



Target Industry Cluster Analysis

SEMO Region, Missouri

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01 overview

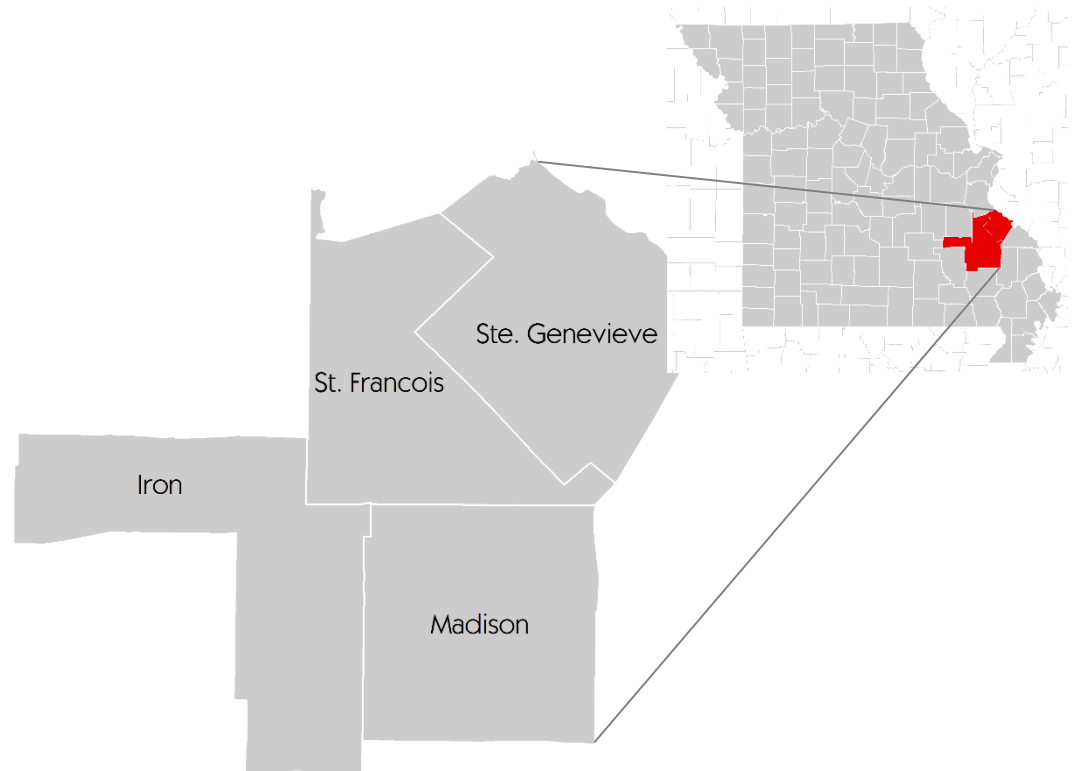
SEMO Region, MO

Overview

SEMO Region

The SEMO region is comprised of four Missouri counties. Ste. Genevieve County forms the border with Illinois.

