



# Regional Data Snapshot

*Target Industry Clusters*  
*SET Session 2*

**7 Rivers Alliance, Wisconsin**

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# 01 overview

**7 Rivers Alliance, Wisconsin**

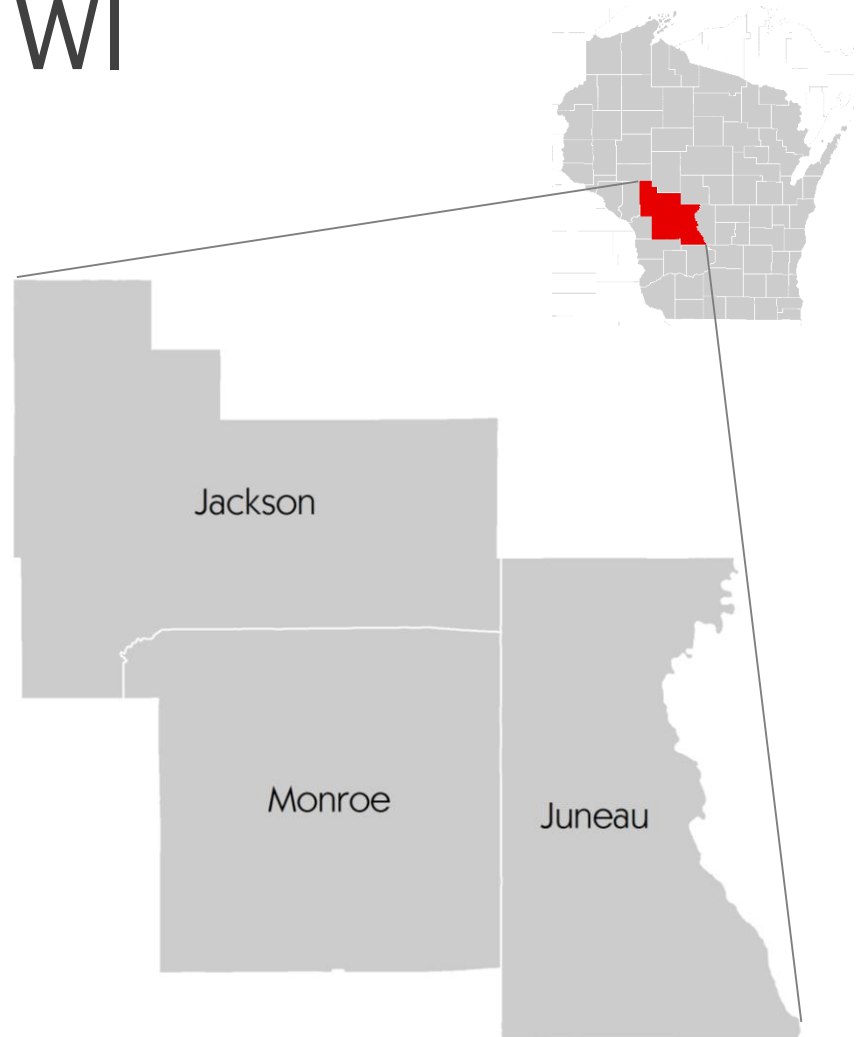
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## Overview

# 7 Rivers Alliance, WI

The Seven Rivers Alliance Region is comprised of 3 Wisconsin counties. Interstate 90 crosses the region from east to west, and joins Interstate 94 passing through the region from north-west to south-east.

- Jackson
- Juneau
- Monroe



# 02 target industry clusters

**Agribusiness, Food Processing  
and Technology**

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**Arts, Entertainment,  
Recreation and Visitor  
Industries**

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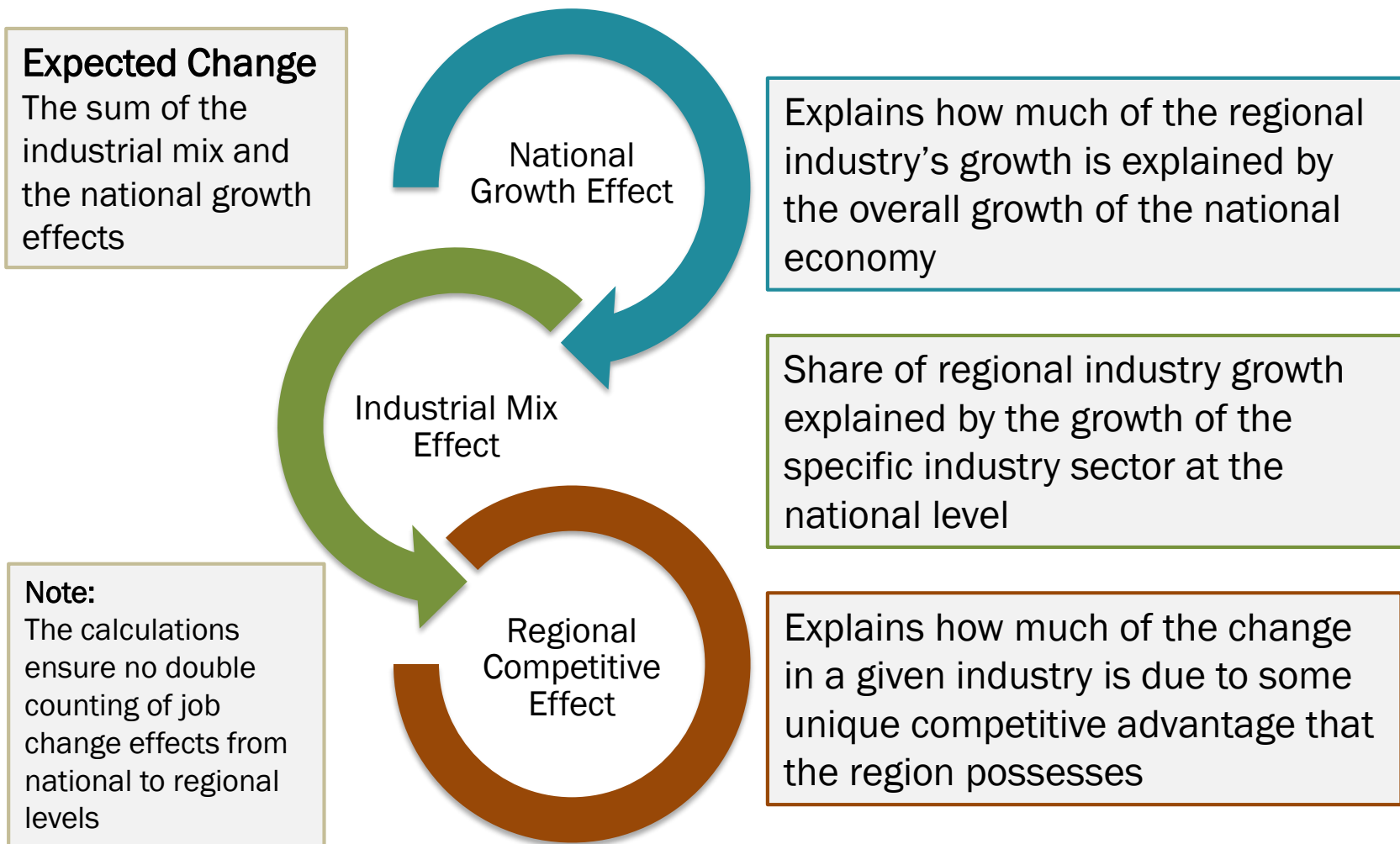
**Fabricated Metal Product  
Manufacturing**

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**Machinery Manufacturing**

# Regional Job Growth:

## Three Key Components of the Shift-Share Analysis



## Shift-Share Analysis (Regional Performance) by Top Industry Sectors

# Agribusiness, Food Processing and Technology

Industries	Jobs 2015	National Trend, 2009-2015	Industry Trend, 2009-2015	Cumulative Expected Growth	Actual Job Growth, 2009-2015	Regional Performance, 2009-2015
		A	B	C=A+B	D	D-C
Animal Production and Aquaculture	1,962	137	-161	-24	396	↑ 420
Crop Production	1,866	216	-168	48	-600	-648
Farm Machinery and Equipment Mfg.	613	46	29	75	88	↑ 13
Dry, Condensed, and Evaporated Dairy Product Mfg.	512	24	9	33	237	↑ 204
Farm Supplies Merchant Wholesalers	252	12	-3	9	114	↑ 105
Dried and Dehydrated Food Mfg.	145	15	-2	13	-27	-40
Fruit and Vegetable Canning	142	11	-16	-5	11	↑ 16
Animal (except Poultry) Slaughtering	139	4	-7	-3	96	↑ 99
Farm and Garden Machinery and Equipment Merchant Wholesalers	129	12	-5	7	-6	-13
Farm Labor Contractors and Crew Leaders	99	10	11	21	-19	-40
Soil Preparation, Planting, and Cultivating	66	5	0	5	12	↑ 7
Cheese Mfg.	64	11	5	16	-56	-72
Other Farm Product Raw Material Merchant Wholesalers	63	6	-2	4	-5	-9
Dog and Cat Food Mfg.	36	1	2	3	19	↑ 16
Other Animal Food Mfg.	32	4	-1	3	-14	-17

Note: Upward arrow (↑) indicates regional competitiveness.

