



**SOUTH FLORIDA WORKFORCE INVESTMENT BOARD**

**Executive Committee Meeting**

**THURSDAY, September 10, 2020**

**8:00 A.M.**

View Live on the Web: <https://us02web.zoom.us/meeting/register/tZAsc-ihrzMjHN0IJWrKXiyPdn-Nx1pPN2ey>  
(Registration Required)

**AGENDA**

1. Call to Order and Introductions
2. Approval of Executive Committee Meeting Minutes
  - A. August 13, 2020
3. Information – Florida Economic and Labor Market Trends
4. Information – COVID-19 Layoff Aversion Fund Update
5. Recommendation as to Approval of Additional Funds for the Layoff Aversion Fund
6. Recommendation as to Approval to Reallocate National Disaster Grant Funds
7. Recommendation as to Approval of New Programs for an Existing Training Provider

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"Members of the public shall be given a reasonable opportunity to be heard on a specific agenda item, but must register with the agenda clerk prior to being heard."



**SFWIB EXECUTIVE COMMITTEE**

**DATE September 10, 2020**

**AGENDA ITEM NUMBER: 2A**

**MEETING MINUTES**

**August 13, 2020 at 8:15 A.M**

**CareerSource South Florida Headquarters**

Virtual Meeting (ZOOM)

<p><b>EXECUTIVE COMMITTEE MEMBERS IN ATTENDANCE</b></p> <ol style="list-style-type: none"> <li>1. Perez, Andy, <i>Chairman</i></li> <li>2. Gibson, Charles, <i>Vice-Chairman</i></li> <li>3. del Valle, Juan Carlos</li> <li>4. Ferradaz, Gilda</li> </ol>	<p><b>EXECUTIVE COMMITTEE MEMBERS NOT IN ATTENDANCE</b></p> <ol style="list-style-type: none"> <li>5. Garza, Maria</li> </ol> <p>*****</p> <p><b>SFWIB STAFF</b></p> <p>Beasley, Rick          Ford, Odell          Gilbert, David          Jean-Baptiste, Antoinette          Kavehersi, Cheri          Kelly, Travis          Perrin, Yian</p>	<p><b>AUDIENCE:</b></p> <p>Antunes, Denyse          Perez-Borroto - Connie          Rodriguez, Maria          (305) 345-1296</p>
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Agenda items are displayed in the order they were discussed.

**1. Call to Order and Introductions**

Chairman Andy Perez called the meeting to order at 8:18am, asked all those present introduce themselves, a special presentation be prepared for former SFWIB Assistant Director Marian Smith who recently retire from the agency once everything gets back to normal. He shared with the Council his gratitude of knowing her for over 15 years and wants a well send off for her that he felt was well deserved. He noted into record is well wishes for best luck and great health.

**2. Approval of Executive Committee Meeting Minutes of July 9, 2020**

Ms. Gilda Ferradaz moved the approval of meeting minutes of July 9, 2020. Motion seconded by Vice-Chairman Charles Gibson and Mr. Juan Carlos del Valle; Motion Passed Unanimously

(All in Favor with no Opposition)

**3. Information – TechHire Summer Boot Camps Update**

Chairman Perez introduced the item and Mr. Beasley further presented.

Ms. Ferradaz asked whether if there were any foster youth that participated in the program. Mr. Beasley and Travis Kelley further explained that staff reached out to the foster youth population. He assured that a detailed report would be provided at a later date. Mr. Beasley reassured it would be provided by next week. Mr. Beasley additionally noted that staff reached out to the homeless youth population as well.

Chairman Perez verified the whether if the goal is to get the information out to the community as efficiently as possible in order to recruit as many youths. Mr. Beasley confirmed, “Yes.” Mr. Beasley assured there would be continued enrollment.

Chairman Perez requested additional virtual programs be implemented to exhaust available resources in order to keep the youth involved academically during the summer.

He additionally shared his concern regarding the various challenges for parents.

Ms. Ferradaz concurred and recommended continued partnership with the M-DCPS as she noted their online program would be more robust this forthcoming school year.

Mr. Beasley recommended designing afterschool and weekend programs.

No further questions or discussions.

**4. Information – Summer Youth Internship Program Update**

Mr. Beasley presented the item.

No further questions or discussions.

**5. Information – COVID-19 Layoff Aversion Fund Update**

Mr. Beasley introduced and presented the item.

Chairman Perez inquired about worker's compensation and payroll tax credit for businesses. Mr. Beasley responded that staff would research and provide more detailed information at a later date.

No further questions or discussions.

**6. Recommendation as to Approval to Authorize SFWIB Staff to Provide Direct Employment and Training**

Mr. Beasley introduced the item.

Mr. Juan Carlos del Valle moved the approval to authorize SFWIB staff to provide direct employment and training. Motion seconded by Vice-Chairman Charles Gibson; **Further Discussion(s)**

Vice-Chairman Gibson asked whether if SFWIB would provide direct services for the centers listed in the agenda item. Mr. Beasley provided updates.

Chairman Perez inquired about potentially revisiting a new offer. Mr. Beasley responded "Yes" then provided details.

**(All in favor with no opposition)**

**7. Recommendation as to Approval to Authorize SFWIB Staff to Execute a One-Year Contract for Auditing Services**

Mr. Beasley presented the item.

Vice-Chairman Charles Gibson moved the approval to authorize SFWIB to execute a one-year contract for auditing services. Motion seconded by Ms. Gilda Ferradaz; **Motion Passed by Unanimous Consent**

**(All in favor with no opposition)**

Prior to meeting adjournment, Mr. del Valle commended the great work of Mr. Beasley and staff on the various services implemented by CSSF during this pandemic. He noted Miami-Dade County Commissioner also recognized CSSF at its recent meeting of which he attended. Mr. Beasley briefly shared his gratitude and appreciation.

There being no further business to come before the Committee, meeting adjourned at 9:03am.



**SFWIB EXECUTIVE COMMITTEE**

**DATE:** 9/10/2020

**AGENDA ITEM NUMBER:** 3

**AGENDA ITEM SUBJECT:** FLORIDA ECONOMIC UPDATE

**AGENDA ITEM TYPE:** **INFORMATIONAL**

**RECOMMENDATION:** N/A.

**STRATEGIC GOAL:** **STRONG WORKFORCE SYSTEM LEADERSHIP**

**STRATEGIC PROJECT:** **Use LMI Data for Policy Development**

**BACKGROUND:**

The Florida Department of Economic Opportunity produces Current Employment Statistics. The Current Employment Statistics (CES) program estimates nonagricultural employment by industry, based on the North American Industry Classification System (NAICS). These estimates represent jobs by place of work and are generated from a monthly survey of businesses in Florida. Monthly tables include estimates for the current month, previous month, and the current month a year ago, along with monthly and annual changes.

COVID-19 has impacted the South Florida economy, as well as, the State of Florida. Ms. Adrienne Johnston, the Chief Economist for DEO, will present the economic trends for the State of Florida. The presentation is attached.

**FUNDING:** N/A

**PERFORMANCE:** N/A

*ATTACHMENT*



## Florida Economic and Labor Market Trends

Bureau of Workforce Statistics and Economic Research  
Adrienne Johnston, Bureau Chief

September 2020

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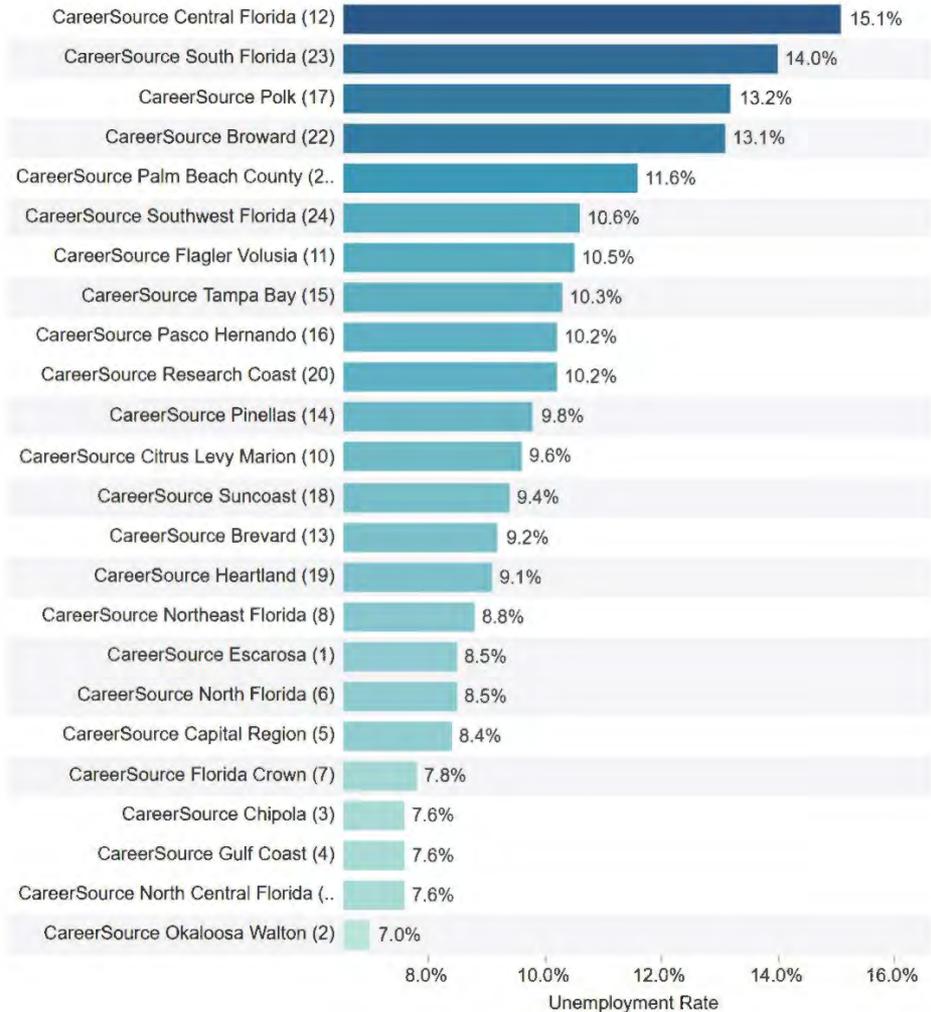
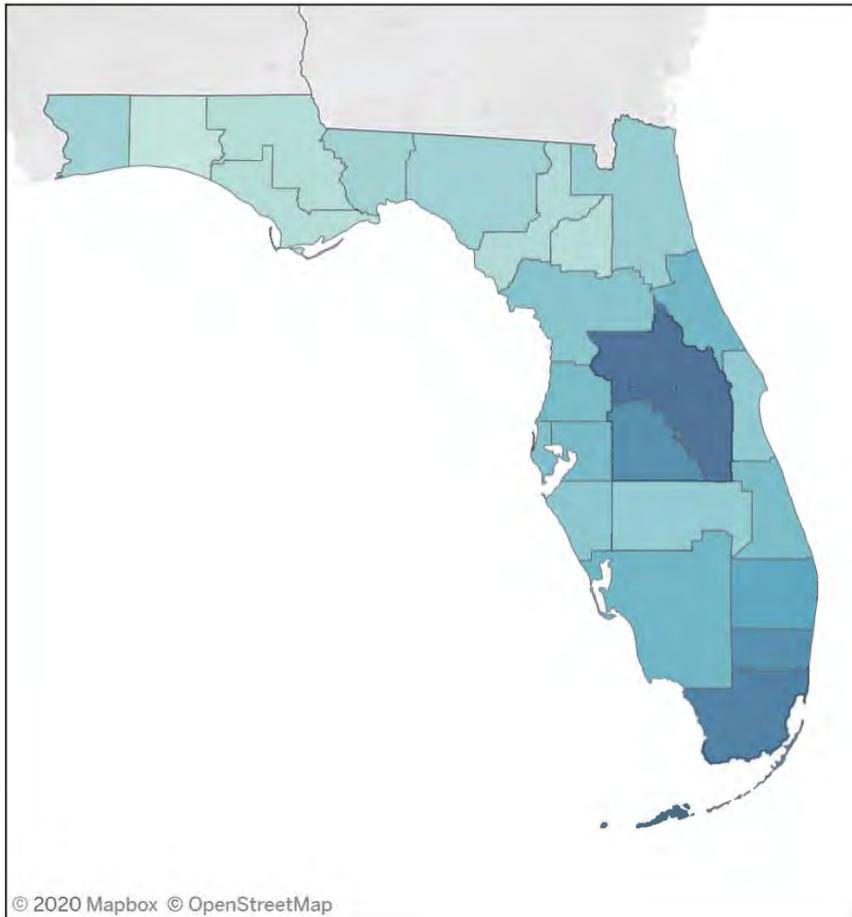


# Florida's Unemployment Rate



Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Local Area Unemployment Statistics. Prepared Aug 2020.

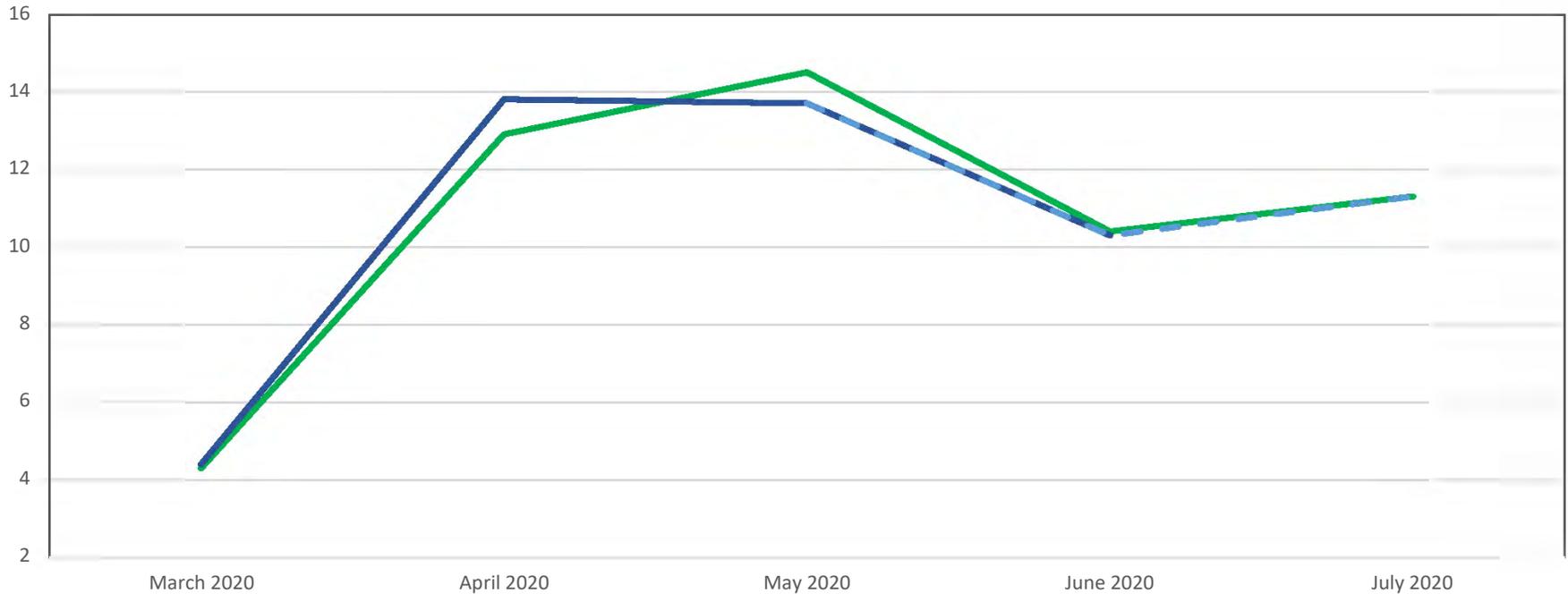
# Florida Unemployment Rates by Area (July 2020)



Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Program, released August 21, 2020.  
 Prepared by: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research.

# Unemployment Revisions

Florida Unemployment Rates  
Preliminary Compared to Revised  
March 2020 to July 2020



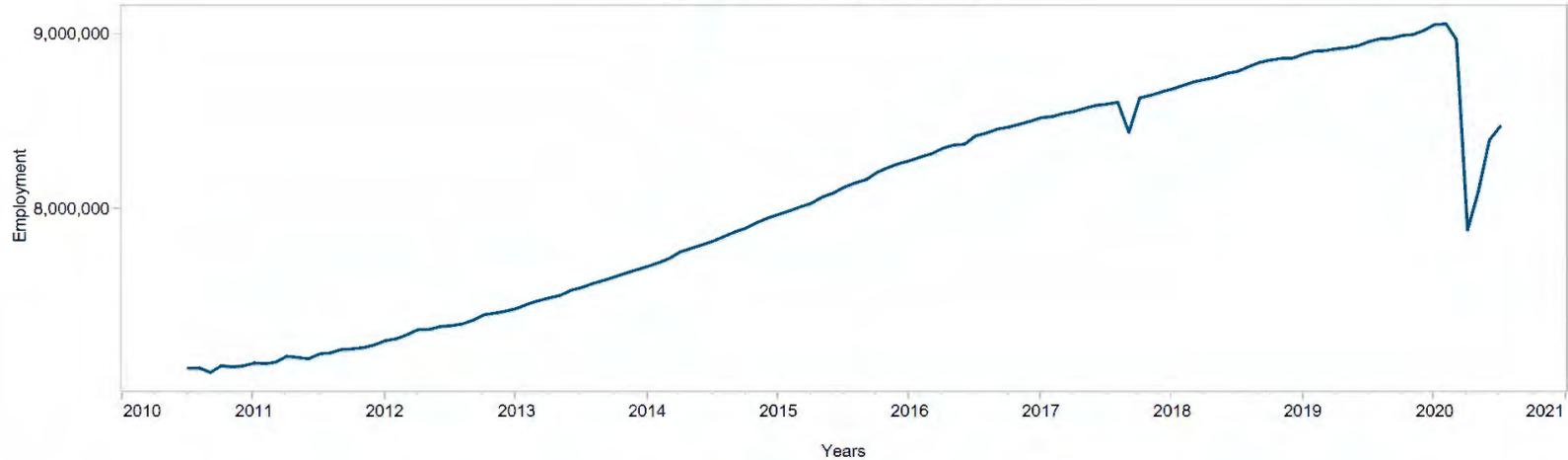
March Preliminary 4.3 percent, March Revised 4.4 percent  
April Preliminary 12.9 percent, April Revised 13.8 percent  
May Preliminary 14.5 percent, May Revised 13.7 percent  
June Preliminary 10.4 percent, June Revised 10.3 percent

— UR Preliminary  
— UR Revised

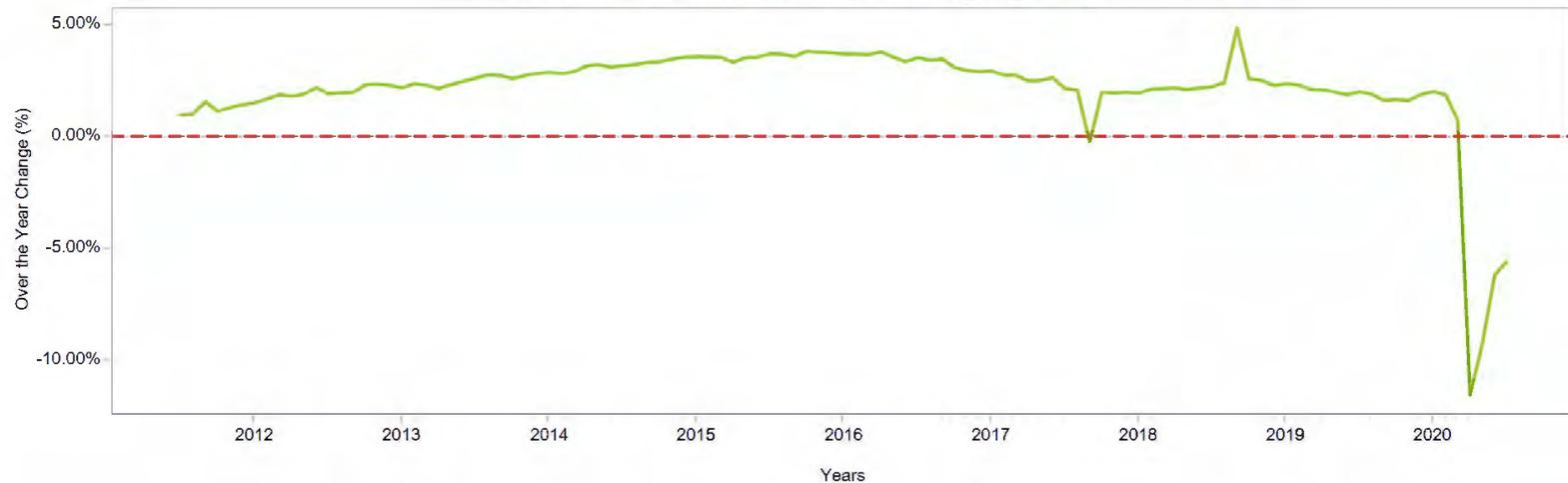
Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Program, released August 21, 2020.  
Prepared by: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research.

