

# Industry Cluster Identification

for 5 County

Emsi Q2 2021 Data Set

April 2021



101 S. Mount Street  
Fairfield, Texas 75840

# Parameters

## Regions:

Code	Description	Code	Description
48001	Anderson County, TX	48293	Limestone County, TX
48161	Freestone County, TX	48349	Navarro County, TX
48289	Leon County, TX		

Datarun: 2021.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

## Executive Summary

- Your highest ranked cluster is Nonmetal Mining, with a score of 93 (out of 100) points.
- Your average cluster score is 46 (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 46 are above average for your region, while clusters ranked lower than 46 are below average.
- Top clusters must have a score of at least 55, while bottom clusters must have a score of 37 or less. These thresholds are determined by applying the average deviation (plus or minus 9) to the average cluster score 46.

■ 7 Top Clusters   ■ 38 Average Clusters   ■ 9 Bottom Clusters



## Cluster Rankings

### Nonmetal Mining

93

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
212321	Construction Sand and Gravel Mining	15	37
212324	Kaolin and Ball Clay Mining	123	100

### State Government Services

84

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
902999	State Government, Excluding Education and Hospitals	5,057	84

### Upstream Metal Manufacturing

78

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
331110	Iron and Steel Mills and Ferroalloy Manufacturing	331	78

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
221112	Fossil Fuel Electric Power Generation	226	70

 Local Education and Training

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
611110	Elementary and Secondary Schools	33	35
611610	Fine Arts Schools	14	35
624310	Vocational Rehabilitation Services	105	40
903611	Elementary and Secondary Schools (Local Government)	5,471	66

 Furniture

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
337110	Wood Kitchen Cabinet and Countertop Manufacturing	48	39
337910	Mattress Manufacturing	509	63

 Plastics

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
325211	Plastics Material and Resin Manufacturing	34	48
326122	Plastics Pipe and Pipe Fitting Manufacturing	319	66
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	151	49
326199	All Other Plastics Product Manufacturing	243	56

You have 6 industries in this cluster:

NAICS	Industry	Jobs	Score
221122	Electric Power Distribution	155	71
221210	Natural Gas Distribution	86	56
454310	Fuel Dealers	113	45
517311	Wired Telecommunications Carriers	122	47
517911	Telecommunications Resellers	31	49
562910	Remediation Services	15	42

 Business Services

You have 14 industries in this cluster:

NAICS	Industry	Jobs	Score
518210	Data Processing, Hosting, and Related Services	55	69
541320	Landscape Architectural Services	33	44
541330	Engineering Services	46	50
541511	Custom Computer Programming Services	35	50
541512	Computer Systems Design Services	199	59
541611	Administrative Management and General Management Consulting Services	67	47
541618	Other Management Consulting Services	14	57
541690	Other Scientific and Technical Consulting Services	145	53
541990	All Other Professional, Scientific, and Technical Services	315	61
551114	Corporate, Subsidiary, and Regional Managing Offices	72	49
561210	Facilities Support Services	109	34
561311	Employment Placement Agencies	18	50
561330	Professional Employer Organizations	59	47
561422	Telemarketing Bureaus and Other Contact Centers	408	59

## Information Technology and Analytical Instruments

55

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	12	55

## Vulcanized and Fired Materials

53

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
326211	Tire Manufacturing (except Retreading)	27	43
327211	Flat Glass Manufacturing	267	56
327215	Glass Product Manufacturing Made of Purchased Glass	37	39

## Oil and Gas Production and Transportation

52

You have 7 industries in this cluster:

NAICS	Industry	Jobs	Score
211120	Crude Petroleum Extraction	213	69
211130	Natural Gas Extraction	72	81
213111	Drilling Oil and Gas Wells	167	54
213112	Support Activities for Oil and Gas Operations	857	45
333132	Oil and Gas Field Machinery and Equipment Manufacturing	16	50
486110	Pipeline Transportation of Crude Oil	42	58
486210	Pipeline Transportation of Natural Gas	56	53

## Automotive

51

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
331511	Iron Foundries	199	45
336211	Motor Vehicle Body Manufacturing	264	55

## Upstream Chemical Products

51

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
325180	Other Basic Inorganic Chemical Manufacturing	129	51

## Local Government Services

50

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
903999	Local Government, Excluding Education and Hospitals	2,240	50

## Local Financial Services

50

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
522110	Commercial Banking	738	53
522130	Credit Unions	70	42
524210	Insurance Agencies and Brokerages	278	45
541213	Tax Preparation Services	36	36

## Financial Services

48

You have 10 industries in this cluster:

NAICS	Industry	Jobs	Score
522220	Sales Financing	15	39
522291	Consumer Lending	63	39
522292	Real Estate Credit	13	53
522298	All Other Nondepository Credit Intermediation	39	40
522390	Other Activities Related to Credit Intermediation	42	50
523120	Securities Brokerage	39	62
523910	Miscellaneous Intermediation	30	46
523920	Portfolio Management	36	47
523930	Investment Advice	27	58
523999	Miscellaneous Financial Investment Activities	17	51

## T Marketing, Design, and Publishing

47

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
511120	Periodical Publishers	23	47
541410	Interior Design Services	13	38
541430	Graphic Design Services	17	37
541613	Marketing Consulting Services	60	52

## (P) Communications Equipment and Services

46

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
517312	Wireless Telecommunications Carriers (except Satellite)	53	46

## A Transportation and Logistics

46

You have 6 industries in this cluster:



NAICS	Industry	Jobs	Score
482110	Rail transportation	318	54
484121	General Freight Trucking, Long-Distance, Truckload	203	37
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	129	40
488190	Other Support Activities for Air Transportation	17	39
488210	Support Activities for Rail Transportation	56	45
488510	Freight Transportation Arrangement	20	39

## Local Logistical Services

46

You have 9 industries in this cluster:

NAICS	Industry	Jobs	Score
484110	General Freight Trucking, Local	198	36
484122	General Freight Trucking, Long-Distance, Less Than Truckload	141	53
484220	Specialized Freight (except Used Goods) Trucking, Local	278	53
485410	School and Employee Bus Transportation	19	36
492110	Couriers and Express Delivery Services	26	39
531130	Lessors of Miniwarehouses and Self-Storage Units	30	39
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	36	42
562111	Solid Waste Collection	39	40
621910	Ambulance Services	104	44

## Environmental Services

45

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
562211	Hazardous Waste Treatment and Disposal	27	45

## Local Commercial Services

45

You have 15 industries in this cluster:

NAICS	Industry	Jobs	Score
453210	Office Supplies and Stationery Stores	29	36
541110	Offices of Lawyers	181	47
541211	Offices of Certified Public Accountants	63	43
541219	Other Accounting Services	75	40
561110	Office Administrative Services	181	47
561320	Temporary Help Services	659	48
561410	Document Preparation Services	17	35
561621	Security Systems Services (except Locksmiths)	10	37
561710	Exterminating and Pest Control Services	53	40
561720	Janitorial Services	452	46
561790	Other Services to Buildings and Dwellings	29	36
811212	Computer and Office Machine Repair and Maintenance	44	44
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	163	42
811412	Appliance Repair and Maintenance	17	40
812320	Drycleaning and Laundry Services (except Coin-Operated)	60	35

## Agricultural Inputs and Services

44

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
111000	Crop Production	413	35
112000	Animal Production	435	55
115112	Soil Preparation, Planting, and Cultivating	12	40
115115	Farm Labor Contractors and Crew Leaders	408	41
115210	Support Activities for Animal Production	53	39

## Coal Mining

43

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
212111	Bituminous Coal and Lignite Surface Mining	213	43

## Trailers, Motor Homes, and Appliances

43

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
336212	Truck Trailer Manufacturing	12	40
336214	Travel Trailer and Camper Manufacturing	234	44

## Downstream Metal Products

43

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
332312	Fabricated Structural Metal Manufacturing	62	45
332321	Metal Window and Door Manufacturing	20	36

## Forestry

43

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
113310	Logging	13	43

## Local Community and Civic Organizations

43

You have 9 industries in this cluster:

NAICS	Industry	Jobs	Score
624110	Child and Youth Services	100	44

624120	Services for the Elderly and Persons with Disabilities	293	45
624190	Other Individual and Family Services	40	38
624210	Community Food Services	16	35
813110	Religious Organizations	920	43
813312	Environment, Conservation and Wildlife Organizations	41	44
813410	Civic and Social Organizations	53	30
813910	Business Associations	53	39
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)	35	36

## Federal Government Services

42

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
901149	US Postal Service	270	44
901199	Federal Government, Civilian, Excluding Postal Service	144	51
901200	Federal Government, Military	290	37

## Downstream Chemical Products

42

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
325611	Soap and Other Detergent Manufacturing	12	37
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	29	44

## Distribution and Electronic Commerce

42

You have 17 industries in this cluster:

NAICS	Industry	Jobs	Score
423510	Metal Service Centers and Other Metal Merchant Wholesalers	93	45
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	21	43
423690	Other Electronic Parts and Equipment Merchant Wholesalers	14	55
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	100	45
423830	Industrial Machinery and Equipment Merchant Wholesalers	72	44
423840	Industrial Supplies Merchant Wholesalers	83	44
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	30	54
424210	Drugs and Druggists' Sundries Merchant Wholesalers	19	61
424690	Other Chemical and Allied Products Merchant Wholesalers	50	43
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	61	45
424910	Farm Supplies Merchant Wholesalers	141	43
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	101	42
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	59	42
425120	Wholesale Trade Agents and Brokers	109	45
454110	Electronic Shopping and Mail-Order Houses	42	45
493110	General Warehousing and Storage	2,241	41
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	82	37

## Local Motor Vehicle Products and Services

42

You have 17 industries in this cluster:

NAICS	Industry	Jobs	Score
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	35	40
423140	Motor Vehicle Parts (Used) Merchant Wholesalers	15	38
441110	New Car Dealers	415	48
441120	Used Car Dealers	128	42
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	42	43
441310	Automotive Parts and Accessories Stores	195	40

441320	Tire Dealers	53	38
447110	Gasoline Stations with Convenience Stores	763	39
447190	Other Gasoline Stations	105	38
453930	Manufactured (Mobile) Home Dealers	13	41
488410	Motor Vehicle Towing	37	42
811111	General Automotive Repair	297	46
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	12	41
811121	Automotive Body, Paint, and Interior Repair and Maintenance	146	42
811191	Automotive Oil Change and Lubrication Shops	48	38
811192	Car Washes	50	35
811198	All Other Automotive Repair and Maintenance	43	40

## Local Health Services

42

You have 22 industries in this cluster:

NAICS	Industry	Jobs	Score
446110	Pharmacies and Drug Stores	136	40
621111	Offices of Physicians (except Mental Health Specialists)	530	49
621112	Offices of Physicians, Mental Health Specialists	84	40
621210	Offices of Dentists	253	45
621310	Offices of Chiropractors	30	38
621320	Offices of Optometrists	31	39
621330	Offices of Mental Health Practitioners (except Physicians)	12	42
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	67	39
621399	Offices of All Other Miscellaneous Health Practitioners	16	40
621492	Kidney Dialysis Centers	82	48
621493	Freestanding Ambulatory Surgical and Emergency Centers	61	54

621498	All Other Outpatient Care Centers	97	52
621511	Medical Laboratories	15	44
621610	Home Health Care Services	1,106	45
621999	All Other Miscellaneous Ambulatory Health Care Services	16	42
622110	General Medical and Surgical Hospitals	1,144	31
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1,307	44
623210	Residential Intellectual and Developmental Disability Facilities	255	43
623311	Continuing Care Retirement Communities	115	32
623312	Assisted Living Facilities for the Elderly	88	33
812210	Funeral Homes and Funeral Services	117	44
903622	Hospitals (Local Government)	87	48

## Metalworking Technology

41

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
332313	Plate Work Manufacturing	97	41

## Livestock Processing

41

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
311611	Animal (except Poultry) Slaughtering	35	49
424520	Livestock Merchant Wholesalers	60	35

## Insurance Services

40

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
524126	Direct Property and Casualty Insurance Carriers	22	42
524298	All Other Insurance Related Activities	74	39

## Local Real Estate, Construction, and Development

39

You have 36 industries in this cluster:

NAICS	Industry	Jobs	Score
236115	New Single-Family Housing Construction (except For-Sale Builders)	330	48
236117	New Housing For-Sale Builders	17	39
236118	Residential Remodelers	132	39
236220	Commercial and Institutional Building Construction	200	51
237110	Water and Sewer Line and Related Structures Construction	48	39
237210	Land Subdivision	19	38
237310	Highway, Street, and Bridge Construction	341	37
238110	Poured Concrete Foundation and Structure Contractors	86	42
238120	Structural Steel and Precast Concrete Contractors	29	44
238130	Framing Contractors	11	39
238140	Masonry Contractors	21	38
238150	Glass and Glazing Contractors	16	39
238160	Roofing Contractors	47	39
238190	Other Foundation, Structure, and Building Exterior Contractors	38	37
238210	Electrical Contractors and Other Wiring Installation Contractors	175	42
238220	Plumbing, Heating, and Air-Conditioning Contractors	315	42
238290	Other Building Equipment Contractors	86	42
238310	Drywall and Insulation Contractors	77	40
238320	Painting and Wall Covering Contractors	111	34
238330	Flooring Contractors	75	42
238350	Finish Carpentry Contractors	52	39



238910	Site Preparation Contractors	709	30
238990	All Other Specialty Trade Contractors	225	41
327390	Other Concrete Product Manufacturing	66	46
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	25	40
423390	Other Construction Material Merchant Wholesalers	15	38
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	28	40
444110	Home Centers	341	37
444120	Paint and Wallpaper Stores	28	43
444190	Other Building Material Dealers	91	43
531110	Lessors of Residential Buildings and Dwellings	60	41
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	50	38
531210	Offices of Real Estate Agents and Brokers	111	43
531311	Residential Property Managers	65	41
531390	Other Activities Related to Real Estate	23	43
541191	Title Abstract and Settlement Offices	60	43

## Local Household Goods and Services

39

You have 9 industries in this cluster:

NAICS	Industry	Jobs	Score
423710	Hardware Merchant Wholesalers	122	44
442110	Furniture Stores	42	39
442210	Floor Covering Stores	13	38
443141	Household Appliance Stores	27	42
444130	Hardware Stores	113	43
444210	Outdoor Power Equipment Stores	32	36
444220	Nursery, Garden Center, and Farm Supply Stores	119	41
453110	Florists	30	34

561730	Landscaping Services	498	37
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## Local Hospitality Establishments

39

You have 12 industries in this cluster:

NAICS	Industry	Jobs	Score
453220	Gift, Novelty, and Souvenir Stores	24	34
611620	Sports and Recreation Instruction	26	36
713910	Golf Courses and Country Clubs	99	38
713940	Fitness and Recreational Sports Centers	133	41
713950	Bowling Centers	38	38
722310	Food Service Contractors	64	37
722320	Caterers	32	32
722410	Drinking Places (Alcoholic Beverages)	18	34
722511	Full-Service Restaurants	1,264	31
722513	Limited-Service Restaurants	2,015	44
722514	Cafeterias, Grill Buffets, and Buffets	35	35
722515	Snack and Nonalcoholic Beverage Bars	169	40

## Performing Arts

38

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
711510	Independent Artists, Writers, and Performers	39	38

## Local Industrial Products and Services

38

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
332710	Machine Shops	96	33
423930	Recyclable Material Merchant Wholesalers	19	40
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	63	44
532210	Consumer Electronics and Appliances Rental	16	45

## Local Personal Services (Non-Medical)

38

You have 11 industries in this cluster:

NAICS	Industry	Jobs	Score
446120	Cosmetics, Beauty Supplies, and Perfume Stores	30	35
453910	Pet and Pet Supplies Stores	13	35
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	90	39
541940	Veterinary Services	162	44
624410	Child Day Care Services	411	38
811490	Other Personal and Household Goods Repair and Maintenance	24	35
812111	Barber Shops	41	37
812112	Beauty Salons	182	35
812113	Nail Salons	29	37
812199	Other Personal Care Services	26	35
812990	All Other Personal Services	37	36

## Printing Services

38

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
323111	Commercial Printing (except Screen and Books)	20	39
323113	Commercial Screen Printing	26	37

## Local Entertainment and Media

You have 5 industries in this cluster:

NAICS	Industry	Jobs	Score
443142	Electronics Stores	27	42
451110	Sporting Goods Stores	71	31
511110	Newspaper Publishers	56	42
512131	Motion Picture Theaters (except Drive-Ins)	32	37
515112	Radio Stations	14	40

## Education and Knowledge Creation

37

You have 4 industries in this cluster:

NAICS	Industry	Jobs	Score
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	56	59
611710	Educational Support Services	14	40
902612	Colleges, Universities, and Professional Schools (State Government)	403	45
903612	Colleges, Universities, and Professional Schools (Local Government)	721	30

## Hospitality and Tourism

36

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
713990	All Other Amusement and Recreation Industries	51	37
721110	Hotels (except Casino Hotels) and Motels	367	36
721214	Recreational and Vacation Camps (except Campgrounds)	22	37

## Local Food and Beverage Processing and Distribution

36

You have 9 industries in this cluster:

NAICS	Industry	Jobs	Score
311812	Commercial Bakeries	113	44
424450	Confectionery Merchant Wholesalers	94	44
424490	Other Grocery and Related Products Merchant Wholesalers	50	41
424810	Beer and Ale Merchant Wholesalers	35	44
445110	Supermarkets and Other Grocery (except Convenience) Stores	899	33
445120	Convenience Stores	139	38
445310	Beer, Wine, and Liquor Stores	48	35
453991	Tobacco Stores	19	36
454390	Other Direct Selling Establishments	23	37

## Local Retailing of Clothing and General Merchandise

36

You have 11 industries in this cluster:

NAICS	Industry	Jobs	Score
448120	Women's Clothing Stores	58	35
448130	Children's and Infants' Clothing Stores	17	38
448140	Family Clothing Stores	52	33
448150	Clothing Accessories Stores	15	34
448190	Other Clothing Stores	18	35
448210	Shoe Stores	20	37
448310	Jewelry Stores	10	35
452210	Department Stores	419	50
452311	Warehouse Clubs and Supercenters	561	24
452319	All Other General Merchandise Stores	449	37
453310	Used Merchandise Stores	71	35

## Wood Products

35

You have 1 industry in this cluster:

NAICS	Industry	Jobs	Score
321920	Wood Container and Pallet Manufacturing	30	35

## Paper and Packaging

34

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
322212	Folding Paperboard Box Manufacturing	141	31
322230	Stationery Product Manufacturing	66	41

## Apparel

28

You have 2 industries in this cluster:

NAICS	Industry	Jobs	Score
314999	All Other Miscellaneous Textile Product Mills	15	19
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	32	33

## Construction Products and Services

28

















You have 7 industries in this cluster:

NAICS	Industry	Jobs	Score
221310	Water Supply and Irrigation Systems	124	42
237120	Oil and Gas Pipeline and Related Structures Construction	595	1
237130	Power and Communication Line and Related Structures Construction	259	56
237990	Other Heavy and Civil Engineering Construction	128	41
327310	Cement Manufacturing	41	60
327331	Concrete Block and Brick Manufacturing	27	28
327991	Cut Stone and Stone Product Manufacturing	150	52

You have 3 industries in this cluster:

NAICS	Industry	Jobs	Score
311352	Confectionery Manufacturing from Purchased Chocolate	299	6
311421	Fruit and Vegetable Canning	131	48
311919	Other Snack Food Manufacturing	47	40

## Clusters That Don't Appear in Your Region

-  Production Technology and Heavy Machinery
-  Leather and Related Products
-  Fishing and Fishing Products
-  Footwear
-  Jewelry and Precious Metals
-  Water Transportation
-  Biopharmaceuticals
-  Video Production and Distribution
-  Recreational and Small Electric Goods
-  Lighting and Electrical Equipment
-  Medical Devices
-  Metal Mining
-  Music and Sound Recording
-  Tobacco
-  Textile Manufacturing
-  Aerospace Vehicles and Defense



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: Texas Workforce Commission