce Ed. Attainment

Score: 0

Award Level	BLS Educational Attainment
No College	5%
Some College	9%
Associates	5%
Bachelors	38%
Masters	30%
Doctoral	14%

Program Scorecard: Econometrics and Quantitative Methods

Econometrics ranks in the 99th percentile.



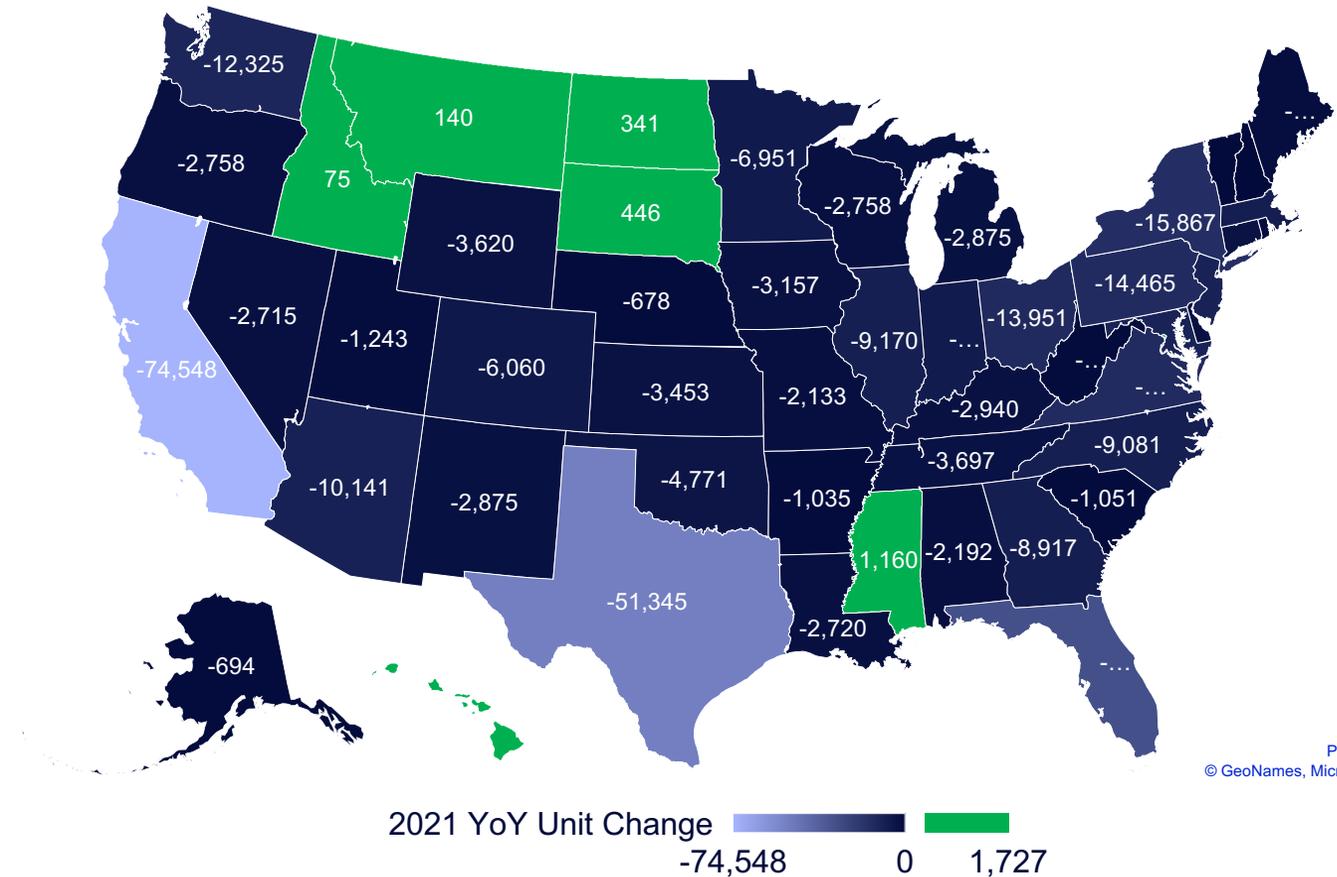
Seven states produced more enrolled students in Summer 2021 versus 2020.

- All other states declined.