# Total Non Agricultural Employment

Florida - Total Nonagricultural Employment  
Employment (Seasonally Adjusted)



Over the Year Percent Change (Seasonally Adjusted)

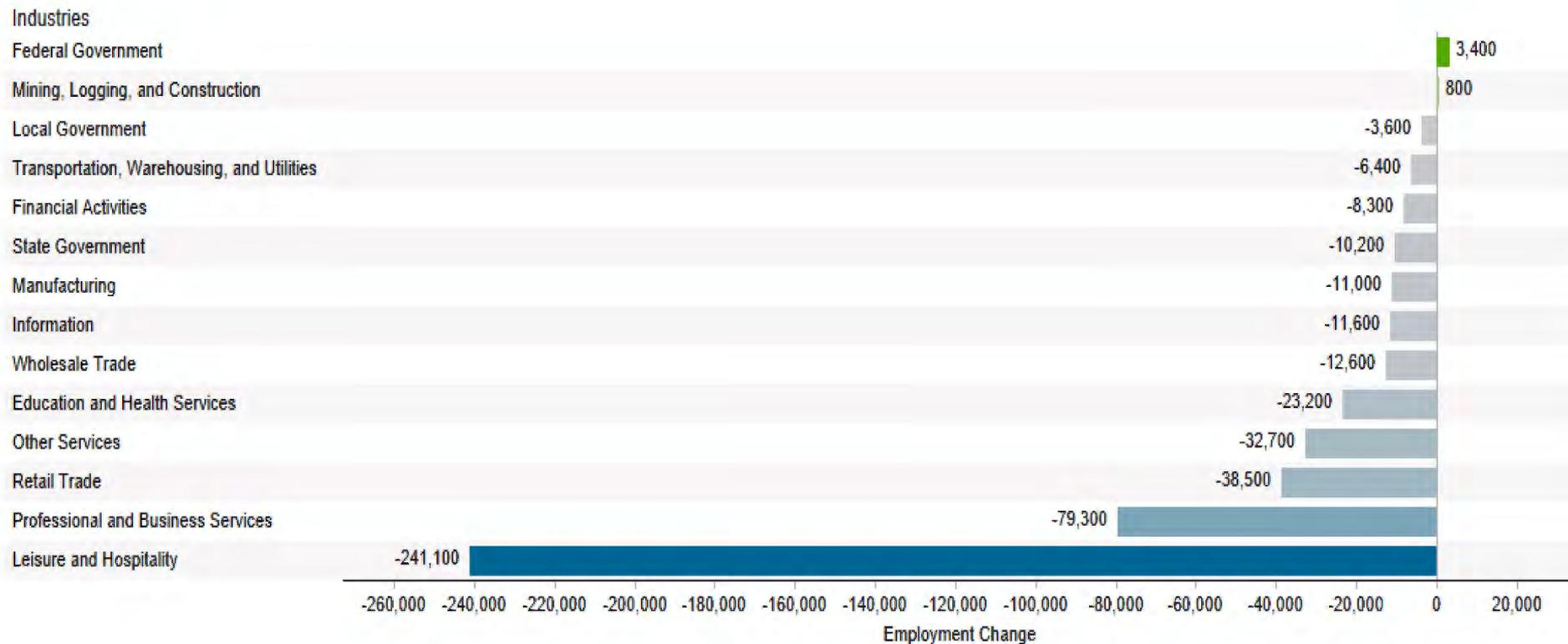


Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Current Employment Statistics (CES). Aug 2020

# Employment Change by Industry July 2019 to July 2020

## Top Industries in Florida by Change in Employment July-2019 to July-2020

\* Total Nonagricultural Employment Change: -474,300

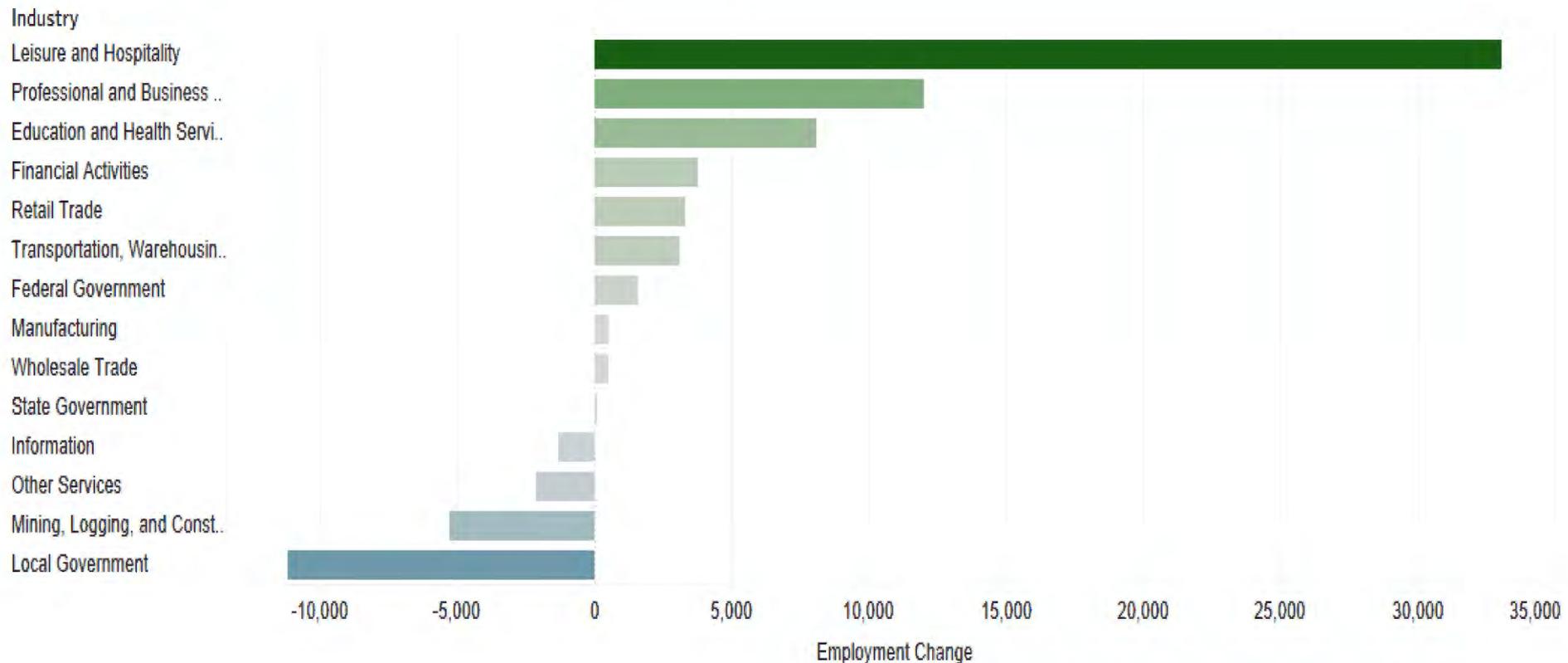


Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Current Employment Statistics.. Prepared September 2020.

# Employment Change by Industry June 2020 to July 2020

## Top Industries in Florida by Change in Employment June-2020 to July-2020

\* Total Nonagricultural Employment Change: +46,200



Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Current Employment Statistics.. Prepared September 2020.



# State and Federal Reemployment Assistance Claim Workflow Employment Change by Industry June 2020 to July 2020 March 15, 2020 - September 1, 2020

Select a green number on the left side to see more details about that section.

## SUBMISSION METHOD

**Total Claims Received**  
**3,842,994**  
 Confirmed Unique Claims Received  
**3,680,797**  
 Unique Claimants  
**3,085,543**

Claims Filed Through Connect	Claims Filed Through Paper & Mobile Friendly Site
<b>1,879,163</b>	<b>1,963,831</b>

Paper Applications Entered by State Employees
<b>261,316</b>

Individuals may have submitted an application through multiple methods. The Total Claims may include duplicate or triplicate claim counts. These numbers may fluctuate as duplicates or incomplete claims are identified and removed.

**Claim Verification Queues**  
**34,235**

## CLAIM VERIFICATION QUEUES

Identity	Out of State Claims	Fraud Detection	Employer and Wage
<b>5,140</b>	<b>2,652</b>	<b>12,683</b>	<b>4,127</b>

A claim may be in the queue for one or more of these processes at any given time, causing the sum of all categories to be greater than the "Claim Verification" total. The Claims Verification Queue excludes claims with no claimant activity in CONNECT for more than 90 days.

**Total Claims Processed\*\***  
**3,620,976**  
 99.1% of Confirmed Unique Claims Submitted  
 Total Eligible Claims Processed  
**2,085,502**

## MONETARY ELIGIBILITY STATUS

Eligible for State Reemployment Assistance	Eligible for Federal Pandemic Emergency Unemployment Compensation	Eligible for Federal Pandemic Unemployment Assistance	Ineligible for State and/or Federal Reemployment Assistance*
<b>1,217,841</b>	<b>487,888</b>	<b>379,773</b>	<b>667,667</b>

Claims by status will not sum to Claims Processed. \*Individuals determined to be ineligible for State Reemployment Assistance may be eligible for other benefits under the C.A.R.E.S. Act, such as Federal Pandemic Unemployment Assistance. \*\* Individuals that have transitioned between programs are included only once in Total Eligible Claims Processed.

**Total Claimants Paid**  
**1,937,633**  
 92.9% of Eligible Claimants Paid  
 Federal PUA Claimants Paid  
**363,087**  
 Federal PEUC Claimants Paid  
**460,440**

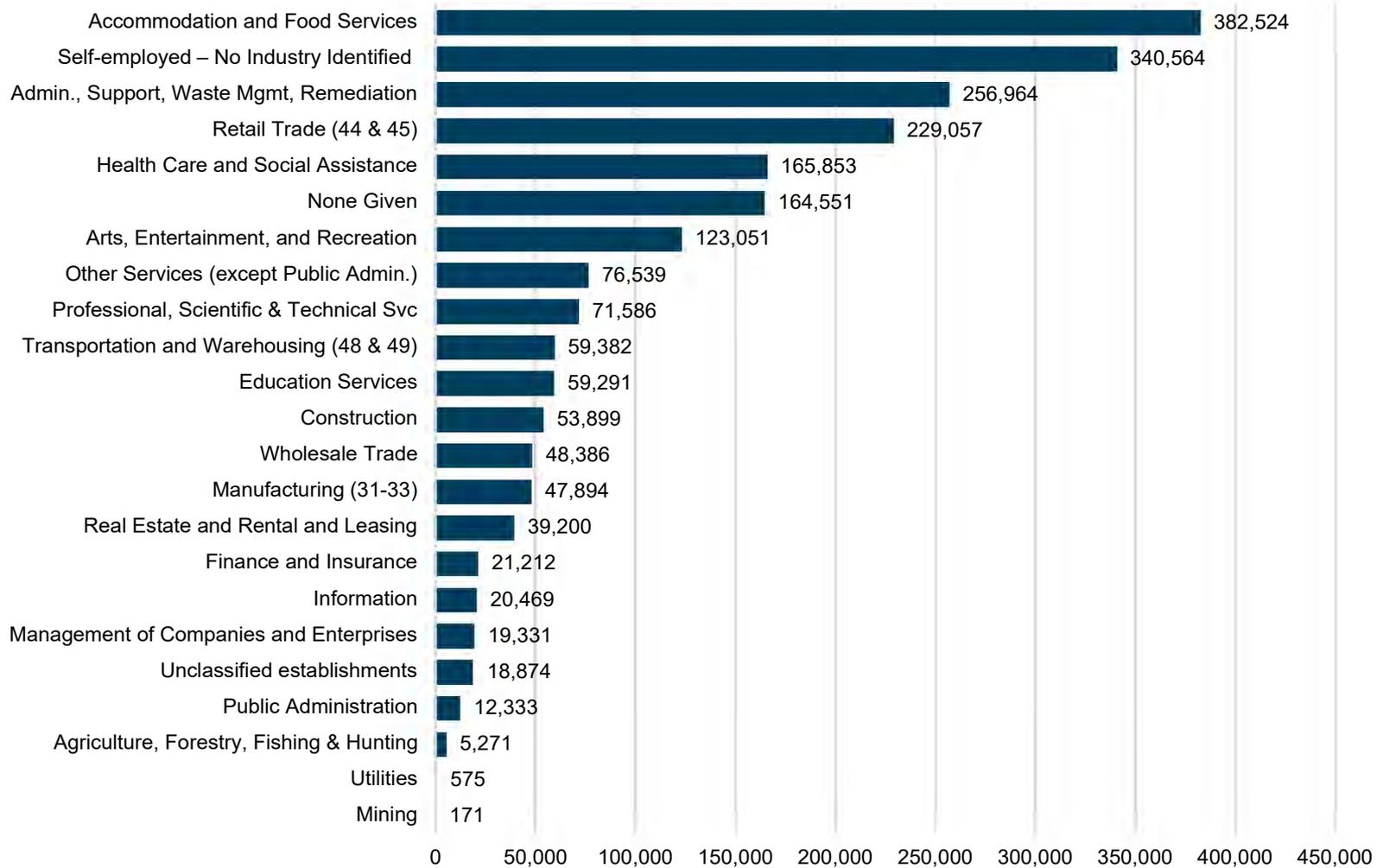
## SOURCE OF FUNDING

State Reemployment Assistance (RA)	Federal Pandemic Emergency Unemployment Compensation (FPEUC)	Federal Pandemic Unemployment Assistance (FPUA)	Federal Pandemic Unemployment Compensation (FPUC)
<b>\$3,092,859,721</b>	<b>\$665,093,388</b>	<b>\$613,337,239</b>	<b>\$10,307,179,200</b>

**\$14,678,469,548**  
**Paid to Claimants**

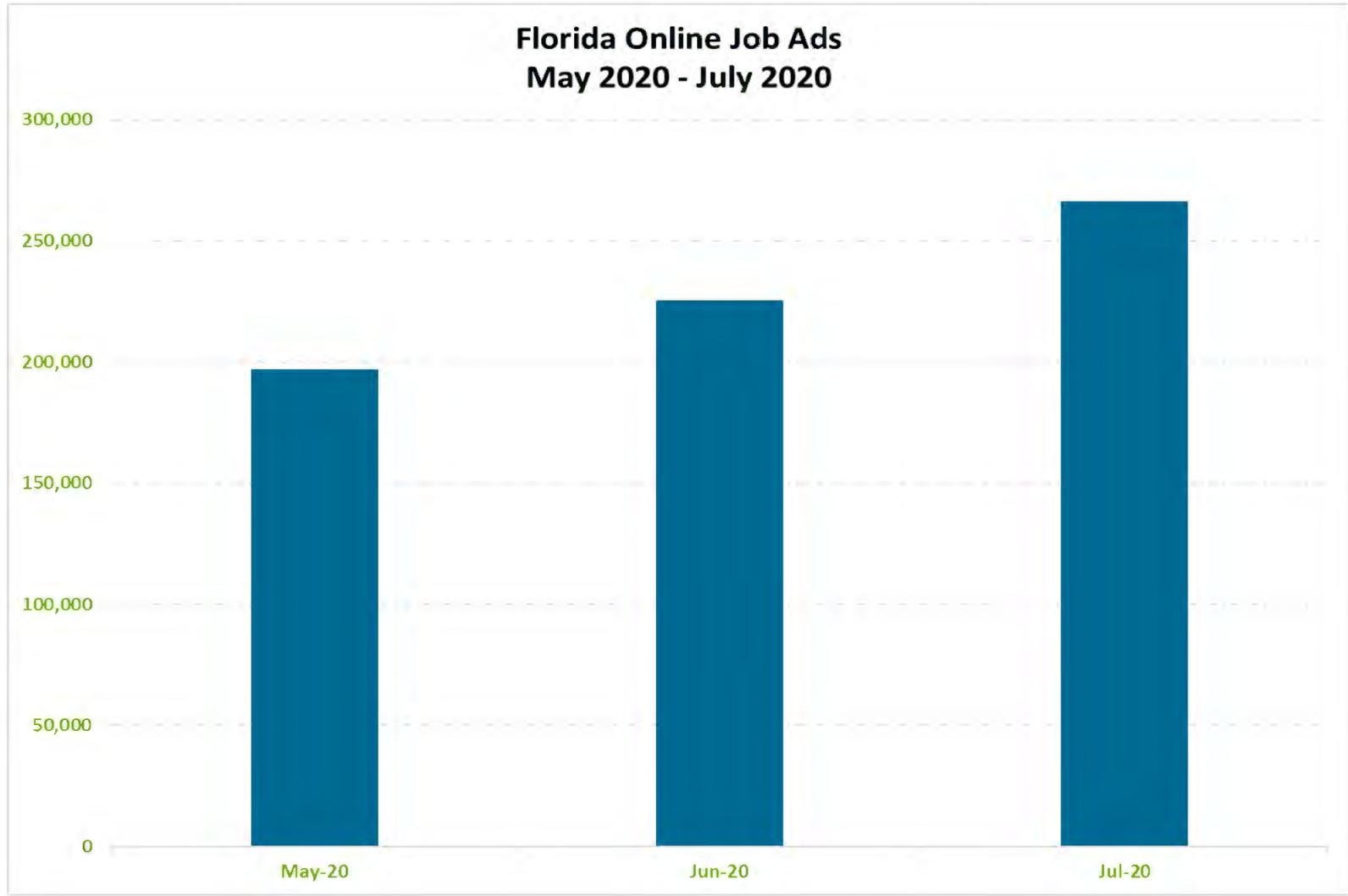
# Initial Claimants by Industry from March 7 to July 25

