

# Industry Cluster Identification

for 2 Michigan Counties

Emsi Q3 2020 Data Set

August 2020



Michigan

# Parameters

Regions:

Code	Description	Code	Description
26005	Allegan County, MI	26139	Ottawa County, MI

Datarun: 2020.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

## Executive Summary

- Your highest ranked cluster is Information Technology and Analytical Instruments, with a score of 88 (out of 100) points.
- Your average cluster score is 38 (out of 100) points. This is *not* a benchmark against other regions; it only compares the relative performance of your clusters to each other. Clusters ranked higher than 38 are above average for your region, while clusters ranked lower than 38 are below average.
- Top clusters must have a score of at least 44, while bottom clusters must have a score of 31 or less. These thresholds are determined by applying the average deviation (plus or minus 7) to the average cluster score 38.

■ 12 Top Clusters  
 ■ 38 Average Clusters  
 ■ 13 Bottom Clusters



## Cluster Rankings

### Information Technology and Analytical Instruments

88

You have 8 industries in this cluster:

NAICS	Industry	Jobs	Score
334412	Bare Printed Circuit Board Manufacturing	307	35
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	120	33
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	5,750	100
334419	Other Electronic Component Manufacturing	62	33
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	138	42
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	392	34
334519	Other Measuring and Controlling Device Manufacturing	205	34
511210	Software Publishers	28	35

### Furniture

67

You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
337110	Wood Kitchen Cabinet and Countertop Manufacturing	74	30
337122	Nonupholstered Wood Household Furniture Manufacturing	170	32

337127	Institutional Furniture Manufacturing	424	33
337211	Wood Office Furniture Manufacturing	3,528	80
337214	Office Furniture (except Wood) Manufacturing	4,068	66
337215	Showcase, Partition, Shelving, and Locker Manufacturing	779	40

## Biopharmaceuticals

58

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
325411	Medicinal and Botanical Manufacturing	79	33
325412	Pharmaceutical Preparation Manufacturing	3,390	59

## Lighting and Electrical Equipment

54

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
335121	Residential Electric Lighting Fixture Manufacturing	52	32
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	82	32
335311	Power, Distribution, and Specialty Transformer Manufacturing	45	29
335313	Switchgear and Switchboard Apparatus Manufacturing	29	36
335911	Storage Battery Manufacturing	1,017	58

## Electric Power Generation and Transmission

51

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
221112	Fossil Fuel Electric Power Generation	469	52
221121	Electric Bulk Power Transmission and Control	25	36

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
611110	Elementary and Secondary Schools	1,531	34
611519	Other Technical and Trade Schools	23	28
611610	Fine Arts Schools	157	27
611692	Automobile Driving Schools	92	28
903611	Elementary and Secondary Schools (Local Government)	8,195	55

Local Government Services

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
903999	Local Government, Excluding Education and Hospitals	5,192	50

Automotive

You have 9 industries in this cluster:

NAICS	Industry	Jobs	Score
331513	Steel Foundries (except Investment)	27	29
331524	Aluminum Foundries (except Die-Casting)	437	38
332114	Custom Roll Forming	1,678	80
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	11	30
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	382	35
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	591	39
336360	Motor Vehicle Seating and Interior Trim Manufacturing	2,399	40
336370	Motor Vehicle Metal Stamping	1,038	42
336390	Other Motor Vehicle Parts Manufacturing	175	33

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	121	31
326121	Unlaminated Plastics Profile Shape Manufacturing	87	40
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	111	32
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	30	36
326199	All Other Plastics Product Manufacturing	2,691	49

 Local Utilities

You have 7 industries in this cluster:

NAICS	Industry	Jobs	Score
221122	Electric Power Distribution	32	49
221210	Natural Gas Distribution	121	58
221320	Sewage Treatment Facilities	65	36
454310	Fuel Dealers	72	35
517311	Wired Telecommunications Carriers	215	46
562212	Solid Waste Landfill	11	31
562910	Remediation Services	15	35