- Iron
- Madison
- Ste. Genevieve
- St. Francois



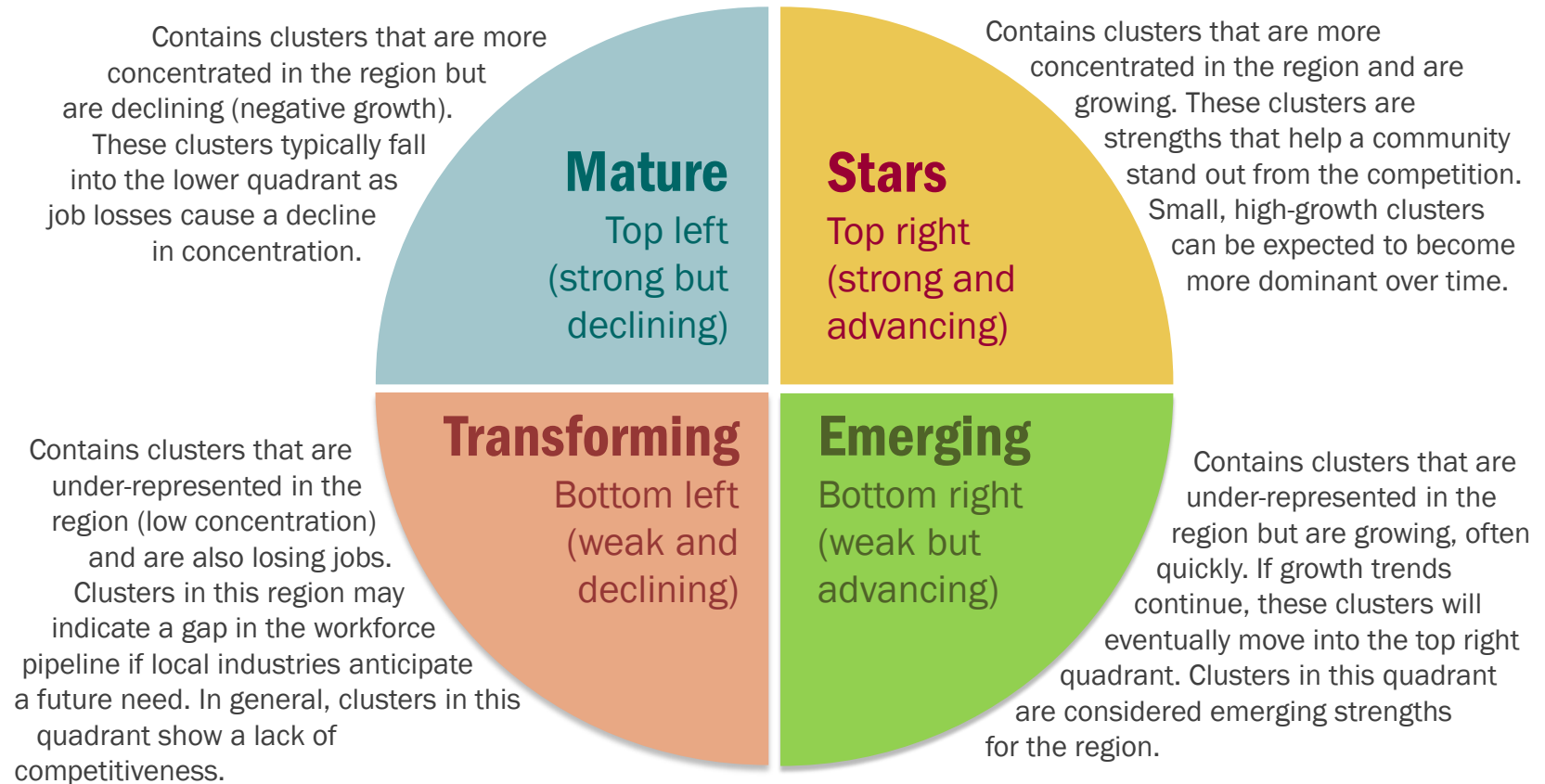
02 industry cluster analysis

SEMO Region, MO

Industry cluster analysis

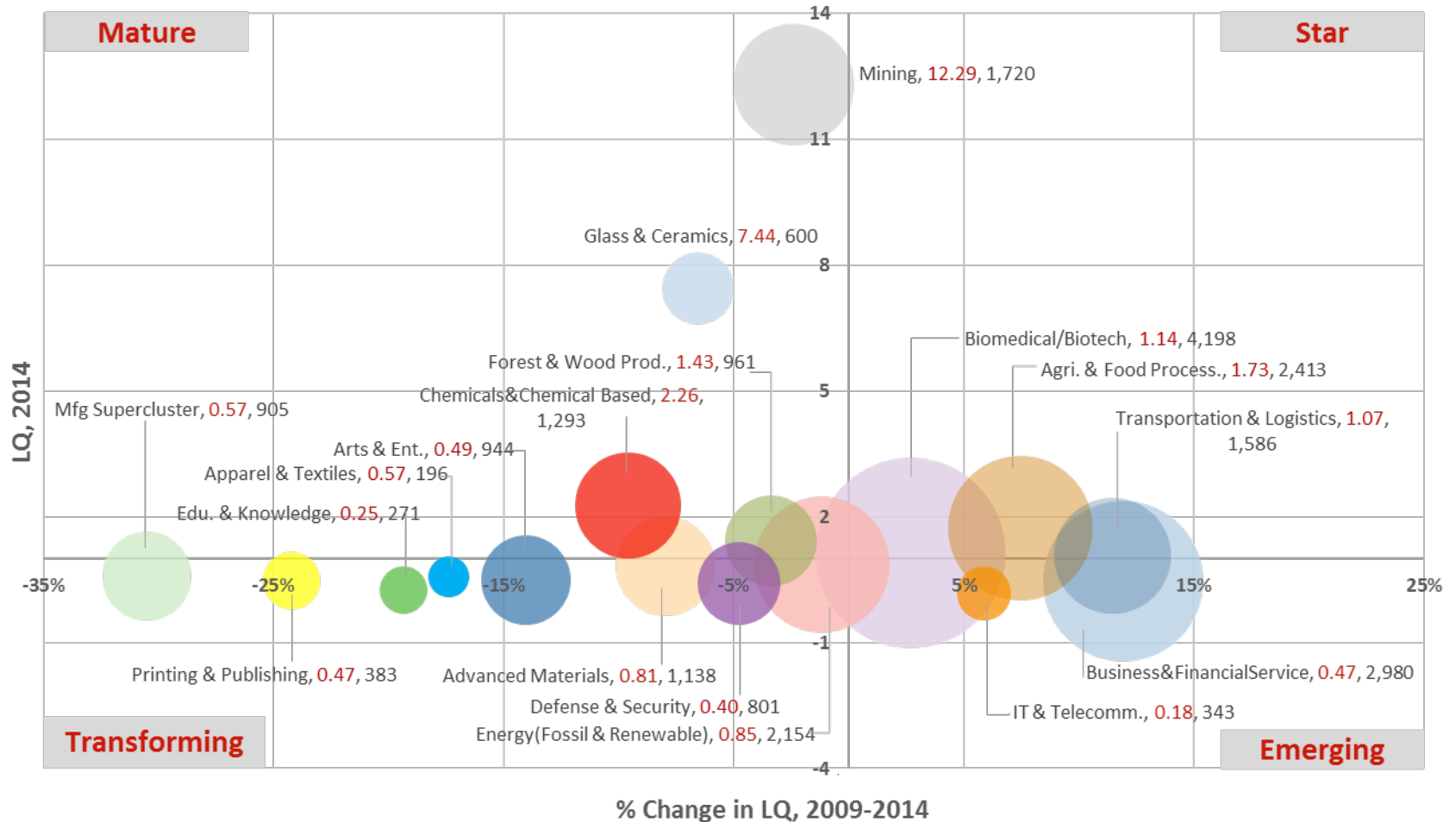
How to interpret cluster data results

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



Industry cluster analysis

Cluster bubble chart, 2009-2014

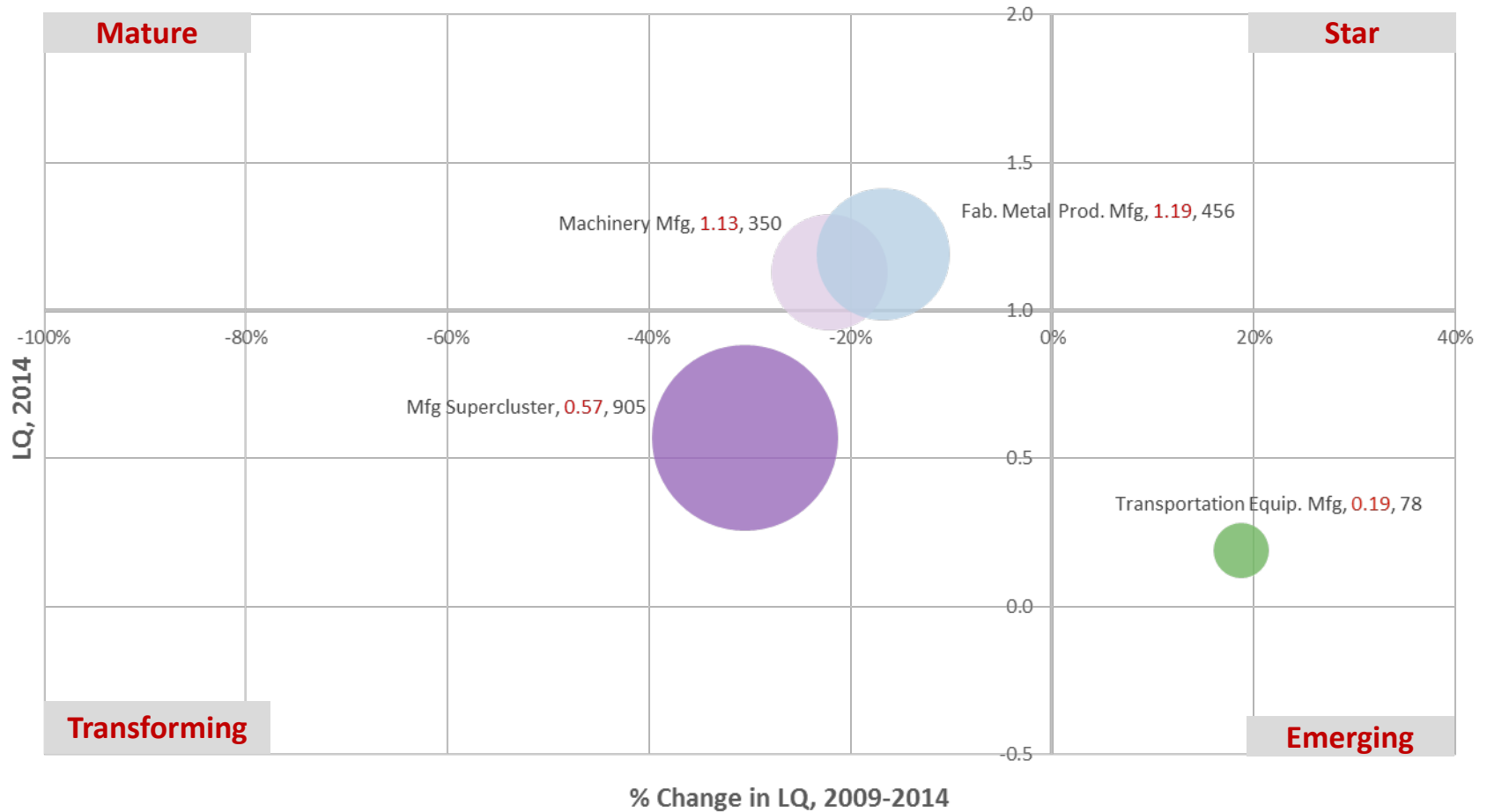


* Note: Label includes cluster name, LQ 2014, and Employment 2014

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Industry cluster analysis

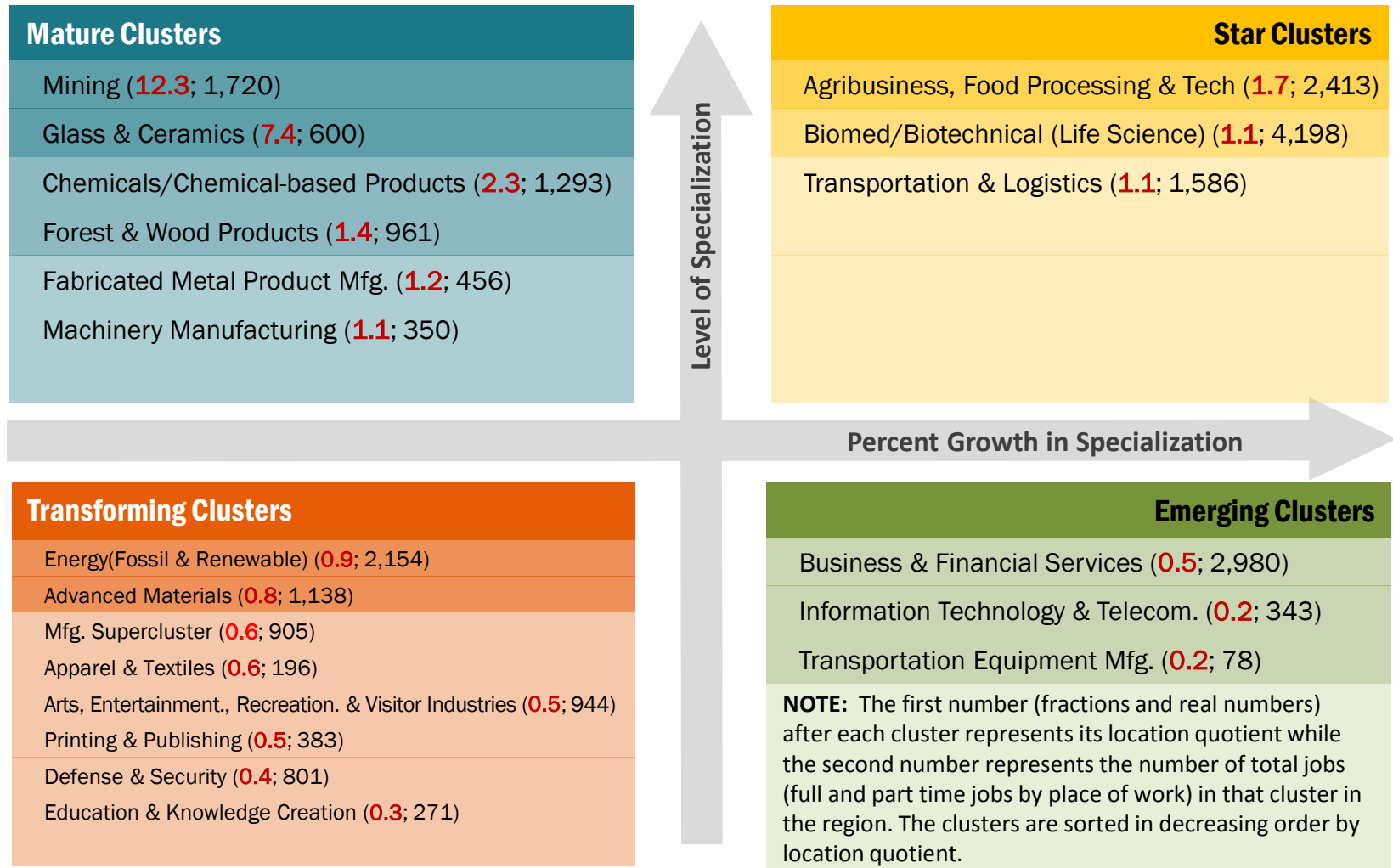
Manufacturing sub-cluster, 2009-2014



* Note: Label includes cluster name, LQ 2014, and Employment 2014;

section 02

Industry cluster analysis, 2009-2014



Note: Computer & Electronic Product does not exist; Electrical Equipment & Appliances and Primary Metal Mfg. have too less number of jobs.

Industry cluster analysis

Bubble chart interpretation

Mature Industries

Six industry clusters in the SEMO Region are in the Maturing stage: Mining, Glass & Ceramics, Chemicals/Chemical-based Products, Forest & Wood Products, Fabricated Metal Product Mfg. and Machinery Manufacturing. These industries are relatively concentrated, but their growth is trending downward. It is worth noting, however, that the SEMO 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 SEMO Region nine clusters are in this group with Energy, Advanced Materials, Manufacturing Supercluster, and Arts, Entertainment, Recreation & Visitor Industries being the largest by employment. However, 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 SEMO Region are Agribusiness, Food Processing & Technology, Biomedical/Biotechnical (Life Science), and Transportation & Logistics clusters.

