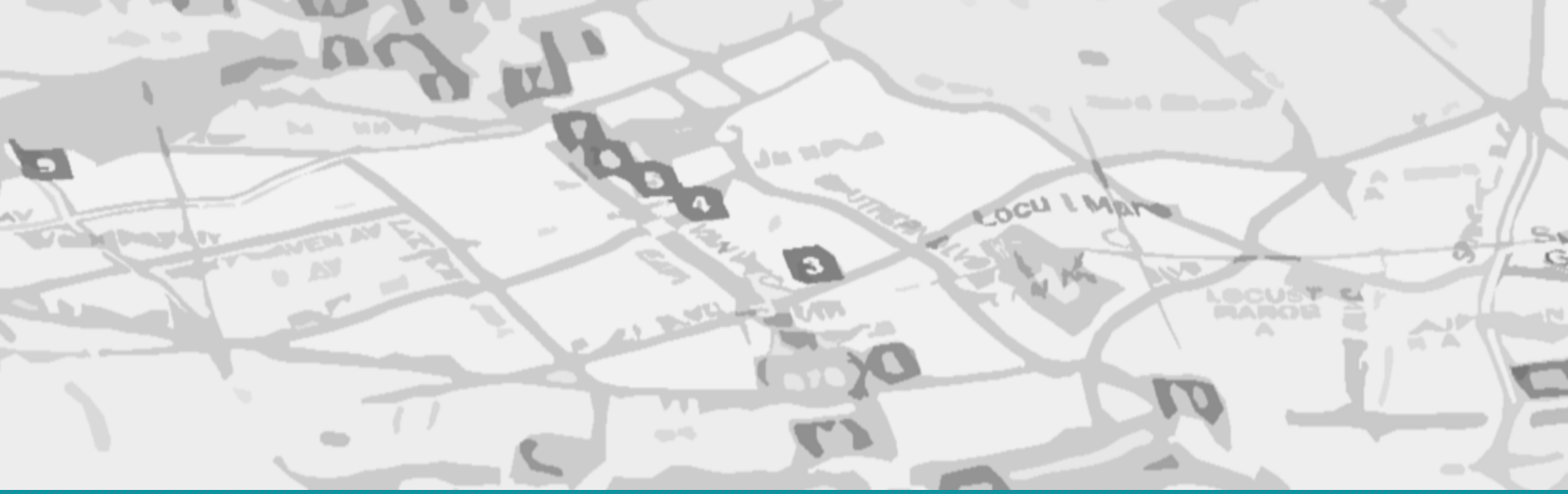


Regional Data Snapshot

Industry Cluster Analysis
SET Session 1

Mid Central Rural Corridor Region, New Mexico

PURDUE UNIVERSITY

Center for Regional Development
Advancing Collaboration : Energizing Regions

Table of Contents

01 overview

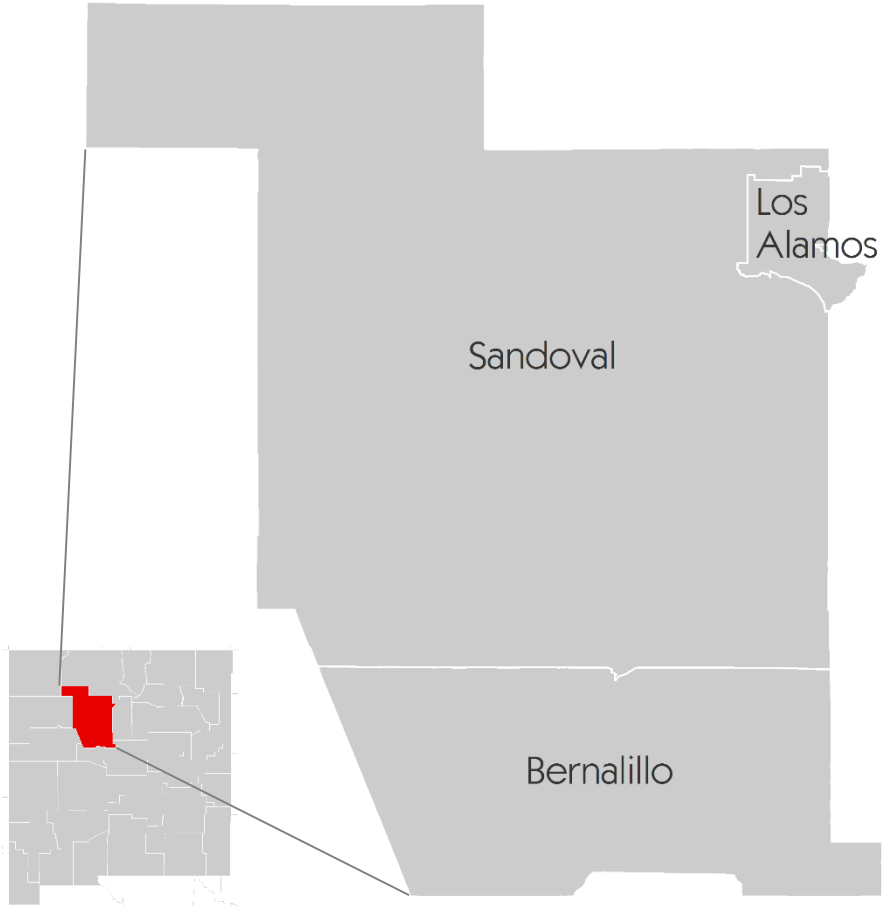
Mid Central Rural Corridor, NM

Overview

Mid Central Rural Corridor Region, NM

The Mid Central Rural Corridor Region is comprised of 3 New Mexico counties. Interstate 25 crosses the southern part of the region connecting it to Albuquerque and Santa Fe. Interstate 40 goes through Albuquerque in Bernalillo County. Major railroad includes BNSF. Albuquerque International Airport is the major airport serving more than 2 million passengers annually.

