Florida Credentials Review Committee Meeting

May 18, 2023

Chair's Welcome and Remarks

Katie Crofoot

Director, REACH Office
Executive Office of the Governor

New Member Introduction

Lindsay Volpe

Deputy Secretary of Workforce Services

Florida Department of Economic Opportunity

Chair's Welcome and Remarks

Katie Crofoot

Director, REACH Office
Executive Office of the Governor

For Public Comment:

- Please email Madison Frazee at mfrazee@careersourceflorida.com.

- Put your name and request into the meeting chat and wait to be recognized.

- If joining by phone, announce yourself at the appropriate time and wait to be recognized.

Consent Item

For Consideration:

- Approval of Feb. 9, 2023, Meeting Minutes, to include any modifications or changes noted by the board.

2023-2024 Master Credentials List Additions

Dan McGrew

Senior Vice President
Business and Workforce Strategies

Action Item

For Consideration:

- Approve the addition of 55 credentials to the 2023-2024 Master Credentials List and send these recommendations to the CareerSource Florida Board of Directors for delivery to the State Board of Education.

- Approve the additional designation of seven credentials for CAPE Post-Secondary Funding as recommended by the Florida Department of Education.

- Approve technical revisions to the list by the Department of the Education, as needed, without adding or removing any credentials not explicitly described in this Action Item.

Legislative Update

Warren Davis

Policy Analyst
Business and Workforce Strategies

Legislative Updates

- SB 240 passed the Florida Legislature and was signed into law by Gov. Ron DeSantis on May 15, 2023.

- How this bill impacts the Credentials Review Committee:
  - The REACH Office Director shall serve as chair of the Credentials Review Committee.
  - The Credentials Review Committee shall include industry certifications for agricultural occupations.
  - Additional labor market information now able to be utilized.
  - Notices must be sent to those who submit credentials that do not meet the Framework of Quality.
  - Credentials must remain on the list for one year after identification for removal.
  - Returned-value funding formula deleted.

Legislative Updates

- Next steps:
  - Changes go into effect on July 1, 2023.
  - CareerSource Florida staff will update the Credentials Review Committee Charter and bring to the next committee meeting for review and approval.

Credential and Occupation Sequencing Research

Matthew Walsh

Research Manager
Lightcast

About Lightcast

- EMSI and Burning Glass Technologies merged in 2021 and the company rebranded as Lightcast.

- We produce the most comprehensive, up-to-date picture of the labor market.

- We use labor market data to inform and connect people, education, and employers.

- We leveraged proprietary job posting and professional profile datasets for this project.

Project Process

| Create a master list of approved credentials | Link credentials to SOCs manually | Validate and expand SOC linkages using labor market signal | Establish a sequence of credentials | Identify industry sector career pathways |

- **Primary goal:** Determine which sequences of credentials put graduates on career paths to high-wage jobs.

- **Secondary goal:** Expand and validate credential-occupation linkages.

Create a master list of approved credentials → Link credentials to SOCs manually → Validate and expand SOC linkages using labor market signal → Establish a sequence of credentials → Identify industry sector career pathways

Credential Inventory

- **Industry Certifications List**
  Promoted credentials identified for review by CareerSource Florida

- **Non-Degree Programs of Study List**
  Non-degree awards available at postsecondary institutions

- **License List**
  Promoted licenses identified for review by CareerSource Florida

Initial Query: First, we looked for an exact match on the certification name. (Sometimes the certification is already in our certification taxonomy, and other times it is not)

Expanded Query: If the exact certification name is not requested, then we did a job text search for relevant keywords or we used our skill taxonomy to search for relevant skills.

Query for the job title targeted by the license.

Manually "fill in the gaps" of SOC linkages

- Many certifications, licenses, and non-degree credentials already had SOC linkages that were made through manual review by CareerSource Florida and a third-party research group, but there were some missing linkages.

- The manual process involved searching within job titles and professional profiles for each credential or related skills, job titles, or keywords. These searches would then become the basis of an "algorithmic" approach which was used later to validate the matches.

- The results of this work was shared at the last board meeting.

> **Key results:**
>
> • Linkages generated for 410+ credentials and 130+ licenses.
>
> • Most credentials had only ONE best-fit match, which follows the precedent set by the internal CareerSource Florida review of credentials.

