

### Higher Education & Workforce Subcommittee

### Wednesday, February 4, 2015 1:30 p.m. – 3:30 p.m. 102 HOB

**Meeting Packet** 

Steve Crisafulli Speaker Elizabeth Porter Chair



### AGENDA

Higher Education & Workforce Subcommittee Wednesday, February 4, 2015 1:30 p.m. – 3:30 p.m. 102 HOB

- I. Call to Order and Roll Call
- II. Opening Remarks
- III. Presentation by CareerSource Florida on the Market Intelligence Portal
- IV. Presentation by the Department of Economic Opportunity on the Florida Occupational Supply/Demand System
- V. Closing Remarks and Adjournment

CareerSource Florida









### **Our Vision**

### global leader for talent. Florida will be the

# The Market Intelligence Portal

- Order of Business
- Motivation: Why?
- -What data are out there?
- Just what is this thing anyhow?
- -It's all about perspective
- Education/Workforce Planning
- Economic Development
- Students/Counselors
- Analysts
- Industry





### Motivation

Did previous graduates obtain employment?

What is the typical salary for this degree?

Will my degree be in demand upon completion?

Should a new training program be considered?

What type of skills will be produced in the future?

Can the talent base currently support this company?





### Data Available (sample)

- Labor Market Supply/Demand Data
  - County, region, etc.



- Occupational and Industry Demand Forecasts
  - Linear projection of demand(National, State, County)

VISIT**FLORIDA** 

- Real Time Supply/Demand Data
  - Help Wanted Online and Conference Board
- Current Market Intelligence

   Industry specific groups
- Training Outcomes
  - Economic Security Report









O\*NET OnLine

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The Market Intelligence Portal	Designed to be a tool which integrates multiple data sources into a single data warehouse	<ul> <li>ailored interfaces for different audiences</li> <li>Designed to allow education program designers to look holistically at supply/demand data (planning interface)</li> <li>Designed to highlight in-demand occupational groups for students (student/counselor interface)</li> <li>Designed to allow economic developers to compare regions/states/etc. quickly and effectively when recruiting projects or looking at expansion (economic developer interface)</li> <li>Designed to allow analysts to efficiently design custom data series leveraging background forecasts (analyst tool)</li> </ul>	CareerSourceFlorida.com
The Market	<ul> <li>Designed to be a multiple data sou warehouse</li> </ul>	<ul> <li>Tailored interfaces for different audiences</li> <li>Designed to allow education program designel holistically at supply/demand data (planning in holistically at supply/demand data (planning in students (student/counselor interface)</li> <li>Designed to allow economic developers to corregions/states/etc. quickly and effectively where or looking at expansion (economic developer i or looking at expansion (economic developer i series leveraging background forecasts (analy</li> </ul>	CareerSource

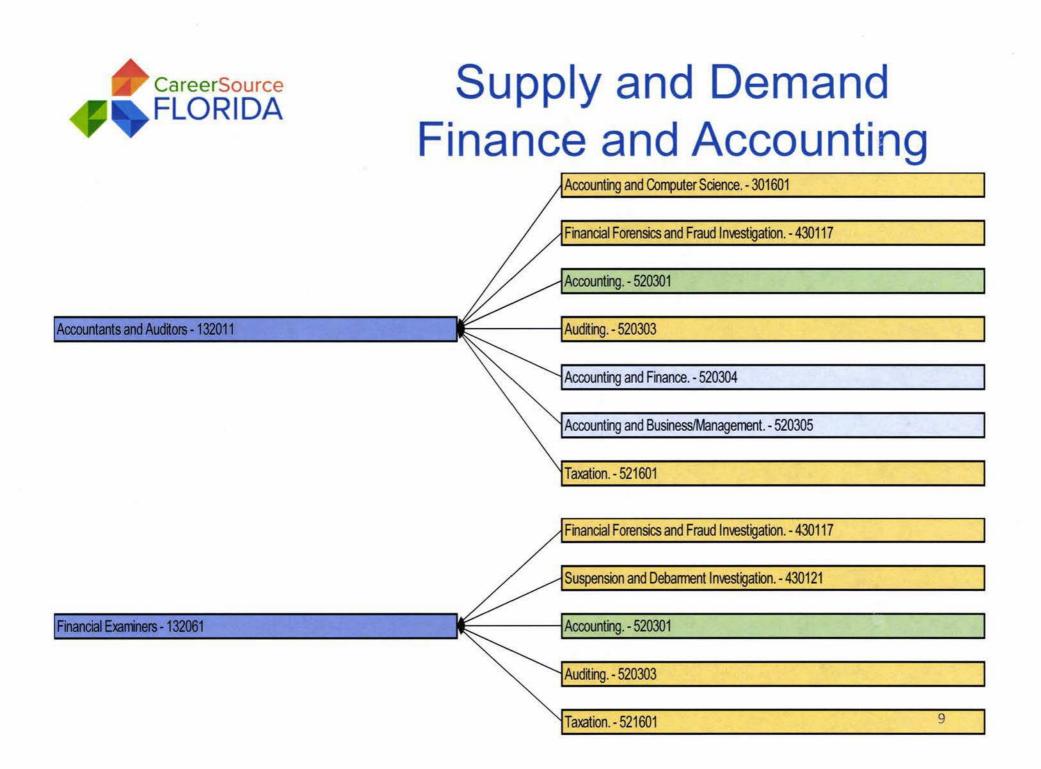


Occupation	SOC	WAE	DPSEC-E	FCS-E	CIE-E	WA-C	DPSEC-C	FCS-C	CIE-C	ICUF-C	SUS-C	JS	Total Supply	Short Term Demand	Supply Gap or Overage	Ratio of Suppl to Demand
Securities, Commodities, and Financial Services Sales Agents	413031	3			2	1						1,088	1,088	2,320	-1,232	0.47
Financial Managers***	113031	1			456	8			133	80	209	1,613	2,035	2,034	1	1.00
Financial Specialists, All Other	132099	2				2						645	645	14	631	46.07
Personal Financial Advisors	132052	7		-	212	1		3	50	402	2,802	208	3,465	349	3,116	9.93
Financial Analysts	132051	4			243	2		3	57	415	2,802	880	4,157	727	3,430	5.72
Financial Examiners	132061				1,414				279	868	2,688	104	3,939	223	3,716	17.66
Accountants and Auditors	132011	37			1,718	33			362	908	2,688	4,741	8,699	4,661	4,038	1.87
Credit Analysts	132041			400	1,270	1		22	50	931	4,796	278	6,077	102	5,975	59.58
Budget Analysts	132031				1,624			3	329	1,213	5,450	114	7,109	37	7,072	192.14
Loan Officers	132072			549		10	_	263				434	697	974	-277	0.72

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Occupation	SOC	WAE	DPSEC-E	FCS-E	CIE-E	MAC	DPSEC-C	FCS-C	CIE-C	ICUF-C	SUS-C
Securities, Commodities, and Financial Services Sales Agents	413031	3			2	1					
Financial Managers***	113031	1			456	8			133	80	209
Financial Specialists, All Other	132099	2				2					
Personal Financial Advisors	132052	7			212	1		3	50	402	2,802
Financial Analysts	132051	4			243	2		3	57	415	2,802
Financial Examiners	132061				1,414				279	868	2,688
Accountants and Auditors	132011	37			1,718	33			362	908	2,688





