

## Appendix A

### Sectors and Sub-sectors potentially requiring Industrial Sites in their location – Sub-sector Descriptions

These are description of the various industries contained within the manufacturing; construction; transportation and warehousing; information; professional, scientific & technical services; administrative and waste management and remediation services; and other services sectors that contain businesses with facilities that are likely to often require “industrial type” locations. The descriptions here are largely excerpted from the U.S. Census Bureau’s web site where the North American Industry Classification System (NAICS) is described in detail and also related to the previous SIC coding system.

[https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart\\_code=31&search=2012 NAICS Search](https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart_code=31&search=2012%20NAICS%20Search)

In applying one of the NAICS classifications to individual businesses, this is not done by looking at the primary activity of the entire business, but by identifying a particular establishment of a given business and what its primary revenue activity entails. Some establishments may have a mix of revenue-producing activities, but the one accounting for most of the revenue of a particular establishment is what is used in applying a classification.

#### **Sector 31-33 – Manufacturing**

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Manufacturing establishments are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public

products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector.

**311 Food Manufacturing** Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers.

**312 Beverage and Tobacco Product Manufacturing** Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

**313 Textile Mills** Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric that is further manufactured into usable items, such as apparel, sheets, towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing. The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile.

**314 Textile Product Mills** Industries in the Textile Product Mills subsector group establishments that make textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make non-apparel textile products, such as sheets and towels).

**315 Apparel Manufacturing** Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment), and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included.

**316 Leather and Allied Product Manufacturing** Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage).

**321 Wood Product Manufacturing** Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile homes), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers. The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products.

**322 Paper Manufacturing** Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The

manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and include coating and laminating activities.

**323 Printing and Related Support Activities** Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, labels, business cards, stationery, business forms, and other materials, and perform support activities, such as data imaging, plate-making services, and bookbinding. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

**324 Petroleum and Coal Products Manufacturing** The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation. In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils.

**325 Chemical Manufacturing** The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

**326 Plastics and Rubber Products Manufacturing** Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same

subsector because plastics are increasingly being used as a substitute for rubber; however the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

**327 Nonmetallic Mineral Product Manufacturing** The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product.

This subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool.

**331 Primary Metal Manufacturing** Industries in the Primary Metal Manufacturing sub-sector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

**332 Fabricated Metal Product Manufacturing** Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture, or treat metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of

these processes.

**333 Machinery Manufacturing** Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine.

**334 Computer and Electronic Product Manufacturing** Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. Their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Communications technology and equipment have been converging with computer technology.

The creation of the Computer and Electronic Product Manufacturing subsector assists in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment, are brought together.

**335 Electrical Equipment, Appliance, and Component Manufacturing** Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute, and use electrical power. Electric Lighting Equipment Manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household Appliance Manufacturing establishments make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments make goods, such as electric motors, generators,

transformers, and switchgear apparatus. Other Electrical Equipment and Component Manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches, etc.).

**336 Transportation Equipment Manufacturing** Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. An entire subsector is devoted to this activity because of the significance of its economic size.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

**337 Furniture and Related Product Manufacturing** Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan.

**339 Miscellaneous Manufacturing** Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly in the fabrication processes used. The industries in this subsector are

defined by what is made rather than how it is made. Examples of these include:

**33911 Medical Equipment and Supplies Manufacturing** Establishments primarily engaged in manufacturing medical equipment and supplies such as surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, ophthalmic goods, dentures, and orthodontic appliances.

**339920 Sporting and Athletic Goods Manufacturing** Establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

**339940 Office Supplies (except Paper) Manufacturing** Establishments primarily engaged in manufacturing office supplies such as pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, modeling clay, hand operated stamps, stamp pads, stencils, carbon paper, and inked ribbons.

**339950 Sign Manufacturing** Establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays, etc.).

**33999 All Other Miscellaneous Manufacturing** Establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

## **Sector 23 – Construction**

The Construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector.

**2362 Nonresidential Building Construction** This industry group comprises establishments primarily responsible for the construction (including new work, additions, alterations, maintenance, and repairs) of nonresidential buildings. It includes nonresidential general contractors,

nonresidential for-sale builders, nonresidential design-build firms, and nonresidential project construction management firms.

