

# Regional Data Snapshot

*Industry Cluster Analysis*  
*SET Session 1*

**Northeast Arkansas Economic Development Association**



**Center for Regional Development**  
Advancing Collaboration : Energizing Regions

## Table of Contents

**01**

Overview

**03**

Industry Cluster Analysis

**02**

Industry and Occupation

**04**

Occupations

# 01 overview

**Northeast Arkansas Economic  
Development Association, AR**

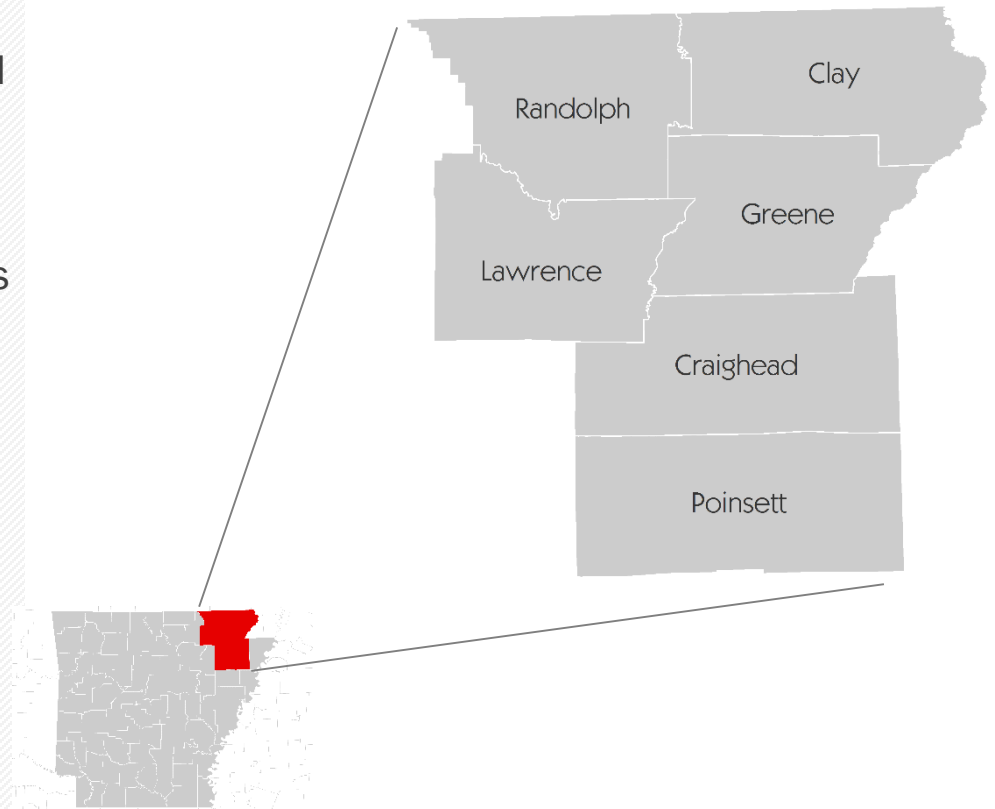
---

## Overview

# Northeast AR Economic Development Association

The Northeast Arkansas Economic Development Association is comprised of 6 Arkansas counties. The region does not have an interstate, but I-55 passes near southeast of Poinsett County. The region is served by various U.S. Highways including U-49, U-62, U-63, and U-67. Major railroads include BNSF and UP. Black River is the major navigable waterway in the region.

- Clay
- Craighead
- Greene
- Lawrence
- Poinsett
- Randolph



# 02 industry and occupation

**Establishments**

---

**Employment by industry**

## Industry and occupation

# Components of changes in Jobs

### Changes in Jobs (2009-2015)

Gained by	New Startups	+29,339
	Spinoffs	+7,287
	Expansion	+16,509
	In-migration	+1,038
Lost by	Closings	-33,626
	Contractions	-14,407
	Out-migration	-1,100
Net change		+5,040

