

LOUISIANA GEOGRAPHIC INFORMATION SYSTEMS COUNCIL

A RESOLUTION TO ADOPT THE *Louisiana Spatial Data Infrastructure*

ADOPTED December 17, 2009

WHEREAS, the Louisiana Geographic Information Systems Council (LGISC) was created to eliminate duplication of effort and unnecessary redundancy in data collections and to provide for integration of geographically-related databases to facilitate the policy and planning purposes of the state of Louisiana, and

WHEREAS, it is the policy of the Louisiana Geographic Information Systems Council to facilitate data sharing and promulgate data standards between all sectors of the Louisiana geospatial community, and

WHEREAS, the Louisiana Geographic Information Systems Council, Digital Data Committee has over a seven year period developed the Louisiana Spatial Data Infrastructure (LSDI) which is comprised of framework layers identified by the Federal Geographic Data Committee, the State of Louisiana and the U.S. Department of Homeland Security, and

WHEREAS, specific elements of the Louisiana Spatial Data Infrastructure can be addressed within the U.S. Department of Homeland Security spatial data framework, and

WHEREAS, the majority of federal and state agencies responding to emergencies will use the U.S. Department of Homeland Security spatial data framework, and

WHEREAS, the Louisiana Geographic Information Systems Council Digital Data Committee will meet as needed to address changes to the Federal Geographic Data Committee, the State of Louisiana and the U.S Department of Homeland Security spatial data framework and their effect on the LSDI; now therefore,

BE IT RESOLVED BY THE LOUISIANA GEOGRAPHIC INFORMATION SYSTEMS COUNCIL, that the council adopts the Louisiana Spatial Data Infrastructure in its current form with the understanding that the Louisiana Spatial Data Infrastructure will change overtime as the Council Digital Data Committee addresses framework modifications due to federal, state and local government spatial framework needs.

Louisiana Geographic Information Systems Council

Louisiana Spatial Data Infrastructure

December 2009

The Louisiana Geographic Information Systems Council (LGISC) was created by an act of the Legislature in 1995 (Act 922) to guide the sound development of geographic information systems and geographically related information technology for the State of Louisiana. The Council's responsibilities include the establishment of Geographic Information Systems (GIS) policies, procedures and guidelines for the sharing of data and technology among State agencies and to coordinate the acquisition of statewide data sets. LGISC is also chartered to facilitate the elimination of duplication of effort and unnecessary redundancy in data collections and to provide for integration of geographically related databases. The Council has adopted the Federal Geographic Data Committee's (FGDC) seven framework data layers as the basis for Louisiana's geographic information system. At the national level, the need to coordinate data creation was addressed by a Presidential Executive Order #12906 establishing the National Spatial Data Infrastructure (NSDI). The creation of these critical data sets at both the State and Federal level will facilitate decision-making on policy and planning issues for the State of Louisiana and the nation.

In adopting a Louisiana Spatial Data Infrastructure (LSDI), The LGISC wishes to recognize the work of the Louisiana Implementation Team (I-Team), which was established in December of 2001 as part of the Framework Data Implementation Initiative Team (I-Team Initiative). The I-Team was a joint project with the Federal Geographic Data Committee (FGDC), the Council for Excellence in Government, Urban Logic, National States Geographic Information Council (NSGIC), National Association of County Government (NACO), and other strategic partners. The I-Team Initiative relies on locally formed interdependent partnerships of Federal, State, local, and tribal authorities, academia and the private sector (I-Teams) to implement State and regional portions of the NSDI in accordance with interoperability specifications and data standards as part of their ordinary business processes. In November 2003 the Louisiana I-Team authored a report titled "Louisiana's Geographic Data Implementation Plan (I-Plan)"¹, which established a process for defining, implementing and maintaining geographic information and services in Louisiana and recommends a framework implementation strategy.

The framework layers which were defined by the Louisiana I-Team are re-stated in this report, along with explanations of several additional framework layers and updates as defined in a 2008 report produced by the Louisiana Geographic Information Center². The full I-Team report should be consulted for a comprehensive explanation of the LSDI and how it addresses business needs, general requirements, functional requirements, and technical requirements of the many partners who contributed time and resources to its formation.

1 Louisiana I-Team, Louisiana's Geographic Data Implementation Plan (I-Plan), 2003

2 Kent, Joshua; Yoo, Jinwoong, Louisiana Spatial Data Index, A geospatial Data Catalog, 2008

Geographic Information Systems (GIS) and geospatial data significantly affect how government and the private sector conduct business. GIS technology provides a powerful suite of tools to display, process, and analyze information critical for decision makers in both the public and the private sectors. GIS is becoming the decision making tool of choice in all branches of government, business, and the military. Millions of dollars have been invested in the production of geospatial data by Federal, State, regional and local governments, universities, and the private sector. To maximize the return on investment in these data a process must be developed that avoids duplication in data collection, creation, and maintenance. The cost of data production and maintenance is too high for either governments or the private sector to develop unilaterally. Data interchange will be a cornerstone for data production in the future. In this manner, everyone in Louisiana will benefit from decisions based on common, high quality, dependable framework data derived from documented sources with known accuracy and quality control.

The Louisiana Spatial Data Infrastructure is comprised of layers from the National Spatial Data Infrastructure, the Department of Homeland Security, and framework layers identified by the State of Louisiana. Appendix 1 of this report outlines the LSDI and the organizational structure to be used for storing geospatial data. Appendix 2 of this report provides definitions for the layers identified in the LSDI. Following is a description of the framework layers included in the LSDI:

Geodetic Control

Geodetic Control feature classes provide a common reference system for establishing the coordinate positions of all geographic data. It provides the means for tying all geographic features to common, nationally used horizontal and vertical coordinate systems.

