

SET Overview *and* Exploration of Regional Data

Mount Rogers: Session 1

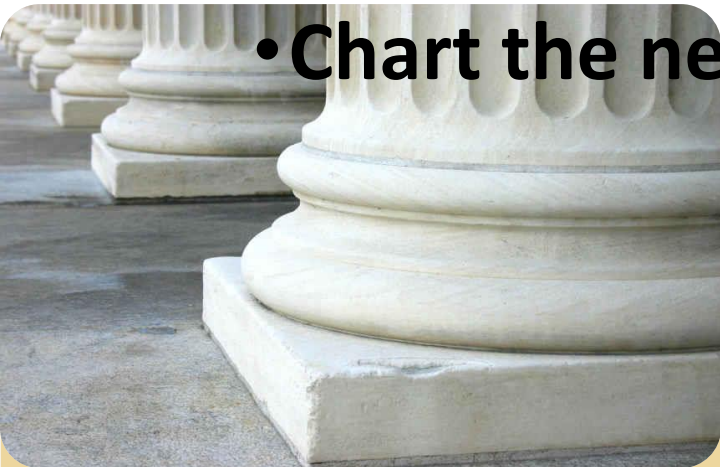
Introductions

HELLO
my name is

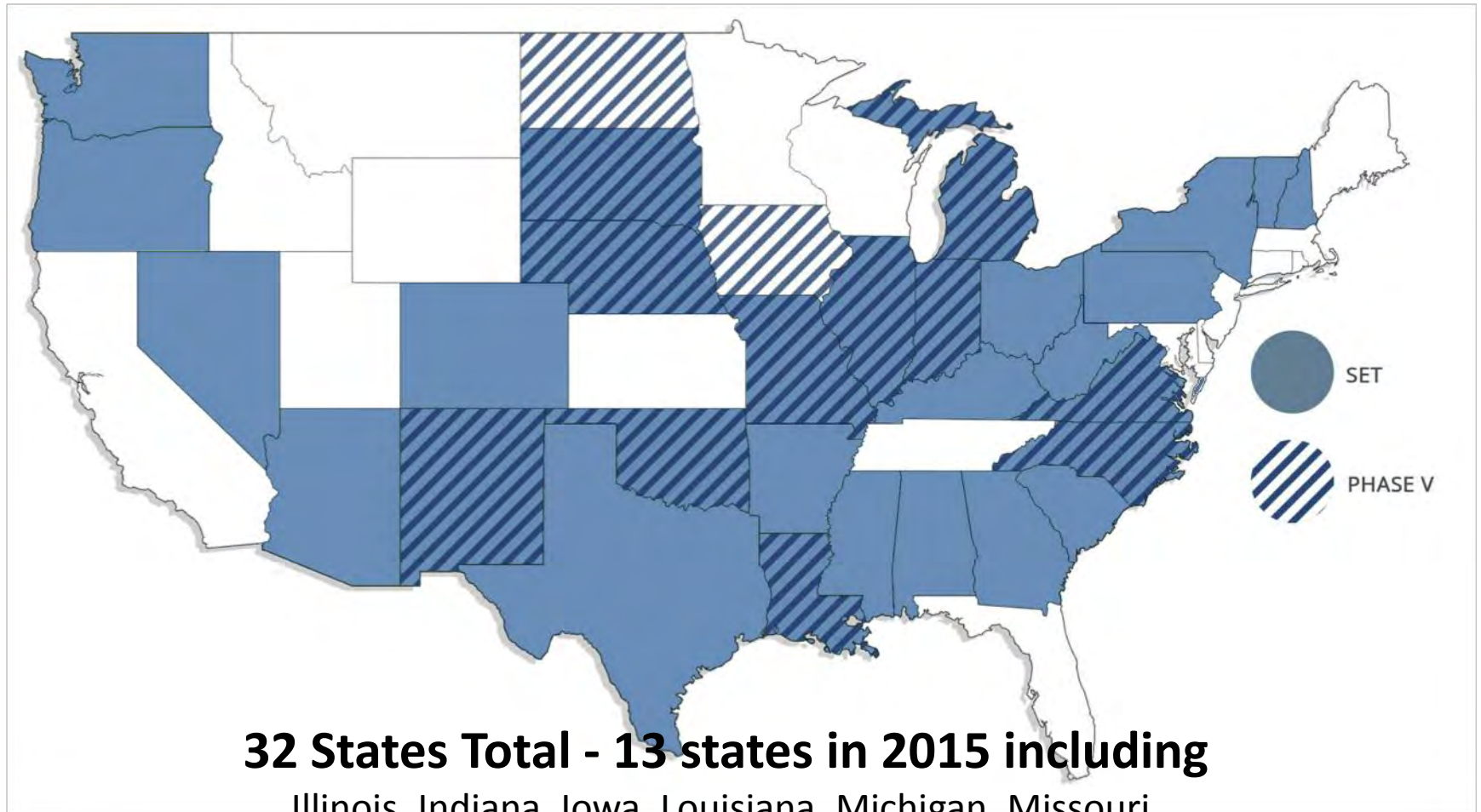
What is skill, experience, and/or talent will you contribute to support a successful discussion?

Today, we will . . .

- **Lay the foundation** for SET work together
- Review the ***Regional SET Civic Forum***
- Explore the **regional economic data**:
 - Regional industry clusters
 - Employment and occupation
- **Chart the next steps**



The SET States



32 States Total - 13 states in 2015 including

Purpose of SET: *Doing Better Together*

Guide the Regional Team
in developing and implementing a

High Quality Regional
Economic Development Plan

that builds on the region's current and
emerging economic strengths.



The SET Partners

Mount Rogers Region: State Resource Team

USDA Rural Development

Dr. Basil Gooden, Janice Stroud-Bickes,
Anne Herring, Craig Barbrow,
David Foster, Dr. Kasey Martin

