



WEIAOB Meeting

Thursday, June 20, 2024

10:00 AM–12:00 PM



Meeting Agenda

- Call to Order and Introductions (*10 mins.*)
- Presentation: Aligning Education and Training Pathways to Economic Opportunities (*50 mins.*)
- Presentation: Overview of Higher Education Funding in Washington (*20 mins.*)
- Discussion: 2025 Legislative Strategy (*30 mins.*)
- Closing (*10 mins.*)



WEIAOB Members and Staff

- Jane Broom (Co-chair)
- Sen. T'wina Nobles (Co-chair)
- Sen. Jeff Holy
- Rep. Vandana Slatter
- Rep. Alex Ybarra
- Dr. Steven Ashby
- Charles Knutson
- Ruben Flores
- Paul Francis
- Dr. Terri Standish-Kuon
- Jeff Vincent
- Eleni Papadakis
- Mark Riker
- Bill Lyne
- *Staff (WSAC)*
- Michael Meotti (ED)
- Heather Hudson
- Joel Anderson



Remaining 2024 WEIAOB Meeting Dates

- **Thursday, June 20, 10:00 AM–12:00 PM (today)**
- Wednesday, September 18, 9:00–11:00 AM
- *All meetings will take place virtually on Zoom*



Matt Sigelman, President, The Burning Glass Institute

- Dedicated career to unlocking new avenues for mobility, opportunity, and equity through skills
- **Created field of real-time labor market data to:**
 - Understand changes in workers' opportunities
 - Identify skills that bridge gaps between people and opportunity





Building Pathways to Opportunity

Aligning State Investment to Local Needs

WEIA Oversight Board

Matt Sigelman, President
The Burning Glass Institute
msigelman@burningglassinstitute.org
June 2024

A Comprehensive View of Outcomes

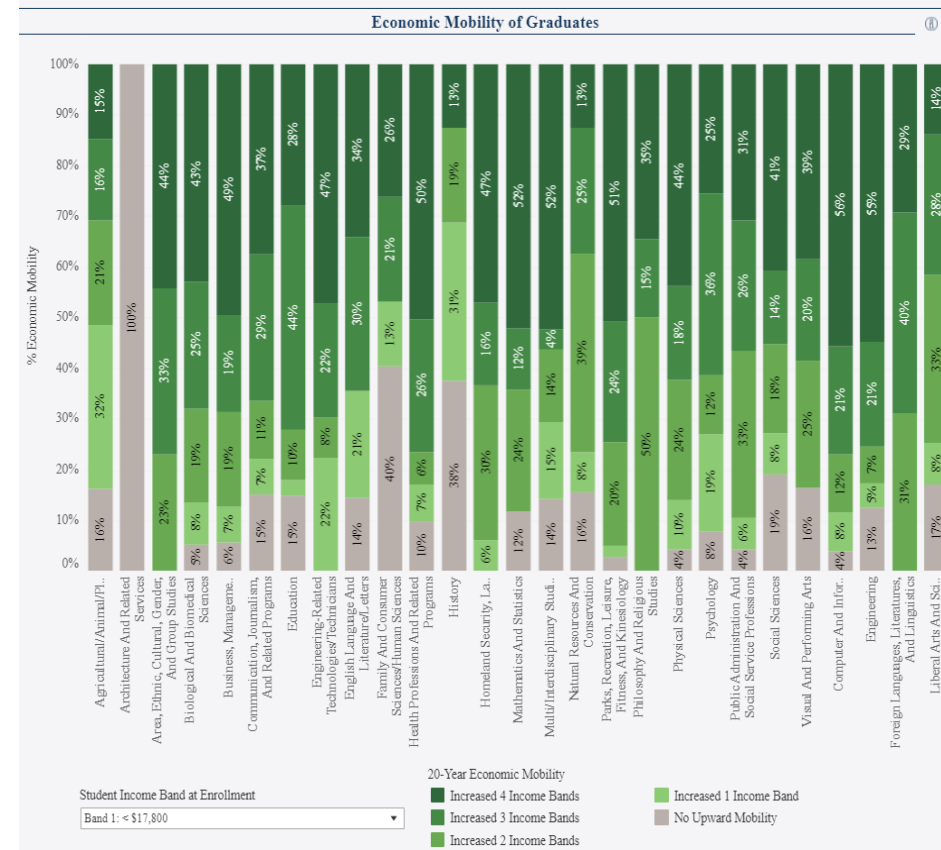
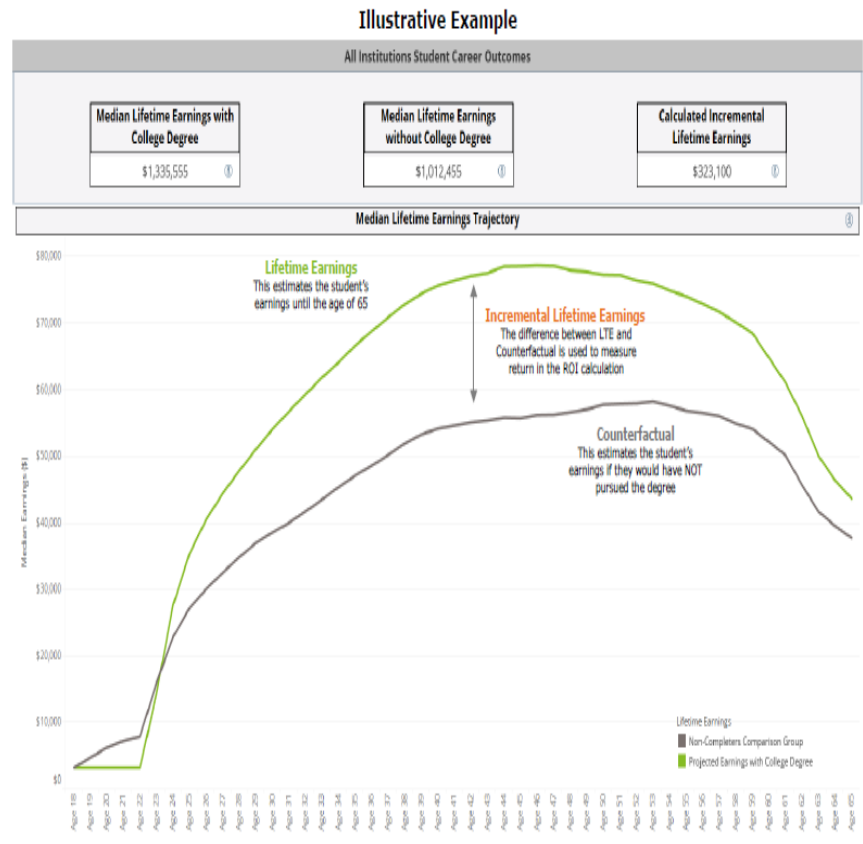
Analyzing not only long-term career earnings and ROI but also economic mobility, underemployment, and other key metrics

Measuring Graduate ROI & Distance Travelled

We studied the careers of hundreds of thousands of UNC grads to measure the career value they accrued and the economic mobility they achieved

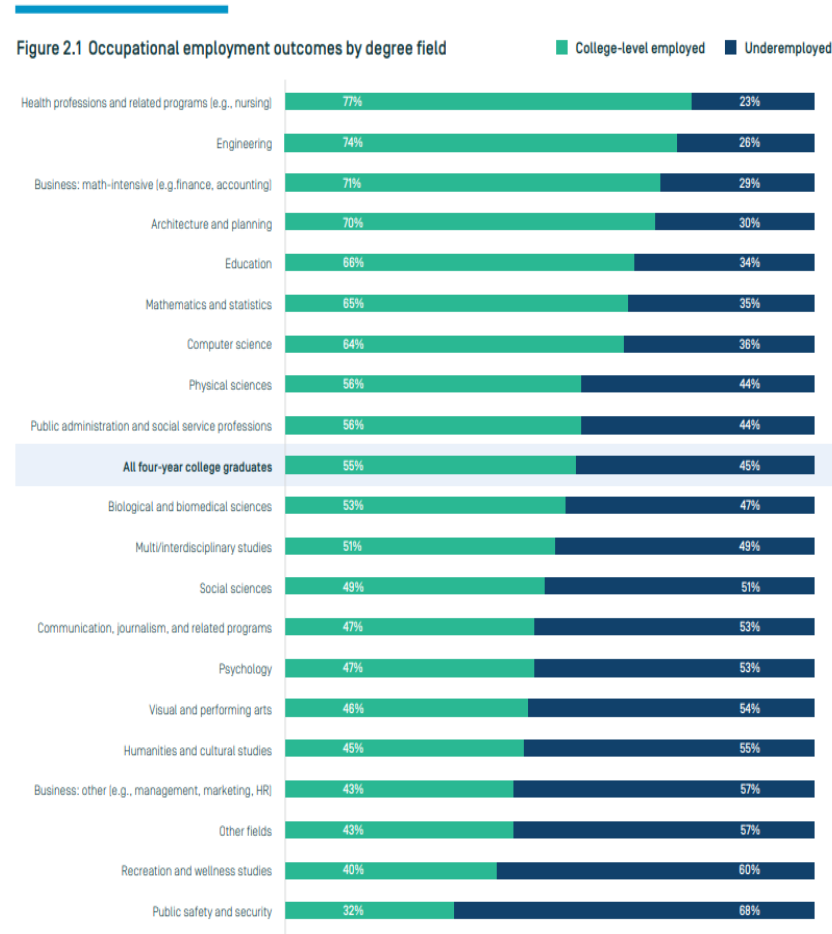
An accurate measure of long-term outcomes must measure incremental value vs. a realistic counterfactual

Some UNC programs offer 6x more economic mobility than others. Many of the majors with the most upward mobility weren't necessarily the highest earning.



Majors Matter

While STEM majors generally have lower risk than others, humanities offer better outcomes than many “practical” programs



Source: Burning Glass Institute analysis of Lightcast Career Histories Database, 2022. Underemployment is calculated for workers with a terminal bachelor's degree five years after graduation.