### 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.

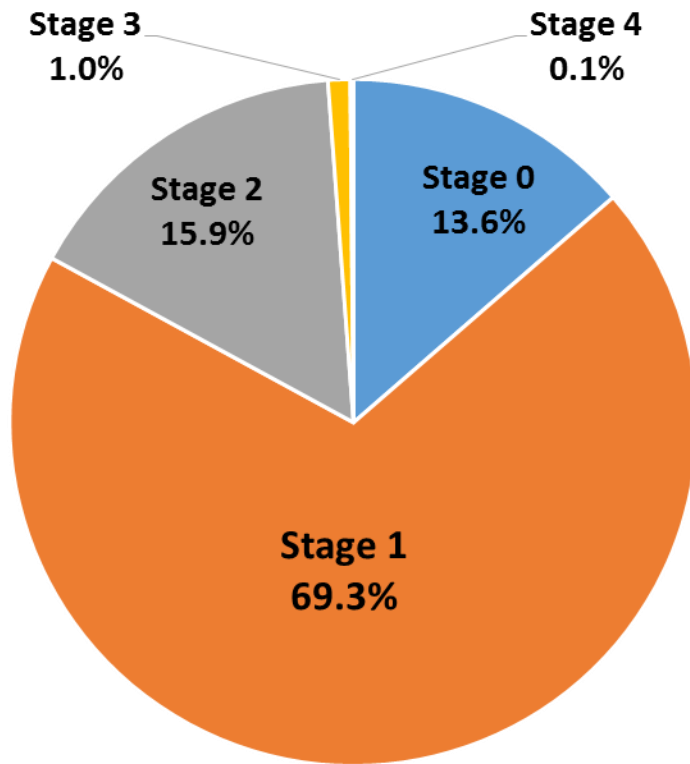
## section 02

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

## Economy

# Company stages



Establishment Distribution by Stages  
Arkansas, 2015

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



### Definition of Company Stages

<b>0</b>	Self-employed	<b>1</b>	2-9 employees
<b>2</b>	10-99 employees	<b>3</b>	100-499 employees
<b>4</b>	500+ employees		

## Industry and occupation

# Establishments

### Number of Establishments by Company Stages

Stage	2009		2015	
	Establishments	Proportion	Establishments	Proportion
Stage 0	1,367	15%	1,513	14%
Stage 1	5,811	66%	7,497	69%
Stage 2	1,551	17%	1,658	15%
Stage 3	125	1%	123	1%
Stage 4	12	0.1%	10	0.1%
<b>Total</b>	<b>8,866</b>	<b>100%</b>	<b>10,801</b>	<b>100%</b>

### 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?



## Industry and occupation

# Jobs and Sales

### Number of Jobs by Company Stages

Year	2009	2015	% Change
Stage 0	1,367	1,938	41.8%
Stage 1	21,960	27,870	26.9%
Stage 2	38,666	39,858	3.1%
Stage 3	21,082	21,622	2.6%
Stage 4	12,795	9,622	-24.8%
<b>Total</b>	<b>95,870</b>	<b>100,910</b>	<b>5.3%</b>

### Sales (\$Billion, 2015) by Company Stages

Year	2009	2015	% Change
Stage 0	0.30	1.0	238%
Stage 1	5.02	6.7	34%
Stage 2	8.04	9.0	12%
Stage 3	4.47	4.0	-11%
Stage 4	2.54	1.7	-32.9%
<b>Total</b>	<b>20.37</b>	<b>22.40</b>	<b>10%</b>

## 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?

## Industry and occupation

# Top ten industry sector employment growth

NAICS	Description	2009 Jobs	2015 Jobs	Change	Change (%)	State Change (%)
55	Management of Companies and Enterprises	350	503	153	44%	25%
71	Arts, Entertainment, and Recreation	870	1,093	223	26%	14%
53	Real Estate and Rental and Leasing	3,155	3,799	644	20%	4%
72	Accommodation and Food Services	6,350	7,416	1066	17%	12%
62	Health Care and Social Assistance	13,309	15,457	2148	16%	8%
48	Transportation and Warehousing	3,070	3,564	494	16%	6%
61	Educational Services	1,292	1,473	181	14%	19%
44	Retail Trade	11,571	13,039	1468	13%	7%
22	Utilities	272	293	21	8%	17%
52	Finance and Insurance	3,083	3,321	238	8%	3%

### 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?

## Industry and occupation

# Four industry sector employment decline

NAICS	Description	2009 Jobs	2015 Jobs	Change	Change (%)	State Change (%)
51	Information	968	887	-81	-8%	-13%
56	Administrative and Support and Waste Management and Remediation Services	6,265	5,852	-413	-7%	21%
42	Wholesale Trade	3,487	3,422	-65	-2%	2%
90	Government	15,077	14,944	-133	-1%	-2%