The main features of geodetic control information are geodetic control stations. These monument points (or in some cases continuously operating reference stations - active Global Positioning System control stations) have precisely measured horizontal or vertical locations and are used as a basis for determining the positions of other points.

The geodetic control component of the framework data initiative consists of geodetic control stations, monuments, and related information including the name, feature identification code, latitude and longitude, orthometric height, and ellipsoid height, and metadata for each station. The metadata for each geodetic control point contains descriptive data, positional accuracy, condition, and other pertinent characteristics for that point. Geodetic control information is crucial for the development of all framework and application-specific data because it provides the spatial reference source to register all other spatial data. Furthermore, geodetic control can be used to plan surveys, assess data quality, plan data collection and conversion, and fit new areas of data into existing feature classes.

Orthoimagery

Imagery feature classes provide a positionally correct image of the earth. Image data can include georeferenced planer and orthorectified raster data products.

Planar imagery refers to a georeferenced image prepared from aerial or satellite image or other remotely sensed data. Planer imagery does not account for geometric distortions. An orthoimage is a georeferenced image prepared from an aerial photograph or other remotely sensed data. Unlike planer imagery, orthorectified images account for measurable displacements of the imagery caused by sensor orientation and terrain relief have been removed. An orthoimage has the same geometric properties as a map and has a uniform scale.

Digital images are composed of an array of georeferenced pixels that encode ground reflectance as a discrete digital value. Many geographic features, including those that are part of the framework, can be interpreted and compiled from an orthoimage. Orthoimages can also serve as a backdrop to reference the results of an application to the landscape.

The framework may include imagery that varies in resolution from sub-meter to tens of meters. Accurately positioned, high-resolution data (pixels of 1 meter or finer) are presumed to be the most useful for supporting the compilation of framework features, particularly those that support local data needs. In some areas, lower-resolution imagery may be sufficient to support the framework and applications.

Orthoimagery provides a useful tool for a variety of applications. Because many land features can be seen on an orthoimage, it can serve as a backdrop for visual reference purposes, saving the expense of creating vector files of features that are needed only for reference. Orthoimagery can be used to compile vector themes photogrammetrically.

Elevation and Bathymetry

Elevation and bathymetric data provide information about elevation of land surfaces (*i.e.* terrain), and water depths, respectively. Elevation refers to a spatially referenced vertical position above or below a datum surface.

For land surfaces, the framework employs an elevation matrix. Elevation values are collected according to regularly defined post-spacing. In areas of low relief, a finer measurement intervals are sought according to the data collection/application requirements.

For water depths, the framework consists of soundings and a gridded water bottom model. Water depth is determined relative to a specific vertical reference surface, usually derived from tidal observations.

Elevation data are used in many different applications. Elevation data is typically represented as contour maps, spot elevations, or a three-dimensional perspective view. Elevation data are also used to build models and perform applications, ranging from line-of-sight calculations, to road planning, to water runoff. Elevation data are often combined with other data themes in applications and mapping.

Governmental Units

Governmental Unit feature data include the geographic areas of units of government, and government maintained lands. These units include, but are not limited to:

- the nation, states, protectorates, and statistically equivalent areas
- counties and statistically equivalent areas,
- incorporated places and consolidated cities,
- functioning and legal minor civil divisions,
- government owned or maintained property and/or leases
- federal- or state-recognized American Indian reservations and trust lands, and
- Alaska Native regional corporations.

Each of these features include the attributes depicting the name and the applicable Federal Information Processing Standard (FIPS) code. Features boundaries may include information about other features (such as roads, railroads, or streams) with which the boundaries are associated and a description of the association (such as coincidence, offset, or corridor).

Governmental unit boundaries are used for a wide variety of applications. Some applications utilize boundaries for information and orientation; while others require the polygons to determine inclusion related to a number of other features. Business GIS is a very active field that uses these boundaries for statistical analysis and decision making.

Transportation

The LSDI adopted the transportation layer as defined by the U.S. Department of Homeland Security³.

Transportation information is used in many applications. Some use it only for reference purposes, as an element of base mapping, while many others use it to attach other types of information, such as address-related information or street characteristics. Transportation features and related data are important elements of many planning applications. Geocoding applications use road and related address data for uses ranging from marketing analysis to site identification. Routing applications use street network data for operations such as vehicle dispatch and fleet management.

³ U.S. Department of Homeland Security, Infrastructure Taxonomy version 3, 2008

Cadastral

Cadastral information typically refers to property interests and other descriptions of real property. Cadastral data represent the geographic extent of the past, current, and future rights and interests in real property. The spatial information necessary to describe the geographic extent and the rights and interests includes surveys, legal description reference systems, and parcel-by-parcel surveys and descriptions.

The primary aspect of cadastral information within the spatial data framework is the cadastral reference systems. Examples of this framework layer include the *Public Land Survey System (PLSS)* and similar systems. Features include the survey corner, survey boundary, and parcel. Each instance of a feature has the attributes of name (or other common identifier) and information about data quality. Each instance also should have a permanent feature identification code.

For the PLSS, the minimum content is the boundaries of sections, including deflection points and the positions for quarter corners along section boundaries. Boundaries that have been surveyed are the preferred content for cadastral reference systems.