A Holistic View of Outcomes

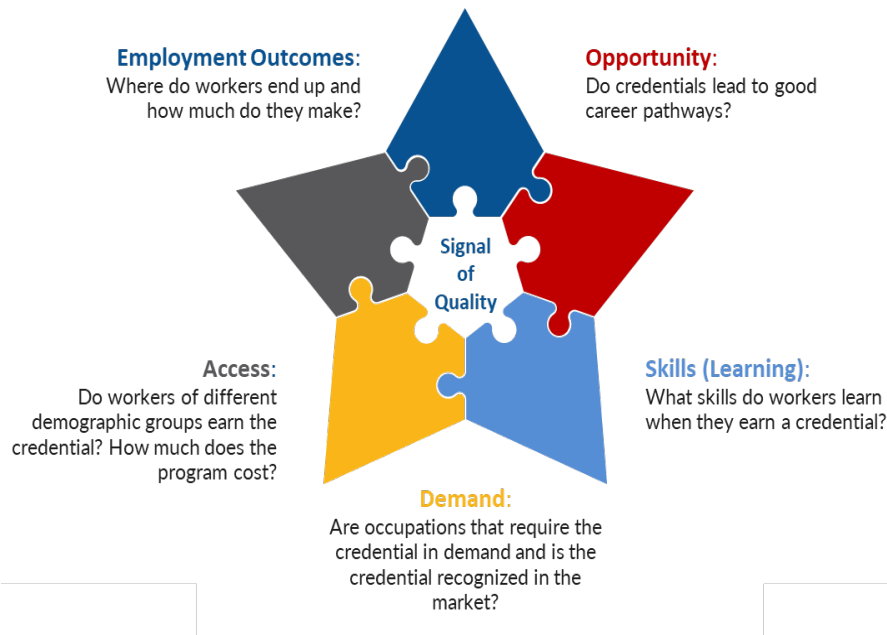
Our data enables us to build a comprehensive view into graduates' post-college careers

Measure	How we track	Rationale
Lifetime Earnings / ROI	We identify the firm, title, and occupations students enter post-graduation to estimate each student's annual salary	The rising cost of college forces many students to consider what return they will generate on their educational investment
Underemployment	We assess whether the occupations students enter typically require a college-degree.	High rates of underemployment upon graduation may cause students and others to question the value of college
Economic Mobility	We compare the income bracket of a student's family before enrollment to the student's earnings post-enrollment	College has historically been a ladder for economic mobility, lifting students into higher paying work
Additional Economic Attainment	We measure the share of graduates who go on to earn advanced degrees	Advanced degrees offer further pathways to upward mobility for students
Career Growth and Entrepreneurship	Measuring how often students found firms and how long post-graduation it takes students to enter management occupations	Understanding how a school is preparing our next generation of leaders can help make the case for greater funding
Social Impact	We identify which students enter "social impact"-oriented professions	Some students prefer social-impact work rather than attempting to maximize their earnings

Don't Just Track Outcomes for Degrees

It's now possible to measure learner outcomes across a range of non-degree programs and certifications

The **EQOS** framework brings together ~50 models to measure outcomes for non-degree credentials



Example: Measurement of Placement & Wages for OSHA30 Certification Across Providers

	Provider A	Provider B	Provider C	Provider D	Provider E
In a new job by one year	67%	68%	70%	40%	58%
Moved into an aligned occupation by one year	18%	18%	19%	12%	22%
Wages after one year	\$63,000	\$65,000	\$61,000	\$46,000	\$40,000
Percent change in wages after one year	10%	9%	13%	3%	8%
Absolute wage changes after one year	\$4,000	\$3,100	\$4,500	\$2,300	\$4,300
Percent of workers with wage increases after one year	44%	45%	46%	41%	44%
Percent change in wages after three years	13%	14%	16%	-6%	17%
Percent change in wages after five years	15%	13%	19%	0%	28%
Employment Outcomes Grade	B	B	A-	F	C+

Source: Burning Glass Institute / EQOS

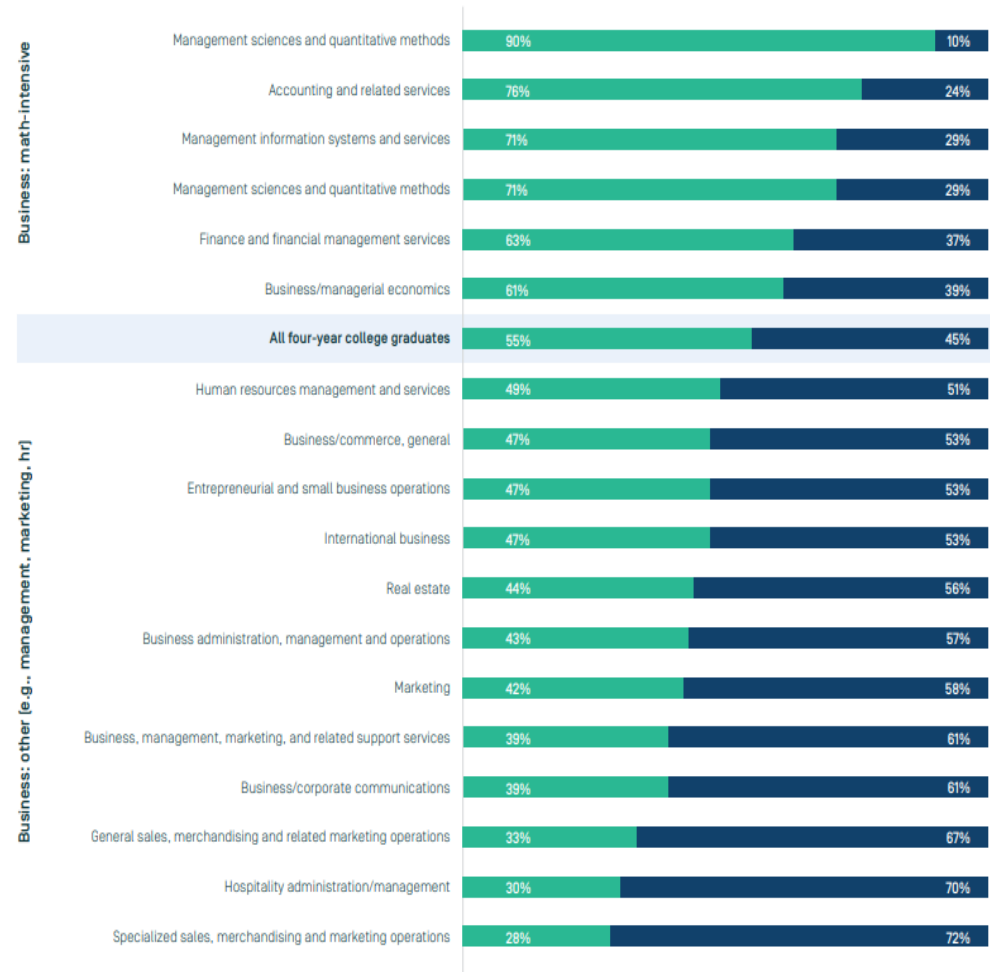
The Importance of Focus

Even within fields, specific specialties and skills can drive wide differences in outcomes

Mind Your Business

Within business fields, risk varies markedly based on the quantitative intensity

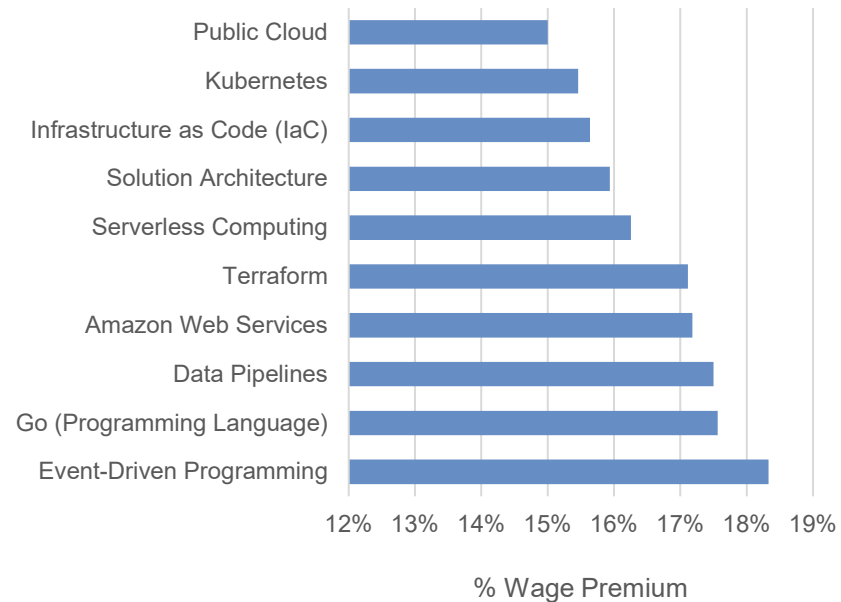
Figure 2.4 Occupational employment outcomes for selected business degree fields



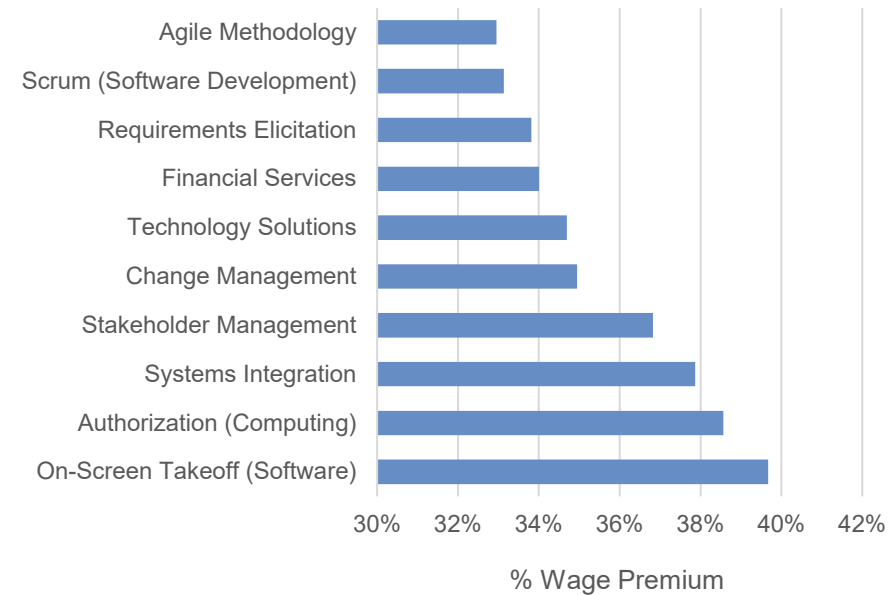
The Skills That Drive Workforce Value

In a recent analysis in Tennessee, we found that some skills deliver big wage premiums – even in high demand tech jobs