Initial Claimants By Industry  
March 1st - July 25th, 2020

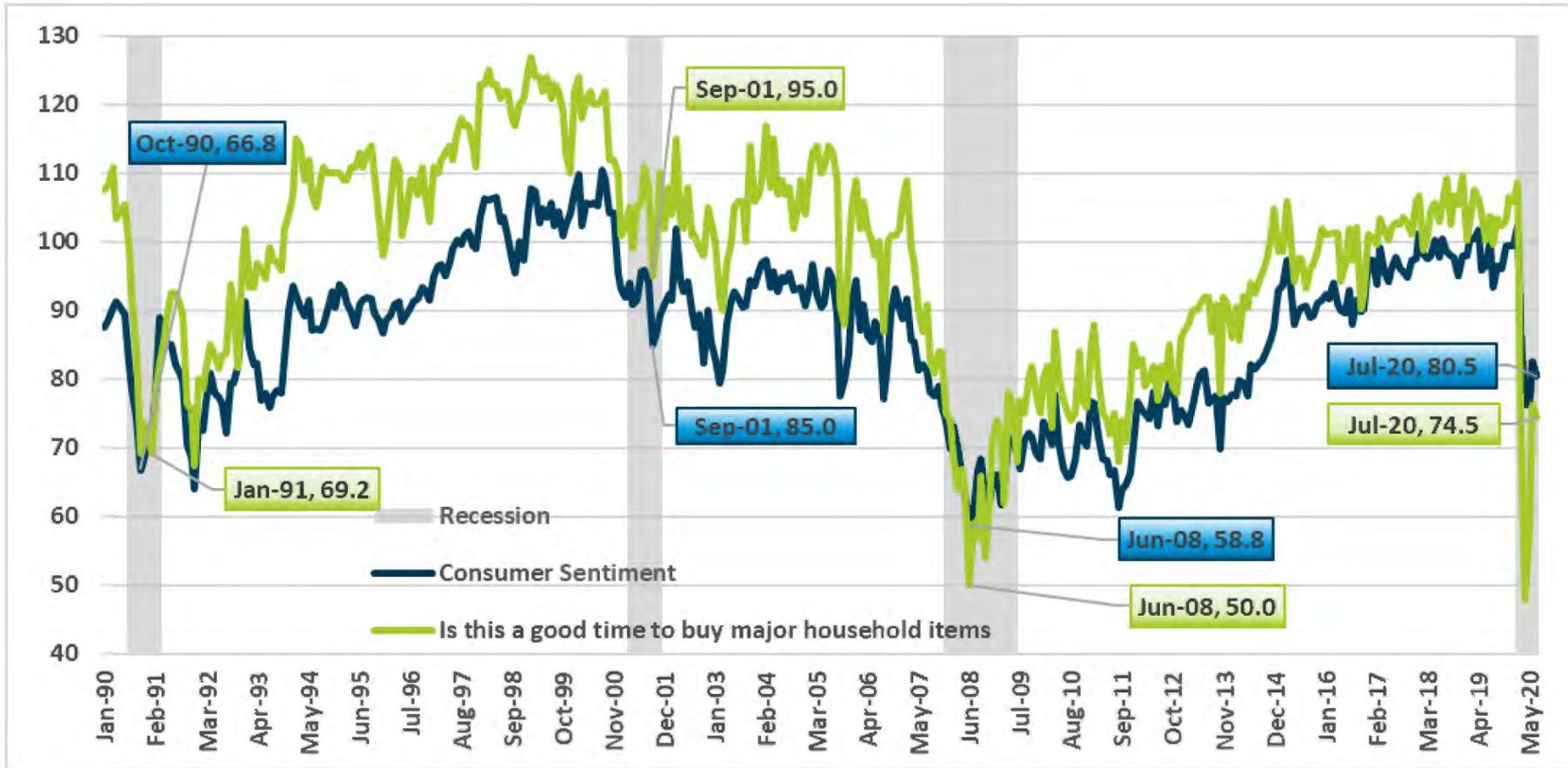


Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research. Prepared August 2020

# Online Job Ads

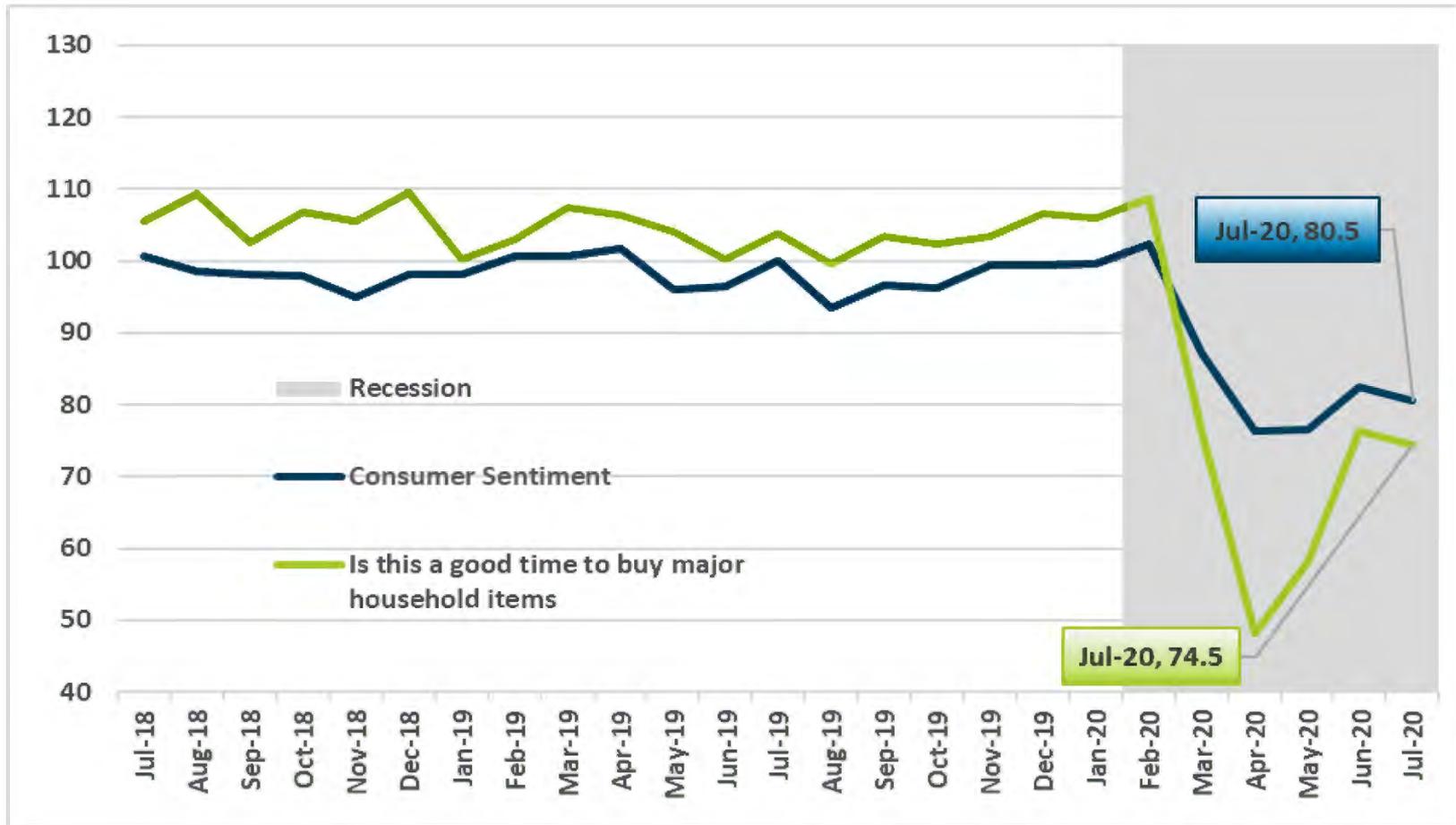


# Florida Consumer Sentiment January 1990 – July 2020



Source: UF Survey Research Center. Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research. Prepared July 2020

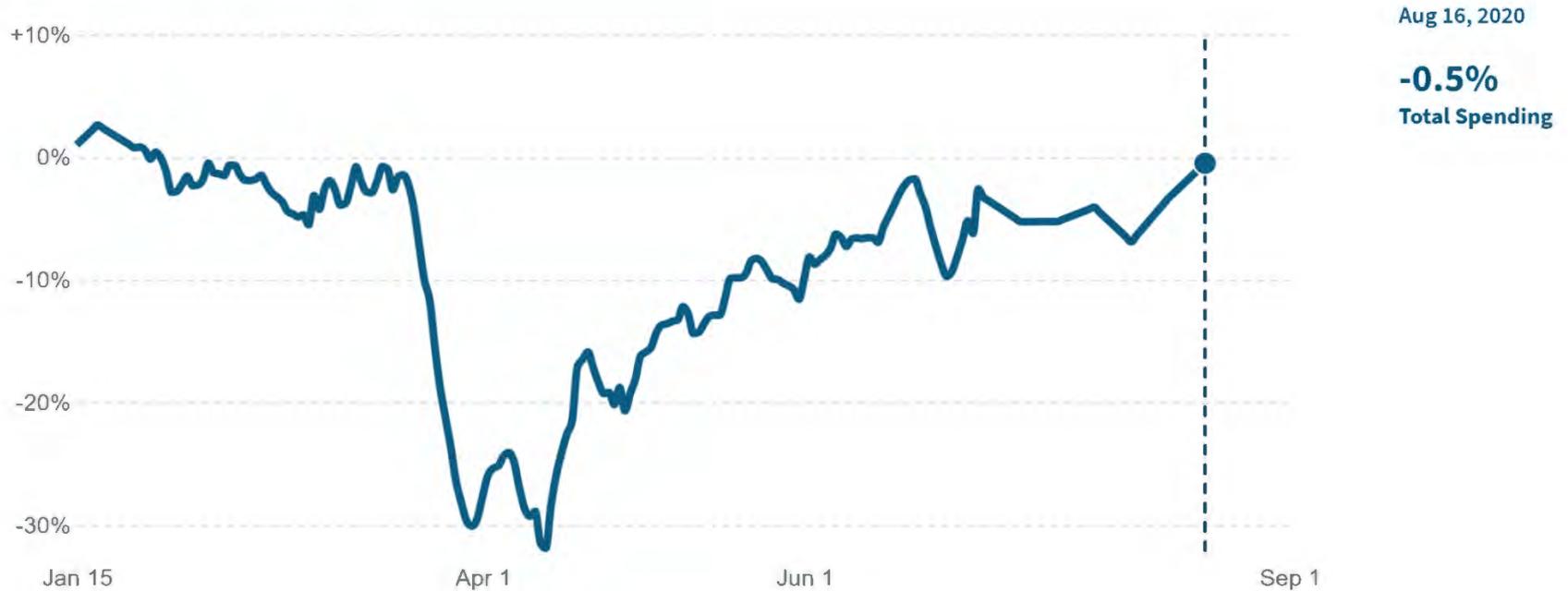
# Florida Consumer Sentiment July 2018 – July 2020



Source: UF Survey Research Center. Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research. Prepared July 2020

# Consumer Spending in 2020

In **Florida**, as of August 16 2020, total spending by all consumers decreased by **0.5%** compared to January 2020.



Source: Chart courtesy of tracktherecovery.org



## **SFWIB EXECUTIVE COMMITTEE**

**DATE:** 9/10/2020

**AGENDA ITEM NUMBER:** 4

**AGENDA ITEM SUBJECT:** WIOA LAYOFF AVERSION FUND UPDATE

**AGENDA ITEM TYPE:** **INFORMATIONAL**

**RECOMMENDATION:** N/A.

**STRATEGIC GOAL:** **BUILD DEMAND-DRIVEN SYSTEM W/ EMPLOYER ENGAGEMENT**

**STRATEGIC PROJECT:** **Develop Integrated Business Service Teams**

### **BACKGROUND:**

On June 18, 2020, the SFWIB approved the implementation of the COVID-19 Layoff Aversion Fund initiative. The program was launched in an effort to support small businesses and/or community based organizations (CBOs) facing financial impacts and potential layoffs from Coronavirus disease 2019 (COVID-19). The fund will provide grants to small businesses and/or CBOs experiencing economic distress. The goals of the fund is to prevent potential layoffs or minimize the duration of unemployment resulting from layoffs due COVID-19.

As of August 31, 2020, the fund has received 977 applications requesting over \$5.7 million dollars in assistance. The attached chart will provide you with an update of the current status of the program.

The first column of the chart depicts the overall totals for the program. A total of 11,403 employees could be potentially impacted within the 977 business. The estimated number of jobs that could be potentially saved is 9,013 which equates to \$341,991,977. 67 in salary impact on the community. That would give the overall program a \$59.32 return on investment.

The second column of the chart depicts the current number of approved applications of 222 business/not-for-profit effecting 2,867 employees and potentially saving 2,418 jobs. If all of the approved applications pass the secondary review it will result in \$96,256,425.42 in salary impact to the community giving the program a \$70.52 return on investment. Applications must be reviewed to ensure approved expenses are allowable.

The third column provides an update on the current status on those applications that have been paid as of August 31, 2020. At present, 68 applicants have received Layoff Aversion Fund reimbursements totalling \$199,456.62 saving an estimated 672 jobs. Thus far the fund has had a \$30,705,016.98 in salary impact on the community which equates to a \$153.95 return on investment.

**FUNDING:** N/A

**PERFORMANCE:** N/A

*ATTACHMENT*

**LAYOFF AVERSION FUND  
SUMMARY REPORT**

ROI Performance Calculations Layoff Aversion	Requested	Approved	Paid as of 8/31/20
<b>Total Number of Applications</b>	<b>977</b>	<b>222</b>	<b>68</b>
<b>Total Number of employees</b>	<b>11,403</b>	<b>2,867</b>	<b>780</b>
Average Hourly Wage per Employee	\$ 18.55	\$ 19.41	\$ 22.11
Avg. Salary Annual	\$ 38,584.00	\$ 40,372.80	\$ 45,988.80
<b>Estimated Number of Jobs Saved Should Employer's Layoff Aversion Request Be Approved</b>	<b>9,013</b>	<b>2,418</b>	<b>672</b>
<b>Estimated Amount of Annual Wages Saved</b>	<b>\$ 347,757,592.00</b>	<b>\$ 97,621,430.40</b>	<b>\$ 30,904,473.60</b>
Layoff Aversion Assistance Requested	\$ 5,765,614.33	\$ 1,365,004.97	\$ 199,456.62
Avg Assistance Amount per Jobs Saved	\$ 639.70	\$ 564.52	\$ 296.81
Net Economic Benefit	\$ 37,944.30	\$ 39,808.28	\$ 45,691.99
<b>Economic Impact to the Community</b>	<b>\$ 341,991,977.67</b>	<b>\$ 96,256,425.43</b>	<b>\$ 30,705,016.98</b>
<b>ROI</b>	<b>\$ 59.32</b>	<b>\$ 70.52</b>	<b>\$ 153.94</b>



**SFWIB EXECUTIVE COMMITTEE**

**DATE:** 9/10/2020

**AGENDA ITEM NUMBER:** 5

**AGENDA ITEM SUBJECT:** LAYOFF AVERSION FUND ADDITIONAL FUNDING REQUEST ALLOCATION

**AGENDA ITEM TYPE:** **APPROVAL**

**RECOMMENDATION:** The SFWIB Staff recommends to the Executive Committee the approval to expand the Layoff Aversion Fund program and allocate an amount not to exceed \$1,500,000 in Workforce Innovation and Opportunity Act (WIOA) Rapid Response Funds, as set forth below.

**STRATEGIC GOAL:** **BUILD DEMAND-DRIVEN SYSTEM W/ EMPLOYER ENGAGEMENT**

**STRATEGIC PROJECT:** **Develop Integrated Business Service Teams**

**BACKGROUND:**

In June 2020, SFWIB Board approved the creation of the Layoff Aversion Fund in an effort to support small businesses and/or community based organizations (CBOs) facing financial impacts and potential layoffs from Coronavirus disease 2019 (COVID-19). The fund provides grants to small businesses and/or CBOs experiencing economic distress. The goals of the fund is to prevent potential layoffs or minimize the duration of unemployment resulting from layoffs due COVID-19. The board approved \$2,300,000 in Workforce Innovation and Opportunity Act (WIOA) Rapid Response Funds for this endeavor.

The SFWIB board approved the original allocation as detailed below:

<b>Business Intermediaries</b>	<b>Layoff Aversion Fund Allocation</b>
Greater Key West Chamber of Commerce	\$150,000
Greater Marathon Chamber of Commerce	\$150,000
Black Economic Development d/b/a Tools for Change	\$500,000
Latin American Chamber of Commerce (CAMACOL)	\$500,000
Greater Miami Chamber of Commerce	\$500,000
Beacon Council	\$500,000
<b>TOTAL</b>	<b>\$2,300,000</b>

Since the program's inception, partnering agencies have received 977 applications totaling \$5.7 Million dollars in reimbursement request. The Greater Miami Chamber and the Beacon Council have received the most request with the chamber receiving 295 request for \$1,803,570 and the Beacon Council receiving 518 applications for \$2,975,090. This additional allocation will help SFWIB and our partnering agencies in assisting more local businesses.

SFWIB staff recommends the additional allocation of \$1,500,000 to be dispersed as set forth below:

<b>Business Intermediaries</b>	<b>Layoff Aversion Fund Allocation</b>
Greater Key West Chamber of Commerce	\$50,000
Greater Marathon Chamber of Commerce	\$50,000
Black Economic Development d/b/a Tools for Change	\$200,000
Latin American Chamber of Commerce (CAMACOL)	\$200,000
Greater Miami Chamber of Commerce	\$500,000
Beacon Council	\$500,000
TOTAL	\$1,500,000

**FUNDING:** Workforce Innovation and Opportunity Act (WIOA) Rapid Response Funds

**PERFORMANCE:** N/A

*NO ATTACHMENT*



## **SFWIB EXECUTIVE COMMITTEE**

**DATE:** 9/10/2020

**AGENDA ITEM NUMBER:** 6

**AGENDA ITEM SUBJECT:** NATIONAL DISLOCATED WORKER GRANT FUND PROJECTS

**AGENDA ITEM TYPE:** **APPROVAL**

**RECOMMENDATION:** SFWIB staff recommends to the Executive Committee to recommend to the Board the approval to reallocate an amount not to exceed \$803,159 in National Disaster Worker Grant (NDWG) funding, as set forth below.