Office of the Secretary of Commerce and Trade

Mary Rae Carter

Virginia Department of Housing & Community Development

Doug Jackson & Michelle Jones

Virginia Rural Center

Christy Morton

Virginia Tourism

Steve Gaylean & Sandra Tanner

Virginia Economic Development Partnership

Liz Povar

Virginia Cooperative Extension – Virginia Tech

Dr. Ed Jones, Dr. Jim Pease, Dr. Mike Lambur, &
Dr. Martha Walker

Virginia Tech Office of Economic Development

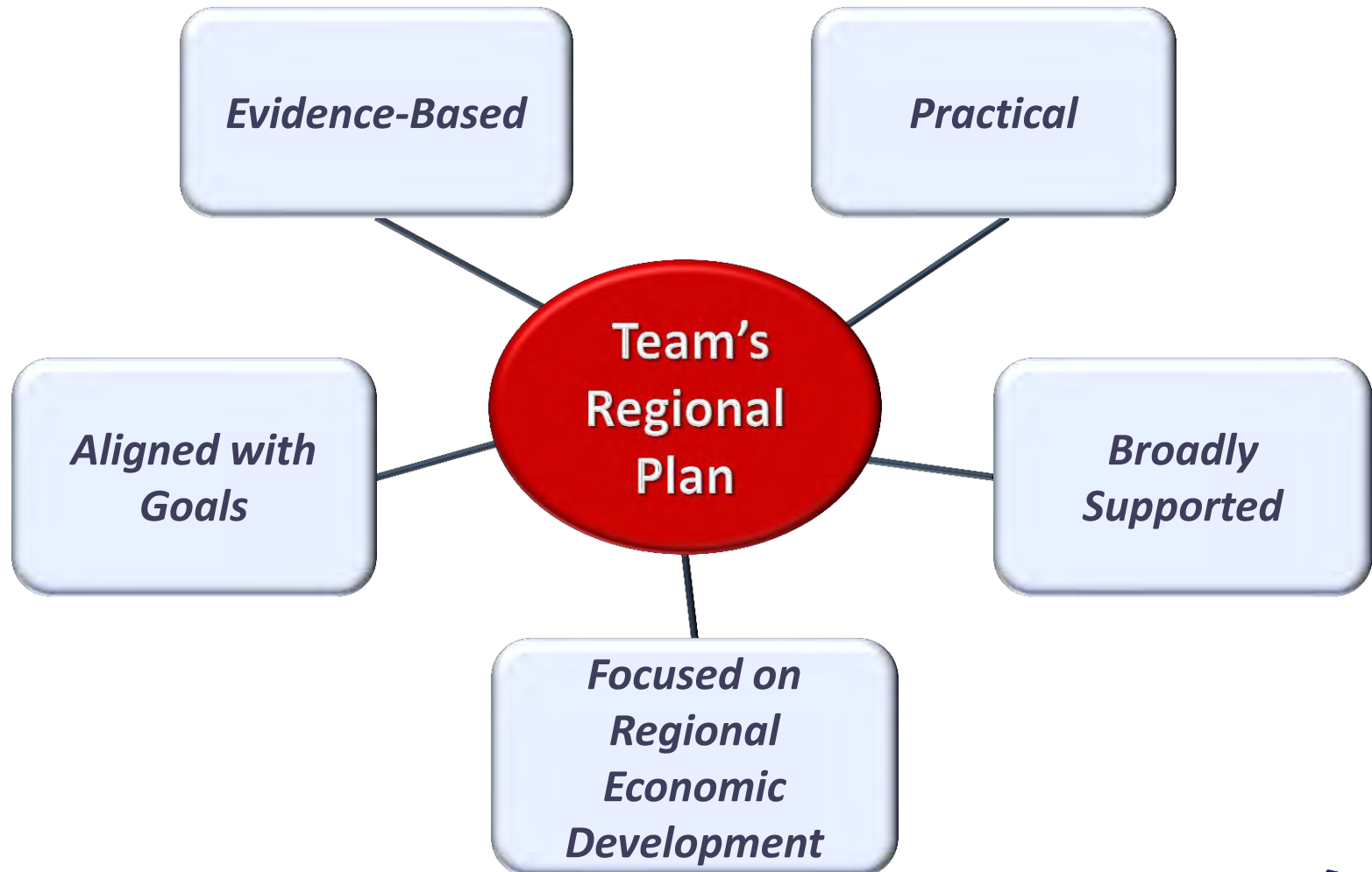
Scott Tate

National Team

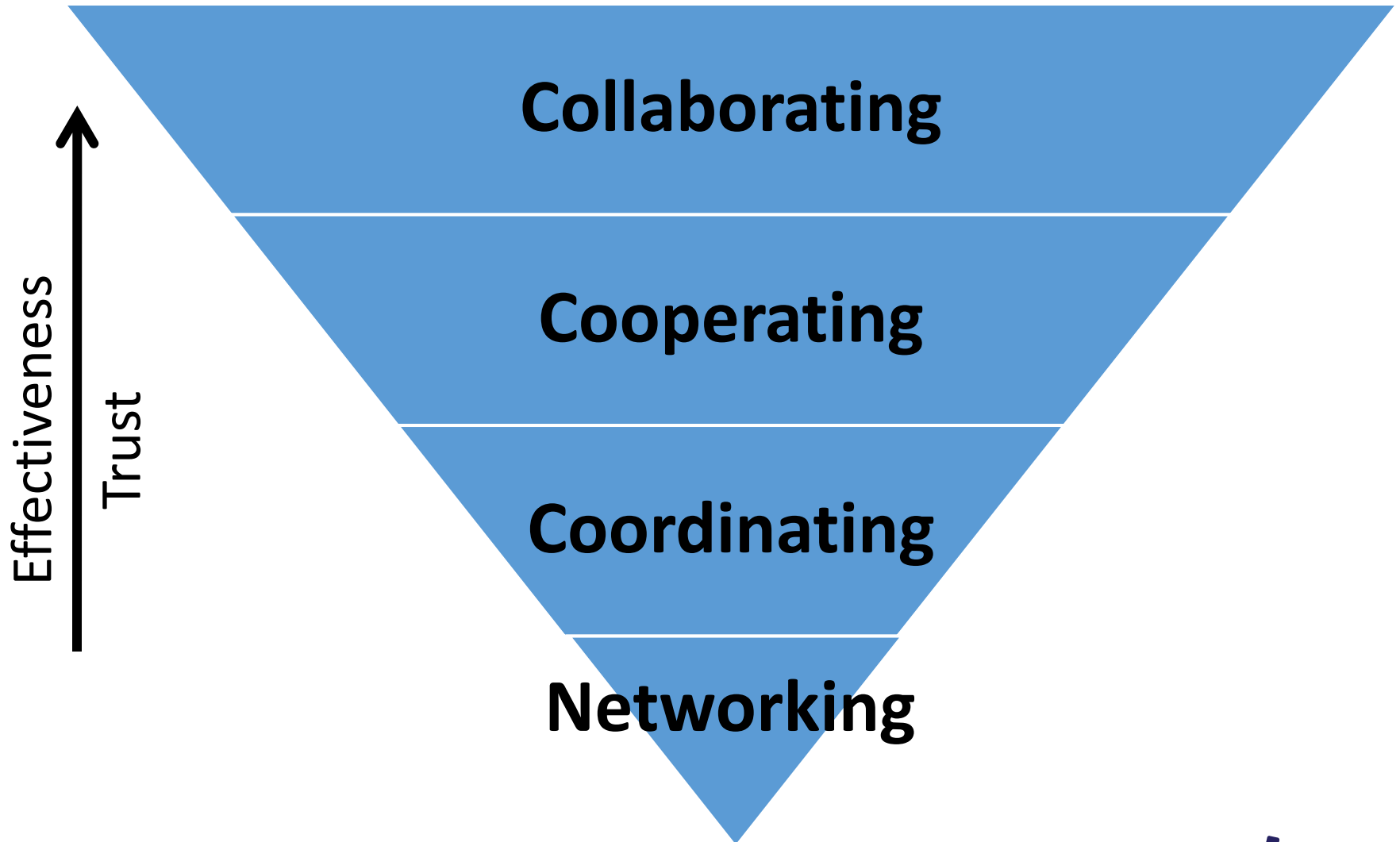


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High Quality Plan: Essential Components