Understanding the "value" of a credential

Human Capital Value

The human capital value of a credential encapsulates the knowledge, skills, and abilities gained over the course of earning the credential. The human capital value of a credential is typically validated by a test, capstone project, hours of experience requirement, or another mechanism which ensures that the expected knowledge, skills, and abilities were indeed learned over the course of credential attainment.

Signaling Value

The signaling value of a credential represents how well the credential serves as an expression for those knowledge, skills, and abilities in a labor market where job seekers and employers do not have perfect information about each other. In cases where employers are not able to test for certain knowledge, skills, or abilities, they might rely on a credential to positively signal that the credential holder has them. The signaling value is what we can test by querying our databases of job postings and professional profiles.

Setting thresholds for demand and wages

We set **low thresholds** for labor market signal at the credential and credential-occupation levels.

- **At the credential level**
Across all professional profiles with the current locations in Florida (a total of 9.92 million) and all job postings listed in Florida between 2017-2021 (a total of 10 million), the credential must be referenced in at least 25 professional profiles or 25 job postings.

- **For credential-occupation linkages**
First, the occupation or occupations that most frequently referenced the credential on job postings and professional profiles were matched, as well as any occupation where more than 1% of job postings or professional profiles for the occupation overall referenced the credential, as well as occupations that account for more than 25% of demand for the credential.

- **For wages**
There are three wage thresholds used, following guidance from the Florida Credentials Review Committee. The starting wage threshold is low.
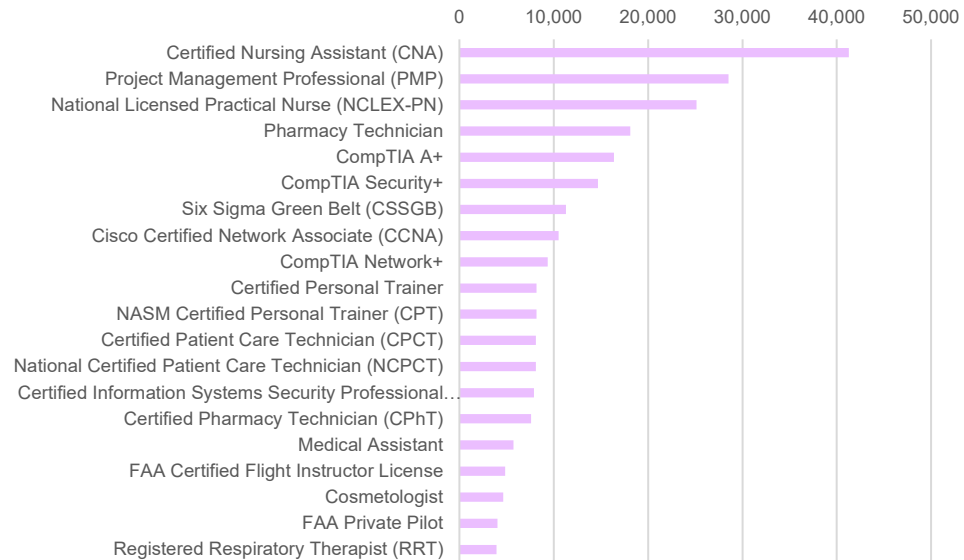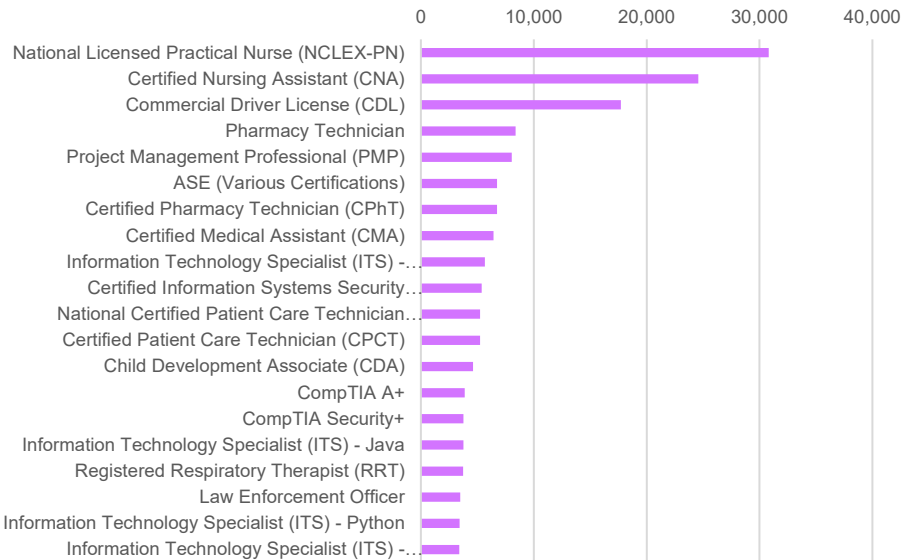
Top industry certifications by supply and demand