**STRATEGIC GOAL:** **STRONG WORKFORCE SYSTEM LEADERSHIP**

**STRATEGIC PROJECT:** **Develop Specific Programs and Initiatives**

### **BACKGROUND:**

On April 28, 2020, the SFWIB received a Noticed of Fund Availability from the Department of Economic Opportunity (DEO) of the State of Florida for a total award of \$1,504,880 in National Dislocated Worker Grant (NDWG) funds. As a result of which, at the June 18, 2020 board meeting the board approved a NDWG project with the Miami-Dade County Corrections and Rehabilitation Department (MDCR). SFWIB staff initiated the project with the Department of Corrections and the program continues today. However, the program has not reached its full capacity and therefore staff would like reallocate some of said funding to two new projects. SFWIB staff have been working with a number of municipalities and nonprofits to develop an employment program to temporarily hire the displaced workers until the economy rebounds.

**Reallocation Project 1:** The SFWIB recommends to Executive Committee the reallocation of COVID-19 NDWG funds in the amount of \$291,375.00 MDCR project to the Miami-Dade County Community Action and Human Services Department (CAHSD) project. The CAHSD project will assist up to 15 dislocated workers for up to 25 weeks of disaster-relief temporary employment. The temporary staff will be responsible for the following activities:

- Distribution of food to elderly residents of Miami-Dade County.
- Providing well-being checks via phone, in-person, or virtual means.
- Providing homemaker grocery, pharmacy, supply delivery, or other services related to COVID-19.

**Reallocation Project 2:** The SFWIB recommends to the Executive Committee the reallocation of COVID-19 NDWG funds in the amount of \$511,784.00 from the MDCR project to the Neighbors & Neighbors Association (NANA) project. The NANA project will assist up to 26 dislocated workers for up to 19 weeks of disaster-relief temporary employment. The temporary staff will be responsible for the following activities:

- Distribution of Personal protective equipment (PPE) equipment to small businesses and residents.
- Prepare PPE boxes/bags for distribution.
- Community Outreach to local businesses to inform of PPE and COVID-19 grants and loan programs.
- Provide assistance in the completion and data entry COVID-19 grants and loan applications.
- Sanitation of Miami-Dade County not for profit businesses.

The CAHSD and NANA will function as the worksite partners and provide the oversight of the displaced workers. CSSF will utilize Alpha 1 Staffing as the employer of record (staffing company) for the two NDWG projects.

**FUNDING:** National Disaster Worker Grant COVID-19

**PERFORMANCE:** N/A

*ATTACHMENT*

**Miami Dade County Community Action and Human Services Department (CAHSD)  
NDWG PROJECT**

Locations	NEG Occupations	# of NEG Positions	Duration of Project (Weeks)	Wage Rate	# of Work Hrs.	PROGRAM COST		Cost Per Participant	TOTALS
						Participant Cost	Staffing Company Rate - 29.5%		
CAHSD	Eligibility Worker	6	25	\$15.00	1,000	\$ 90,000.00	\$ 26,550.00	\$ 19,425.00	\$ 116,550.00
CAHSD	Elderly Division – Telephone Reassurance Worker	5	25	\$15.00	1,000	\$ 75,000.00	\$ 22,125.00	\$ 19,425.00	\$ 97,125.00
CAHSD	Senior Meals Program	4	25	\$15.00	1,000	\$ 60,000.00	\$ 17,700.00	\$ 19,425.00	\$ 77,700.00
<b>Totals</b>		<b>15</b>	<b>25</b>	<b>\$15.00</b>	<b>1,000</b>	<b>\$ 225,000.00</b>	<b>\$ 66,375.00</b>	<b>\$ 19,425.00</b>	<b>\$ 291,375.00</b>

**Neighbors & Neighbors Association (NANA)  
NDWG PROJECT**

Locations	NEG Occupations	# of NEG Positions	Duration of Project (Weeks)	Wage Rate	# of Work Hrs.	PROGRAM COST		Cost Per Participant	TOTALS
						Participant Cost	Staffing Company Rate - 29.5%		
NANA	Eligibility Worker	26	19	\$20.00	760	\$ 395,200.00	\$ 116,584.00	\$ 19,684.00	\$ 511,784.00
<b>Totals</b>		<b>26</b>	<b>19</b>	<b>\$20.00</b>	<b>760</b>	<b>\$ 395,200.00</b>	<b>\$ 116,584.00</b>	<b>\$ 19,684.00</b>	<b>\$ 511,784.00</b>



## **SFWIB EXECUTIVE COMMITTEE**

**DATE:** 9/10/2020

**AGENDA ITEM NUMBER:** 7

**AGENDA ITEM SUBJECT:** EXISTING TRAINING PROVIDER AND PROGRAMS

**AGENDA ITEM TYPE:** **APPROVAL**

**RECOMMENDATION:** SFWIB staff recommends to the Executive Committee to recommend to the Board the approval of New Programs for an Existing Training Provider, as set forth below.

**STRATEGIC GOAL:** **HIGH ROI THROUGH CONTINUOUS IMPROVEMENT**

**STRATEGIC PROJECT:** **Improve Credential Outcomes for Job Seekers**

### **BACKGROUND:**

In accordance with Section 122 of the Workforce Innovation and Opportunity Act, regional workforce boards are permitted to independently develop criteria for the selection and subsequent eligibility of Training Providers and programs. The South Florida Workforce Investment Board (SFWIB) developed processes to evaluate an applicant's programmatic capabilities.

SFWIB staff completed the review process and documentation is being presented to the Executive Committee for a recommendation to the Board for approval.

Below is a request to add new programs and courses for existing training provider for review and approval of the Committee.

Request to add New Programs for Existing Training Provider:

1. District Board of Trustees of Miami Dade College dba Miami Dade College

Request to Add new programs and courses to existing locations:

New Programs:

- Graphic Design Support - College Credit Certificate
- Help Desk Support Technician - College Credit Certificate
- Digital Marketing Management - College Credit Certificate
- Chef's Apprentice - College Credit Certificate

- Business Entrepreneurship Specialist - Start-Up Venture - College Credit Certificate
- Accounting Clerk - College Credit Certificate
- Phlebotomy Technician - College Credit Certificate
- Emergency Medical Technician - College Credit Certificate
- Translation and Interpretation - College Credit Certificate
- Network Security - College Credit Certificate
- Enterprise Cloud Computing - College Credit Certificate

New Courses:

- Amazon Web Services (AWS) Certified Solutions Architect - Associate - Industry Certification
- AWS Certified Cloud Practitioner – Industry Certification
- Oracle Certified Associate (OCA): Java Programmer - Industry Certification
- Certified Internet Web (OCA): JavaScript Specialist - Industry Certification
- Certified Nursing Assistant (CNA) - Industry Certification
- 911 Public Safety Telecommunicator - Industry Certification
- Logistics, Transportation, Distribution - Industry Certification
- Certified Professional Biller - Industry Certification

**FUNDING:** N/A

**PERFORMANCE:** N/A

*ATTACHMENT*

## Training Vendor Program Information for: Miami Dade College

**Note:** ITAs are issued in accord with the SFWIB ITA Policy; the initial ITA may cover up to and including 50 percent of the program's maximum ITA amount; the subsequent ITA is issued upon the participant's arrival at the midpoint of the training program's life and may cover up to and including the remaining 50 percent of the program's maximum ITA amount. **Pell Grants:** All participants are required to apply for the Pell Grant and if Pell eligible and the program is a Pell eligible program, then the Pell Grant must be deducted from the total ITA amount. ITAs only cover up to one year of training and neither A.A. nor Bachelor degrees. **Refunds:** For guidance on issuing refunds, refer to the SFWIB Standardized Refund Policy. **Notice:** Case Managers shall advise participants that they may be required to obtain student loans and/or other grants to cover the cost of the program that they wish to enroll in if the ITA amount and the Pell Grant, if eligible for Pell, does not cover the full cost of the program. **SFWIB will not be responsible for any debts that the participant incurs.**

																				2020-2021 TOL Wage Rate			
Proposed Training Program Name <small>(program name must be written as approved by the CIE)</small>	Credential Type <small>(i.e., Diploma, Associate or Bachelor of Science)</small>	Location/ Campus <small>(street address, city, state &amp; zip)</small>	Credit Hours	Clock Hours	Course Length <small>(estimated in months)</small>	Tuition Cost	Application Registration Fees Cost	Books Cost	Materials Cost	Uniforms Cost	Tools Cost	Testing Fees Cost	Certification Fees Cost	Licensing Fees Cost	Other Fees/ Costs	Total Program Costs	Pell Eligible <small>(Yes/No)</small>	CIP Code	2020-2021 TOL Related Occupations <small>(SOC &amp; Name)</small>	Entry	Mean	Quadrant Category	
<b>Certificate Programs</b>																							
Graphic Design Support	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	15	N/A	4	\$1,773.30	\$30.00	\$185.00	\$315.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.00	\$2,358.30	N	0611080302	27-1024/ Graphic Designers	\$15.61	\$24.47	LG/HW	
Help Desk Support Technician	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	16	N/A	12	\$1,891.52	\$30.00	\$437.00	\$100.00	\$0.00	\$0.00	\$0.00	\$330.00	\$0.00	\$252.00	\$3,040.52	Y	0511010313	15-1151 / Computer User Support Specialists	\$15.53	\$24.47	HG/HW	
Digital Marketing Specialist	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	12	N/A	4	\$1,418.64	\$30.00	\$785	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,233.64	Y	0252140112	11-2021/ Marketing Managers	\$31.37	\$59.94	HG/HW	
Chef's Apprentice	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	12	N/A	4	\$1,418.64	\$30.00	\$427.00	\$8,331.00	\$0.00	\$0.00	\$275.00	\$0.00	\$0.00	\$0.00	\$10,481.64	N	0612050302	11-9051/ Food Service Managers	\$20.84	\$35.23	HG/HW	
Business Entrepreneurship Specialist - Start-Up Venture	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	12	N/A	4	\$1,418.64	\$30.00	\$385.00	\$282.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,116.00	N	0552070308	11-2021/ Marketing Managers	\$31.37	\$59.94	HG/HW	
Business Intelligence Professional	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	20	N/A	8	\$2,364.40	\$30.00	\$381.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$315.00	\$3,090.90	Y	0552130101	15-1199 Computer Occupations, All Other	\$18.37	\$44.46	HG/HW	
Accounting Clerk	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	18	N/A	12	\$2,127.96	\$30.00	\$852.00	\$0.00	\$0.00	\$0.00	\$150.00	\$0.00	\$0.00	\$0.00	\$3,159.96	Y	0552030203	43-3031/ Bookkeeping, Accounting, and Auditing Clerks	\$13.82	\$20.11	LG/HW	
Phlebotomy Technician	College Technical Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	5.5	N/A	4	\$531.00	\$30.00	\$350.00	\$215.00	\$100.00	\$0.00	\$135.00	\$0.00	\$0.00	\$0.00	\$1,361.00	N	0351100901	31-9097/ Phlebotomists	\$12.45	\$15.52	HG/LW	
Emergency Medical Technician	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	12	N/A	4	\$1,418.64	\$30.00	\$448.00	\$36.00	\$160.00	\$0.00	\$80.00	\$35.00	\$0.00	\$0.00	\$2,207.64	N	0351090415	29-2041/ Emergency Medical Technicians and Paramedics			HG/LW	
Translation and Interpretation	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	18	N/A	12	\$2,127.96	\$30.00	\$400.00	\$0.00	\$0.00	\$0.00	\$2,115.00	\$0.00	\$0.00	\$0.00	\$4,672.96	Y	0713100306	27-3091/ Interpreters and Translators			HG/HW	
Network Security	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	20	N/A	12	\$2,364.40	\$30.00	\$630.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$315.00	\$3,340.38	Y	0511100118	15-1122 Information Security Analysts	\$27.96	\$44.21	HG/HW	
Enterprise Cloud Computing	College Credit Certificate	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	24	N/A	12	\$2,837.28	\$30.00	\$263.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$378.00	\$3,509.23	Y	0511100116	15-1142 Network and Computer Systems Administrator	\$24.48	\$38.47	HG/HW	
<b>Non-Credit Courses</b>																							
Amazon Web Services (AWS) Certified Solutions Architect - Associate	Industry Certification: Amazon Web Services (AWS) Certified Solutions Architect - Associate AMAZN01	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	80	3	\$750.00	\$0.00	\$500.00	\$100.00	\$0.00	\$0.00	\$150.00	\$0.00	\$0.00	\$0.00	\$1,500.00	N	N/A	N/A	N/A	N/A	N/A	
AWS Certified Cloud Practitioner	Industry Certification: AWS Certified Cloud Practitioner AMAZN02	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	40	1.5	\$450.00	\$0.00	\$500.00	\$75.00	\$0.00	\$0.00	\$100.00	\$0.00	\$0.00	\$0.00	\$1,125.00	N	N/A	N/A	N/A	N/A	N/A	
Oracle Certified Associate (OCA): Java Programmer	Industry Certification: Oracle Certified Associate (OCA): Java ORACL004 Programmer	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	80	3	\$750.00	\$0.00	\$250.00	\$100.00	\$0.00	\$0.00	\$185.00	\$0.00	\$0.00	\$0.00	\$1,285.00	N	N/A	N/A	N/A	N/A	N/A	
Certified Internet Web (OCA): JavaScript Specialist	Industry Certification: Certified Internet Web (OCA): JavaScript Specialist PROSO017	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	80	4	\$750.00	\$0.00	\$250.00	\$100.00	\$0.00	\$0.00	\$150.00	\$0.00	\$0.00	\$0.00	\$1,250.00	N	N/A	N/A	N/A	N/A	N/A	
Certified Nursing Assistant (CNA)	Industry Certification: Certified Nursing Assistant (CNA) FDMQA002	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	102	4.5	\$1,259.00	\$0.00	\$52.00	\$200.00	\$0.00	\$0.00	\$155.00	\$0.00	\$0.00	\$0.00	\$1,666.00	N	N/A	N/A	N/A	N/A	N/A	
911 Public Safety Telecommunicator	Industry Certification: 911 Public Safety Telecommunicator FDMQA030	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	238	10	\$1,900.00	\$0.00	\$135.00	\$0.00	\$0.00	\$0.00	\$75.00	\$0.00	\$0.00	\$0.00	\$2,110.00	N	N/A	N/A	N/A	N/A	N/A	
Logistics, Transportation, Distribution	Industry Certification: Logistics, Transportation, Distribution APICS001	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	208	3	\$2,193.00	\$0.00	\$0	\$0.00	\$0.00	\$0.00	\$795.00	\$0.00	\$0.00	\$0.00	\$2,988.00	N	N/A	N/A	N/A	N/A	N/A	
Certified Professional Biller	Industry Certification: Certified Professional Biller ACOPC007	Wolfson Campus 300 NE 2 Avenue Miami, FL 33132 (All)	N/A	96	4	\$1,886.00	\$0.00	\$537.00	\$0.00	\$0.00	\$0.00	\$400.00	\$0.00	\$0.00	\$175.00	\$3,098.00	N	N/A	N/A	N/A	N/A	N/A	



SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS  
COMMISSION ON COLLEGES

July 1, 2015

Dr. Eduardo J. Padron  
President  
Miami Dade College  
300 N.E. Second Avenue, Suite 1474  
Miami, FL 33132-2297

Dear Dr. Padron:

The following action regarding your institution was taken by the Board of Trustees of the Southern Association of Colleges and Schools Commission on Colleges during its meeting held on June 11, 2015:

The SACSCOC Board of Trustees reaffirmed accreditation. No additional report was requested. Your institution's next reaffirmation will take place in 2025 unless otherwise notified.

Please submit to your Commission staff member, preferably by email, a **one-page** executive summary of your institution's Quality Enhancement Plan. The summary is due **August 14, 2015**, and should include on the same page the following information: (1) the title of your Quality Enhancement Plan, (2) your institution's name, and (3) the name, title, and email address of an individual who can be contacted regarding its development or implementation. This summary will be posted to the Commission's website as a resource for other institutions undergoing the reaffirmation process.

All institutions are requested to submit an "Impact Report of the Quality Enhancement Plan on Student Learning" as part of their "Fifth-Year Interim Report" due five years before their next reaffirmation review. Institutions will be notified 11 months in advance by the President of the Commission regarding its specific due date. Directions for completion of the report will be included with the notification.

We appreciate your continued support of the activities of SACS Commission on Colleges. If you have questions, please contact the staff member assigned to your institution.

Sincerely,

A handwritten signature in black ink that reads "Belle S. Wheelan".

Belle S. Wheelan, Ph.D.  
President

BSW:sf

cc: Dr. Nuria M. Cuevas



Javier A. Ley-Soto  
College Legal Counsel

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Wolfson Campus

March 25, 2019

TO WHOM IT MAY CONCERN:

In Florida, state colleges are entities created by the Florida Constitution and governed by state law. As a state college created by the Florida Constitution, The District Board of Trustees of Miami Dade College, Florida (“Miami Dade College”) is a public educational institution operated by its district board of trustees under the statutory authority and rules of the State Board of Education. Art. IX, Sec. 8, Fla. Const.; Sections 1000.21(3)(o), 1004.65(1) and 1004.66, Fla. Stat. Miami Dade College, also a political subdivision of the State of Florida, “is an independent, separate, legal entity created for the operation of a Florida College System institution.” Section 1004.65(2), Fla. Stat. Miami Dade College, just as each Florida College System institution in Florida, operates under the direction and supervision of a district board of trustees. Miami Dade College is considered a corporation with all corporate powers. Section 1001.63, Fla. Stat.

As Miami Dade College is constitutionally created and statutorily considered a corporation, it is not required to register with the Florida Department of State, Division of Corporations. Nonetheless, the Internal Revenue Service has issued Miami Dade College EIN#59-1210485 for use in its operations.

The above information is current as of the 2019 version of the Florida Constitution and Florida Statutes, is provided for informational purposes only, and may be subject to legislative amendment.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Ley-Soto', with a large flourish extending to the left.

Javier A. Ley-Soto

Florida Department of Education  
Curriculum Framework

**Program Title:** Graphic Design Support  
**Career Cluster:** Arts, A/V Technology and Communication

CCC	
CIP Number	0611080302
Program Type	College Credit Certificate (CCC)
Program Length	15 credit hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-1024 – Graphic Designers
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

The purpose of this program is to prepare students for initial employment as a graphic design assistant, graphic production artist, or to provide supplemental training for persons previously or currently employed in these occupations.

This certificate program is part of the Graphics Technology AS degree program (1611080300).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The content includes, but is not limited to, communication skills, illustration, design concepts and theory, typography skills, production skills, color theories, utilization of computers to produce electronic content, presentation procedures, and employability skills.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate effective interpersonal communication skills.
- 02.0 Perform raster-based and vector-based visual solutions.
- 03.0 Formulate concepts/theories.
- 04.0 Apply design and color theories.
- 05.0 Demonstrate technical and creative uses of typography.
- 06.0 Demonstrate production skills in web and print design.
- 07.0 Interpret printing processes.
- 08.0 Demonstrate knowledge of current industry standards, practices, and techniques.
- 09.0 Demonstrate industry-level presentation techniques.
- 10.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
- 11.0 Create electronic interfaces.
- 12.0 Demonstrate employability skills.