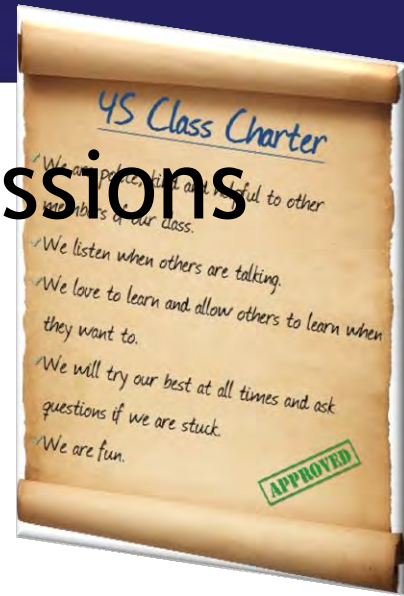


Building Shared Expectations



Guiding Principles for Our Discussions

- Enter into the discussion enthusiastically.
- Give freely of your experience.
- Allow and encourage others to contribute.
- Listen attentively and take accurate notes.
- Ask questions when you don't understand.
- Appreciate the other person's point of view.
- Provide constructive feedback and receive it willingly.
- Keep confidences and assume others will.
- Confine your discussion to the topic.
- **Think Regionally**
- **Be personally detached – open to ideas**



Round I: Forum Review

Civic Engagement Forum Review

- Regional Strengths & Challenges
- Data Snapshot Reactions
- Opportunities



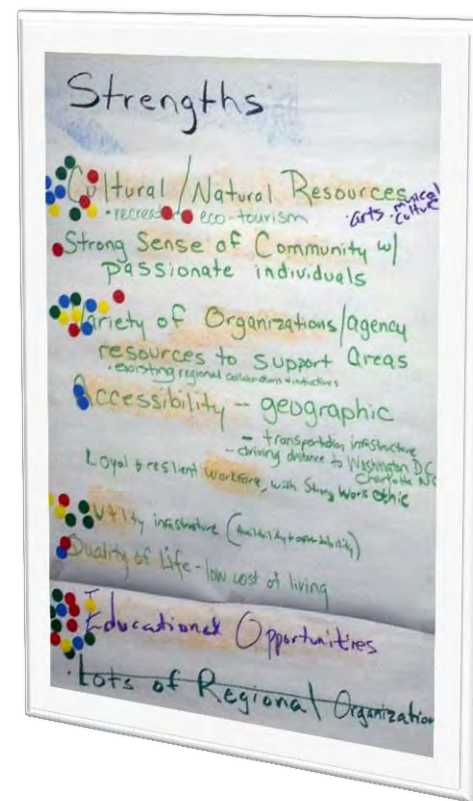
Mount Rogers Region: Strengths

Top Strengths

- Cultural/natural resources related to recreation and eco-tourism including arts
- Variety of organizations and agencies offering resources to support area
- Utility infrastructure is second to none

Other Strengths:

- Quality of life with low cost of living
- Strong sense of community with passionate individuals
- Accessibility related to geographic area
- Local and resilient workforce with strong work ethic
- Educational opportunities



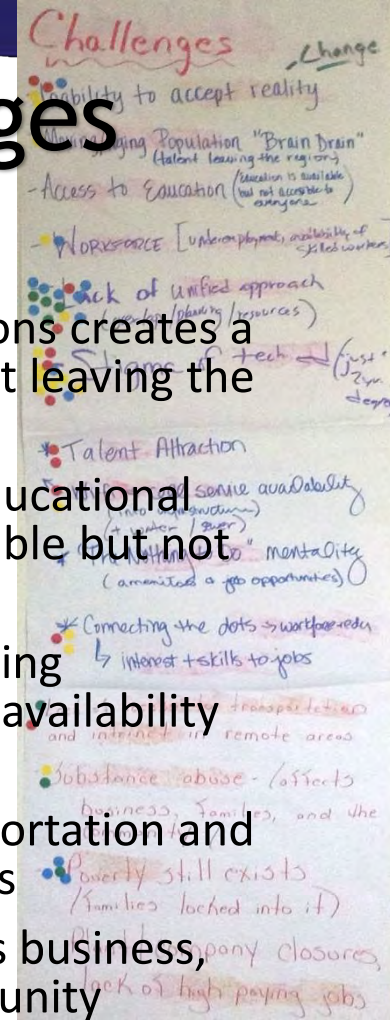
Mount Rogers Region: Challenges

Top Challenges:

- Lack of unified approach has created an overlap in planning and access to resources
- Stigma of technical education or obtaining “just” a two-year degree
- Inability to accept reality and/or change
- Poverty still exists and families are locked into it
- Talent attraction
- Wi-fi and cell services availability affects information infrastructure
- Connecting the dots (workforce and education)—> interest and skills to jobs

Other Challenges:

- Moving/aging populations creates a “brain drain” with talent leaving the region
- Access to education (educational opportunities are available but not accessible to everyone)
- Workforce issues including underemployment and availability of skilled workers
- Lack of access to transportation and internet in remote areas
- Substance abuse affects business, families, and the community
- Plant/company closures
- Lack of high paying jobs
- “the Nothing to do” mentality (amenities and job opportunities)



Mount Rogers Region: Opportunities

Communication/Network

- Increase coordination between agencies—like SET
- Increase dialog among stakeholders
- Workforce Development and economic development entities work collaboratively and meet quarterly
- Leadership/facilitation—>enhance ways to work together
- Models of cooperation
- 2020 Summit—Collective Impact—Strive to work together

Workforce/Education

- Upcoming Sector Strategy Initiative
- Changing perception of technical education
- Develop workforce to meet current and emerging careers
- Match education with current and future vocational employment needs
- Connect K-12 education system with workforce pipeline
- Get offenders/drug addicts a change—help them instead of punishing them

Awareness/Education

- Educate K-12 students about region and opportunities
- Educate parents and teachers to funnel students in the right direction
- Mentoring poverty stricken families
- \$300 million from Tobacco Commission and invest it in students and youth

Entrepreneurship

- Strong correlation between technical skills and entrepreneurship

Economic Strategies

- Reclaim coal mines and use methane gases to grow herbs such as Grow Chinese medicinal herbs (Ginseng, etc.) and export to China
- Double down on agriculture—keep locally grown products local
- Manufacture outdoor recreation products for outfitters

Rebrand Region

- Opportunity to rebrand and correct the stereotypes both internally and externally associated with Appalachia



Where Mount Rogers Region would invest . . .