Occupations	Supply	Computer Occupations, All Other - 151199
	Accounting and Computer Science: - 301601	Criminal Justice and Law Enforcement Teachers, Postsecondary - 251111
	Financial Forensics and Fraud Investigation 430117	Detectives and Criminal Investigators - 333021
	Accounting 520301	Private Detectives and Investigators - 339021
Accountants and Auditors - 132011	Auditing 520303	Business Teachers, Postsecondary - 251011
Financial Examiners - 132061	Accounting and Finance 520304	Tax Preparers - 132082
Budget Analysts - 132031	Accounting and Business/Management 520305	Chief Executives - 111011
Credit Analysts - 132041	Taxation 521601	General and Operations Managers - 111021
Tax Examiners and Collectors, and Revenue Agents - 132081	Suspension and Debarment Investigation 430121	Natural Sciences Managers - 119121
Financial Analysts - 132051	Finance, General 520801	Mathematicians - 152021
Financial Managers - 113031	Public Finance 520808	Mathematical Science Occupations, All Other - 152099
Personal Financial Advisors - 132052	Credit Management 520809	Economists - 193011
Loan Officers - 132072	Financial Mathematics 270305	Mathematical Science Teachers, Postsecondary - 251022
Financial Specialists, All Other - 132099	International Finance: - 520806	Bill and Account Collectors - 433011
Credit Counselors - 132071	Investments and Securities 520807	Tellers - 433071
Statistical Assistants - 439111	Finance and Financial Management Services, Other 520899	Credit Authorizers, Checkers, and Clerks - 434041
Securities, Commodities, and Financial Services Sales Agents - 413031	Financial Planning and Services 520804	Loan Interviewers and Clerks - 434131
	Banking and Financial Support Services 520803	New Accounts Clerks - 434141
	Accounting Technology/Technician and Bookkeeping 520302	Bookkeeping, Accounting, and Auditing Clerks - 433031
	Business and Personal/Financial Services Marketing Operations 521908	Payroll and Timekeeping Clerks - 433051
		Brokerage Clerks - 434011

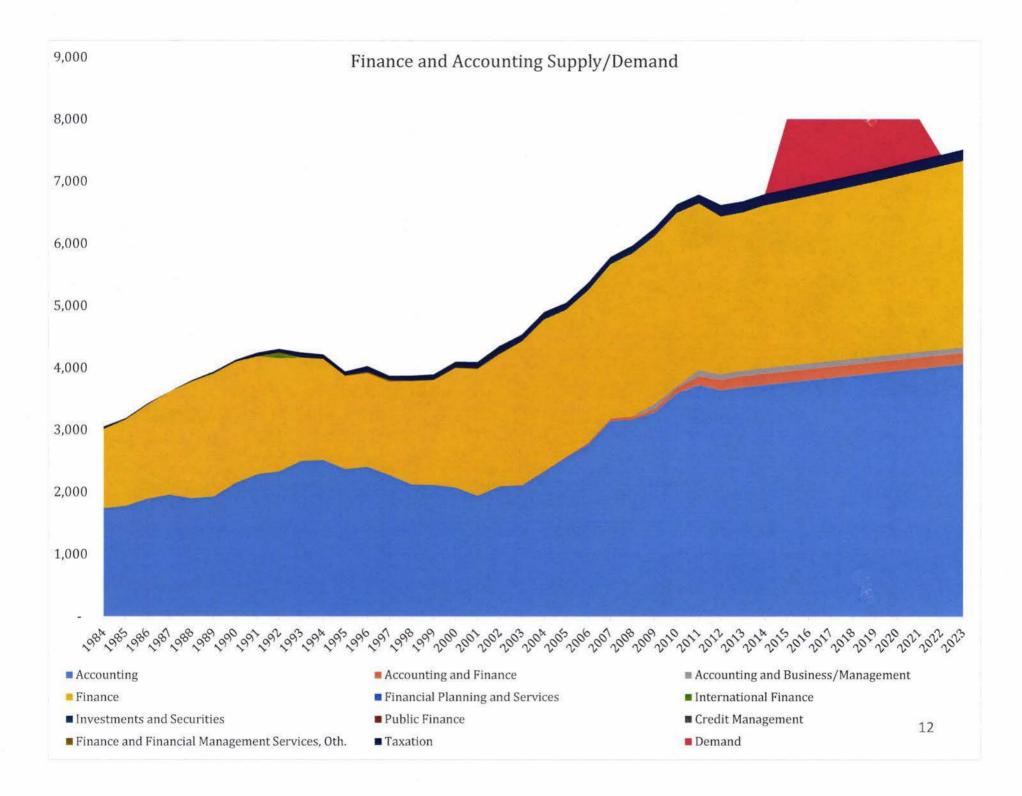


			Accounting and Finance 520304
			Accounting and Business/Management 520305
	1	H	Finance, General 520801
	M		International Finance 520806
Financial Managers - 113031			Public Finance 520808
Accountants and Auditors - 132011		H	Credit Management 520809
Budget Analysts - 132031		[]	Finance and Financial Management Services, Other 520899
Financial Examiners - 132061		X	Accounting and Computer Science 301601
Financial Analysts - 132051		Å)	Financial Forensics and Fraud Investigation 430117
Personal Financial Advisors - 132052		I.	Accounting 520301
Financial Specialists, All Other - 132099		X	Auditing 520303
Securities, Commodities, and Financial Services Sales Agents - 413031		$\langle \rangle$	Taxation 521601
Credit Analysts - 132041		$\langle \rangle$	Suspension and Debarment Investigation 430121
	// //	N	Financial Mathematics 270305
	/	$\langle \rangle \rangle$	Investments and Securities 520807
		/ /	

Business and Personal/Financial Services Marketing Operations. - 521908

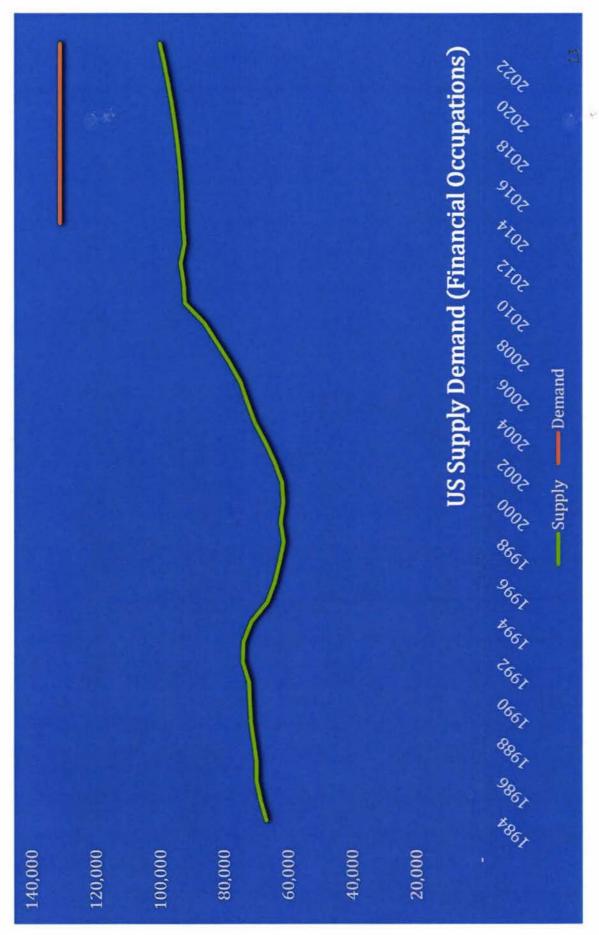
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Financial Planning and Services. - 520804



