



## 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:

Strong sub-sectors  
(Regional  
Competitive Effect):

Blank response area for strong sub-sectors.

What industries  
support this cluster?  
(Long bars)

Blank response area for industries supporting the cluster.

Where do leakages  
occur? (Large out of  
region expenditures)

Blank response area for leakage locations.

Where does the region  
already have capacity  
to respond? (large  
in-region expenditures)

Blank response area for existing regional capacity.

What industries have  
the highest exports?

Blank response area for highest export industries.

Workforce needs  
(skills):

Blank response area for workforce needs.



# Cluster Support Worksheet (One Cluster per Sheet)

 Potential Strategies for Building the Region's Cluster:

 Create

 Attract

 Retain

 Expand

 **Foundation**

(Workforce, Infrastructure, Connections, etc.)



## Guided Conversations with Regional Industry Leaders

**Participant Name:** \_\_\_\_\_

**Industry Cluster:** \_\_\_\_\_

**Interviewer:** \_\_\_\_\_

Introduce yourself and your reasons for this meeting. Hand respondent a copy of the SET overview and briefly explain the regional effort. After this brief introduction, hand the respondent a copy of the data for your region.

Ask the respondent to look at the data and comment on it. Is the data consistent with what he or she knows to be true?

After respondents comments on data, ask him or her if they would be willing to answer a few questions about their related industry in this region (\_\_\_\_\_ Selected Industry Cluster).

*We would like to ask you a few questions about the \_\_\_\_\_ industry. Thinking of your industry in this region and 4 different strategies for growing your industry (creation, attraction, retention, expansion). For each of these strategies,*

### **Creation**

- 1) Are there individuals in the region interested in starting a new business?
  
- 2) Are there entrepreneurship training programs in place to build capacity?
  
- 3) Are there channels for accessing capital?
- 4) What opportunities do you see to create new businesses that could support this industry? (i.e., Is there a large enough regional market to justify a new business? Are there other barriers specific to this industry, such as skilled labor/specialized services, infrastructure, or facilities, that would make it difficult to start a business within the region?) [DAVE SHIDELER SUGGESTION]

### **Attraction**

- 1) Are there specific types of firms the region could attract to fill the leakage gap?
- 2) What strategies are in place to target these specific industries?
- 3) What do these industries need to be lured to the region?

### **Retention**

- 1) What firms are currently contributing to the cluster?
- 2) Are these firms facing any common threats to survival in the region?
- 3) Do these firms need any particular programs, resources, policies in order to continue operation in the region?

### **Expansion**

- 1) Could existing businesses expand to fulfill the needs of the cluster?
- 2) What incentives or resources are needed to help these businesses expand?

### **Foundations of Economic Growth**

What local conditions or local environment do we have to have to tie all of this (creation, attraction, retention, and expansion) together in our region? Be *specific* to your industry in your area.



## Evaluation | Session 2

### ***Evidence Based Planning***

Region Name: \_\_\_\_\_

Today's Date: \_\_\_\_\_

Training Location: (town, county, state)

Please indicate how useful this module was to your regional strategic effort.

Major Topics	Not Useful	Not Very Useful	Somewhat Useful	Fairly Useful	Very Useful
Using a Bubble Chart to Identify Industry Clusters					
Analyzing Shift Share Economic Data					
Understanding Cluster Support Industries and Leakages					
Exploring CARE Opportunities for Clusters					

What might we do to improve this session?

What is your most significant take-away from this session?