- **Workforce/Education**
- **Awareness Education**
- **(tie) Entrepreneurship**
- **(tie) Rebrand region**

Community Challenge

Finding from your discussions on regional economic growth . . .

Who did you interview?

What did you discover?



Round II: Economic Data

Data Scavenger Hunt: Thriving Businesses

- Number of employees
- Workforce skills needed
- Type of business (i.e. manufacturing, retail, health services)
- Average earnings
- County
- Size
 - Large=over 100 employees
 - Small= under 100
- Other businesses/industries for which it is providing support



Round III: Explain, Examine, and Explore

05 industry and occupation

• Establishments

• Employment by industry

• Cluster analysis

• Top occupations

• STEM occupations

Establishments

Establishments

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

Establishments

Components of Change for Establishments 2000-2011

Establishments Launched	14,037
Establishments Closed	7,575
Net Change	6,462
Net Migration (Establishments moving into minus establishments moving out of the region)	267
Total Change	6,729

Establishments

Number of Establishments by Company Stages

	2000		2011	
Stage	Establishments	Proportion	Establishments	Proportion
Stage 0	1,969	24.5%	4,340	29.4%
Stage 1	4,594	57.2%	8,874	60.1%
Stage 2	1,321	16.4%	1,405	9.5%
Stage 3	135	1.7%	136	0.9%
Stage 4	18	0.2%	11	0.1%
Total	8,037	100%	14,766	100%

Questions:

- What stage businesses have shaped the region's economic growth in the last 10 years?
- Which ones are growing or declining the most?
- Which stage of establishments are likely to shape the region's future economic growth?

Establishments

Number of Jobs by Company Stages

Year	2000	2011	% Change
Stage 0	1,969	4,340	120%
Stage 1	17,431	26,559	52%
Stage 2	33,686	37,810	12%
Stage 3	26,886	26,949	0.2%
Stage 4	12,335	9,322	-24%
Total	92,307	104,980	13.7%

Sales (\$ 2013) by Company Stages

Year	2000	2011	% Change
Stage 0	225,789,198	292,057,777	29%
Stage 1	2,435,780,242	2,185,013,625	-10%
Stage 2	3,756,403,934	3,162,230,055	-16%
Stage 3	3,481,543,625	2,994,336,968	-14%
Stage 4	2,368,702,860	1,485,804,652	-37%
Total	12,268,219,860	10,119,443,077	-18%

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 2000-11 period?

Mt Rogers PDC Census of Agriculture 2012

Farms	5452
Farms by Sales less than \$100K	4968
Farms by Sales \$100K and over	484
Land in Farms (acres)	882,791
Total Sales (\$)	\$270,291,000
Crop Sales (\$)	\$35,524,000
Livestock Sales (\$)	\$234,767,000
Net Cash Farm Income (\$)	\$24,691,000

Employment by Industry

Top industry sector employment growth

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
53	Real Estate and Rental and Leasing	2,439	2,970	531	22%	15%
52	Finance and Insurance	2,874	3,339	465	16%	14%
61	Educational Services	1,200	1,272	72	6%	13%
31	Manufacturing	14,286	14,666	380	3%	-2%
72	Accommodation and Food Services	7,084	7,299	215	3%	9%
54	Professional, Scientific, and Technical Services	2,327	2,394	67	3%	2%
62	Health Care and Social Assistance	9,152	9,290	138	2%	11%
90	Government	15,262	15,449	187	1%	-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?

Top industry sector employment decline

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
22	Utilities	217	113	-104	-48%	-7%
21	Mining, Quarrying, and Oil and Gas Extraction	739	553	-186	-25%	-4%
56	Administrative and Support and Waste Management and Remediation Services	4,259	3,474	-785	-18%	9%
23	Construction	5,361	4,526	-835	-16%	-7%
51	Information	819	749	-70	-9%	-10%
48	Transportation and Warehousing	2,747	2,558	-189	-7%	5%
81	Other Services (except Public Administration)	5,175	4,941	-234	-5%	9%
42	Wholesale Trade	2,576	2,458	-118	-5%	-1%
44	Retail Trade	12,275	11,774	-501	-4%	4%
11	Crop and Animal Production	5,662	5,615	-47	-1%	-2%

Questions:

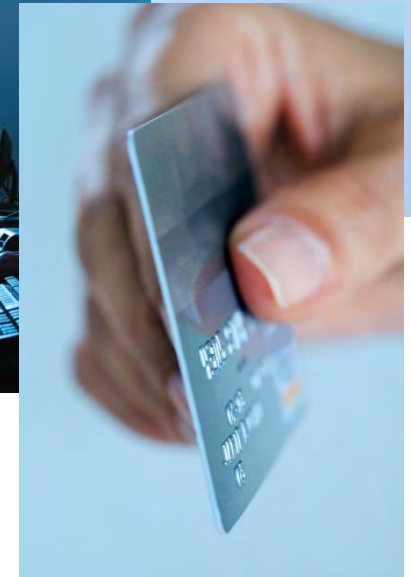
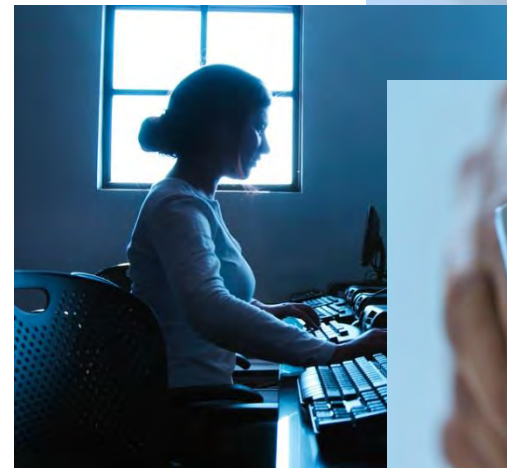
- How does the industry sector make-up of the region compare to the rest of the state?
- Which industry sectors are growing and declining the most in employment?