Cadastral information is the basis of many analytical, decision-making, and operational applications, including site selection, land use administration, and transportation planning. The PLSS reference system is often used to register locally produced information into the framework. Information about publicly owned lands serves both those who administer the lands and those who have interests in them -- an especially popular topic for the sportsmen and sportswomen of Louisiana. Framework representation of these lands provides useful information about their location, boundaries, extent, and relationships to other geographic features and phenomena. Because parcels play an important role in many public and private sector activities, and parcel information is a basic ingredient of many applications, there is interest in providing multiple levels of cadastral data. These levels would be based on available data and customer requirements. The framework provides a means to link existing parcel data into the larger cadastral network.

Hydrography

Hydrography feature classes include surface water features such as lakes and ponds, streams and rivers, bayous, canals, oceans, and shorelines. Each of these features has the attributes of a name and feature identification code. Centerlines and polygons represent the geographic positions of these features. For feature identification code, many federal and state agencies use the *Reach scheme* developed by the U.S. Environmental Protection Agency (US EPA).

Many hydrography data users require comprehensive attribution about the connectivity of the hydrography network and the direction in which the water

flows. To meet these needs, additional elements representing the flow of water and connections between features may be included with the feature data.

Shoreline data is often represented as hydrographic and geophysical data. In the hydrographic framework context, a shoreline represents the intersection of the water's surface with land. Shorelines are usually referenced to some analytically determined stage of the tide for coastal water, or other water level for lakes and rivers. Several shorelines, referenced to different stages of the water such as "mean high water" and "mean low water," are included in this context. These shorelines are included because different users require different shorelines and the complex, nonlinear relationships between various shorelines make it difficult to determine them analytically. Attributes can include the description of the tidal reference for the shoreline.

Hydrography is important to many applications. As with other data themes, many users need hydrographic features as reference or base map data. Other applications, particularly environmentally oriented analyses, need the information for analysis and modeling of water supply, pollution, flood hazard, wildlife, development, and land suitability.

Land Use/Land Cover

Land Use refers to the human activities that are directly related to the land. Land Cover describes the vegetation, water, natural surface, and manmade features of the land. The interpretations are based on a land use and land cover system developed for use with remotely sensed data. Land use is traditionally organized into hierarchical classifications consisting of two defined levels. Land use and land cover areas are classified into nine major categories: urban or built-up land, agricultural, rangeland, forest, water areas, wetland, barren land, tundra, and perennial snow or ice. Each general class is subdivided into several detailed classes.

Demographics

Demography is the study of population, including size, composition, distribution, density, growth, housing conditions and other characteristics. The use of demographic information is mandated for governmental reapportionment and redistricting and many facility and service planning functions such as transportation, health care and hospitals, education, housing, social services, disaster evacuation and relief, and allocation of entitlement grants. It is also widely used for private business, economic, medical, social, and other service planning. The US Census Bureau pioneered the development of geocoding (the process of digital geographic encoding of points) and other geographic methods of displaying data, which has created a framework for presentation of demographic information. This presentation framework will be used for demographic as well as other social, economic, and life event data.

Infrastructure

The LSDI adopted the Infrastructure layer as defined by the U.S. Department of Homeland Security³, with the exception of the Transportation section, which is included as a separate framework layer within the NSDI. Infrastructure feature classes typically include hydroelectricity, geothermal, solar and nuclear sources of energy, water purification and distribution, sewage collection and disposal, electricity and gas distribution, data communication, telecommunication, and radio/television broadcast networks.

In addition to this list, Louisiana established a number of features as critical infrastructure - features that are , flood protection, state-owned buildings/lands, and many other records about energy, water, waste water, and communications infrastructure and services - includes consumers, consumption and service areas.

Geophysical

Geophysical feature classes includes all geologic mapping information and related geo-scientific spatial data (including associated geophysical, geochemical, geo-chronologic, and paleontological data) that can contribute to a better understanding of dynamic processes and phenomena of the Earth. Applications of geophysical data layers include offshore mineral resources (including oil, gas, sulfur, gold, sand and gravel, and manganese), soil data (consisting of georeferenced digital map data and associated tabular attribute data), meteorological (including model-generated and observed surface, near surface, and atmospheric conditions), ocean currents, land-water interfaces (e.g. shorelines and high-tide markers), and more. In most cases, these data cover a wide range of scales.

Map Reference

Map Reference feature classes include various grids (or graticules) that represent a given coordinate system (e.g. longitude-latitude, Universal Transverse Mercator, State Plane, USNG, GARS, etc.). Grid reference systems are used to facilitate the acquisition of a coordinate [e.g. Cartesian (spherical) or ellipsoidal] that references a unique location on the Earth. Grid systems will vary based according to their application.

Biological

Biologic feature classes commonly include spatially referenced information of non-human biological resources, systems, and phenomena that include plants, animals, and ecological systems. Examples of biological data include habitat areas, ecosystems, fisheries and aquatics, forestry, wildlife preserves, vegetation, organism (subspecies, species, and systematic), and ecological (populations, communities, ecosystems, biomes, etc.) levels. Applications of Biological data include conservation, bio-diversity surveys, species management, and more.

Environmental

Environmental feature classes includes information associated with environmental resources and conservation, especially how they relate to public health and environmental protection. Typical data layers include environment, pollution, waste storage, waste treatment, environmental impact assessment, remediation, nature, sensitivity surveys, monitoring, risk, nature reserves, landscape, natural resources, risk, heritage, water quality, and habitat.

A descriptive ecosystem framework is an essential element for the successfully study of environmental systems across state, provincial, and country jurisdiction boundaries. Examples of how environmental data include jurisdictional or administrative boundaries, environmental resource management, risk assessment, ecosystems analysis and impact studies.

