



Workforce - Energy Cluster

Top Occupations: SC-OAB Region

Occupations	Jobs 2013	% Change, 2008-2013	Median Hourly Earnings, \$ 2013	Education Level
Electrical Power-Line Installers and Repairers	62	2%	\$26.4	High school diploma
First-Line Supervisors of Production and Operating Workers	48	0%	\$29.4	Postsecondary non-degree award
Maintenance and Repair Workers, General	48	(4%)	\$16.3	High school diploma
Team Assemblers	45	41%	\$13.9	High school diploma
Personal Financial Advisors	45	463%	\$31.1	Bachelor's degree
Heavy and Tractor-Trailer Truck Drivers	40	(7%)	\$17.0	Postsecondary non-degree award
Construction Laborers	37	(3%)	\$10.7	Less than high school
Electricians	36	(49%)	\$18.1	High school diploma
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	36	(16%)	\$13.9	High school diploma
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	35	(15%)	\$15.0	Postsecondary non-degree award
Carpenters	35	(3%)	\$12.0	High school diploma
Chemical Equipment Operators and Tenders	33	(3%)	\$23.5	High school diploma
Chemical Plant and System Operators	30	0%	\$22.5	High school diploma
General and Operations Managers	29	(33%)	\$34.2	Bachelor's degree
First-Line Supervisors of Mechanics, Installers, and Repairers	29	(12%)	\$26.3	High school diploma

Note: * sales and related occupations are excluded

* Source: Economic Modeling Specialists International (EMSI) – 2014.3 Class of Workers (QCEW, non QCEW, Self-employed; Extended Proprietors)



Shift Share Analysis

splits regional job growth into three components: the national change effect, industrial mix effect, and regional competitiveness effect. Note that a timeframe is required to perform shift share analysis, since shift share deals with job growth over time.

The national growth effect (national trend)

explains how much of the regional industry's growth is explained by the overall health of the national economy: if the nation's whole economy is growing, you would generally expect to see some positive change in each industry in the region.

The industrial mix effect (industry trend)

represents the share of regional industry growth explained by the growth of the industry/cluster/occupation at the national level. So if the health sector nationally grew by 5% then it is expected that all across the country the health sector should also grow by 5%.

The regional competitiveness effect (regional performance)

is the most important of the three indicators, as it explains how much of the change in a given industry is due to some unique competitive advantage that the region possesses, because the growth cannot be explained by national trends in that industry or the economy as whole. This effect is calculated by taking the total regional growth and subtracting the national growth and industrial mix effects. Note that this effect can be higher than actual job growth if national and/or industry mix effects are negative while regional growth is positive. This is because the regional competitiveness effect accounts for jobs "saved" from declining national trends as well as new jobs created.



Cluster Support Worksheet (One Cluster per Sheet)

Cluster: _____

What are the strong sub-sectors?

Shift-Share Analysis
(Regional performance)

What industries support this cluster?

Top 15 Inputs by Dollars
(Long bars)

Where do leakages occur?

Top 15 Inputs by Dollars
(Large out of region expenditures)

What are the strong sub-sectors?

Top 15 Inputs by Dollars
(Large in-region expenditures)

What are the workforce needs (skills)?



Cluster Support Worksheet (One Cluster per Sheet)

➔ Potential Strategies for Building the Region's Cluster: _____

➔ **Create**

➔ **Attract**

➔ **Retain**

➔ **Expand**

➔ **Foundation**
(Workforce, Infrastructure, Connections, etc.)