 Vulcanized and Fired Materials

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
326220	Rubber and Plastics Hoses and Belting Manufacturing	60	35
327215	Glass Product Manufacturing Made of Purchased Glass	1,489	45

 Recreational and Small Electric Goods

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
339920	Sporting and Athletic Goods Manufacturing	78	30
339992	Musical Instrument Manufacturing	35	31
339999	All Other Miscellaneous Manufacturing	711	47

## Metalworking Technology

41

You have 10 industries in this cluster:

NAICS	Industry	Jobs	Score
332313	Plate Work Manufacturing	135	32
332721	Precision Turned Product Manufacturing	339	35
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	742	34
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	102	30
333511	Industrial Mold Manufacturing	163	33
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	802	38
333515	Cutting Tool and Machine Tool Accessory Manufacturing	62	37
333517	Machine Tool Manufacturing	286	35
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	977	56
333992	Welding and Soldering Equipment Manufacturing	30	34

## Paper and Packaging

40

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
322130	Paperboard Mills	229	50
322211	Corrugated and Solid Fiber Box Manufacturing	485	36
322212	Folding Paperboard Box Manufacturing	269	38

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
336412	Aircraft Engine and Engine Parts Manufacturing	312	40

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
336612	Boat Building	460	39

You have 13 industries in this cluster:

NAICS	Industry	Jobs	Score
311119	Other Animal Food Manufacturing	41	33
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	235	33
311412	Frozen Specialty Food Manufacturing	671	38
311421	Fruit and Vegetable Canning	291	33
311511	Fluid Milk Manufacturing	337	37
311513	Cheese Manufacturing	140	36
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	750	52
311520	Ice Cream and Frozen Dessert Manufacturing	11	29
311920	Coffee and Tea Manufacturing	215	35
312111	Soft Drink Manufacturing	186	32
312120	Breweries	467	37
312130	Wineries	135	31
424510	Grain and Field Bean Merchant Wholesalers	50	47



You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
902999	State Government, Excluding Education and Hospitals	558	39

 Financial Services

You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
522190	Other Depository Credit Intermediation	117	35
522292	Real Estate Credit	58	36
523120	Securities Brokerage	124	48
523910	Miscellaneous Intermediation	22	34
523920	Portfolio Management	76	36
523930	Investment Advice	136	36

 Production Technology and Heavy Machinery

You have 18 industries in this cluster:

NAICS	Industry	Jobs	Score
332912	Fluid Power Valve and Hose Fitting Manufacturing	646	42
332991	Ball and Roller Bearing Manufacturing	61	34
333111	Farm Machinery and Equipment Manufacturing	78	35
333120	Construction Machinery Manufacturing	55	34
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	33	33
333249	Other Industrial Machinery Manufacturing	408	36
333318	Other Commercial and Service Industry Machinery Manufacturing	379	36
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	28	36

333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	227	32
333611	Turbine and Turbine Generator Set Units Manufacturing	26	37
333912	Air and Gas Compressor Manufacturing	42	32
333922	Conveyor and Conveying Equipment Manufacturing	477	42
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	18	32
333993	Packaging Machinery Manufacturing	388	42
333994	Industrial Process Furnace and Oven Manufacturing	81	35
333995	Fluid Power Cylinder and Actuator Manufacturing	22	31
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	277	35
339991	Gasket, Packing, and Sealing Device Manufacturing	27	33

## Oil and Gas Production and Transportation

38

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
211120	Crude Petroleum Extraction	34	34
486210	Pipeline Transportation of Natural Gas	64	40

## Upstream Metal Manufacturing

38

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
331221	Rolled Steel Shape Manufacturing	59	32
331318	Other Aluminum Rolling, Drawing, and Extruding	482	36
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	947	40
332613	Spring Manufacturing	451	35

## Footwear

37

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
316110	Leather and Hide Tanning and Finishing	128	37

## Education and Knowledge Creation

37

You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	174	37
611310	Colleges, Universities, and Professional Schools	2,235	34
611691	Exam Preparation and Tutoring	19	27
611699	All Other Miscellaneous Schools and Instruction	58	27
611710	Educational Support Services	95	28
902612	Colleges, Universities, and Professional Schools (State Government)	4,255	39