Economic

Economic feature classes include data that are related to business, economics, and business geographic interests. Examples of economic and business feature classes include income, wage, production, labor, revenue, commerce, housing/real estate, office, retail, unemployment, industry, population data. Other examples include land use, economic incentive zones/areas, and more.

1. FGDC NSDI – FRAMEWORK

1.1. GEODETIC CONTROL

- 1.1.1. Geodetic Control Stations (Benchmarks)
- 1.1.2. Global Positioning System Control Stations (CORS)
- 1.1.3. Coordinate Systems

1.2. ORTHOIMAGERY (IMAGERY)

- 1.2.1. Aerial
 - 1.2.1.1. Film Based Photography
 - 1.2.1.1.1. Ortho
 - 1.2.1.1.2. Oblique
 - 1.2.1.2. Digital Camera Based Photography
 - 1.2.1.2.1. Ortho
 - 1.2.1.2.2. Oblique
 - 1.2.1.2.3. Video
- 1.2.2. Satellite
 - 1.2.2.1. Image
 - 1.2.2.2. Radar
- 1.2.3. Ground
 - 1.2.3.1. Image
 - 1.2.3.2. Video

1.3. ELEVATION AND BATHYMETRY

- 1.3.1. Photogrammetric Methods
- 1.3.2. Traditional Ground Surveys
- 1.3.3. Terrestrial LIDAR
 - 1.3.3.1. Aerial Based Survey
 - 1.3.3.2. Fixed-Point Survey
- 1.3.4. Traditional Bathymetric Surveys
- 1.3.5. Hydrographic Surveys
 - 1.3.5.1. Side-scan
 - 1.3.5.2. Multibeam
- 1.3.6. Bathymetric LIDAR

1.4. ADMINISTRATIVE (GOVERNMENTAL) UNITS

- 1.4.1. The Nation (Federal)
- 1.4.2. States
 - 1.4.2.1. Departmental
- 1.4.3. Counties (or Parishes)
- 1.4.4. Incorporated Places and Consolidated Cities (Local)

1.4.4.1. Municipal

1.4.4.2. Urban

1.4.4.3. Metropolitan Statistical Areas (MSA)

1.4.5. Functioning and Legal Minor Civil Divisions

1.4.5.1. Historic districts

1.4.6. Federal- or State-recognized American Indian Reservations and Trustlands

1.4.7. Alaska Native Regional Corporations

1.4.8. Regional

1.4.8.1. Levee Districts

1.4.8.2. Planning and Developmental Districts

1.5. TRANSPORTATION

1.5.1. AVIATION

1.5.1.1. Aviation Conveyances

1.5.1.2. Airports

1.5.1.2.1. Certificated Airports

1.5.1.2.1.1. Category X Airports

1.5.1.2.1.2. Category I Airports

1.5.1.2.1.3. Category II Airports

1.5.1.2.1.4. Category III Airports

1.5.1.2.1.5. Category IV Airports

1.5.1.2.2. Non-Certificated Airports

1.5.1.2.2.1. Public Airports

1.5.1.2.2.2. Private Airports

1.5.1.2.3. Military Airfields

1.5.1.2.3.1. Air Force Airfields

1.5.1.2.3.2. Army Airfields

1.5.1.2.3.3. Navy Airfields

1.5.1.2.3.4. Marine Corps Airfields

1.5.1.2.3.5. Coast Guard Airfields

1.5.1.2.4. Foreign Airports

1.5.1.3. Air Traffic Control And Navigation Facilities

1.5.1.3.1. Air Route Traffic Control Facilities

1.5.1.3.2. Airport Traffic Control Towers

1.5.1.3.3. Flight Service Stations

1.5.1.3.4. Other Air Traffic Control Facilities

1.5.1.4. Space Transportation Facilities

1.5.1.4.1. Military Facilities

1.5.1.4.1.1. Launch Vehicles

- 1.5.1.4.1.2. Launch Facilities
- 1.5.1.4.1.3. Mission Control Facilities
- 1.5.1.4.1.4. Satellites
- 1.5.1.4.2. Commercial Facilities
 - 1.5.1.4.2.1. Launch Vehicles
 - 1.5.1.4.2.2. Launch Facilities
 - 1.5.1.4.2.3. Mission Control Facilities
 - 1.5.1.4.2.4. Satellites
- 1.5.1.4.3. NASA Facilities
 - 1.5.1.4.3.1. Launch Vehicles
 - 1.5.1.4.3.2. Launch Facilities
 - 1.5.1.4.3.3. Mission Control Facilities
 - 1.5.1.4.3.4. Satellites
- 1.5.1.5. Aviation Sector Command Control Communication Coordination Facilities
- 1.5.1.6. Other Aviation Facilities
- 1.5.2. RAILROAD
 - 1.5.2.1. Railroad Conveyance
 - 1.5.2.1.1. Freight Conveyance
 - 1.5.2.1.2. Passenger Conveyance
 - 1.5.2.1.2.1. Passenger Trains Long Distance/Intercity
 - 1.5.2.1.2.2. Passenger Trains Commuter
 - 1.5.2.2. Railroad Rights Of Way
 - 1.5.2.2.1. Railroad Track
 - 1.5.2.2.1.1. STRACNET Track
 - 1.5.2.2.2. Other Track
 - 1.5.2.2.3. Railroad Bridges
 - 1.5.2.2.4. Railroad Tunnels
 - 1.5.2.3. Railroad Yards
 - 1.5.2.3.1. Rail Yard - Local
 - 1.5.2.3.2. Rail Yard - Classification
 - 1.5.2.3.3. Rail Yard - Intermodal
 - 1.5.2.3.4. Rail Yard - HAZMAT
 - 1.5.2.4. Railroad Stations
 - 1.5.2.4.1. Railroad Passenger Stations
 - 1.5.2.5. Railroad Operations Centers
 - 1.5.2.5.1.1. Railroad Dispatch and Operations Control Centers
 - 1.5.2.5.1.2. Railroad Communications Centers
 - 1.5.2.5.1.3. Railroad Signaling Facilities and Equipment

