Evidence-Based Planning

Session 2

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Review

- Clusters you selected to explore in greater detail.

- Justification for selecting these clusters
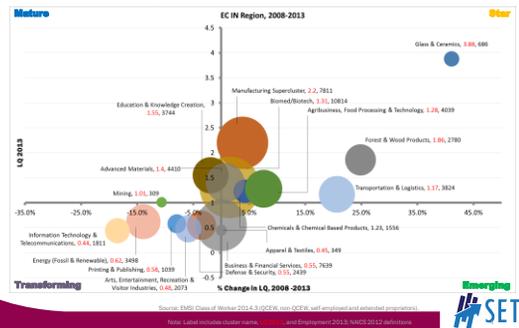
- People you invited and/or interviewed

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Interpreting the Bubble Chart

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Industry and occupation

Industry Cluster Bubble Chart

EC IN Region, 2008-2013

Source: EMSI Class of Worker 2014.3 (QCEW, non-QCEW, self-employed and extended proprietors).
Note: Label includes cluster name, LQ 2013, and Employment 2013; NAICS 2012 definitions

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Measuring Region's Performance

Shift Share Analysis

https://youtu.be/mukcl4OwT8M

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Agribusiness, Food Processing and Technology Cluster
Shift-Share Analysis by Top Industry Sectors: East Central Indiana Region

Industries	Jobs 2013	National Trend, 2008-2013	Industry Trend, 2008-2013	Regional Performance, 2008-2013
Animal Production	1,279	28	(61)	51
Crop Production	1,016	21	(16)	71
Tortilla Manufacturing	360	8	6	(30)
All Other Miscellaneous Food Manufacturing	343	7	24	(8)
Soft Drink Manufacturing	166	2	(8)	71
Grain and Field Bean Merchant Wholesalers	119	2	5	29
Farm Supplies Merchant Wholesalers	111	3	2	(18)
Farm Labor Contractors and Crew Leaders	91	1	5	22
Soil Preparation, Planting, and Cultivating	85	1	10	22
Meat Processed from Carcasses	82	1	(1)	47
Farm and Garden Machinery and Equipment Merchant Wholesalers	75	2	(1)	(34)
Dog and Cat Food Manufacturing	62	2	11	(31)
Retail Bakeries	53	2	15	(60)
Flour Milling	37	1	0	10
Animal (except Poultry) Slaughtering	31	1	(2)	6

Note: Upward arrow ⇑ indicates regional competitiveness. EMSI does not include detailed sectors for cash crops and fruits production for NAICS 11 (Agriculture, Forestry, Fishing and Hunting)

Source: EMSI Class of Worker 2014.3 (QCEW, non-QCEW, self-employed and extended proprietors)

Coaches: INSERT OWN SHIFT SHARE CHART

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Regional Performance

- Over the last 4 to 5 years, did the national economy fare well or poorly?

- Within your selected clusters, which of the larger industries fared well nationally? Which did not perform well? Why?

- Did certain industries within the clusters perform well in the region, given national economic and industrial trends?

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Agribusiness, Food Processing and Technology Cluster

Top 15 Inputs by Dollars: East Central Indiana Region

Coaches: INSERT OWN CHART

Industries	Estimated Input ($ Millions), 2013	% In-Region	% Out of Region
Crop Production	67.4	9%	91%
Animal Production and Aquaculture	56.9	4%	96%
Other Animal Food Manufacturing *	25.8	1%	99%
Corporate, Subsidiary, and Regional Managing Offices	17.8	4%	96%
Petroleum Refineries *	12.5	0%	100%
Flour Milling	10.9	23%	77%
Wholesale Trade Agents and Brokers	9.1	3%	97%
Rail transportation	6.3	13%	87%
Animal (except Poultry) Slaughtering	6.1	5%	95%
Flavoring Syrup and Concentrate Manufacturing **	5.7	0%	100%
General Freight Trucking, Long-Distance, Truckload	5.6	27%	73%
Meat Processed from Carcasses	5.5	11%	89%
Wet Corn Milling **	4.9	0%	100%
Plastics Bottle Manufacturing	4.8	9%	91%
Fats and Oils Refining and Blending **	4.7	0%	100%

Note: * indicates that industry sector has <10 jobs as per EMSI; ** indicates that industry sector is not present in the region
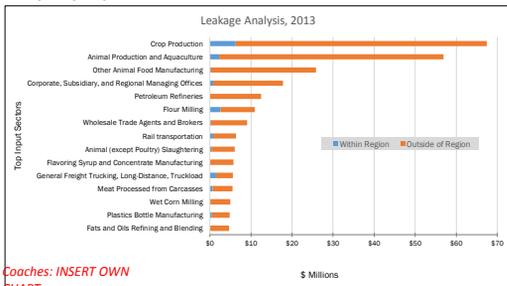
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Source: EMSI Class of Worker 2014.3 (QCEW, non-QCEW, self-employed and extended proprietors).

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Agribusiness, Food Processing and Technology Cluster

Top 15 Inputs by Dollars:

Leakage Analysis, 2013

Coaches: INSERT OWN CHART

Source: EMSI Class of Worker 2014.3 (QCEW, non-QCEW, self-employed and extended proprietors).

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Input Requirements

- What inputs do firms within this cluster purchase?

- Are these purchases made locally or imported from outside the region?