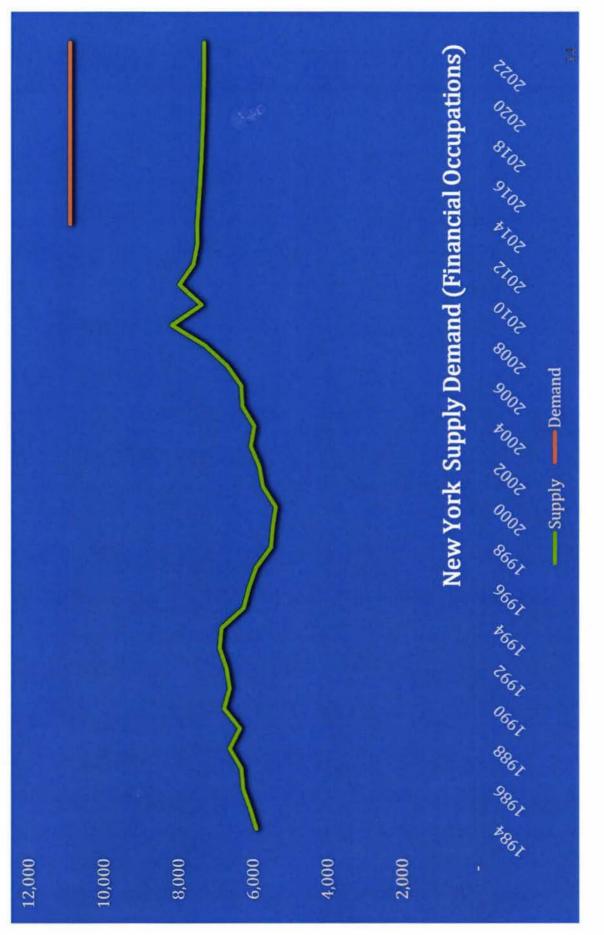


## Finance/Accounting (US)





## Finance/Accounting (NY)





### **Accounting Degree Wages**

### Accounting

Area of Study (CIP) Code: [52.0301]

### Area of Study Description

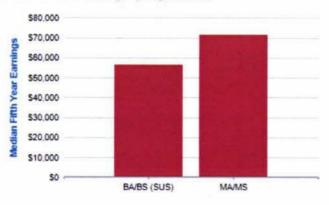
A program that prepares individuals to practice the profession of accounting and to perform related business functions. Includes instruction in accounting principles and theory, financial accounting, managerial accounting, cost accounting, budget control, tax accounting, legal aspects of accounting, auditing, reporting procedures, statement analysis, planning and consulting, business information systems, accounting research methods, professional standards and ethics, and applications to specific for-profit, public, and nonprofit organizations.

### Type or click to select

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### Median Fifth Year Earnings by Degree Level



### 5th Year Outcomes After Graduation (2007/2008 Graduates)

### Detailed Breakdown 5th Year Outcomes After Graduation (2007/2008 Graduates)

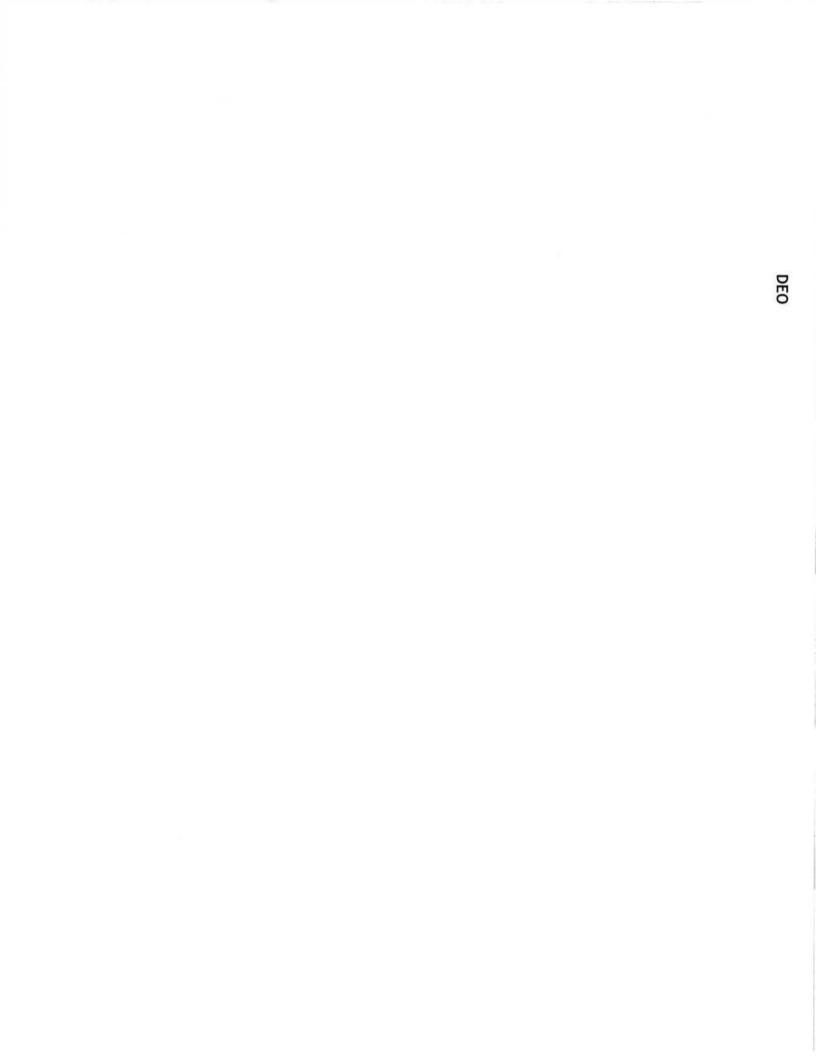
Degree Level	Institutions with Disclosable Programs 🔽	# of Completers	Public Assistance Percent 🔽	Total Employed Percent 🔽	Median Fifth Year Earnings	Continuing Education Percent 🔽
Bachelor's Degree (SUS)	10 institutions	1,721	1 %	73 %	\$56,254	5 %
	Florida Agricultural and Mechanical University	39	0 %	54 %	\$53,688	0%
	Florida Atlantic University	260	0 %	77 %	\$54,828	6 %
	Florida Gulf Coast University	45	0 %	76 %	\$49,970	7 %
	Florida International University	167	0 %	74 %	\$61,384	5%
	Florida State	188	0 %	75 %	\$57 202	7 %



### Questions?

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### FLORIDA DEPARTMENT & ECONOMIC OPPORTUNITY

### DEO Home > Labor Market Information > Supply Demand

### FLORIDA OCCUPATIONAL SUPPLY/DEMAND SYSTEM

### WELCOME!



Partners and other related links

**Contact Us** 

and Wages

The Florida Department of Economic Opportunity (DEO), Bureau of Labor Market Statistics has developed this new tool that allows users to view occupational Supply/Demand information in Florida. These data help in making informed choices for allocating training resources, helping jobseekers with reemployment information and providing timely data for workforce, economic developers and education.

The application allows the user to compare sources of potential occupational supply (graduates from post secondary educational programs and jobseekers) with sources of occupational demand (job openings). The education and occupation data contained in this tool are comprehensive and can be explored in many different ways. There are two report options: a standard report and a custom report.

### Standard Report

- The Standard Report uses the most recent occupational data available.
- Total Supply consists of data from workforce and educational training sources as well as jobseekers.
- Data can be selected by Workforce Region (RWBs).
- Data can be selected by aggregating Workforce Regions as a single 'Super' region.
- Data can be selected for Short-Term analysis using online job ads or long-term analysis using employment projections as demand.
- Data are selected by Major Occupational Group(s) and/or specific occupation(s).