### 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?

# 03 Industry cluster analysis

**Northeast Arkansas Economic  
Development Association, AR**

---

## Industry cluster analysis

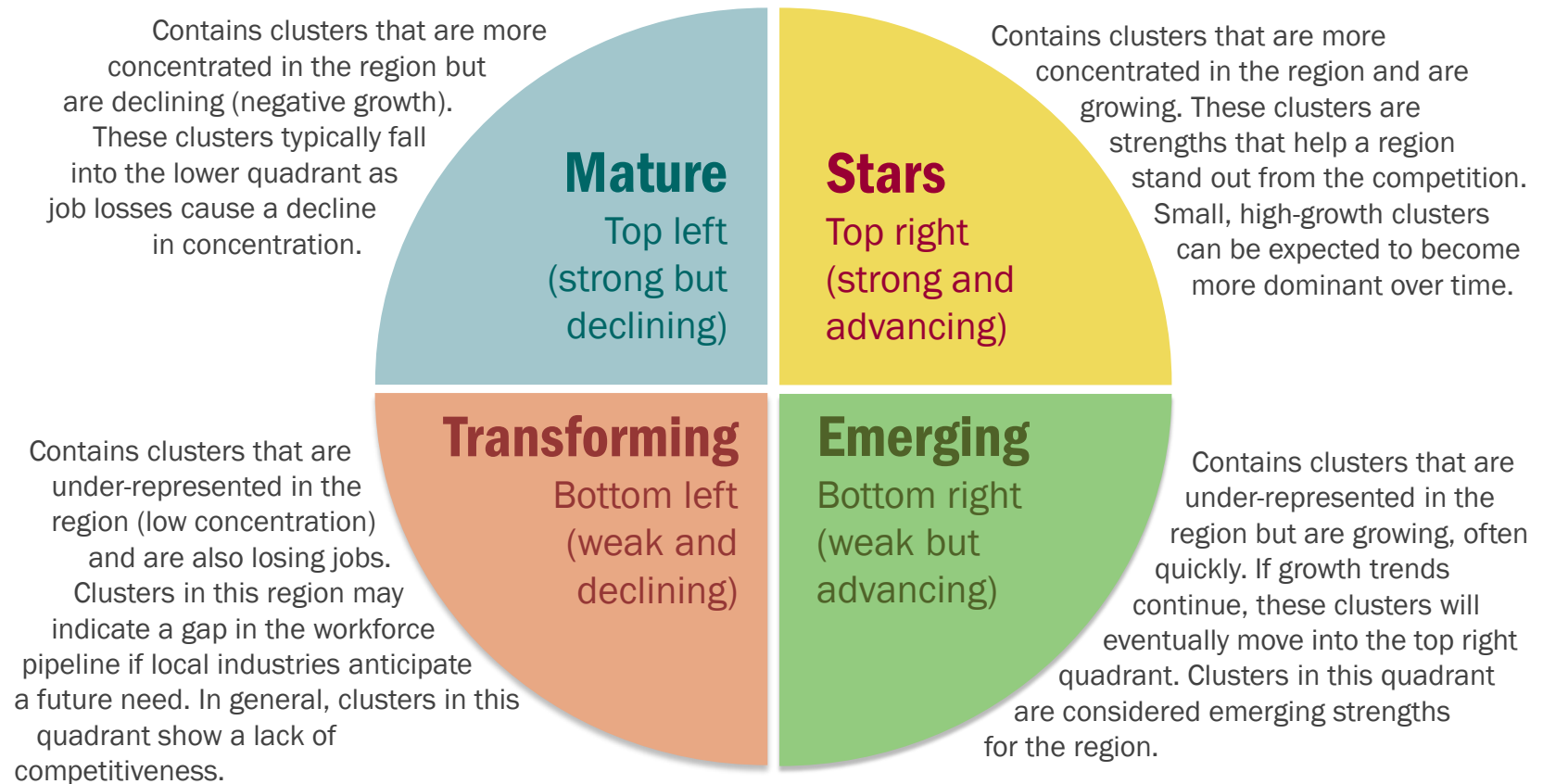
# List of Clusters

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