Exploring Industry Clusters

Clusters Defined

Similar and related firms in a defined geographic area that share:

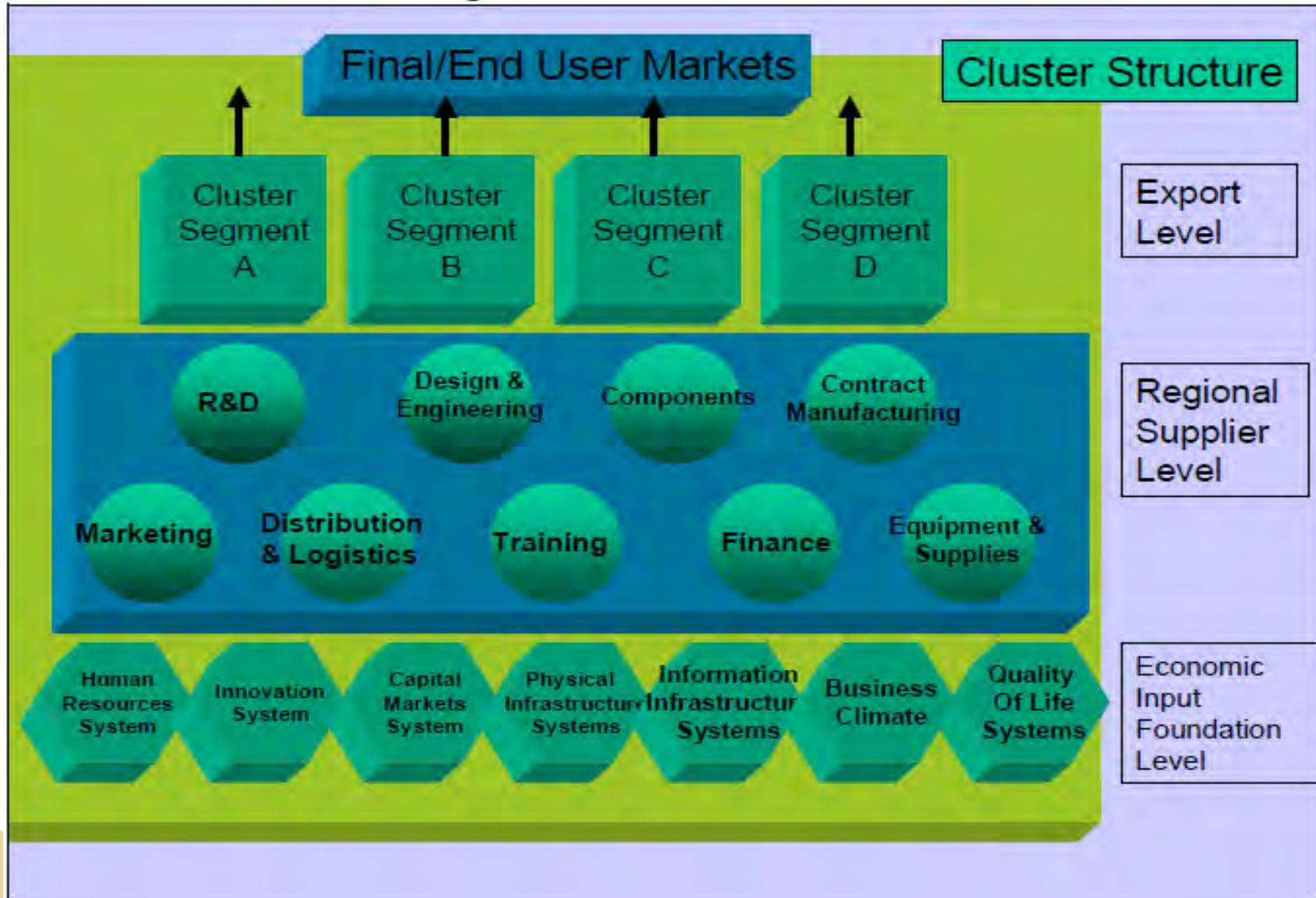
- Common markets
- Technologies
- Worker skill needs
- Buyer-seller relationships



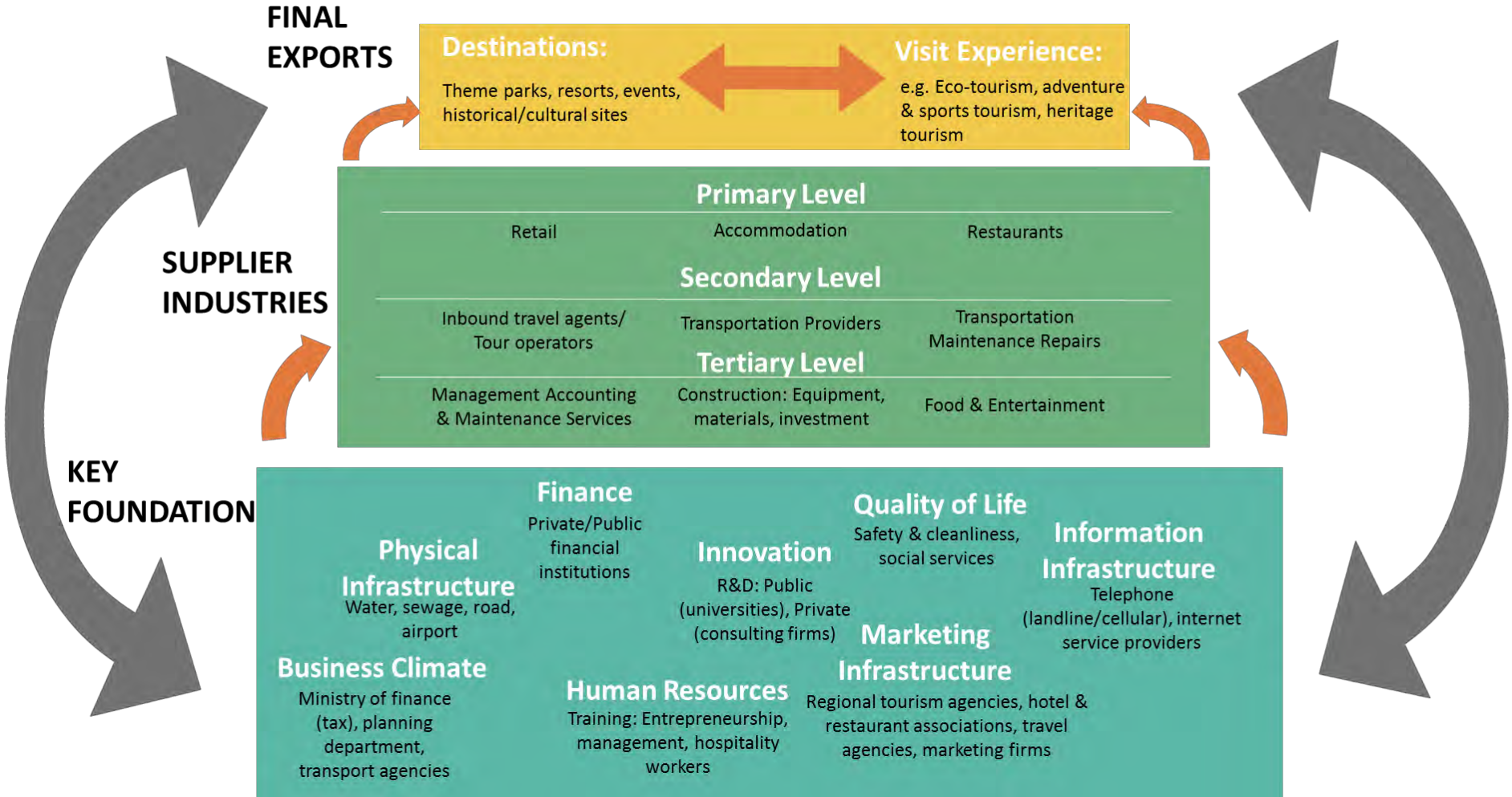
Clusters: Characteristics and Comparisons