- Bernalillo
- Los Alamos
- Sandoval



02 industry and occupation

Establishments

Employment by industry

Components of changes in Jobs

Changes in Jobs (2009-2015)		
Gained by	New Startups	+138,638
	Spinoffs	+24,940
	Expansion	+109,046
	In-migration	+4,558
Lost by	Closings	-196,557
	Contractions	-79,192
	Out-migration	-4,000
Net change		-2,567

How to Interpret the Accompanying Table

New Startups: A completely new business from births/openings without any affiliation to an existing business.

Spinoffs: New businesses that were spun-off from existing businesses.

Expansions: Existing businesses that have expanded in jobs.

In-migration: Businesses that have moved-in from outside of the county.

Closings: Closure of existing businesses.

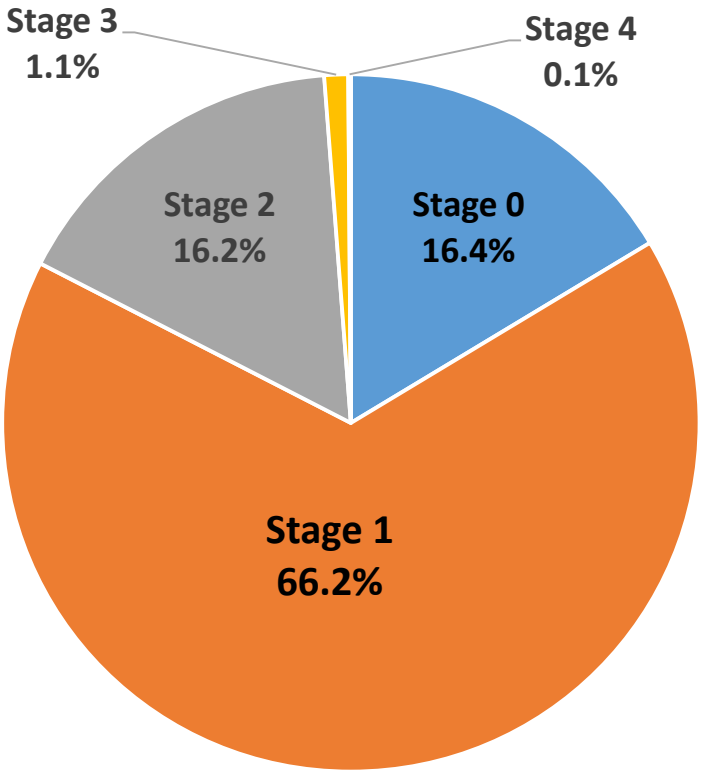
Contractions: Existing businesses that have shed/reduced jobs.

Out-migration: Businesses that have moved-out from the county.

Note: YourEconomy has changed its data source from NETS to InfoUSA on August, 2016. Based on the data available, we can only estimate churn based on jobs and not establishments.

Source: YourEconomy.org

Company stages



Establishment Distribution by Stages
New Mexico, 2015

An establishment is a physical business location. Branches, standalones and headquarters are all considered types of establishments.

Definition of Company Stages

0 Self-employed

1 2-9 employees

2 10-99 employees

3 100-499 employees

4 500+ employees

Note: Based on Edward Lowe's research, http://thegrowthsociety.com/links/SecondStage.pdf
Source: Pyramid graphics is courtesy of Nancy Duarte, http://www.duarte.com/diagrammer/

Establishments

Number of Establishments by Company Stages

	2009		2015	
Stage	**Establishments**	**Proportion**	**Establishments**	**Proportion**
Stage 0	6,255	17%	7,638	18%
Stage 1	22,649	63%	28,305	66%
Stage 2	6,380	18%	6,363	15%
Stage 3	534	1%	543	1%
Stage 4	54	0.2%	51	0.1%
Total	**35,872**	**100%**	**42,900**	**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?

Source: Youreconomy.org database

Jobs and Sales

Number of Jobs by Company Stages

Year	2009	2015	% Change
Stage 0	6,255	8,112	29.7%
Stage 1	83,721	105,271	25.7%
Stage 2	161,679	163,136	0.9%
Stage 3	92,420	88,698	-4.0%
Stage 4	106,849	83,140	-22.2%
Total	**450,924**	**448,357**	**-0.6%**

Sales ($Billion, 2015) by Company Stages

Year	2009	2015	% Change
Stage 0	1.24	4.7	282%
Stage 1	17.74	23.7	34%
Stage 2	29.10	29.9	3%
Stage 3	19.05	15.6	-18%
Stage 4	10.83	5.1	-53.1%
Total	**77.95**	**79.03**	**1%**

Questions

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?

