

# DEFINITIONS OF CONSTRUCTION

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Construction includes the following:

1. New buildings and structures.
2. Additions, alterations, conversions, expansions, reconstruction, renovations, rehabilitations, and major replacements (such as the complete replacement of a roof or heating system).
3. Mechanical and electrical installations such as plumbing, heating, electrical work, elevators, escalators, central air-conditioning, and other similar building services.
4. Site preparation and outside construction of fixed structures or facilities such as sidewalks, highways and streets, parking lots, utility connections, outdoor lighting, railroad tracks, airfields, piers, wharves and docks, telephone lines, radio and television towers, water supply lines, sewers, water and signal towers, electric light and power distribution and transmission lines, petroleum and gas pipelines, and similar facilities that are built into or fixed to the land.
5. Installation of the following types of equipment: boilers, overhead hoists and cranes, and blast furnaces.
6. Fixed, largely site-fabricated equipment not housed in a building, primarily for petroleum refineries and chemical plants, but also including storage tanks, refrigeration systems, etc.
7. Cost and installation of construction materials placed inside a building and used to support production machinery; for example, concrete platforms, overhead steel girders, and pipes to carry paint, etc. from storage tanks.

The following are excluded from construction:

1. Maintenance and repairs to existing structures or service facilities.
2. Cost and installation of production machinery and equipment items not specifically covered above, such as heavy industrial machinery, printing presses, stamping machines, bottling machines, and packaging machines; special purpose equipment designed to prepare the structure for a specific use, such as steam tables in restaurants, pews in churches, lockers in school buildings, beds or X-ray machines in hospitals, and display cases and shelving in stores.
3. Drilling of gas and oil wells, including construction of offshore drilling platforms; digging and shoring of mines (construction of buildings at mine sites is included); work that is an integral part of farming operations such as plowing and planting of crops.
4. Land acquisition.

## VALUE OF CONSTRUCTION PUT IN PLACE

The "value of construction put in place" is a measure of the value of construction installed or erected at the site during a given period. For an individual project, this includes—

1. Cost of materials installed or erected.
2. Cost of labor (both by contractors and force account) and a proportionate share of the cost of construction equipment rental.

3. Contractor's profit.
4. Cost of architectural and engineering work.
5. Miscellaneous overhead and office costs chargeable to the project on the owner's books.
6. Interest and taxes paid during construction (except for state and locally owned projects).

The total value-in-place for a given period is the sum of the value of work done on all projects underway during this period, regardless of when work on each individual project was started or when payment was made to the contractors. For some categories, published estimates represent payments made during a period rather than the value of work actually done during that period. For other categories, estimates are derived by distributing the total construction cost of the project by means of historic construction progress patterns.

## **CLASSIFICATION OF CONSTRUCTION**

The following descriptions are used in classifying construction projects. Projects are classified as privately owned or government owned (state, local, or federal government). The distinction is made on the basis of ownership during the construction period.

### **Total Construction**

#### **Residential Buildings**

##### **New single family**

Includes new houses and town houses built to be sold or rented and units built by the owner or for the owner on contract. The classification excludes residential units in buildings that are primarily nonresidential. It also excludes manufactured housing and houseboats.

##### **New multi-family**

Includes new apartments and condominiums. The classification excludes residential units in buildings that are primarily nonresidential.

State and local includes remodeling, additions, and major replacements to multi-family properties subsequent to completion of original building as well as construction of additional housing units in existing residential structures, the addition of swimming pools and garages, and replacement of major equipment items such as water heaters, furnaces, and central air-conditioners. Maintenance and repair work is excluded.

##### **Improvements**

Includes remodeling, additions, and major replacements to owner occupied properties subsequent to completion of original building. It includes construction of additional housing units in existing residential structures, finishing of basements and attics, modernization of kitchens, bathrooms, etc. Also included are improvements outside of residential structures, such as the addition of swimming pools and garages, and replacement of major equipment items such as water heaters, furnaces and central air-conditioners. Maintenance and repair work is not included.

Improvements to state and locally owned multi-family units are included in the state and local multi-family category.

#### **Lodging**

Includes hotels, motels, resort lodging, tourist courts and cabins, and similar facilities.

## **Office**

In addition to the types of offices listed below, it also includes motion picture, television, and radio offices.