447 industry certifications have signaling value (at least 25 postings or profiles).

Average Annual Postings

Certification	
National Licensed Practical Nurse (NCLEX-PN)	
Certified Nursing Assistant (CNA)	
Commercial Driver License (CDL)	
Pharmacy Technician	
Project Management Professional (PMP)	
ASE (Various Certifications)	
Certified Pharmacy Technician (CPhT)	
Certified Medical Assistant (CMA)	
Information Technology Specialist (ITS) -…	
Certified Information Systems Security…	
National Certified Patient Care Technician…	
Certified Patient Care Technician (CPCT)	
Child Development Associate (CDA)	
CompTIA A+	
CompTIA Security+	
Information Technology Specialist (ITS) - Java	
Registered Respiratory Therapist (RRT)	
Law Enforcement Officer	
Information Technology Specialist (ITS) - Python	
Information Technology Specialist (ITS) -…	

(axis: 0 – 10,000 – 20,000 – 30,000 – 40,000)

Professional Profiles

Certification	
Certified Nursing Assistant (CNA)	
Project Management Professional (PMP)	
National Licensed Practical Nurse (NCLEX-PN)	
Pharmacy Technician	
CompTIA A+	
CompTIA Security+	
Six Sigma Green Belt (CSSGB)	
Cisco Certified Network Associate (CCNA)	
CompTIA Network+	
Certified Personal Trainer	
NASM Certified Personal Trainer (CPT)	
Certified Patient Care Technician (CPCT)	
National Certified Patient Care Technician (NCPCT)	
Certified Information Systems Security Professional…	
Certified Pharmacy Technician (CPhT)	
Medical Assistant	
FAA Certified Flight Instructor License	
Cosmetologist	
FAA Private Pilot	
Registered Respiratory Therapist (RRT)	

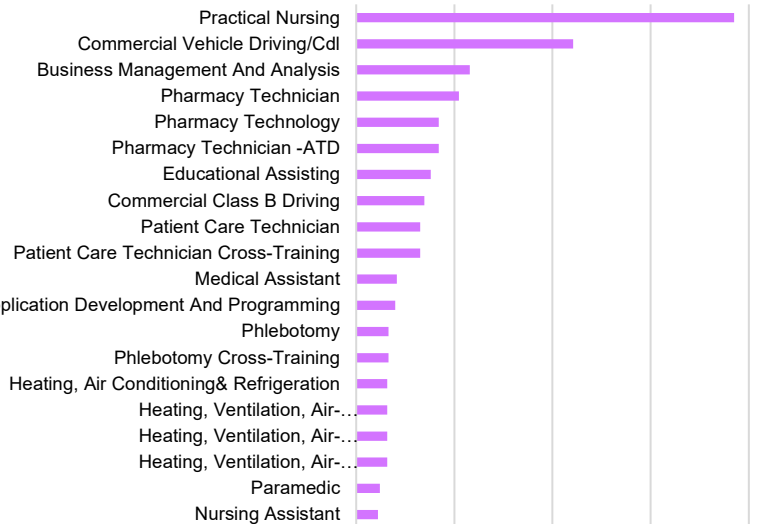(axis: 0 – 10,000 – 20,000 – 30,000 – 40,000 – 50,000)

