

Regional Data Snapshot

Industry Cluster Analysis
SET Session 1

Central South Carolina SET, South Carolina





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no Industry and Occupation

Occupations

Central South Carolina SET, SC

01 overview

Overview

Central South Carolina SET, SC

The Central South Carolina SET Region is comprised of 11 South Carolina counties. Interstate 26 connects the region to Charleston in the South. Interstate 20 connects the region to Atlanta in the West. Interstate 77 connects the region to Charlotte in the north.

- Calhoun
- Clarendon
- Fairfield
- Kershaw
- Lee
- Lexington
- Newberry
- Orangeburg
- Richland
- Saluda
- Sumter



Establishments

Employment by industry

Components of changes in Jobs

Changes in Jobs (2009-2015)

Gained by	New Startups	128,882
	Spinoffs	40,671
	Expansion	102,208
	In-migration	15,539
Lost by	Closings	191,828
	Contractions	96,956
	Out-migration	11,648
Net change		-13,132

An establishment is a physical business location.

Branches, standalones and headquarters are all considered types of establishments.



Definition of Company Stages

Selfemployed 1

2-9 employees

2 10em

10-99 employees 3

100-499 employees

4

500+ employees

Establishments

Number of Establishments by Company Stages

	2009		2015	
Stage	Establishments	Proportion	Establishments	Proportion
Stage 0	5,424	12%	5,370	11%
Stage 1	29,855	68%	34,539	71%
Stage 2	7,647	18%	7,748	16%
Stage 3	675	2%	599	1%
Stage 4	81	0.2%	70	0.1%
Total	43,682	100%	48,326	100%

Questions:

- What stage businesses have shaped the region's economic growth in the last 6 years?
- Which ones are growing or declining the most?
- Which stage of establishments are likely to shape the region's future economic growth?

Establishments

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Year	2009	2015	% Change			
Stage 0	5,424	5,609	3%			
Stage 1	110,916	132,389	19%			
Stage 2	191,785	189,111	-1%			
Stage 3	111,801	99,251	-11%			
Stage 4	92519	72,953	-21.1%			
Total	512,445	499,313	-3%			

Sales (\$Billion, 2015) by Company Stages

Year	2009	2015	% Change
Stage 0	1.03	1.0	-7%
Stage 1	22.64	26.4	16%
Stage 2	35.40	36.0	2%
Stage 3	19.66	19.0	-3%
Stage 4	21.73	23.9	10.1%
Total	100.46	106.25	6%

Ouestions

What establishments are the most numerous based on company stages?

What stages have experienced the largest growth? The greatest decline?

What company stage employs the largest number of people?

What stage captures the most sales?

Which ones have experienced the greatest percentage loss over the 2009-2015 period?

Top ten industry sector employment growth

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
21	Mining, Quarrying, and Oil and Gas Extraction	599	1,068	469	78%	30%
56	Administrative and Support and Waste Management and Remediation Services	28,647	39,856	11,209	39%	29%
48	Transportation and Warehousing	12,112	15,557	3,445	28%	19%
71	Arts, Entertainment, and Recreation	7,973	9,173	1,200	15%	14%
61	Educational Services	9,676	11,042	1,366	14%	8%
72	Accommodation and Food Services	37,812	42,931	5,119	14%	11%
81	Other Services (except Public Administration)	32,042	35,743	3,701	12%	9%
62	Health Care and Social Assistance	49,358	54,068	4,710	10%	12%
22	Utilities	4,210	4,530	320	8%	-3%
53	Real Estate and Rental and Leasing	21,399	22,982	1,583	7%	6%

Questions:

- What regional industry sectors have seen the greatest growth?
- Did they grow at the same rate as the state?
- What factors are causing the growth?

Top four industry sector employment decline

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
55	Management of Companies and Enterprises	4,818	3,906	-912	-19%	17%
23	Construction	29,977	28,355	-1,622	-5%	-5%
51	Information	7,533	7,317	-216	-3%	3%
90	Government	123,802	123,779	-23	0%	1%

Questions:

- How does the industry sector make-up of the region compare to the rest of the state?
- Which industry sectors are growing and declining the most in employment?