Office buildings at manufacturing sites are classified as "manufacturing"; however, an office building owned by a manufacturing company and not located at a manufacturing site is classified as "office."

## **General**

Includes administration buildings, computer centers, office buildings, and professional buildings.

State and local and federal also includes city halls, borough halls, municipal buildings, courthouses, and state capitol buildings.

## **Financial**

Includes banks, financial institutions, building & loans, saving & loans, and credit unions.

## **Commercial**

Includes buildings and structures used by the retail, wholesale and selected service industries.

## **Automotive**

Includes the following:

**Sales** – includes auto dealerships, motorcycle dealerships, auto showrooms, and truck dealerships.

**Service/parts** – includes auto service centers, auto parts centers, auto repair centers, tire service centers, car washes, car rental centers, gas stations, and emissions testing centers.

**Parking** – includes commercial parking lots and garages.

## **Food/beverage**

Includes the following:

**Food** – includes supermarkets, bakeries, dairies, markets, convenience stores, and delicatessens.

**Dining/drinking** – includes liquor stores, bars, nightclubs, cafés, diners, restaurants, cafeterias, taverns, inns (eat & drink only), and bistros.

**Fast food** – includes drive-in restaurants and fast food restaurants.

## **Multi-retail**

In addition to the types of multi-retail establishments listed below, it also includes warehouse-type retail stores.

**General merchandise** – includes department stores and variety stores.

**Shopping center** – includes shopping centers, shopping plazas, and town centers.

**Shopping mall** – includes shopping malls.

## **Other commercial**

In addition to the types of stores listed below, it also includes beauty salons, nail shops, crematories, funeral homes, animal shelters, kennels, veterinary clinics, florists, nurseries, pawnshops, photo shops, dance schools, dry cleaners, laundromats, and post offices.

**Drug store** – includes drug stores and pharmacies.

**Building supply store** – includes hardware stores and lumber yards.

**Other stores** – includes clothing stores, jewelry stores, salesrooms (non-auto), furniture stores, office supply stores, storerooms, and electronics stores.

## **Warehouse**

Warehouses and storage buildings, cold storage plants, grain elevators, and silos located at manufacturing sites are included in the manufacturing category.

In addition to the types of warehouses listed below, it also includes grain elevators and greenhouses.

**General commercial** – includes commercial warehouses, storage warehouses, and distribution buildings.

**Mini-storage** – includes mini-storage centers and self storage centers.

## **Farm**

Includes buildings and structures such as barns, storage houses, smokehouses, and fences; land improvements such as land leveling, terracing, tile drainage; and the construction of ponds, roads and lanes on establishments having annual agricultural sales of \$1,000 or more.

## **Health Care**

### **Hospital**

Includes hospitals, mental hospitals, infirmaries, and infrastructure.

### **Medical building**

Includes clinics, medical offices, medical labs, doctor & dentist offices, outpatient clinics, and research labs (non-manufacturing, non-educational, or non-hospital).

### **Special care**

Includes nursing homes, hospices, orphan homes, sanatoriums, drug clinics, rehabilitation centers, rest homes, and adult day-care centers.

## **Educational**

In addition to the types of educational facilities listed below, it also includes nursing schools, cosmetology and beauty schools, trade schools, military training facilities, schools for the handicapped, and modeling schools.

Schools on Indian reservations are included in federal construction.

### **Preschool**

Includes childcare and day-care centers, nurseries, and preschools.

### **Primary/secondary**

In addition to the types of primary and secondary schools listed below, it also includes academies, parochial schools, and vocational schools.

**Elementary** – includes elementary schools.

**Middle/junior high** – includes middle and junior high schools.

**High** – includes high schools.

## **Higher education**

In addition to the types of higher education facilities listed below, it also includes health centers and clinics located at colleges (including junior and community colleges) and universities.

**Instructional** – includes instructional buildings and laboratories.

**Parking** – includes parking lots and garages.

**Administration** – includes administration buildings.

**Dormitory** – includes dormitories, living/learning centers and residence halls.

**Library** – includes libraries (school).

**Student union/cafeteria** – includes student union buildings and cafeterias.

**Sports/recreation** – includes gymnasiums and athletic field houses, arenas, coliseums and stadiums, outdoor courts or fields, racquetball courts, rinks, tennis courts, and swimming pools.