Top non-degree programs by supply and demand

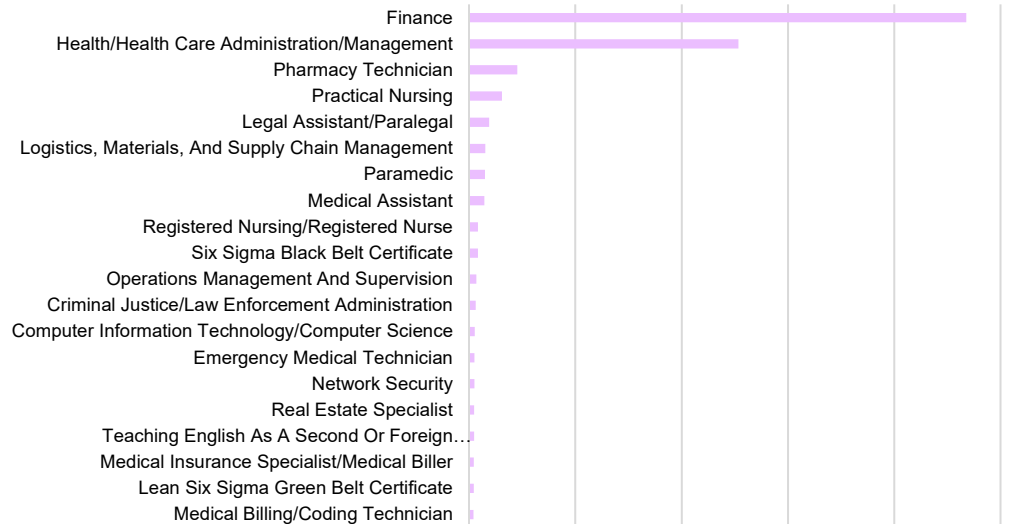**321 non-degree programs** have signaling value (at least 25 postings or profiles).

Average Annual Postings

Program	
Practical Nursing	
Commercial Vehicle Driving/Cdl	
Business Management And Analysis	
Pharmacy Technician	
Pharmacy Technology	
Pharmacy Technician -ATD	
Educational Assisting	
Commercial Class B Driving	
Patient Care Technician	
Patient Care Technician Cross-Training	
Medical Assistant	
.NET Application Development And Programming	
Phlebotomy	
Phlebotomy Cross-Training	
Heating, Air Conditioning& Refrigeration	
Heating, Ventilation, Air-…	
Heating, Ventilation, Air-…	
Heating, Ventilation, Air-…	
Paramedic	
Nursing Assistant	

Professional Profiles

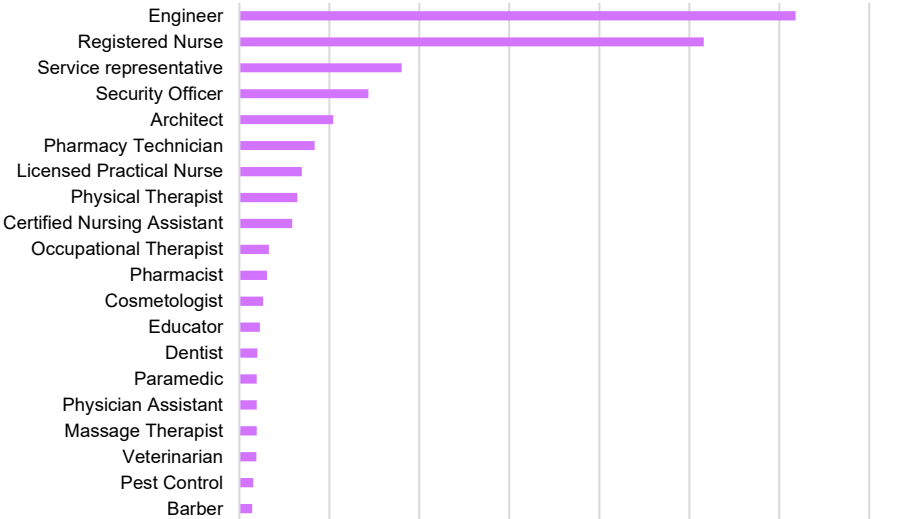| Program	
Finance	
Health/Health Care Administration/Management	
Pharmacy Technician	
Practical Nursing	
Legal Assistant/Paralegal	
Logistics, Materials, And Supply Chain Management	
Paramedic	
Medical Assistant	
Registered Nursing/Registered Nurse	
Six Sigma Black Belt Certificate	
Operations Management And Supervision	
Criminal Justice/Law Enforcement Administration	
Computer Information Technology/Computer Science	
Emergency Medical Technician	
Network Security	
Real Estate Specialist	
Teaching English As A Second Or Foreign…	
Medical Insurance Specialist/Medical Biller	
Lean Six Sigma Green Belt Certificate	
Medical Billing/Coding Technician	