### **Custom Report**

- Report is fully customizable by the user
- User picks the timeframes for which the report gathers data.
- View the most current data or select historical data.
- User can select to see any or all of the following occupational data:
  - Potential Occupational Supply Indicators
    - Enrollees
  - Completers/Graduates
  - Jobseekers
  - Additional Occupational Information
  - Current Employment
  - Projected Employment
  - Wages
  - Targeted Occupations List
  - Education Level

### Detail on Florida's Occupational Supply / Demand System

- Florida applied for and won a competitive grant from the U.S. Department of Labor; Workforce Data Quality Initiative for \$1 million
  - The grant funded the new Florida Occupational Supply/Demand System (S/D) which is the most comprehensive and timely system available in the nation
  - The S/D system has been designed to improve education and training alignment to better meet the hiring needs of business
  - The S/D system has been designed for workforce, education, business/economic development, job seekers, and students
  - The web-based data are statewide and by region
  - Florida's supply/demand system and LMI business recruitment functions are now funded on an ongoing basis by the Florida Legislature
  - On-going improvements include a new Job Seeker, Student and Parent Portal for Occupational and Supply/Demand information that is easy to use and understand



### Florida's Supply/Demand System

### The indicators of Potential Labor Supply by occupation are:

- Workforce, public and private postsecondary education (enrollees completers, and graduates by occupation based on CIP-SOC)
- Job seekers registered at career centers

### • The indicators for Labor Demand are:

- The Conference Board's Help Wanted OnLine (HWOL) data series of monthly job ad openings by occupation (for short-term analysis)
- DEO LMS average annual projected openings by occupation (for longterm analysis)

### • Other Information:

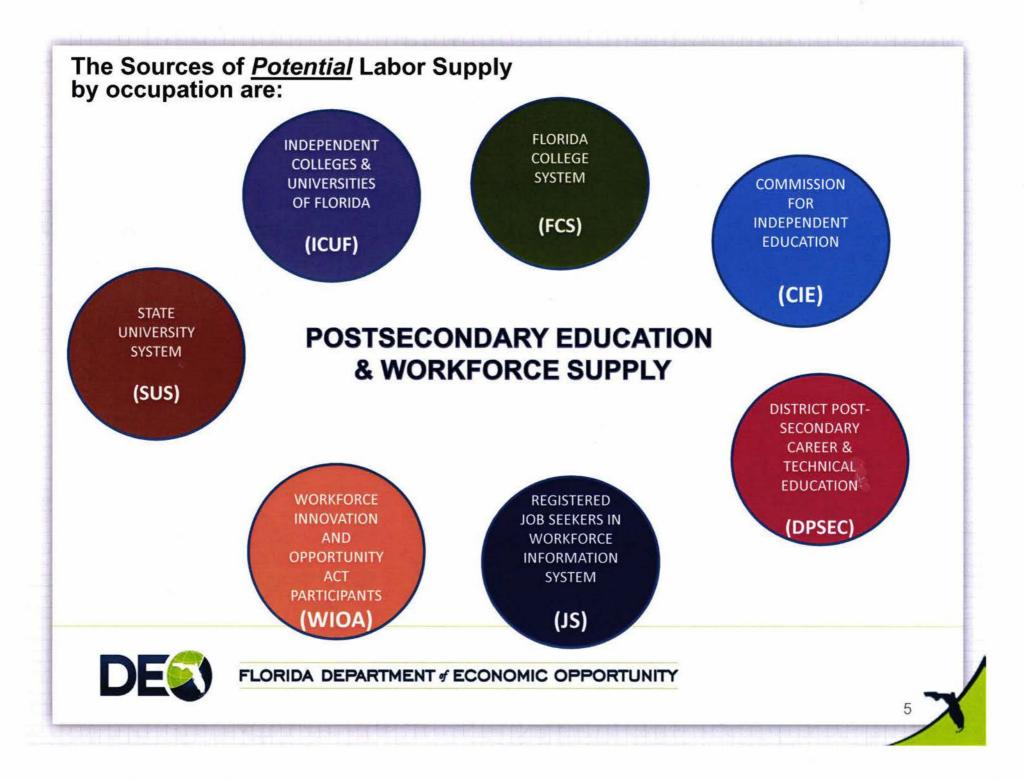
 Current and projected employment, wages, and education required by occupation



### How will the data be used to help Florida and the economy?

- Workforce and education will use the data to create better alignment of education and training offerings in meeting the hiring demands of business
- Business/economic developers will have the most comprehensive and timely occupational data to determine available labor supply to support business recruitment
- A new portal is under development to enhance the system for job seekers seeking re-employment; students and parents selecting career choices on jobs in demand now and in the future
- The portal will be easier to use with more graphical data presentations



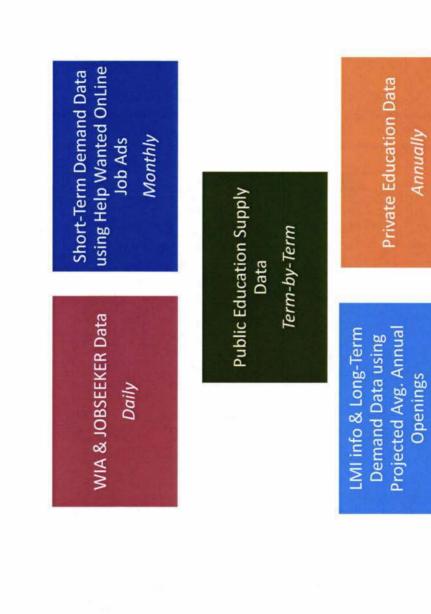


### **Supply/Demand Data Components**

Workforce - System	Workforce Investment Act (WIA) training enrollees and completers, and registered job seekers by occupation
Postsecondary - Education	Completers/graduates for education supply by sector, institution, term and year, and program name and coding enrollees provided as "Pipeline Information"
Employer Job Ads Demand via Internet	- Monthly job ad counts by occupation both statewide and by workforce region Provided by The Conference Board's Help Wanted OnLine (HWOL) data series
Labor Market - Information	Average annual occupational openings Occupational employment levels (current & 8 years out) Entry, median & experienced wages Occupational growth rates Minimum & typical education level of occupations



How often are the data updated?



FLORIDA DEPARTMENT & ECONOMIC OPPORTUNITY

Annually



### Short-Term Demand:

This data series is based on employer generated job ads advertised on the internet. The source is The Conference Board's Help Wanted OnLine data series which scrapes over 16,000 sources. The data are available monthly and have been processed to reduce duplicate job ads.

### Long-Term Demand:

This data series has average annual openings based on long-term projections produced by DEO's Bureau of Labor Market Statistics. These data are based on projected occupational growth and separations (includes projections of retirements and those changing occupations, not simply changing jobs). The data are available on an annual basis.

### How do they Differ?

Short-term demand is based upon ads resulting from occupational growth, separations, <u>and job churning</u>. Job churning is the voluntary movement of workers from one job to another, usually due to seeking a better job opportunity. As a result, short-term demand can exceed long-term demand.



### Explanation of Supply/Demand Report Information...

	Regional Report													
Area	Occupation	SOC	WIA-E	DPSEC- E	FCS-E	CIE-E	WIA-C	DPSE C-C	FCS-C	CIE-C	ICUF -C	SUS-C	JS	Total Supply
12	Registered Nurses	291141	17		2,984	942	10		540	119	972	2,111	276	935

- Enrollees on the Supply/Demand report are signified with an –E suffix following the Supply acronym while Completers/Graduates are indicated by a -C suffix.
- Notice that items in **BLUE** are used in creating the **Total Supply** (also in **BLUE**).
- REGIONAL Reports DO NOT include ICUF and SUS data in total supply as university graduates are considered statewide supply and are not parsed to a regional level. They are provided as informational supply only.
- STATEWIDE Reports DO include University graduates. When reviewing occupations for potential new training programs or programs to reduce, one should always review both the Regional and Statewide Reports.