**237 Heavy and Civil Engineering Construction** The Heavy and Civil Engineering Construction subsector comprises establishments whose primary activity is the construction of entire engineering projects (e.g., highways and dams), and specialty trade contractors, whose primary activity is the production of a specific component for such projects. Specialty trade contractors in Heavy and Civil Engineering Construction generally are performing activities that are specific to heavy and civil engineering construction projects and are not normally performed on buildings. The work performed may include new work, additions, alterations, or maintenance and repairs.

For example, specialized equipment is needed to paint lines on highways. This equipment is not normally used in building applications so the activity is classified in this subsector. Traffic signal installation, while specific to highways, uses much of the same skills and equipment that are needed for electrical work in building projects and is therefore classified in Subsector 238, Specialty Trade Contractors.

Construction projects involving water resources (e.g., dredging and land drainage) and projects involving open space improvement (e.g., parks and trails) are included in this subsector. Establishments whose primary activity is the subdivision of land into individual building lots usually perform various additional site-improvement activities (e.g., road building and utility line installation) and are included in this subsector.

**2382 Building Equipment Contractors** This industry group comprises establishments primarily engaged in installing or servicing equipment that forms part of a building mechanical system (e.g., electricity, water, heating, and cooling). The work performed may include new work, additions, alterations, maintenance, and repairs. Contractors installing specialized building equipment, such as elevators, escalators, service station equipment, and central vacuum cleaning systems are also included.

## **Sector 48-49 – Transportation and Warehousing**

The Transportation and Warehousing sector includes industries

providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline.

The Transportation and Warehousing sector distinguishes three basic types of activities: subsectors for each mode of transportation, a subsector for warehousing and storage, and a subsector for establishments providing support activities for transportation. In addition, there are subsectors for establishments that provide passenger transportation for scenic and sightseeing purposes, postal services, and courier services.

**48211 Rail Transportation** Establishments primarily engaged in operating railroads (except street railroads, commuter rail, urban rapid transit, and scenic and sightseeing trains). Line-haul railroads and short-line railroads are included in this industry.

**488210 Support Activities for Rail Transportation** Establishments primarily engaged in providing specialized services for railroad transportation including servicing, routine repairing (except factory conversion, overhaul or rebuilding of rolling stock), and maintaining rail cars; loading and unloading rail cars; and operating independent terminals.

**484 Truck Transportation** Industries in the Truck Transportation subsector provide over-the-road transportation of cargo using motor vehicles, such as trucks and tractor trailers. The subsector is subdivided into general freight trucking and specialized freight trucking. This distinction reflects differences in equipment used, type of load carried, scheduling, terminal, and other networking services. General freight transportation establishments handle a wide variety of general commodities, generally palletized, and transported in a container or van trailer. Specialized freight transportation is the transportation of cargo that, because of size, weight, shape, or other inherent characteristics require specialized equipment for transportation.

**491110 Postal Service** Establishments primarily engaged in providing mail services under a universal service obligation. Due to the infrastructure requirements of providing mail service under a universal service obligation, postal service establishments often provide parcel and express delivery services in addition to the mail service.

**492110 Couriers and Express Delivery Services** Establishments primarily engaged in providing air, surface, or combined mode courier and express delivery services of parcels, but not operating under a universal service obligation. These parcels can include goods and documents, but the express delivery services are not part of the normal mail service.

**493110 General Warehousing and Storage** Establishments primarily engaged in operating merchandise warehousing and storage facilities. These generally handle goods in containers, such as boxes, barrels, and/or drums, using equipment, such as forklifts, pallets, and racks. They are not specialized in handling bulk products of any particular type, size, or quantity of goods or products.

**493120 Refrigerated Warehousing and Storage** Establishments primarily engaged in operating refrigerated warehousing and storage facilities including blast freezing, tempering, and modified atmosphere storage services.

**493130 Farm Product Warehousing and Storage** Establishments primarily engaged in operating bulk farm product warehousing and storage facilities (except refrigerated). Grain elevators primarily engaged in storage are included in this industry.

**493190 Other Warehousing and Storage** Establishments primarily engaged in operating warehousing and storage facilities (except general merchandise, refrigerated, and farm product warehousing and storage).

## **Sector 51 – Information**

The Information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute

these products as well as data or communications, and (c) processing data.

The main components of this sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; Web search portals, data processing industries, and the information services industries.