Florida Department of Education  
Curriculum Framework

**Program Title:** Help Desk Support Technician  
**Career Cluster:** Information Technology

CCC	
CIP Number	0511010313
Program Type	College Credit Certificate (CCC)
Program Length	Primary: 16 credit hours; Secondary: 18 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes (all applicable)	15-1151 – Computer User Support Specialists
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Computer Information Technology AS degree program (1511010307).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Information Technology career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to instruction in computer literacy; software application support; basic hardware configuration and troubleshooting; networking technologies, troubleshooting, security, and administration; and customer service and human relations skills.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Install, configure, manage, deploy, monitor and troubleshoot a networked server environment.
- 02.0 Install, configure, manage, and troubleshoot an operating system.
- 03.0 Install, configure, upgrade and troubleshoot computer hardware.
- 04.0 Install, configure and troubleshoot system and device driver software and implement basic security measures.
- 05.0 Perform customer service skills.
- 06.0 Perform help desk support activities.

Florida Department of Education  
Curriculum Framework

Program Title: Digital Marketing Management  
Career Cluster: Marketing, Sales and Service

CCC	
CIP Number	0252140112
Program Type	College Credit Certificate (CCC)
Program Length	12 credit hours
CTSO	Collegiate DECA, FBLA-PBL
SOC Codes (all applicable)	11-2011 – Advertising and Promotions Managers 11-2021 – Marketing Managers 11-2031 – Public Relations and Funding Managers 13-1161 – Market Research analysts and Marketing Specialists
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Marketing Management AS degree program (1252140101).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Marketing, Sales and Service career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Marketing, Sales and Service career cluster.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

**Program Structure**

This program is a planned sequence of instruction consisting of 12 credit hours.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Utilize effective selling techniques and procedures for the marketing of products and services.
- 02.0 Demonstrate the ability to communicate skillfully.
- 03.0 Build a marketing plan and strategy.
- 04.0 Demonstrate proficiency in the utilization of software appropriate to marketing.
- 05.0 Identify the uses of technology in marketing.
- 06.0 Manage an e-Commerce marketing campaign.
- 07.0 Demonstrate knowledge of the principles of promotion.
- 08.0 Demonstrate knowledge of advertising.
- 09.0 Demonstrate knowledge of display design.
- 10.0 Utilize digital tools, social networks and a variety of media to create awareness and promote products and services to consumers and businesses.
- 11.0 Determine the global and multicultural aspects of marketing.

Florida Department of Education  
Curriculum Framework

Program Title: Chef’s Apprentice  
Career Cluster: Hospitality & Tourism

CCC	
CIP Number	0612050302
Program Type	College Credit Certificate (CCC)
Program Length	12 credit hours
CTSO	N/A
SOC Codes (all applicable)	11-9051 – Food Service Managers 35-1012 – First Line Supervisors of Food Preparation and Serving Workers 35-1011 – Chefs and Head Cooks 35-2014 – Cooks, Restaurant
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Culinary Management (60) AS degree program 1612050401.

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Hospitality & Tourism career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Hospitality & Tourism career cluster.

The content includes but is not limited to sanitation and safety; maintenance and operation of equipment; recognition and identification of foods; proper storage of foods; methods of preparation; usage of foods; methods of cooking; communication skills; math skills; computer applications; professionalism; culinary organization; and food and beverage purchasing.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate the application of mathematics commonly used in the culinary industry.
- 02.0 Identify organization and functions of the culinary industry.
- 03.0 Demonstrate equipment operation.
- 04.0 Demonstrate skills in food service and beverage sanitation and safety.
- 05.0 Recognize, identify, and demonstrate usage of foods.
- 06.0 Demonstrate skill in preparing foods for cooking.
- 07.0 Demonstrate methods of cooking.

Florida Department of Education  
Curriculum Framework

**Program Title:** Business Entrepreneurship  
**Career Cluster:** Business Management and Administration

CCC	
CIP Number	0552070308
Program Type	College Credit Certificate (CCC)
Program Length	12 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes	11-2011 – Advertising and Promotions Managers 11-2021 – Marketing Managers 11-2022 – Sales Managers
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Business Entrepreneurship (60) AS degree program (1552070308).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Business Management and Administration career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Business Management and Administration career cluster.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Develop entrepreneurial concepts.
- 02.0 Develop entrepreneurial resources.
- 03.0 Apply accounting principles and concepts to perform accounting activities.
- 04.0 Demonstrates money management skills.
- 05.0 Describe and conduct business records management.
- 06.0 Plan and develop a marketing-information management system.
- 07.0 Plan and develop promotional strategies.
- 08.0 Plan and develop pricing strategies.
- 09.0 Analyze business risk.
- 10.0 Analyze and identify legal considerations.

Florida Department of Education  
Curriculum Framework

**Program Title:** Business Intelligence Professional  
**Career Cluster:** Information Technology

CCC	
CIP Number	0552130101
Program Type	College Credit Certificate (CCC)
Standard Length	20 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes (all applicable)	15-1199 – Computer Occupations, All Others
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml</a>

**Purpose**

This certificate program is part of the Business Intelligence Specialist AS degree program (1552130100).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Information Technology career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to instruction in documenting specifications for business reports; locating, acquiring and modeling data for analysis and output; building and generating reports; and business intelligence techniques.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Florida Department of Education  
Curriculum Framework

**Program Title:** Accounting Technology Operations  
**Career Cluster:** Business Management and Administration

CCC	
CIP Number	0552030203
Program Type	College Credit Certificate (CCC)
Program Length	18 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes	43-3031 – Bookkeeping, Accounting and Auditing Clerks
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Accounting Technology AS degree program (1552030201).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as accounts receivable coordinators, accounts payable coordinators, bookkeepers, credit and collections coordinators, payroll coordinators, accountants, auditors, and other accounting paraprofessionals in advanced professional accounting occupations in the Business Management and Administration career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Business Management and Administration career cluster.

The content includes but is not limited to the principles, procedures, and theories of organizing, analyzing and recording business and financial transactions and the preparation of accompanying financial records and reports for internal and external users.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Prepare and use financial information about business organizations to support decision making.
- 02.0 Manage business information using appropriate software.
- 03.0 Demonstrate effective business communication and collaboration skills.
- 04.0 Evaluate business and financial information to support internal decision making.

**Florida Department of Education  
Curriculum Framework**

**Program Title:** Phlebotomy  
**Program Type:** Career Preparatory  
**Career Cluster:** Health Science

**Career Certificate Program**

Program Number	H170302
CIP Number	0351100901
Grade Level	30, 31
Standard Length	165 hours
Teacher Certification	Refer to the <b><u>Program Structure</u></b> section.
CTSO	HOSA: Future Health Professionals
SOC Codes (all applicable)	31-9097 Phlebotomists 31-9099 Healthcare Support Workers, All Other
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>
Basic Skills Level	N/A

**Purpose**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of Health Science career cluster.

The purpose of this program is to prepare students for employment as phlebotomists SOC Code 31-9097 Phlebotomists, All other.

The content includes but is not limited to communication, leadership, human relations, and employability skills; performance of safe and efficient work practices in obtaining adequate and correct blood specimens by capillary or venipuncture on adults, children and neonates; maintaining the integrity of the specimen in relation to the test to be performed; preparing blood smears; labeling specimens accurately and completely; collecting timed specimens; promoting the comfort and well-being of the patient while performing blood collecting duties; observing safety policies and procedures; medical terminology; emergency procedures including CPR (Heartsaver); delivering a variety of clinical specimens to the clinical

laboratory; sorting and recording specimens received in the laboratory; centrifuging specimens and preparing aliquots of samples according to the designated protocol; distributing samples to appropriate laboratory sections; and preparing collection trays for specimen procurement.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

**Program Structure**

This program is a planned sequence of instruction consisting of 2 occupational completion points.

This program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3) (b), F.S.

To teach the courses listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the postsecondary program structure:

OCP	Course Number	Course Title	Teacher Certification	Length	SOC Code
A	HSC0003	Basic Healthcare Worker	PHLEB 7G	90 hours	31-9099
B	MEA0520	Phlebotomist	LAB TECH @7 7G MED ASST 7G PARAMEDIC @7 7G REG NURSE 7 G RESP THER @7 7G PRAC NURSE @7 %7%G (Must be a Registered Nurse)	75 hours	31-9097

**Florida Department of Education  
Curriculum Framework**

**Program Title:**       **Emergency Medical Technician**  
**Career Cluster:**     **Health Science**

CCC	
CIP Number	0351090415
Program Type	College Credit Certificate (CCC)
Program Length	12 credit hours
CTSO	HOSA: Future Health Professionals
SOC Codes (all applicable)	29-2041 Emergency Medical Technicians and Paramedics
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml</a>

**Purpose**

This certificate program is part of the Emergency Medical Services AS degree program (1351090402).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of Health Science career cluster.

This is an instructional program that prepares students for employment as emergency medical technicians SOC Code 29-2041 (Emergency Medical Technicians and Paramedics) to function at the basic pre-hospital emergency medical technician level and treat various medical/trauma conditions using appropriate equipment and materials. The program prepares students for certification as EMT's in accordance with Chapter 64J of the Florida Administrative Code. The program must be approved by the Department of Health, Office of Emergency Medical Services, and the curriculum must adhere to the US Department of Transportation (DOT) National EMS Education Standards for EMT. This is the initial level for a career in emergency medical services and the primary prerequisite for paramedic training and certification.

The content includes but is not limited to patient assessment, airway management, cardiac arrest, external and internal bleeding and shock, traumatic injuries, fractures, dislocations, sprains, poisoning, heart attack, stroke, diabetes, acute abdomen, communicable diseases, patients with abnormal behavior, alcohol and drug abuse, the unconscious state, emergency childbirth, burns, environmental hazards, communications,

reporting, extrication and transportation of patient. The student must be proficient in patient assessment and evaluation, the use of suctioning devices, oral and nasal airways, resuscitation devices, oxygen equipment, sphygmomanometer and stethoscope, splints of all types, pneumatic anti-shock garments, extrication tools, dressings and bandages, stretchers and patient carrying devices.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

### **Regulated Programs**

Florida Statute 401.2701 requires that the instructor-student ratio should not exceed 1:6. Hospital activity shall include a minimum of 20 hours of supervised clinical supervision, including 10 hours in a hospital emergency department. Clinical activity shall include appropriate patient assessment skills, intervention and documentation relevant to each clinical rotation.

Field Internship Activities: Field internship shall include a competency based program to assure appropriate pre-hospital assessment and management of medical and trauma patients, as well as associated manual skills. The field internship activity shall include a minimum of 5 emergency runs resulting in patient care and transport appropriate for the EMT. In addition, the patient care components should include minimum competencies in patient assessment, airway management and ventilation, trauma and medical emergencies. This program meets the Department of Health trauma score card methodologies and Sudden Unexpected Infant Death Syndrome (SUIDS) training education requirements. Upon completion of this program, the instructor will provide a certificate to the student verifying that these requirements have been met. This program also meets the Department of Health's education requirements for HIV/AIDS, Domestic Violence and Prevention of Medical Errors. Although not a requirement for initial licensure, it is a requirement for renewal, therefore the instructor may provide a certificate for renewal purposes to the student verifying these requirements have been met.

Please refer to chapter 401 F.S. for more information on disqualification for the EMT license through the Office of Emergency Medical Services (EMS), Department of Health.

An EMT program must be taught by an instructor meeting the qualifications as set forth in 64J-1.201 FAC.

An American Heart Association or Red Cross certification or equivalent in "professional" BLS is required of all candidates for entrance into an EMT program.

The Student Performance Standards for Emergency Medical Technology-EMT were adapted and condensed from the US Department of Transportation (DOT) National EMS Educational Standards for EMT.

It is strongly recommended this program be accredited by Commission on Accreditation of Allied Health Education Programs (CAAHEP).

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate a simple depth, foundational breadth of knowledge of EMS systems.
- 02.0 Demonstrate a simple depth, simple breadth of knowledge of research and evidence-based decision making.
- 03.0 Demonstrate a fundamental depth, foundational breadth of knowledge of workforce safety and wellness.
- 04.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the principles of medical documentation and report writing.
- 05.0 Demonstrate a simple depth, simple breadth of knowledge of the EMS communication system, communication with other health care professionals, and team communication.
- 06.0 Demonstrate a simple depth, simple breadth of knowledge of the principles of therapeutic communication.
- 07.0 Demonstrate a fundamental depth, foundational breadth of knowledge of medical legality and ethics.
- 08.0 Demonstrate a fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.
- 09.0 Demonstrate a fundamental knowledge in the use of medical terminology.
- 10.0 Demonstrate a fundamental knowledge of the causes and pathophysiology of shock and the components of resuscitation.
- 11.0 Demonstrate a fundamental knowledge of life span development to patient assessment and management.
- 12.0 Demonstrate a simple knowledge of the principles of illness and injury prevention in emergency care.
- 13.0 Demonstrate a simple depth, simple breadth of knowledge of pharmacology, medication safety, and medication types used during an emergency.
- 14.0 Demonstrate a fundamental depth, simple breadth of knowledge of emergency medications within the scope of practice of the EMT.
- 15.0 Demonstrate a foundational depth, fundamental breadth of knowledge of airway management across the life span within the scope of practice of the EMT.
- 16.0 Demonstrate a fundamental depth, foundational breadth of knowledge of respiration.
- 17.0 Demonstrate a fundamental depth, foundational breadth of knowledge of assessment and management utilizing ventilation across the life span.
- 18.0 Demonstrate a fundamental depth, foundational breadth of knowledge of scene management and multiple patient situations.
- 19.0 Demonstrate a fundamental depth, simple breadth of knowledge of the primary assessment for all patient situations.
- 20.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the components of history taking.
- 21.0 Demonstrate a fundamental depth, foundational breadth of knowledge of techniques used for a secondary assessment.
- 22.0 Demonstrate a simple depth, simple breath of knowledge of monitoring devices within the scope of practice of the EMT.
- 23.0 Demonstrate a fundamental depth, foundational breadth of knowledge of how and when to perform a reassessment for all patient situations.
- 24.0 Demonstrate a simple depth, foundation breadth of knowledge of pathophysiology, assessment and management of medical complaints.
- 25.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of neurologic disorders/emergencies across the life span.
- 26.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of abdominal and gastrointestinal disorders/emergencies across the life span.
- 27.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of immunology disorders/emergencies across the life span.

- 28.0 Demonstrate a simple depth, simple breadth of knowledge of the assessment and management of a patient who may have an infectious disease across the life span.
- 29.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of endocrine disorders/emergencies across the life span.
- 30.0 Demonstrate a fundamental depth, foundational breadth of knowledge regarding the assessment and management of psychiatric emergencies across the life span.
- 31.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of cardiovascular emergencies across the life span.
- 32.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of toxicological (poisoning and overdose) emergencies across the life span.
- 33.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of respiratory disorders/emergencies across the life span.
- 34.0 Demonstrate a simple depth, simple breadth of knowledge of the assessment, and management of hematology disorders across the life span.
- 35.0 Demonstrate a simple depth, simple breath of knowledge of the assessment and management of genitourinary/ renal emergencies across the life span.
- 36.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of gynecologic emergencies across the life span.
- 37.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of non-traumatic fractures across the life span.
- 38.0 Demonstrate a simple depth, simple breadth of knowledge of assessment and management of diseases of the Eyes, Ears, Nose, and Throat across the life span.
- 39.0 Demonstrate a fundamental knowledge of the causes, pathophysiology, and management of shock and respiratory failure across the life span.
- 40.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of the trauma patient across the life span.
- 41.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of bleeding across the life span.
- 42.0 Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment, and management of chest trauma across the life span.
- 43.0 Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment, and management of abdominal and genitourinary trauma across the life span.
- 44.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of orthopedic trauma across the life span.
- 45.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of soft tissue trauma across the life span.
- 46.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of head, facial, neck, and spine trauma across the life span.

- 47.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of nervous system trauma across the life span.
- 48.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of trauma patients with special considerations across the life span.
- 49.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of environmental emergencies across the life span.
- 50.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the pathophysiology, assessment, and management of multi-system trauma and blast injuries across the life span.
- 51.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the obstetric patient within the scope of practice of the EMT.
- 52.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the newborn and neonatal patient within the scope of practice of the EMT.
- 53.0 Demonstrate a fundamental depth, fundamental breath of knowledge of the management of the pediatric patient within the scope of practice of the EMT.
- 54.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the geriatric patient within the scope of practice of the EMT.
- 55.0 Demonstrate a simple depth, simple breadth of knowledge of management of the patient with special challenges across the life span.
- 56.0 Demonstrate a simple depth, foundational breadth of knowledge of risks and responsibilities of transport.
- 57.0 Demonstrate a fundamental depth, fundamental breadth of knowledge of establishing and working within the incident management system.
- 58.0 Demonstrate a simple depth, foundational breadth of knowledge of responding to an emergency during a multiple casualty incident.
- 59.0 Demonstrate a simple depth, simple breadth of knowledge of safe air medical operations and criteria for utilizing air medical response.
- 60.0 Demonstrate a simple depth, simple breadth of knowledge for safe vehicle extrication and use of simple hand tools.
- 61.0 Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident.
- 62.0 Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating on the scene of a natural or man-made disaster.

**Florida Department of Education  
Curriculum Framework**

**Program Title:** Translation and Interpretation  
**Career Cluster:** Education & Training

CCC	
CIP Number	0713100306
Program Type	College Credit Certificate (CCC)
Program Length	18 credit hours
CTSO	N/A
SOC Codes (all applicable)	27-3091 – Interpreters and Translators
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Translation-Interpretation Studies: English - Spanish (60) AS degree 1713100304.

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Education & Training career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of Education & Training career cluster.

This program is designed to provide bilingual students with the knowledge and skills necessary to carry out the work associated with areas of written translation (SOC 27-3091) in the workplace. Graduates are prepared for positions as in-house translators for the private sector including translation agencies, translators for government agencies, hospital translators, and freelance translators

The content includes but is not limited to knowledge and acquisition of a broad non-technical bilingual vocabulary; bilingual legal, financial, and medical terminology; translation theory and translation strategy including the four steps to the translation process (text analysis, documentation, actual translation task, and revision); and applied linguistic notions and concepts including language and cultural awareness. Ethical considerations and professional organizations are also included.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Perform translation-related skills.
- 02.0 Demonstrate linguistic-related knowledge and skills.
- 03.0 Demonstrate culture-related knowledge.
- 04.0 Demonstrate language proficiency in source and target language.
- 05.0 Demonstrate appropriate ethics.
- 07.0 Demonstrate interpersonal communication skills.

Florida Department of Education  
Curriculum Framework

**Program Title:** Network Security  
**Career Cluster:** Information Technology

CCC	
CIP Number	0511100118
Program Type	College Credit Certificate (CCC)
Program Length	Primary: 30 credit hours; Secondary: 20 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes (all applicable)	15-1122 – Information Security Analysts
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Network Systems Technology AS degree program (1511100112).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Information Technology career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to instruction in computer literacy; software application support; basic hardware configuration and troubleshooting; networking technologies, troubleshooting, security, and administration; and customer service and human relations skills.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate proficiency in securing network infrastructures and protecting data.
- 02.0 Demonstrate proficiency in performing security penetration testing.
- 03.0 Demonstrate proficiency in responding to cybersecurity incidents.
- 04.0 Demonstrate proficiency in the essential elements of forensic analysis.
- 05.0 Demonstrate employability skills.