### section 02

## Shift-Share Analysis

# Agribusiness, Food Processing and Technology

### Industries that Outperformed

- Animal Production and Aquaculture
- Dry, Condensed, and Evaporated Dairy Product Manufacturing
- Farm Supplies Merchant Wholesalers
- Animal (except Poultry) Slaughtering
- Fruit and Vegetable Canning
- Dog and Cat Food Manufacturing
- Farm Machinery and Equipment Mfg.
- Soil Preparation, Planting, and Cultivating

### Industries that Underperformed

- Other Farm Product Raw Material Merchant Wholesalers
- Farm and Garden Machinery and Equipment Merchant Wholesalers
- Other Animal Food Mfg.
- Dried and Dehydrated Food Mfg.
- Farm Labor Contractors and Crew Leaders
- Cheese Mfg.
- Crop Production



## Top Industry Sectors

# Agribusiness, Food Processing and Technology

Industries	Exports 2014 (\$ Millions)	Jobs 2014	Export per job 2014 (\$)	LQ 2015
Animal Production and Aquaculture	\$350.3	1,885	\$185,874	6.2
Crop Production	\$403.4	1,994	\$202,290	4.5
Farm Machinery and Equipment Manufacturing	\$198.8	632	\$314,449	33.8
Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$325.7	496	\$657,146	116.4
Farm Supplies Merchant Wholesalers	\$34.7	250	\$138,714	7.7
Dried and Dehydrated Food Manufacturing	\$50.8	205	\$248,576	44.3
Fruit and Vegetable Canning	\$51.7	80	\$645,136	7.9
Animal (except Poultry) Slaughtering	\$53.6	140	\$383,671	3.7
Farm and Garden Machinery and Equipment Merchant Wholesalers	\$16.2	129	\$126,373	4.4
Farm Labor Contractors and Crew Leaders	\$0.2	100	\$2,336	1.1
Soil Preparation, Planting, and Cultivating	\$2.6	69	\$36,890	3.4
Cheese Manufacturing	\$51.2	74	\$690,598	5.2
Other Farm Product Raw Material Merchant Wholesalers	\$8.7	64	\$136,128	22.3
Dog and Cat Food Manufacturing	\$18.6	30	\$619,636	5.4
Other Animal Food Manufacturing	\$24.1	46	\$527,563	3.3

Note: Sorted similarly as the shift-share analysis slide.

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## Top 15 Inputs by Dollars

# Agribusiness, Food Processing and Technology

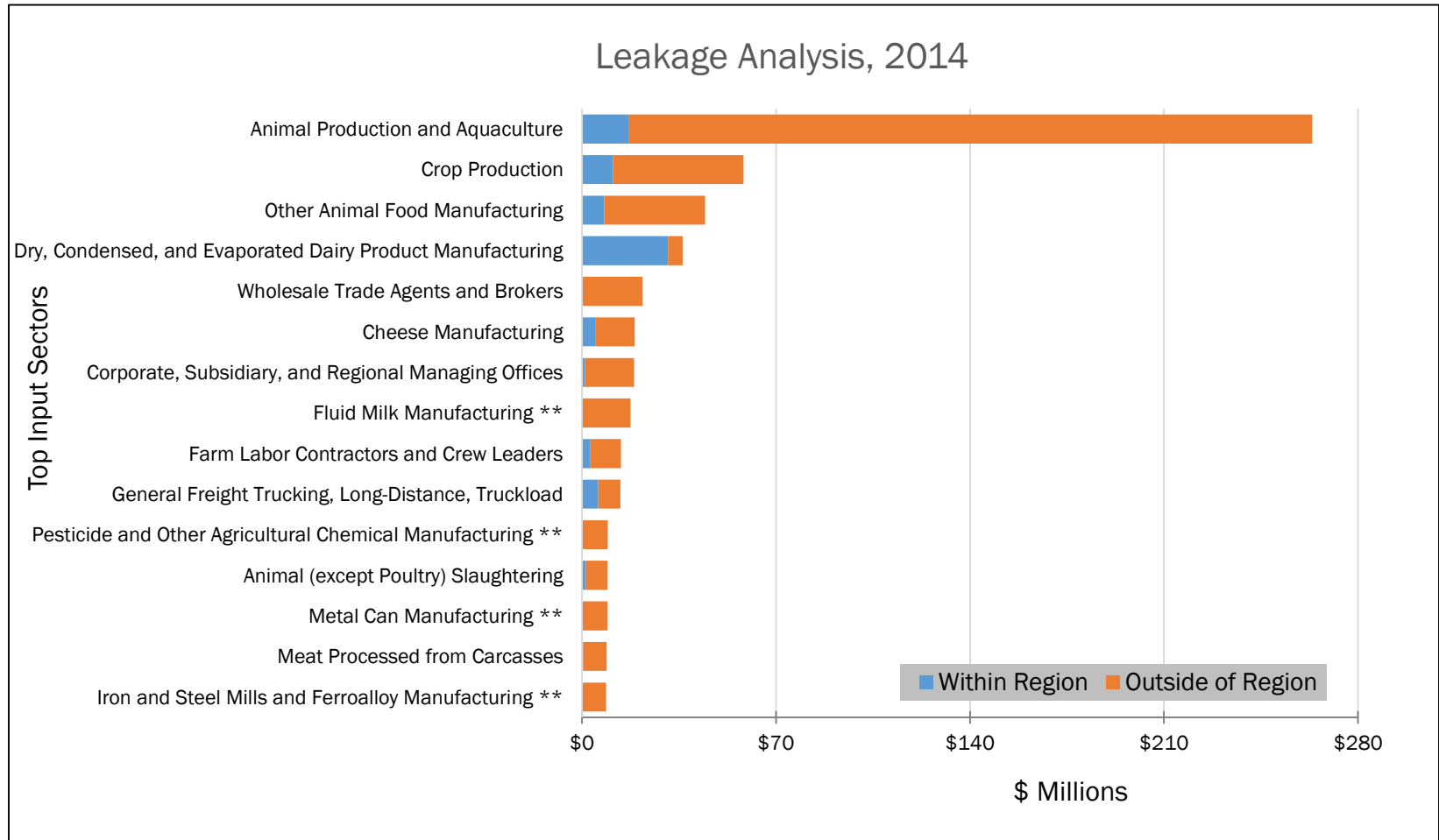
Industries	Estimated Input (\$ Millions), 2014	% In-Region	% Out of Region
Animal Production and Aquaculture	\$263.50	6%	94%
Crop Production	\$58.31	19%	81%
Other Animal Food Manufacturing	\$44.42	18%	82%
Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$36.37	85%	15%
Wholesale Trade Agents and Brokers	\$21.86	1%	99%
Cheese Manufacturing	\$19.08	25%	75%
Corporate, Subsidiary, and Regional Managing Offices	\$18.83	6%	94%
Fluid Milk Manufacturing **	\$17.50	0%	100%
Farm Labor Contractors and Crew Leaders	\$14.10	22%	78%
General Freight Trucking, Long-Distance, Truckload	\$13.87	43%	57%
Pesticide and Other Agricultural Chemical Manufacturing **	\$9.30	0%	100%
Animal (except Poultry) Slaughtering	\$9.23	16%	84%
Metal Can Manufacturing **	\$9.22	0%	100%
Meat Processed from Carcasses *	\$8.89	5%	95%
Iron and Steel Mills and Ferroalloy Manufacturing **	\$8.72	0%	100%

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

### section 02

## Top 15 Inputs by Dollars

# Agribusiness, Food Processing and Technology



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

### section 02

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors).