Source: Youreconomy.org database

Top ten industry sector employment growth

NAICS	Description	2009 Jobs	2015 Jobs	Change	Change (%)	State Change (%)
21	Mining, Quarrying, and Oil and Gas Extraction	501	769	268	53%	56%
11	Crop and Animal Production	1,769	2,298	529	30%	14%
62	Health Care and Social Assistance	49,969	58,327	8,358	17%	11%
71	Arts, Entertainment, and Recreation	10,174	11,556	1,382	14%	5%
22	Utilities	830	922	92	11%	-5%
72	Accommodation and Food Services	34,294	38,056	3,762	11%	11%
61	Educational Services	8,220	8,798	578	7%	9%
48	Transportation and Warehousing	9,218	9,792	574	6%	11%
55	Management of Companies and Enterprises	3,588	3,689	101	3%	1%
81	Other Services (except Public Administration)	21,792	21,877	85	0%	-2%

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?

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

Nine industry sector employment decline

NAICS	Description	2009 Jobs	2015 Jobs	Change	Change (%)	State Change (%)
23	Construction	29,825	25,309	-4,516	-15%	-10%
56	Administrative and Support and Waste Management and Remediation Services	32,771	29,097	-3,674	-11%	-3%
54	Professional, Scientific, and Technical Services	54,716	50,671	-4,045	-7%	-4%
51	Information	10,460	9,752	-708	-7%	-9%
31	Manufacturing	19,762	18,469	-1,293	-7%	-4%
53	Real Estate and Rental and Leasing	20,708	19,392	-1,316	-6%	-4%
52	Finance and Insurance	19,318	18,302	-1,016	-5%	-3%
42	Wholesale Trade	13,477	12,862	-615	-5%	-3%
90	Government	84,114	83,884	-230	0%	-3%

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?

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

03 Industry cluster analysis

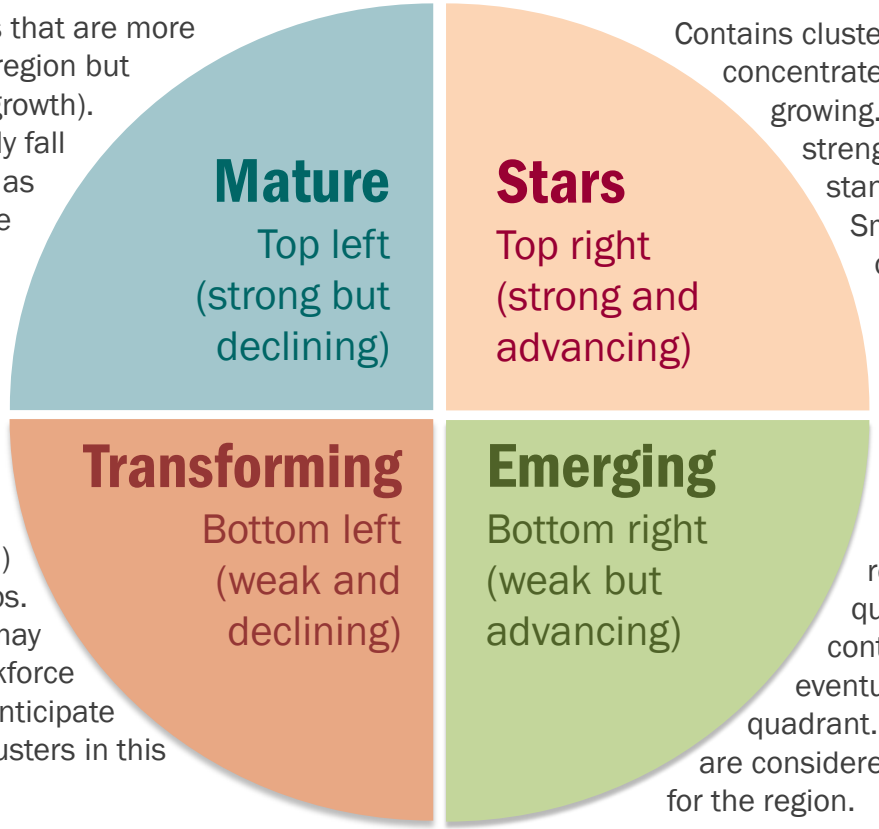
Mid Central Rural Corridor, NM

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
- Mining
- Primary Metal Manufacturing
- Printing & Publishing
- Transportation & Logistics
- Transportation Equipment Manufacturing

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.