Emerging Industries

Industry clusters that may be poised for future growth are classified as “Emerging.” There are three clusters in the region: Business & Financial Services, Transportation Equipment Manufacturing, and Information Technology & Telecommunications.

03 target industry clusters

**Biomedical/Biotechnical
(Life Sciences)**

Mining

**Transportation Equipment
Manufacturing**

**Agribusiness, Food
Processing and Technology**

Forest and Wood Products

Shift-Share Analysis by Top Industry Sectors: SEMO Region, MO

Biomedical/Biotechnical (Life Sciences) Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Cumulative Expected Growth	Regional Performance, 2009-2014
Nursing Care Facilities (Skilled Nursing Facilities)	1,198	85	-79	6	↑ 78
General Medical and Surgical Hospitals	713	61	-38	23	-109
Home Health Care Services	625	37	97	134	0
Pharmacies and Drug Stores	282	24	-31	-7	-33
Specialty (except Psychiatric and Substance Abuse) Hospitals	240	7	2	9	↑ 135
Continuing Care Retirement Communities	205	17	20	37	-50
Residential Intellectual and Developmental Disability Facilities	180	12	1	13	↑ 15
Assisted Living Facilities for the Elderly	149	14	14	28	-64
Other Residential Care Facilities	93	7	-10	-3	↑ 6
Kidney Dialysis Centers	82	5	9	14	↑ 7
All Other Outpatient Care Centers	80	8	23	31	-51
Residential Mental Health and Substance Abuse Facilities	75	4	3	7	↑ 20
Outpatient Mental Health and Substance Abuse Centers	60	3	5	8	↑ 8
Ambulance Services	33	3	1	4	-11
All Other Health and Personal Care Stores	32	2	1	3	↑ 4

Note: Upward arrow (↑) indicates regional competitiveness.