1ndustry cluster analysis

Central South Carolina SET, SC

Industry cluster analysis

List of Clusters

- Advanced Materials
- Agribusiness, Food Processing & Technology
- Apparel & Textiles
- Arts, Entertainment, Recreation & Visitor
 Industries
- Biomedical/Biotechnical (Life Sciences)
- Business & Financial Services
- Chemicals
- Computer & Electronic Product Manufacturing
- Defense & Security
- Education & Knowledge Creation
- Electrical Equip, Appliance & Component Manufacturing

- Fabricated Metal Product Manufacturing
- Energy (Fossil & Renewable)
- Forest & Wood Products
- Glass & Ceramics
- Information Technology & Telecommunications
- Machinery Manufacturing
- Manufacturing Super-cluster
- Mining
- Primary Metal Manufacturing
- Printing & Publishing
- Transportation & Logistics
- Transportation Equipment Manufacturing

Industry cluster analysis

How to interpret cluster data results

The graph's four quadrants tell a different story for each cluster.

Contains clusters that are more concentrated in the region but are declining (negative growth).

These clusters typically fall into the lower quadrant as job losses cause a decline in concentration.

Mature

Top left (strong but declining)

Transforming

Bottom left (weak and declining)

Stars

Top right (strong and advancing)

Contains clusters that are more concentrated in the region and are growing. These clusters are strengths that help a region stand out from the competition.

Small, high-growth clusters can be expected to become more dominant over time.

Emerging

Bottom right (weak but advancing)

Contains clusters that are under-represented in the region but are growing, often quickly. If growth trends continue, these clusters will eventually move into the top right quadrant. Clusters in this quadrant are considered emerging strengths for the region.

Contains clusters that are under-represented in the region (low concentration) and are also losing jobs.
Clusters in this region may indicate a gap in the workforce pipeline if local industries anticipate a future need. In general, clusters in this quadrant show a lack of competitiveness.

Industry cluster analysis

Mature Clusters

Electrical Equip., Appl. & Comp. Mfg. (1.72; 2,220)

Defense & Security (1.35; 33,447)

Machinery Manufacturing (1.34; 5,058)

Forest & Wood Products (1.11; 9,492)

Level of Specialization

Star Clusters

Chemicals & Chemical Based Prod. (1.32; 9,282)

Agribusiness, Food Proc. & Tech. (1.26; 22,008)

Apparel & Textiles (1.23; 5,335)

Fabricated Metal Product Mfg. (1.2; 5,683)

Percent Growth in Specialization

Transforming Clusters

Energy (Fossil & Renewable) (**0.82**; 26,354)

Glass & Ceramics (0.76; 723)

Advanced Materials (0.75; 12,880)

IT & Telecommunications (0.63; 14,506)

Primary Metal Manufacturing (0.59; 772)

Computer & Electronic Product Mfg. (0.45; 1,569)

Emerging Clusters

Manufacturing Supercluster (0.92; 18,130)

Business & Financial Services (0.87; 64,489)

Transportation & Logistics (0.84; 15,414)

Biomedical/Biotechnical (0.83; 37,786)

Education & Knowledge Creation (0.70; 9,261)

Arts, Enter., Rec. & Visitor Industries (0.64; 15,328)

Printing & Publishing (**0.57**; 5,668)

Transportation Equipment Mfg. (0.55; 2,829)

Mining (**0.51**; 906)

section 03

Bubble Chart: What to Look at First

Quadrant Location



Size of Location Quotient

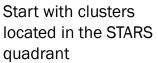


Percentage Change in Last 5 Years



Number of Employees

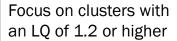




See if the MATURING clusters might have a good chance of growing again

Determine if EMERGING clusters are likely to grow in strength

Avoid clusters that are "TRANSFORMING"



Clusters with high LQs represent economic activities in which the region is competitive relative to the U.S.

REMEMBER: Clusters only capture industries that have the likelihood of exporting goods and services.

