



Target Industry Cluster Analysis

Rivers Confluence Region, Iowa-Illinois-Missouri

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01 overview

River Confluence Region, Tri-State

Overview

Rivers Confluence Region

The Rivers Confluence Region is comprised of three counties from three neighboring states: Iowa, Illinois and Missouri. State Highway 61 passes through the central part of the region connecting to I-80 to the north.

- Hancock, IL
- Lee, IA
- Clark, MO



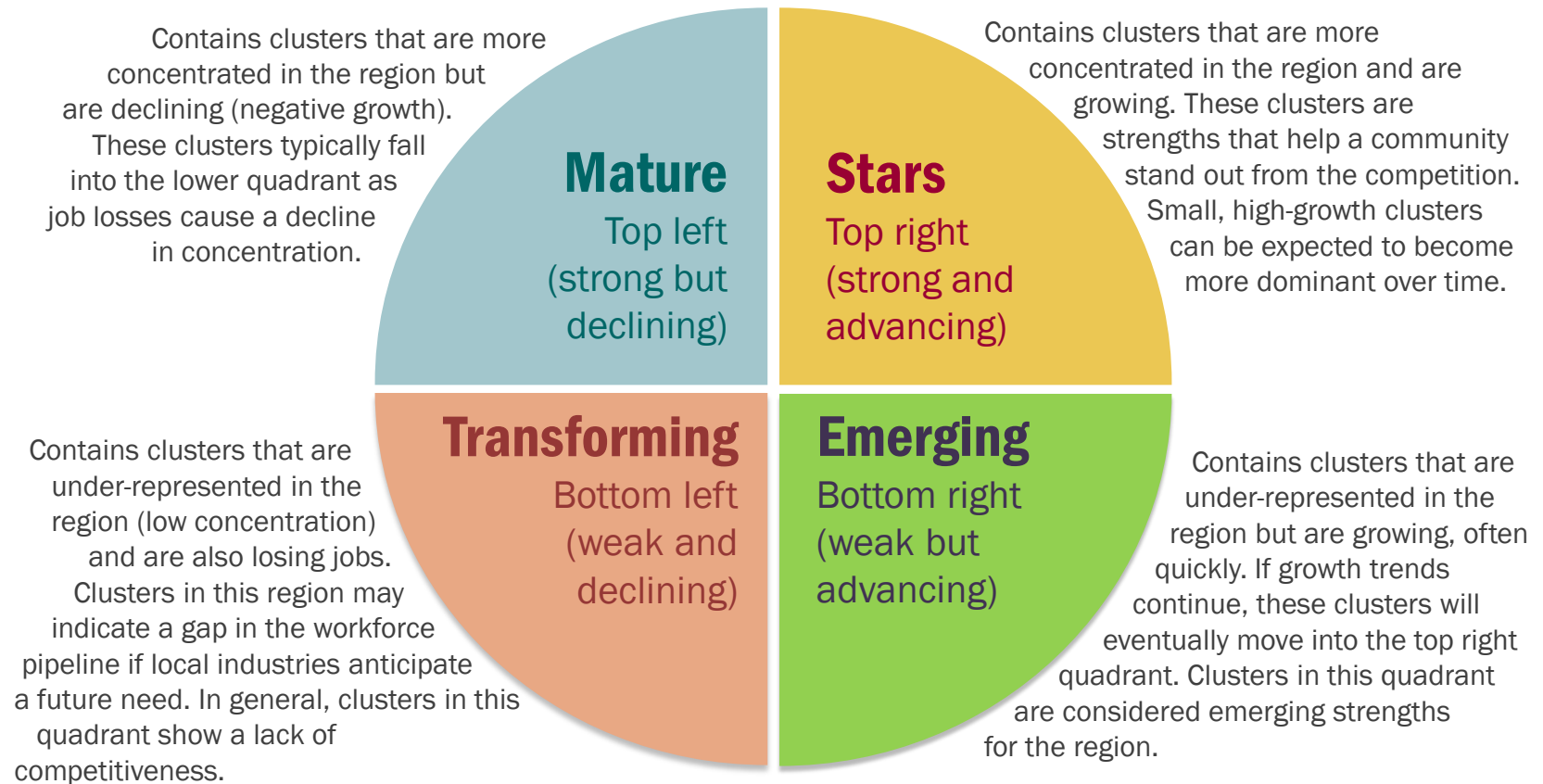
02 Industry cluster analysis

**The River Confluence
Region, Tri-State**

Industry cluster analysis

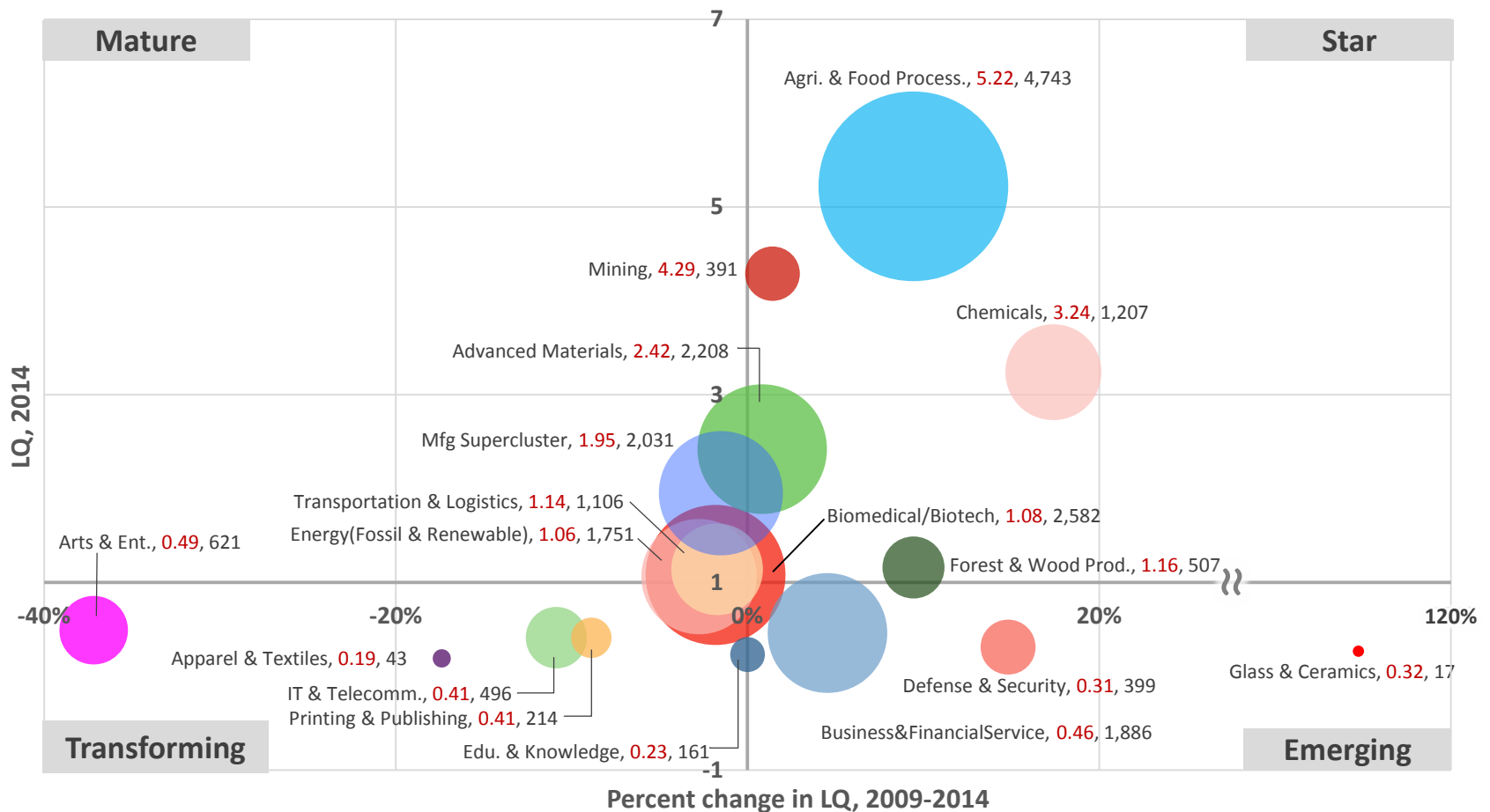
How to interpret cluster data results

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



Industry and occupation

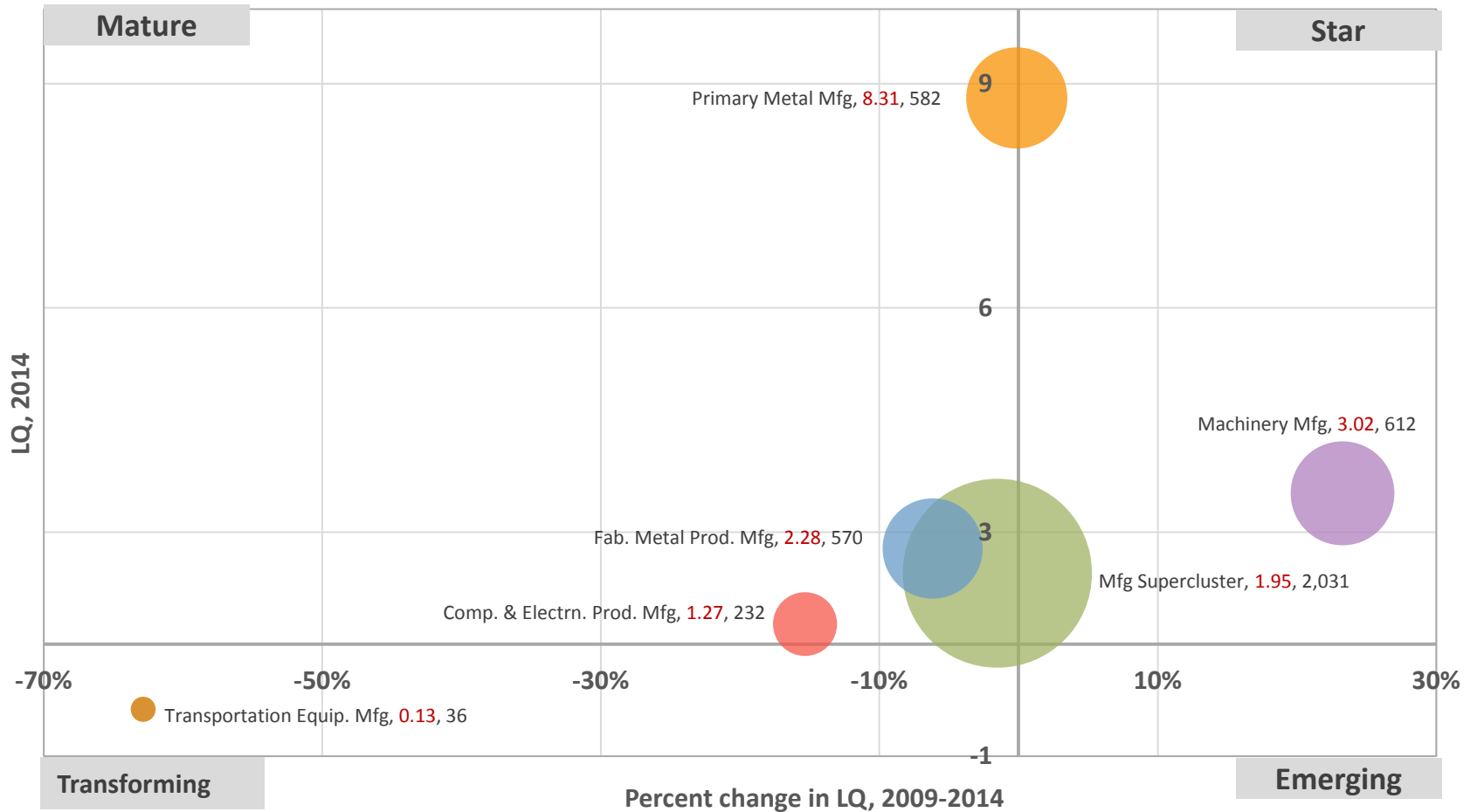
Industry cluster bubble chart



Note: Glass & Ceramics and Apparel & Textiles clusters have too few jobs