- Are these inputs available locally?

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Plugging the Leaks through Import Substitution

- What inputs are the industries within the cluster purchasing from outside the region (leakages)?

- Does the region currently have capacity for supplying these inputs cost-effectively?

- If yes, why aren't these transactions occurring?

- If no, what are the resources needed to help promote the creation, expansion, retention or attraction of businesses to supply inputs?

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Agribusiness, Food Processing and Technology Cluster

Top Occupations: East Central Indiana Region

Occupations	Jobs 2013	% Change, 2008-2013	Median Hourly Earnings, $ 2013	Entry Level Education
Farmers, Ranchers, and Other Agricultural Managers	1,848	(2%)	$10.5	High school diploma
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	293	37%	$9.8	Less than high school
Packers and Packagers, Hand	133	6%	$10.2	Less than high school
Packaging and Filling Machine Operators and Tenders	107	7%	$12.3	High school diploma
Food Batch-makers	97	(1%)	$10.9	High school diploma
Laborers and Freight, Stock, and Material Movers, Hand	95	22%	$10.6	Less than high school
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	54	(4%)	$21.2	High school diploma
Industrial Truck and Tractor Operators	52	16%	$14.6	Less than high school
First-Line Supervisors of Production and Operating Workers	49	9%	$24.0	Postsecondary non-degree award
Heavy and Tractor-Trailer Truck Drivers	49	20%	$17.0	Postsecondary non-degree award
Helpers-Production Workers	46	0%	$12.9	Less than high school
Animal Trainers	46	39%	$9.7	High school diploma
Nonfarm Animal Caretakers	45	67%	$8.9	Less than high school
Bakers	41	(28%)	$9.5	Less than high school
Bookkeeping, Accounting, and Auditing Clerks	37	6%	$15.2	High school diploma

Coaches: INSERT OWN CHART

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2013

Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

Source: EMSI Class of Worker 2014.3 (QCEW, non-QCEW, self-employed and extended proprietors).

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Workforce Needs

- What types of occupations are needed to fulfill this cluster?
- What is the expected educational attainment for these jobs?
- Are these living wages with benefits?
- Are there training programs in place for these occupations?
- What is needed to meet the workforce demands of this cluster?

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Approaches for Strengthening Clusters

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C.A.R.E. Model

$C_{reation}$	$A_{ttraction}$	$R_{etention}$	$E_{xpansion}$
Foundation of Economic Growth			

Source: Barta, et al (2010) CARE Model

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Starting from a Solid Foundation

$C_{reation}$	$A_{ttraction}$	$R_{etention}$	$E_{xpansion}$
Foundation of Economic Growth			

- Workforce development
- Healthcare
- Public policy

- Physical infrastructure
  - Sufficient housing
  - Adequate transportation systems
  - Broadband access
  - Water & energy

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C.A.R.E.

$C_{reation}$	$A_{ttraction}$	$R_{etention}$	$E_{xpansion}$
Foundation of Economic Growth			

- Are there individuals in the region interested in starting a new business?
- Are there entrepreneurship training programs in place to build capacity?
- Are there channels for accessing capital?

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C.A.R.E

$C_{reation}$	$A_{ttraction}$	$R_{etention}$	$E_{xpansion}$
Foundation of Economic Growth			

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

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C.A.**R**.E.

Creation	**A**ttraction	**R**etention	**E**xpansion

Foundation
of Economic Growth

- What firms are currently contributing to the cluster?

- Are these firms facing any common threats to survival in the region?

- Do these firms need any particular programs, resources, policies in order to continue operation in the region?

C.A.R.**E**.

Creation	**A**ttraction	**R**etention	**E**xpansion

Foundation
of Economic Growth

- Could existing businesses expand to fulfill the needs of the cluster?

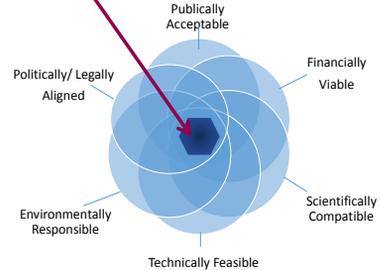- What incentives or resources are needed to help these businesses expand?
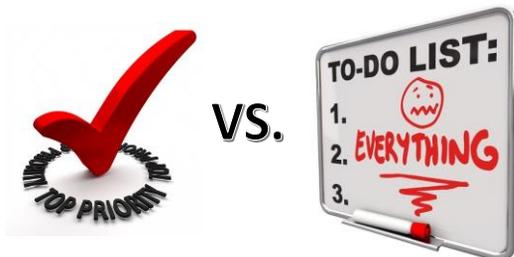

C.A.R.E.: Healthcare Example

CREATE: Entrepreneur starts a transportation service for patients.	**ATTRACT**: Hospital attracts a part-time endocrinologist to fill a void.	**RETENTION**: Marketing firm hired to develop marketing strategies to attract more patients	**EXPANSION**: Part-time cardiologist and diagnostics lab expanded to full time
FOUNDATION Improved access to high speed Internet through a co-op.			

Decision-Making Sweet Spot

Publically Acceptable

Financially Viable

Politically/ Legally Aligned

Scientifically Compatible

Environmentally Responsible

Technically Feasible

Prioritizing Opportunities

VS.

Shaping the Path

- Focused modules

- Additional information

- Other?