### **5111 Newspaper, Periodical, Book, and Directory Publishers**

Establishments primarily engaged in publishing newspapers, magazines, other periodicals, books, directories and mailing lists, and other works, such as calendars, greeting cards, and maps.

**511210 Software Publishers** Establishments primarily engaged in computer software publishing or publishing and reproduction including ones that carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers. These establishments may design, develop, and publish, or publish only.

**5121 Motion Picture and Video Industries** Establishments primarily engaged in the production and/or distribution of motion pictures, videos, television programs, or commercials; in the exhibition of motion pictures; or in the provision of postproduction and related services.

**517110 Wired Telecommunications Carriers** Establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.

**517210 Wireless Telecommunications Carriers (except Satellite)**

Establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves including ones such as cellular phone services, paging services, wireless Internet access, and wireless video services.

**517410 Satellite Telecommunications** Establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.

**518210 Data Processing, Hosting, and Related Services**

Establishments primarily engaged in providing infrastructure for hosting or data processing services including ones that provide specialized hosting activities, such as web hosting, streaming services or application hosting; provide application service provisioning; or may provide general time-share mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.

**Sector 54 – Professional, Scientific, and Technical Services**

The Professional, Scientific, and Technical Services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. The establishments in this sector specialize according to expertise and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

**541380 Testing Laboratories** Establishments primarily engaged in performing physical, chemical, and other analytical testing services, such as acoustics or vibration testing, assaying, biological testing (except medical and veterinary), calibration testing, electrical and

electronic testing, geotechnical testing, mechanical testing, nondestructive testing, or thermal testing. The testing may occur in a laboratory or on-site.

**54171 Research and Development in the Physical, Engineering, and Life Sciences** Establishments primarily engaged in conducting research and experimental development in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, biotechnology, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other allied subjects.

**Sector 56 – Administrative and Support and Waste Management and Remediation Services**

The Administrative and Support and Waste Management and Remediation Services sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. The establishments in this sector specialize in one or more of these support activities and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

**562 Waste Management and Remediation Services** Establishments engaged in the collection, treatment, and disposal of waste materials including ones engaged in local hauling of waste materials; operating materials recovery facilities (i.e., those that sort recyclable materials from the trash stream); providing remediation services (i.e., those that provide for the cleanup of contaminated buildings, mine sites, soil, or ground water); and providing septic pumping and other miscellaneous waste management services. Three industry groups within the subsector separate these activities into waste collection, waste treatment and disposal, and remediation and other waste management.

**562111 Solid Waste Collection** Establishments primarily engaged in one or more of the following: (1) collecting and/or hauling nonhazardous solid waste (i.e., garbage) within a local area; (2) operating nonhazardous solid waste transfer stations; and (3) collecting and/or hauling mixed recyclable

materials within a local area.

**562112 Hazardous Waste Collection** Establishments primarily engaged in collecting and/or hauling hazardous waste within a local area and/or operating hazardous waste transfer stations. Hazardous waste collection establishments may be responsible for the identification, treatment, packaging, and labeling of waste for the purposes of transport.

**562910 Remediation Services** Establishments primarily engaged in one or more of the following: (1) remediation and cleanup of contaminated buildings, mine sites, soil, or ground water; (2) integrated mine reclamation activities, including demolition, soil remediation, waste water treatment, hazardous material removal, contouring land, and revegetation; and (3) asbestos, lead paint, and other toxic material abatement.

**562991 Septic Tank and Related Services** Establishments primarily engaged in (1) pumping (i.e., cleaning) septic tanks and cesspools and/or (2) renting and/or servicing portable toilets.

## **Sector 81 – Other Services (except Public Administration)**

The Other Services (except Public Administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. These are primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

**8112 Electronic and Precision Equipment Repair and Maintenance** Establishments primarily engaged in repairing electronic equipment, such as computers and communications equipment, and highly specialized precision instruments, typically having staff skilled in repairing items having complex, electronic components.

**811310 Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance** Establishments

primarily engaged in the repair and maintenance of commercial and industrial machinery and equipment. Establishments in this industry either sharpen/install commercial and industrial machinery blades and saws or provide welding (e.g., automotive, general) repair services; or repair agricultural and other heavy and industrial machinery and equipment (e.g., forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment, and mining machinery).