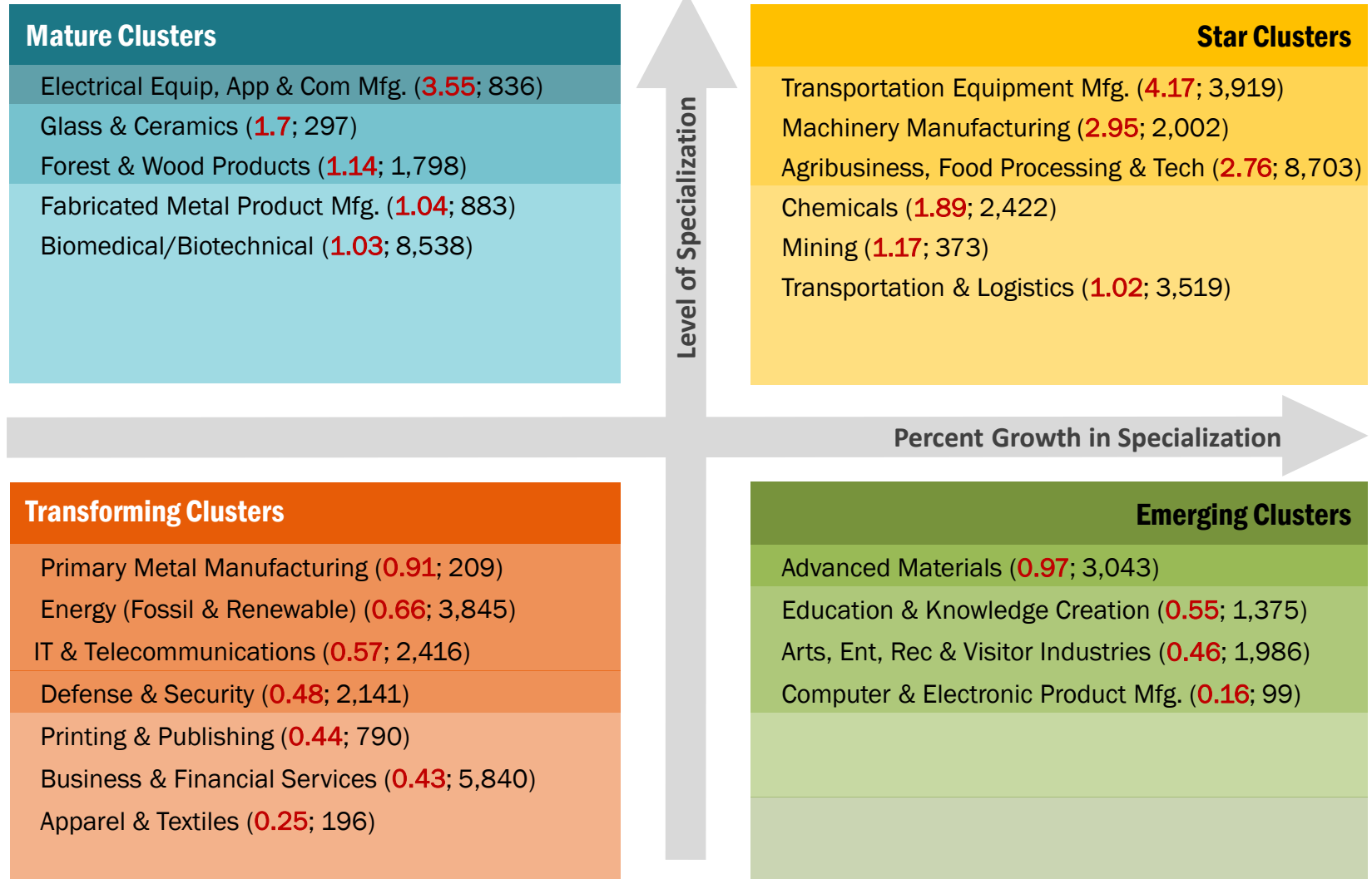
## Industry cluster analysis

# How to interpret cluster data results

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



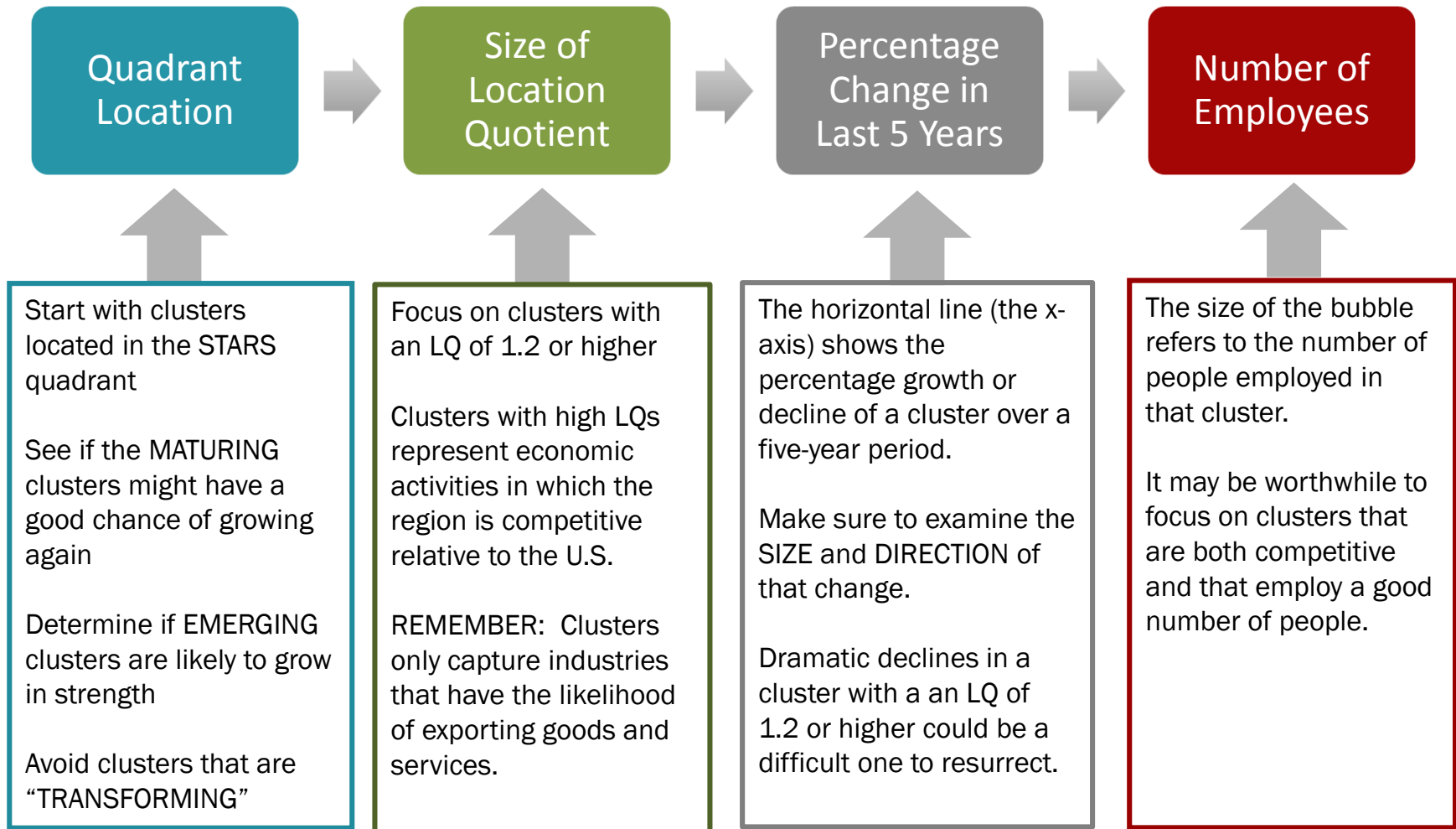
# Industry cluster analysis



## section 03

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.