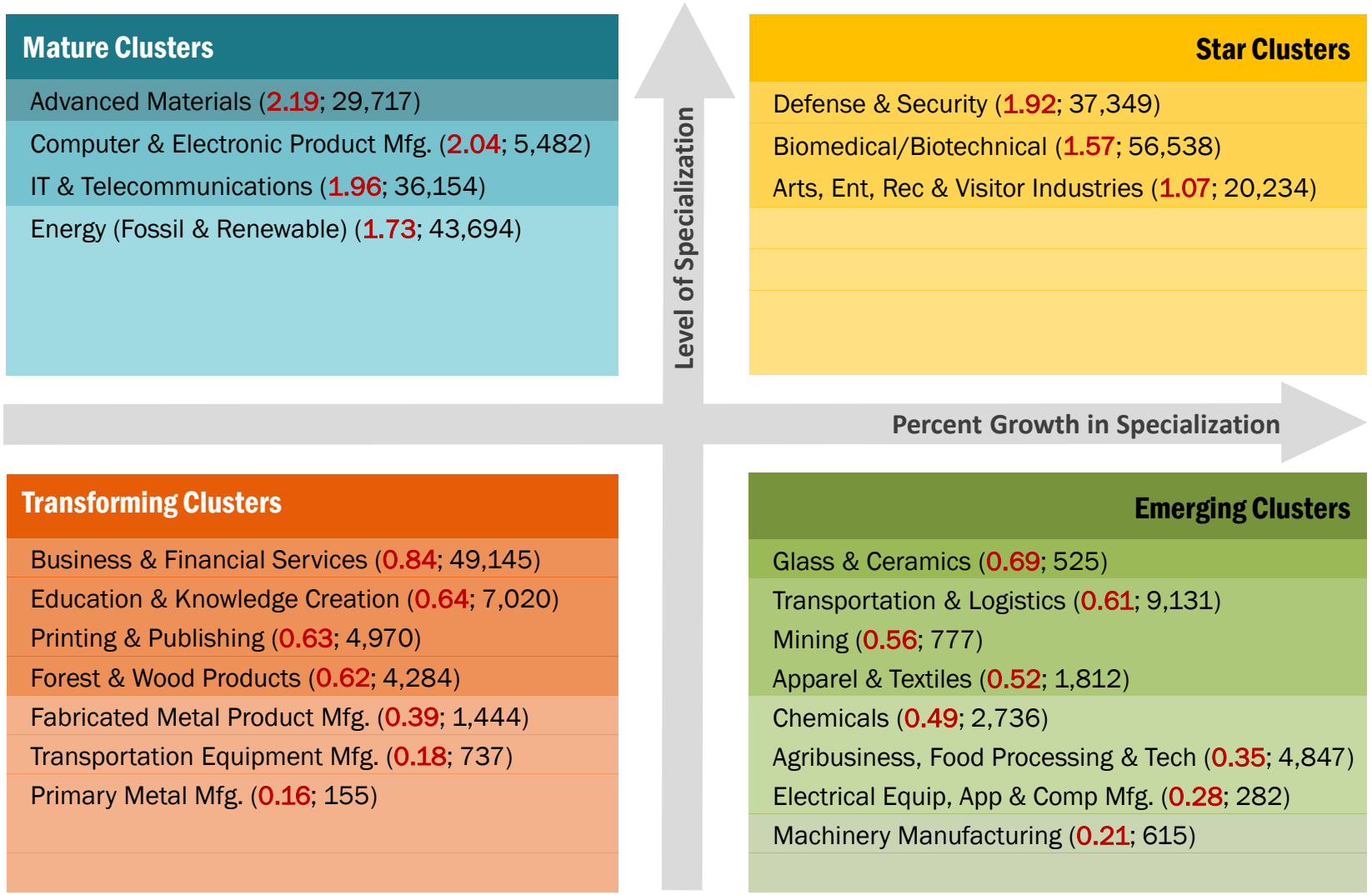
Contains clusters that are more concentrated in the region and are growing. These clusters are strengths that help a region stand out from the competition. Small, high-growth clusters can be expected to become more dominant over time.

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.

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.