## Top Occupations

# Agribusiness, Food Processing and Technology

Occupations	Jobs 2015	% Change, 2009-2015	Median Hr. Earnings	Entry Level Education
Farmers, Ranchers, and Other Agricultural Managers	2,851	-10%	\$16.0	High school diploma or equivalent
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	565	18%	\$12.9	No formal educational credential
Food Batchmakers	223	27%	\$14.1	High school diploma or equivalent
Packaging and Filling Machine Operators and Tenders	109	20%	\$13.9	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	107	23%	\$13.6	No formal educational credential
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	104	28%	\$23.5	High school diploma or equivalent
Team Assemblers	91	17%	\$14.3	High school diploma or equivalent
Welders, Cutters, Solderers, and Brazers	81	17%	\$18.1	High school diploma or equivalent
Agricultural Equipment Operators	71	34%	\$15.3	No formal educational credential
Office Clerks, General	71	27%	\$14.3	High school diploma or equivalent
Maintenance and Repair Workers, General	69	23%	\$18.0	High school diploma or equivalent
Farmworkers, Farm, Ranch, and Aquacultural Animals	66	16%	\$14.2	No formal educational credential
Heavy and Tractor-Trailer Truck Drivers	62	22%	\$19.1	Postsecondary nondegree award
First-Line Supervisors of Production and Operating Workers	61	24%	\$22.3	High school diploma or equivalent
Bookkeeping, Accounting, and Auditing Clerks	57	-3%	\$16.2	Some college, no degree

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2015. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

### section 02

## Shift-Share Analysis (Regional Performance) by Top Industry Sectors

# Arts, Entertainment, Recreation and Visitor Industries

Industries	Jobs 2015	National Trend, 2009-2015	Industry Trend, 2009-2015	Cumulative Expected Growth	Actual Job Growth, 2009-2015	Regional Performance, 2009-2015
		A	B	C=A+B	D	D-C
Hotels (except Casino Hotels) and Motels	579	44	10	54	72	↑ 18
Sporting and Athletic Goods Mfg.	286	14	-6	8	131	↑ 123
Independent Artists, Writers, and Performers	134	11	0	11	7	-4
Golf Courses and Country Clubs	114	8	-1	7	19	↑ 12
Radio Stations	71	5	-5	0	16	↑ 16
Bowling Centers	66	6	-9	-3	0	↑ 3
Fitness and Recreational Sports Centers	61	5	4	9	1	-8
RV (Recreational Vehicle) Parks and Campgrounds	47	6	4	10	-23	-33
Sporting and Recreational Goods and Supplies Merchant Wholesalers	45	2	3	5	17	↑ 12
All Other Amusement and Recreation Industries	44	3	8	11	12	↑ 1
Racetracks	38	3	-9	-6	-2	↑ 4
Travel Agencies	25	2	-2	0	-4	-4
Other Spectator Sports	21	2	-1	1	-5	-6
Motion Picture Theaters (except Drive-Ins)	16	4	-2	2	-26	-28
All Other Traveler Accommodation	15	4	10	14	-28	-42

Note: Upward arrow (↑) indicates regional competitiveness.

### section 02

## Shift-Share Analysis

# Arts, Entertainment, Recreation and Visitor Industries

### Industries that Outperformed

- 
- Sporting and Athletic Goods Manufacturing
  - Hotels (except Casino Hotels) and Motels
  - Radio Stations
  - Golf Courses and Country Clubs
  - Sporting and Recreational Goods and Supplies Merchant Wholesalers
  - Racetracks
  - Bowling Centers
  - All Other Amusement and Recreation Industries

### Industries that Underperformed

- 
- Independent Artists, Writers, and Performers
  - Travel Agencies
  - Other Spectator Sports
  - Fitness and Recreational Sports Centers
  - Motion Picture Theaters (except Drive-Ins)
  - RV (Recreational Vehicle) Parks and Campgrounds
  - All Other Traveler Accommodation

## Top Industry Sectors

# Arts, Entertainment, Recreation and Visitor Industries

Industries	Exports 2014 (\$ Millions)	Jobs 2014	Export per job 2014 (\$)	LQ 2015
Hotels (except Casino Hotels) and Motels	\$16.2	574	\$28,297	1.3
Sporting and Athletic Goods Manufacturing	\$80.0	321	\$249,266	18.4
Independent Artists, Writers, and Performers	\$1.3	136	\$9,371	0.4
Golf Courses and Country Clubs	\$1.3	123	\$10,358	1.0
Radio Stations	\$7.7	69	\$110,911	2.6
Bowling Centers	\$1.0	49	\$20,535	3.1
Fitness and Recreational Sports Centers	\$0.4	64	\$5,519	0.3
RV (Recreational Vehicle) Parks and Campgrounds	\$6.3	41	\$152,767	4.1
Sporting and Recreational Goods and Supplies Merchant Wholesalers	\$3.6	42	\$85,876	2.3
All Other Amusement and Recreation Industries	\$0.8	34	\$24,016	0.5
Racetracks	\$0.3	37	\$7,325	2.2
Travel Agencies	\$2.9	40	\$71,962	0.7
Other Spectator Sports	\$0.1	23	\$6,206	0.4
Motion Picture Theaters (except Drive-Ins)	\$0.7	12	\$62,345	0.4
All Other Traveler Accommodation	\$0.8	15	\$53,547	2.8

Note: Sorted similarly as the shift-share analysis slide.

### section 02

## Top 15 Inputs by Dollars

# Arts, Entertainment, Recreation and Visitor Industries

Industries	Estimated Input (\$ Millions), 2014	% In-Region	% Out of Region
Corporate, Subsidiary, and Regional Managing Offices	\$6.20	6%	94%
Iron and Steel Mills and Ferroalloy Manufacturing **	\$1.87	0%	100%
Plastics Material and Resin Manufacturing **	\$1.56	0%	100%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) **	\$1.40	0%	100%
Television Broadcasting *	\$1.18	1%	99%
Wholesale Trade Agents and Brokers	\$1.01	1%	99%
Sporting and Athletic Goods Manufacturing	\$0.97	39%	61%
Offices of Lawyers	\$0.96	13%	87%
Sports Teams and Clubs	\$0.95	4%	96%
Advertising Agencies *	\$0.95	1%	99%
Internet Publishing and Broadcasting and Web Search Portals *	\$0.93	0%	100%
Nonferrous Metal Die-Casting Foundries	\$0.87	24%	76%
Corrugated and Solid Fiber Box Manufacturing **	\$0.82	0%	100%
Sawmills	\$0.80	5%	95%
Paint and Coating Manufacturing *	\$0.77	0%	100%