- Size: Jobs, revenues
- Specialization: Proportion of employment relative to average
- Growth: Employment, revenue growth rate relative to average
- Depth: Proportion of good/service value that is exported
- Breadth: Of cluster segments in national/global industry
- Dynamism: Degree of company formation and survival
- Stage of Life Cycle: Evolution over time

Example Cluster



Tourism Cluster



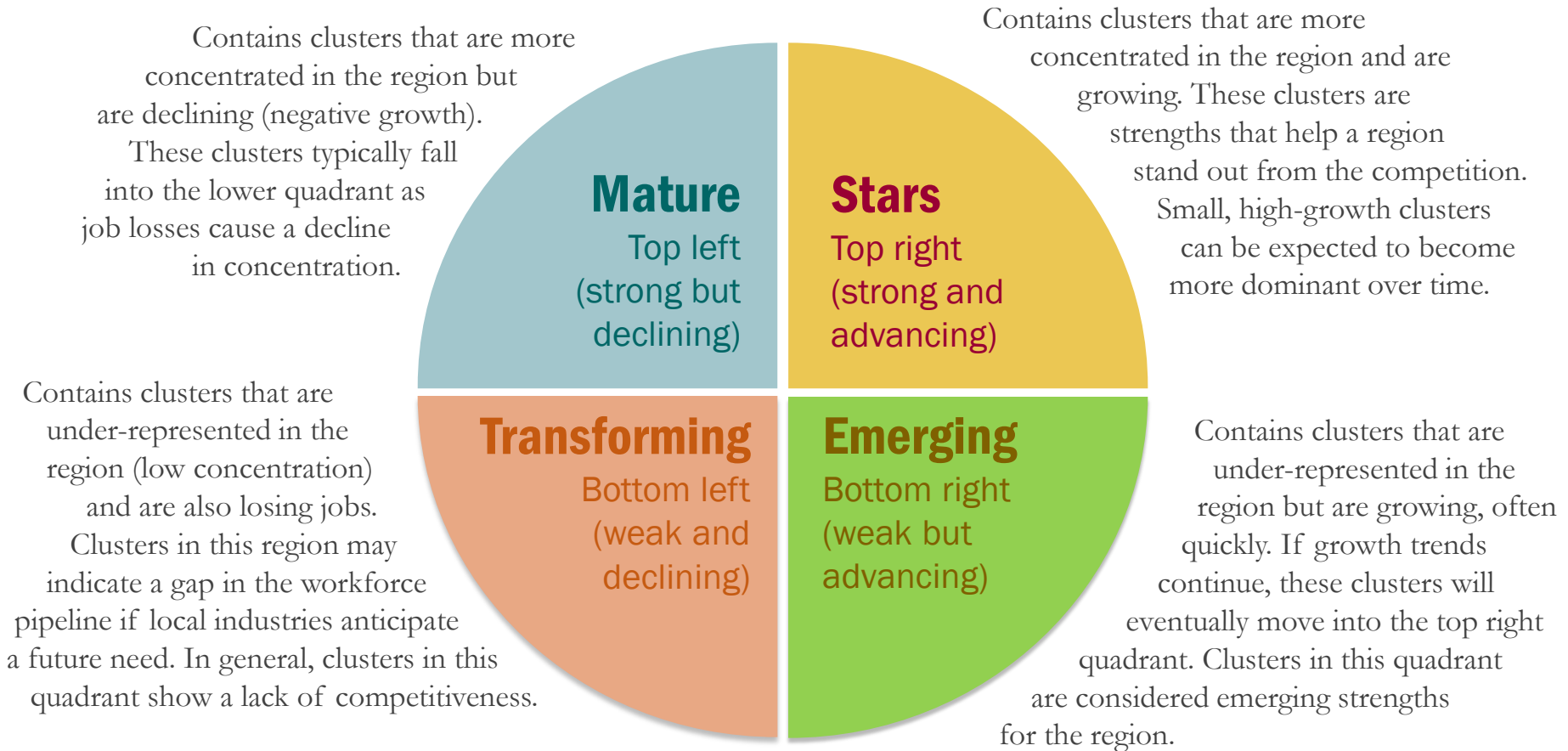
LIST OF CLUSTERS in SET

- 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