## Downstream Chemical Products

37

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
325510	Paint and Coating Manufacturing	328	40
325611	Soap and Other Detergent Manufacturing	46	30
325612	Polish and Other Sanitation Good Manufacturing	39	35
325991	Custom Compounding of Purchased Resins	73	31

## Transportation and Logistics

37

You have 12 industries in this cluster:

NAICS	Industry	Jobs	Score
481219	Other Nonscheduled Air Transportation	24	27
482110	Rail transportation	45	34
484121	General Freight Trucking, Long-Distance, Truckload	1,542	39
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	312	37
485210	Interurban and Rural Bus Transportation	31	28
485510	Charter Bus Industry	70	29
488190	Other Support Activities for Air Transportation	62	33
488490	Other Support Activities for Road Transportation	93	32
488510	Freight Transportation Arrangement	77	32
488991	Packing and Crating	18	30
488999	All Other Support Activities for Transportation	83	34
491110	Postal Service	29	28

## Printing Services

37

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
323111	Commercial Printing (except Screen and Books)	517	38
323113	Commercial Screen Printing	60	28

## Business Services

36

You have 21 industries in this cluster:

NAICS	Industry	Jobs	Score
485320	Limousine Service	39	27
518210	Data Processing, Hosting, and Related Services	41	30
541214	Payroll Services	132	32
541310	Architectural Services	164	36

541320	Landscape Architectural Services	26	29
541330	Engineering Services	875	39
541340	Drafting Services	11	34
541511	Custom Computer Programming Services	453	36
541512	Computer Systems Design Services	377	34
541519	Other Computer Related Services	86	37
541611	Administrative Management and General Management Consulting Services	243	32
541612	Human Resources Consulting Services	73	32
541614	Process, Physical Distribution, and Logistics Consulting Services	204	34
541618	Other Management Consulting Services	80	34
541690	Other Scientific and Technical Consulting Services	47	32
541990	All Other Professional, Scientific, and Technical Services	807	39
551112	Offices of Other Holding Companies	65	36
551114	Corporate, Subsidiary, and Regional Managing Offices	269	47
561210	Facilities Support Services	31	29
561311	Employment Placement Agencies	292	26
561330	Professional Employer Organizations	396	31

## Local Financial Services

35

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
522110	Commercial Banking	1,002	32
522130	Credit Unions	113	31
524210	Insurance Agencies and Brokerages	1,107	40
541213	Tax Preparation Services	125	30
561440	Collection Agencies	39	32

## Livestock Processing

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
311611	Animal (except Poultry) Slaughtering	1,362	40
311612	Meat Processed from Carcasses	1,788	32
311615	Poultry Processing	116	32
424520	Livestock Merchant Wholesalers	97	30

## Distribution and Electronic Commerce

You have 36 industries in this cluster:

NAICS	Industry	Jobs	Score
423210	Furniture Merchant Wholesalers	166	33
423220	Home Furnishing Merchant Wholesalers	33	31
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	40	40
423440	Other Commercial Equipment Merchant Wholesalers	16	30
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	14	30
423510	Metal Service Centers and Other Metal Merchant Wholesalers	84	29
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	233	36
423690	Other Electronic Parts and Equipment Merchant Wholesalers	55	37
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	107	36
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	351	35
423830	Industrial Machinery and Equipment Merchant Wholesalers	243	34
423840	Industrial Supplies Merchant Wholesalers	67	36
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	44	36
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	27	32
424130	Industrial and Personal Service Paper Merchant Wholesalers	88	37
424210	Drugs and Druggists' Sundries Merchant Wholesalers	213	42
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers	27	28