Software Developer Skill Premiums



Project Manager Skill Premiums



Skills Launch Careers

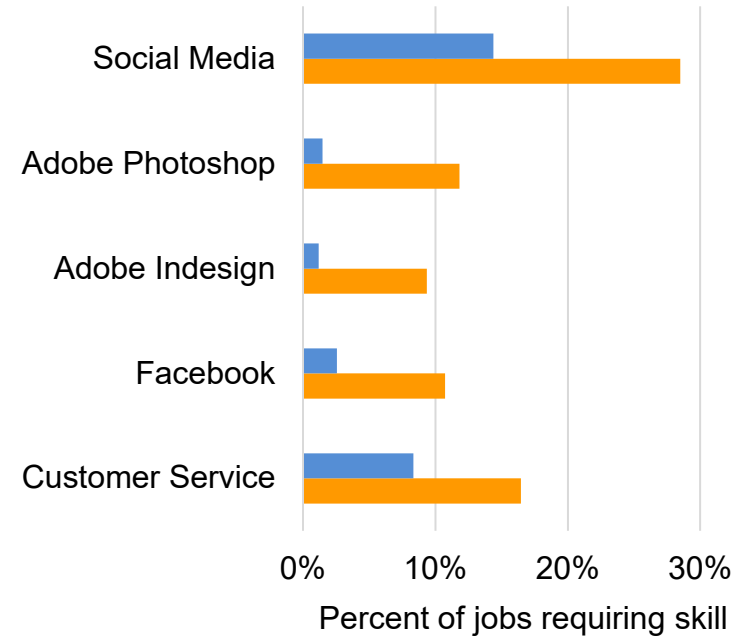
Help learners acquire skills associated with better paying jobs & higher upward mobility

High-Paying Skills for Marketing Managers



■ Top Salary Quartile ■ Bottom Salary Quartile

Low-Paying Skills for Marketing Managers



■ Top Salary Quartile ■ Bottom Salary Quartile

Measure a Workforce by Skills, Not Jobs

Despite a sizeable software sector, there are signs of trouble ahead for Massachusetts

On the Surface, All is Well...



7th Most Software Developers of any state

6th Highest average Software Developer salary

3rd Highest Software share of employment

	MA	CA	USA
Software Share of Employment	1.7%	1.4%	1.2%
Software Average Salary	\$128,190	\$146,770	\$120,985

...But Growth is Stalled



Massachusetts is....

47th for Tech Industry employment growth

38th for Software employment growth

24th for Software wage growth

Not All Skills Are Created Equal in Software

“Frontier Skills” stand out based on their value and growth. That’s where Boston is falling behind

Out of all software skills, we identified 104 at the “frontier”- those that are **growing quickly and defining the future of the sector**

Boston ranks #22 nationally for frontier skills, lagging all other major software hubs

Skill Growth vs Skill Value

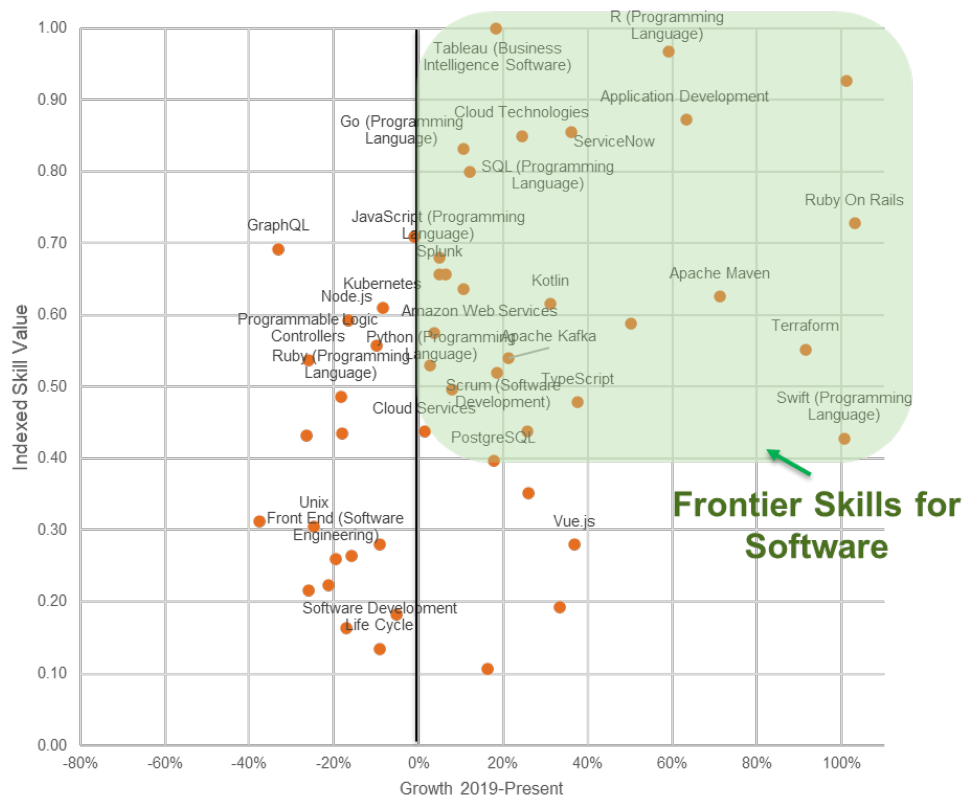
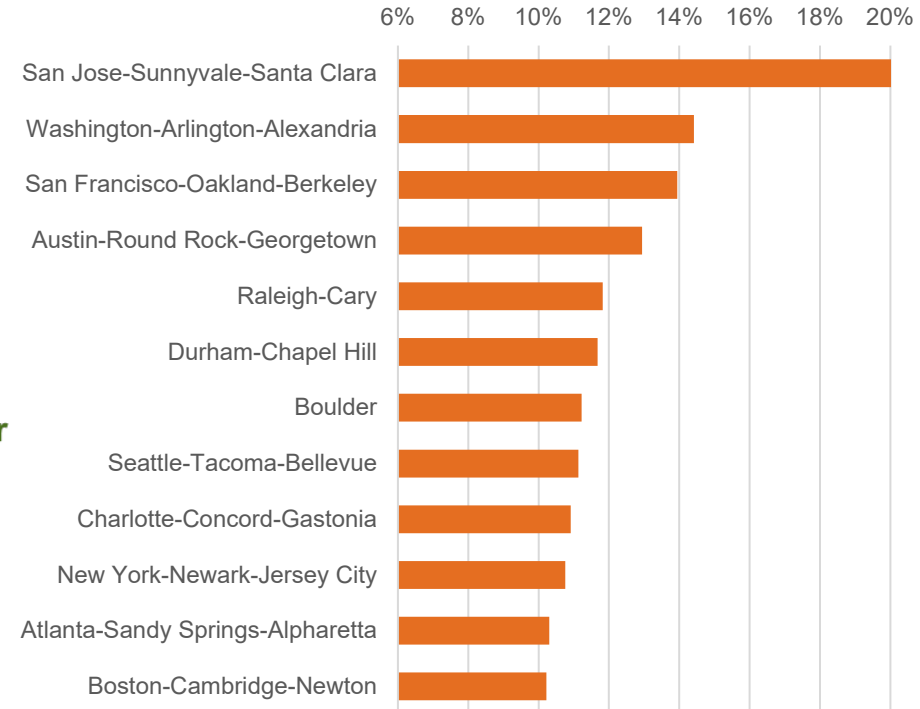


Chart shows subset of frontier skills, along with other specialized and software skills

Share of Jobs Requiring Frontier Skills



A Targeted Approach

Workers and learners need supports tailored to their region, sector, and skillsets

When It Comes to Reskilling, All Jobs are Local

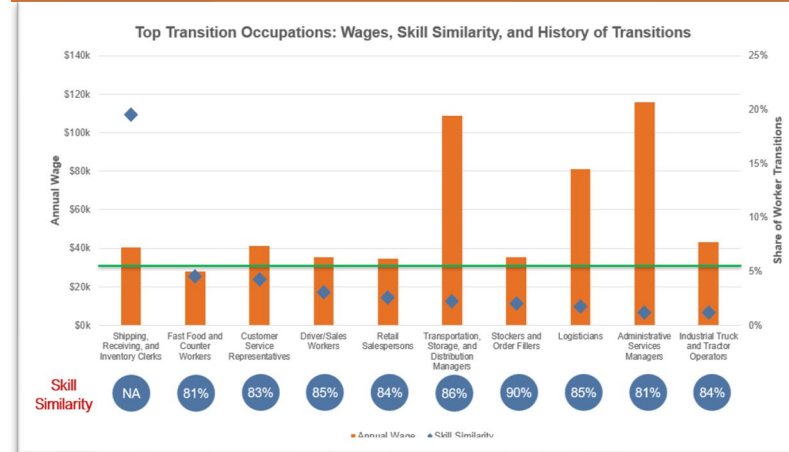
Workers in the same role at the same firm can require very different supports

1. Determine Company's local labor market share of each DC occupation, map red/yellow/green

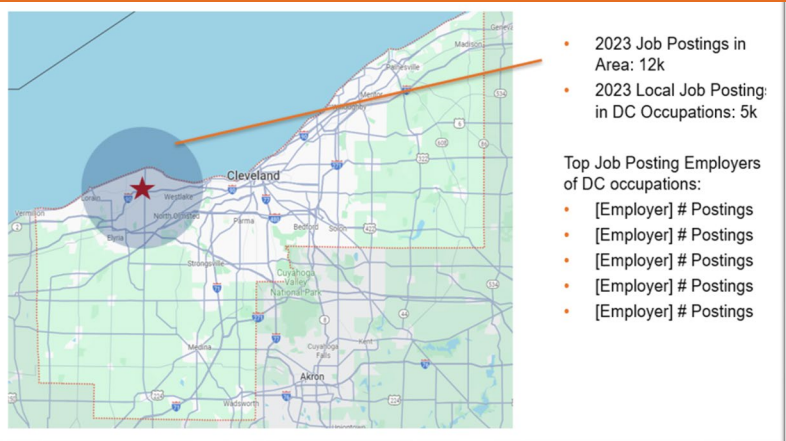
Share of Local Employment by Occupation for each DC