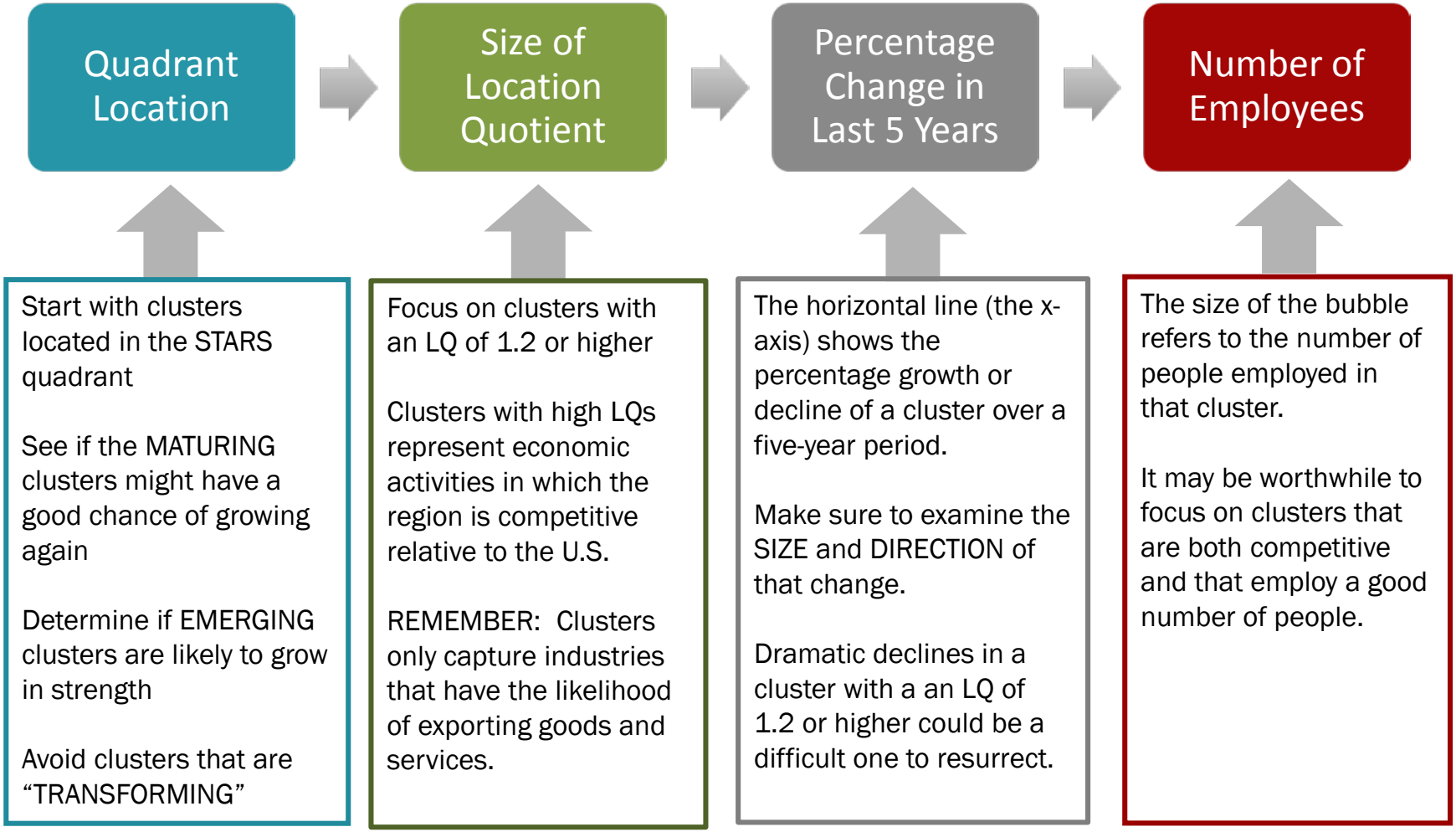
Modified from: http://www.charlestonregionaldata.com/bubble-chart-explanation/