:	Statewide Report													
				DPSEC-				DPSE			ICUF			Total
Area	Occupation	SOC	WIA-E	E	FCS-E	CIE-E	WIA-C	C-C	FCS-C	CIE-C	-C	SUS-C	JS	Supply
STW	Registered Nurses	291141	2,074		27,803	11,969	882		5,345	2,258	972	2,111	5,417	16,103



### Explanation of Supply/Demand Report Information (Continued)

Area	Occupation	soc	Total Supply	Short Term Demand	Ratio of Supply to Demand	Gap or			MEDIAN WAGE		1000000	FL EDUC LEV
12	Registered Nurses	291141	935	1,499	0.62	-564	18,195	\$22.31	\$27.33	\$31.19	Yes	4

### Total Supply is contrasted against Short Term Demand

Total Supply of 935 vs. Short-Term Demand of 1,499 leaves a "Gap" of -564 trained individuals

... and a ratio of .62 persons for each job ad existing

### **Other Information:**

Current employment, wages, and education required by occupation

**FI. Education Levels** 1=<HS 2=HS 3=Postsecondary Adult Vocational (PSAV) 4=College Credit 5= Bachelor's 6= Master's or higher



### **Data Caveats**

- All supply data are *potential labor supply*
- Completers/graduates are counted in *each occupation* related to their program of study
- Enrollees may or may not complete training
- Completers may already have a job or may have moved out of the geographic area
- Most jobseekers do not register with the career centers and they may or may not be qualified for the job they are seeking



### Data Caveats (continued)

- Not all job openings are advertised on the Internet
- The job ads have been de-duplicated but some duplicates may still exist
- Time frames for supply and demand data elements may differ
- District and Florida College System enrollees and completers are supply in the workforce region
- University graduates are statewide only and cannot be parsed to workforce regions; the statewide report does include university graduates in supply



### Data Caveats (continued)

- Some job ads may be placed in an area but actually exist in a different location
- There can be some seasonal aspects to the S/D report related to education, agriculture, and tourism
- Information may be known at the local level that should be considered when using the occupational S/D data, such as incoming or expanding firms



### IN CLOSING ...

All 823 occupations can be selected for:

- Statewide
- Regions
- Custom combinations of regions

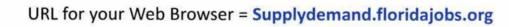
The system typically provides a report in less than a minute

Committee members can use the provided system sign-in information to access the system; if desired

A sample Occupational Under-Supply Report is provided in your DEO meeting materials







	DEO Home > Labor Market Information > Supply Demand  Supply Demand Application Login: User Login Id: fileg Password:  © 2014 State of Florida, Department of Economic Opportunity   <u>Site Map</u>   <u>Bitescy Statement</u>   <u>Legal</u>
	The Florida Occupational Supply/Demand System currently requires signing into –
	Login ID = flleg (not case sensitive) Login P/W = fllegPass (IS case sensitive, "P" must be uppercase)
DE	FLORIDA DEPARTMENT & ECONOMIC OPPORTUNITY

### Date: 01/29/2015

### Ratio of Supply to Demand Report

### User's Data Choice Summary to Generate Report

Report Type	Standard	WIA-E	Workforce Investment Act Enrollees
Reporting Level	Report with selected region(s) data aggregated together	WIA-C	Workforce Investment Act Completers/Graduates
Demand Data Use Option	Short Term Demand Data as Demand	DPSEC-E	District Postsecondary Enrollees
Selected Reporting Area(s)	Statewide	DPSEC-C	District Postsecondary Completers/Graduates
Supply Data Period(s)	WIA E: Activity <= 12/13/2014 WIA C: From 06/14/2014 To	FCS-E	Florida College System Enrollees
	12/13/2014	FCS-C	Florida College System Completers/Graduates
	JS: From 11/14/2014 To 12/13/2014	CIE-E	Commission for Independent Education Enrollees
	DPSEC E and C: 2013-14:YR	CIE-C	Commission for Independent Education
	FCS E and C: 2013-14:YR		Completers/Graduates
	SUS C: 2013-14:YR	JS	Jobseekers
	CIE E and C: 2013-14:YR	ICUF-C	Independent Colleges & Universities of Florida
	ICUF C: 2012-13:YR		Completers/Graduates
		SUS-C	State University System Completers/Graduates
Demand Data Period(s)	Short Term Demand Data: 12/2014	Total Supply	Supply total
Sort Order	By Supply Gap Overage	Short-Term Demand	Demand Total from Help Wanted OnLine (HWOL)
% of tolerance for displaying	10	EFM Job Ads	Employ Florida Marketplace Job Ads
occupations as either under or	Note: % Tolerance = % range of Supply Gap to Overage that will be	Long-Term Demand	Projected Average Annual Job Openings as Demand
over supplied	considered neither under or over supplied.	CURR YR EMP	Current Year Employment (based on year selected)
	Occupations under supplied will be displayed in a green font, those not	OUT YR EMP	Projected employment level 8 years out from 'Base Yr Proj' employment level
	considered under supplied will be in a black font.	ANNUAL OPENINGS	Projected Average Annual Job Openings (DEO Produced)
Occupational Education Level	Minimum Reg'd Education (FL Education Codes)	ENTRY WAGE	Occupation Entry Wage
Selected	FL: 1 = Less than High School, 2 = HS/GED, 3 = PSAV, 4 = College	MEDIAN WAGE	Occupation Median Wage
00,00,00	Credit (ATD, AAS, AS), 5 = Bachelor's, 6 = Master's or higher.	EXP WAGE	Occupation Experienced Wage
Asterisk(s) on Occupation Title	* Less than 1 year of experience; ** 1 to 5 years of experience; ***		
notations indicate these minimum		ON TOL	On Targeted Occupations List
requirements:	and the second	FL EDUC LEV	Florida Education Level (minimum education reg'd)
		SOC	Standard Occupational Classification (2010 Version)
			an na ang kana ang ang kang pang pang pang kang kang bang kang pang pang pang pang pang pang pang p

**Report Header Abbreviations** 

 $^{\star}\,$  Report rows where supply and demand counts are all zero will not display in the report

\*\*NOTE: WIA Completers are counted in other education sources for Supply Calculations.

Sources: FL Department of Economic Opportunity (DEO), Labor Market Statistics Center; FL Department of Education; FL State University System; FL Commission of Independent Education; The Conference Board's Help Wanted OnLine (all sources listed; actual sources used in report are based upon user's customized selections)