424470	Meat and Meat Product Merchant Wholesalers	42	31
424480	Fresh Fruit and Vegetable Merchant Wholesalers	59	32
424590	Other Farm Product Raw Material Merchant Wholesalers	44	30
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	11	45
424690	Other Chemical and Allied Products Merchant Wholesalers	18	45
424710	Petroleum Bulk Stations and Terminals	227	50
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	81	38
424910	Farm Supplies Merchant Wholesalers	257	35
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	385	32
424950	Paint, Varnish, and Supplies Merchant Wholesalers	54	32
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	86	30
425110	Business to Business Electronic Markets	82	34
425120	Wholesale Trade Agents and Brokers	515	30
454110	Electronic Shopping and Mail-Order Houses	247	31
493110	General Warehousing and Storage	280	35
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	35	38
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	11	31
561499	All Other Business Support Services	299	32
561910	Packaging and Labeling Services	625	39

## Trailers, Motor Homes, and Appliances

35

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
336212	Truck Trailer Manufacturing	239	35

## Communications Equipment and Services

35

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	222	35
334290	Other Communications Equipment Manufacturing	44	31
517312	Wireless Telecommunications Carriers (except Satellite)	15	37

## Local Health Services

34

You have 29 industries in this cluster:

NAICS	Industry	Jobs	Score
339116	Dental Laboratories	35	31
446110	Pharmacies and Drug Stores	597	32
621111	Offices of Physicians (except Mental Health Specialists)	707	27
621112	Offices of Physicians, Mental Health Specialists	72	36
621210	Offices of Dentists	1,256	37
621310	Offices of Chiropractors	310	30
621320	Offices of Optometrists	140	31
621330	Offices of Mental Health Practitioners (except Physicians)	144	32
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	427	31
621391	Offices of Podiatrists	21	32
621399	Offices of All Other Miscellaneous Health Practitioners	78	33
621410	Family Planning Centers	32	30
621420	Outpatient Mental Health and Substance Abuse Centers	43	29
621492	Kidney Dialysis Centers	54	32
621493	Freestanding Ambulatory Surgical and Emergency Centers	62	38
621498	All Other Outpatient Care Centers	99	30
621511	Medical Laboratories	27	28
621512	Diagnostic Imaging Centers	23	33
621610	Home Health Care Services	355	26
621999	All Other Miscellaneous Ambulatory Health Care Services	111	38



622110	General Medical and Surgical Hospitals	1,471	36
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1,221	32
623210	Residential Intellectual and Developmental Disability Facilities	71	27
623220	Residential Mental Health and Substance Abuse Facilities	51	29
623311	Continuing Care Retirement Communities	527	27
623312	Assisted Living Facilities for the Elderly	1,879	32
623990	Other Residential Care Facilities	74	27
812210	Funeral Homes and Funeral Services	97	29
903622	Hospitals (Local Government)	2,165	42

## Local Industrial Products and Services

34

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
332710	Machine Shops	1,020	31
423930	Recyclable Material Merchant Wholesalers	743	38
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	67	31
532310	General Rental Centers	53	29
811219	Other Electronic and Precision Equipment Repair and Maintenance	18	30

## Local Real Estate, Construction, and Development

34

You have 49 industries in this cluster:

NAICS	Industry	Jobs	Score
236115	New Single-Family Housing Construction (except For-Sale Builders)	940	35
236116	New Multifamily Housing Construction (except For-Sale Builders)	39	30
236117	New Housing For-Sale Builders	171	32
236118	Residential Remodelers	926	32

236220	Commercial and Institutional Building Construction	660	35
237110	Water and Sewer Line and Related Structures Construction	170	30
237210	Land Subdivision	36	30
237310	Highway, Street, and Bridge Construction	232	35
238110	Poured Concrete Foundation and Structure Contractors	813	38
238120	Structural Steel and Precast Concrete Contractors	33	30
238130	Framing Contractors	134	31
238140	Masonry Contractors	212	31
238150	Glass and Glazing Contractors	69	32
238160	Roofing Contractors	347	32
238170	Siding Contractors	126	30
238190	Other Foundation, Structure, and Building Exterior Contractors	85	33
238210	Electrical Contractors and Other Wiring Installation Contractors	1,345	37
238220	Plumbing, Heating, and Air-Conditioning Contractors	1,057	35
238290	Other Building Equipment Contractors	64	32
238310	Drywall and Insulation Contractors	340	31
238320	Painting and Wall Covering Contractors	454	31
238330	Flooring Contractors	200	31
238340	Tile and Terrazzo Contractors	117	29
238350	Finish Carpentry Contractors	286	31
238390	Other Building Finishing Contractors	148	32
238910	Site Preparation Contractors	1,000	35
238990	All Other Specialty Trade Contractors	783	37
327320	Ready-Mix Concrete Manufacturing	122	35
327390	Other Concrete Product Manufacturing	158	35
332322	Sheet Metal Work Manufacturing	510	34
337212	Custom Architectural Woodwork and Millwork Manufacturing	32	32
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	258	35
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	55	33