Industry cluster analysis

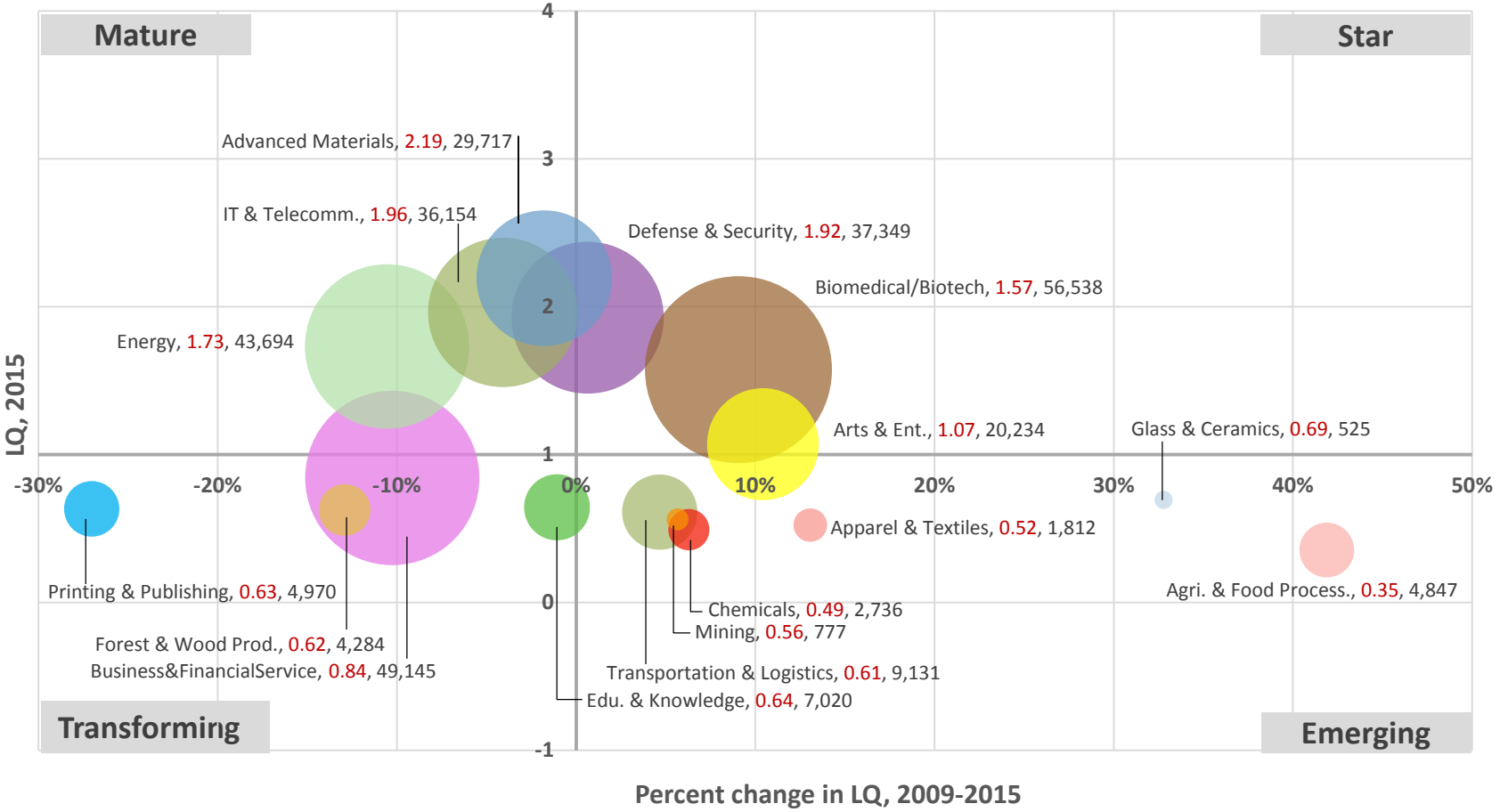


NOTE: The first number after each cluster represents the number of total jobs (full and part time jobs by place of work) in that cluster in the region in 2015. The clusters are sorted in decreasing order by location quotient as shown in the bubble chart.

Bubble Chart: What to Look at First



Industry cluster bubble chart

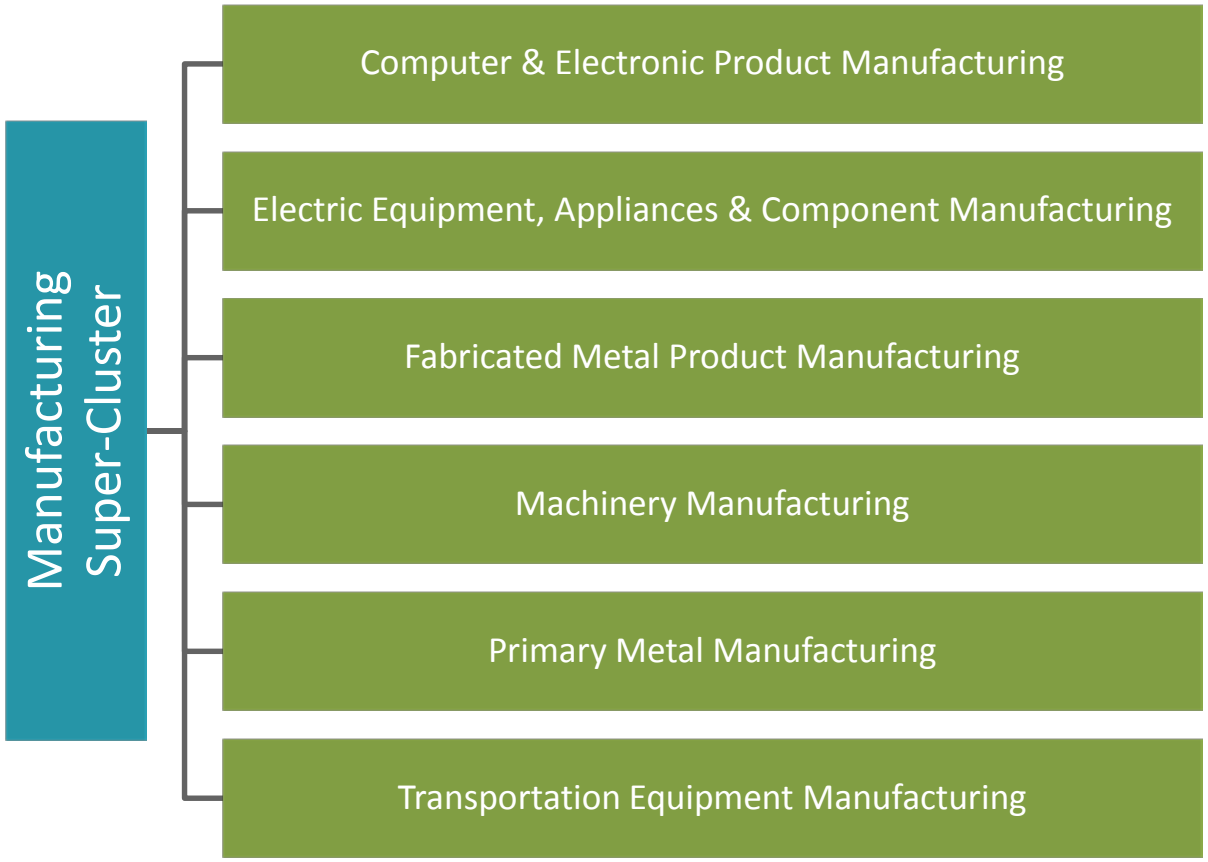


Note: Label includes cluster name, LQ in 2015, and Employment in 2015.