Top licenses by supply and demand

86 licenses have signaling value (at least 25 postings or profiles).

Average Annual Postings

License	
Engineer	
Registered Nurse	
Service representative	
Security Officer	
Architect	
Pharmacy Technician	
Licensed Practical Nurse	
Physical Therapist	
Certified Nursing Assistant	
Occupational Therapist	
Pharmacist	
Cosmetologist	
Educator	
Dentist	
Paramedic	
Physician Assistant	
Massage Therapist	
Veterinarian	
Pest Control	
Barber	

Professional Profiles

License	
Engineer	
Registered Nurse	
Service representative	
Architect	
Educator	
Pharmacy Technician	
Security Officer	
Pharmacist	
Physical Therapist	
Massage Therapist	
Certified Nursing Assistant	
Medical Doctor	
Physician Assistant	
Dentist	
Psychologist	
Paramedic	
Licensed Practical Nurse	
Dental Hygienist	
Cosmetologist	
Occupational Therapist	

Employer demand vs jobseeking behavior

Labor market signaling for credentials is driven by employer demand rather than by individual job seekers.

Number of Credentials with Signaling Value

Credentials with signal value

- Credentials in IT, business, healthcare have the greatest signaling value in the labor market.

- Industry certifications generally lead other types of credentials in alignment.

- Demand signal and supply signal are positively correlated, but labor market signal is greater among employers than among job seekers.

Setting thresholds for labor market signal

We set **low thresholds** for labor market signal at the credential and credential-occupation levels.

- **At the credential level**
  Across all professional profiles with the current locations in Florida (a total of 9.92 million) and all job postings listed in Florida between 2017-2021 (a total of 10 million), the credential must be referenced in at least 25 professional profiles or 25 job postings.

- **For credential-occupation linkages**
  First, the occupation or occupations that most frequently referenced the credential on job postings and professional profiles were matched, as well as any occupation where more than 1% of job postings or professional profiles for the occupation overall referenced the credential, as well as occupations that account for more than 25% of demand for the credential.

- **For wages**
  There are three wage thresholds used, following guidance from the Florida Credentials Review Committee. The starting wage threshold is low.

Linkages improve when credentials have signal value

Manual linkages are more likely to align with algorithmically-generated linkages (i.e., those generated by labor market signal tests) when the credential itself has signal value rather than the signal coming from related skills and keywords.

For credentials that meet signaling thresholds

Credential Source	Validated Linkages	Linkages without Signal Validation
Credential List	69%	31%
License List	72%	28%
Non-Degree List	16%	84%

For credentials that do not meet signaling thresholds

Credential Source	Validated Linkages	Linkages without Signal Validation
Credential List	39%	61%
License List	4%	96%
Non-Degree List	11%	89%

Setting thresholds for labor market signal

We set **<u>low thresholds</u>** for labor market signal at the credential and credential-occupation levels.

- **At the credential level**
  Across all professional profiles with the current locations in Florida (a total of 9.92 million) and all job postings listed in Florida between 2017-2021 (a total of 10 million), the credential must be referenced in at least 25 professional profiles or 25 job postings.

- **For credential-occupation linkages**
  First, the occupation or occupations that most frequently referenced the credential on job postings and professional profiles were matched, as well as any occupation where more than 1% of job postings or professional profiles for the occupation overall referenced the credential, as well as occupations that account for more than 25% of demand for the credential.

- **For wages**
  There are three wage thresholds used, following guidance from the Florida Credentials Review Committee. The starting wage threshold is low, and the high-level wage is ~$15 to ~$30.