States with Growing Enrollment

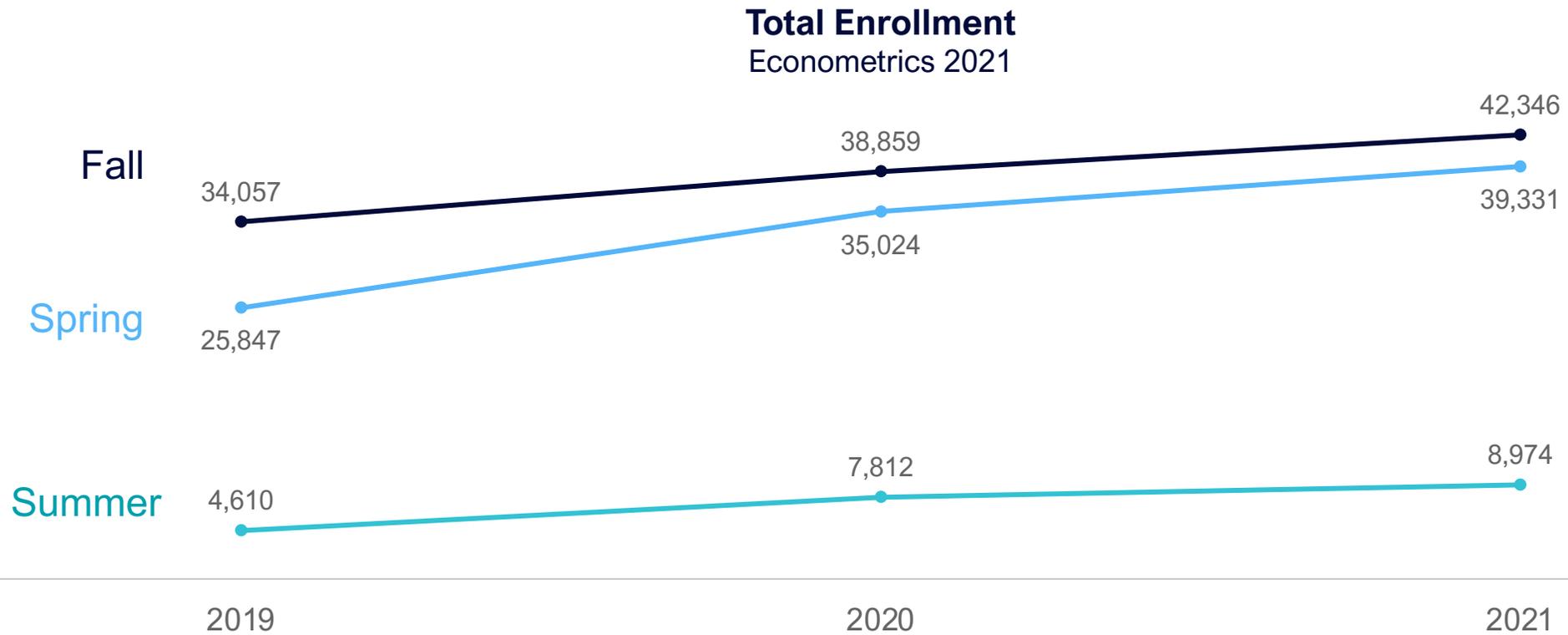
State	Summer 2021	YoY Unit Change
Hawaii	21,622	1,727
Mississippi	65,967	1,160
South Dakota	14,071	446
North Dakota	12,525	341
Montana	13,803	140
Idaho	25,353	75
District of Columbia	9,536	8

2021 Econometrics Enrollment by State



Powered by Bing
© GeoNames, Microsoft, TomTom

Econometrics enrollment has grown every term since 2019.



Source: National Student Clearinghouse, Gray Analysis

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- Google searches for programs declined 2% year-over-year in February.
 - Google searches for brands increased 14%.
- Fall 2021 enrollment declined 5% year-over-year.
 - Enrollment increased in Master's degrees and Post-Master's certificates.
- The highest volume of U.S. job postings was for health care workers.
 - Postings for solar sales reps and appraisers increased 1286% year-over-year.
- Market demand for Econometrics programs at the Bachelor's level is very high.
 - Enrollment has steadily grown since 2019.
- Foreign students represented a large share of Econometrics completions in 2020.
 - Program reporting in Economics may switch CIP codes to become STEM-qualified for foreign students.

Upcoming Webinars

Topic	Date
Master Class II: Reaching Curricular Efficiency	<i>Thursday</i> April 5 th at 2:00 pm ET
Demand Trends Webcast	<i>Thursday</i> April 28 th at 2:00 pm ET

Contact:
Robert Atkins
Robert.Atkins@grayassociates.com



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