Area         Occupation         SC         WiA-E         E         FCS-E         CIE-E         WIA-C         C         FCS-C         CIE-C         VII-C         SUS-C         SUS-C<	-3 0.25 -771 0.31 -941 0.39 -403 0.59 -67 0.81 87 1.43 135 1.47 -16 0.27 -758 0.31	1         6,402           9         12,462           9         7,295           1         2,427           3         8,180	\$ 24.83	0         \$ 39.03           5         \$ 40.00           3         \$ 36.21           3         \$ 33.51           0         \$ 66.37	\$ 45.40 \$ 46.62 \$ 41.88 \$ 48.74	N/A N/A N/A	6 6 6 6
STW       Occupational Therapists       291122       Image: Constraint of the co	-771 0.31 -941 0.39 -403 0.59 -67 0.81 87 1.43 135 1.47 -16 0.27	1         6,402           9         12,462           9         7,295           1         2,427           3         8,180	\$ 27.90 \$ 28.65 \$ 24.83 \$ 21.13 \$ 37.90	0         \$ 39.03           5         \$ 40.00           3         \$ 36.21           3         \$ 33.51           0         \$ 66.37	\$ 45.40 \$ 46.62 \$ 41.88 \$ 48.74	N/A N/A N/A	6 6 6
STW       Physical Therapists       291123       6       195       2       55       120       308       121       604       1,545         STW       Speech-Language Pathologists       291127         23        6       224       319       30       573       976         STW       Medical Scientists, Except Epidemiologists       191042       1       23        6       72       161       49       282       349         STW       Dentists, General       291021       1       200        143       83       65       291       204         STW       Operations Research Analysts       15203       1       938       2       6       6       2       6       26       6       6       296       70	-941 0.39 -403 0.59 -67 0.81 87 1.43 135 1.47 -16 0.27	9         12,462           9         7,295           1         2,427           3         8,180	\$ 28.65 \$ 24.83 \$ 21.13 \$ 37.90	5 \$ 40.00 3 \$ 36.21 3 \$ 33.51 0 \$ 66.37	\$ 46.62 \$ 41.88 \$ 48.74	N/A N/A	6 6 6
STW       Speech-Language Pathologists       291127       1       1       23       1       24       319       30       573       976         STW       Medical Scientists, Except Epidemiologists       191042       1       23       2       20       72       161       49       282       349         STW       Dentists, General       291021       1       200       143       83       65       291       204         STW       Operations Research Analysts       152031       1       200       7       143       83       65       291       204         STW       Operations Research Analysts       152031       1       7       7       143       83       65       291       204         STW       Operations Research Analysts       152031       1       7       7       10       104       42       20         STW       Industrial Engineers       17217       7       6       6       2       2       2       5       5       4       33       1,091       3       1,091       3       1,091       3       1,091       1,093       2,101       3       1,091       1,093       2,101       3 <td< td=""><td>-403 0.59 -67 0.81 87 1.43 135 1.47 -16 0.27</td><td>7,295           1         2,427           3         8,180</td><td>\$ 24.83 \$ 21.13 \$ 37.90</td><td>3 \$ 36.21 3 \$ 33.51 0 \$ 66.37</td><td>\$ 41.88 \$ 48.74</td><td>N/A</td><td>6 6</td></td<>	-403 0.59 -67 0.81 87 1.43 135 1.47 -16 0.27	7,295           1         2,427           3         8,180	\$ 24.83 \$ 21.13 \$ 37.90	3 \$ 36.21 3 \$ 33.51 0 \$ 66.37	\$ 41.88 \$ 48.74	N/A	6 6
STMMedical Scientists, Except Epidemiologists1910421232307216149282349STWDentists, General291021120020001438365291204STWOperations Research Analysts15203109382025760104421286Composition Research Analysts15203100 <td>-67 0.81 87 1.43 135 1.47 -16 0.27</td> <td>1 2,427 3 8,180</td> <td>\$ 21.13 \$ 37.90</td> <td>3 \$ 33.51 0 \$ 66.37</td> <td>\$ 48.74</td> <td></td> <td>6</td>	-67 0.81 87 1.43 135 1.47 -16 0.27	1 2,427 3 8,180	\$ 21.13 \$ 37.90	3 \$ 33.51 0 \$ 66.37	\$ 48.74		6
STWDentists, General2910211120011438365291204STWOperations Research Analysts15203119382125760104421286STWPetroleum Engineers17217111 <td< td=""><td>87 1.43 135 1.47 -16 0.27</td><td>8,180</td><td>\$ 37.90</td><td>\$ 66.37</td><td>and the second second</td><td>N/A</td><td></td></td<>	87 1.43 135 1.47 -16 0.27	8,180	\$ 37.90	\$ 66.37	and the second second	N/A	
STWOperations Research Analysts15203119382225760104421286AA	135 1.47 -16 0.27	8,180	\$ 37.90	\$ 66.37	and the second second		6
Image: Second	-16 0.27		1.0000000000000000000000000000000000000	Contraction and the second second	5 95.00	N/A	6
STWPetroleum Engineers172171Image: second s				\$ 23.01	\$ 33.34	Contraction and a second second	6
STWPetroleum Engineers172171Image: second s							
STWIndustrial Engineers172112Image: constraint of the state of the		7 N/D	NI/D	N/D	NI/D	NUA	E
STW       Securities, Commodities, and Financial       413031       1       6       1       3       1       6       1       3       1       1,036       1,039       2,101         STW       Recreational Therapists       291125       1       -       -       -       -       69       69       129         STW       Business Teachers, Postsecondary       251011       4       -       -       -       1       13       137       151       198         STW       Business Teachers, Postsecondary       251011       4       -       129       2       33       309       58       146       546       626         STW       Sales Engineers       419031       -       -       33       -       -       162       162       180         STW       Financial Managers***       113031       2       351       5       80       80       209       1,475       1,844       1,840         STW       Pinacial Scientists, All Other       192099       4       4       5       4       4       5       4         STW       Health and Safety Engineers, Except Mining Safety       172011       -       6       6       6 <td>-/00 0.31</td> <td></td> <td>N/R</td> <td>N/R</td> <td>N/R</td> <td>N/A</td> <td>5</td>	-/00 0.31		N/R	N/R	N/R	N/A	5
STWRecreational Therapists2911251111113137151198STWBusiness Teachers, Postsecondary2510114666113137151198151198STWPhysician Assistants2910714129263330958146546626151104162180151162162162162162162162162162162162162162162162162162162161161161161161161 <td< td=""><td>-1,062 0.49</td><td>-</td><td></td><td></td><td>\$ 41.62 \$ 53.82</td><td></td><td>5</td></td<>	-1,062 0.49	-			\$ 41.62 \$ 53.82		5
STW       Business Teachers, Postsecondary       251011       4       6       6       6       1       13       137       151       198         STW       Physician Assistants       291071       4       129       2       33       309       58       146       546       626         STW       Sales Engineers       419031       6       6       33       0       58       162       180         STW       Financial Managers***       113031       2       351       5       80       80       209       1,475       1,844       1,840         STW       Physical Scientists, All Other       192099       6       4       6       4       6       4       5       4         STW       Health and Safety Engineers, Except Mining Safety       172111       1       7       17       175       1       14       12       13       10	-60 0.53	3 604	\$ 16.03	\$ 21 97	\$ 25.49	N/A	5
STWPhysician Assistants29107121292330958146546626STWSales Engineers419031663366162180STWFinancial Managers***113031235156808002091,4751,8441,840STWPhysical Scientists, All Other1920944641454STWHealth and Safety Engineers, Except Mining Safety17211117211110227175175STWMaterials Scientists1920326620112131010STWCivil Engineers172051220644629304981750	-47 0.76		\$ 25.73		-		5
STWSales Engineers41903141903133666162162180STWFinancial Managers***1130312351580802091,4751,8441,840STWPhysical Scientists, All Other1920994461454STWHealth and Safety Engineers, Except Mining Safety1721111721111211042271755STWMaterials Scientists192032666461121310STWCivil Engineers1720512206444629304981750	-80 0.87	Contraction of the	\$ 35.03		\$ 53.49	Contraction of the second	5
STW       Financial Managers***       113031       2       351       5       80       80       209       1,475       1,844       1,840         STW       Physical Scientists, All Other       192099       4       1       4       5       4         STW       Health and Safety Engineers, Except Mining Safety       172111       2       2       8       115       104       227       175         STW       Materials Scientists       192032       -       -       6       4       44       629       304       981       750         STW       Civil Engineers       172051       2       20       4       44       629       304       981       750	-18 0.90	17		and the second second	\$ 69.34	- topen-r	5
STWPhysical Scientists, All Other1920994454STWHealth and Safety Engineers, Except Mining Safety172111228115104227175STWMaterials Scientists1920326661121310STWCivil Engineers172051220444629304981750	4 1.00						5
STW       Health and Safety Engineers, Except Mining Safety       172111       2       2       8       115       104       227       175         STW       Materials Scientists       192032       1       10       10       10       10       10         STW       Civil Engineers       172051       2       20       4       44       629       304       981       750	1 1.25			3 \$ 34.67			5
Safety         Image: Constraint of the second						1.58.58	5
STW         Civil Engineers         172051         2         20         4         44         629         304         981         750	52 1.30 3 1.30		\$ 24.40		\$ 40.22 \$ 42.73		5
	231 1.31	12 24 405 20	100000000000000000000000000000000000000	a second and a second as the	\$ 47.81	A CONTRACTOR	5
STW Medical and Health Services Managers 119111 31 2,501 32 194 316 441 1,677 1,445 4,073 2,984	1,089 1.36	5. 500 A.C. (205		7 \$ 45.80	· · · · · · · · · · · · · · · · · · ·		5
STW Marine Engineers and Naval Architects         172121         1         1         58         58         42	16 1.38			\$ 39.10			5
STW Mining and Geological Engineers, Including 172151 10 10 7	3 1.43	Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.	Carlournett on	\$ 35.26			5
Mining							
FL Education Level 4 - College Credit (ATD, AAS, A	AS, etc.)				125		
STW Funeral Service Managers 119061 3 3 20	-17 0.15	5 337	\$ 23.78	\$ 29.10	\$ 41.48	No	4
STW Medical and Clinical Laboratory 292011 3 169 5 38 212 250 626	-376 0.40	10,040	\$ 22.45	\$ 27.63	\$ 30.44	No	4
STW         First-Line Supervisors of Non-Retail Sales         411012         32         4         1         816         817         1,788           Workers         OTM         Device Accests         First-Line Supervisors of Non-Retail Sales         411012         32         4         1         816         817         1,788	-971 0.46	33,435	\$ 21.27	\$ 34.99	\$ 50.65	Yes	4
STW     Purchasing Agents, Except Wholesale, Retail, and Farm Products     131023     5     3     2     1     317     318     582       STW     Vacational Education Teachers     251104     251104     251104     251104     251104     251104	-264 0.55			\$ 25.90	11 2000		4
STW         Vocational Education Teachers, Postsecondary         251194         1         387         5         198         201         399         714           STW         First-Line Supervisors of Construction         471011         11         1.095         272         0         122         85         724         022         1.577	-315 0.56			\$ 23.56	20		4
STW         First-Line Supervisors of Construction         471011         11         1,986         273         9         123         85         724         932         1,577           Trades and Extraction Workers***         132072         549         10         263         428         691         923	-645 0.59 -232 0.75		17	<ul><li>\$ 26.84</li><li>\$ 32.62</li></ul>			4