Distribution Center	Laborers and Freight, Stock, and Material Movers, Hand	Stockers and Order Fillers	Transportation, Storage, and Distribution Managers	Shipping, Receiving, and Inventory Clerks	Packers and Packagers, Hand
Metropolitan Statistical Area #	0.5%	0.4%	0.8%	0.6%	1%
Metropolitan Statistical Area #	23%	44%	69%	23%	0%
Metropolitan Statistical Area #	2%	0.5%	1.5%	3%	0.2%
Micropolitan Statistical Area #	4%	0.9%	3%	4%	12%
Metropolitan Statistical Area #	0.4%	0.4%	0.1%	0.1%	0%


2. Identify skill-adjacent transitions that represent positive wage outcomes for workers



3. Map theoretically feasible job transitions to local job opportunities




4. Identify skill gaps between current and target occupations for targeted reskilling



Order Fillers at Specific DC
\$#k Average Annual Salary
Workers

➔



Office Clerks, General
\$41k Average Annual Salary
~1.5% of local employment

Top skills to bridge the gap:

- + Office Supply Management
- + Clerical Skills
- + Record Filing

Identifying Hidden Talent

A framework for identifying underleveraged talent

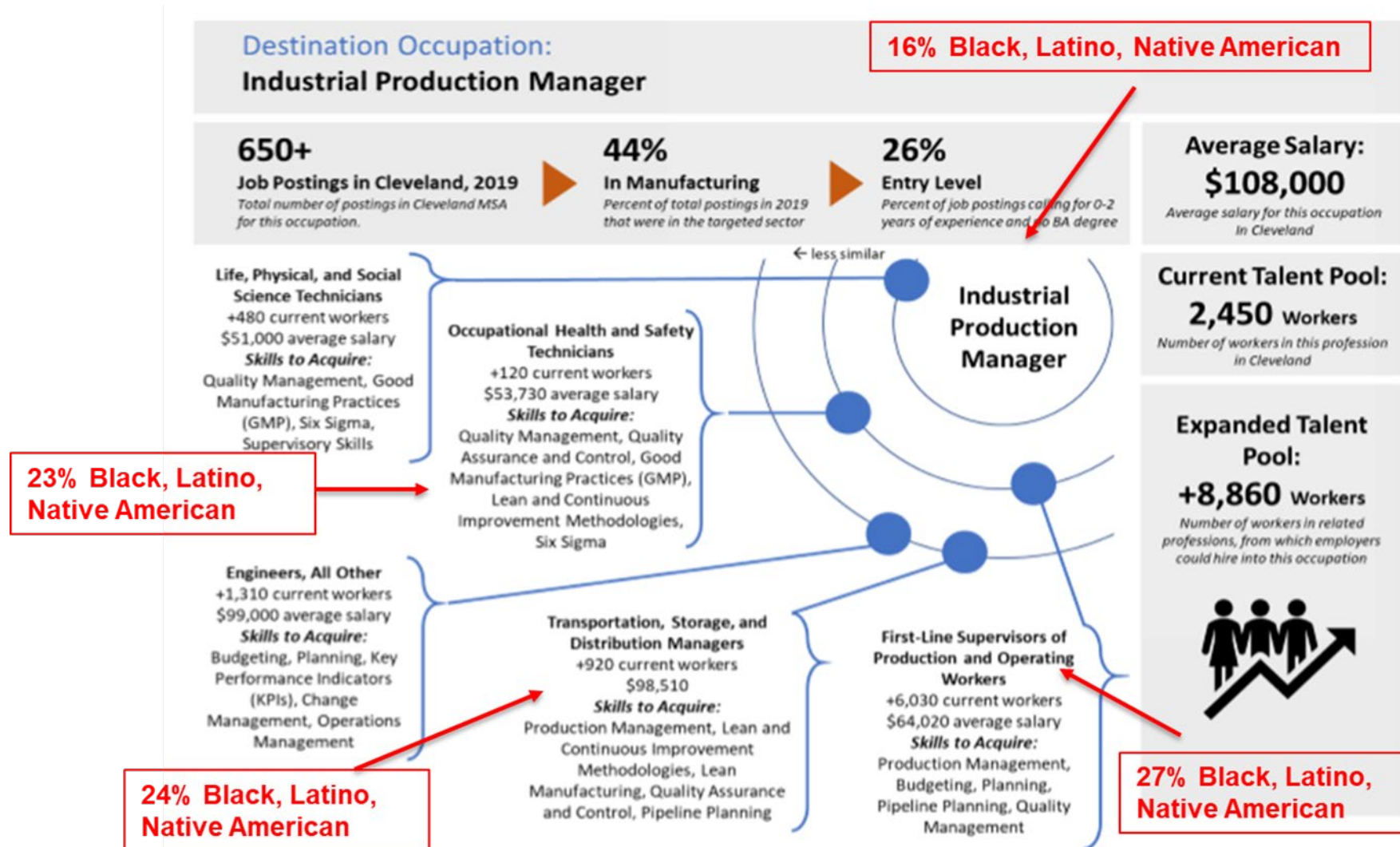
Some transitions make sense because they are well-worn paths, frequently observed. Others make sense because they involve bridging between similar roles. **Transitions with high skill match and few observed transitions represent underleveraged opportunity.**

	Most Similar	Similar	Least Similar
Most Observed	Computer Programmers Web Developers Network and Computer Systems Administrators	Information Technology Project Managers	Industrial Engineers
Observed	Software Quality Assurance Analysts & Testers	Information Security Engineers Radio Frequency ID Device Specialists	Sales Engineers
Least Observed	Database Architects*	Business Intelligence Analysts Clinical Data Managers Telecommunications Engineering Specialists	Nurse Practitioners

*Database architects have few observed transitions and high similarity- but are a very small talent pool and tend to earn more than software developers, and thus were excluded from the next step of analysis

Building a Broader Pipeline of Talent

Unlocking more diverse sources of talent, opening new opportunities



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Presentation: Overview of Higher Education Funding in Washington

Joel Anderson and Michael Meotti



Higher Education Funding in Washington

Joel Anderson



Notable Accounts

- General Fund-State (GF-S)*
- Workforce Education Investment Account (WEIA)
- Education Legacy Trust Account (ELTA)*
- Washington Opportunity Pathways Account*^

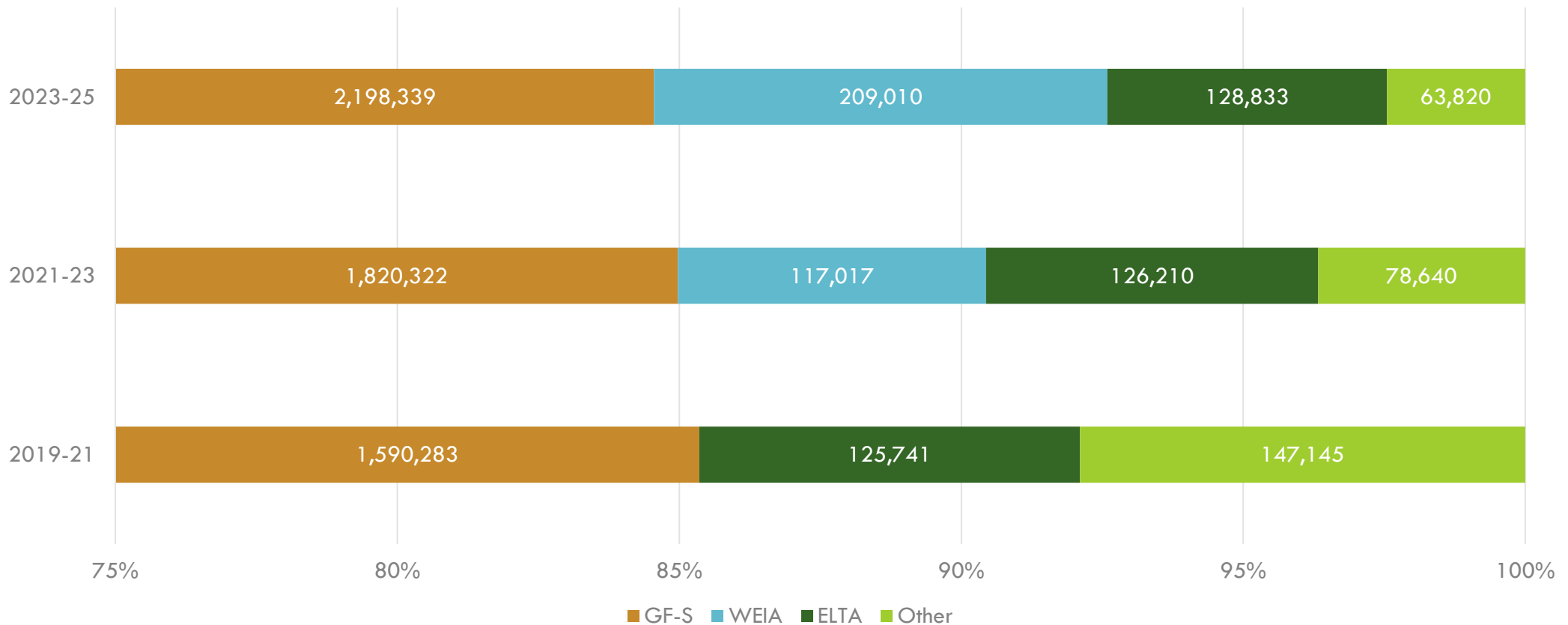
**can be used for expenditures outside higher education*