423330	Roofing, Siding, and Insulation Material Merchant Wholesalers	68	38
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	73	31
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	79	33
444110	Home Centers	975	33
444120	Paint and Wallpaper Stores	20	31
444190	Other Building Material Dealers	153	33
531110	Lessors of Residential Buildings and Dwellings	285	32
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	90	32
531190	Lessors of Other Real Estate Property	93	33
531210	Offices of Real Estate Agents and Brokers	334	34
531311	Residential Property Managers	314	33
531312	Nonresidential Property Managers	78	30
531320	Offices of Real Estate Appraisers	30	30
531390	Other Activities Related to Real Estate	131	33
541370	Surveying and Mapping (except Geophysical) Services	117	35
562991	Septic Tank and Related Services	65	31

## Insurance Services

34

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
524113	Direct Life Insurance Carriers	24	33
524126	Direct Property and Casualty Insurance Carriers	30	38
524127	Direct Title Insurance Carriers	14	34
524298	All Other Insurance Related Activities	32	31

## Environmental Services

33

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
562211	Hazardous Waste Treatment and Disposal	33	30
562219	Other Nonhazardous Waste Treatment and Disposal	86	36
562920	Materials Recovery Facilities	15	26

## Construction Products and Services

33

You have 7 industries in this cluster:

NAICS	Industry	Jobs	Score
221310	Water Supply and Irrigation Systems	15	28
236210	Industrial Building Construction	164	35
237130	Power and Communication Line and Related Structures Construction	160	35
237990	Other Heavy and Civil Engineering Construction	102	32
327331	Concrete Block and Brick Manufacturing	111	33
332913	Plumbing Fixture Fitting and Trim Manufacturing	10	30
332996	Fabricated Pipe and Pipe Fitting Manufacturing	30	28

## Nonmetal Mining

33

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
212321	Construction Sand and Gravel Mining	43	33

## Downstream Metal Products

33

You have 8 industries in this cluster:

NAICS	Industry	Jobs	Score
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	49	29

332216	Saw Blade and Handtool Manufacturing	163	34
332311	Prefabricated Metal Building and Component Manufacturing	171	30
332312	Fabricated Structural Metal Manufacturing	154	32
332321	Metal Window and Door Manufacturing	11	31
332439	Other Metal Container Manufacturing	11	32
332510	Hardware Manufacturing	60	34
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	422	35

## Agricultural Inputs and Services

33

You have 8 industries in this cluster:

NAICS	Industry	Jobs	Score
111000	Crop Production	4,663	31
112000	Animal Production	2,414	40
115112	Soil Preparation, Planting, and Cultivating	42	28
115113	Crop Harvesting, Primarily by Machine	56	34
115114	Postharvest Crop Activities (except Cotton Ginning)	177	31
115115	Farm Labor Contractors and Crew Leaders	594	28
115116	Farm Management Services	39	31
115210	Support Activities for Animal Production	57	28

## Local Household Goods and Services

33

You have 13 industries in this cluster:

NAICS	Industry	Jobs	Score
423710	Hardware Merchant Wholesalers	63	34
442110	Furniture Stores	310	32
442210	Floor Covering Stores	215	33