1.5.2.6. Other Railroad Facilities

1.5.3. ROAD

1.5.3.1. Roadways And Supporting Facilities

1.5.3.1.1. Roadways

1.5.3.1.1.1. Limited Access Highways

1.5.3.1.1.2. Multi-Lane Non-Limited Access Highways

1.5.3.1.1.3. Two Lane Numbered Highways

1.5.3.1.1.4. Other Roads

1.5.3.1.2. Road Bridges

1.5.3.1.3. Road Tunnels

1.5.3.1.4. Highway Rest and Service Areas

1.5.3.1.4.1. Highway Rest Stops

1.5.3.1.4.2. Highway Service Areas

1.5.3.1.4.3. Vehicle Weigh Stations

1.5.3.1.4.4. Truck Stops

1.5.3.1.5. Road Transportation Support Facilities

1.5.3.1.5.1. Operations and Traffic Management Centers

1.5.3.1.5.2. Road International Border Facilities

1.5.3.1.5.3. Motor Vehicle Fueling Stations

1.5.3.2. Trucking

1.5.3.2.1. Truck Conveyance

1.5.3.2.2. Truck Terminals

1.5.3.2.2.1. Truck Terminal HAZMAT Facilities

1.5.3.2.2.2. Truck Terminal non-HAZMAT Facilities

1.5.3.2.3. Truck Rental Facilities

1.5.3.2.4. Truck Dispatch Centers

1.5.3.2.5. Truck Operations Centers

1.5.3.3. Over-the-Road Motorcoach System

1.5.3.3.1. Motorcoach Conveyance

1.5.3.3.2. Over-the-Road Motorcoach Passenger Terminals

1.5.3.3.3. Over-the-Road Motorcoach Facilities

1.5.3.3.3.1. Storage Facilities

1.5.3.3.3.2. Maintenance Facilities

1.5.3.3.4. Over-the-Road Motorcoach Operations Centers

1.5.3.3.5. Over-the-Road Motorcoach Dispatch Centers

1.5.3.4. School Bus Systems

1.5.3.4.1. School Bus Conveyance

1.5.3.4.2. School Bus Routes

- 1.5.3.4.3. School Bus Stops
- 1.5.3.4.4. School Bus Maintenance Facilities
- 1.5.3.4.5. School Bus Dispatch Centers
- 1.5.3.4.6. School Bus Communication Centers

1.5.3.5. Other Road Facilities

1.5.4. MARITIME

1.5.4.1. Vessels

1.5.4.1.1. Shallow Draft Vessels

- 1.5.4.1.1.1. Tugs and Towboats
- 1.5.4.1.1.2. Small Vehicle/Passenger Ferries
- 1.5.4.1.1.3. River Ferries
- 1.5.4.1.1.4. Excursion/Tour Boat
- 1.5.4.1.1.5. Supply/Work Boat
- 1.5.4.1.1.6. Recreational Vessel
- 1.5.4.1.1.7. Barge - Tank
- 1.5.4.1.1.8. Barge - Hopper
- 1.5.4.1.1.9. Barge - Gas

1.5.4.1.2. Deep Draft Vessels

- 1.5.4.1.2.1. General Cargo Ship
- 1.5.4.1.2.2. Container Ship
- 1.5.4.1.2.3. Dry Bulk Cargo Ship
- 1.5.4.1.2.4. Tank Ship
- 1.5.4.1.2.5. Gas Carrier Ship
- 1.5.4.1.2.6. Roll-on/Roll-off and Pure Car Carrier
- 1.5.4.1.2.7. Cruise Ship
- 1.5.4.1.2.8. Large Vehicle/Passenger Ferries
- 1.5.4.1.2.9. Medium Vehicle/Passenger Ferries
- 1.5.4.1.2.10. Military Combatant Vessel
- 1.5.4.1.2.11. Military Support Vessels
- 1.5.4.1.2.12. Other Vessels

1.5.4.2. Ports

1.5.4.2.1. Shallow Draft Ports

- 1.5.4.2.1.1. Shallow Draft General Cargo Terminal
- 1.5.4.2.1.2. Shallow Draft Dry Bulk Cargo Terminal
- 1.5.4.2.1.3. Shallow Draft Liquid Bulk Cargo Terminal
- 1.5.4.2.1.4. Shallow Draft Barge Fleeting Area
- 1.5.4.2.1.5. Shallow Draft Passenger Terminal