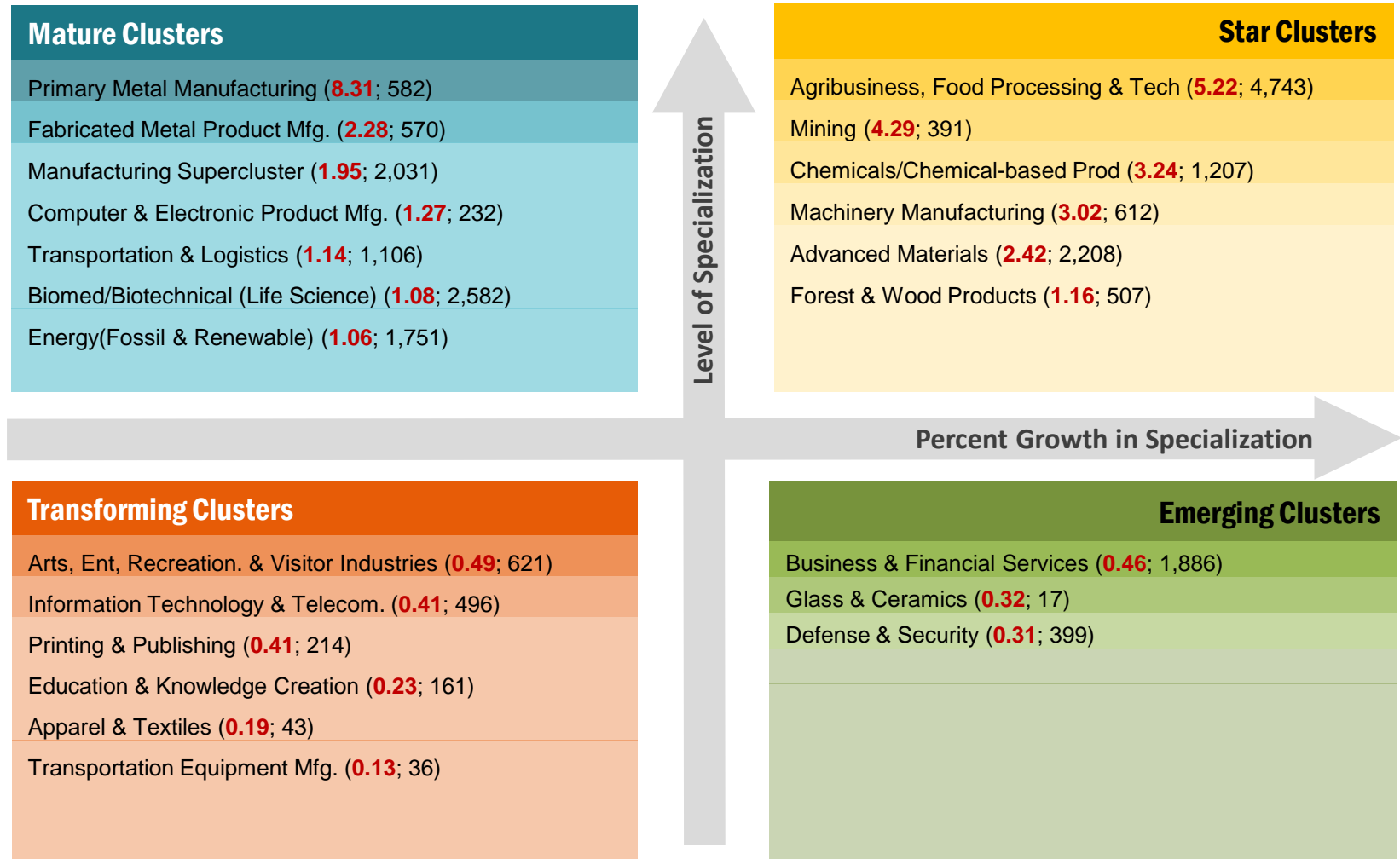
Industry and occupation

Manufacturing sub-cluster bubble chart



Note: Transportation Equipment Manufacturing cluster has too few jobs. Electrical Equipment, Appliance & Component Manufacturing cluster does not exist in the region.

Industry cluster analysis



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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.

Industry and occupation

Bubble chart interpretation

Mature Industries

Seven industry clusters in the Rivers Confluence Region are in the Maturing stage: Primary Metal Mfg., Fabricated Metal Product Mfg., Manufacturing Supercluster, Computer & Electronic Product Mfg., Transportation & Logistics, Biomed/Biotechnical, and Energy. These industries are relatively concentrated, but their growth is trending downward. It is worth noting, however, that the Rivers Confluence 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 Rivers Confluence Region, Arts, Ent, Recreation. & Visitor Industries, Information Technology & Telecom., Printing & Publishing, Education & Knowledge Creation, Apparel & Textiles, Transportation Equipment Mfg., 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. The most highly concentrated of the Star industry clusters in the Rivers Confluence Region is Agribusiness, Food Processing & Technology. Its location quotient is 5.22, indicating that the cluster is 5 times more concentrated in the region compared to the U.S. The other strong clusters in the region are Mining, Chemicals/Chemical-based Products, Machinery Manufacturing, Forest and Wood Product, and Advanced Materials.

Emerging Industries

Industry clusters that may be poised for future growth are classified as “Emerging.” There are three Emerging clusters in the Rivers Confluence Region: Business & Financial Services, Defense & Security and Glass & Ceramics.