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Top 15 Inputs by Dollars: SEMO Region, MO

Biomedical/Biotechnical (Life Sciences) Cluster

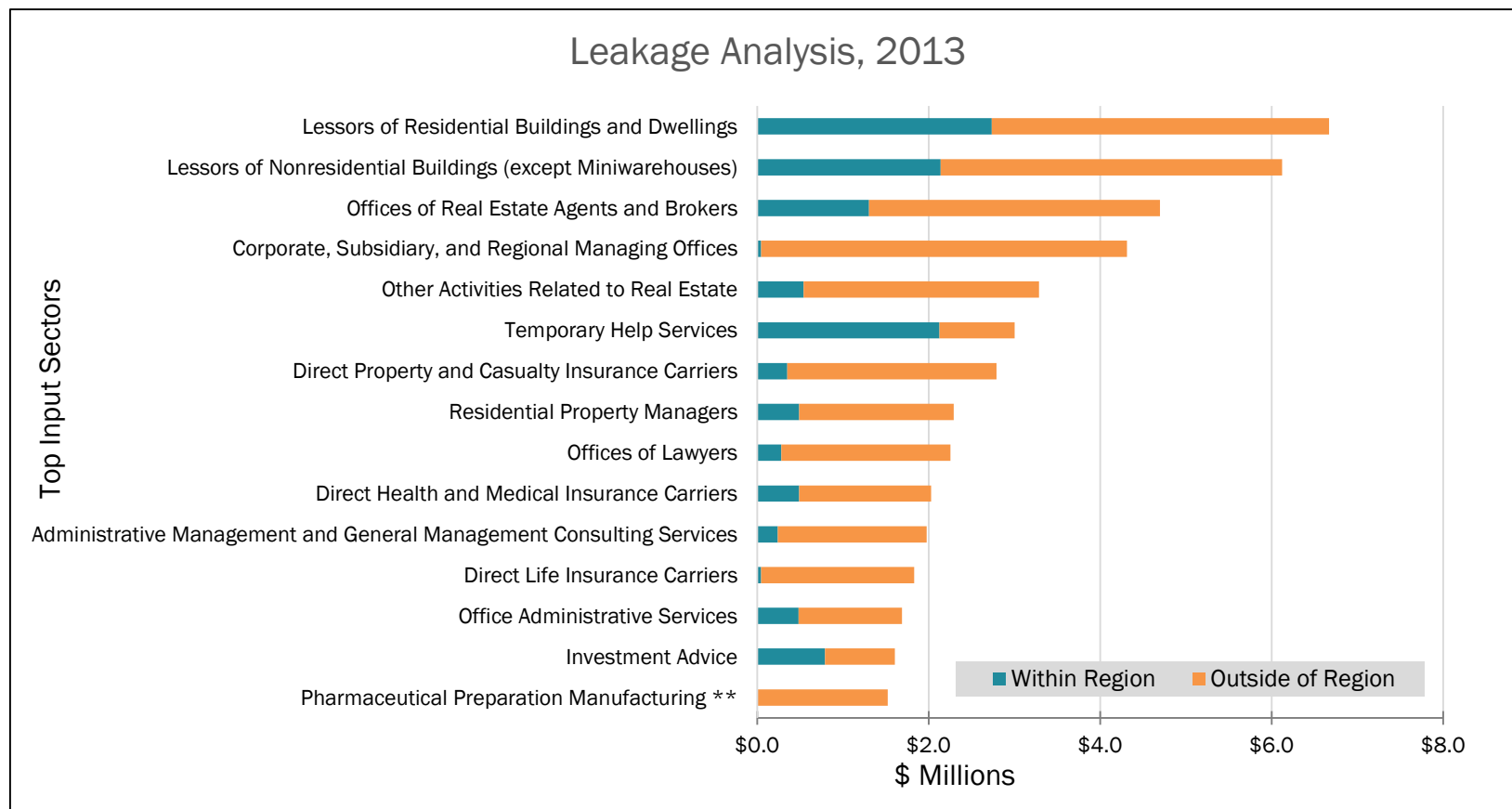
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Lessors of Residential Buildings and Dwellings	\$6.67	41%	59%
Lessors of Nonresidential Buildings (except Miniwarehouses)	\$6.12	35%	65%
Offices of Real Estate Agents and Brokers	\$4.70	28%	72%
Corporate, Subsidiary, and Regional Managing Offices	\$4.31	1%	99%
Other Activities Related to Real Estate	\$3.29	17%	83%
Temporary Help Services	\$3.00	71%	29%
Direct Property and Casualty Insurance Carriers	\$2.79	13%	87%
Residential Property Managers	\$2.29	21%	79%
Offices of Lawyers	\$2.26	12%	88%
Direct Health and Medical Insurance Carriers	\$2.03	24%	76%
Administrative Management and General Management Consulting Services	\$1.98	12%	88%
Direct Life Insurance Carriers *	\$1.83	3%	97%
Office Administrative Services	\$1.69	29%	71%
Investment Advice	\$1.61	49%	51%
Pharmaceutical Preparation Manufacturing **	\$1.52	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: SEMO Region, MO

Biomedical/Biotechnical (Life Sciences) Cluster



Note: ** industry sector is not present in the region .

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Top Occupations: SEMO Region, MO

Biomedical/Biotechnical (Life Sciences) Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, 2014	Entry Level Education
Nursing Assistants	696	6%	\$9.8	Postsecondary non-degree award
Registered Nurses	575	8%	\$23.3	Associate's degree
Personal Care Aides	275	19%	\$9.2	Less than high school
Licensed Practical and Licensed Vocational Nurses	270	12%	\$16.7	Postsecondary non-degree award
Home Health Aides	154	22%	\$9.2	Less than high school
Pharmacy Technicians	131	-8%	\$12.8	High school diploma or equivalent
Maids and Housekeeping Cleaners	129	2%	\$7.9	Less than high school
Cooks, Institution and Cafeteria	111	4%	\$9.2	Less than high school
Cashiers	70	-15%	\$8.8	Less than high school
Medical Secretaries	65	16%	\$11.9	High school diploma or equivalent
Office Clerks, General	61	5%	\$11.1	High school diploma or equivalent
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	60	11%	\$11.1	High school diploma or equivalent
Mental Health and Substance Abuse Social Workers	54	38%	\$19.9	Bachelor's degree
Pharmacists	54	-5%	\$66.4	Doctoral or professional degree
Maintenance and Repair Workers, General	51	4%	\$13.5	High school diploma or equivalent

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: SEMO Region, MO

Mining Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Cumulative Expected Growth	Regional Performance, 2009-2014
Lead Ore and Zinc Ore Mining	792	50	382	432	-304
Crushed and Broken Limestone Mining and Quarrying	357	39	-11	28	-185
Rail transportation	251	14	12	26	↑ 34
Support Activities for Metal Mining	168	6	21	27	↑ 67
Dimension Stone Mining and Quarrying	91	4	2	6	↑ 26
Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	32	2	4	6	↑ 4
Crushed and Broken Granite Mining and Quarrying	16	1	2	3	↑ 2

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not show sufficient jobs for Iron Ore Mining; Construction Sand and Gravel Mining; Industrial Sand Mining; and Support Activities for Nonmetallic Minerals (except Fuels) Mining.