**Infrastructure** – includes power plants, water supply facilities, sewage and other infrastructure.

## **Other educational**

In addition to the types of facilities listed below, it also includes zoos, arboreta, botanical gardens, planetariums and observatories.

**Gallery/museum** – includes art galleries, cultural centers, and museums.

**Library/archive** – includes libraries (nonschool) and archives.

## **Religious**

Certain buildings, although owned by religious organizations, are not included in this category. These include educational or charitable institutions, hospitals, and publishing houses.

### **House of worship**

Includes churches, chapels, mosques, synagogues, tabernacles, and temples.

### **Other religious**

In addition to the types of facilities listed below, it also includes sanctuaries, abbeys, convents, novitiates, rectories, monasteries, missions, seminaries, and parish houses.

**Auxiliary building** – includes fellowship halls, life centers, camps and retreats, and Sunday schools.

## **Public Safety**

### **Correctional**

Includes the following:

**Detention** - includes cell blocks, detention centers, jails, penitentiaries, and prisons.

**Police/sheriff** - includes police stations and sheriffs' offices.

### **Other public safety**

In addition to the types of facilities listed below, it also includes armories and military structures that could not be assigned to a specific type of construction.

**Fire/rescue** – includes fire stations, rescue squads, dispatch and emergency centers.

## **Amusement and Recreation**

In addition to the types of facilities listed below, it also includes racetracks, equestrian centers, riding academies, bowling alleys, rifle ranges, casinos, pool halls, and driving ranges.

## **Theme/amusement park**

Includes amusement buildings or rides, theme parks, and arcades.

## **Sports**

Includes the following types of structures not located at schools or colleges: gymnasiums and athletic field houses, arenas, coliseums and stadiums, outdoor courts or fields, racquetball courts, rinks, tennis courts, and swimming pools.

## **Fitness**

Includes fitness centers, health or athletic clubs, YMCAs, YWCAs, cabanas, saunas, and spas.

## **Performance/meeting center**

In addition to the types of facilities listed below, it also includes civic centers, concert halls, opera houses, theaters for the performing arts, amphitheaters, pavilions, and auditoriums.

**Convention centers** – includes convention and trade centers.

## **Social center**

In addition to the types of facilities listed below, it also includes banquet halls, lodge buildings, golf courses, community houses, community centers, fraternal halls, and country clubs.

**Neighborhood center** – includes community houses, community centers, and neighborhood centers.

## **Park/camp**

Includes parks, seasonal camps, and tourist camps.

## **Movie theater/studio**

Includes movie theaters, drive-ins, and movie, radio, and television studios.

## **Transportation**

### **Air**

In addition to the types of facilities listed below, it also includes pavement and lighting, hangars, air freight terminals, space facilities, air traffic towers, aircraft storage and maintenance buildings.

**Passenger terminal** – includes air passenger terminals.

**Runway** – includes airport runway pavement and lighting.

### **Land**

In addition to the types of facilities listed below, it also includes maintenance facilities and freight terminals (bus, railroad, or truck).

**Passenger terminal** – includes bus and railroad passenger terminals.

**Mass transit** – includes light rail, monorail, streetcar, and subway facilities.

**Railroad** – includes railroad track and bridges.

### **Water**

**Dock/marina** – includes docks, piers, wharves, and marinas.

**Dry dock/marine terminal** – includes dry docks, boatels, and maritime freight terminals.

## **Communication**

Includes telephone, television, and radio, distribution and maintenance buildings and structures.

## **Power**

In addition to the types of facilities listed below, it also includes wind and solar energy facilities.

## **Electric**

In addition to the types of facilities listed below, it also includes power plants (nuclear, oil, gas, coal, wood), nuclear reactors, and hydroelectric plants.

**Distribution** – includes electric distribution systems, electrical substations, switch houses, transformers, and transmission lines.

## **Gas**

Includes buildings and structures for the distribution, transmission, gathering, and storage of natural gas.

## **Oil**

Includes buildings and structures for the distribution, transmission, gathering, and storage of crude oil.

## **Highway and Street**

### **Pavement**

Includes highways, roads, streets, culverts, gutters, and sidewalks.

### **Lighting**

Includes traffic lights, signals and highway lighting systems.

### **Retaining wall**

Includes retaining walls and fences.