Set wage thresholds for job quality analyses

Current wage thresholds set by the Credentials Review Committee

	Representative Starting Wage	Average Annual Wage	High-Level Wage Threshold
All Occupations	$20,530	$50,020	$59,380
No formal educational credential	$19,160	$28,040	$31,470
High school diploma or equivalent	$22,200	$42,430	$50,240
Some college, no degree	$21,770	$40,290	$48,230
Postsecondary nondegree award	$23,930	$42,240	$50,620
Associate's degree	$25,650	$53,480	$67,370
Bachelor's degree	$34,890	$80,570	$96,750
Master's degree	$34,490	$78,040	$99,590
Doctoral or professional degree	$45,510	$134,520	$170,700

Compare advertised wages to wage thresholds

Advertised wages on postings (requesting less than a BA and no more than two years of experience) for the occupations linked to credentials are typically greater than the representative starting wage, but only greater than the average annual wage for a slim majority of credentials and only greater than the high-level wage for 16% of credentials.

Number of linked occupations and the percent of those occupations that beat wage thresholds

	Total Linked Occupations	Beat Representative Starting Wage	Beat Average Annual Wage	Beat High-Level Wage
Less than high school diploma	277	100%	68%	52%
High school diploma or equivalent	2188	100%	51%	9%
Some college, no degree	926	100%	60%	26%
Associate's degree	393	100%	21%	8%
Overall	3784	100%	52%	16%

Weight wage comparisons by job demand

To create a credential-level metric of advertised wages versus wage thresholds, we calculate weighted averages using job postings. This is a view on the opportunity that programs will have to beat the established wage thresholds.
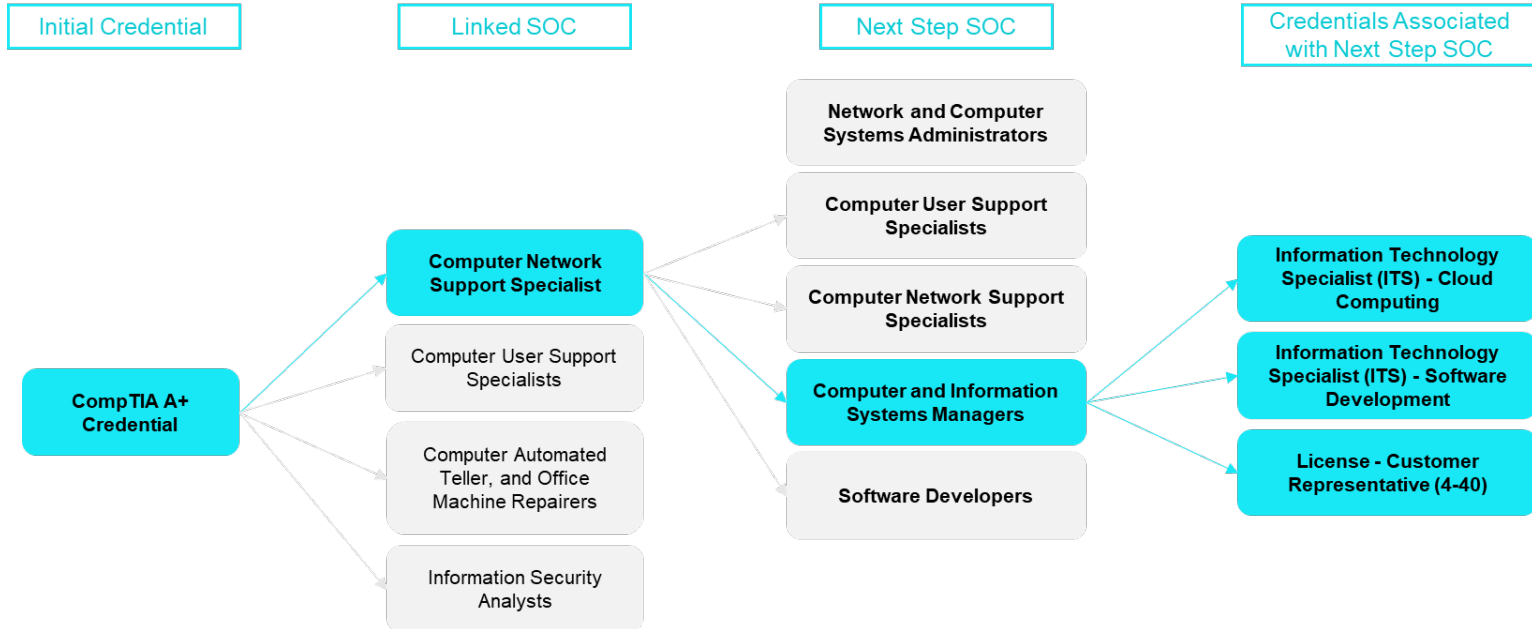
Number of credentials and the percent of credentials that beat wage thresholds (weighted by demand)