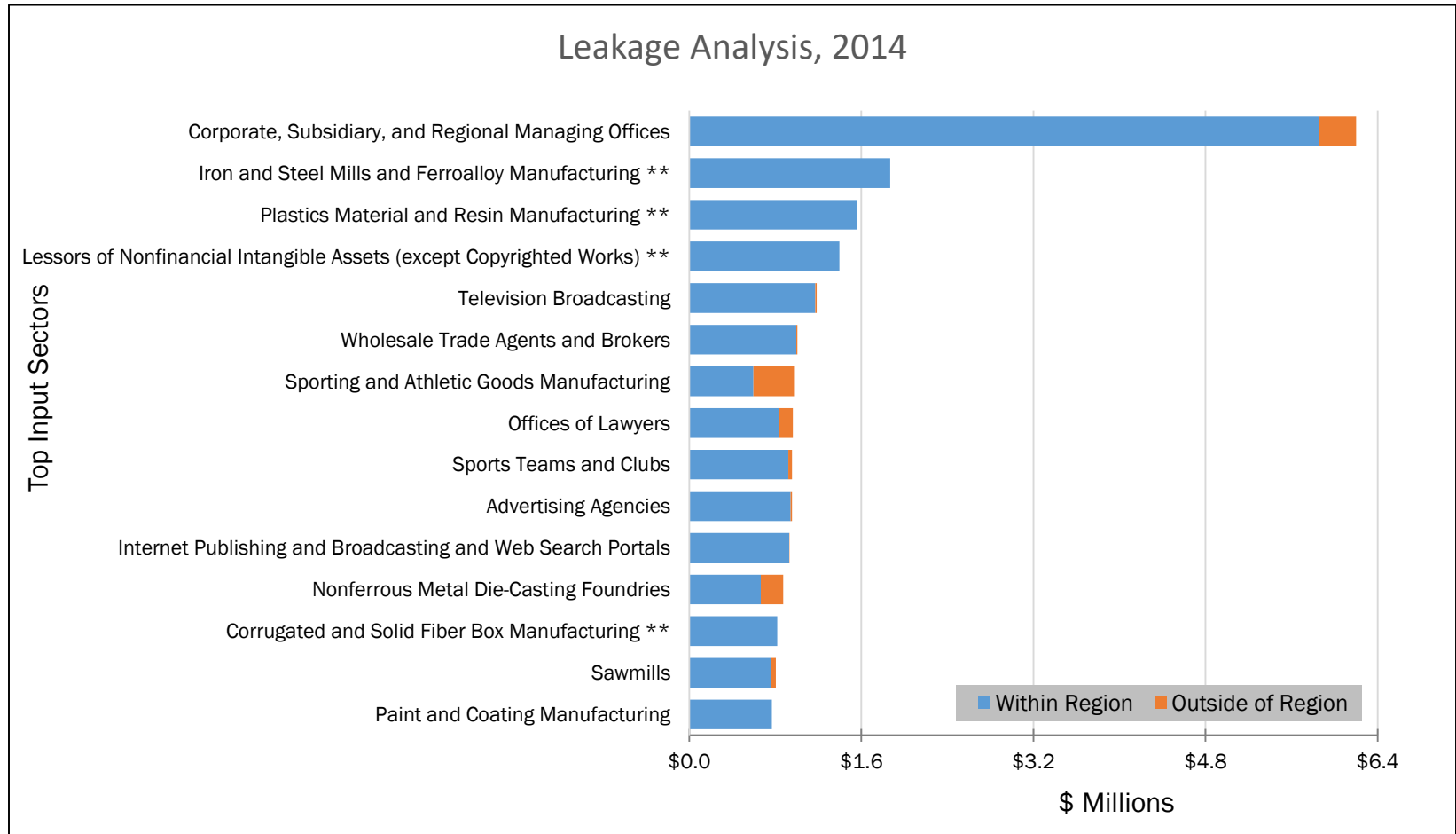
Note: \* industry sector has less than 10 jobs as calculated by EMSI; \*\* industry sector is not present in the region.

### section 02



## Top 15 Inputs by Dollars

# Arts, Entertainment, Recreation and Visitor Industries



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

### section 02

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors).

## Top Occupations

# Arts, Entertainment, Recreation and Visitor Industries

Occupations	Jobs 2015	% Change, 2009-2015	Median Hr. Earnings	Entry Level Education
Maids and Housekeeping Cleaners	163	9%	\$9.7	No formal educational credential
Hotel, Motel, and Resort Desk Clerks	101	6%	\$9.8	High school diploma or equivalent
Lodging Managers	70	-13%	\$18.7	High school diploma or equivalent
Waiters and Waitresses	57	2%	\$9.3	No formal educational credential
Musicians and Singers	50	14%	\$11.8	No formal educational credential
Maintenance and Repair Workers, General	50	-2%	\$18.0	High school diploma or equivalent
Fitness Trainers and Aerobics Instructors	43	34%	\$12.8	High school diploma or equivalent
Writers and Authors	43	10%	\$13.3	Bachelor's degree
Team Assemblers	39	86%	\$14.3	High school diploma or equivalent
Bartenders	39	5%	\$9.6	No formal educational credential
Coaches and Scouts	31	29%	\$12.7	Bachelor's degree
Office Clerks, General	31	19%	\$14.3	High school diploma or equivalent
Cooks, Restaurant	27	8%	\$9.9	No formal educational credential
Fine Artists, Including Painters, Sculptors, and Illustrators	26	0%	\$6.9	Bachelor's degree
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	24	0%	\$12.3	No formal educational credential

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2015. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

### section 02

## Shift-Share Analysis (Regional Performance) by Top Industry Sectors

# Fabricated Metal Product Manufacturing

Industries	Jobs 2015	National Trend, 2009-2015	Industry Trend, 2009-2015	Cumulative Expected Growth	Actual Job Growth, 2009-2015	Regional Performance, 2009-2015
		A	B	C=A+B	D	D-C
Metal Tank (Heavy Gauge) Manufacturing	371	14	40	54	206	↑ 152
All Other Miscellaneous Fabricated Metal Product Manufacturing	272	7	2	9	197	↑ 188
Bolt, Nut, Screw, Rivet, and Washer Manufacturing	244	19	10	29	30	↑ 1
Fluid Power Valve and Hose Fitting Manufacturing	132	28	40	68	-187	-255
Machine Shops	98	1	2	3	81	↑ 78
Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	67	3	3	6	35	↑ 29
Precision Turned Product Manufacturing	47	4	9	13	-2	-15
Fabricated Structural Metal Manufacturing	35	0	0	0	35	↑ 35
Prefabricated Metal Building and Component Manufacturing	31	1	-1	0	14	↑ 14
Sheet Metal Work Manufacturing	12	0	0	0	6	↑ 6

Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not include detailed sectors for Hardware Mfg.; Plate Work Mfg.; and Metal Crown, Closure, and Other Metal Stamping (except Automotive).

### section 02

## Shift-Share Analysis

# Fabricated Metal Product Manufacturing

### Industries that Outperformed

- All Other Miscellaneous Fabricated Metal Product Mfg.
- Metal Tank (Heavy Gauge) Mfg.
- Machine Shops
- Fabricated Structural Metal Mfg.
- Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
- Prefabricated Metal Building and Component Mfg.
- Sheet Metal Work Mfg.
- Bolt, Nut, Screw, Rivet, and Washer Mfg.

### Industries that Underperformed

- Precision Turned Product Mfg.
- Fluid Power Valve and Hose Fitting Mfg.

## Top Industry Sectors

# Fabricated Metal Product Manufacturing

Industries	Exports 2014 (\$ Millions)	Jobs 2014	Export per job 2014 (\$)	LQ 2015
Metal Tank (Heavy Gauge) Manufacturing	\$122.9	377	\$325,504	35.5
All Other Miscellaneous Fabricated Metal Product Manufacturing	\$37.2	254	\$146,857	11.9
Bolt, Nut, Screw, Rivet, and Washer Manufacturing	\$66.3	250	\$264,673	21.6
Fluid Power Valve and Hose Fitting Manufacturing	\$55.2	135	\$409,506	12.6
Machine Shops	\$7.9	76	\$103,396	1.1
Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	\$9.0	70	\$128,967	4.0
Precision Turned Product Manufacturing	\$12.7	54	\$233,580	3.9
Fabricated Structural Metal Manufacturing	\$8.6	46	\$188,970	1.4
Prefabricated Metal Building and Component Manufacturing	\$3.0	21	\$141,228	3.7
Sheet Metal Work Manufacturing	\$2.4	11	\$217,354	0.4

Note: Sorted similarly as the shift-share analysis slide. EMSI does not include detailed sectors for Hardware Mfg.; Plate Work Mfg.; and Metal Crown, Closure, and Other Metal Stamping (except Automotive).