1.5.4.2.2. Deep Draft Ports

- 1.5.4.2.2.1. Deep Draft General Cargo Terminal
- 1.5.4.2.2.2. Deep Draft Containerized Cargo Terminal
- 1.5.4.2.2.3. Deep Draft Dry Bulk Cargo Terminal
- 1.5.4.2.2.4. Deep Draft Liquid Bulk Cargo Terminal - Crude/Product
- 1.5.4.2.2.5. Deep Draft Liquid Bulk Cargo Terminal - Chemical
- 1.5.4.2.2.6. Deep Draft Bulk Gas Cargo Terminal
- 1.5.4.2.2.7. Deep Draft Industrial Cargo Terminal
- 1.5.4.2.2.8. Off-Shore Terminals or Platforms
- 1.5.4.2.2.9. Outer Continental Shelf Crude Oil Platforms
- 1.5.4.2.2.10. Outer Continental Shelf Natural Gas Platforms
- 1.5.4.2.2.11. Cruise Ship Passenger Terminal
- 1.5.4.2.2.12. Ferry Terminals
- 1.5.4.2.3. Port Public Access Areas
- 1.5.4.2.4. Public Access Areas
- 1.5.4.3. Military and Strategic Seaports
 - 1.5.4.3.1. Military and Strategic Deep Draft Ports
 - 1.5.4.3.1.1. Military Cargo Terminal
 - 1.5.4.3.1.2. Military Ammunition Terminal
 - 1.5.4.3.1.3. Strategic Commercial and Military Terminal
 - 1.5.4.3.1.4. Military Combatant Vessel Terminal
- 1.5.4.4. Waterways
 - 1.5.4.4.1. Inland Waterways
 - 1.5.4.4.2. Intracoastal Waterways
 - 1.5.4.4.3. Navigation Locks
 - 1.5.4.4.4. Canals
 - 1.5.4.4.5. Dams
- 1.5.4.5. Maritime Supporting Facilities
 - 1.5.4.5.1. Navigation Facilities
 - 1.5.4.5.1.1. Lighthouses and Beacons
 - 1.5.4.5.1.2. Buoys
 - 1.5.4.5.1.3. Electronic Navigation Facilities
 - 1.5.4.5.2. Emergency Search and Rescue Facilities
 - 1.5.4.5.2.1. U.S. Coast Guard Marine Emergency Response Facilities
 - 1.5.4.5.2.2. State and Local Marine Emergency Response Facilities
- 1.5.4.6. Other Maritime Facilities
- 1.5.5. MASS TRANSIT
 - 1.5.5.1. Rail Mass Transit
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- 1.5.5.1.1.1. Heavy Rail Transit
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- 1.5.5.1.1.3. Commuter Rail
- 1.5.5.1.1.4. Other Rail Transit
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- 1.5.5.1.3. Rail Transit Rights of Way
 - 1.5.5.1.3.1. Rail Transit Track
 - 1.5.5.1.3.2. Rail Transit Bridges
 - 1.5.5.1.3.3. Rail Transit Tunnels
- 1.5.5.1.4. Rail Transit Yards
- 1.5.5.1.5. Rail Transit Dispatch and Operations Control Centers
- 1.5.5.1.6. Rail Transit Communications Centers
- 1.5.5.1.7. Rail Transit Signaling Facilities and Equipment
- 1.5.5.2. Bus Mass Transit
 - 1.5.5.2.1. Transit Bus Vehicles
 - 1.5.5.2.2. Transit Bus Routes
 - 1.5.5.2.3. Transit Bus Terminals
 - 1.5.5.2.4. Transit Bus Stops
 - 1.5.5.2.5. Transit Bus Garages
 - 1.5.5.2.6. Transit Bus Dispatch and Operations Control Centers
 - 1.5.5.2.7. Transit Bus Communication Centers
- 1.5.5.3. Other Mass Transit Systems
- 1.5.6. PIPELINES
 - 1.5.6.1. Crude Oil Pipelines
 - 1.5.6.1.1. Crude Oil Pipeline Components
 - 1.5.6.1.2. Crude Oil Pipeline Pumping Stations
 - 1.5.6.1.3. Crude Oil Pipeline Control Centers
 - 1.5.6.1.4. Crude Oil Storage
 - 1.5.6.1.5. Crude Oil Pipeline Hub
 - 1.5.6.2. Petroleum Product Pipelines
 - 1.5.6.2.1. Petroleum Product Pipeline Components and Interconnects
 - 1.5.6.2.2. Petroleum Product Pipeline Pumping Stations
 - 1.5.6.2.3. Petroleum Product Pipeline Control Centers
 - 1.5.6.2.4. Petroleum Product Storage
 - 1.5.6.3. Natural Gas Transmission Pipelines
 - 1.5.6.3.1. Natural Gas Transmission Pipeline Components and Interconnects
 - 1.5.6.3.2. Natural Gas Transmission Pipeline Compressor Stations
 - 1.5.6.3.3. Natural Gas Transmission Pipeline Control Centers

- 1.5.6.3.4. Natural Gas Transmission Storage
- 1.5.6.3.5. Natural Gas Pipeline Hub
- 1.5.6.3.6. Natural Gas Receipt/Delivery Metering Stations
- 1.5.6.3.7. Liquefied Natural Gas Storage (Terminal)

1.5.6.4. Natural Gas Distribution

- 1.5.6.4.1. City Gate Stations
- 1.5.6.4.2. Natural Gas Distribution Pipeline Networks
- 1.5.6.4.3. Natural Gas Distribution Control and Dispatch Centers
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1.5.6.5. LNG Transport

- 1.5.6.5.1. LNG Tankers
- 1.5.6.5.2. LNG Ports

1.5.6.6. Other Pipelines

- 1.5.6.6.1. Other Pipeline Components
- 1.5.6.6.2. Other Pipeline Pumping Stations
- 1.5.6.6.3. Other Pipeline Control Centers
- 1.5.6.6.4. Other Pipeline Terminals