### **Tunnel**

Includes highway tunnels (vehicular or pedestrian).

### **Bridge**

Includes bridges and overhead crossings (vehicular or pedestrian).

### **Toll/weigh**

Includes toll facilities, weigh and inspection stations.

Federal includes border-crossing stations.

### **Maintenance building**

Includes maintenance and storage buildings and salt domes.

### **Rest facility**

Includes rest facilities, travel centers, median improvements, beautification projects, and welcome centers.

## **Sewage and Waste Disposal**

### **Sewage/dry waste**

In addition to the types of facilities listed below, it also includes resource recovery and recycling centers, and pond sewage systems.

**Plant** – includes solid waste disposals (incinerator or burial), sewage treatment plants, and sewage disposal plants.

**Line/pump station** – includes sanitary sewers, sewage pipeline, interceptors and lift/pump stations.

### **Waste water**

**Plant** – includes waste water disposal plants.

**Line/drain** – includes water collection systems (nonpotable water) and storm drains.

## **Water Supply**

### **Plant**

Includes filtration, treatment, water supply, and water softening plants.

### **Well**

Includes water wells.

### **Line**

Includes culverts (water supply), water transmission pipelines, tunnels and water lines.

### **Pump station**

Includes gatehouses and lift/pump stations.

### **Reservoir**

Includes potable water supply reservoirs.

### **Tank/tower**

Includes water storage tanks and towers.

## **Conservation and Development**

In addition to the types of projects listed below, it also includes facilities constructed for irrigation (draining, dredging, water collection systems, nonpotable reservoir), mine reclamation, fish hatcheries and wetlands.

### **Dam/levee**

Includes non-power dams, dikes, levees, locks and lock gates.

### **Breakwater/jetty**

Includes breakwaters, bulkheads, tide-gates, jetties, erosion control, retaining walls, and sea walls.

### **Dredging**

Includes non-irrigation related dredging.

## **Manufacturing**

Includes all buildings and structures at manufacturing sites. Office buildings and warehouses owned by manufacturing companies but not constructed at a manufacturing site are classified as "office" and "commercial" respectively.

### **Food/beverage/tobacco**

Food industries transform livestock and agricultural products into products for intermediate or final consumption. These products are typically sold to wholesalers or retailers for distribution to consumers.

Beverage industries include manufacturing of nonalcoholic and alcoholic beverages. Ice manufacturing is included with nonalcoholic beverage manufacturing.

Tobacco industries include the redrying and stemming of tobacco and the manufacturing of tobacco products, such as cigarettes and cigars.

### **Textile/apparel/leather & allied**

Textile industries transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric.

Apparel industries purchase fabric to cut and sew to make a garment.



Leather and allied industries transform hides into leather products. Also included are leather substitutes, such as rubber (ex. rubber footwear) and plastic (ex. plastic purses or wallets).

## **Wood**

Wood industries manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings.

## **Paper**

Paper industries manufacture pulp, paper, or converted paper products.

## **Print/publishing**

Print/publishing industries print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as bookbinding, platemaking services, and data imaging.

## **Petroleum/coal**

Petroleum/coal industries transform crude petroleum and coal into usable products.

## **Chemical**

Chemical industries transform organic and inorganic raw materials by a chemical process and form products.

## **Plastic/rubber**

Plastic/rubber industries make goods by processing plastics materials and raw rubber.

## **Nonmetallic mineral**

Nonmetallic mineral industries transform mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption.

## **Primary metal**

Primary metal industries smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. 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.

## **Fabricated metal**

Fabricated metal industries transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere.

## **Machinery**

Machinery industries create end products that apply mechanical force, for example, the application of gears and levers, to perform work.

## **Computer/electronic/electrical**

Computer/electronic industries manufacture computers, computer peripherals, communications equipment, and similar electronic products, and the components for such products.

Electrical industries manufacture products that generate, distribute, and use electrical power. Included are manufacturers of electric lighting equipment, household appliances, and other electrical equipment and components.

## **Transportation equipment**

Transportation equipment industries produce equipment for transporting people and goods.

## **Furniture**

Furniture industries make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures.

## **Miscellaneous**

Miscellaneous industries make a wide range of products that are not produced in the specified manufacturing categories. Examples are medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.