^funds usually do not go to IHEs



Total Appropriated (TOT-A) by Account, Public Four-Years

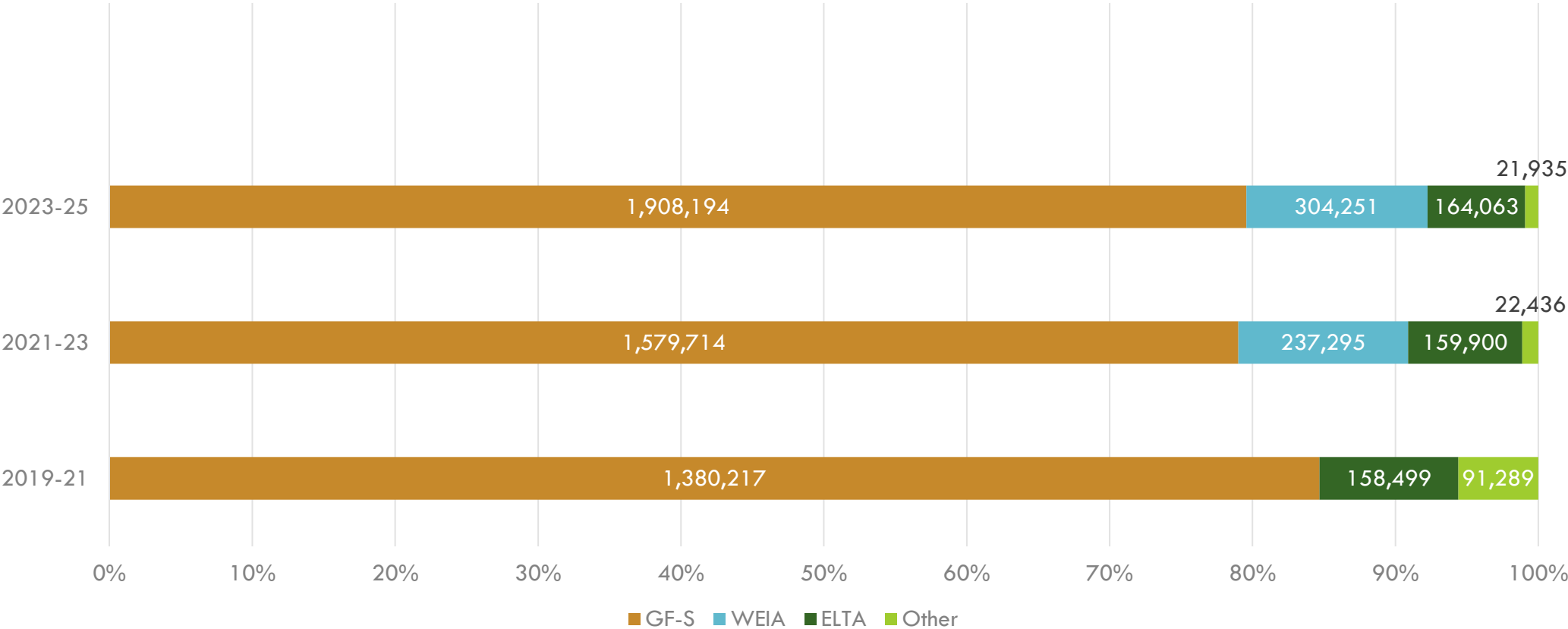
TOT-A by Account, Public Four-Years (numbers in thousands)





Total Appropriated (TOT-A) by Account, SBCTC

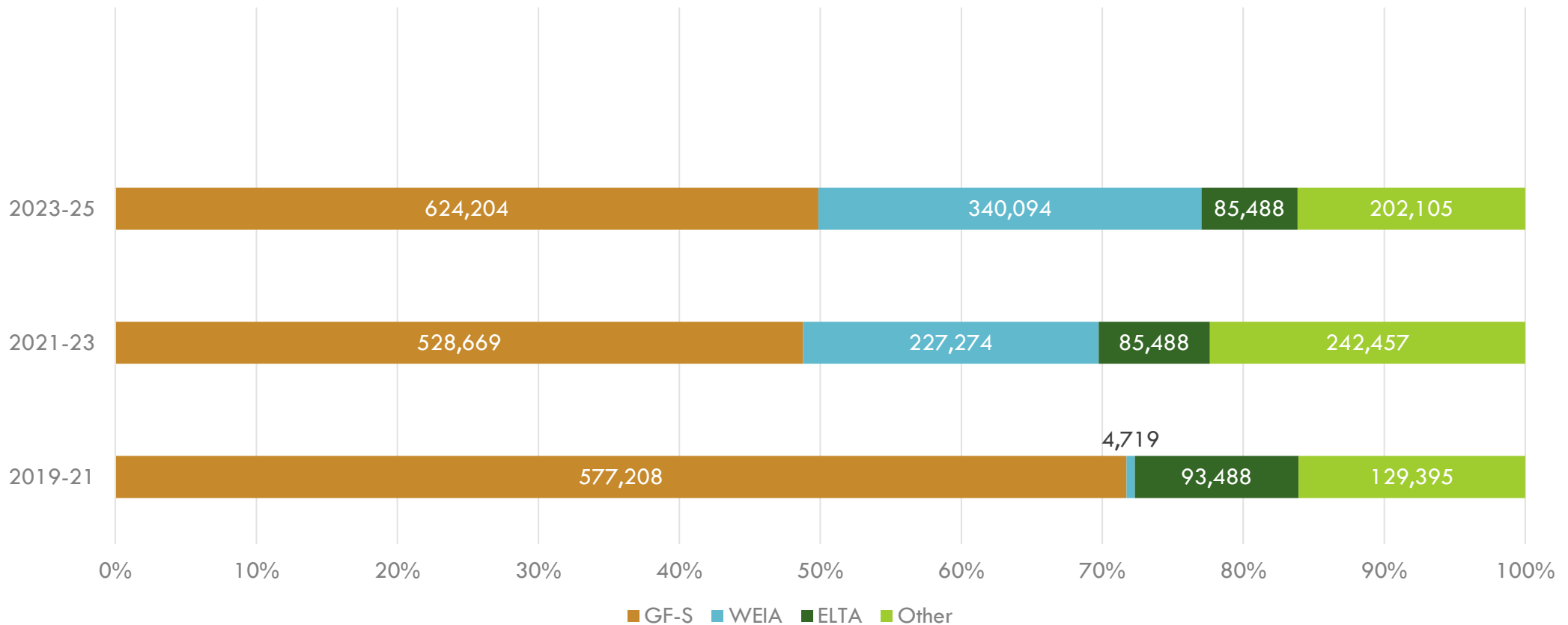
TOT-A by Account, SBCTC (numbers in thousands)





Total Appropriated (TOT-A) by Account, WSAC

TOT-A by Account, WSAC (numbers in thousands)





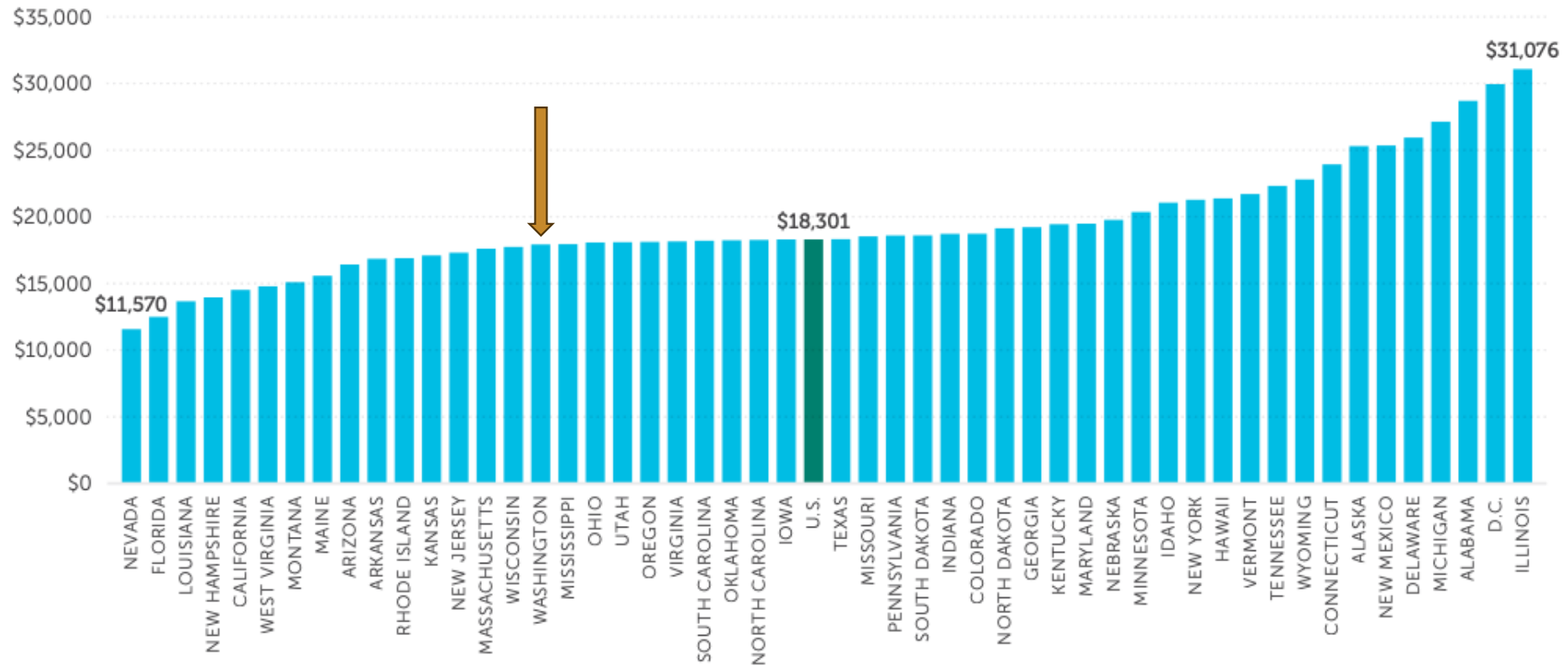
Public Higher Education Finance: A 50-State Comparison