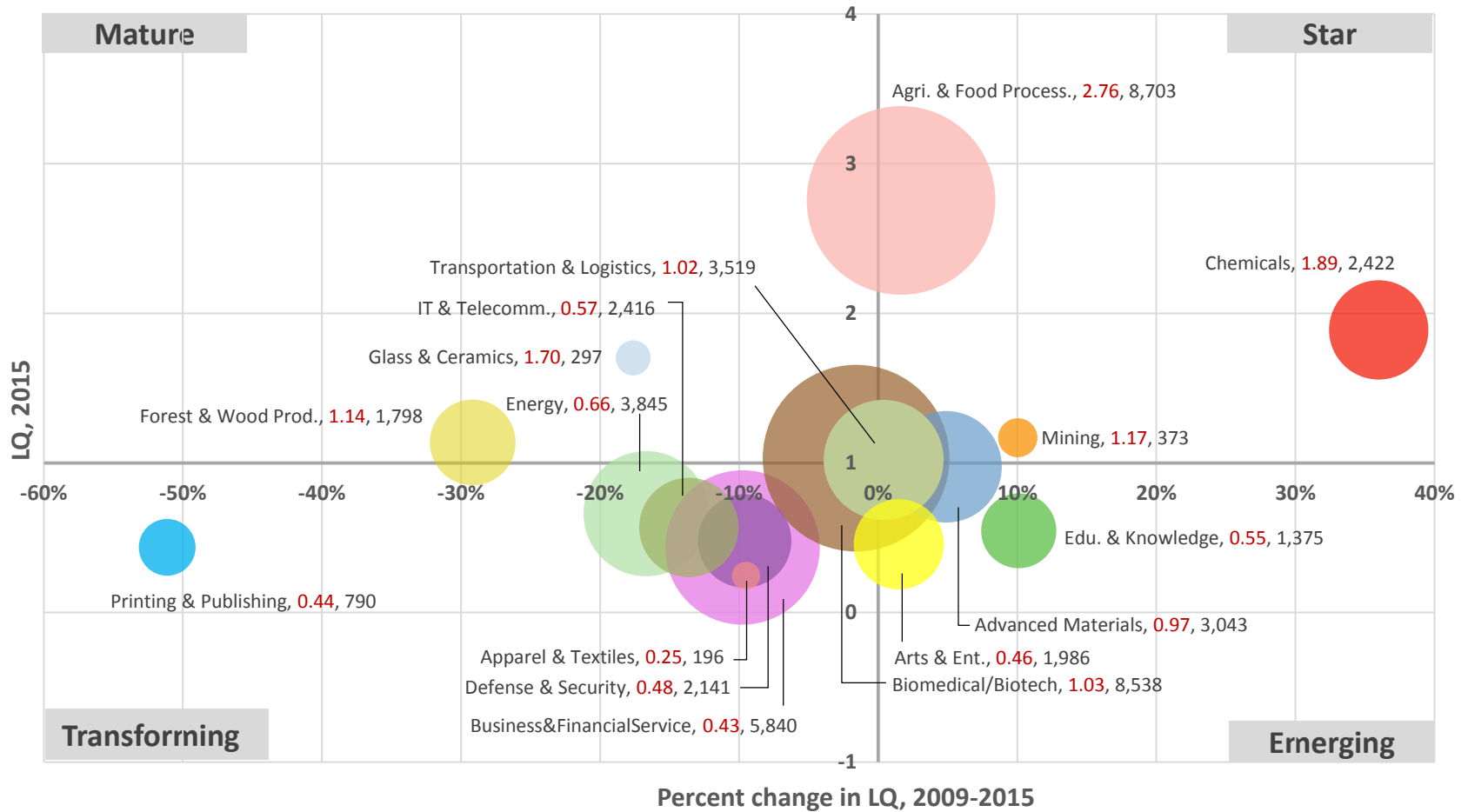
# Bubble Chart: What to Look at First





## Industry and occupation

# Industry cluster