442291	Window Treatment Stores	39	30
442299	All Other Home Furnishings Stores	116	27
443141	Household Appliance Stores	150	31
444130	Hardware Stores	430	33
444210	Outdoor Power Equipment Stores	41	29
444220	Nursery, Garden Center, and Farm Supply Stores	137	27
453110	Florists	111	27
561730	Landscaping Services	1,555	35
561740	Carpet and Upholstery Cleaning Services	41	29
811420	Reupholstery and Furniture Repair	23	28

## Local Logistical Services

32

You have 10 industries in this cluster:

NAICS	Industry	Jobs	Score
484110	General Freight Trucking, Local	750	30
484122	General Freight Trucking, Long-Distance, Less Than Truckload	478	36
484210	Used Household and Office Goods Moving	35	28
484220	Specialized Freight (except Used Goods) Trucking, Local	203	34
492110	Couriers and Express Delivery Services	58	29
492210	Local Messengers and Local Delivery	33	28
531130	Lessors of Miniwarehouses and Self-Storage Units	62	30
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	49	31
562111	Solid Waste Collection	339	35
621910	Ambulance Services	60	29

## Local Motor Vehicle Products and Services

32

You have 22 industries in this cluster:

NAICS	Industry	Jobs	Score
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	184	30
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	159	34
423130	Tire and Tube Merchant Wholesalers	134	32
423140	Motor Vehicle Parts (Used) Merchant Wholesalers	68	32
441110	New Car Dealers	837	35
441120	Used Car Dealers	208	32
441210	Recreational Vehicle Dealers	127	29
441222	Boat Dealers	345	33
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	87	35
441310	Automotive Parts and Accessories Stores	355	30
441320	Tire Dealers	85	31
447110	Gasoline Stations with Convenience Stores	885	30
447190	Other Gasoline Stations	35	27
488410	Motor Vehicle Towing	76	31
811111	General Automotive Repair	907	35
811113	Automotive Transmission Repair	55	31
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	44	30
811121	Automotive Body, Paint, and Interior Repair and Maintenance	299	30
811122	Automotive Glass Replacement Shops	48	30
811191	Automotive Oil Change and Lubrication Shops	225	29
811192	Car Washes	464	32
811198	All Other Automotive Repair and Maintenance	71	30

## T Marketing, Design, and Publishing

32

You have 11 industries in this cluster:

NAICS	Industry	Jobs	Score
511120	Periodical Publishers	43	28

511130	Book Publishers	155	39
519190	All Other Information Services	72	33
541410	Interior Design Services	82	29
541420	Industrial Design Services	133	31
541430	Graphic Design Services	105	28
541490	Other Specialized Design Services	32	29
541613	Marketing Consulting Services	139	32
541810	Advertising Agencies	82	31
541820	Public Relations Agencies	34	31
541890	Other Services Related to Advertising	40	31

## Local Retailing of Clothing and General Merchandise

32

You have 12 industries in this cluster:

NAICS	Industry	Jobs	Score
448120	Women's Clothing Stores	186	29
448130	Children's and Infants' Clothing Stores	53	27
448140	Family Clothing Stores	127	26
448150	Clothing Accessories Stores	39	28
448190	Other Clothing Stores	43	28
448210	Shoe Stores	36	27
448310	Jewelry Stores	79	28
451130	Sewing, Needlework, and Piece Goods Stores	57	26
452210	Department Stores	273	27
452311	Warehouse Clubs and Supercenters	2,442	34
452319	All Other General Merchandise Stores	383	29
453310	Used Merchandise Stores	407	31

## Wood Products



You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
321113	Sawmills	24	30
321211	Hardwood Veneer and Plywood Manufacturing	59	31
321219	Reconstituted Wood Product Manufacturing	31	32
321918	Other Millwork (including Flooring)	78	30
321920	Wood Container and Pallet Manufacturing	325	31
321999	All Other Miscellaneous Wood Product Manufacturing	165	34

## Medical Devices

31

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
339114	Dental Equipment and Supplies Manufacturing	46	31

## Federal Government Services

31

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
901149	US Postal Service	512	34
901199	Federal Government, Civilian, Excluding Postal Service	99	36
901200	Federal Government, Military	675	28