	Total Number of Credentials	Beat Representative Starting Wage	Beat Average Annual Wage	Beat High-Level Wage
Credentials with wage data	1,457	1,445	438	111
Percent of credentials with wage data	-	99%	30%	8%

Establish a sequence of credentials

Sequences use credentials for occ-occ mobility

Example: CompTIA A+

| Initial Credential | Linked SOC | Next Step SOC | Credentials Associated with Next Step SOC |

Most sequences do not change wage levels

Averaged out across the most common realized transitions between occupations, only a small percentage climb over the average annual wage if they were not over it already. This highlights the importance of being picky about sequences and pathways, rather than hoping graduates will naturally transition to a job that meets wage thresholds just because they earned a first credential. Follow-on credentials should focus on the specific pathways that lead to occupations that beat wage thresholds.

Additional percent of credentials that beat wage thresholds in next-step occupations

	Beat Representative Starting Wage	Beat Average Annual Wage	Beat High-Level Wage
Percent of credentials with wage data that beat wage thresholds with initial linkages	99%	30%	8%
Additional percent of credentials that beat wage thresholds with next-step linkages	0%	1%	0%

Occupational sequences that work

The sequence to follow is: Credential → Occupation → Occupation → Credential

Credential Name	Linked SOC Name	Avg Salary	Next Step SOC Name	Salary Boost
Diving Medical Technician	Occupational Therapy Aides	$29,530	Physical Therapist Assistants	$23,950
Nursing Cross-Training				
Certified Occupational Therapy Assistant				
Practical Nursing				
Certified Nursing Assistant (CNA)				
National Licensed Practical Nurse (NCLEX-PN)				
Nursing Cross-Training	Home Health and Personal Care Aides	$25,338	First-Line Supervisors of Office and Administrative Support Workers	$17,092
Dietetic Management And Supervision				
Home Health Aide (Postsecondary)				
Anesthesiologist Assistant				
Home Health Aide				
Certified Nursing Assistant (CNA)				

Industry clusters

Cluster	Number of Sequences
Computer and Tech	512
Sales	355
Office and Administrative Support	263
Installation, Maintenance, and Repair	261
Production	203
Construction and Extraction	77
Healthcare Practitioners and Technical Occupations	69
Transportation and Material Moving	37
Protective Service	36
Architecture and Engineering	35
Food Preparation and Serving	10
Healthcare Support	9
Business and Financial	7
Personal Care and Service	6
Legal	5
Arts, Design, Entertainment, Sports, and Media	5
Life, Physical, and Social Science	4
Farming, Fishing, and Forestry	4

- Computer and Tech sequences are versatile and cover a range of disciplines (help desk support, design, software development, and more).

- Sales sequences focus largely on automotive sales, parts sales, and machinery sales.

- Office and Admin Support has a range of customer service and business support sequences.

- Many sequences in Production and Construction and Extraction overlap.

| Create a master list of approved credentials | Link credentials to SOCs manually | Validate and expand SOC linkages using labor market signal | Establish a sequence of credentials | Identify industry sector career pathways |

How to use this information?

- Fold labor market signals (i.e., use by employers in job postings, advertisement of the credential by job seekers on resumes, and estimated/advertised wages) into the validation of credentials.

- Prioritize credentials with low signal value for a review of the human capital value (i.e., confirm that there is genuine skill acquisition and that those skills are valuable in the labor market).

- Engage employers to utilize credentials that have low signal but strong wages.

- Determine which is the "first best" credential in arenas where there are multiple competing credentials (i.e., cybersecurity, welding, etc.).