Florida Department of Education  
Curriculum Framework

**Program Title:** Network Virtualization  
**Career Cluster:** Information Technology

CCC	
CIP Number	0511100116
Program Type	College Credit Certificate (CCC)
Program Length	Primary: 24 credit hours; Secondary: 18 credit hours
CTSO	Phi Beta Lambda, BPA
SOC Codes (all applicable)	15-1142 – Network and Computer Systems Administrators
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Network Systems Technology AS degree program (1511100112).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Information Technology career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to instruction in computer literacy; software application support; basic hardware configuration and troubleshooting; networking technologies, troubleshooting, security, and administration; and customer service and human relations skills.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate an understanding of virtualization concepts.
- 02.0 Install and configure the virtualization server platform.
- 03.0 Install, configure and manage virtualized clients.

## 2020-21 Regional Demand Occupations List

Sorted by Occupational Title

### Workforce Development Area 23 - Miami-Dade and Monroe Counties

Selection Criteria:

- 1 FLDOE Training Code 3 (PSAV Certificate), 4 (Community College Credit/Degree), or 5 (Bachelor's Degree)
- 2 80 annual openings and positive growth
- 3 Mean Wage of \$15.40/hour and Entry Wage of \$12.53/hour
- 4 High Skill/High Wage (HSHW) Occupations:  
Mean Wage of \$24.15/hour and Entry Wage of \$15.40/hour

SOC Code†	HSHW††	Occupational Title†	Annual Percent Growth	Annual Openings	2018 Hourly Wage		FLDOE Training Code	In EFI Targeted Industry?	Data Source†††
					Mean	Entry			
13-2011	HSHW	Accountants and Auditors	1.37	1,488	38.74	20.98	5	Yes	R
11-3011	HSHW	Administrative Services Managers	1.44	178	49.84	28.00	4	Yes	R
41-3011		Advertising Sales Agents	0.11	1,462	28.61	13.50	3	Yes	S
49-3011	HSHW	Aircraft Mechanics and Service Technicians	1.06	339	29.25	16.48	3	Yes	R
53-2011	HSHW	Airline Pilots, Copilots, and Flight Engineers	1.47	585	90.58	47.57	4	Yes	S
13-2021	HSHW	Appraisers and Assessors of Real Estate	1.87	115	31.54	16.75	3	Yes	R
17-3011	HSHW	Architectural and Civil Drafters	1.64	108	27.35	18.61	3	Yes	R
27-4011		Audio and Video Equipment Technicians	1.08	151	20.23	12.79	4	Yes	R
49-3021		Automotive Body and Related Repairers	0.37	114	18.69	12.70	3	Yes	R
43-3031		Bookkeeping, Accounting, and Auditing Clerks	0.12	1,715	20.11	13.82	4	Yes	R
47-2021		Brickmasons and Blockmasons	1.54	882	18.61	12.70	3	No	S
49-3031	HSHW	Bus and Truck Mechanics and Diesel Engine Specialists	0.94	189	25.52	15.58	3	Yes	R
53-3021		Bus Drivers, Transit and Intercity	0.91	289	19.65	15.16	3	No	R
13-1199	HSHW	Business Operations Specialists, All Other	1.16	1,265	31.77	17.71	4	Yes	R
25-1011	HSHW	Business Teachers, Postsecondary	2.32	83	47.41	23.45	5	No	R
53-5021	HSHW	Captains, Mates, and Pilots of Water Vessels	1.05	317	37.15	15.89	3	Yes	R
47-2031		Carpenters	1.31	921	20.09	14.30	3	Yes	R
47-2051		Cement Masons and Concrete Finishers	1.66	1,827	17.64	12.77	3	Yes	S
35-1011		Chefs and Head Cooks	1.26	227	25.69	15.11	3	Yes	R
	HSHW	Chief Executives	0.10	231	97.67	41.21	5	Yes	R
17-2051	HSHW	Civil Engineers	1.87	274	45.28	25.01	5	Yes	R
13-1031	HSHW	Claims Adjusters, Examiners, and Investigators	0.54	2,012	30.21	19.35	3	Yes	S
53-2012	HSHW	Commercial Pilots	0.70	88	34.83	18.76	3	Yes	R
21-1099		Community and Social Service Specialists, All Other	1.45	199	18.96	13.76	5	Yes	R
13-1041	HSHW	Compliance Officers	0.53	342	36.22	21.53	3	Yes	R
11-3021	HSHW	Computer and Information Systems Managers	1.37	142	63.11	36.32	5	Yes	R
15-1143	HSHW	Computer Network Architects	1.00	148	39.89	25.36	3	Yes	R
15-1152	HSHW	Computer Network Support Specialists	1.05	112	30.01	19.68	3	Yes	R
15-1199	HSHW	Computer Occupations, All Other	1.46	120	41.46	18.37	3	Yes	R
15-1121	HSHW	Computer Systems Analysts	0.88	152	41.61	26.77	4	Yes	R
15-1151	HSHW	Computer User Support Specialists	1.28	401	24.47	15.53	3	Yes	R

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research (WSER)

## 2020-21 Regional Demand Occupations List

Sorted by Occupational Title

### Workforce Development Area 23 - Miami-Dade and Monroe Counties

Selection Criteria:

- 1 FLDOE Training Code 3 (PSAV Certificate), 4 (Community College Credit/Degree), or 5 (Bachelor's Degree)
- 2 80 annual openings and positive growth
- 3 Mean Wage of \$15.40/hour and Entry Wage of \$12.53/hour
- 4 High Skill/High Wage (HSHW) Occupations:  
Mean Wage of \$24.15/hour and Entry Wage of \$15.40/hour

SOC Code†	HSHW††	Occupational Title†	Annual		2018 Hourly Wage		FLDOE Training Code	In EFI Targeted Industry?	Data Source†††
			Percent Growth	Annual Openings	Mean	Entry			
47-4011	HSHW	Construction and Building Inspectors	1.69	204	32.30	22.37	3	Yes	R
11-9021	HSHW	Construction Managers	1.18	342	51.67	31.06	4	Yes	R
13-1051	HSHW	Cost Estimators	0.92	143	31.12	20.11	4	Yes	R
15-1141	HSHW	Database Administrators	1.63	677	41.76	25.88	4	Yes	S
31-9091		Dental Assistants	1.84	388	19.06	13.78	3	Yes	R
29-2021		Dental Hygienists	1.83	87	24.36	14.71	4	Yes	R
29-2032	HSHW	Diagnostic Medical Sonographers	2.70	501	31.65	24.44	3	Yes	S
25-9099	HSHW	Education, Training, and Library Workers, All Other	1.33	116	25.47	16.79	5	Yes	R
47-2111		Electricians	0.66	597	21.13	14.35	3	Yes	R
25-2021	HSHW	Elementary School Teachers, Except Special Education	0.62	617	25.03	19.18	5	No	R
13-2051	HSHW	Financial Analysts	1.61	180	38.04	25.34	5	Yes	R
11-3031	HSHW	Financial Managers	2.22	371	71.16	35.85	5	Yes	R
13-2099	HSHW	Financial Specialists, All Other	1.76	108	36.50	21.35	3	Yes	R
33-2011	HSHW	Firefighters	0.83	268	32.85	24.12	3	Yes	R
47-1011	HSHW	First-Line Supervisors of Construction Trades and Extraction Workers	1.34	605	34.28	21.94	4	Yes	R
37-1011		First-Line Supervisors of Housekeeping and Janitorial Workers	1.42	350	18.42	12.65	3	Yes	R
37-1012		First-Line Supervisors of Landscaping, Lawn Service, and Groundskee	1.42	135	19.35	12.87	3	Yes	R
49-1011	HSHW	First-Line Supervisors of Mechanics, Installers, and Repairers	0.88	394	30.63	19.24	3	Yes	R
41-1012	HSHW	First-Line Supervisors of Non-Retail Sales Workers	0.69	600	43.04	23.12	4	Yes	R
43-1011	HSHW	First-Line Supervisors of Office and Administrative Support Workers	0.59	1,612	28.41	17.49	4	Yes	R
39-1021		First-Line Supervisors of Personal Service Workers	1.45	261	22.47	14.01	3	Yes	R
51-1011	HSHW	First-Line Supervisors of Production and Operating Workers	0.53	352	27.26	16.72	3	Yes	R
33-1099		First-Line Supervisors of Protective Service Workers, All Other	0.51	143	24.60	14.56	3	Yes	R
41-1011		First-Line Supervisors of Retail Sales Workers	0.62	1,606	23.34	14.59	3	Yes	R
11-9051	HSHW	Food Service Managers	1.09	165	35.23	20.84	4	Yes	R
11-1021	HSHW	General and Operations Managers	1.32	1,250	54.79	23.33	4	Yes	R
47-2121		Glaziers	1.66	685	18.26	13.74	3	Yes	S
27-1024		Graphic Designers	0.94	279	23.46	15.61	4	Yes	R
29-2099		Health Technologists and Technicians, All Other	1.43	135	21.78	14.71	3	Yes	R
49-9021		Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1.17	409	19.78	13.60	3	Yes	R
53-3032		Heavy and Tractor-Trailer Truck Drivers	0.94	11,157	20.20	13.16	3	Yes	S

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research (WSER)

## 2020-21 Regional Demand Occupations List

Sorted by Occupational Title

### Workforce Development Area 23 - Miami-Dade and Monroe Counties

Selection Criteria:

- 1 FLDOE Training Code 3 (PSAV Certificate), 4 (Community College Credit/Degree), or 5 (Bachelor's Degree)
- 2 80 annual openings and positive growth
- 3 Mean Wage of \$15.40/hour and Entry Wage of \$12.53/hour
- 4 High Skill/High Wage (HSHW) Occupations:  
Mean Wage of \$24.15/hour and Entry Wage of \$15.40/hour

SOC Code†	HSHW††	Occupational Title†	Annual	Annual	2018 Hourly Wage		FLDOE	In EFI	Data
			Percent Growth	Openings	Mean	Entry	Training Code	Targeted Industry?	Source†††
43-4161		Human Resources Assistants, Except Payroll and Timekeeping	0.17	129	18.77	13.56	3	Yes	R
13-1071	HSHW	Human Resources Specialists	0.99	518	28.10	17.17	5	Yes	R
49-9041		Industrial Machinery Mechanics	0.64	121	22.09	14.11	3	Yes	R
53-7051		Industrial Truck and Tractor Operators	0.77	2,744	17.53	12.35	3	Yes	S
15-1122	HSHW	Information Security Analysts	3.36	578	44.21	27.96	3	Yes	S
41-3021	HSHW	Insurance Sales Agents	0.95	535	33.45	15.59	3	Yes	R
27-1025	HSHW	Interior Designers	1.31	100	27.88	16.70	4	Yes	R
25-2012		Kindergarten Teachers, Except Special Education	1.02	157	23.37	17.16	5	No	R
23-2099		Legal Support Workers, All Other	0.60	121	22.79	17.23	4	Yes	R
29-2061		Licensed Practical and Licensed Vocational Nurses	1.41	439	22.51	19.25	3	Yes	R
43-4131		Loan Interviewers and Clerks	0.81	176	20.84	13.86	3	Yes	R
13-2072	HSHW	Loan Officers	0.64	251	39.54	23.94	4	Yes	R
13-1081	HSHW	Logisticians	1.58	157	32.71	15.53	5	Yes	R
13-1111	HSHW	Management Analysts	2.18	771	37.64	19.10	5	Yes	R
11-9199	HSHW	Managers, All Other	1.01	542	47.63	25.82	4	Yes	R
13-1161	HSHW	Market Research Analysts and Marketing Specialists	2.63	668	31.63	17.67	5	Yes	R
11-2021	HSHW	Marketing Managers	1.59	153	59.94	31.37	5	Yes	R
29-2012		Medical and Clinical Laboratory Technicians	1.68	649	24.51	14.54	4	Yes	S
29-2011	HSHW	Medical and Clinical Laboratory Technologists	1.10	92	26.63	16.93	4	Yes	R
11-9111	HSHW	Medical and Health Services Managers	2.29	186	57.05	34.11	5	Yes	R
31-9092		Medical Assistants	3.19	8,491	15.80	12.58	3	Yes	S
29-2071		Medical Records and Health Information Technicians	1.58	925	19.87	12.82	4	Yes	S
43-6013		Medical Secretaries	2.22	3,199	16.11	12.54	3	Yes	S
13-1121	HSHW	Meeting, Convention, and Event Planners	2.30	201	26.81	17.24	4	Yes	R
25-2022	HSHW	Middle School Teachers, Except Special and Career/Technical Educat	0.62	242	25.84	17.42	5	No	R
49-3042		Mobile Heavy Equipment Mechanics, Except Engines	0.86	99	22.50	15.03	3	Yes	R
15-1142	HSHW	Network and Computer Systems Administrators	0.98	210	38.47	24.48	4	Yes	R
47-2073		Operating Engineers and Other Construction Equipment Operators	0.92	261	19.85	15.26	3	Yes	R
23-2011		Paralegals and Legal Assistants	2.48	788	25.06	14.73	3	Yes	R
13-2052	HSHW	Personal Financial Advisors	2.68	288	65.70	22.21	5	Yes	R
31-9097		Phlebotomists	2.32	1,151	15.52	12.45	3	Yes	S

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## 2020-21 Regional Demand Occupations List

Sorted by Occupational Title

### Workforce Development Area 23 - Miami-Dade and Monroe Counties

Selection Criteria:

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- 4 High Skill/High Wage (HSHW) Occupations:  
Mean Wage of \$24.15/hour and Entry Wage of \$15.40/hour

SOC Code†	HSHW††	Occupational Title†	Annual	Annual	2018 Hourly Wage		FLDOE	In EFI	Data
			Percent Growth	Openings	Mean	Entry	Training Code	Targeted Industry?	Source†††
31-2021	HSHW	Physical Therapist Assistants	2.97	917	29.64	22.61	4	Yes	S
29-1071	HSHW	Physician Assistants	4.03	83	50.85	33.41	5	Yes	R
47-2152		Plumbers, Pipefitters, and Steamfitters	1.12	266	21.41	14.68	3	Yes	R
33-3051	HSHW	Police and Sheriff's Patrol Officers	0.86	508	33.65	25.02	3	No	R
25-1199	HSHW	Postsecondary Teachers, All Other	1.40	1,864	29.54	17.19	4	No	S
27-2012	HSHW	Producers and Directors	1.15	204	37.85	18.45	5	Yes	R
11-9141		Property, Real Estate, and Community Association Managers	1.33	676	28.91	13.36	4	Yes	R
27-3031	HSHW	Public Relations Specialists	1.03	265	30.76	16.86	5	Yes	R
29-2034	HSHW	Radiologic Technologists	1.55	154	28.00	20.50	3	Yes	R
41-9021	HSHW	Real Estate Brokers	1.08	141	31.03	16.24	3	No	R
41-9022	HSHW	Real Estate Sales Agents	1.04	599	29.82	15.78	3	Yes	R
29-1141	HSHW	Registered Nurses	1.68	2,031	33.11	24.63	4	Yes	R
29-1126	HSHW	Respiratory Therapists	2.37	113	28.07	22.69	4	Yes	R
47-2181		Roofers	1.31	277	17.56	13.14	3	No	R
53-5011		Sailors and Marine Oilers	1.01	254	NR	NR		No	R
11-2022	HSHW	Sales Managers	1.04	242	58.99	27.46	5	Yes	R
41-4012		Sales Representatives, Wholesale and Manufacturing, Except Technic	0.61	2,201	28.65	12.85	3	Yes	R
41-4011	HSHW	Sales Representatives, Wholesale and Manufacturing, Technical and	0.43	441	39.15	17.11	3	Yes	R
25-2031	HSHW	Secondary School Teachers, Except Special and Career/Technical Ed	0.67	506	25.80	19.73	5	No	R

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research (WSER)