Area Occupation	SOC	WIA-E	DPSEC-	FCS-E	CIE-E	WIA-C	DPSEC C	FCS-C	CIE-C	ICUF-C	SUS-C	JS	Total Supply	Short Term Demand	Supply Gap or Overage	Ratio of Supply to Demand	CURR YR EMP	ENTRY	MEDIAN WAGE	EXP WAGE	ON TOL	FL EDUC LEV
STW Human Resources Specialists	131071	15		104	63	48		25	8	179		855	1,067	1,108	-41	0.96	25,438	\$ 16.61	\$ 23.88	\$ 31.23	No	4
STW First-Line Supervisors of Police and	331012	8			1,100	2				Contract of the second		35	35	33	2	1.06	3,983	\$ 28.35	\$ 42.29	\$ 50.05	No	4
Detectives** STW Registered Nurses	291141	2,051		27,930	21,294	978		5,815	4,293	1,413	2,357	4,898	18,776	17,216	1,560	1.09	167.360	\$ 23.87		\$ 33.64	Yes	1
STW Software Developers, Applications	151132	2,031		5,185	3,019	25		345	652	225	917	620	2,759	2,474	285	1.12	24,599	\$ 24.69		\$ 46.88		4
STW Occupational Therapy Assistants	312011	20		5,185	286	13		89	17	220	917	124	2,759	179	51		The Address of the	And the second second		the second second second	125-01	4
STW Computer Systems Analysts	151121	N/ W	40	017252	471222	1000	4		1. Ker	444	1.054	the second second	- alexand		and the second	1.28	1,410	\$ 23.65	and the second s	\$ 32.43	No	4
STW Property, Real Estate, and Community		21	12	7,176	2,262	16	1	692	232	414	1,954	777	4,070	3,154	916	1.29	22,380	\$ 27.44	\$ 39.88	\$ 49.16	Yes	4
Association Managers**	119141	2				3				14	153	1,278	1,445	1,072	373	1.35	35,596	\$ 14.87	\$ 23.15	\$ 33.08	Yes	4
STW Civil Engineering Technicians	173022	6		406		3		16			-	126	142	102	40	1.39	2,857	\$ 14.16	\$ 21.95	\$ 26.89	No	4
												durantina	1	DCAV								
CTW First Line Supervisors of Transportation and	624024		State March	1	and the second	1000		-	10000	1	FLE	ducation	Level 3 -	PSAV	1.	100	-	-			1	1
STW First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators**	531031	1		960		1		177				230	407	1,190	-783	0.34	9,157	\$ 17.50	\$ 25.78	\$ 31.64	No	3
STW First-Line Supervisors of Mechanics, Installers, and Repairers**	491011	18		946		8		42				608	650	1,580	-930	0.41	26,628	\$ 18.87	\$ 27.66	\$ 33.50	Yes	3
STW Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	2				17						1,348	1,348	3,070	-1,722	0.44	97,485	\$ 12.87	\$ 22.83	\$ 35.56	Yes	3
STW Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	514023							_				6	6	13	-7	0.46	231	\$ 10.83	\$ 15.83	\$ 20.19	No	3
STW Magnetic Resonance Imaging Technologists	292035	1			27				12			11	23	43	-20	0.53	3,206	\$ 24.30	\$ 30.69	\$ 33.35	No	3
STW Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	414011	3				30						1,047	1,047	1,644	-597	0.64	22,334	\$ 19.87	\$ 32.31	\$ 46.26	Yes	3
STW Self-Enrichment Education Teachers**	253021							-		1		70	70	108	-38	0.65	16,751	\$ 9.77	\$ 14.55	\$ 20.20	No	3
STW Bus and Truck Mechanics and Diesel Engine Specialists	493031	6	612	254	76	8	68	34	57			303	462	712	-250	0.65	10,322	\$ 15.03	\$ 20.82	\$ 24.50	No	3
STW Hearing Aid Specialists	292092											18	18	27	-9	0.67	206	\$ 17.57	\$ 25.41	\$ 28.91	No	3
STW Pest Control Workers	372021	2	5	1		1	3	1				199	203	295	-92	0.69	9,201	\$ 10.82	\$ 14.00	\$ 17.23	No	3
STW Security and Fire Alarm Systems Installers	492098	1		1		4		6		1		157	163	235	-72	0.69	6,445	\$ 12.77	\$ 17.31	\$ 20.40	Yes	3
STW Upholsterers	516093		-									43	43	60	-17	0.72	2,192	\$ 9.91	\$ 14.45	\$ 17.87	No	3
STW Real Estate Sales Agents	419022	7	36	243		4	7	166		5	129	503	810	1,125	-315	0.72	61,131	\$ 11.06	\$ 15.59	\$ 24.98	Yes	3
STW Insurance Sales Agents	413021	11		805		20		590				1,017	1,607	2,223	-616	0.72	46,146	\$ 18.11	\$ 25.12		1000	3
STW Web Developers	151134	5	656	365	3,318		105	28	667	357	705	345	2,207	2,857	-650	0.77	8,789	and the second se	\$ 27.25	the second s	3465-21.5	3
STW Actors	272011		Contraction?	1000			1.375.0		10.00			364	364	441	-77	0.83	2,006	Contraction of the second	\$ 15.82	And the second second	There is a	3
STW Fundraisers	131131											40	40	47	-7	0.85	2,435		\$ 24.65			3
STW First-Line Supervisors of Food Preparation and Serving Workers**	351012	17		4,879	6,191	25		633	1,897			1,090	3,620	4,196	-576	0.86	59,422		\$ 14.96	P		3
STW Drywall and Ceiling Tile Installers	472081											195	195	226	-31	0.86	6,607	\$ 11.59	\$ 15.73	\$ 18.29	Yes	3
STW Home Appliance Repairers	499031	2	233			2	28					96	124	142	-18	0.87	4,860	\$ 10.81	\$ 14.90	\$ 19.02	No	3
STW Tile and Marble Setters	472044		34				1					93	94	103	-9	0.91	6,741	\$ 9.75	\$ 14.64	\$ 17.74	No	3
STW First-Line Supervisors of Retail Sales Workers**	411011		16	2,033	686	3	9	1,201	110	1		4,220	5,541	5,952	-411	0.93	117,882	\$ 13.37	\$ 18.57	\$ 24.08	Yes	3