The horizontal line (the x-axis) shows the percentage growth or decline of a cluster over a five-year period.

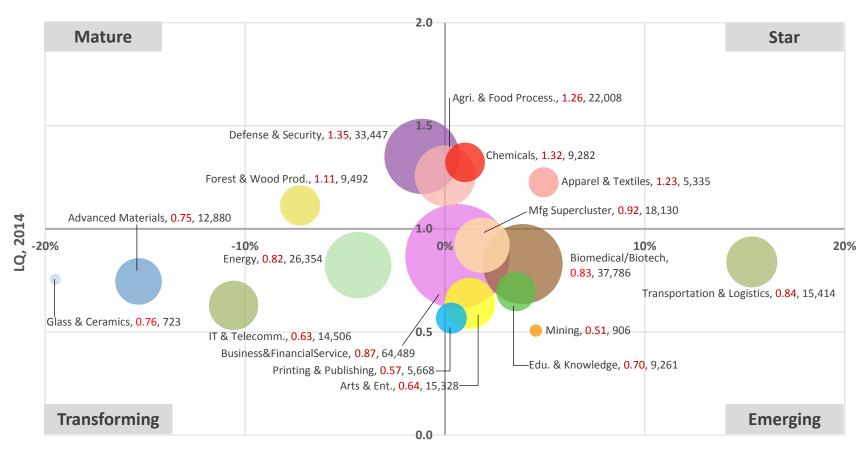
Make sure to examine the SIZE and DIRECTION of that change.

Dramatic declines in a cluster with a an LQ of 1.2 or higher could be a difficult one to resurrect.

The size of the bubble refers to the number of people employed in that cluster.

It may be worthwhile to focus on clusters that are both competitive and that employ a good number of people.

Industry cluster bubble chart

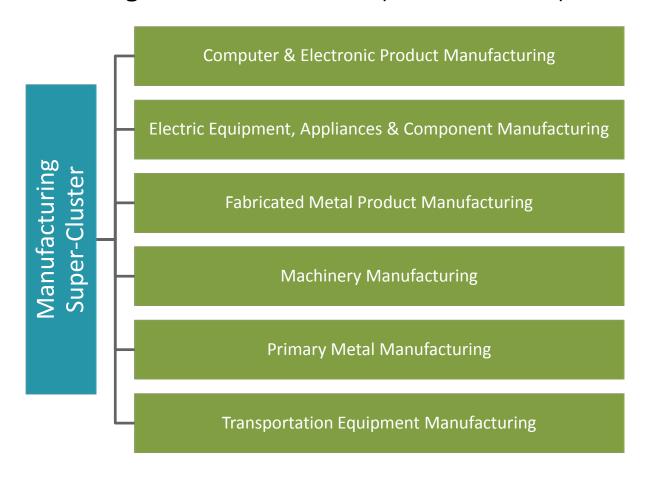


Percent change in LQ, 2009-2014

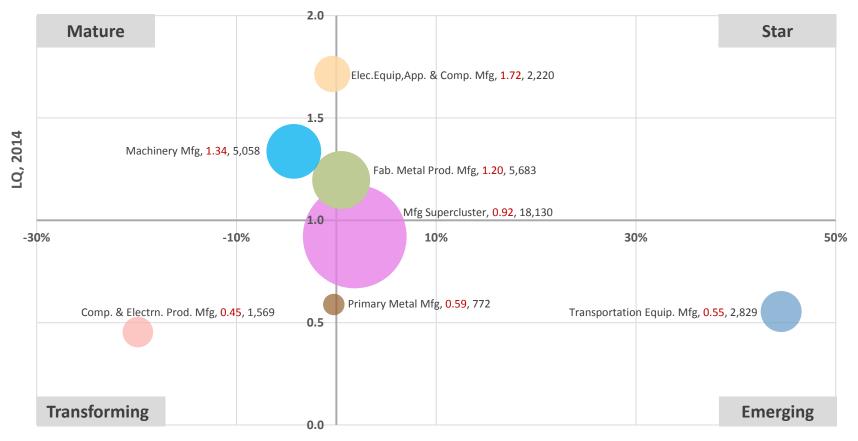
Note: Label includes cluster name, LQ in 2014, and Employment in 2014

The Manufacturing Super-Cluster

Please note that this is not a cluster that a SET region should select. Rather, focus on the manufacturing sub-clusters that are important to that super-cluster.