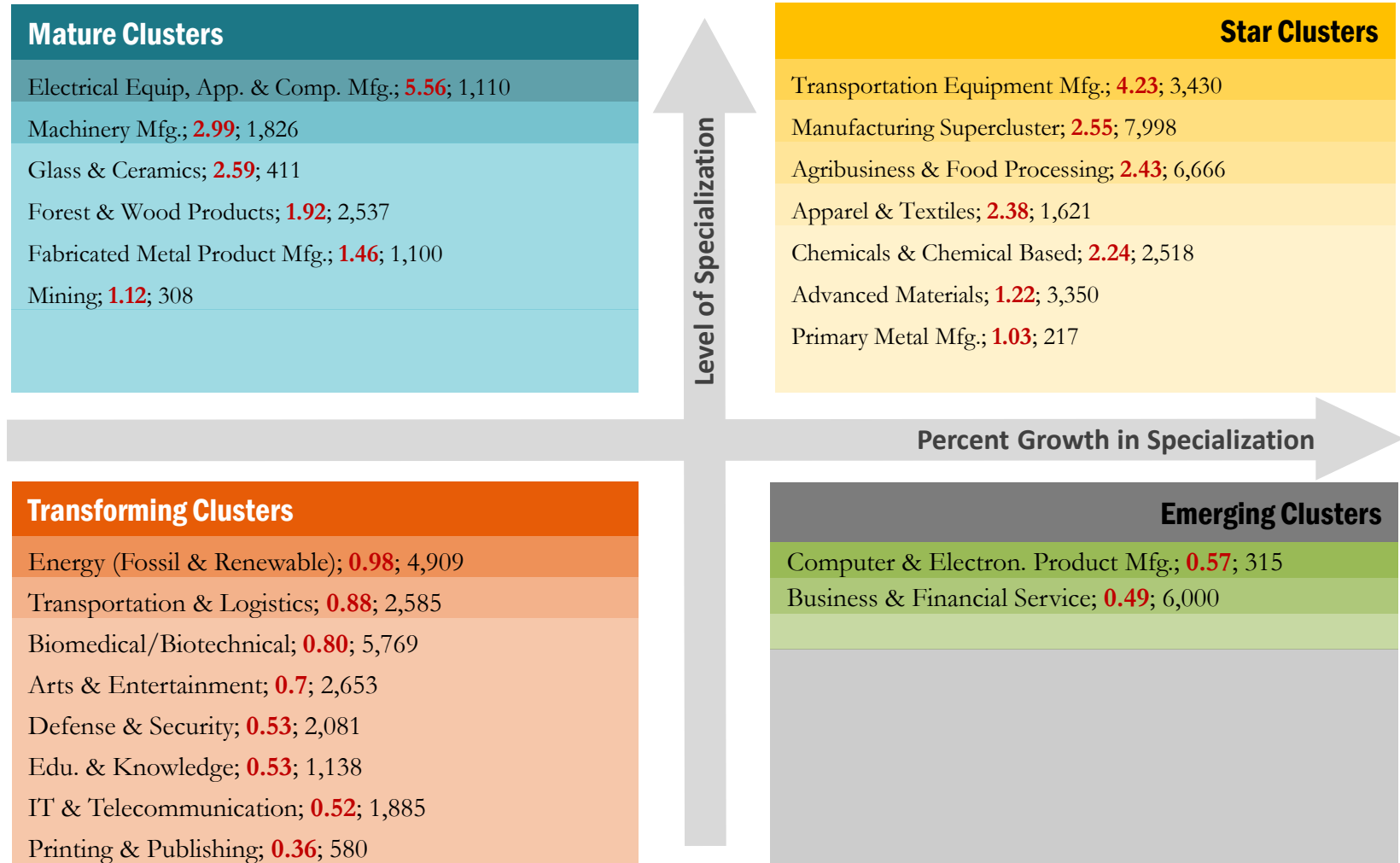
Industry cluster analysis

Clusters by Job Concentration and Job Growth

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



Industry cluster analysis



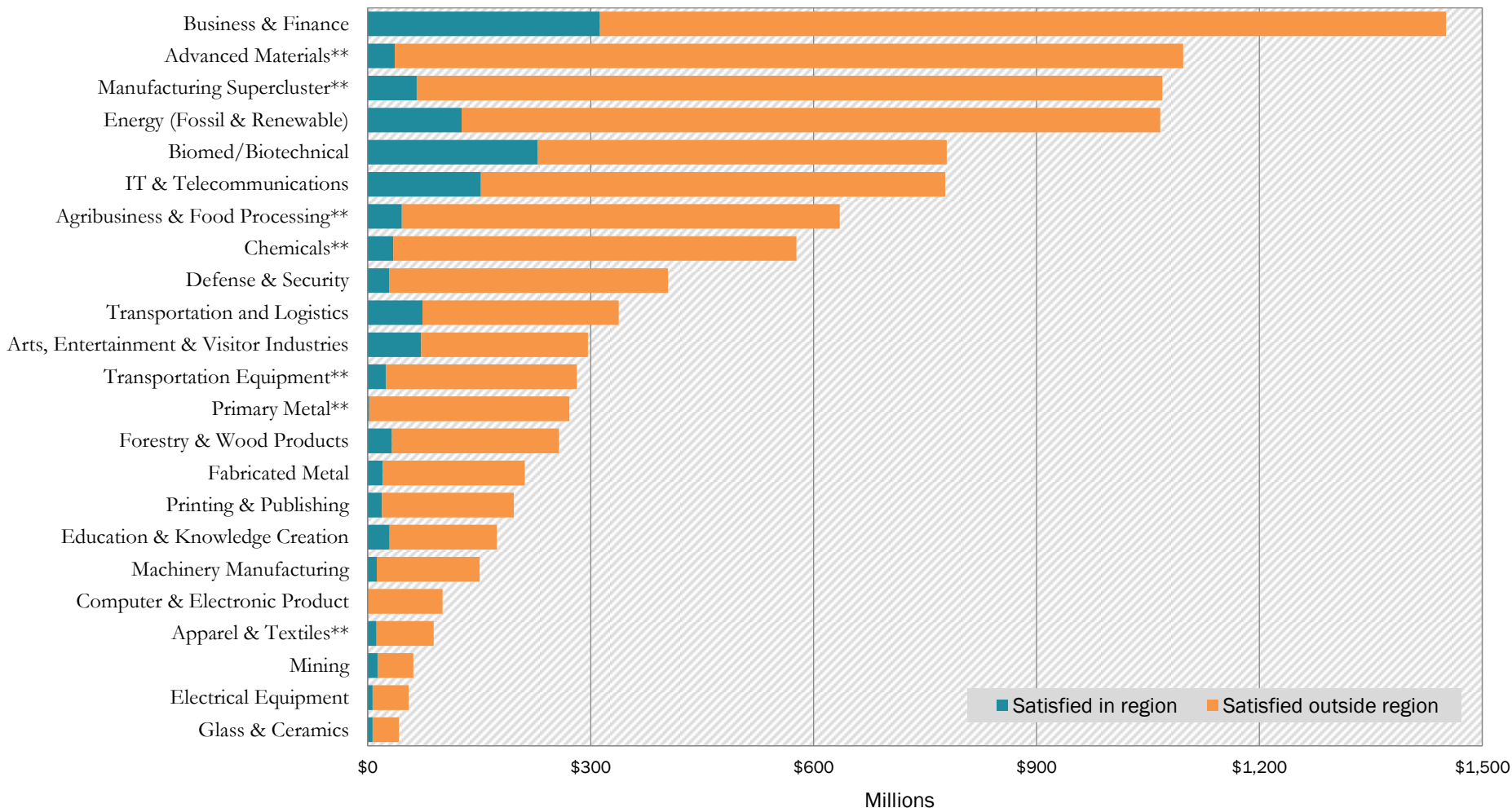
NOTE: The first number after each cluster represents its location quotient while the second number represents the number of total jobs (full and part time jobs by place of work) in that cluster in the region in 2014. The clusters are sorted in decreasing order by location quotient.