### section 02

## Top 15 Inputs by Dollars

# Fabricated Metal Product Manufacturing

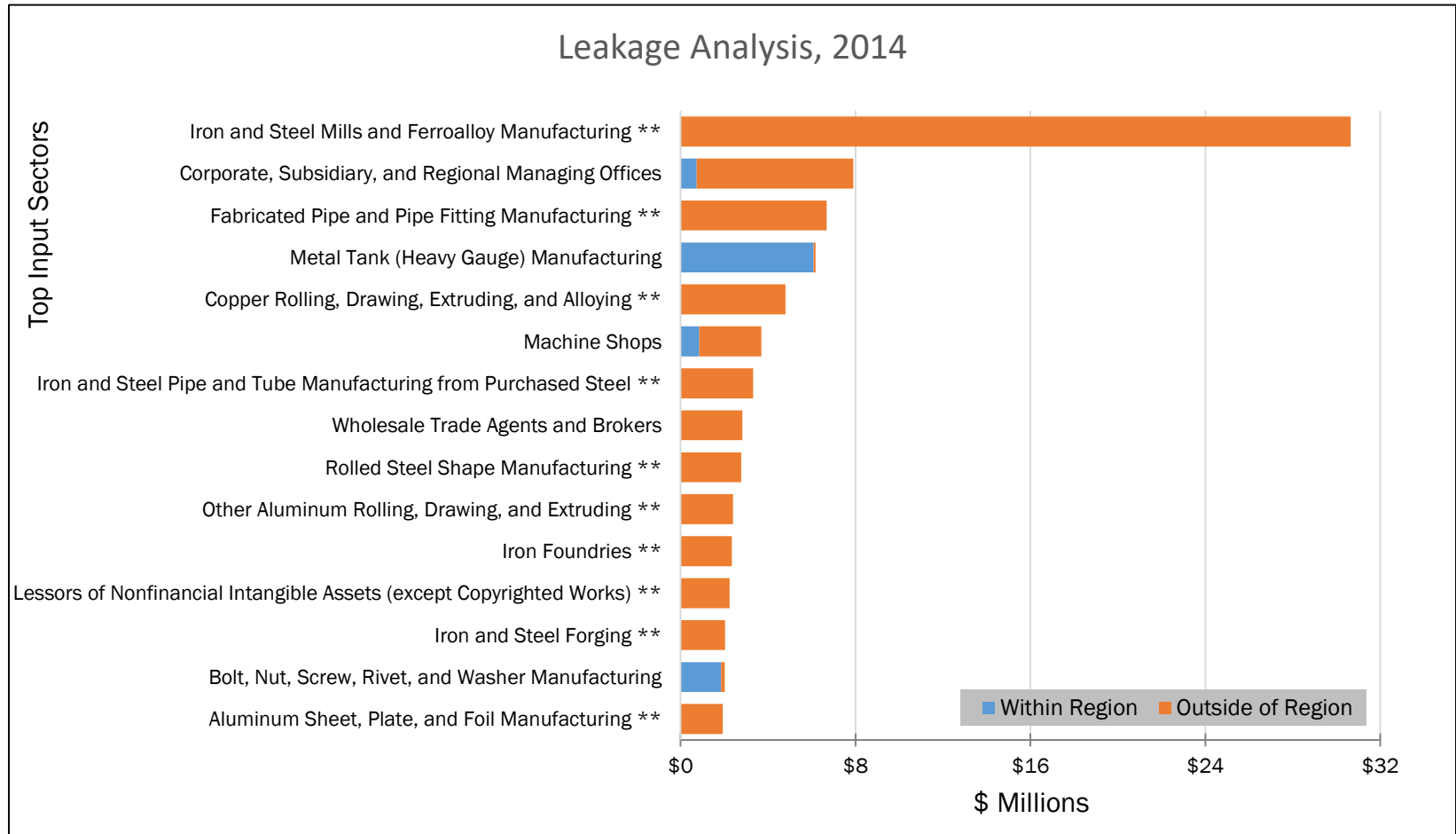
Industries	Estimated Input (\$ Millions), 2014	% In-Region	% Out of Region
Iron and Steel Mills and Ferroalloy Manufacturing **	\$30.65	0%	100%
Corporate, Subsidiary, and Regional Managing Offices	\$7.90	9%	91%
Fabricated Pipe and Pipe Fitting Manufacturing **	\$6.68	0%	100%
Metal Tank (Heavy Gauge) Manufacturing	\$6.17	99%	1%
Copper Rolling, Drawing, Extruding, and Alloying **	\$4.79	0%	100%
Machine Shops	\$3.69	23%	77%
Iron and Steel Pipe and Tube Manufacturing from Purchased Steel **	\$3.31	0%	100%
Wholesale Trade Agents and Brokers	\$2.82	1%	99%
Rolled Steel Shape Manufacturing **	\$2.77	0%	100%
Other Aluminum Rolling, Drawing, and Extruding **	\$2.40	0%	100%
Iron Foundries **	\$2.34	0%	100%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) **	\$2.23	0%	100%
Iron and Steel Forging **	\$2.03	0%	100%
Bolt, Nut, Screw, Rivet, and Washer Manufacturing	\$2.01	92%	8%
Aluminum Sheet, Plate, and Foil Manufacturing **	\$1.93	0%	100%

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

## section 02

## Top 15 Inputs by Dollars

# Fabricated Metal Product Manufacturing



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

### section 02

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors).

## Top Occupations

# Fabricated Metal Product Manufacturing

Occupations	Jobs 2015	% Change, 2009-2015	Median Hr. Earnings	Entry Level Education
Welders, Cutters, Solderers, and Brazers	149	52%	\$18.1	High school diploma or equivalent
Machinists	90	43%	\$18.6	High school diploma or equivalent
Team Assemblers	79	18%	\$14.3	High school diploma or equivalent
Computer-Controlled Machine Tool Operators, Metal and Plastic	74	48%	\$17.5	High school diploma or equivalent
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	54	15%	\$15.7	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	53	29%	\$22.3	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, and Weighers	44	22%	\$16.5	High school diploma or equivalent
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	40	21%	\$16.7	High school diploma or equivalent
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	38	65%	\$18.0	High school diploma or equivalent
Office Clerks, General	32	33%	\$14.3	High school diploma or equivalent
Structural Metal Fabricators and Fitters	31	19%	\$16.7	High school diploma or equivalent
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	27	17%	\$17.2	High school diploma or equivalent
Maintenance and Repair Workers, General	25	47%	\$18.0	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	22	16%	\$23.5	High school diploma or equivalent
Helpers--Production Workers	19	19%	\$12.5	No formal educational credential

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2015. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

### section 02



## Shift-Share Analysis (Regional Performance) by Top Industry Sectors

# Machinery Manufacturing

Industries	Jobs 2015	National Trend, 2009-2015	Industry Trend, 2009-2015	Cumulative Expected Growth	Actual Job Growth, 2009-2015	Regional Performance, 2009-2015
		A	B	C=A+B	D	D-C
Farm Machinery and Equipment Manufacturing	613	46	29	75	88	↑ 13
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	349	16	-23	-7	167	↑ 174
All Other Miscellaneous General Purpose Machinery Manufacturing	88	20	6	26	-144	-170
Other Commercial and Service Industry Machinery Manufacturing	42	7	-7	0	-33	-33
Industrial Mold Manufacturing	18	2	3	5	-6	-11
Mining Machinery and Equipment Manufacturing	10	0	0	0	10	↑ 10