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Top 15 Inputs by Dollars: SEMO Region, MO

Mining Cluster

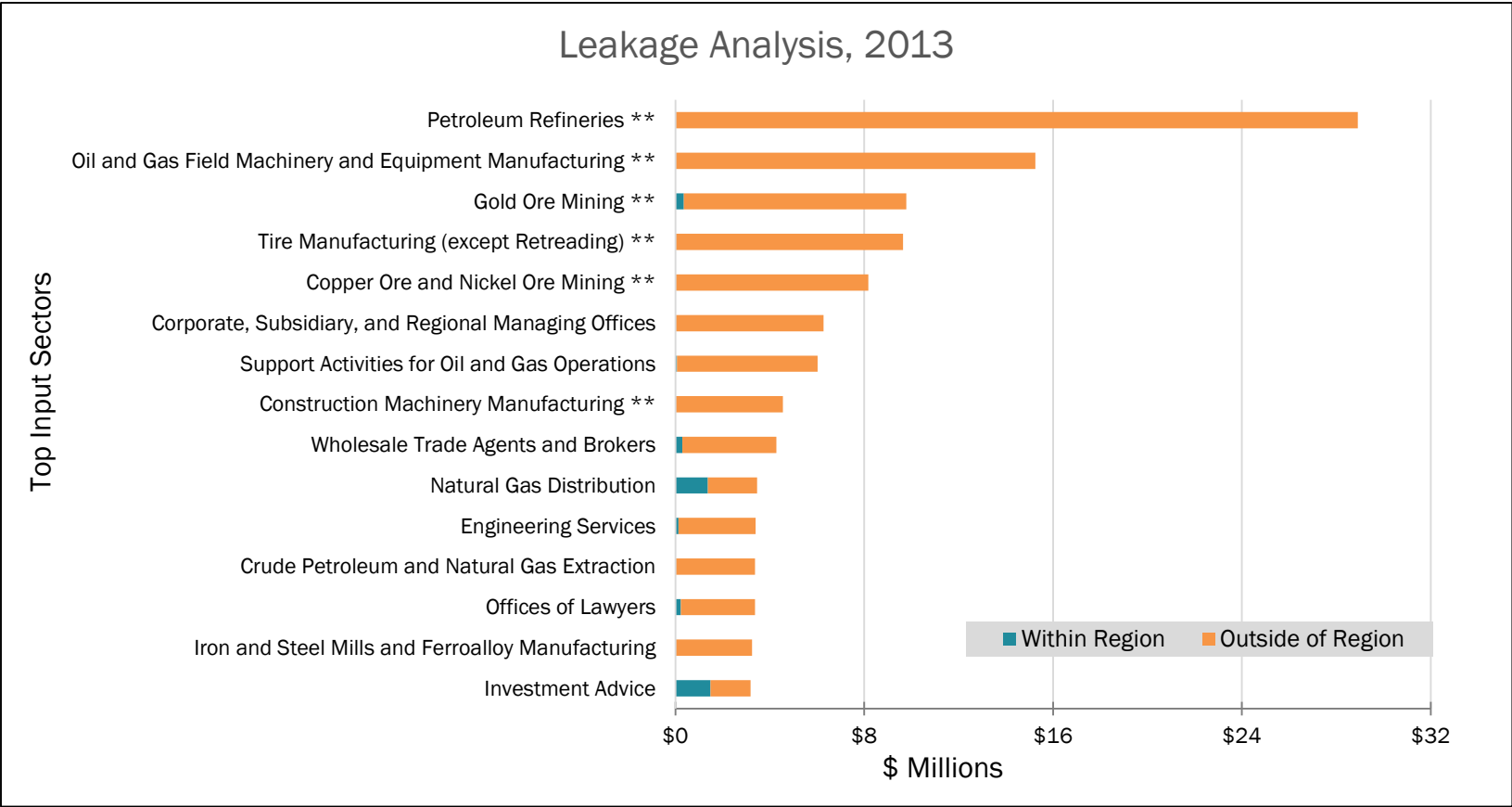
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Petroleum Refineries **	\$28.91	0%	100%
Oil and Gas Field Machinery and Equipment Manufacturing **	\$15.26	0%	100%
Gold Ore Mining **	\$9.78	4%	96%
Tire Manufacturing (except Retreading) **	\$9.64	0%	100%
Copper Ore and Nickel Ore Mining **	\$8.17	0%	100%
Corporate, Subsidiary, and Regional Managing Offices	\$6.27	0%	100%
Support Activities for Oil and Gas Operations *	\$6.03	1%	99%
Construction Machinery Manufacturing **	\$4.56	0%	100%
Wholesale Trade Agents and Brokers	\$4.28	7%	93%
Natural Gas Distribution	\$3.46	40%	60%
Engineering Services	\$3.40	4%	96%
Crude Petroleum and Natural Gas Extraction	\$3.38	0%	100%
Offices of Lawyers	\$3.37	7%	93%
Iron and Steel Mills and Ferroalloy Manufacturing *	\$3.25	0%	100%
Investment Advice	\$3.19	47%	53%

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: SEMO Region, MO

Mining Cluster



Note: ** industry sector is not present in the region .

section 03

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

Top Occupations: SEMO Region, MO

Mining Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, 2014	Entry Level Education
Heavy and Tractor-Trailer Truck Drivers	149	7%	\$14.3	Postsecondary non-degree award
Excavating and Loading Machine and Dragline Operators	108	-6%	\$16.5	High school diploma or equivalent
Industrial Machinery Mechanics	88	31%	\$23.6	High school diploma or equivalent
Rock Splitters, Quarry	80	-15%	\$18.3	High school diploma or equivalent
Operating Engineers and Other Construction Equipment Operators	71	-3%	\$19.2	High school diploma or equivalent
Continuous Mining Machine Operators	51	4%	\$16.3	High school diploma or equivalent
Helpers--Production Workers	43	23%	\$9.9	Less than high school
Railroad Conductors and Yardmasters	43	30%	\$26.0	High school diploma or equivalent
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	41	17%	\$21.1	High school diploma or equivalent
Locomotive Engineers	40	33%	\$23.7	High school diploma or equivalent
Mobile Heavy Equipment Mechanics, Except Engines	39	5%	\$22.3	High school diploma or equivalent
General and Operations Managers	33	10%	\$27.9	Bachelor's degree
Laborers and Freight, Stock, and Material Movers, Hand	31	15%	\$9.5	Less than high school
First-Line Supervisors of Construction Trades and Extraction Workers	31	7%	\$20.9	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	30	15%	\$20.7	Postsecondary non-degree award

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: SEMO Region, MO

Transportation Equipment Manufacturing Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Cumulative Expected Growth	Regional Performance, 2009-2014
Other Aircraft Parts and Auxiliary Equipment Manufacturing	72	4	1	5	↑ 15

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not show sufficient jobs for Boat Building; Travel Trailer and Camper Manufacturing; Motor Vehicle Body Manufacturing; Other Motor Vehicle Parts Manufacturing; and All Other Transportation Equipment Manufacturing.