Michael Meotti



Total Public Higher Education Revenue

PUBLIC HIGHER EDUCATION TOTAL EDUCATION REVENUE PER FTE BY STATE, FY 2023 (ADJUSTED)

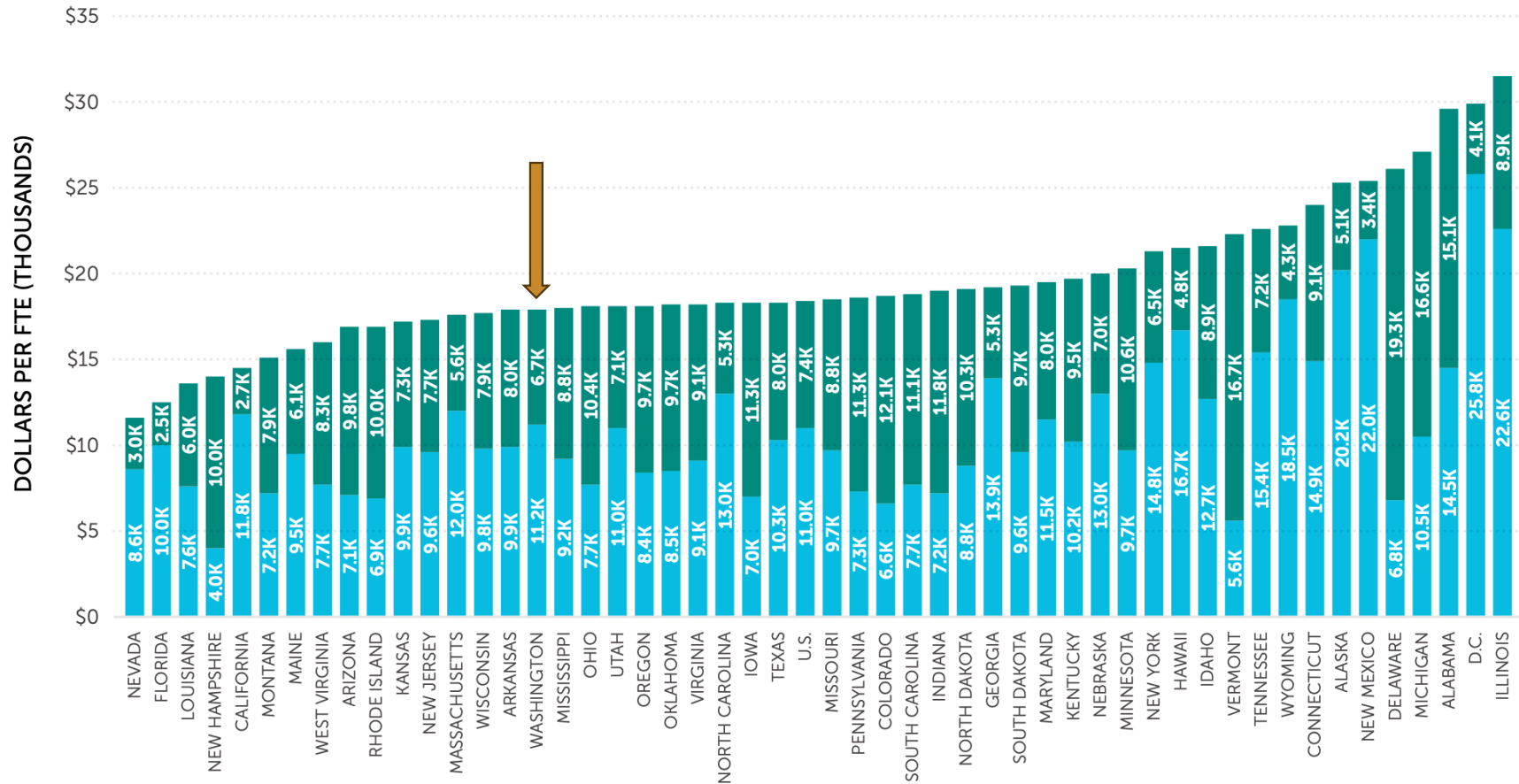




Education Appropriations & Tuition Revenue

EDUCATION APPROPRIATIONS AND NET TUITION REVENUE PER FTE BY STATE, FY 2023 (ADJUSTED)

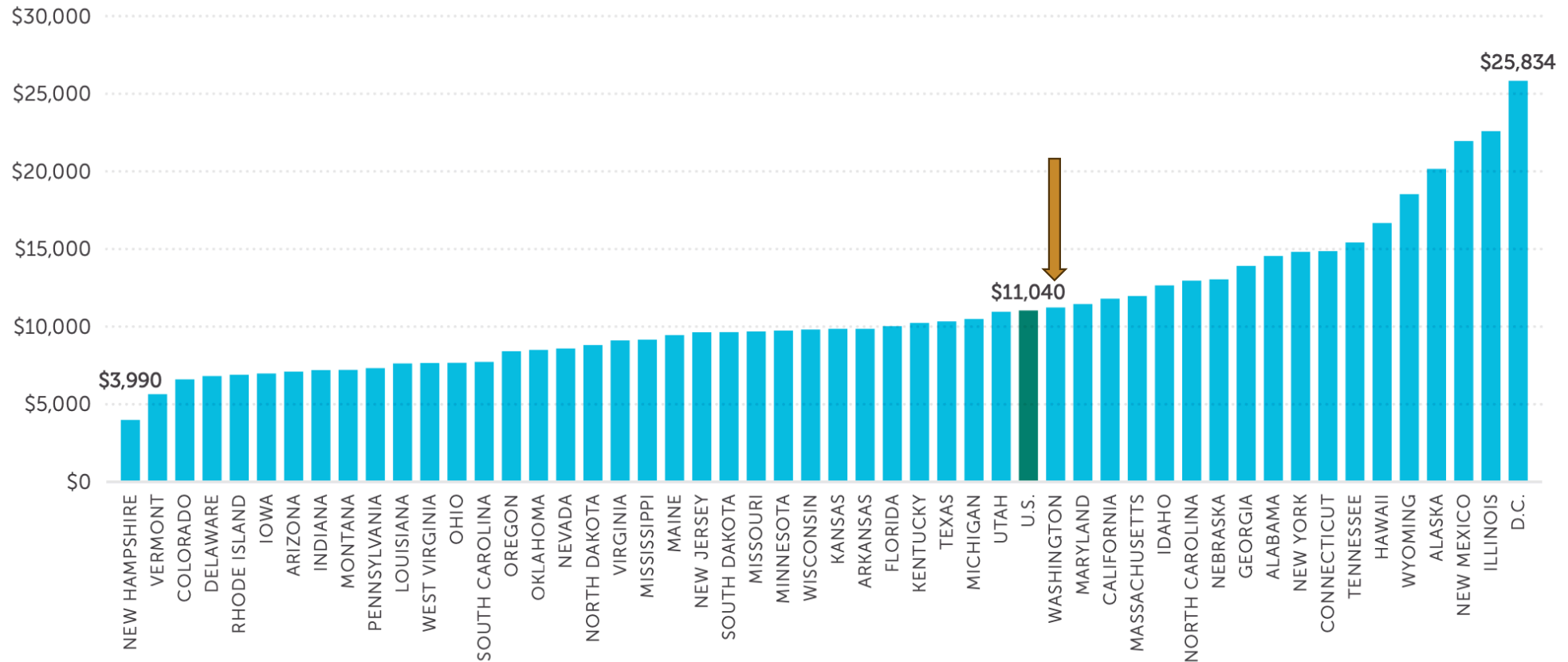
■ Net Tuition
■ Education Appropriations





Public Higher Education Appropriations

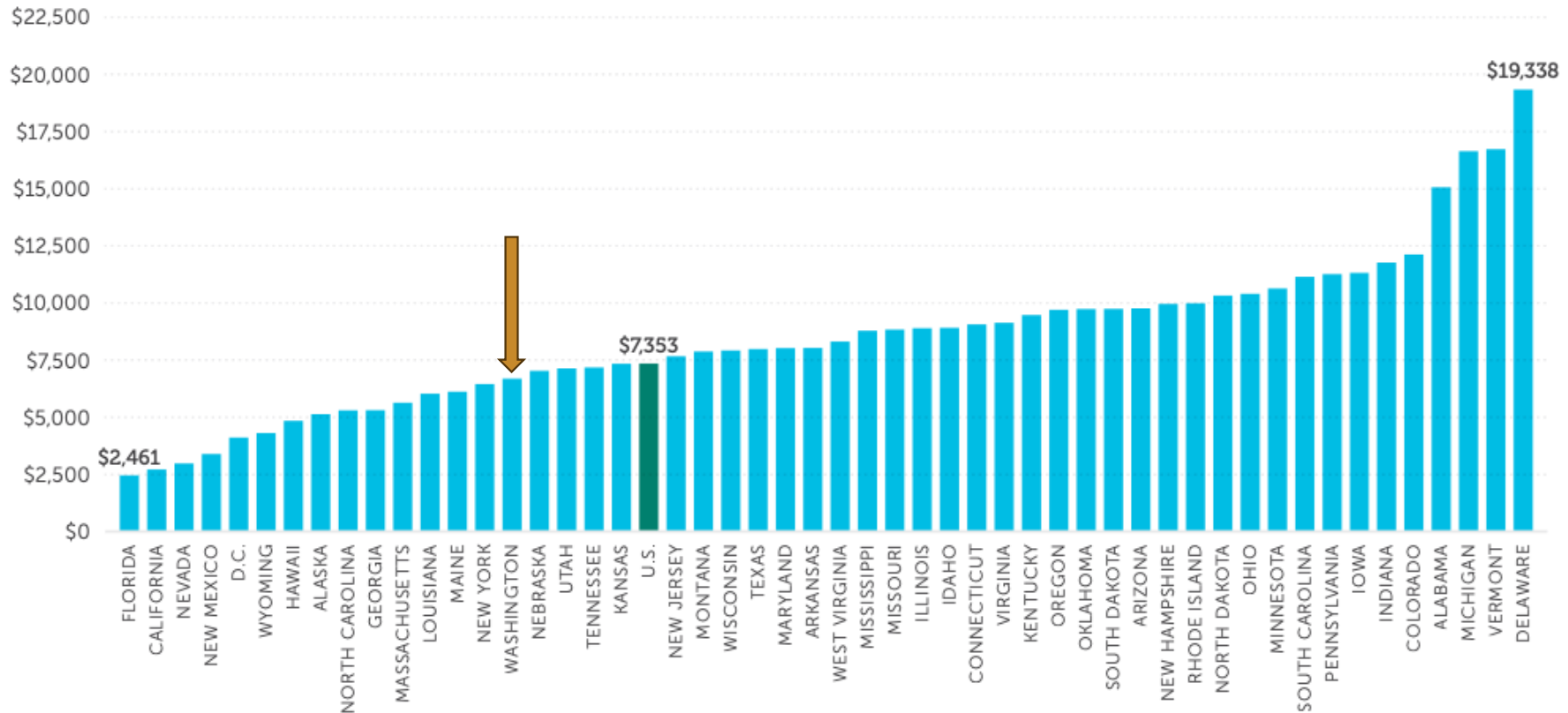
PUBLIC HIGHER EDUCATION APPROPRIATIONS PER FTE BY STATE, FY 2023 (ADJUSTED)