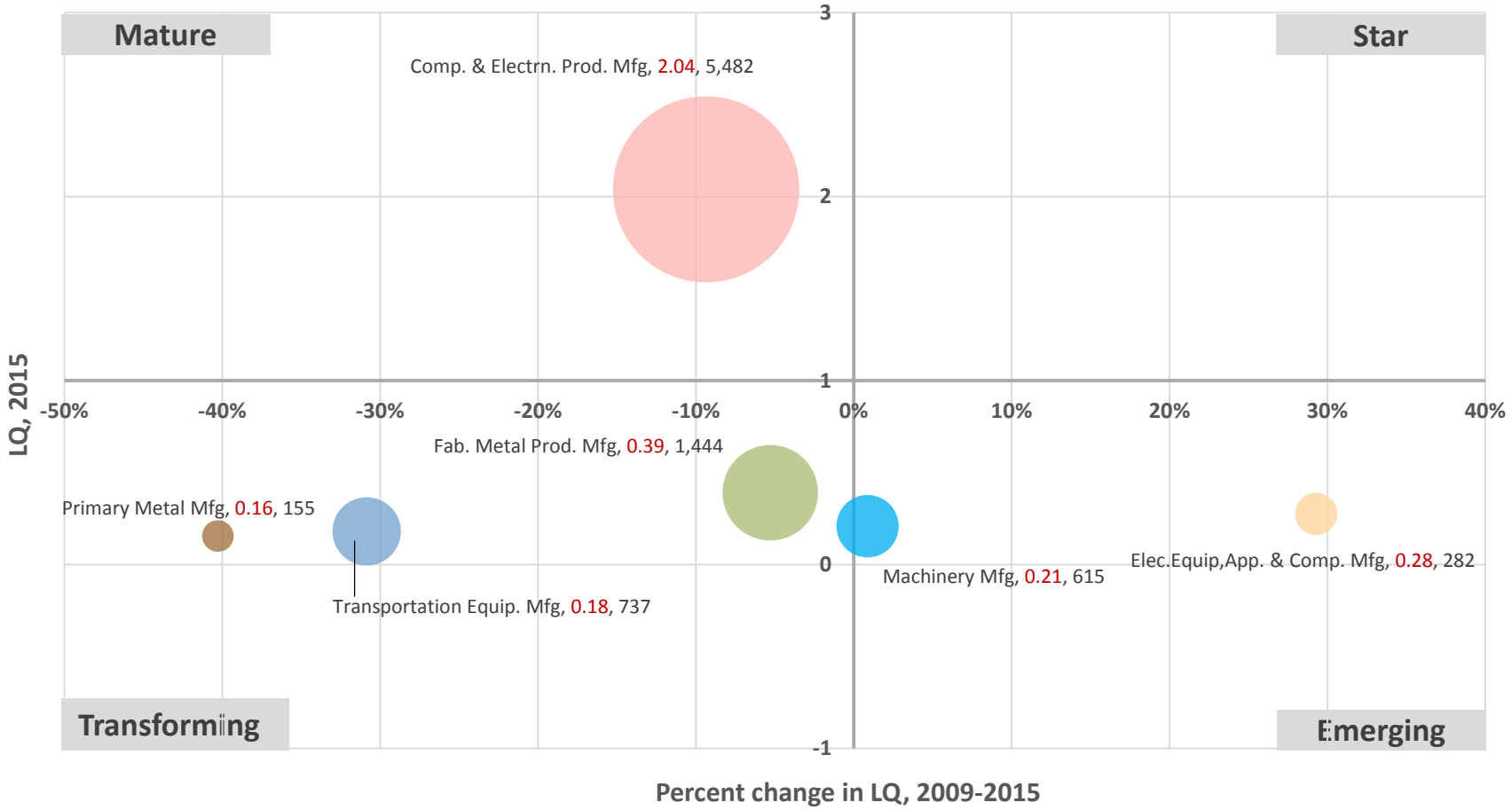
Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

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



Note: Label includes cluster name, LQ in 2015, and Employment in 2015.

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

Industry and occupation

For your region

Mature Industries

Four industry clusters in the MCRC region are in the Matured stage: Advanced Materials; Computer & Electronic Prod. Mfg.; IT & Telecom; and Energy. The mature industry is 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.

Star Industries

Star industry clusters are highly concentrated, exporting and still experiencing growth in the region. Three Star industry clusters in the MCRC region are Defense & Security; Biomedical/Biotechnical (Life Sciences); Arts, Entertainment, Recreation & Visitor Industries. These clusters indicate that they have a little more jobs concentration in the region compared to the U.S.

Transforming Industries

Transforming clusters capture the mix of industries that are experiencing relative decline and limited export capability. In the Region, Business & Financial Services; Education & Knowledge Creation; Printing & Publishing; Forest & Wood Prod.; Fabricated Metal Prod. Mfg.; Transportation Equip Mfg.; and Primary Metal Mfg. Seven industry clusters are all Transforming clusters. Any amount of growth in these industries would require relatively large investments.