Economic “Leakages”

In economic development terms, an economic leakage is money spent outside the regional economy.

If some leakages can be efficiently and effectively “plugged,” then clusters may become stronger and more economic growth occur.

Regional requirements, 2013



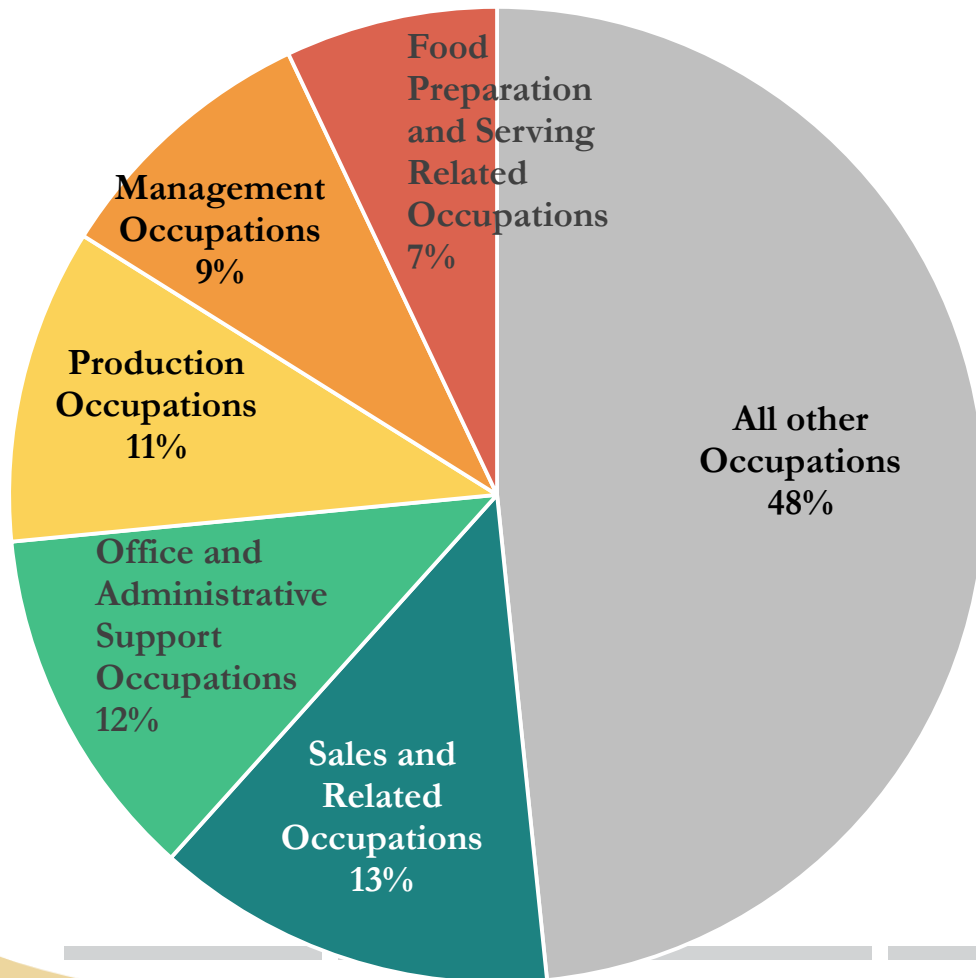
Note: ** shows Star clusters

Workforce Data

- What are the region's unemployment trends?
- Are more people commuting into the region or commuting out?
- How do regional earnings compare to the state or nation?



Top five occupations in 2014

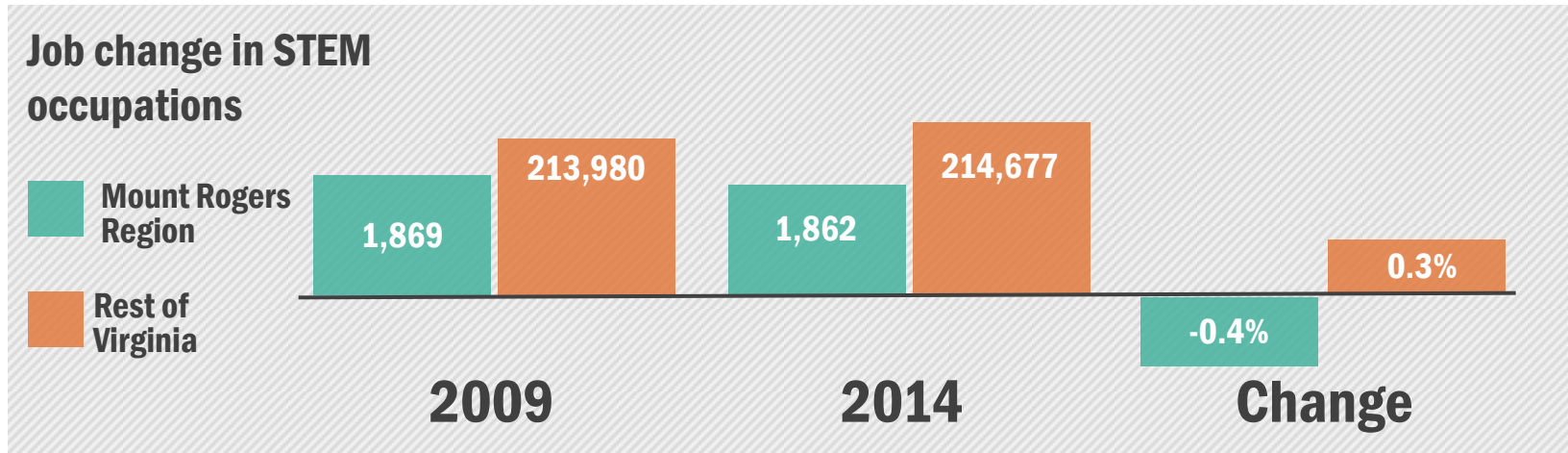


Questions:

- 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?

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?

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

section 05

Source: EMSI Class of Worker 2014.4 (QCEW, non-QCEW, self-employed and extended proprietors)

Now What?

Based on the assets of the region
and current industrial trends...

What clusters should this region
explore further?

What do we want to know?



Reality Check and Next Steps

Did the data reveal:

- Any new opportunities that should be considered?
- The need to eliminate previously considered opportunities?
- New partners that need to be included in the planning process.



Actions: Begin Writing the Plan

- Describe and summarize the Civic Engagement Forum process and results.
- Summarize key strengths and challenges based on the data
- Describe the selected clusters:
 - Why were these clusters selected for further exploration?
 - What are the strengths and challenges associated with the selected clusters?
 - Which suggested opportunities are associated with each selected cluster?