Public College Tuition Revenue

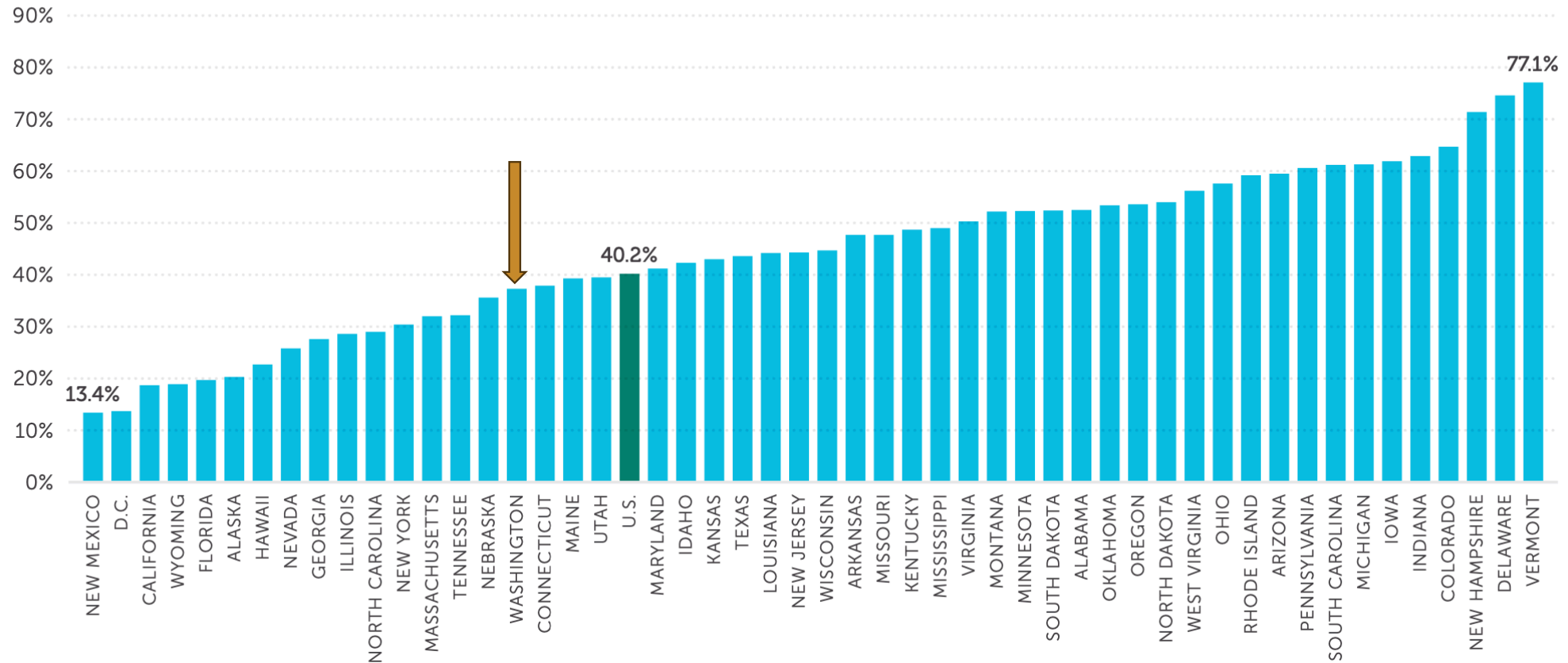
PUBLIC HIGHER EDUCATION NET TUITION REVENUE PER FTE BY STATE, FY 2023 (ADJUSTED)





Tuition Relative to Revenue

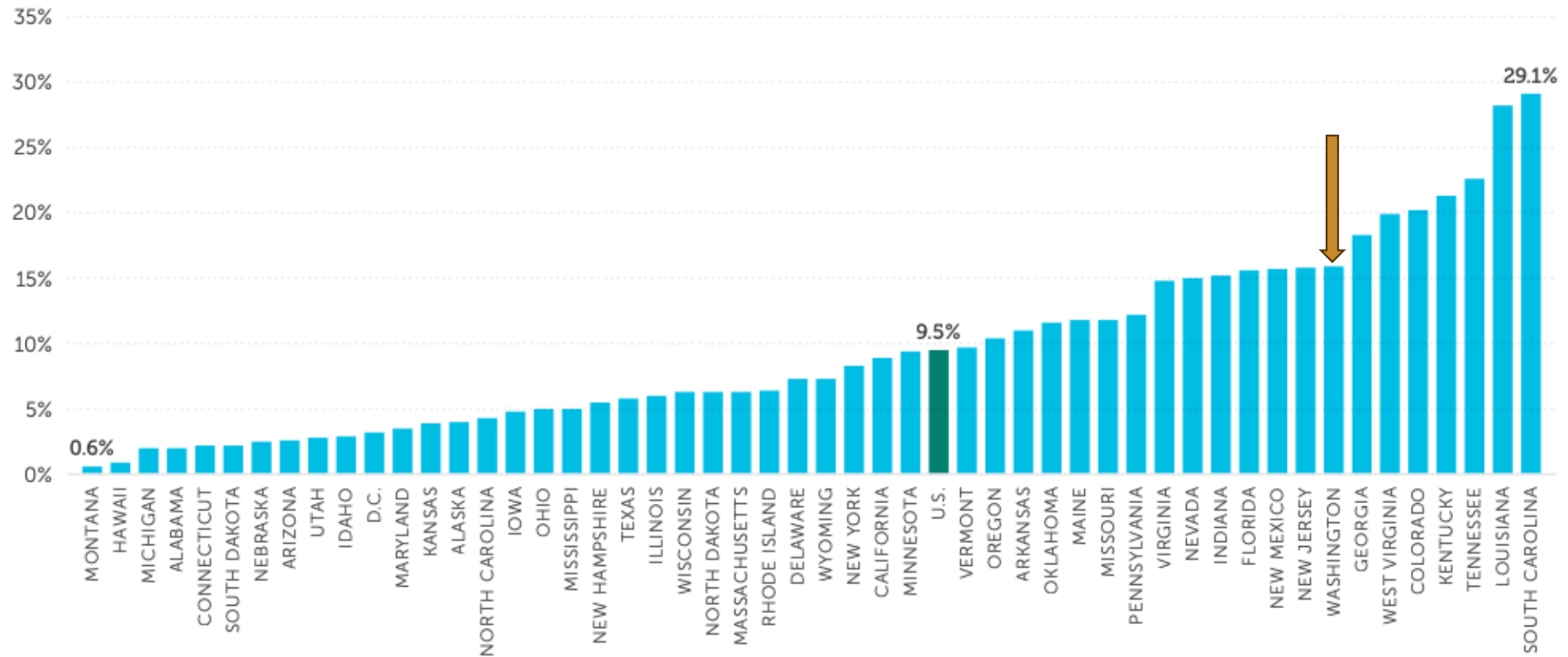
NET TUITION AS A PERCENTAGE OF TOTAL EDUCATION REVENUE BY STATE, FY 2023





Financial Aid Relative to Appropriations

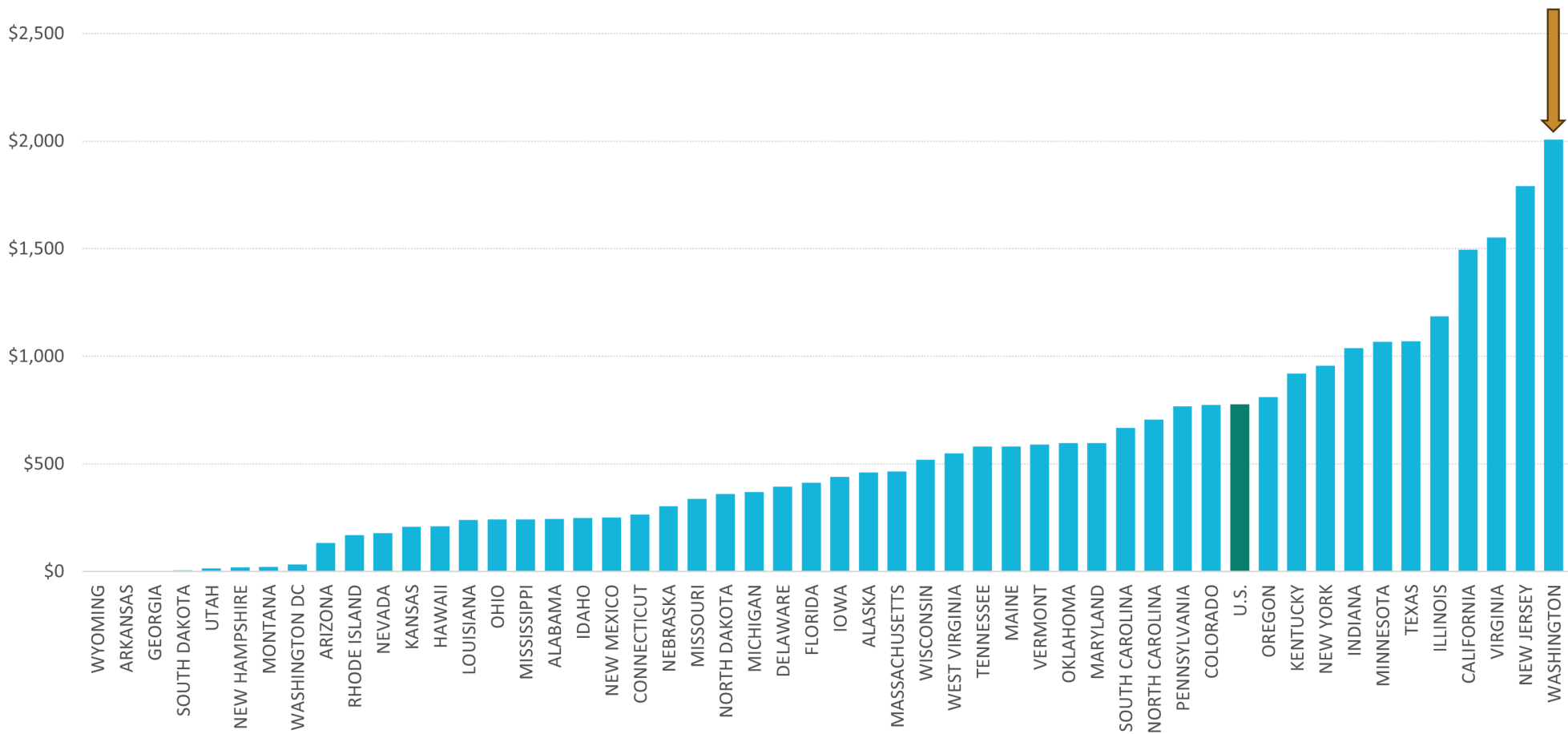
PUBLIC HIGHER EDUCATION STATE FINANCIAL AID AS A PERCENTAGE OF EDUCATION APPROPRIATIONS BY STATE, FY 2023