bubble chart

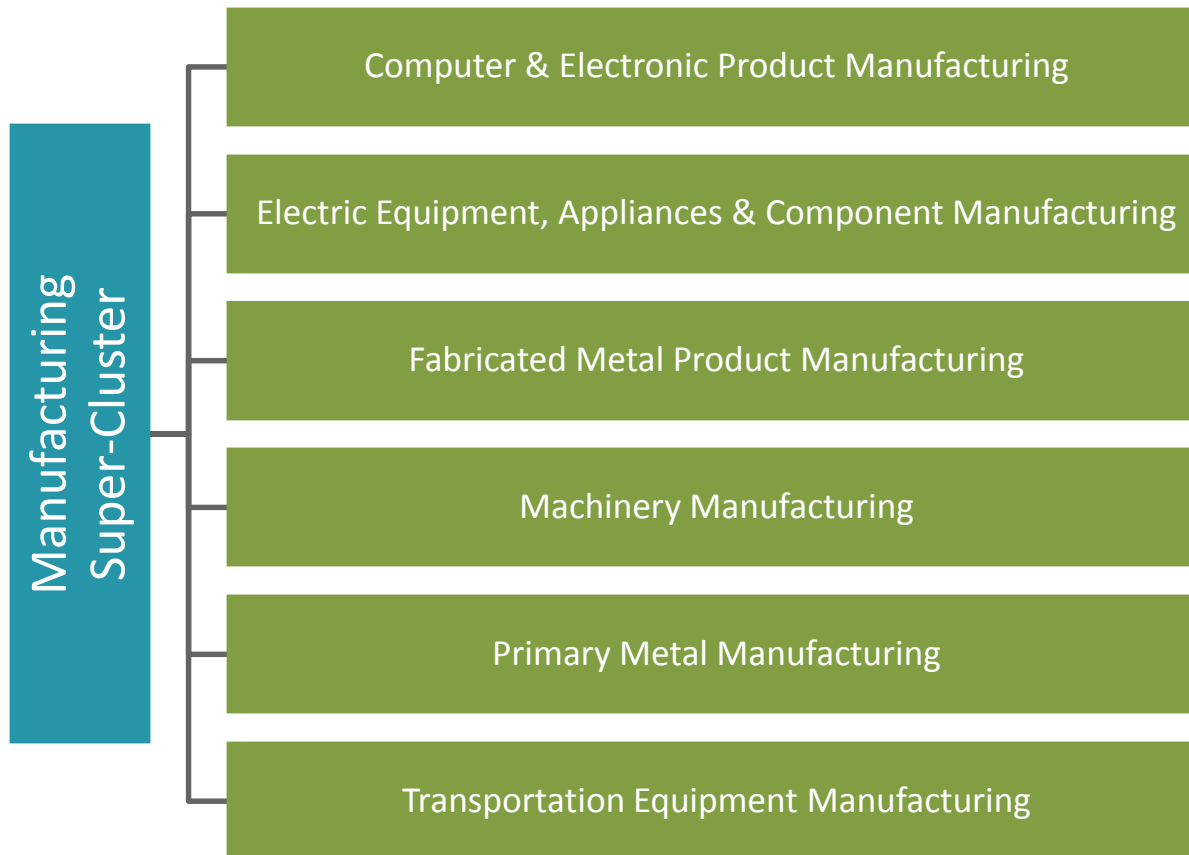


Note: Label includes cluster name, LQ in 2015, and Employment in 2015.