Area	Occupation	SOC	WIA-E	DPSEC-	FCS-E	CIE-E	WIA-C	DPSEC		CIE-C	ICUF-C	SUS-C	JS	Total Supply	Short Term Demand	Supply Gap or Overage	Ratio of Supply to Demand		ENTRY	MEDIAN	EXP	ON TOL	FL EDUC
	Carpet Installers	472041											105	105	111	-6	0.95	1,403	\$ 10.75		\$ 16.60	No	3
STW	Ophthalmic Medical Technicians	292057			-								59	59	61	-2	0.97	2,158	\$ 15.22	\$ 17.72	\$ 20.09	No	3
STW	Roofers	472181					5		-				254	254	259	-5	0.98	16.773	\$ 11.69	\$ 14.98	\$ 17.38	Yes	3
STW	Stonemasons	472022											18	18	18	0	1.00	505	\$ 9.32	\$ 13.53	\$ 16.81	No	3
STW	Medical Equipment Preparers	319093		105	258	40	3	68	18	15			87	188	187	1	1.01	5,362	\$ 10.31	\$ 13.05	\$ 14.71	No	3
	Mobile Heavy Equipment Mechanics, Except Engines	493042	11	75	36		4	12					105	117	114	3	1.03	5,714	\$ 14.97	\$ 20.13	\$ 23.53	Yes	3
	Sheet Metal Workers	472211	1				1						209	209	193	16	1.08	7,698	\$ 11.65	\$ 16.51	\$ 19.65	Yes	3
	First-Line Supervisors of Production and Operating	511011	12				40	-					1,338	1,338	1,205	133	1.11	24,172	\$ 17.86	\$ 25.19	\$ 31.53	Yes	3
	Tellers	433071			192		1		10			-	1,729	1,739	1,527	212	1.14	35,641	\$ 10.68	\$ 13.47	\$ 15.53	No	3
STW	Locksmiths and Safe Repairers	499094	4				2						45	45	38	7	1.18	2,982	\$ 11.04	\$ 16.50	\$ 20.60	No	3
STW	Etchers and Engravers	519194											6	6	5	1	1.20	289	\$ 9.25	\$ 12.91	\$ 15.08	No	3
STW	Plumbers, Pipefitters, and Steamfitters	472152	5	316	12	35	31	33	6	17			727	783	638	145	1.23	19,958	\$ 13.31	\$ 18.16	\$ 21.50	Yes	3
STW	Construction and Building Inspectors***	474011	2				8						344	344	278	66	1.24	6,597	\$ 18.43	\$ 26.05	\$ 30.33	Yes	3
STW	Maintenance and Repair Workers, General	499071	6		-		56						3,975	3,975	3,208	767	1.24	80,918	\$ 10.96	\$ 15.14	\$ 18.80	Yes	3
STW	Computer Occupations, All Other	151199	136	478	823	825	162	61	58	100	374	736	2,703	4,032	3,218	814	1.25	5,031	\$ 24.89	\$ 37.77	\$ 43.37	No	3
STW	Environmental Science and Protection Technicians, Including Health	194091		_	1,276	10	1		55				137	192	149	43	1.29	1,786	\$ 13.53	\$ 16.91	\$ 20.31	No	3
STW	Surveying and Mapping Technicians	173031	1		407				17				116	133	100	33	1.33	4,893	\$ 12.43	\$ 17.89	\$ 22.12	No	3
STW	Advertising Sales Agents	413011	1			11	1	-		11			1,269	1,280	943	337	1.36	14,200	\$ 11.89	\$ 19.50	\$ 28.97	Yes	3
	Cardiovascular Technologists and Technicians	292031	29	6	473	413	18		67	234			202	503	363	140	1.39	5,197	\$ 12.83	\$ 21.72	\$ 26.92	Yes	3
STW	Recreational Vehicle Service Technicians	493092	2			52	1			52			22	74	53	21	1.40	905	\$ 14.74	\$ 18.27	\$ 20.85	No	3
STW	Surgical Technologists	292055	54	596	881	1,188	63	124	179	335			310	948	678	270	1.40	6,260	\$ 15.47	\$ 18.76	\$ 21.21	Yes	3
STW	Social and Human Service Assistants	211093	22		3,369	664	15		252	374			1.326	1,952	1,383	569	1.41	12,736	\$ 10.92	\$ 13.72	\$ 16.58	Yes	3
STW	Claims Adjusters, Examiners, and Investigators	131031	3		132		5		104				799	903	637	266	1.42	21,443	\$ 19.09	\$ 26.98	\$ 32.50	Yes	3
	Telecommunications Equipment Installers and Repair	492022		302	242		4	17	198				499	714	490	224	1.46	19,026	\$ 15.31	\$ 22.91	\$ 28.08	Yes	3
STW	Plasterers and Stucco Masons	472161				_							82	82	55	27	1.49	1,741	\$ 12.86	\$ 16.43	\$ 18.17	No	3

### **Data Caveats**

### Data Caveats are:

- All Supply Data is POTENTIAL SUPPLY.
- Completers/graduates are counted in each occupation that is related to their program of study.
- Enrollees may or may not complete training.
- Completers may already have a job or may have moved out of the geographic area.
- Jobseekers may or may not be qualified for the job they are seeking.
- Only 1/2 of all job seekers have their desired occupation identified in the system.
- Job openings only include internet job ad postings (not all jobs are posted on the internet or posted in an even fashion).
- The job ads have been deduplicated but some duplicates could possibly still exist.
- District and Florida College System enrollees and completers are based on supply in the workforce region and are not statewide based.
- University graduates are statewide only and cannot be parsed to workforce regions. However, the Statewide report does include University graduates in supply.
- The Targeted Occupations List (TOL) is based on long term projections forecast eight years out from the base year and assumes economic recovery. In economic downturns, some of these occupations may be in current decline.
- Some occupations are typically hired at specific times of the year, such as teachers, agricultural related occupations and others.
- Locally, information may be known that would override the use of particular occupational supply demand data, such as incoming or expanding firm(s).
- Asterisk(s) on Occupation Titles indicate these minimum requirements: \* Less than 1 year of experience; \*\* 1 to 5 years of experience; \*\*\* More than 5 years of experience.
- Medical specialty occupations requiring board certifications and /or internships beyond the university level are not included; as supply is currently not available.

### **Explanatory Notes:**

• Occupational data contained in this report are across all industries and is not specific to any industry.

This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.