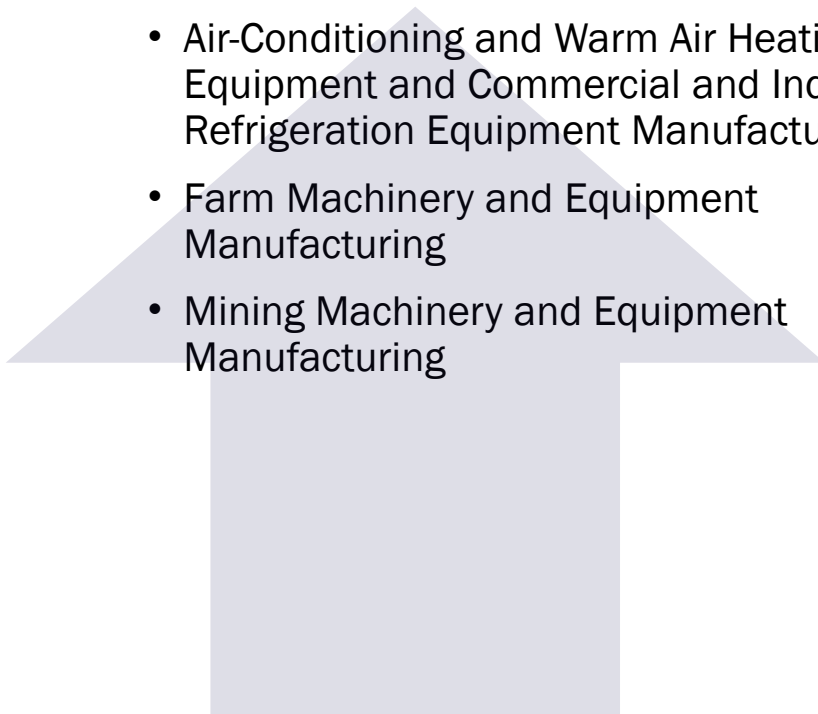
Note: Upward arrow (↑) indicates regional competitiveness. EMSI does not include detailed sectors for Other Industrial Machinery Manufacturing; Heating Equipment (except Warm Air Furnaces) Manufacturing; Construction Machinery Manufacturing; and Special Die and Tool, Die Set, Jig, and Fixture Manufacturing.

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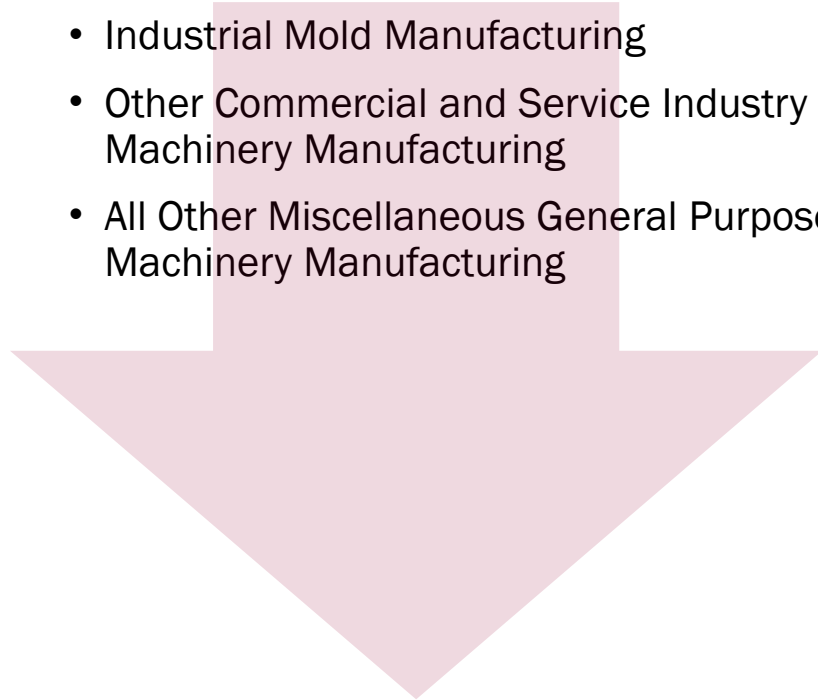
## Shift-Share Analysis

# Machinery Manufacturing

### Industries that Outperformed

- 
- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing
  - Farm Machinery and Equipment Manufacturing
  - Mining Machinery and Equipment Manufacturing

### Industries that Underperformed

- 
- Industrial Mold Manufacturing
  - Other Commercial and Service Industry Machinery Manufacturing
  - All Other Miscellaneous General Purpose Machinery Manufacturing

## Top Industry Sectors

# Machinery Manufacturing

Industries	Exports 2014 (\$ Millions)	Jobs 2014	Export per job 2014 (\$)	LQ 2015
Farm Machinery and Equipment Manufacturing	\$198.8	632	\$314,449	33.8
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$87.0	339	\$256,623	15.0
All Other Miscellaneous General Purpose Machinery Manufacturing	\$22.7	98	\$231,049	7.3
Other Commercial and Service Industry Machinery Manufacturing	\$4.7	37	\$127,692	2.3
Industrial Mold Manufacturing	\$1.4	17	\$81,191	1.5

Note: Sorted similarly as the shift-share analysis slide. EMSI does not include detailed sectors for Mining Machinery and Equipment Manufacturing; Other Industrial Machinery Manufacturing; Heating Equipment (except Warm Air Furnaces) Manufacturing; Construction Machinery Manufacturing; and Special Die and Tool, Die Set, Jig, and Fixture Manufacturing.

### section 02

## Top 15 Inputs by Dollars

# Machinery Manufacturing

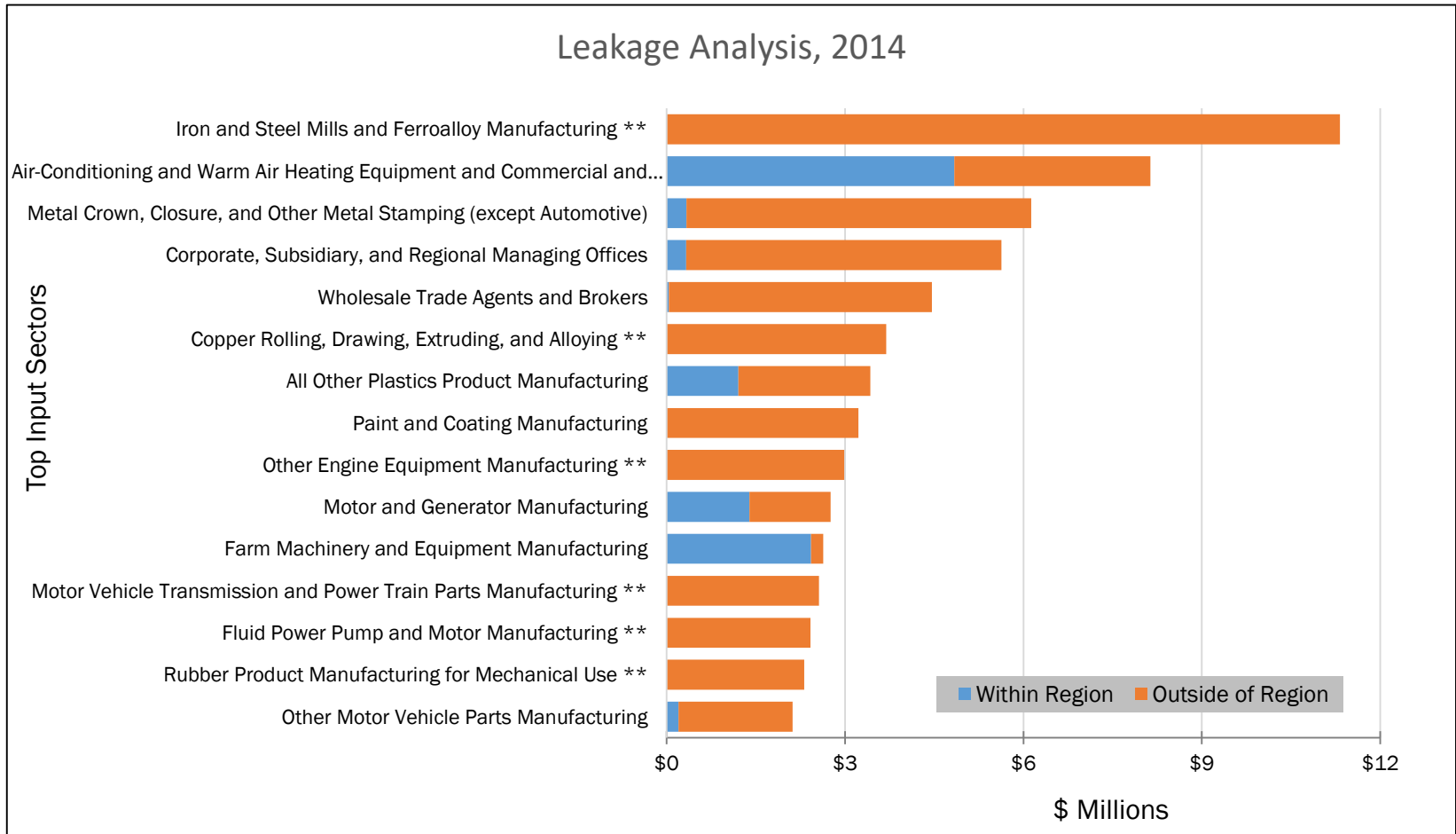
Industries	Estimated Input (\$ Millions), 2014	% In-Region	% Out of Region
Iron and Steel Mills and Ferroalloy Manufacturing **	\$11.32	0%	100%
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$8.13	59%	41%
Metal Crown, Closure, and Other Metal Stamping (except Automotive) *	\$6.13	5%	95%
Corporate, Subsidiary, and Regional Managing Offices	\$5.63	6%	94%
Wholesale Trade Agents and Brokers	\$4.46	1%	99%
Copper Rolling, Drawing, Extruding, and Alloying **	\$3.69	0%	100%
All Other Plastics Product Manufacturing	\$3.43	35%	65%
Paint and Coating Manufacturing *	\$3.23	0%	100%
Other Engine Equipment Manufacturing **	\$2.99	0%	100%
Motor and Generator Manufacturing	\$2.76	51%	49%
Farm Machinery and Equipment Manufacturing	\$2.63	92%	8%
Motor Vehicle Transmission and Power Train Parts Manufacturing **	\$2.56	0%	100%
Fluid Power Pump and Motor Manufacturing **	\$2.42	0%	100%
Rubber Product Manufacturing for Mechanical Use **	\$2.31	0%	100%
Other Motor Vehicle Parts Manufacturing	\$2.12	9%	91%