Need-Based Aid per Undergraduate Enrollment

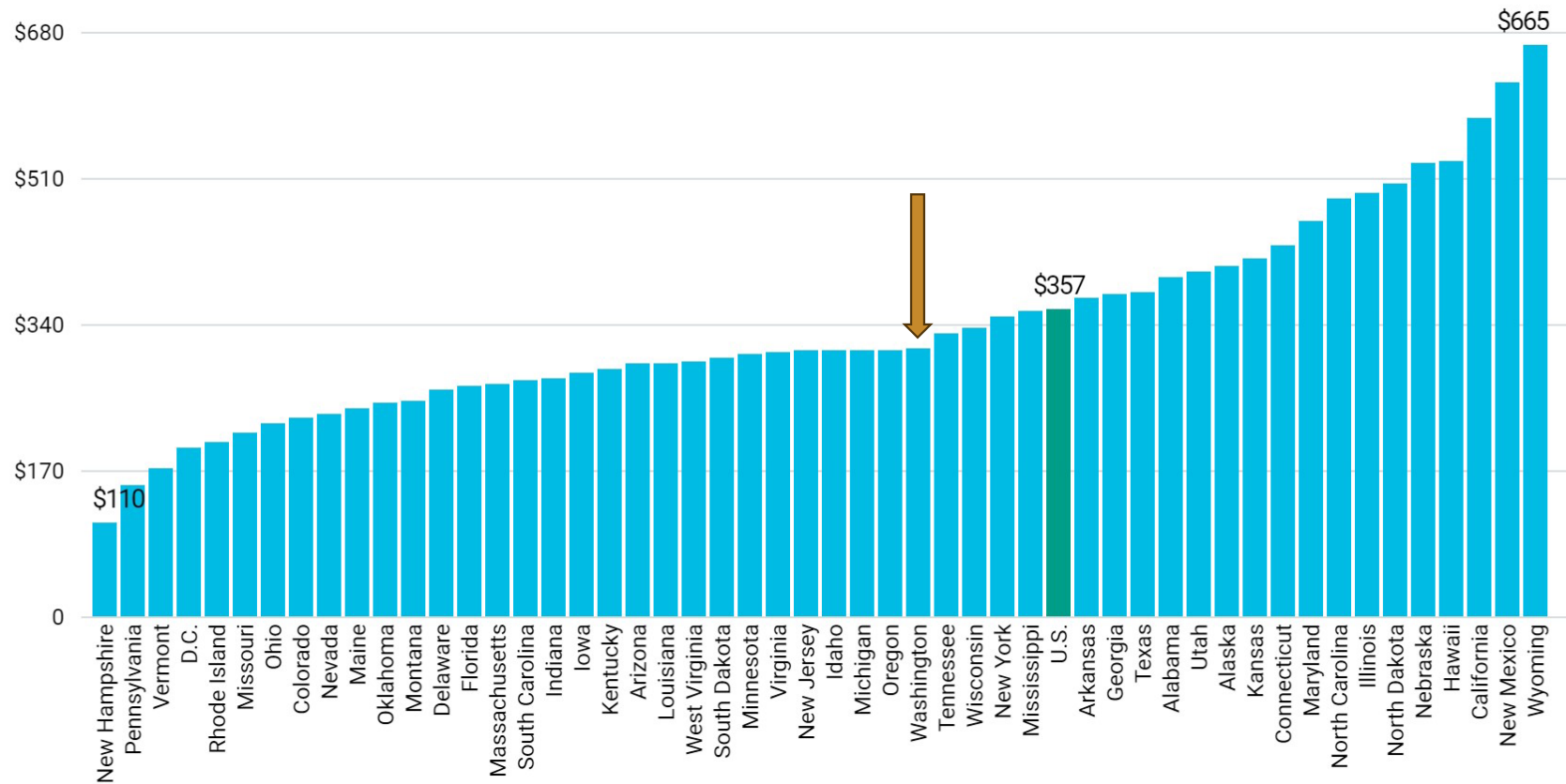
ESTIMATED UNDERGRAD GRANT DOLLARS PER UNDERGRAD ENROLLMENT BY STATE, 2021-22





Higher Education Support Per Capita

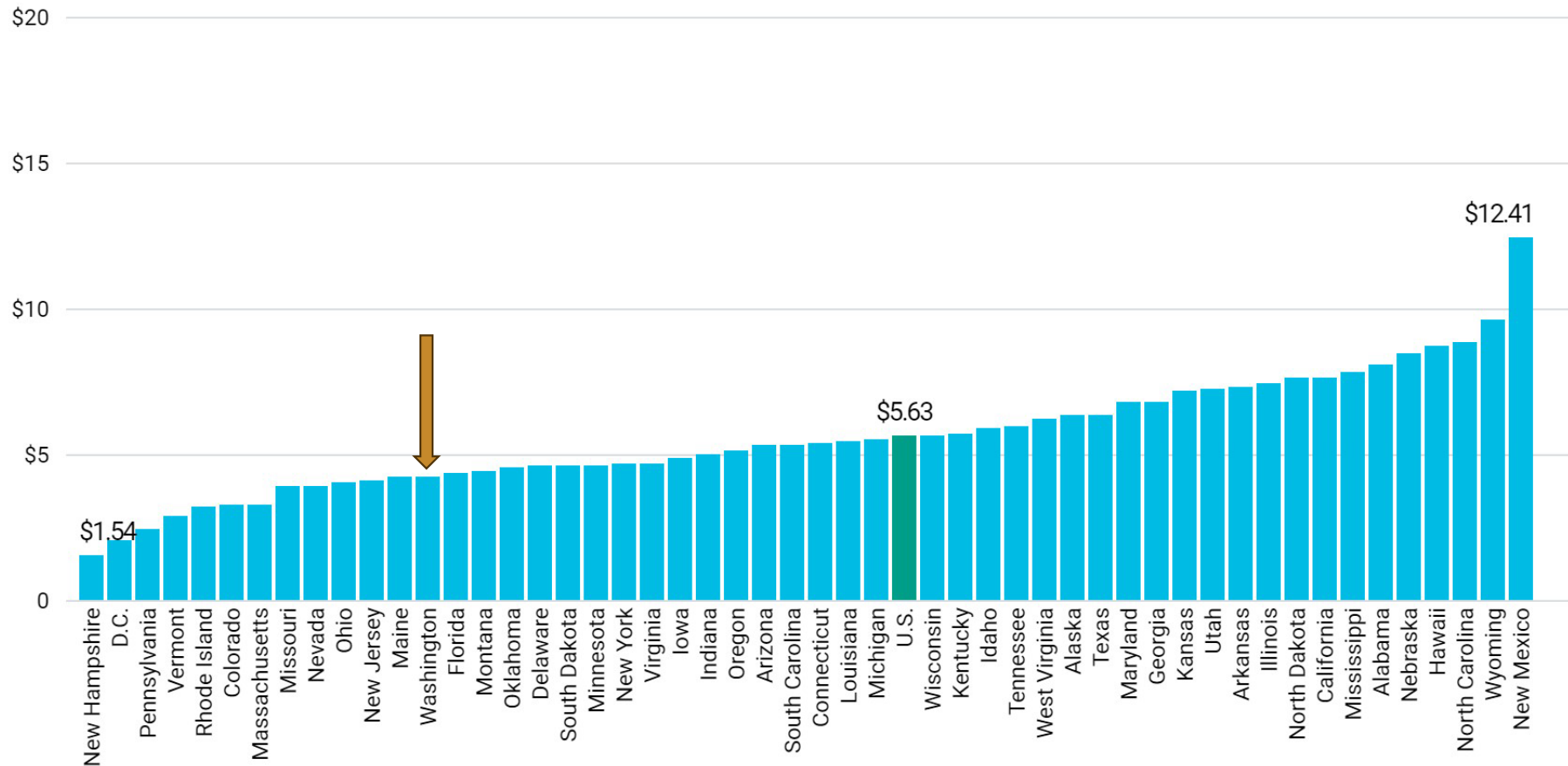
HIGHER EDUCATION SUPPORT PER CAPITA BY STATE, FY 2022





Higher Education Support by Personal Income

HIGHER EDUCATION SUPPORT PER \$1,000 OF PERSONAL INCOME BY STATE, FY 2022





Presentation: 2025 Legislative Strategy

Jane Broom