### section 03

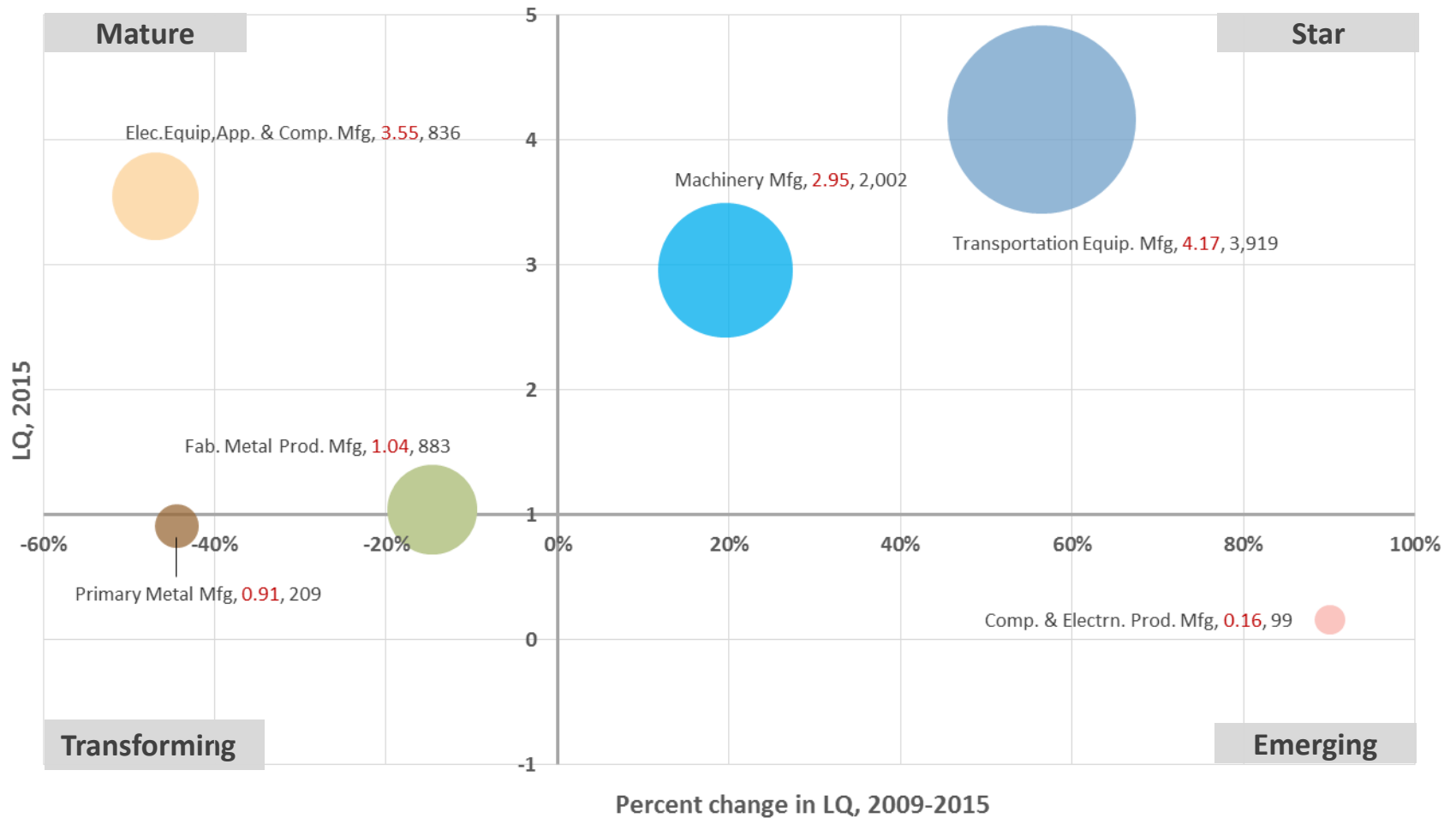
# The Manufacturing Super-Cluster

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.



## Industry and occupation

# Manufacturing sub-cluster bubble chart



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

### section 03

## Industry and occupation

# For your region

### Mature Industries

Five industry clusters in the NAEDA region is in the Matured stage: Electrical Equip, App & Comp Mfg.; Glass & Ceramics; Forest & Wood Prod.; Fabricated Metal Product Mfg.; and Biomedical/Biotech. The mature 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, Primary Metal Mfg.; Energy; IT & Telecom; Defense & Security; Printing & Publishing; Business & Financial Services; and Apparel & Textiles. Seven 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. Six Star industry clusters in the NAEDA region are Transportation Equip Mfg.; Machinery Mfg.; Agribusiness, Food Process & Tech; Chemicals; Mining; and Transportation & Logistics. 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 four Emerging clusters in total in the NAEDA region: Advanced Materials; Education & Knowledge Creation; Arts, Entertainment, Recreation & Visitor Industries; and Computer & Electronic Product Mfg.