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

### section 02

## Top 15 Inputs by Dollars

# Machinery Manufacturing



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

### section 02

Source: EMSI Class of Worker 2016.4 (QCEW, non-QCEW, self-employed and extended proprietors).

## Top Occupations

# Machinery Manufacturing

Occupations	Jobs 2015	% Change, 2009-2015	Median Hr. Earnings	Entry Level Education
Team Assemblers	154	14%	\$14.3	High school diploma or equivalent
Welders, Cutters, Solderers, and Brazers	118	7%	\$18.1	High school diploma or equivalent
Computer-Controlled Machine Tool Operators, Metal and Plastic	39	11%	\$17.5	High school diploma or equivalent
Machinists	37	-12%	\$18.6	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	34	3%	\$22.3	High school diploma or equivalent
Mechanical Engineers	34	0%	\$34.8	Bachelor's degree
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	32	10%	\$15.7	High school diploma or equivalent
Electrical and Electronic Equipment Assemblers	28	27%	\$11.7	High school diploma or equivalent
Industrial Engineers	27	4%	\$32.6	Bachelor's degree
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	26	13%	\$16.7	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, and Weighers	24	4%	\$16.5	High school diploma or equivalent
Office Clerks, General	23	0%	\$14.3	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	23	0%	\$23.5	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	22	10%	\$13.6	No formal educational credential
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	21	5%	\$18.0	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2015. Extended proprietors include estimates for underreported self employment, proprietorships, trusts, partnerships and cooperatives.

### section 02

# 03 Cluster Comparisons

**Agribusiness, Food Processing  
and Technology**

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**Arts, Entertainment,  
Recreation and Visitor  
Industries**

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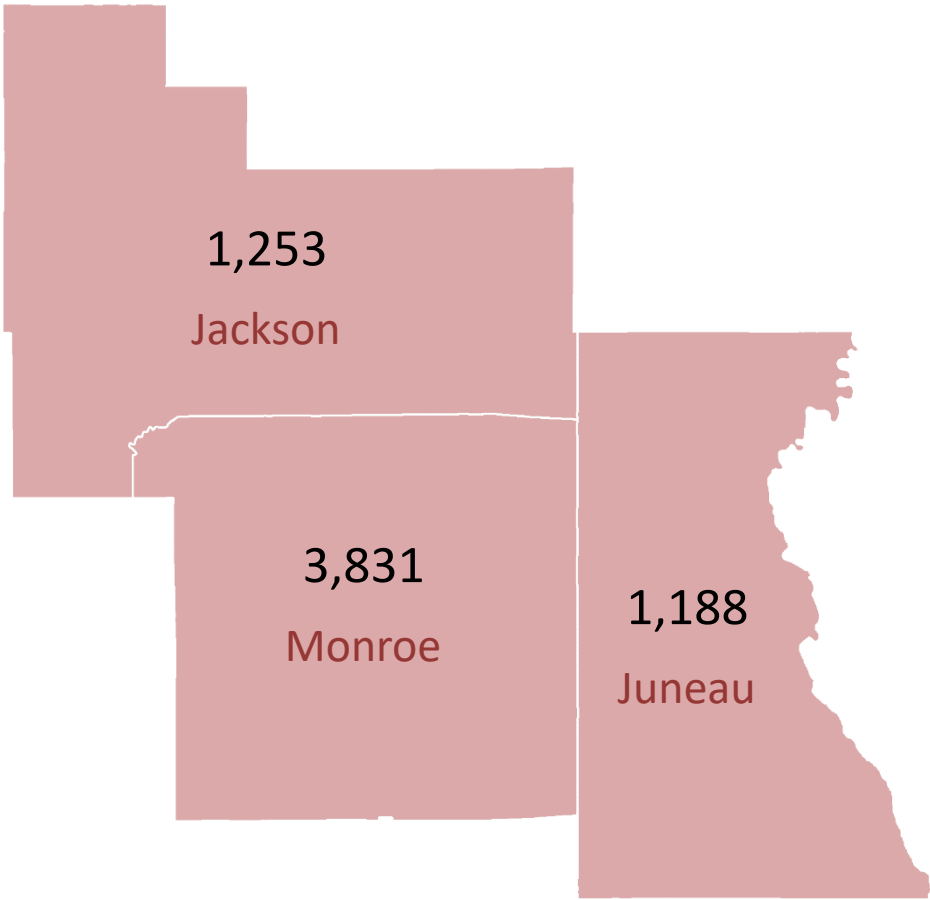
**Fabricated Metal Product  
Manufacturing**

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**Machinery Manufacturing**

Agribusiness, Food Processing and Technology

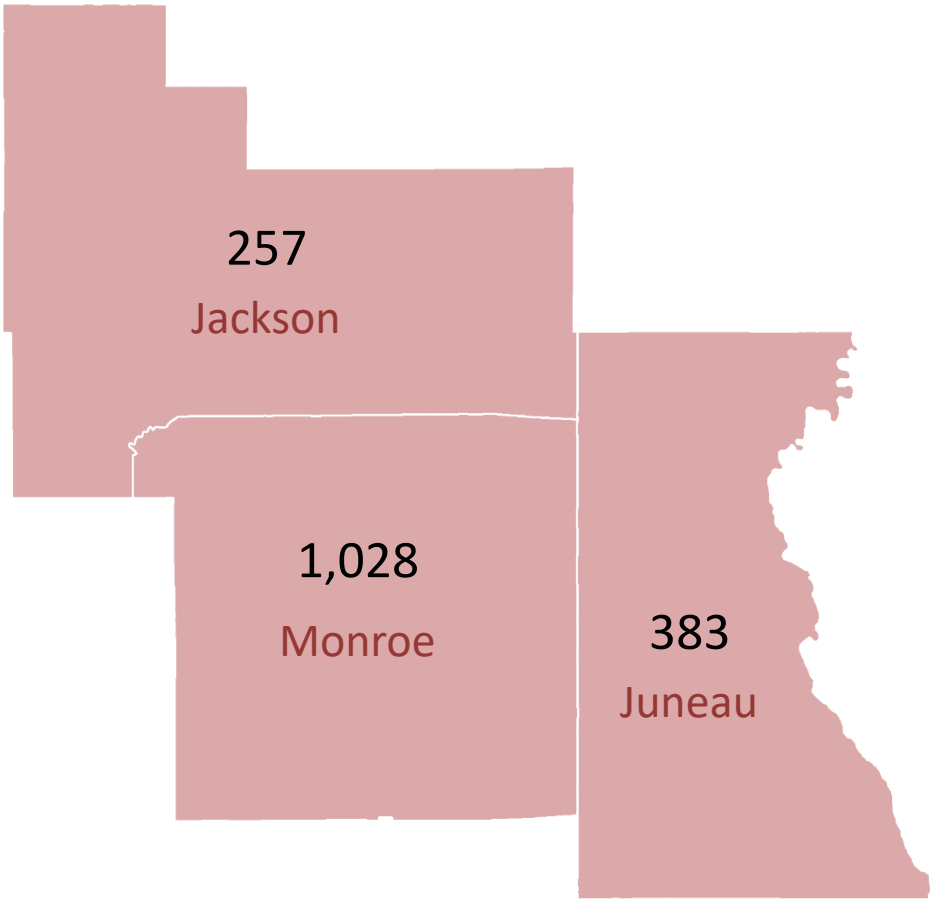
# Contribution by Counties (Jobs, 2015)