1.5.6.7. Other Pipeline Facilities

1.5.7. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

- 1.5.7.1. Federal Transportation Agencies
- 1.5.7.2. State, Local, Regional Transportation Agencies
- 1.5.7.3. Transportation Industry Organizations
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1.6. CADASTRAL

- 1.6.1. Public Land Survey System (PLSS)
- 1.6.2. Land survey & Land records
- 1.6.3. Parcels
- 1.6.4. Lots
- 1.6.5. Buildings
- 1.6.6. Building Permits
- 1.6.7. Parking
- 1.6.8. Assessor
- 1.6.9. Zoning
- 1.6.10. Subdivisions
- 1.6.11. Right-of-Way(ROWs) & Servitudes

1.7. HYDROGRAPHY

- 1.7.1. National Hydrography Dataset (NHD)
- 1.7.2. Lakes and Ponds

1.7.3. Streams and Rivers

1.7.4. Canals

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2. LOUISIANA – FRAMEWORK

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2.3.1. US CENSUS

2.3.1.1. American Community Survey (ACS)

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2.4. INFRASTRUCTURE

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- 2.4.1.2.1.1.2. Off-Site Feed Mills
- 2.4.1.2.1.2. Rendering and Meat Byproduct Manufacturing
- 2.4.1.2.1.3. Pet Food Manufacturing
- 2.4.1.2.2. Grain and Oilseed Milling
 - 2.4.1.2.2.1. Grains, Fats, and Oils Processing
 - 2.4.1.2.2.2. Breakfast Food Manufacturing
- 2.4.1.2.3. Sugar and Confectionary Product Manufacture
 - 2.4.1.2.3.1. Sugar Manufacturing
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- 2.4.1.2.4. Fruit/Vegetable Preserving, Specialty Food Manufacturing Facilities
 - 2.4.1.2.4.1. Frozen Food Manufacturing Facilities
 - 2.4.1.2.4.2. Fruit and Vegetable Canning, Pickling, Drying
- 2.4.1.2.5. Dairy Product Manufacturing
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- 2.4.1.2.6. Animal Slaughtering and Processing Facilities
 - 2.4.1.2.6.1. Non-Poultry Animal Slaughtering and Processing
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- 2.4.1.2.7. Seafood Product Processing
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- 2.4.1.2.8. Bakery Products Manufacturing
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 - 2.4.1.2.9.1. Snack Food Manufacturing
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 - 2.4.1.2.9.3. All Other Food Manufacturing
- 2.4.1.2.10. Beverage Manufacturing
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 - 2.4.1.2.10.2. Ice Manufacturing
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- 2.4.1.3. AGRICULTURAL AND FOOD PRODUCT STORAGE
 - 2.4.1.3.1. Bulk Food Storage Facilities
 - 2.4.1.3.1.1. Grain Elevators

- 2.4.1.3.1.2. Non-Refrigerated Bulk Food Storage Facilities
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- 2.4.1.4. AGRICULTURAL AND FOOD PRODUCT TRANSPORTATION
 - 2.4.1.4.1. Road Transport of Agricultural and Food Products
 - 2.4.1.4.2. Rail Transport of Agricultural and Food Products
 - 2.4.1.4.3. Maritime Transport of Agricultural and Food Products
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- 2.4.1.5. AGRICULTURAL AND FOOD PRODUCT DISTRIBUTION
 - 2.4.1.5.1. Farm Product Wholesalers
 - 2.4.1.5.1.1. Grain and Field Bean Wholesalers
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 - 2.4.1.5.1.3. Other Farm Product Wholesalers
 - 2.4.1.5.2. Grocery and Related Product Wholesalers
 - 2.4.1.5.3. Food and Beverage Retailers
 - 2.4.1.5.3.1. Supermarkets and Grocery Stores
 - 2.4.1.5.3.2. Convenience Stores
 - 2.4.1.5.3.3. Specialty Food Stores
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 - 2.4.1.5.4. Food Service and Drinking Facilities
 - 2.4.1.5.4.1. Full Service Restaurants
 - 2.4.1.5.4.2. Limited Service Food Facilities
 - 2.4.1.5.4.3. Drinking Establishments
 - 2.4.1.5.4.3.1. Bars
 - 2.4.1.5.4.3.2. Nightclubs
 - 2.4.1.5.4.3.3. Nightclub Districts
- 2.4.1.6. AGRICULTURE AND FOOD SUPPORTING FACILITIES
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 - 2.4.1.6.2. Veterinary Pharmaceutical Manufacture
 - 2.4.1.6.3. Farm Supply Wholesalers
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 - 2.4.1.6.5. Veterinary Services
 - 2.4.1.6.6. Agricultural Testing Laboratories
 - 2.4.1.6.7. Agricultural and Food Research
- 2.4.1.7. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.1.7.1. Federal Agriculture and Food Agencies