# 04 occupations

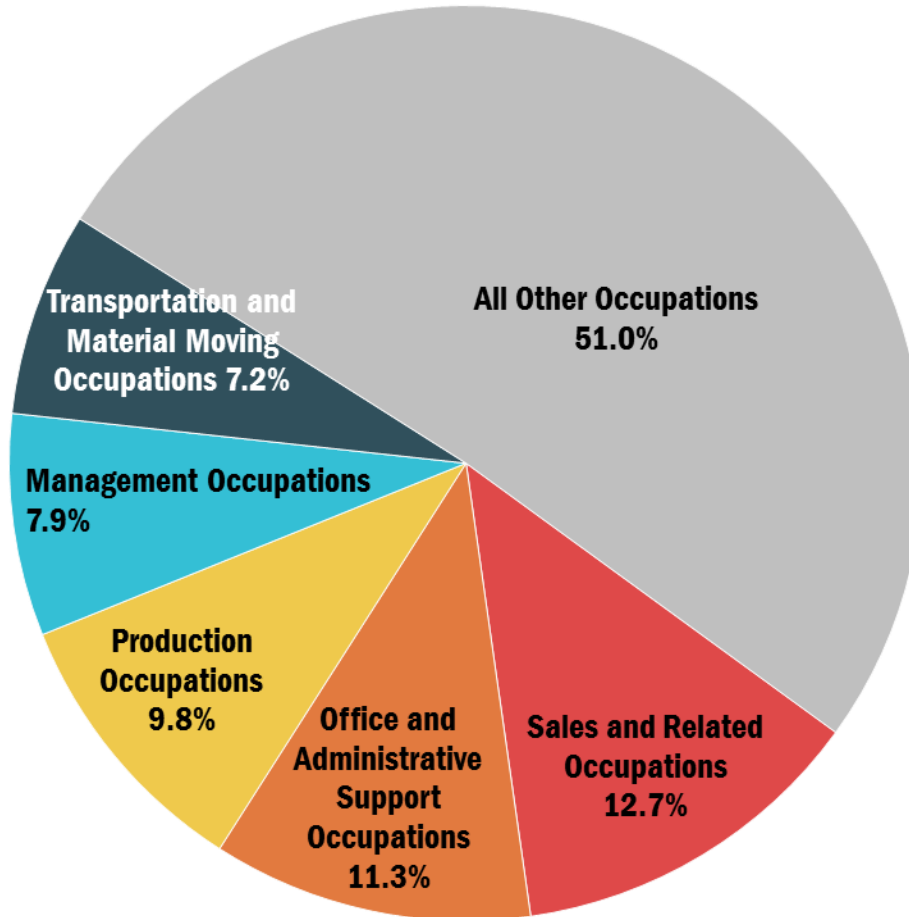
**Top occupations**

---

**STEM occupations**

## Industry and occupation

# Top five occupations in 2015

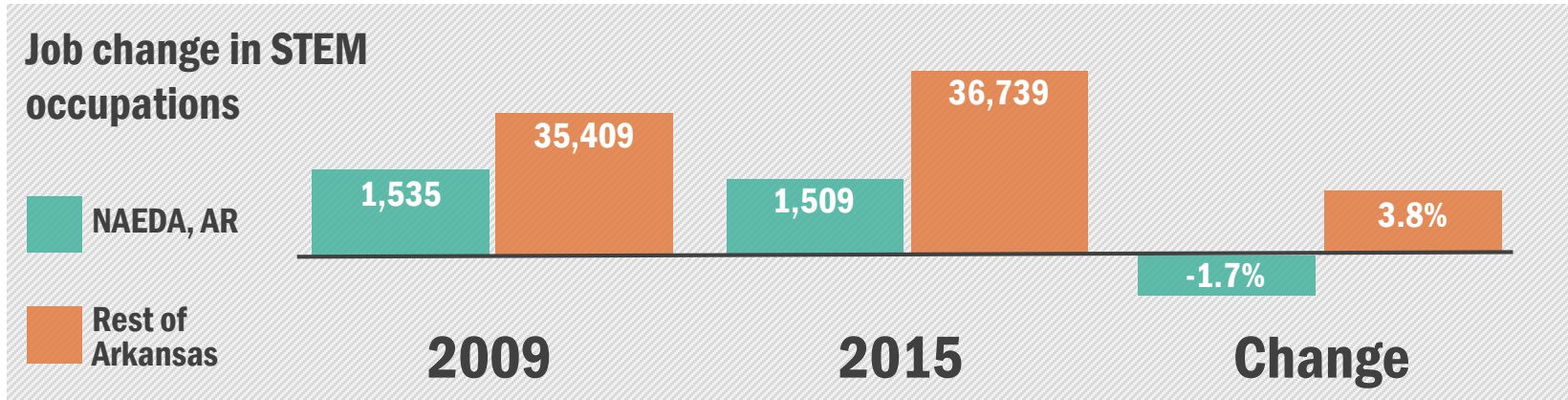


### Questions:

- 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?

## Industry and occupation

# 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?

# Report Contributors

This report was prepared by the Purdue Center for Regional Development, in partnership with the Southern Rural Development Center and USDA Rural Development, in support of the Stronger Economies Together program.



## Report Authors

Bo Beaulieu, PhD  
Indraneel Kumar, PhD  
Andrey Zhalnin, PhD



## Data Analysis

Ayoung Kim  
Andrey Zhalnin, PhD  
Indraneel Kumar, PhD



## Report Design

Tyler Wright

This report was supported, in part, by grant from the USDA Rural Development through the auspices of the Southern Rural Development Center. It was produced in support of the Stronger Economies Together (SET) program.



**PURDUE**  
UNIVERSITY



**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.

**For more information,**  
please contact:

Dr. Bo Beaulieu,  
PCRD Director:  
[ljb@purdue.edu](mailto:ljb@purdue.edu)

Or

765-494-7273

May 2017