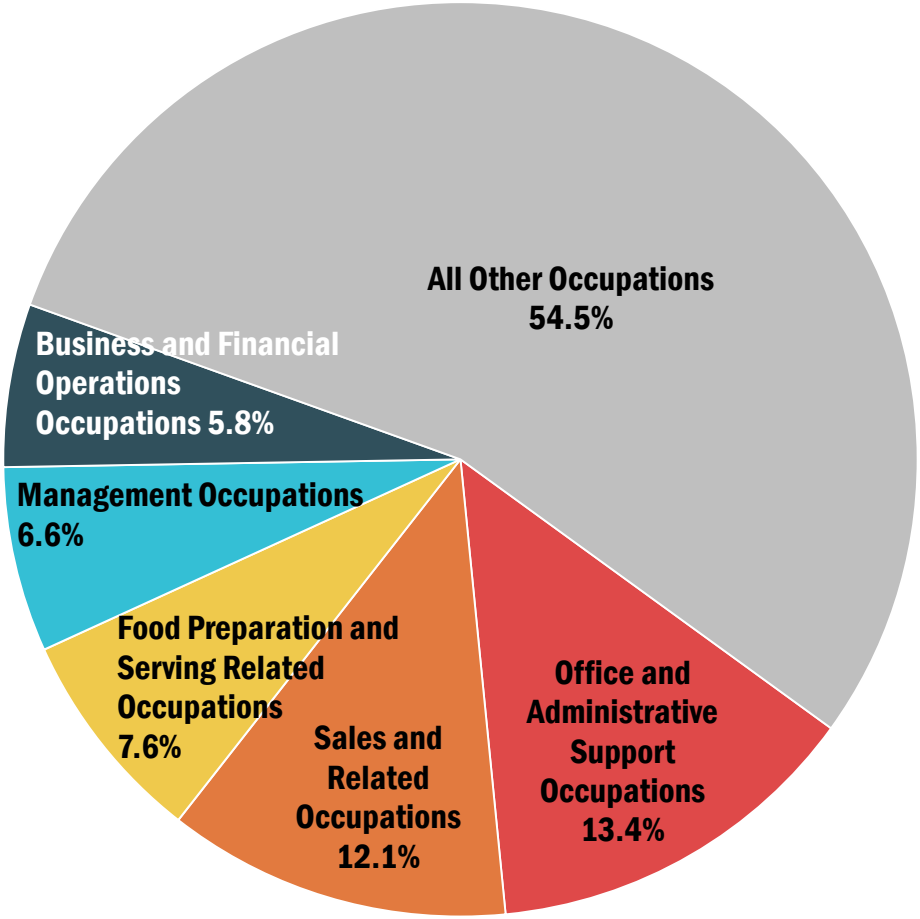
Emerging Industries

Industry clusters that may be poised for future growth are classified as “Emerging.” There are eight Emerging clusters in total in the MCRC region: Glass & Ceramics; Transportation & Logistics; Mining; Apparel & Textiles; Chemicals; Agribusiness, Food Processing & Technology; Electrical Equipment, Appliance & Component Mfg.; and Machinery Manufacturing.

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

04 occupations

Top five occupations in 2015

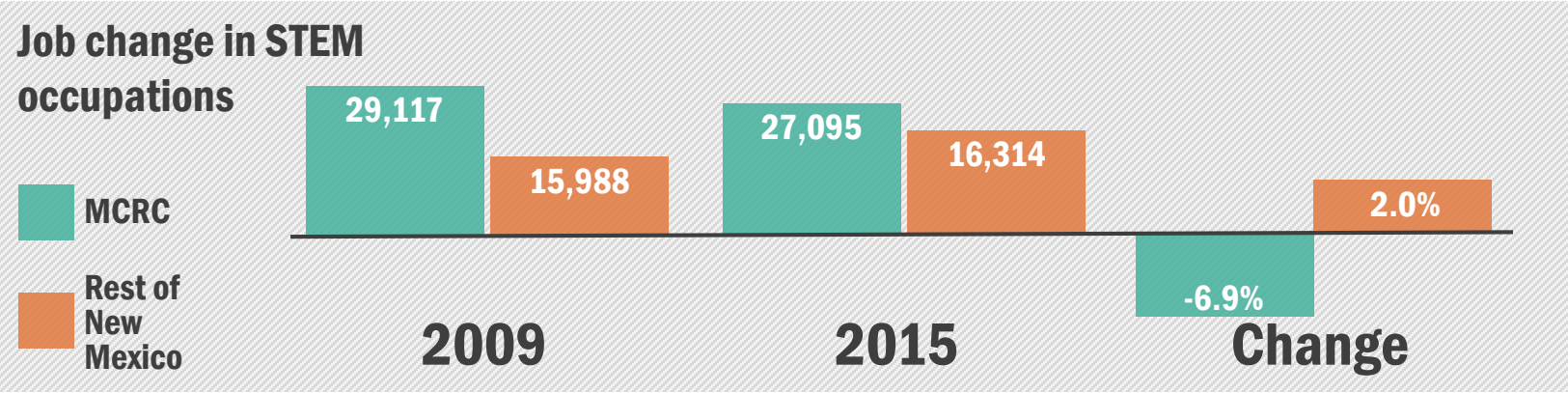


Questions:

- 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?

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

Science, Technology, Engineering & Math



Questions:

- 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?

*Note: STEM and STEM-related occupation definitions from BLS (2010)

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors)

Report Contributors

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Center for Regional Development
Advancing Collaboration : Energizing Regions

The Purdue Center for Regional Development (PCRD) seeks to pioneer new ideas and strategies that contribute to regional collaboration, innovation and prosperity.

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