Top 15 Inputs by Dollars: SEMO Region, MO

Transportation Equipment Manufacturing Cluster

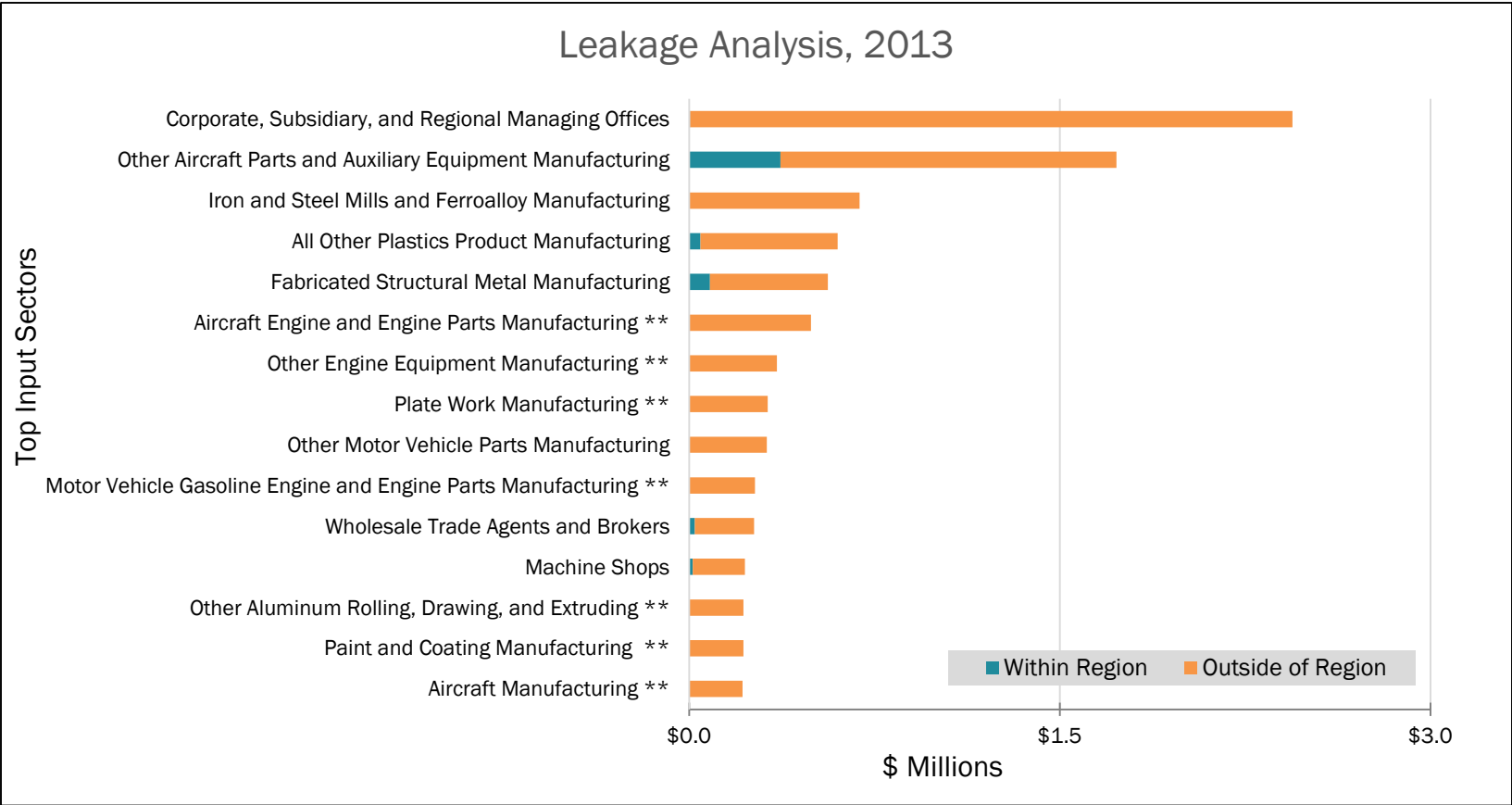
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Corporate, Subsidiary, and Regional Managing Offices	\$2.44	0%	100%
Other Aircraft Parts and Auxiliary Equipment Manufacturing	\$1.73	21%	79%
Iron and Steel Mills and Ferroalloy Manufacturing *	\$0.69	0%	100%
All Other Plastics Product Manufacturing	\$0.60	8%	92%
Fabricated Structural Metal Manufacturing	\$0.56	15%	85%
Aircraft Engine and Engine Parts Manufacturing **	\$0.49	0%	100%
Other Engine Equipment Manufacturing **	\$0.36	0%	100%
Plate Work Manufacturing **	\$0.32	0%	100%
Other Motor Vehicle Parts Manufacturing *	\$0.31	0%	100%
Motor Vehicle Gasoline Engine and Engine Parts Manufacturing **	\$0.27	0%	100%
Wholesale Trade Agents and Brokers	\$0.26	9%	91%
Machine Shops	\$0.23	7%	93%
Other Aluminum Rolling, Drawing, and Extruding **	\$0.22	0%	100%
Paint and Coating Manufacturing **	\$0.22	0%	100%
Aircraft Manufacturing **	\$0.22	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: SEMO Region, MO

Transportation Equipment Manufacturing Cluster



Note: ** industry sector is not present in the region .

section 03

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

Top Occupations: SEMO Region, MO

Transportation Equipment Manufacturing Cluster

EMSI shows insufficient information for the jobs in occupations.

Shift-Share Analysis by Top Industry Sectors: SEMO Region, MO

Agribusiness, Food Processing and Technology Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Cumulative Expected Growth	Regional Performance, 2009-2014
Crop Production	1189	26	-23	3	↑ 842
Animal Production	779	116	-148	-32	-719
Wineries	186	10	22	32	↑ 16
Soil Preparation, Planting, and Cultivating	79	1	1	2	↑ 71
Fruit and Vegetable Canning	45	2	-3	-1	↑ 22
Farm and Garden Machinery and Equipment Merchant Wholesalers	34	7	0	7	-70
Farm Supplies Merchant Wholesalers	29	3	0	3	-11
Farm Labor Contractors and Crew Leaders	29	2	2	4	-5

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not show sufficient jobs for Confectionery Manufacturing from Purchased Chocolate; Meat Processed from Carcasses; Commercial Bakeries; Retail Bakeries; Ice Cream and Frozen Dessert Manufacturing; Livestock Merchant Wholesalers; Crop Harvesting, Primarily by Machine; Postharvest Crop Activities (except Cotton Ginning); Farm Management Services; etc.