Manufacturing sub-cluster bubble chart



Percent change in LQ, 2009-2014

Note: Label includes cluster name, LQ in 2014, and Employment in 2014.

For your region

Mature Industries

Four industry clusters in the Central South Carolina SET Region are in the Matured stage: Electrical Equipment Appliance & Component Mfg.; Defense & Security; Machinery Mfg.; and Forest & Wood Products. These industries are relatively concentrated, but its growth is trending downward. It is worth noting, however, that the Region may find it worthwhile to invest in efforts to shore up the concentration of these industries.

Transforming Industries

Transforming clusters capture the mix of industries that are experiencing relative decline and limited export capability. In the Region, Energy; Glass & Ceramics; Advanced Materials; IT & Telecom.; Primary Metal Manufacturing; and Computer & Electronic Product Manufacturing. Six industry clusters are all Transforming clusters. Any amount of growth in these industries would require relatively large investments.

Star Industries

Star industry clusters are highly concentrated, exporting and still experiencing growth in the region. Four Star industry clusters in the Central South Carolina SET Region are Chemicals; Agribusiness, Food Processing & Technology; Apparel & Textiles; and Fabricated Metal Product Manufacturing. These clusters indicate that they have a little more jobs concentration in the region compared to the U.S.

Emerging Industries

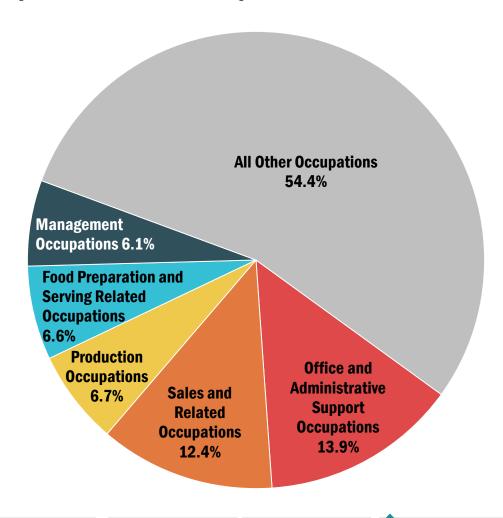
Industry clusters that may be poised for future growth are classified as "Emerging." There are eight Emerging clusters in total in the Central South Carolina SET Region: Business & Financial Services; Transportation & Logistics; Education & Knowledge Creation; Biomedical/Biotechnical (Life Sciences); Arts, Ent., Recreation & Visitor Industries; Printing & Publishing; Mining; and Transportation Equipment Manufacturing.

04 occupations

Top occupations

STEM occupations

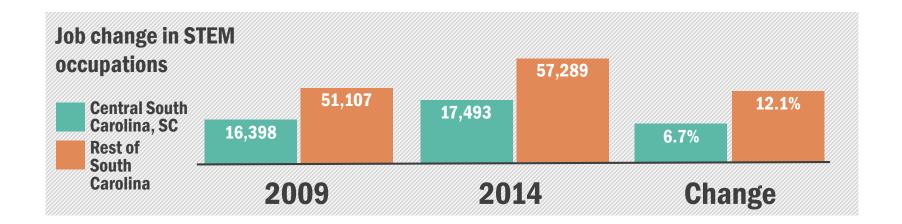
Top five occupations in 2014



Questions:

- What are the education and skill requirements for these occupations?
- Do the emerging and star clusters align with the top occupations?
- What type salaries do these occupations typically provide?

Science, Technology, Engineering & Math



Ouestions:

- How do STEM jobs compare to the state?
- What has been the trend of STEM jobs over time?
- How important are STEM jobs to the region's Star and Emerging clusters?

Report Contributors

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