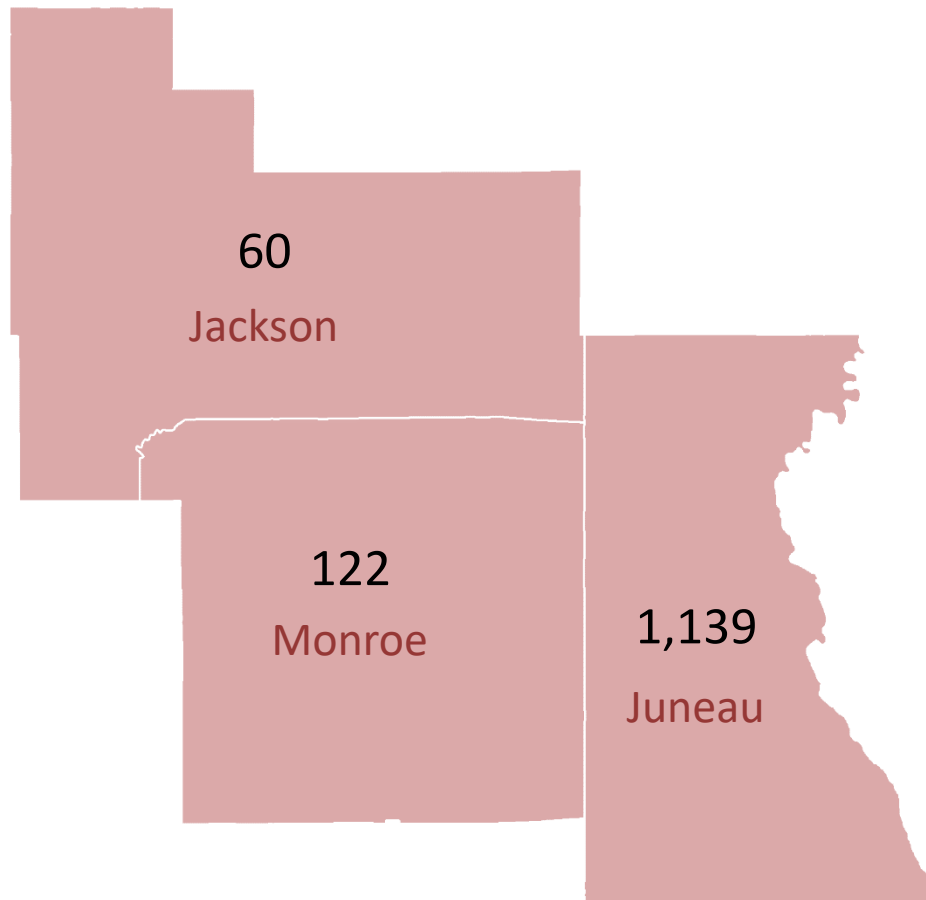
**Art, Entertainment, Recreation and Visitor Industries**

# Contribution by Counties (Jobs, 2015)



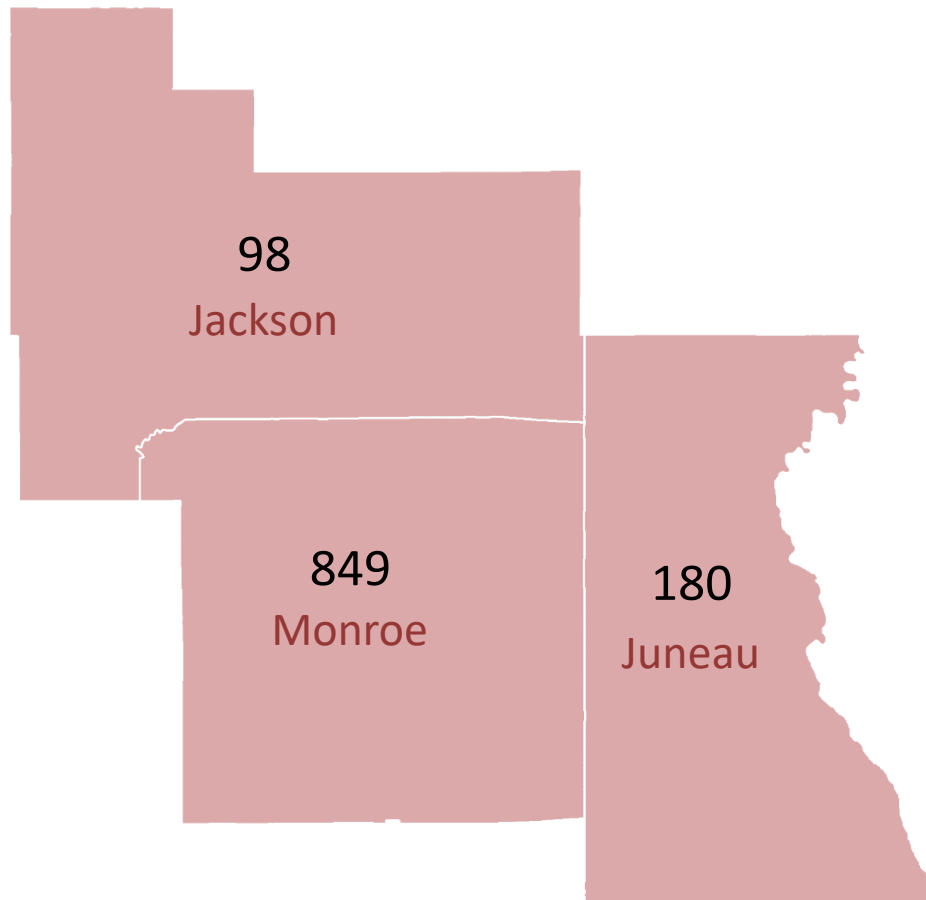
## Fabricated Metal Product Manufacturing

# Contribution by Counties (Jobs, 2015)



## Machinery Manufacturing

# Contribution by Counties (Jobs, 2015)



## Industry Clusters: Components to Assess

	<b>Agribusiness, Food Processing and Technology</b>	<b>Arts, Ent., Rec. and Visitor Industries</b>	<b>Fabricated Metal Product Mfg.</b>	<b>Machinery Mfg.</b>
Regional Performance, 2009-2015 (Shift-share analysis)	+11 (positive value)	+47 (positive value)	+97 (positive value)	-70 (negative value)
Export value, 2014	\$1,615,971,466	\$127,048,283	\$328,445,255	\$316,482,214
Leakage, 2014	\$950,310,739	\$7,363,935	\$154,987,506	\$141,303,727
Number of establishments, 2015	181	79	27	11
Contribution by counties	3	3	3	3
Business input	Seek input from businesses on how they can strengthen their connections to the key clusters, especially providing products and services now being imported from outside the region.			
Resident's value	Review Civic Forum Input from Residents			

### section 03