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Top 15 Inputs by Dollars: SEMO Region, MO

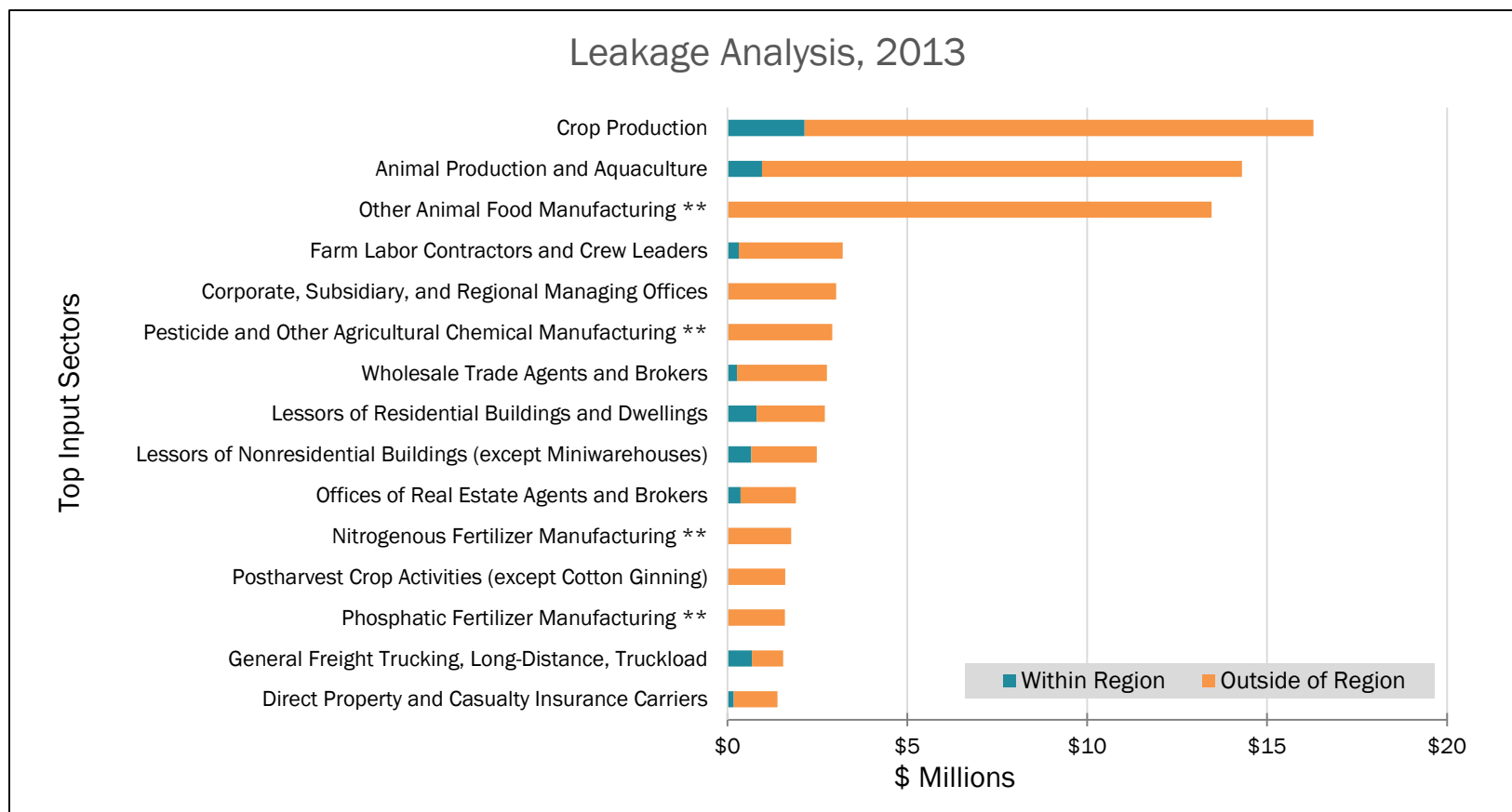
Agribusiness, Food Processing and Technology Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Crop Production	\$16.29	13%	87%
Animal Production and Aquaculture	\$14.30	7%	93%
Other Animal Food Manufacturing **	\$13.45	0%	100%
Farm Labor Contractors and Crew Leaders	\$3.21	10%	90%
Corporate, Subsidiary, and Regional Managing Offices	\$3.02	0%	100%
Pesticide and Other Agricultural Chemical Manufacturing **	\$2.91	0%	100%
Wholesale Trade Agents and Brokers	\$2.76	10%	90%
Lessors of Residential Buildings and Dwellings	\$2.70	30%	70%
Lessors of Nonresidential Buildings (except Miniwarehouses)	\$2.48	27%	73%
Offices of Real Estate Agents and Brokers	\$1.90	19%	81%
Nitrogenous Fertilizer Manufacturing **	\$1.77	0%	100%
Postharvest Crop Activities (except Cotton Ginning) *	\$1.60	1%	99%
Phosphatic Fertilizer Manufacturing **	\$1.59	0%	100%
General Freight Trucking, Long-Distance, Truckload	\$1.55	44%	56%
Direct Property and Casualty Insurance Carriers	\$1.39	12%	88%

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: SEMO Region, MO

Agribusiness, Food Processing and Technology Cluster



Note: ** industry sector is not present in the region .

section 03

Top Occupations: SEMO Region, MO

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	1,781	4%	\$9.7	High school diploma or equivalent
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	102	28%	\$8.6	Less than high school
Packaging and Filling Machine Operators and Tenders	44	38%	\$16.0	High school diploma or equivalent
Agricultural Equipment Operators	34	183%	\$11.0	Less than high school
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	24	41%	\$21.1	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	22	0%	\$9.5	Less than high school
Heavy and Tractor-Trailer Truck Drivers	20	25%	\$14.3	Postsecondary non-degree award
Bookkeeping, Accounting, and Auditing Clerks	18	6%	\$12.3	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	17	-15%	\$17.6	High school diploma or equivalent
Animal Trainers	17	-19%	\$9.0	High school diploma or equivalent
Industrial Truck and Tractor Operators	15	36%	\$12.8	Less than high school
Managers, All Other	14	0%	\$14.9	High school diploma or equivalent
Nonfarm Animal Caretakers	13	30%	\$8.6	Less than high school
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	11	-8%	\$11.1	High school diploma or equivalent
General and Operations Managers	10	-23%	\$27.9	Bachelor's degree

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

section 03

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

Shift-Share Analysis by Top Industry Sectors: SEMO Region, MO

Forest And Wood Products Cluster

Industries	Jobs 2014	National Trend, 2009-2014	Industry Trend, 2009-2014	Cumulative Expected Growth	Regional Performance, 2009-2014
Wood Container and Pallet Manufacturing	217	14	7	21	↑ 6
Logging	159	6	-5	1	↑ 79
Sawmills	124	7	-1	6	↑ 24
Finish Carpentry Contractors	111	12	-23	-11	-39
Roofing Contractors	59	5	-2	3	-5
Flooring Contractors	55	4	-7	-3	↑ 1
Adhesive Manufacturing	46	1	0	1	↑ 29
Siding Contractors	46	3	-8	-5	↑ 5
Wood Kitchen Cabinet and Countertop Manufacturing	24	4	-6	-2	-23
Institutional Furniture Manufacturing	21	1	-1	0	↑ 6
Framing Contractors	13	3	-8	-5	-26
Stationery Product Manufacturing	12	4	-18	-14	-34
Other Millwork (including Flooring)	12	1	-1	0	↑ 3
Timber Tract Operations	11	1	0	1	-1

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not include detailed sectors for Forest Nurseries and Gathering of Forest Products.