Standard Occupational Code	Occupational Title	# of Persons in EFM w / Qualifications	# of Persons in Training based on PY19-20	# of Jobs in EFM PY19-20	Annual Openings Base on LMI Data 2019-2027	Demand / Supply Rate (Short-Term)	Demand / Supply Rate (Long-Term)	Annual Growth Percentage Change	PY19-20 Average Hourly Wage	Quadrant Category		Education Level
										Growth Category	Wage Category	
111011	Chief Executives	311	-	14	1,847	22.21	0.17	0.8%	94.60	Low Growth	High Wage	B
111021	General and Operations Managers	1,583	2	136	10,003	11.65	0.16	10.6%	44.14	High Growth	High Wage	A
111031	Legislators	8	-	-	77	N/A	0.10	6.6%	41631.00	Low Growth	High Wage	B
112011	Advertising and Promotions Managers	381	-	18	153	21.17	2.49	4.6%	36.15	Low Growth	High Wage	B
112021	Marketing Managers	1,127	-	167	1,226	6.75	0.92	12.7%	53.82	High Growth	High Wage	B
112022	Sales Managers	2,529	-	347	1,931	7.29	1.31	8.3%	49.28	High Growth	High Wage	B
112031	Public Relations and Fundraising Managers	99	-	12	275	8.25	0.36	9.7%	50.25	High Growth	High Wage	B
113011	Administrative Services Managers	2,556	2	38	1,424	67.32	1.80	11.5%	41.71	High Growth	High Wage	A
113021	Computer and Information Systems Managers	243	9	67	1,132	3.76	0.22	11.0%	56.63	High Growth	High Wage	B
113031	Financial Managers	514	-	138	2,965	3.72	0.17	17.8%	61.75	High Growth	High Wage	B
113051	Industrial Production Managers	118	-	12	372	9.83	0.32	5.7%	44.75	Low Growth	High Wage	A
113061	Purchasing Managers	171	-	13	296	13.15	0.58	10.9%	47.43	High Growth	High Wage	A
113071	Transportation, Storage, and Distribution Managers	425	-	71	684	5.99	0.62	9.0%	43.87	High Growth	High Wage	A
113111	Compensation and Benefits Managers	27	-	5	47	5.40	0.57	8.3%	51.23	High Growth	High Wage	A
113121	Human Resources Managers	356	-	40	509	8.90	0.70	10.5%	52.47	High Growth	High Wage	B
113131	Training and Development Managers	99	-	7	96	14.14	1.03	10.5%	40.72	High Growth	High Wage	A
119021	Construction Managers	452	1	74	2,737	6.12	0.17	9.4%	47.29	High Growth	High Wage	A
119031	Education Administrators, Preschool and Childcare Center/Pro	95	-	6	102	15.83	0.93	11.7%	20.52	High Growth	High Wage	B
119032	Education Administrators, Elementary and Secondary School	101	-	3	361	33.67	0.28	5.7%	94681.00	Low Growth	High Wage	B
119033	Education Administrators, Postsecondary	159	-	6	219	26.50	0.73	12.3%	28.47	High Growth	High Wage	B
119039	Education Administrators, All Other	145	-	-	152	N/A	0.95	11.7%	35.67	High Growth	High Wage	B
119041	Architectural and Engineering Managers	107	-	47	596	2.28	0.18	11.8%	60.32	High Growth	High Wage	B
119051	Food Service Managers	1,165	1	47	1,325	24.81	0.88	8.8%	29.73	High Growth	High Wage	A
119071	Gaming Managers	8	-	-	33	N/A	0.24	0.0%	38.47	Low Growth	High Wage	PS
119081	Lodging Managers	269	-	37	570	7.27	0.47	9.2%	28.70	High Growth	High Wage	A
119111	Medical and Health Services Managers	239	-	60	1,487	3.98	0.16	18.3%	49.30	High Growth	High Wage	B
119121	Natural Sciences Managers	104	6	24	145	4.58	0.76	13.3%	50.26	High Growth	High Wage	B
119131	Postmasters and Mail Superintendents	3	-	-	4	N/A	0.75	-10.0%	41.56	Low Growth	High Wage	A
119141	Property, Real Estate, and Community Association Managers	382	-	53	5,405	7.21	0.07	10.6%	23.77	High Growth	High Wage	A
119151	Social and Community Service Managers	175	-	9	413	19.44	0.42	11.3%	27.91	High Growth	High Wage	A
119161	Emergency Management Directors	4	-	1	15	4.00	0.27	4.3%	46.10	Low Growth	High Wage	A
119199	Managers, All Other	2,511	1	210	4,335	11.96	0.58	8.1%	45.05	High Growth	High Wage	A
131011	Agents and Business Managers of Artists, Performers, and Ath	73	-	5	173	14.60	0.42	3.9%	30.94	Low Growth	High Wage	B
131021	Buyers and Purchasing Agents, Farm Products	42	-	2	132	21.00	0.32	1.4%	26.16	Low Growth	High Wage	PS
131022	Wholesale and Retail Buyers, Except Farm Products	98	-	19	526	5.16	0.19	0.7%	26.16	Low Growth	High Wage	A
131023	Purchasing Agents, Except Wholesale, Retail, and Farm Produ	105	-	15	1,752	7.00	0.06	-1.4%	26.16	Low Growth	High Wage	A
131031	Claims Adjusters, Examiners, and Investigators	162	-	43	1,637	3.77	0.10	-1.4%	29.72	Low Growth	High Wage	PS
131032	Insurance Appraisers, Auto Damage	11	1	1	128	12.00	0.09	0.0%	28.43	Low Growth	High Wage	PS
131041	Compliance Officers	70	1	10	2,738	7.10	0.03	4.2%	38.74	Low Growth	High Wage	PS
131051	Cost Estimators	39	-	12	1,143	3.25	0.03	7.3%	28.52	Low Growth	High Wage	A
131071	Human Resources Specialists	376	-	107	4,147	3.51	0.09	7.9%	25.79	High Growth	High Wage	B
131075	Labor Relations Specialists	52	1	13	484	4.08	0.11	-3.5%	26.65	Low Growth	High Wage	B
131081	Logisticians	242	-	94	1,256	2.57	0.19	12.7%	24.09	High Growth	High Wage	B
131111	Management Analysts	248	-	243	6,167	1.02	0.04	17.4%	28.64	High Growth	High Wage	B
131121	Meeting, Convention, and Event Planners	510	-	56	1,607	9.11	0.32	18.4%	23.89	High Growth	High Wage	A
131131	Fundraisers	68	-	2	527	34.00	0.13	9.8%	27.20	High Growth	High Wage	HS
131141	Compensation, Benefits, and Job Analysis Specialists	42	-	13	316	3.23	0.13	6.9%	25.28	Low Growth	High Wage	A
131151	Training and Development Specialists	158	-	39	1,642	4.05	0.10	10.5%	29.37	High Growth	High Wage	B
131161	Market Research Analysts and Marketing Specialists	459	19	286	5,344	1.67	0.09	21.1%	28.92	High Growth	High Wage	B
131199	Business Operations Specialists, All Other	384	3	114	10,120	3.39	0.04	9.3%	29.11	High Growth	High Wage	A
132011	Accountants and Auditors	1,587	-	282	11,908	5.63	0.13	11.0%	31.80	High Growth	High Wage	B
132021	Appraisers and Assessors of Real Estate	101	-	1	921	101.00	0.11	15.0%	32.35	High Growth	High Wage	PS
132031	Budget Analysts	24	-	18	257	1.33	0.09	6.8%	36.47	Low Growth	High Wage	B
132041	Credit Analysts	70	-	11	308	6.36	0.23	4.3%	35.26	Low Growth	High Wage	PS
132051	Financial Analysts	355	-	122	1,438	2.91	0.25	12.9%	35.17	High Growth	High Wage	B
132052	Personal Financial Advisors	89	-	35	2,309	2.54	0.04	21.4%	49.92	High Growth	High Wage	B
132053	Insurance Underwriters	30	-	10	398	3.00	0.08	-1.8%	26.77	Low Growth	High Wage	PS
132061	Financial Examiners	16	-	7	343	2.29	0.05	7.6%	39.70	High Growth	High Wage	B
132071	Credit Counselors	40	-	2	500	20.00	0.08	12.7%	20.38	High Growth	High Wage	A
132072	Loan Officers	196	-	29	2,012	6.76	0.10	5.1%	32.54	Low Growth	High Wage	A
132081	Tax Examiners and Collectors, and Revenue Agents	26	-	3	156	8.67	0.17	-1.0%	32.49	Low Growth	High Wage	B

Standard Occupational Code	Occupational Title	# of Persons in EFM w / Qualifications	# of Persons in Training based on PY19-20	# of Jobs in EFM PY19-20	Annual Openings Base on LMI Data 2019-2027	Demand / Supply Rate (Short-Term)	Demand / Supply Rate (Long-Term)	Annual Growth Percentage Change	PY19-20 Average Hourly Wage	Quadrant Category		Education Level
										Growth Category	Wage Category	
132082	Tax Preparers	126	-	13	544	9.69	0.23	13.3%	12.29	High Growth	Low Wage	PS
132099	Financial Specialists, All Other	175	-	57	860	3.07	0.20	14.1%	34.71	High Growth	High Wage	PS
151121	Computer Systems Analysts	216	-	88	1,213	2.45	0.18	7.1%	41.32	Low Growth	High Wage	A
151131	Computer Programmers	129	-	25	1,178	5.16	0.11	-0.4%	35.55	Low Growth	High Wage	PS
151132	Software Developers, Applications	218	2	163	3,261	1.35	0.07	20.4%	40.21	High Growth	High Wage	A
151133	Software Developers, Systems Software	102	-	37	957	2.76	0.11	14.0%	46.47	High Growth	High Wage	B
151134	Web Developers	120	-	3	964	40.00	0.12	9.2%	26.34	High Growth	High Wage	PS
151141	Database Administrators	103	-	20	614	5.15	0.17	11.5%	37.85	High Growth	High Wage	A
151142	Network and Computer Systems Administrators	246	5	20	1,684	12.55	0.15	7.9%	35.96	High Growth	High Wage	A
151143	Computer Network Architects	103	1	18	1,180	5.78	0.09	8.0%	37.06	High Growth	High Wage	PS
151151	Computer User Support Specialists	506	9	288	3,211	1.79	0.16	10.2%	22.49	High Growth	High Wage	PS
151152	Computer Network Support Specialists	149	6	25	892	6.20	0.17	8.4%	29.34	High Growth	High Wage	PS
151199	Computer Occupations, All Other	929	7	162	965	5.78	0.97	11.6%	38.01	High Growth	High Wage	PS
152031	Operations Research Analysts	70	-	9	716	7.78	0.10	21.7%	31.98	High Growth	High Wage	M+
152041	Statisticians	19	-	5	90	3.80	0.21	38.6%	37.68	High Growth	High Wage	B
171011	Architects, Except Landscape and Naval	78	-	14	1,045	5.57	0.07	9.5%	30.50	High Growth	High Wage	M+
171012	Landscape Architects	15	-	2	27	7.50	0.56	4.7%	31.81	Low Growth	High Wage	B
171021	Cartographers and Photogrammetrists	6	-	1	61	6.00	0.10	16.7%	42.47	High Growth	High Wage	B
171022	Surveyors	14	-	2	267	7.00	0.05	14.1%	28.12	High Growth	High Wage	B
172011	Aerospace Engineers	33	-	7	80	4.71	0.41	14.8%	49.54	High Growth	High Wage	B
172031	Biomedical Engineers	12	-	7	41	1.71	0.29	9.4%	35.68	High Growth	High Wage	B
172051	Civil Engineers	60	1	98	2,198	0.62	0.03	14.9%	42.36	High Growth	High Wage	B
172061	Computer Hardware Engineers	44	-	4	137	11.00	0.32	10.5%	45.01	High Growth	High Wage	B
172071	Electrical Engineers	45	2	13	346	3.62	0.14	10.4%	42.56	High Growth	High Wage	B
172072	Electronics Engineers, Except Computer	7	-	1	220	7.00	0.03	-0.5%	42.65	Low Growth	High Wage	B
172081	Environmental Engineers	14	-	9	107	1.56	0.13	9.5%	42.51	High Growth	High Wage	B
172111	Health and Safety Engineers, Except Mining Safety Engineers	24	-	38	72	0.63	0.33	8.5%	35.10	High Growth	High Wage	B
172112	Industrial Engineers	43	-	69	560	0.62	0.08	11.3%	30.33	High Growth	High Wage	B
172141	Mechanical Engineers	101	-	15	345	6.73	0.29	15.4%	39.96	High Growth	High Wage	B
172199	Engineers, All Other	151	-	55	233	2.75	0.65	11.5%	29.42	High Growth	High Wage	B
173011	Architectural and Civil Drafters	108	-	55	861	1.96	0.13	13.1%	27.07	High Growth	High Wage	PS
173012	Electrical and Electronics Drafters	5	-	-	68	N/A	0.07	18.9%	27.66	High Growth	High Wage	PS
173013	Mechanical Drafters	31	-	-	368	N/A	0.08	11.4%	24.09	High Growth	High Wage	PS
173021	Aerospace Engineering and Operations Technicians	38	-	3	45	12.67	0.84	5.0%	-	Low Growth	N / A	A
173022	Civil Engineering Technicians	46	-	6	376	7.67	0.12	15.0%	24.16	High Growth	High Wage	A
173023	Electrical and Electronics Engineering Technicians	112	-	44	525	2.55	0.21	8.1%	33.18	High Growth	High Wage	A
173025	Environmental Engineering Technicians	11	-	6	20	1.83	0.55	8.0%	28.55	High Growth	High Wage	A
173026	Industrial Engineering Technicians	10	-	-	113	N/A	0.09	6.0%	23.48	Low Growth	High Wage	PS
173027	Mechanical Engineering Technicians	51	-	5	81	10.20	0.63	10.1%	24.31	High Growth	High Wage	A
173029	Engineering Technicians, Except Drafters, All Other	134	-	15	214	8.93	0.63	7.6%	25.68	High Growth	High Wage	A
173031	Surveying and Mapping Technicians	27	-	4	619	6.75	0.04	12.6%	20.20	High Growth	High Wage	PS
191013	Soil and Plant Scientists	3	-	-	75	N/A	0.04	16.2%	18.65	High Growth	High Wage	B
191022	Microbiologists	8	-	1	22	8.00	0.36	6.9%	26.26	Low Growth	High Wage	M+
191023	Zoologists and Wildlife Biologists	10	-	1	96	10.00	0.10	2.2%	30.61	Low Growth	High Wage	B
191029	Biological Scientists, All Other	14	-	1	311	14.00	0.05	1.8%	40.68	Low Growth	High Wage	B
191031	Conservation Scientists	35	-	1	17	35.00	2.06	0.0%	14.03	Low Growth	Low Wage	B
191042	Medical Scientists, Except Epidemiologists	9	-	15	154	0.60	0.06	13.7%	43.56	High Growth	High Wage	M+
192021	Atmospheric and Space Scientists	3	-	-	148	N/A	0.02	10.8%	48.15	High Growth	High Wage	B
192031	Chemists	31	-	1	202	31.00	0.15	7.1%	36.47	Low Growth	High Wage	B
192041	Environmental Scientists and Specialists, Including Health	19	3	13	391	1.69	0.06	12.0%	33.21	High Growth	High Wage	B
192042	Geoscientists, Except Hydrologists and Geographers	2	-	2	35	1.00	0.06	7.0%	44.84	Low Growth	High Wage	B
192099	Physical Scientists, All Other	3	-	-	62	N/A	0.05	11.0%	46.10	High Growth	High Wage	B
193011	Economists	35	-	-	13	N/A	2.69	4.8%	48.75	Low Growth	High Wage	B
193022	Survey Researchers	34	-	-	105	N/A	0.32	13.8%	37.03	High Growth	High Wage	B
193031	Clinical, Counseling, and School Psychologists	57	1	5	378	11.60	0.15	11.8%	36.07	High Growth	High Wage	M+
193039	Psychologists, All Other	19	-	-	114	N/A	0.17	10.7%	50.54	High Growth	High Wage	M+
193051	Urban and Regional Planners	15	-	5	240	3.00	0.06	15.5%	38.31	High Growth	High Wage	B
193099	Social Scientists and Related Workers, All Other	21	-	-	316	N/A	0.07	5.5%	41.85	Low Growth	High Wage	B
194021	Biological Technicians	47	-	1	109	47.00	0.43	4.5%	23.17	Low Growth	High Wage	A
194031	Chemical Technicians	36	-	3	125	12.00	0.29	10.6%	22.46	High Growth	High Wage	A
194091	Environmental Science and Protection Technicians, Including H	17	-	11	239	1.55	0.07	12.4%	21.39	High Growth	High Wage	PS

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										Growth Category	Wage Category	
253098	Substitute Teachers	-	-	-	2,532	N/A	0.00	6.9%	12.42	Low Growth	Low Wage	B
254013	Museum Technicians and Conservators	10	-	-	127	N/A	0.08	16.1%	20.74	High Growth	High Wage	M+
254021	Librarians	26	-	4	651	6.50	0.04	8.5%	30.78	High Growth	High Wage	M+
254031	Library Technicians	16	-	-	226	N/A	0.07	10.6%	19.94	High Growth	High Wage	A
259031	Instructional Coordinators	104	-	6	1,649	17.33	0.06	11.8%	25.88	High Growth	High Wage	M+
259041	Teacher Assistants	843	-	27	3,739	31.22	0.23	10.7%	21309.00	High Growth	High Wage	PS
259099	Education, Training, and Library Workers, All Other	34	-	1	930	34.00	0.04	10.6%	23.73	High Growth	High Wage	B
271011	Art Directors	159	-	14	527	11.36	0.30	9.3%	37.91	High Growth	High Wage	B
271014	Multimedia Artists and Animators	48	-	2	525	24.00	0.09	7.9%	28.51	High Growth	High Wage	A
271022	Fashion Designers	86	-	2	191	43.00	0.45	3.3%	17.51	Low Growth	High Wage	A
271023	Floral Designers	48	-	-	486	N/A	0.10	3.2%	13.64	Low Growth	Low Wage	PS
271024	Graphic Designers	440	-	42	2,228	10.48	0.20	7.5%	22.28	Low Growth	High Wage	A
271025	Interior Designers	114	-	36	801	3.17	0.14	10.5%	25.69	High Growth	High Wage	A
271026	Merchandise Displayers and Window Trimmers	198	-	56	979	3.54	0.20	2.0%	13.49	Low Growth	Low Wage	HS
272012	Producers and Directors	662	1	57	1,640	11.63	0.40	9.2%	31.07	High Growth	High Wage	B
272021	Athletes and Sports Competitors	42	-	-	120	N/A	0.35	0.9%	96652.00	Low Growth	High Wage	HS
272022	Coaches and Scouts	249	-	16	1,202	15.56	0.21	10.0%	45775.00	High Growth	High Wage	HS
272023	Umpires, Referees, and Other Sports Officials	18	-	-	84	N/A	0.21	0.0%	35473.00	Low Growth	High Wage	PS