## Apparel

31

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
314999	All Other Miscellaneous Textile Product Mills	70	30
315990	Apparel Accessories and Other Apparel Manufacturing	50	32

## Local Hospitality Establishments

30

You have 12 industries in this cluster:

NAICS	Industry	Jobs	Score
453220	Gift, Novelty, and Souvenir Stores	218	28
611620	Sports and Recreation Instruction	279	27
713910	Golf Courses and Country Clubs	407	26
713940	Fitness and Recreational Sports Centers	216	29
713950	Bowling Centers	88	28
722310	Food Service Contractors	1,198	30
722320	Caterers	133	28
722410	Drinking Places (Alcoholic Beverages)	518	31
722511	Full-Service Restaurants	4,755	29
722513	Limited-Service Restaurants	4,669	33
722514	Cafeterias, Grill Buffets, and Buffets	61	27
722515	Snack and Nonalcoholic Beverage Bars	577	25

## Local Community and Civic Organizations

30

You have 16 industries in this cluster:

NAICS	Industry	Jobs	Score
624110	Child and Youth Services	173	29
624120	Services for the Elderly and Persons with Disabilities	793	28
624190	Other Individual and Family Services	294	29
624210	Community Food Services	49	27
624229	Other Community Housing Services	33	30
624230	Emergency and Other Relief Services	32	33
813110	Religious Organizations	3,082	31
813211	Grantmaking Foundations	37	34

813219	Other Grantmaking and Giving Services	44	30
813311	Human Rights Organizations	19	28
813312	Environment, Conservation and Wildlife Organizations	53	27
813319	Other Social Advocacy Organizations	111	27
813410	Civic and Social Organizations	317	28
813910	Business Associations	143	36
813930	Labor Unions and Similar Labor Organizations	68	29
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)	78	33

## Textile Manufacturing

30

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	22	30

## Video Production and Distribution

30

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
512110	Motion Picture and Video Production	44	30

## Local Personal Services (Non-Medical)

29

You have 17 industries in this cluster:

NAICS	Industry	Jobs	Score
446120	Cosmetics, Beauty Supplies, and Perfume Stores	63	27
446199	All Other Health and Personal Care Stores	163	32
453910	Pet and Pet Supplies Stores	26	27

453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	286	31
532289	All Other Consumer Goods Rental	30	28
541921	Photography Studios, Portrait	108	29
541940	Veterinary Services	351	30
611511	Cosmetology and Barber Schools	22	34
624410	Child Day Care Services	903	28
811490	Other Personal and Household Goods Repair and Maintenance	244	31
812111	Barber Shops	79	28
812112	Beauty Salons	779	30
812113	Nail Salons	53	27
812199	Other Personal Care Services	124	26
812310	Coin-Operated Laundries and Drycleaners	18	26
812910	Pet Care (except Veterinary) Services	255	28
812990	All Other Personal Services	275	31

## Leather and Related Products

29

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
314910	Textile Bag and Canvas Mills	140	29

## Local Entertainment and Media

28

You have 10 industries in this cluster:

NAICS	Industry	Jobs	Score
443142	Electronics Stores	220	29
451110	Sporting Goods Stores	208	28
451120	Hobby, Toy, and Game Stores	143	28

451140	Musical Instrument and Supplies Stores	32	29
451211	Book Stores	49	26
511110	Newspaper Publishers	90	29
512131	Motion Picture Theaters (except Drive-Ins)	117	27
515111	Radio Networks	26	29
515112	Radio Stations	59	31
532282	Video Tape and Disc Rental	23	26

## Forestry

28

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
113310	Logging	34	28

## Performing Arts

28

You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
711110	Theater Companies and Dinner Theaters	40	27
711130	Musical Groups and Artists	47	26
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	78	29
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	24	28
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	19	28
711510	Independent Artists, Writers, and Performers	211	28

## Local Commercial Services

28

You have 24 industries in this cluster:

NAICS	Industry	Jobs	Score
339950	Sign Manufacturing	83	31
453210	Office Supplies and Stationery Stores	49	27
541110	Offices of Lawyers	323	34
541211	Offices of Certified Public Accountants	220	33
541219	Other Accounting Services	199	30
541350	Building Inspection Services	56	36
541380	Testing Laboratories	236	35
541620	Environmental Consulting Services	80	31
561110	Office Administrative Services	134	28
561320	Temporary Help Services	1,769	1
561410	Document Preparation Services	30	26
561439	Other Business Service Centers (including Copy Shops)	21	29
561491	Repossession Services	32	29
561612	Security Guards and Patrol Services	21	27
561710	Exterminating and Pest Control Services	85	32
561720	Janitorial Services	3,733	38
561790	Other Services to Buildings and Dwellings	110	28
561990	All Other Support Services	460	38
811212	Computer and Office Machine Repair and Maintenance	46	31
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	346	31
811411	Home and Garden Equipment Repair and Maintenance	34	28
811412	Appliance Repair and Maintenance	11	29
812320	Drycleaning and Laundry Services (except Coin-Operated)	95	27
812332	Industrial Launderers	103	31

## Local Food and Beverage Processing and Distribution

28

You have 16 industries in this cluster:

NAICS	Industry	Jobs	Score
311811	Retail Bakeries	74	30
311812	Commercial Bakeries	190	28
424410	General Line Grocery Merchant Wholesalers	34	28
424420	Packaged Frozen Food Merchant Wholesalers	33	35
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	206	33
424490	Other Grocery and Related Products Merchant Wholesalers	174	28
445110	Supermarkets and Other Grocery (except Convenience) Stores	1,479	27
445120	Convenience Stores	86	27
445210	Meat Markets	91	28
445291	Baked Goods Stores	13	27
445299	All Other Specialty Food Stores	121	28
445310	Beer, Wine, and Liquor Stores	163	27
446191	Food (Health) Supplement Stores	40	27
453991	Tobacco Stores	28	29
454210	Vending Machine Operators	59	28
454390	Other Direct Selling Establishments	134	29

## Hospitality and Tourism








27

You have 16 industries in this cluster:

NAICS	Industry	Jobs	Score
453920	Art Dealers	27	29
487210	Scenic and Sightseeing Transportation, Water	24	27
561510	Travel Agencies	92	31
561591	Convention and Visitors Bureaus	11	29
711212	Racetracks	57	27
711219	Other Spectator Sports	33	27
712110	Museums	37	28

712120	Historical Sites	52	31
713110	Amusement and Theme Parks	60	26
713920	Skiing Facilities	93	27
713930	Marinas	222	31
713990	All Other Amusement and Recreation Industries	162	27
721110	Hotels (except Casino Hotels) and Motels	577	25
721191	Bed-and-Breakfast Inns	33	27
721199	All Other Traveler Accommodation	19	27
721211	RV (Recreational Vehicle) Parks and Campgrounds	94	29

## Clusters That Don't Appear in Your Region

-  Upstream Chemical Products
-  Fishing and Fishing Products
-  Music and Sound Recording
-  Metal Mining
-  Tobacco
-  Coal Mining
-  Jewelry and Precious Metals



The clusters in this analysis are defined according to the methodology of Harvard Business School's U.S. Cluster Mapping Project. Cluster icons used with permission of the U.S. Cluster Mapping Project (<http://clustermapping.us>).

Source: U.S. Cluster Mapping (<http://clustermapping.us>), Institute for Strategy and Competitiveness, Harvard Business School. Copyright © 2014 President and Fellows of Harvard College. All rights reserved. Research funded in part by the U.S. Department of Commerce, Economic Development Administration.

Emsi has made modifications to the Harvard clusters in order to integrate our additional data.



# Appendix A - Data Sources and Calculations

## Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

## Industry Data

Emsi industry data have various sources depending on the class of worker. (1) For QCEW Employees, Emsi primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

## Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

## Shift Share

Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors.

## State Data Sources

This report uses state data from the following agencies: Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives