

Aggregated Cluster Definitions

To minimize the problems caused by data suppression in the nationwide county analysis, the research team revised the six-digit cluster definitions to use three-digit NAICS sectors wherever possible, minimizing reliance upon more-detailed NAICS levels as much as possible. The following list provides these definitions for each of the 17 clusters.

NAICS Code	ADVANCED MATERIALS
212325	Clay and ceramic and refractory minerals mining
316211	Rubber and plastics footwear manufacturing
322221	Coated and laminated packaging paper and plastics film manufacturing
322299	All other converted paper product manufacturing
324191	Petroleum lubricating oil and grease manufacturing
3251	Basic chemical manufacturing
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing
32532	Pesticide and other agricultural chemical manufacturing
3254	Pharmaceutical and medicine manufacturing (except 325411)
3255	Paint, coating, and adhesive manufacturing
3256	Soap, cleaning compound, and toilet preparation manufacturing
326112	Plastics packaging film and sheet (including laminated) manufacturing
326113	Unlaminated plastics film and sheet (except packaging) manufacturing
326121	Unlaminated plastics profile shape manufacturing
32614	Polystyrene foam product manufacturing
326199	All other plastics product manufacturing
32629	Other rubber product manufacturing
327112	Vitreous china, fine earthenware, and other pottery product manufacturing
327113	Porcelain electrical supply manufacturing
327124	Clay refractory manufacturing
327125	Nonclay refractory manufacturing
32742	Gypsum product manufacturing
327910	Abrasive product manufacturing
327992	Ground or treated mineral and earth manufacturing
327993	Mineral wool manufacturing
3311	Iron and steel mills and ferroalloy manufacturing
3312	Steel product manufacturing from purchased steel
3313	Alumina and aluminum production and processing (except 331311)
3314	Nonferrous metal (except aluminum) production and processing
3315	Foundries
332111	Iron and steel forging
332116	Metal stamping

NAICS Code ADVANCED MATERIALS

332117	Powder metallurgy part manufacturing
332313	Plate work manufacturing
332322	Sheet metal work manufacturing
332618	Other fabricated wire product manufacturing
33271	Machine shops
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers
332813	Electroplating, plating, polishing, anodizing, and coloring
332911	Industrial valve manufacturing
332991	Ball and roller bearing manufacturing
332995	Other ordnance and accessories manufacturing
332997	Industrial pattern manufacturing
332999	All other miscellaneous fabricated metal product manufacturing
333298	All other industrial machinery manufacturing
333313	Office machinery manufacturing
333319	Other commercial and service industry machinery manufacturing
3335	Metalworking machinery manufacturing (except 333512, 6)
333912	Air and gas compressor manufacturing
334119	Other computer peripheral equipment manufacturing
334220	Radio and television broadcasting and wireless communications equipment manufacturing
334290	Other communications equipment manufacturing
3344	Semiconductor and other electronic component manufacturing
3345	Navigational, measuring, electromedical, and control instruments manufacturing (except 334516, 8)
33511	Electric lamp bulb and part manufacturing
335314	Relay and industrial control manufacturing
335921	Fiber optic cable manufacturing
335931	Current-carrying wiring device manufacturing
336322	Other motor vehicle electrical and electronic equipment manufacturing
336399	All other motor vehicle parts manufacturing
336419	Other guided missile and space vehicle parts and auxiliary equipment manufacturing
339111	Laboratory apparatus and furniture manufacturing
339112	Surgical and medical instrument manufacturing
339113	Surgical appliance and supplies manufacturing
339991	Gasket, packing, and sealing device manufacturing
54138	Testing laboratories
5417	Scientific research and development services

NAICS Code AGRIBUSINESS, FOOD PROCESSING AND TECHNOLOGY

111	Crop production
112	Animal production

NAICS Code AGRIBUSINESS, FOOD PROCESSING AND TECHNOLOGY

1141	Fishing
1151	Support activities for crop production
1152	Support activities for animal production
311	Food manufacturing
312	Beverage and tobacco product manufacturing
3253	Pesticide, fertilizer, and other agricultural chemical manufacturing
33311	Agricultural implement manufacturing
333294	Food product machinery manufacturing
42382	Farm and garden machinery and equipment merchant wholesalers
4245	Farm product raw material merchant wholesalers
42491	Farm supplies merchant wholesalers

NAICS Code APPAREL AND TEXTILES CLUSTER

313	Textile mills
314	Textile product mills
315	Apparel manufacturing
323113	Commercial screen printing
32513	Synthetic dye and pigment manufacturing
32522	Artificial and synthetic fibers and filaments manufacturing
32791	Abrasive product manufacturing
33791	Mattress manufacturing
337121	Upholstered household furniture manufacturing
339993	Fastener, button, needle, and pin manufacturing
4243	Apparel, piece goods, and notions merchant wholesalers (except 42434)
54143	Graphic design services
54149	Other specialized design services
54184	Media representatives
54185	Display advertising
54186	Direct mail advertising
54187	Advertising material distribution services
54189	Other services related to advertising

NAICS Code ARTS, ENTERTAINMENT, RECREATION AND VISITOR INDUSTRIES

33992	Sporting and athletic goods manufacturing
33993	Doll, toy, and game manufacturing
42391	Sporting and recreational goods and supplies merchant wholesalers
487	Scenic and sightseeing transportation
512	Motion picture and sound recording industries

NAICS Code ARTS, ENTERTAINMENT, RECREATION AND VISITOR INDUSTRIES

515	Broadcasting (except internet)
5615	Travel arrangement and reservation services
711	Performing arts, spectator sports, and related industries
712	Museums, historical sites, and similar institutions
713	Amusement, gambling, and recreation industries
7211	Traveler accommodation
7212	Rv (recreational vehicle) parks and recreational camps

NAICS Code BIOMEDICAL/BIOTECHNICAL (LIFE SCIENCES)

3254	Pharmaceutical and medicine manufacturing
333314	Optical instrument and lens manufacturing
334510	Electromedical and electrotherapeutic apparatus manufacturing
334516	Analytical laboratory instrument manufacturing
334517	Irradiation apparatus manufacturing
3391	Medical equipment and supplies manufacturing
42345	Medical, dental, and hospital equipment and supplies merchant wholesalers
446	Health and personal care stores
5417	Scientific research and development services
562112	Hazardous waste collection
562211	Hazardous waste treatment and disposal
621	Ambulatory health care services (except 6211, 6212, 6213)

NAICS Code BUSINESS AND FINANCIAL SERVICES CLUSTER

323115	Digital printing
323116	Manifold business forms printing
518	Internet service providers, web search portals, and data processing services
5222	Nondepository credit intermediation
5223	Activities related to credit intermediation
523	Securities, commodity contracts, and other financial investments and related activities
524	Insurance carriers and related activities
525	Funds, trusts, and other financial vehicles
5313	Activities related to real estate (except 531320)
533	Lessors of nonfinancial intangible assets (except copyrighted works)
5411	Legal services
5412	Accounting, tax preparation, bookkeeping, and payroll services
5413	Architectural, engineering, and related services
5414	Specialized design services
5415	Computer systems design and related services
5416	Management, scientific, and technical consulting services

NAICS Code	BUSINESS AND FINANCIAL SERVICES CLUSTER
5418	Advertising and related services
54191	Marketing research and public opinion polling
541922	Commercial photography

NAICS Code	CHEMICALS
325	Chemical manufacturing
326	Plastics and rubber products manufacturing
327	Nonmetallic mineral product manufacturing
4246	Chemical and allied products merchant wholesalers
4247	Petroleum and petroleum products merchant wholesalers

NAICS Code	DEFENSE AND SECURITY
212291	Uranium-radium-vanadium ore mining
23713	Power and communication line and related structures construction
32592	Explosives manufacturing
332912	Fluid power valve and hose fitting manufacturing
332992	Small arms ammunition manufacturing
332993	Ammunition (except small arms) manufacturing
332994	Small arms manufacturing
332995	Other ordnance and accessories manufacturing
33429	Other communications equipment manufacturing
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing
3364	Aerospace product and parts manufacturing
3366	Ship and boat building
336992	Military armored vehicle, tank, and tank component manufacturing
339113	Surgical appliance and supplies manufacturing
4231	Motor vehicle and motor vehicle parts and supplies merchant wholesalers
423860	Transportation equipment and supplies (except motor vehicle) merchant wholesalers
5415	Computer systems design and related services
541710	Research and development in the physical, engineering, and life sciences
5616	Investigation and security services
81149	Other personal and household goods repair and maintenance
922	Justice, public order, and safety activities
92612	Regulation and administration of transportation programs
927	Space research and technology
928	National security and international affairs

NAICS Code	EDUCATION AND KNOWLEDGE CREATION
611	Educational services
51111	Newspaper publishers
51112	Periodical publishers
51113	Book publishers
516	Internet publishing and broadcasting
519	Other information services

NAICS Code	ENERGY (FOSSIL AND RENEWABLE)
211	Oil and gas extraction
2121	Coal mining
213	Support activities for mining (except 213115)
212291	Uranium-radium-vanadium ore mining
2211	Electric power generation, transmission and distribution
2212	Natural gas distribution
22133	Steam and air-conditioning supply
2371	Utility system construction
2379	Other heavy and civil engineering construction (includes dams and hydroelectric facilities)
23821	Electrical contractors
23822	Plumbing, heating, and air-conditioning contractors
32411	Petroleum refineries
324199	All other petroleum and coal products manufacturing
32511	Petrochemical manufacturing
32512	Industrial gas manufacturing
325191	Gum and wood chemical manufacturing (include coke and charcoal)
325192	Cyclic crude and intermediate manufacturing
325193	Ethyl alcohol manufacturing (includes ethanol manuf.)
33241	Power boiler and heat exchanger manufacturing
33242	Metal tank (heavy gauge) manufacturing
33313	Mining and oil and gas field machinery manufacturing
333414	Heating equipment (except warm air furnaces) manufacturing (includes solar and hydronic heating equipment manufacturing)
333611	Turbine and turbine generator set units manufacturing
334413	Semiconductor and related device manufacturing
334519	Other measuring and controlling device manufacturing
3353	Electrical equipment manufacturing
3359	Other electrical equipment and component manufacturing
42352	Coal and other mineral and ore merchant wholesalers
42361	Electrical apparatus and equipment, wiring supplies, and related equipment merchant wholesalers
42369	Other electronic parts and equipment merchant wholesalers
42372	Plumbing and heating equipment and supplies (hydronics) merchant wholesalers

NAICS Code	ENERGY (FOSSIL AND RENEWABLE)
4247	Petroleum and petroleum products merchant wholesalers
447	Gasoline stations
45431	Fuel dealers
486	Pipeline transportation
52391	Miscellaneous intermediation (includes mineral and oil royalties dealing)
523999	Miscellaneous financial investment activities (includes oil and gas lease brokers)
532412	Construction, mining, and forestry machinery and equipment rental and leasing
533	Lessors of nonfinancial intangible assets (except copyrighted works)
54133	Engineering services
54136	Geophysical surveying and mapping services
54138	Testing laboratories
54162	Environmental consulting services
54169	Other scientific and technical consulting services
54171	Research and development in the physical, engineering, and life sciences
92613	Regulation and administration of communications, electric, gas, and other utilities

NAICS Code	FOREST AND WOOD PRODUCTS
113	Forestry and logging
1153	Support activities for forestry
23813	Framing contractors
23817	Siding contractors
23833	Flooring contractors
23835	Finish carpentry contractors
23816	Roofing contractors
321	Wood product manufacturing
322	Paper manufacturing
323117	Books printing
325191	Gum and wood chemical manufacturing
3255	Paint, coating, and adhesive manufacturing
32791	Abrasive product manufacturing
332213	Saw blade and handsaw manufacturing
33321	Sawmill and woodworking machinery manufacturing
333291	Paper industry machinery manufacturing
333991	Power-driven handtool manufacturing
337	Furniture and related product manufacturing (except 337124, 337125, 337214)
339992	Musical instrument manufacturing
339995	Burial casket manufacturing
4232	Furniture and home furnishing merchant wholesalers
4233	Lumber and other construction materials merchant wholesalers

NAICS Code GLASS AND CERAMICS

3271	Clay product and refractory manufacturing
3272	Glass and glass product manufacturing
3273	Cement and concrete product manufacturing
327992	Ground or treated mineral and earth manufacturing
327999	All other miscellaneous nonmetallic mineral product manufacturing
3328	Coating, engraving, heat treating, and allied activities

NAICS Code INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS

23821	Electrical contractors
333613	Mechanical power transmission equipment manufacturing
333295	Semiconductor machinery manufacturing
3341	Computer and peripheral equipment manufacturing
3342	Communications equipment manufacturing
3343	Audio and video equipment manufacturing
3344	Semiconductor and other electronic component manufacturing
334512	Automatic environmental control manufacturing for residential, commercial, and appliance use
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables
334515	Instrument manufacturing for measuring and testing electricity and electrical signals
334516	Analytical laboratory instrument manufacturing
334518	Watch, clock, and part manufacturing
3346	Manufacturing and reproducing magnetic and optical media
3353	Electrical equipment manufacturing
3359	Other electrical equipment and component manufacturing
42343	Computer and computer peripheral equipment and software merchant wholesalers
42369	Other electronic parts and equipment merchant wholesalers
5112	Software publishers
517	Telecommunications (except 5175)
518	Internet service providers, web search portals, and data processing services
5415	Computer systems design and related services
541618	Other management consulting services
5417	Scientific research and development services
92613	Regulation and administration of communications, electric, gas, and other utilities

NAICS Code MANUFACTURING SUPERCLUSTER

331	Primary metal manufacturing
332	Fabricated metal product manufacturing (except 332992, 3, 4, 5)
333	Machinery manufacturing
334	Computer and electronic product manufacturing
335	Electrical equip, appliance and component manufacturing

NAICS Code MANUFACTURING SUPERCLUSTER

336 Transportation equipment manufacturing

NAICS Code MINING

2122 Metal ore mining

2123 Nonmetallic mineral mining and quarrying

213114 Support activities for metal mining

213115 Support activities for nonmetallic minerals

482 Rail transportation

532412 Construction, mining, and forestry machinery and equipment rental and leasing

NAICS Code PRINTING AND PUBLISHING

323 Printing and related support activities

325910 Printing ink manufacturing

339950 Sign manufacturing

511 Publishing industries (except Internet)

51511 Radio broadcasting

51521 Cable and other subscription programming

516 Internet publishing and broadcasting

51911 News syndicates

51919 All other information services

54143 Graphic design services

541613 Marketing consulting services

5418 Advertising and related services

54191 Marketing research and public opinion polling

541922 Commercial photography

NAICS Code TRANSPORTATION AND LOGISTICS

481 Air transportation

482 Rail transportation

483 Water transportation

484 Truck transportation

485112 Commuter rail systems

4855 Charter bus industry

485999 All other ground passenger transportation

486 Pipeline transportation

488 Support activities for transportation

492 Couriers and messengers

493 Warehousing and storage