- Shore up credential availability in industries without many sequences that lead to above-average wage occupations.

- Use wage data to determine which credentials to prioritize → those that lead to employment in high-paying occupations.

- Use demand data to determine which credentials to prioritize → those that lead to employment in occupations with the highest or most acute demand.

Next Steps

- Identify key findings and make recommendations related to Florida's Master Credentials List.

- Deliver final report with recommendations to Credentials Review Committee.

- Build the pathway maps.

Thank You

Matt Walsh

matthew.walsh@lightcast.io

Employer Focus Groups Recap

Dehryl McCall

Senior Director
Business and Workforce Strategies

Sheridan Meek

Research Economist
Florida Chamber Foundation

Workforce Needs Study 2.0 Focus Groups: Research on the Road

- **Research objectives:**
  - Verify current/emerging skills needs
    - Master Credentials List
  - Catalogue industry-education partnership best practices
  - Assess training resource utilization

- **Eight regions**

- **Four occupational groups**
  - Manufacturing/Construction/Skilled Trades
  - Information Technology
  - Healthcare
  - Finance/Professional Services

- **70 employers engaged to date**

3/28

3/29

4/6

4/3

Virtual Focus Groups:

6/12, 10 a.m. – 12 p.m.: Information Technology

6/13, 10 a.m. – 12 p.m.: Healthcare

6/14, 10 a.m. – 12 p.m.: Manufacturing/Construction/Skilled Trades

6/15, 10 a.m. – 12 p.m.: Finance/Professional Services

4/5

4/4

FLORIDA CHAMBER Foundation

Workforce Needs Study 2.0 Focus Groups: What We Learned

Verify current/emerging skills needs
- Little pre-existing knowledge of Master Credentials List
- No strong sentiment to remove any credentials
- Sporadic sentiment to add credentials

Catalogue industry-education partnership best practices
- Limited examples of partnerships
- Smaller employers indicated preference for collaborative approach
- Strong sentiment re: employability skills and career exploration (Especially Manufacturing, Construction, Skilled Trades)
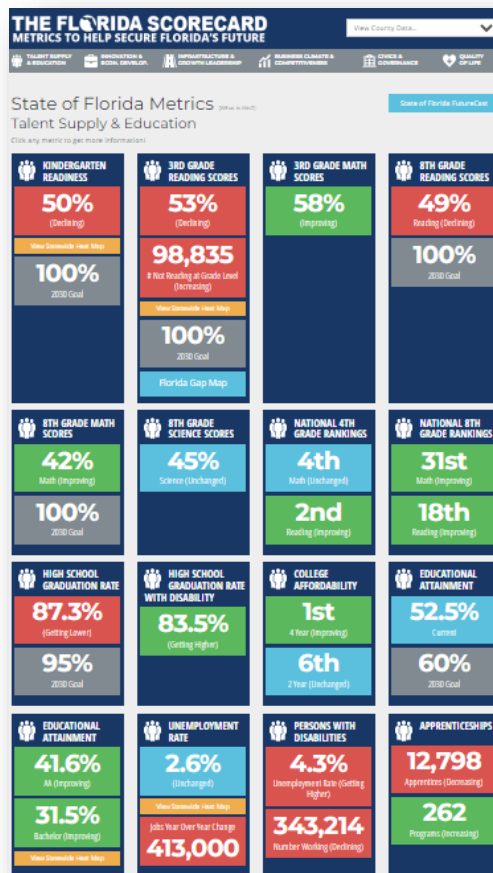
Assess training resource utilization
- Little utilization among focus group employers
- Those who had benefitted from a "Navigator"

Questions?

Sheridan Meek
Research Economist
Florida Chamber Foundation
smeek@flchamber.com

TheFloridaScorecard.org

TheFloridaGapMap.com

@FloridaBTN
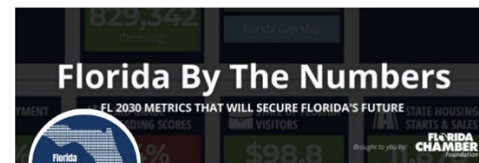
Open Discussion and Public Comment

Upcoming Meetings

- August/September 2023

- November/December 2023