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Top 15 Inputs by Dollars: SEMO Region, MO

Forest And Wood Products Cluster

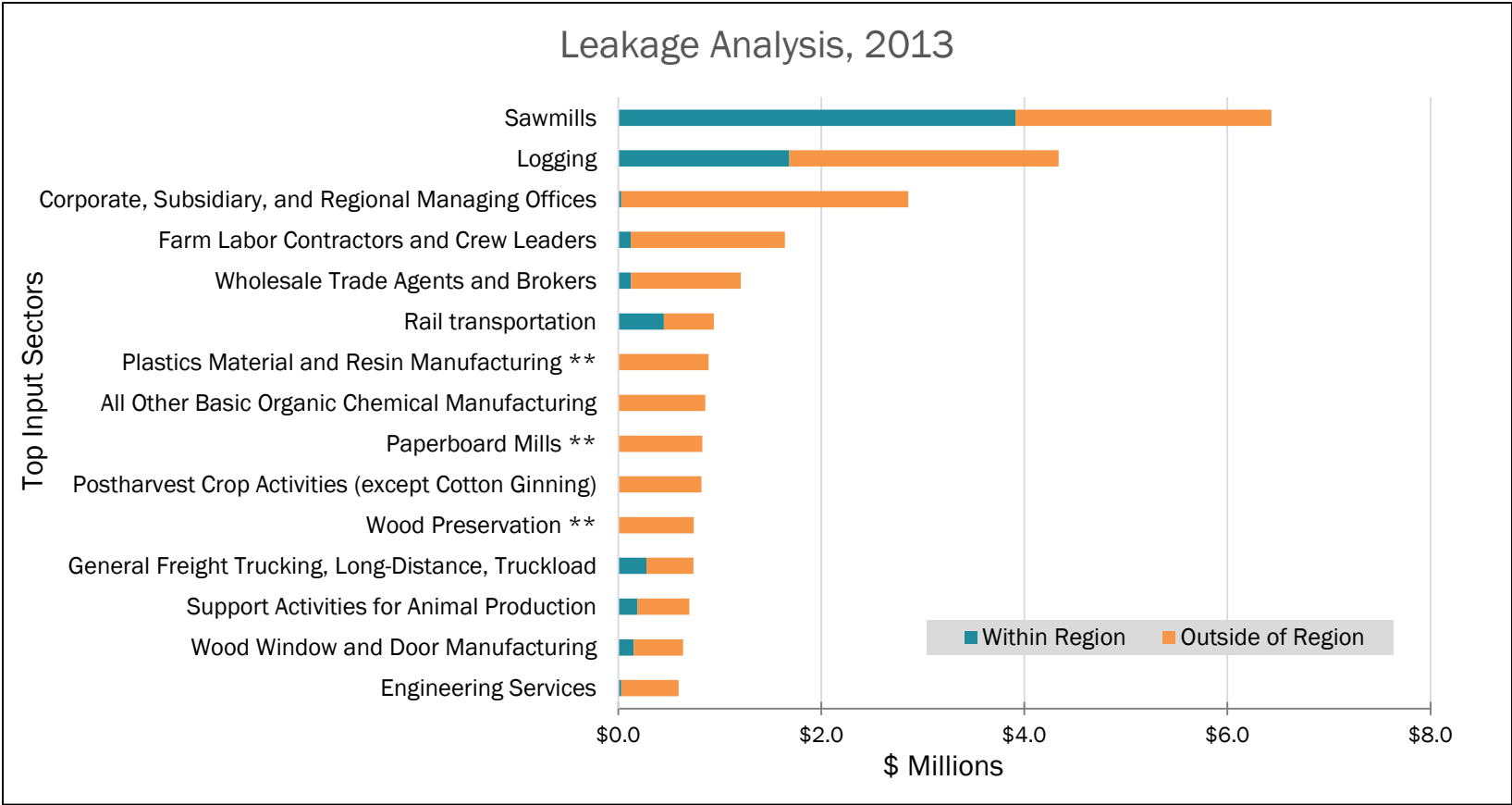
Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Sawmills	\$6.43	61%	39%
Logging	\$4.34	39%	61%
Corporate, Subsidiary, and Regional Managing Offices	\$2.86	1%	99%
Farm Labor Contractors and Crew Leaders	\$1.64	8%	92%
Wholesale Trade Agents and Brokers	\$1.21	10%	90%
Rail transportation	\$0.94	48%	52%
Plastics Material and Resin Manufacturing **	\$0.89	0%	100%
All Other Basic Organic Chemical Manufacturing *	\$0.86	0%	100%
Paperboard Mills **	\$0.83	0%	100%
Postharvest Crop Activities (except Cotton Ginning) *	\$0.82	1%	99%
Wood Preservation **	\$0.74	0%	100%
General Freight Trucking, Long-Distance, Truckload	\$0.74	38%	62%
Support Activities for Animal Production	\$0.70	27%	73%
Wood Window and Door Manufacturing *	\$0.64	24%	76%
Engineering Services	\$0.60	5%	95%

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: SEMO Region, MO

Forest And Wood Products Cluster



Note: ** industry sector is not present in the region .

section 03

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

Top Occupations: SEMO Region, MO

Forest And Wood Products Cluster

Occupations	Jobs 2014	% Change, 2009-2014	Median Hourly Earnings, 2014	Entry Level Education
Logging Equipment Operators	96	96%	\$9.9	High school diploma or equivalent
Carpenters	70	-22%	\$12.2	High school diploma or equivalent
Sawing Machine Setters, Operators, and Tenders, Wood	53	8%	\$11.6	High school diploma or equivalent
Team Assemblers	50	-29%	\$11.9	High school diploma or equivalent
Construction Laborers	47	-16%	\$12.2	Less than high school
Cabinetmakers and Bench Carpenters	34	-33%	\$13.0	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	29	-6%	\$9.5	Less than high school
Roofers	26	-19%	\$12.8	Less than high school
Helpers--Production Workers	24	-20%	\$9.9	Less than high school
Fallers	22	100%	\$10.7	High school diploma or equivalent
Assemblers and Fabricators, All Other	21	-28%	\$10.9	High school diploma or equivalent
Managers, All Other	21	17%	\$14.9	High school diploma or equivalent
Industrial Truck and Tractor Operators	21	-19%	\$12.8	Less than high school
Heavy and Tractor-Trailer Truck Drivers	19	19%	\$14.3	Postsecondary non-degree award
First-Line Supervisors of Production and Operating Workers	17	-23%	\$20.7	Postsecondary non-degree award

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

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Report Contributors

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