03 Target Industry cluster

**Agribusiness, Food
Processing and Technology**

Advanced Materials

**Biomedical/Biotechnical
(Life Sciences)**

Chemicals

Shift-Share Analysis by Top Industry Sectors: The River Confluence Region, IA

Agribusiness, Food Processing and Technology Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Regional Performance, 2009-2014
Animal Production	1,930	142	-182	↑ 94
Wet Corn Milling	747	55	328	-359
Crop Production	411	36	-32	-65
Meat Processed from Carcasses	339	23	-14	↑ 33
Nitrogenous Fertilizer Manufacturing	280	16	9	↑ 44
Farm Supplies Merchant Wholesalers	234	11	0	↑ 76
Soil Preparation, Planting, and Cultivating	178	7	12	↑ 65
Grain and Field Bean Merchant Wholesalers	166	17	6	-82
Farm and Garden Machinery and Equipment Merchant Wholesalers	144	11	-1	-14
Animal (except Poultry) Slaughtering	112	5	-9	↑ 50
Farm Labor Contractors and Crew Leaders	60	4	3	0
Farm Management Services	44	3	4	-7
Other Animal Food Manufacturing	33	2	-2	↑ 4
All Other Miscellaneous Food Manufacturing	14	0	0	↑ 14

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not include detailed sectors for Cotton Ginning

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Top 15 Inputs by Dollars: The River Confluence Region, IA

Agribusiness, Food Processing and Technology Cluster

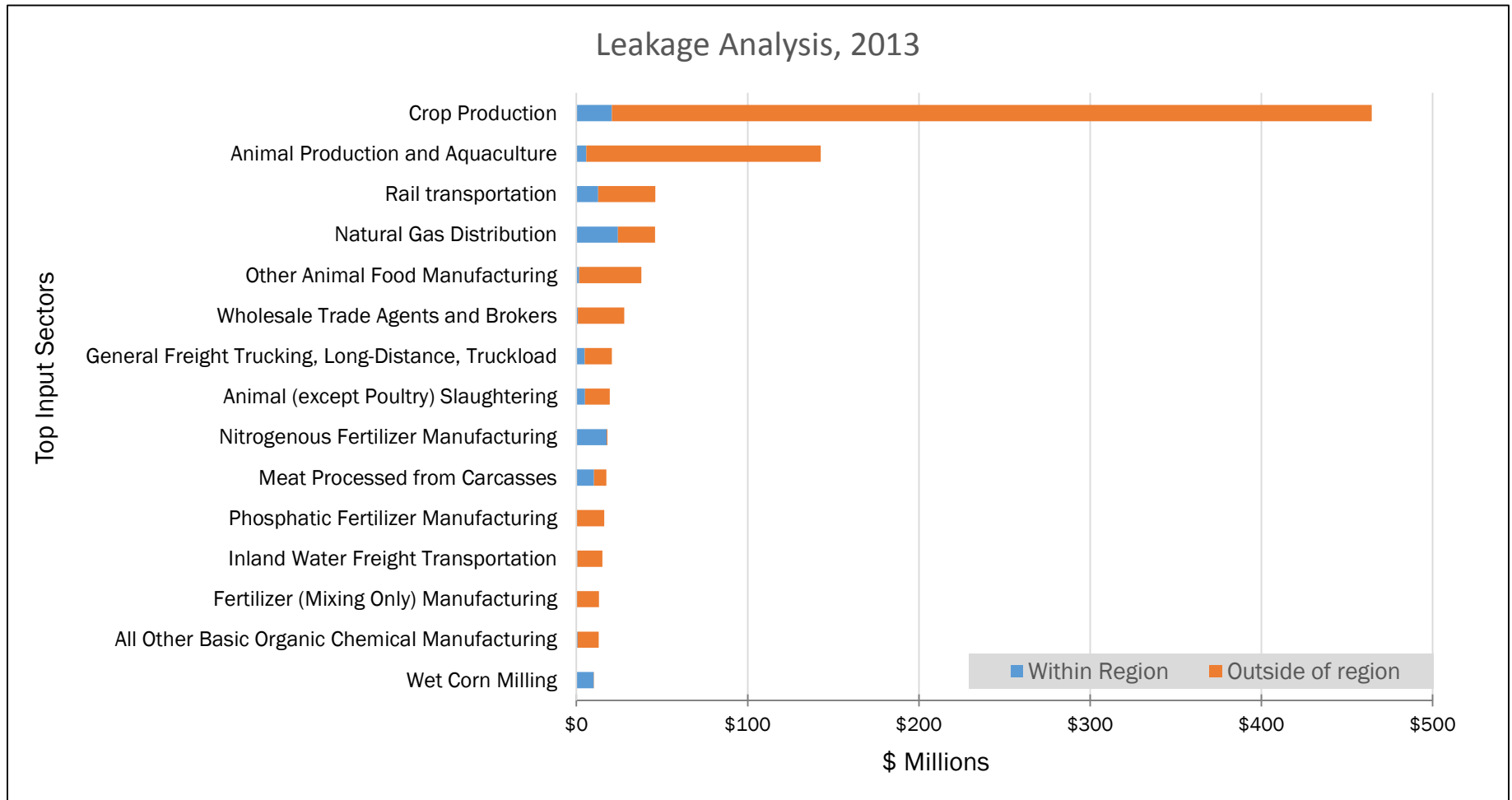
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Crop Production	\$464.47	4%	96%
Animal Production and Aquaculture	\$142.74	4%	96%
Rail transportation	\$46.07	28%	72%
Natural Gas Distribution	\$45.88	53%	47%
Other Animal Food Manufacturing	\$37.86	4%	96%
Wholesale Trade Agents and Brokers	\$27.98	3%	97%
General Freight Trucking, Long-Distance, Truckload	\$20.71	23%	77%
Animal (except Poultry) Slaughtering	\$19.46	26%	74%
Nitrogenous Fertilizer Manufacturing	\$18.02	98%	2%
Meat Processed from Carcasses	\$17.54	58%	42%
Phosphatic Fertilizer Manufacturing **	\$16.21	0%	100%
Inland Water Freight Transportation *	\$15.23	4%	96%
Fertilizer (Mixing Only) Manufacturing **	\$13.11	0%	100%
All Other Basic Organic Chemical Manufacturing	\$12.95	5%	95%
Wet Corn Milling	\$10.19	99%	1%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region.

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Top 15 Inputs by Dollars: The River Confluence Region, IA

Agribusiness, Food Processing and Technology Cluster



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Top Occupations: The River Confluence Region, IA

Agribusiness, Food Processing and Technology Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, \$ 2014	Entry Level Education
Farmers, Ranchers, and Other Agricultural Managers	1,977	-1%	\$10.9	High school diploma or equivalent
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	258	18%	\$10.3	Less than high school
Packaging and Filling Machine Operators and Tenders	165	9%	\$13.8	High school diploma or equivalent
Food Batchmakers	158	7%	\$15.8	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	119	7%	\$13.2	Less than high school
Meat, Poultry, and Fish Cutters and Trimmers	97	24%	\$12.2	Less than high school
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	73	16%	\$21.2	High school diploma or equivalent
Heavy and Tractor-Trailer Truck Drivers	71	15%	\$16.1	Postsecondary non-degree award
Production Workers, All Other	70	17%	\$13.2	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	66	12%	\$23.6	Postsecondary non-degree award
Animal Trainers	61	7%	\$14.5	High school diploma or equivalent
Maintenance and Repair Workers, General	60	13%	\$19.3	High school diploma or equivalent
Nonfarm Animal Caretakers	58	26%	\$12.0	Less than high school
Industrial Machinery Mechanics	55	20%	\$20.5	High school diploma or equivalent
Agricultural Equipment Operators	55	38%	\$16.3	Less than high school

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

Shift-Share Analysis by Top Industry Sectors: The River Confluence Region, IA

Advanced Materials Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Regional Performance, 2009-2014
Rubber Product Manufacturing for Mechanical Use	594	29	32	↑ 158
Steel Foundries (except Investment)	515	42	15	-91
Other Electronic Component Manufacturing	207	23	-34	-83
Paper Bag and Coated and Treated Paper Manufacturing	187	12	-22	↑ 43
All Other Miscellaneous Fabricated Metal Product Manufacturing	172	8	3	↑ 50
Other Basic Inorganic Chemical Manufacturing	149	12	-15	-3
Cutting Tool and Machine Tool Accessory Manufacturing	68	0	1	↑ 60
Aluminum Foundries (except Die-Casting)	67	0	0	↑ 61
Machine Shops	48	8	15	-76
All Other Miscellaneous Chemical Product and Preparation Manufacturing	33	5	1	-33
Paint and Coating Manufacturing	32	3	0	-5
Plate Work Manufacturing	32	3	1	-15
Research and Development in the Social Sciences and Humanities	27	0	0	↑ 27
Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	16	0	0	↑ 16
Other Motor Vehicle Parts Manufacturing	13	6	18	-92

Note: Upward arrow (↑) indicates regional competitiveness.

Top 15 Inputs by Dollars: The River Confluence Region, IA

Advanced Materials Cluster

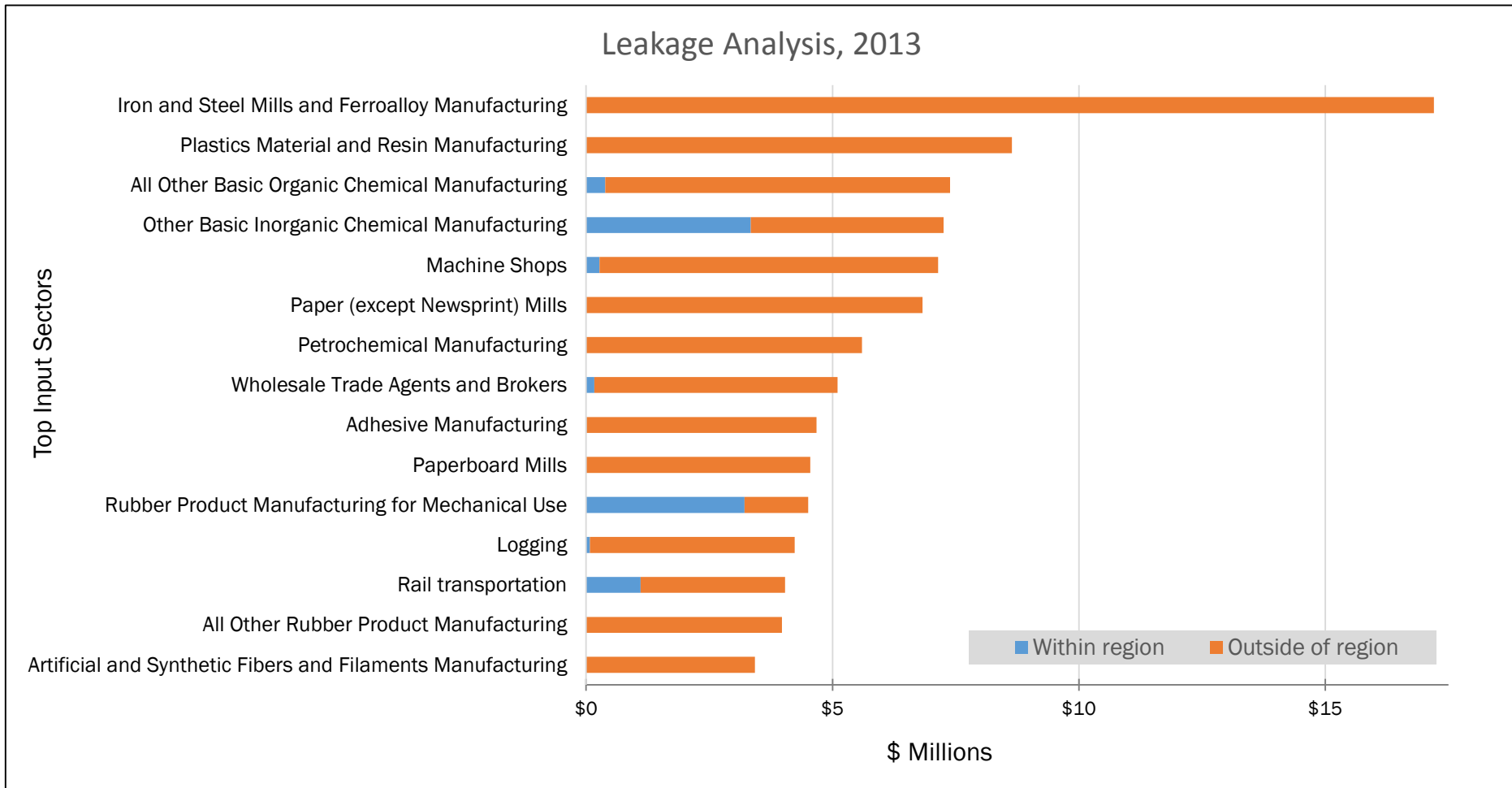
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Iron and Steel Mills and Ferroalloy Manufacturing **	\$17.21	0%	100%
Plastics Material and Resin Manufacturing **	\$8.64	0%	100%
All Other Basic Organic Chemical Manufacturing	\$7.38	5%	95%
Other Basic Inorganic Chemical Manufacturing	\$7.25	46%	54%
Machine Shops	\$7.14	4%	96%
Paper (except Newsprint) Mills **	\$6.82	0%	100%
Petrochemical Manufacturing **	\$5.60	0%	100%
Wholesale Trade Agents and Brokers	\$5.10	3%	97%
Adhesive Manufacturing *	\$4.67	0%	100%
Paperboard Mills **	\$4.55	0%	100%
Rubber Product Manufacturing for Mechanical Use	\$4.50	71%	29%
Logging	\$4.23	2%	98%
Rail transportation	\$4.04	27%	73%
All Other Rubber Product Manufacturing	\$4.00	0%	100%
Artificial and Synthetic Fibers and Filaments Manufacturing	\$3.43	0%	100%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region.

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Top 15 Inputs by Dollars: The River Confluence Region, IA

Advanced Materials Cluster



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Top Occupations: The River Confluence Region, IA

Advanced Materials Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, \$ 2014	Entry Level Education
Production Workers, All Other	103	16%	\$13.2	High school diploma or equivalent
Team Assemblers	91	-6%	\$14.9	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	85	-2%	\$23.6	Postsecondary non-degree award
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	82	3%	\$11.7	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, and Weighers	77	7%	\$17.0	High school diploma or equivalent
Tire Builders	74	57%	\$18.1	High school diploma or equivalent
Machinists	72	-9%	\$17.6	High school diploma or equivalent
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	68	48%	\$14.3	High school diploma or equivalent
Foundry Mold and Coremakers	56	4%	\$15.9	High school diploma or equivalent
Maintenance and Repair Workers, General	55	2%	\$19.3	High school diploma or equivalent
Industrial Machinery Mechanics	46	10%	\$20.5	High school diploma or equivalent
Computer-Controlled Machine Tool Operators, Metal and Plastic	40	-2%	\$18.9	High school diploma or equivalent
Welders, Cutters, Solderers, and Brazers	35	-10%	\$17.8	High school diploma or equivalent
General and Operations Managers	35	-3%	\$32.3	Bachelor's degree
Laborers and Freight, Stock, and Material Movers, Hand	33	-3%	\$13.2	Less than high school

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

Shift-Share Analysis by Top Industry Sectors: The River Confluence Region, IA

Biomedical/Biotechnical (Life Sciences) Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Regional Performance, 2009-2014
General Medical and Surgical Hospitals	950	87	-54	-226
Nursing Care Facilities (Skilled Nursing Facilities)	512	49	-46	-137
Assisted Living Facilities for the Elderly	267	9	9	↑ 137
Home Health Care Services	253	16	42	-20
Pharmacies and Drug Stores	161	12	-15	↑ 8
Other Residential Care Facilities	99	2	-3	↑ 74
Ambulance Services	63	5	2	-8
All Other Health and Personal Care Stores	54	4	1	-7
Residential Mental Health and Substance Abuse Facilities	42	0	0	↑ 40
Outpatient Mental Health and Substance Abuse Centers	39	5	8	-36
Residential Intellectual and Developmental Disability Facilities	38	1	0	↑ 26
Research and Development in the Social Sciences and Humanities	27	0	0	↑ 27
Kidney Dialysis Centers	21	0	1	↑ 15
Cosmetics, Beauty Supplies, and Perfume Stores	18	1	1	-3

Note: Upward arrow (↑) indicates regional competitiveness. EMSI estimates show no jobs for Dental Laboratories.

Top 15 Inputs by Dollars: The River Confluence Region, IA

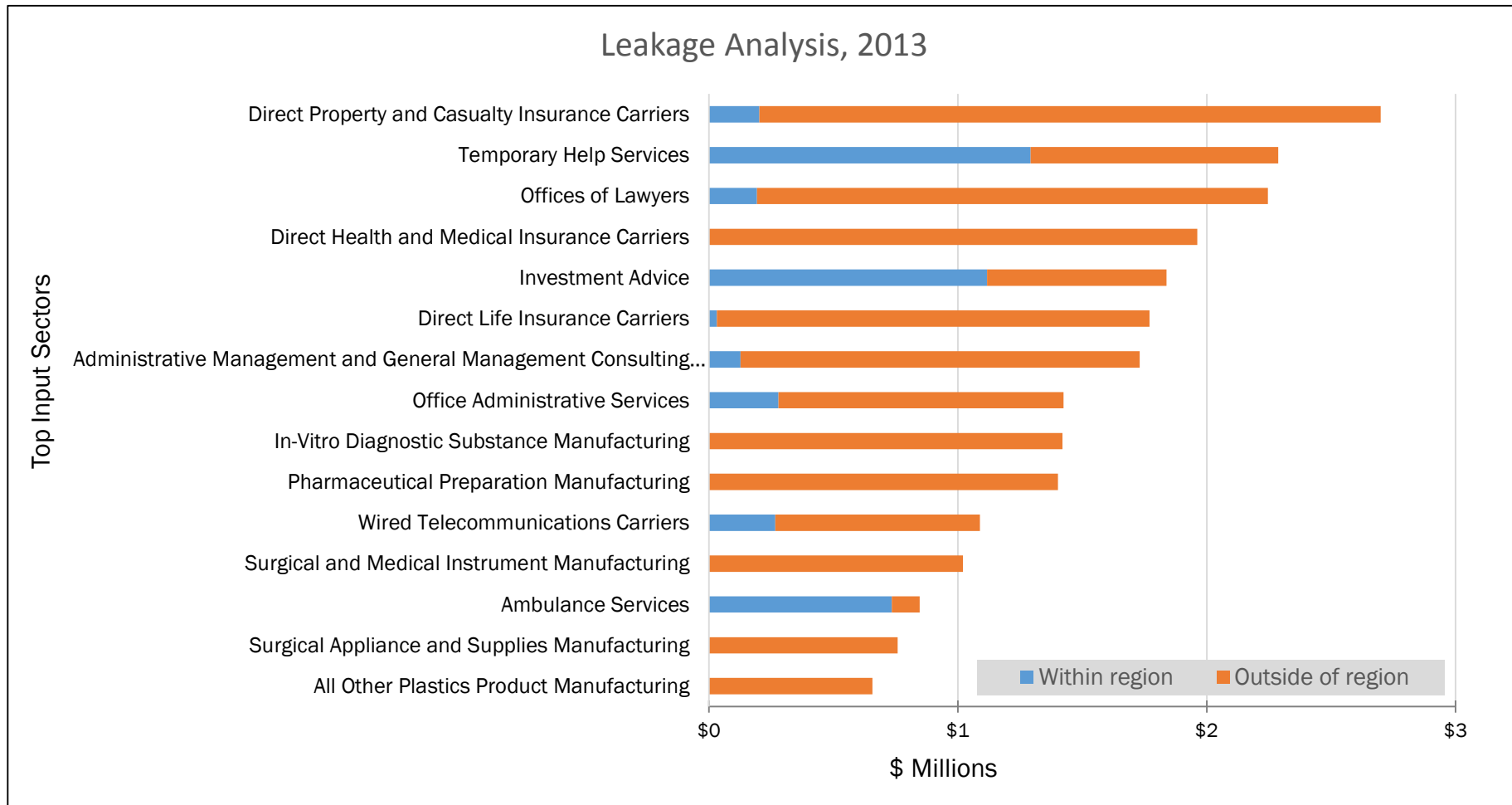
Biomedical/Biotechnical (Life Sciences) Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Direct Property and Casualty Insurance Carriers	\$2.70	8%	92%
Temporary Help Services	\$2.29	57%	43%
Offices of Lawyers	\$2.25	9%	91%
Direct Health and Medical Insurance Carriers **	\$1.96	0%	100%
Investment Advice	\$1.84	61%	39%
Direct Life Insurance Carriers *	\$1.77	2%	98%
Administrative Management and General Management Consulting Services	\$1.73	7%	93%
Office Administrative Services	\$1.42	20%	80%
In-Vitro Diagnostic Substance Manufacturing **	\$1.42	0%	100%
Pharmaceutical Preparation Manufacturing**	\$1.40	0%	100%
Wired Telecommunication Carriers	\$1.09	24%	76%
Surgical and Medical Instrument Manufacturing**	\$1.02	0%	100%
Ambulance Services	\$0.85	87%	13%
Surgical Appliance and Supplies Manufacturing**	\$0.76	0%	100%
All Other Plastics Product Manufacturing**	\$0.66	0%	100%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region.

Top 15 Inputs by Dollars: The River Confluence Region, IA

Biomedical/Biotechnical (Life Sciences) Cluster



Note: Top 15 related input sectors are included. Large supply chain gaps such as petroleum refineries are excluded.

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Top Occupations: The River Confluence Region, IA

Biomedical/Biotechnical (Life Sciences) Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, \$ 2014	Entry Level Education
Nursing Assistants	412	-8%	\$10.4	Postsecondary non-degree award
Registered Nurses	384	-13%	\$23.5	Associate's degree
Home Health Aides	188	40%	\$8.7	Less than high school
Personal Care Aides	117	41%	\$8.8	Less than high school
Licensed Practical and Licensed Vocational Nurses	94	-5%	\$16.3	Postsecondary non-degree award
Maids and Housekeeping Cleaners	82	-2%	\$7.9	Less than high school
Pharmacy Technicians	72	4%	\$12.6	High school diploma or equivalent
Cooks, Institution and Cafeteria	64	12%	\$9.8	Less than high school
Emergency Medical Technicians and Paramedics	53	-5%	\$14.7	Postsecondary non-degree award
Medical and Health Services Managers	52	-9%	\$29.9	Bachelor's degree
Food Servers, Nonrestaurant	46	10%	\$9.1	Less than high school
Pharmacists	39	-3%	\$50.8	Doctoral or professional degree
Retail Salespersons	38	-3%	\$10.7	Less than high school
Cashiers	35	-3%	\$8.8	Less than high school
Radiologic Technologists	26	-13%	\$20.2	Associate's degree

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

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Shift-Share Analysis by Top Industry Sectors: The River Confluence Region, IA

Chemicals Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Regional Performance, 2009-2014
Rubber Product Manufacturing for Mechanical Use	594	29	32	↑ 158
Nitrogenous Fertilizer Manufacturing	280	16	9	↑ 44
Other Basic Inorganic Chemical Manufacturing	149	12	-15	-3
Plastics Pipe and Pipe Fitting Manufacturing	47	2	-1	↑ 24
All Other Miscellaneous Chemical Product and Preparation Manufacturing	33	5	1	-33
Paint and Coating Manufacturing	32	3	0	-5
Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	22	1	-1	↑ 9
Ready-Mix Concrete Manufacturing	15	1	-2	-1
All Other Basic Organic Chemical Manufacturing	12	5	1	-65

Note: Upward arrow (↑) indicates regional competitiveness. EMSI estimates show no jobs for Adhesive Manufacturing; Polystyrene Foam Product Manufacturing; Pottery, Ceramics, and Plumbing Fixture Manufacturing; Other Pressed and Blown Glass and Glassware Manufacturing; Glass Product Manufacturing Made of Purchased Glass; and Other Concrete Product Manufacturing in Chemicals Cluster. Chemical cluster in River Confluence Region is comprised of few industry sectors.