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272041	Music Directors and Composers	19	-	-	178	N/A	0.11	7.2%	56.32	Low Growth	High Wage	B
272042	Musicians and Singers	116	-	-	1,241	N/A	0.09	7.3%	32.31	Low Growth	High Wage	NR
273011	Radio and Television Announcers	74	-	3	202	24.67	0.37	-6.0%	18.69	Low Growth	High Wage	PS
273012	Public Address System and Other Announcers	6	-	1	89	6.00	0.07	11.3%	16.89	High Growth	High Wage	NR
273021	Broadcast News Analysts	9	-	-	143	N/A	0.06	11.0%	68.13	High Growth	High Wage	B
273022	Reporters and Correspondents	128	-	3	341	42.67	0.38	0.5%	30.58	Low Growth	High Wage	B
273031	Public Relations Specialists	279	-	32	2,117	8.72	0.13	8.3%	26.78	High Growth	High Wage	B
273041	Editors	123	-	9	529	13.67	0.23	2.0%	25.26	Low Growth	High Wage	B
273042	Technical Writers	40	-	1	241	40.00	0.17	15.8%	29.13	High Growth	High Wage	B
273043	Writers and Authors	120	-	9	654	13.33	0.18	9.1%	24.76	High Growth	High Wage	B
273091	Interpreters and Translators	77	-	3	577	25.67	0.13	20.5%	21.79	High Growth	High Wage	A
273099	Media and Communication Workers, All Other	52	1	5	218	10.60	0.24	10.0%	19.37	High Growth	High Wage	A
274011	Audio and Video Equipment Technicians	203	-	30	1,211	6.77	0.17	8.6%	16.93	High Growth	High Wage	A
274012	Broadcast Technicians	67	-	3	306	22.33	0.22	3.8%	14.97	Low Growth	Low Wage	A
274014	Sound Engineering Technicians	51	-	3	122	17.00	0.42	2.5%	22.36	Low Growth	High Wage	A
274021	Photographers	186	-	3	1,049	62.00	0.18	2.8%	16.86	Low Growth	High Wage	PS
274031	Camera Operators, Television, Video, and Motion Picture	139	-	2	290	69.50	0.48	5.6%	27.57	Low Growth	High Wage	A
274032	Film and Video Editors	102	-	3	519	34.00	0.20	12.3%	25.01	High Growth	High Wage	A
274099	Media and Communication Equipment Workers, All Other	8	-	-	36	N/A	0.22	2.0%	33.80	Low Growth	High Wage	A
291011	Chiropractors	7	-	-	95	N/A	0.07	11.7%	45.74	High Growth	High Wage	M+
291021	Dentists, General	142	-	1	414	142.00	0.34	15.1%	49.44	High Growth	High Wage	M+
291031	Dietitians and Nutritionists	40	-	12	302	3.33	0.13	9.5%	31.36	High Growth	High Wage	B
291051	Pharmacists	50	-	33	1,672	1.52	0.03	7.7%	58.88	High Growth	High Wage	M+
291062	Family and General Practitioners	44	-	-	580	N/A	0.08	11.3%	-	High Growth	N / A	M+
291063	Internists, General	118	-	2	118	59.00	1.00	14.1%	-	High Growth	N / A	M+
291064	Obstetricians and Gynecologists	7	-	-	19	N/A	0.37	12.7%	-	High Growth	N / A	M+
291065	Pediatricians, General	3	-	1	83	3.00	0.04	15.2%	60.65	High Growth	High Wage	M+
291066	Psychiatrists	1	-	-	53	N/A	0.02	8.4%	84.28	High Growth	High Wage	M+
291067	Surgeons	13	-	2	50	6.50	0.26	11.3%	57.44	High Growth	High Wage	M+
291069	Physicians and Surgeons, All Other	162	1	15	1,149	10.87	0.14	13.4%	66.99	High Growth	High Wage	M+
291071	Physician Assistants	34	-	1	662	34.00	0.05	32.3%	51.15	High Growth	High Wage	B
291081	Podiatrists	-	-	-	125	N/A	0.00	7.8%	49.42	High Growth	High Wage	M+
291122	Occupational Therapists	45	-	10	498	4.50	0.09	13.7%	33.66	High Growth	High Wage	M+
291123	Physical Therapists	94	-	25	1,166	3.76	0.08	19.7%	40.26	High Growth	High Wage	M+
291124	Radiation Therapists	-	-	2	100	0.00	0.00	15.7%	41.48	High Growth	High Wage	A
291125	Recreational Therapists	26	-	2	28	13.00	0.93	-1.5%	26.73	Low Growth	High Wage	B
291126	Respiratory Therapists	23	-	22	903	1.05	0.03	18.9%	27.82	High Growth	High Wage	A
291127	Speech-Language Pathologists	32	-	5	416	6.40	0.08	11.0%	41.25	High Growth	High Wage	M+
291128	Exercise Physiologists	7	-	-	27	N/A	0.26	9.8%	22.20	High Growth	High Wage	M+
291129	Therapists, All Other	51	-	5	89	10.20	0.57	14.1%	20.64	High Growth	High Wage	M+
291131	Veterinarians	6	-	1	191	6.00	0.03	18.2%	53.67	High Growth	High Wage	M+
291141	Registered Nurses	490	2	484	16,246	1.02	0.03	13.4%	32.20	High Growth	High Wage	A
291171	Nurse Practitioners	48	-	1	905	48.00	0.05	28.8%	44.38	High Growth	High Wage	M+
291181	Audiologists	17	-	1	84	17.00	0.20	13.4%	33.38	High Growth	High Wage	M+
291199	Health Diagnosing and Treating Practitioners, All Other	21	-	1	467	21.00	0.04	11.7%	27.80	High Growth	High Wage	M+
292011	Medical and Clinical Laboratory Technologists	30	-	30	726	1.00	0.04	8.8%	26.77	High Growth	High Wage	A
292012	Medical and Clinical Laboratory Technicians	68	-	29	530	2.34	0.13	12.6%	26.77	High Growth	High Wage	A
292021	Dental Hygienists	208	-	-	692	N/A	0.30	14.6%	24.96	High Growth	High Wage	A
292031	Cardiovascular Technologists and Technicians	8	-	24	417	0.33	0.02	9.9%	23.00	High Growth	High Wage	PS
292032	Diagnostic Medical Sonographers	43	-	3	537	14.33	0.08	20.4%	30.64	High Growth	High Wage	PS
292033	Nuclear Medicine Technologists	6	-	2	155	3.00	0.04	10.7%	33.72	High Growth	High Wage	A
292034	Radiologic Technologists	40	-	49	1,230	0.82	0.03	12.4%	28.03	High Growth	High Wage	PS
292035	Magnetic Resonance Imaging Technologists	4	-	1	305	4.00	0.01	11.7%	29.09	High Growth	High Wage	PS
292041	Emergency Medical Technicians and Paramedics	61	-	53	892	1.15	0.07	7.6%	13.74	High Growth	Low Wage	A
292051	Dietetic Technicians	30	-	3	90	10.00	0.33	9.8%	13.64	High Growth	Low Wage	PS
292052	Pharmacy Technicians	239	-	40	3,431	5.98	0.07	13.5%	15.59	High Growth	Low Wage	PS
292053	Psychiatric Technicians	105	-	15	809	7.00	0.13	5.2%	14.45	Low Growth	Low Wage	PS
292055	Surgical Technologists	42	-	42	882	1.00	0.05	10.7%	21.04	High Growth	High Wage	PS
292056	Veterinary Technologists and Technicians	36	-	-	541	N/A	0.07	19.2%	16.26	High Growth	Low Wage	A
292061	Licensed Practical and Licensed Vocational Nurses	150	-	27	3,519	5.56	0.04	11.3%	22.42	High Growth	High Wage	PS
292071	Medical Records and Health Information Technicians	241	-	72	1,140	3.35	0.21	13.2%	17.60	High Growth	High Wage	A

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292081	Opticians, Dispensing	69	-	-	556	N/A	0.12	14.2%	20.48	High Growth	High Wage	A
292091	Orthotists and Prosthetists	7	-	-	6	N/A	1.17	0.0%	22.73	Low Growth	High Wage	B
292099	Health Technologists and Technicians, All Other	127	-	15	1,084	8.47	0.12	11.5%	19.26	High Growth	High Wage	PS
299011	Occupational Health and Safety Specialists	33	-	10	140	3.30	0.24	6.8%	35.38	Low Growth	High Wage	PS
299091	Athletic Trainers	54	-	11	83	4.91	0.65	21.1%	44444.00	High Growth	High Wage	B
299099	Healthcare Practitioners and Technical Workers, All Other	45	-	26	244	1.73	0.18	9.9%	21.30	High Growth	High Wage	PS
311011	Home Health Aides	574	1	87	4,975	6.61	0.12	31.0%	10.32	High Growth	Low Wage	PS
311014	Nursing Assistants	709	1	159	12,506	4.47	0.06	10.4%	12.07	High Growth	Low Wage	PS
312021	Physical Therapist Assistants	66	-	6	520	11.00	0.13	19.6%	28.64	High Growth	High Wage	A
312022	Physical Therapist Aides	36	-	2	419	18.00	0.09	22.1%	13.13	High Growth	Low Wage	PS
319011	Massage Therapists	327	-	16	1,715	20.44	0.19	14.4%	16.92	High Growth	High Wage	PS
319091	Dental Assistants	500	-	8	3,106	62.50	0.16	14.7%	17.90	High Growth	High Wage	PS
319092	Medical Assistants	849	3	125	10,286	6.82	0.08	24.5%	15.06	High Growth	Low Wage	PS
319093	Medical Equipment Preparers	18	-	13	684	1.38	0.03	9.7%	14.83	High Growth	Low Wage	PS
319096	Veterinary Assistants and Laboratory Animal Caretakers	68	-	-	705	N/A	0.10	19.1%	14.27	High Growth	Low Wage	PS
319097	Phlebotomists	104	-	34	1,124	3.06	0.09	15.6%	15.38	High Growth	Low Wage	PS
319099	Healthcare Support Workers, All Other	233	-	54	572	4.31	0.41	10.1%	21.44	High Growth	High Wage	PS
331011	First-Line Supervisors of Correctional Officers	15	-	-	95	N/A	0.16	-4.4%	33.81	Low Growth	High Wage	PS
331012	First-Line Supervisors of Police and Detectives	2	-	-	375	N/A	0.01	5.8%	49.63	Low Growth	High Wage	A
331021	First-Line Supervisors of Fire Fighting and Prevention Workers	2	-	-	194	N/A	0.01	6.5%	52.34	Low Growth	High Wage	PS
331099	First-Line Supervisors of Protective Service Workers, All Other	26	-	3	1,149	8.67	0.02	4.1%	24.12	Low Growth	High Wage	PS
332011	Firefighters	10	-	-	2,139	N/A	0.00	6.6%	33.00	Low Growth	High Wage	PS
332021	Fire Inspectors and Investigators	5	-	1	115	5.00	0.04	7.0%	34.91	Low Growth	High Wage	PS
333011	Bailiffs	3	-	-	96	N/A	0.03	0.7%	-	Low Growth	N / A	PS
333012	Correctional Officers and Jailers	186	16	10	2,166	20.20	0.09	-4.5%	23.89	Low Growth	High Wage	PS
333021	Detectives and Criminal Investigators	80	1	4	520	20.25	0.16	2.1%	46.98	Low Growth	High Wage	PS
333041	Parking Enforcement Workers	29	-	1	84	29.00	0.35	-27.2%	27.17	Low Growth	High Wage	HS
333051	Police and Sheriff's Patrol Officers	70	16	80	4,067	1.08	0.02	6.9%	34.28	Low Growth	High Wage	PS
339011	Animal Control Workers	27	-	-	27	N/A	1.00	6.9%	24.63	Low Growth	High Wage	NR
339021	Private Detectives and Investigators	31	-	2	212	15.50	0.15	7.2%	29.16	Low Growth	High Wage	A
339031	Gaming Surveillance Officers and Gaming Investigators	15	-	1	143	15.00	0.10	0.0%	15.87	Low Growth	Low Wage	PS
339032	Security Guards	3,920	5	963	23,907	4.08	0.16	5.5%	11.49	Low Growth	Low Wage	PS
339091	Crossing Guards	40	-	21	1,234	1.90	0.03	6.5%	12.03	Low Growth	Low Wage	NR
339092	Lifeguards, Ski Patrol, and Other Recreational Protective Services	115	-	13	2,112	8.85	0.05	7.0%	15.14	Low Growth	Low Wage	NR
339093	Transportation Security Screeners	72	-	-	1,315	N/A	0.05	2.5%	19.73	Low Growth	High Wage	PS
339099	Protective Service Workers, All Other	113	-	6	3,559	18.83	0.03	7.8%	14.91	High Growth	Low Wage	PS
351011	Chefs and Head Cooks	1,395	-	37	1,820	37.70	0.77	10.0%	24.60	High Growth	High Wage	PS
351012	First-Line Supervisors of Food Preparation and Serving Workers	738	-	122	10,088	6.05	0.07	8.9%	17.17	High Growth	High Wage	PS
352012	Cooks, Institution and Cafeteria	389	17	29	2,230	14.00	0.18	11.6%	13.35	High Growth	Low Wage	HS
352014	Cooks, Restaurant	1,760	-	212	18,484	8.30	0.10	9.8%	13.98	High Growth	Low Wage	PS
352015	Cooks, Short Order	105	-	12	1,174	8.75	0.09	-0.1%	13.61	Low Growth	Low Wage	PS
352019	Cooks, All Other	109	64	8	354	21.63	0.49	11.6%	12.35	High Growth	Low Wage	NR
352021	Food Preparation Workers	1,106	-	171	11,575	6.47	0.10	11.8%	11.17	High Growth	Low Wage	NR
353011	Bartenders	2,441	-	88	7,670	27.74	0.32	7.8%	9.38	High Growth	Low Wage	NR
353021	Combined Food Preparation and Serving Workers, Including Food Counter Attendants, Cafeteria, Food Concession, and Coffee Service	1,347	-	269	45,559	5.01	0.03	13.1%	9.48	High Growth	Low Wage	NR
353022	Counter Attendants, Cafeteria, Food Concession, and Coffee Service	574	-	181	10,902	3.17	0.05	2.7%	9.33	Low Growth	Low Wage	NR
353031	Waiters and Waitresses	5,665	-	295	45,230	19.20	0.13	6.7%	9.64	Low Growth	Low Wage	NR
353041	Food Servers, Nonrestaurant	623	-	68	2,475	9.16	0.25	8.7%	10.27	High Growth	Low Wage	NR
359011	Dining Room and Cafeteria Attendants and Bartender Helpers	1,009	-	253	10,110	3.99	0.10	6.9%	9.28	Low Growth	Low Wage	NR
359021	Dishwashers	667	-	142	7,855	4.70	0.08	4.2%	10.28	Low Growth	Low Wage	NR
371011	First-Line Supervisors of Housekeeping and Janitorial Workers	451	-	107	2,805	4.21	0.16	11.4%	16.82	High Growth	Low Wage	PS
371012	First-Line Supervisors of Landscaping, Lawn Service, and Grounds Maintenance Workers	56	-	6	1,087	9.33	0.05	11.4%	16.53	High Growth	Low Wage	PS
372011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,442	2	347	27,221	4.16	0.05	10.5%	10.48	High Growth	Low Wage	NR
372012	Maids and Housekeeping Cleaners	2,225	8	781	18,261	2.86	0.12	11.6%	10.81	High Growth	Low Wage	NR
373011	Landscaping and Groundskeeping Workers	592	1	210	7,480	2.82	0.08	10.5%	12.22	High Growth	Low Wage	NR
373012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	19	-	-	299	N/A	0.06	8.2%	17.35	High Growth	High Wage	A
391021	First-Line Supervisors of Personal Service Workers	167	-	12	2,083	13.92	0.08	11.6%	19.13	High Growth	High Wage	PS
392011	Animal Trainers	56	-	2	2,043	28.00	0.27	9.0%	14.32	High Growth	Low Wage	HS
392021	Nonfarm Animal Caretakers	102	-	5	2,092	20.40	0.05	21.6%	11.67	High Growth	Low Wage	NR
393012	Gaming and Sports Book Writers and Runners	1	-	-	277	N/A	0.00	-3.6%	-	Low Growth	N / A	NR
393021	Motion Picture Projectionists	8	-	-	68	N/A	0.12	-13.3%	13.42	Low Growth	Low Wage	NR

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393031	Ushers, Lobby Attendants, and Ticket Takers	222	-	18	1,437	12.33	0.15	-0.3%	9.50	Low Growth	Low Wage	NR
393091	Amusement and Recreation Attendants	267	-	120	4,564	2.23	0.06	9.0%	10.71	High Growth	Low Wage	NR
393093	Locker Room, Coatroom, and Dressing Room Attendants	63	-	17	372	3.71	0.17	9.0%	11.35	High Growth	Low Wage	NR
393099	Entertainment Attendants and Related Workers, All Other	38	-	61	146	0.62	0.26	5.2%	-	Low Growth	N / A	HS
394021	Funeral Attendants	15	-	1	514	15.00	0.03	0.7%	11.78	Low Growth	Low Wage	HS
395012	Hairdressers, Hairstylists, and Cosmetologists	677	1	13	3,698	52.15	0.18	4.9%	11.83	Low Growth	Low Wage	PS
395091	Makeup Artists, Theatrical and Performance	87	-	-	66	N/A	1.32	7.6%	-	High Growth	N / A	PS
395094	Skincare Specialists	177	-	5	803	35.40	0.22	7.3%	15.36	Low Growth	Low Wage	PS
396011	Baggage Porters and Bellhops	236	-	65	5,236	3.63	0.05	13.0%	9.98	High Growth	Low Wage	NR
396012	Concierges	277	-	25	1,270	11.08	0.22	13.8%	13.47	High Growth	Low Wage	HS
399011	Childcare Workers	1,186	-	36	12,721	32.94	0.09	12.5%	11.02	High Growth	Low Wage	PS
399021	Personal Care Aides	325	-	17	3,401	19.12	0.10	16.1%	10.52	High Growth	Low Wage	PS
399031	Fitness Trainers and Aerobics Instructors	266	-	10	3,076	26.60	0.09	7.4%	17.84	Low Growth	High Wage	HS
399032	Recreation Workers	327	10	117	5,622	2.88	0.06	4.9%	10.88	Low Growth	Low Wage	A
399041	Residential Advisors	63	-	3	512	21.00	0.12	8.6%	12.97	High Growth	Low Wage	HS
399099	Personal Care and Service Workers, All Other	42	-	2	2,150	21.00	0.02	10.9%	11.02	High Growth	Low Wage	PS
411011	First-Line Supervisors of Retail Sales Workers	1,543	1	207	12,845	7.46	0.12	4.9%	21.26	Low Growth	High Wage	PS
411012	First-Line Supervisors of Non-Retail Sales Workers	339	-	43	4,796	7.88	0.07	5.5%	37.60	Low Growth	High Wage	A
412011	Cashiers	5,665	-	203	44,579	27.91	0.13	1.1%	9.79	Low Growth	Low Wage	HS
412021	Counter and Rental Clerks	181	-	34	4,259	5.32	0.04	1.9%	13.19	Low Growth	Low Wage	HS
412031	Retail Salespersons	4,870	42	1,300	61,216	3.78	0.08	3.2%	10.89	Low Growth	Low Wage	HS
413011	Advertising Sales Agents	426	-	24	1,694	17.75	0.25	-3.3%	27.86	Low Growth	High Wage	PS
413021	Insurance Sales Agents	345	1	28	4,275	12.36	0.08	7.6%	23.32	High Growth	High Wage	PS
413031	Securities, Commodities, and Financial Services Sales Agents	579	-	55	4,274	10.53	0.14	12.1%	30.63	High Growth	High Wage	B
413041	Travel Agents	323	-	11	2,157	29.36	0.15	1.7%	17.56	Low Growth	High Wage	PS
413099	Sales Representatives, Services, All Other	1,419	-	124	12,673	11.44	0.11	9.4%	21.70	High Growth	High Wage	HS
414011	Sales Representatives, Wholesale and Manufacturing, Technic	483	1	159	3,522	3.04	0.14	3.4%	39.70	Low Growth	High Wage	PS
414012	Sales Representatives, Wholesale and Manufacturing, Except	814	1	155	17,611	5.26	0.05	4.8%	22.87	Low Growth	High Wage	PS
419011	Demonstrators and Product Promoters	174	-	34	2,001	5.12	0.09	10.1%	17.25	High Growth	High Wage	HS
419021	Real Estate Brokers	97	-	-	1,130	N/A	0.09	8.6%	22.58	High Growth	High Wage	PS
419022	Real Estate Sales Agents	494	-	16	4,790	30.88	0.10	8.4%	27.41	High Growth	High Wage	PS
419031	Sales Engineers	62	-	42	243	1.48	0.26	4.7%	46.00	Low Growth	High Wage	B
419099	Sales and Related Workers, All Other	563	-	8	1,058	70.38	0.53	13.2%	17.38	High Growth	High Wage	PS
431011	First-Line Supervisors of Office and Administrative Support Wo	586	2	286	12,893	2.06	0.05	4.7%	25.58	Low Growth	High Wage	A
432011	Switchboard Operators, Including Answering Service	67	-	13	785	5.15	0.09	-15.9%	12.41	Low Growth	Low Wage	HS
433011	Bill and Account Collectors	369	-	35	1,822	10.54	0.20	0.9%	17.52	Low Growth	High Wage	HS
433021	Billing and Posting Clerks	286	-	25	4,840	11.44	0.06	13.8%	17.12	High Growth	High Wage	HS
433031	Bookkeeping, Accounting, and Auditing Clerks	1,034	3	145	13,720	7.15	0.08	1.0%	18.61	Low Growth	High Wage	A
433041	Gaming Cage Workers	22	-	1	118	22.00	0.19	0.0%	9.32	Low Growth	Low Wage	HS
433051	Payroll and Timekeeping Clerks	106	-	9	749	11.78	0.14	1.5%	20.19	Low Growth	High Wage	HS
433061	Procurement Clerks	49	1	10	395	5.00	0.13	0.0%	21.84	Low Growth	High Wage	HS
433071	Tellers	371	1	91	3,877	4.09	0.10	-6.9%	14.92	Low Growth	Low Wage	PS
433099	Financial Clerks, All Other	46	-	2	397	23.00	0.12	12.1%	22.61	High Growth	High Wage	HS
434011	Brokerage Clerks	32	-	5	774	6.40	0.04	17.4%	24.30	High Growth	High Wage	HS