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Top 15 Inputs by Dollars: The River Confluence Region, IA

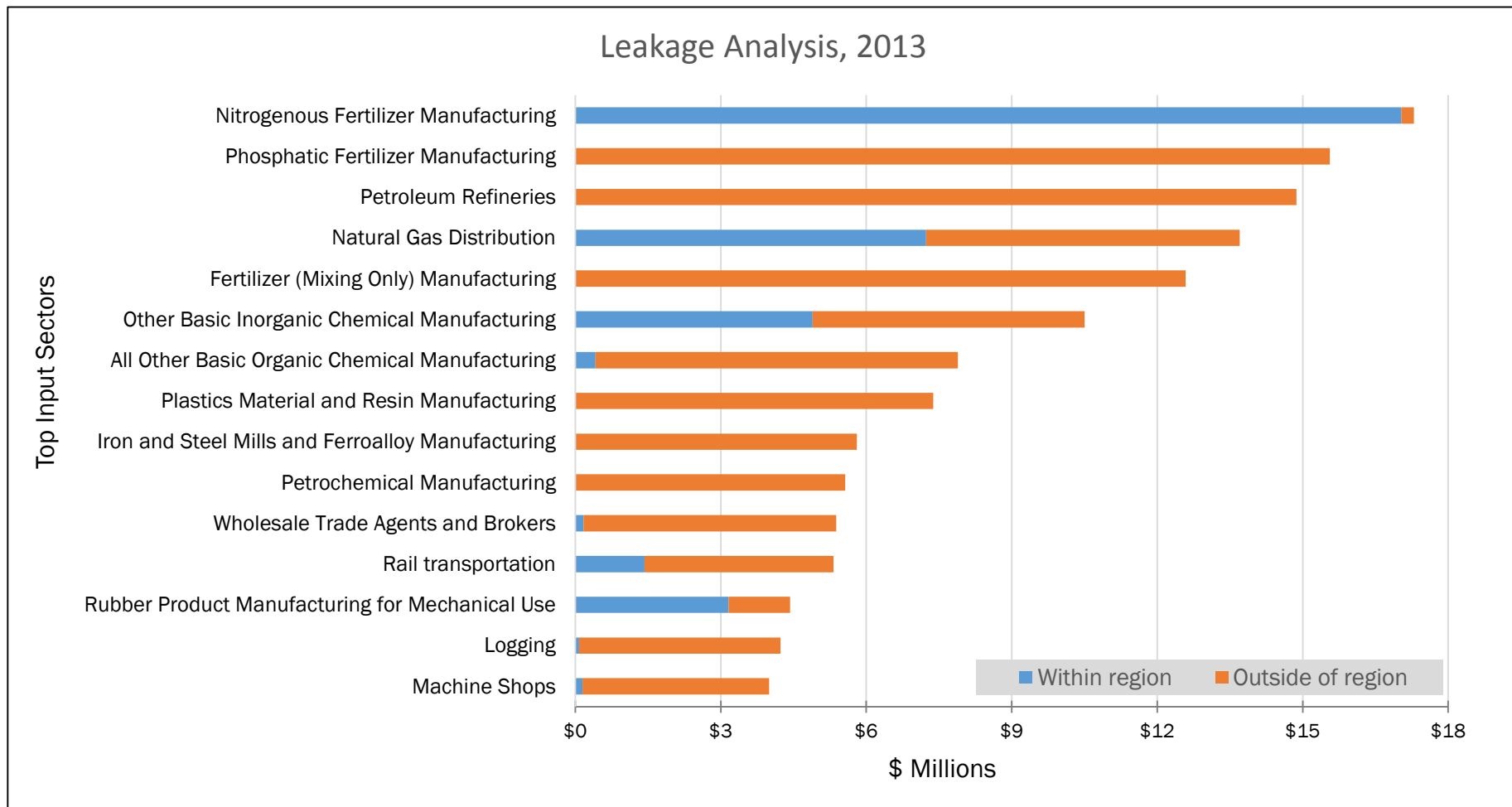
Chemicals Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Nitrogenous Fertilizer Manufacturing	\$17.29	99%	1%
Phosphatic Fertilizer Manufacturing **	\$15.56	0%	100%
Petroleum Refineries **	\$14.87	0%	100%
Natural Gas Distribution	\$13.70	53%	47%
Fertilizer (Mixing Only) Manufacturing **	\$12.59	0%	100%
Other Basic Inorganic Chemical Manufacturing	\$10.50	47%	53%
All Other Basic Organic Chemical Manufacturing	\$7.89	5%	95%
Plastics Material and Resin Manufacturing **	\$7.38	0%	100%
Iron and Steel Mills and Ferroalloy Manufacturing **	\$5.81	0%	100%
Petrochemical Manufacturing **	\$5.57	0%	100%
Wholesale Trade Agents and Brokers	\$5.38	3%	97%
Rail transportation	\$5.33	27%	73%
Rubber Product Manufacturing for Mechanical Use	\$4.43	71%	29%
Logging	\$4.23	2%	98%
Machine Shops	\$4.00	4%	96%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region.

Top 15 Inputs by Dollars: The River Confluence Region, IA

Chemicals Cluster



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Top Occupations: The River Confluence Region, IA

Chemicals Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, \$ 2014	Entry Level Education
Chemical Plant and System Operators	80	10%	\$22.2	High school diploma or equivalent
Tire Builders	74	57%	\$18.1	High school diploma or equivalent
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	68	51%	\$14.3	High school diploma or equivalent
Production Workers, All Other	61	24%	\$13.2	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	46	12%	\$23.6	Postsecondary non-degree award
Mixing and Blending Machine Setters, Operators, and Tenders	45	5%	\$15.2	High school diploma or equivalent
Team Assemblers	42	27%	\$14.9	High school diploma or equivalent
Heavy and Tractor-Trailer Truck Drivers	39	22%	\$16.1	Postsecondary non-degree award
Maintenance and Repair Workers, General	37	16%	\$19.3	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, and Weighers	36	38%	\$17.0	High school diploma or equivalent
Chemical Equipment Operators and Tenders	34	-19%	\$23.0	High school diploma or equivalent
Packaging and Filling Machine Operators and Tenders	33	-3%	\$13.8	High school diploma or equivalent
Industrial Machinery Mechanics	32	23%	\$20.5	High school diploma or equivalent
Cutting and Slicing Machine Setters, Operators, and Tenders	23	53%	\$16.1	High school diploma or equivalent
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	22	16%	\$11.7	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

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Report Contributors

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