- 2.4.1.7.2. State, Local, Regional Agriculture and Food Agencies
- 2.4.1.7.3. Agriculture and Food Industry Organizations
- 2.4.1.7.4. International Agriculture and Food Organizations
- 2.4.1.8. OTHER AGRICULTURE AND FOOD
- 2.4.2. BANKING AND FINANCE
 - 2.4.2.1. BANKING AND CREDIT
 - 2.4.2.1.1. Federal Reserve System
 - 2.4.2.1.1.1. Federal Reserve Headquarters
 - 2.4.2.1.1.2. Federal Reserve Banks
 - 2.4.2.1.2. Depository Credit Institutions
 - 2.4.2.1.2.1. Commercial Banks
 - 2.4.2.1.2.1.1. Bank Office Buildings
 - 2.4.2.1.2.1.2. Bank Customer Service Facilities
 - 2.4.2.1.2.2. Savings Institutions
 - 2.4.2.1.2.2.1. Savings Institution Office Buildings
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 - 2.4.2.1.2.3. Credit Unions
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 - 2.4.2.1.3.2. Consumer Lending
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 - 2.4.2.1.3.5. International Trade Financing
 - 2.4.2.1.3.6. Government Sponsored Enterprises
 - 2.4.2.1.3.7. Other Non-Depository Credit Institutions
 - 2.4.2.1.4. Banking and Credit Supporting Activities
 - 2.4.2.1.4.1. Loan Brokerages
 - 2.4.2.1.4.2. Financial Transaction Processing and Clearinghouse Activities
 - 2.4.2.1.4.3. Banking and Credit Emergency Redundancy Service Facilities
 - 2.4.2.1.4.3.1. Banking and Credit Company Emergency Redundancy Service Facilities
 - 2.4.2.1.4.3.2. Banking and Credit Contract Emergency Redundancy Service Facilities

- 2.4.2.1.4.4. Physical Repositories
- 2.4.2.1.5. Banking and Credit Regulatory, Oversight, And Industry Organizations
 - 2.4.2.1.5.1. Federal Banking and Credit Agencies
 - 2.4.2.1.5.2. State, Local, Regional Banking and Credit Agencies
 - 2.4.2.1.5.3. Banking and Credit Industry Organizations
 - 2.4.2.1.5.4. International Banking and Credit Organizations
- 2.4.2.2. SECURITIES, COMMODITIES, AND FINANCIAL INVESTMENTS
 - 2.4.2.2.1. Securities and Commodities Brokers
 - 2.4.2.2.2. Securities and Commodities Exchanges
 - 2.4.2.2.3. Other Financial Investment Activities
 - 2.4.2.2.4. Securities, Commodities, and Financial Investment Supporting Activities
 - 2.4.2.2.4.1. Securities, Commodities, and Financial Investment Processing and Clearinghouse Activities
 - 2.4.2.2.4.2. Securities, Commodities Emergency Redundancy Service
 - 2.4.2.2.4.3. Securities, Commodities Company Emergency Facilities Redundancy Service Facilities
 - 2.4.2.2.4.4. Securities, Commodities Contract Emergency Redundancy Service Facilities
 - 2.4.2.2.5. Securities, Commodities, Financial Investment Regulatory, Oversight, and Industry Organizations
 - 2.4.2.2.5.1. Federal Securities, Commodities, and Financial Investment Agencies
 - 2.4.2.2.5.2. State, Local, Regional Securities, Commodities, and Financial Investment Agencies
 - 2.4.2.2.5.3. Securities, Commodities, and Financial Investment Industry Organizations
 - 2.4.2.2.5.4. International Securities, Commodities, and Financial Investment Organizations
- 2.4.2.3. INSURANCE COMPANIES
 - 2.4.2.3.1. Direct Insurance Companies
 - 2.4.2.3.2. Reinsurance Companies
 - 2.4.2.3.3. Insurance producers
 - 2.4.2.3.4. Insurance Support Organizations
 - 2.4.2.3.5. Insurance Regulatory, Oversight, And Industry Organizations
 - 2.4.2.3.5.1. Federal Insurance Agencies
 - 2.4.2.3.5.2. State, Local, Regional Insurance Agencies
 - 2.4.2.3.5.3. Insurance Industry Organizations
 - 2.4.2.3.5.4. International Insurance Organizations
- 2.4.3. CHEMICAL AND HAZARDOUS MATERIALS INDUSTRY
 - 2.4.3.1. CHEMICAL MANUFACTURING AND PROCESSING PLANTS

- 2.4.3.1.1. Basic Chemicals
 - 2.4.3.1.1.1. Inorganic Chemicals
 - 2.4.3.1.1.1.1. Alkalies and Chlorine
 - 2.4.3.1.1.1.2. Industrial Gases
 - 2.4.3.1.1.1.3. Inorganic Pigments
 - 2.4.3.1.1.1.4. Acids
 - 2.4.3.1.1.1.5. Other Inorganics
 - 2.4.3.1.1.2. Petrochemicals and Derivatives
 - 2.4.3.1.1.2.1. Organics
 - 2.4.3.1.1.2.2. Synthetic Materials
 - 2.4.3.1.1.2.3. Other Organics
 - 2.4.3.1.1.2.4. Other Industrial Chemicals
- 2.4.3.1.2. Specialty Chemicals
 - 2.4.3.1.2.1. Coatings
 - 2.4.3.1.2.2. Other Specialties
 - 2.4.3.1.2.3. Explosives
- 2.4.3.1.3. Agricultural Chemicals
 - 2.4.3.1.3.1. Fertilizers
 - 2.4.3.1.3.2. Crop Protection
 - 2.4.3.1.3.2.1. Pesticides
 - 2.4.3.1.3.2.2. Herbicides
 - 2.4.3.1.3.2.3. Other Crop Protection Chemicals
- 2.4.3.1.4. Pharmaceuticals
- 2.4.3.1.5. Consumer Products
- 2.4.3.1.6. Potential chemical weapon agents and precursors
- 2.4.3.2. HAZARDOUS CHEMICAL TRANSPORT
 - 2.4.3.2.1. Pipelines
 - 2.4.3.2.1.1. Pipeline Components
 - 2.4.3.2.1.2. Pipeline Pumping Stations
 - 2.4.3.2.1.3. Pipeline Control Centers
 - 2.4.3.2.2. Marine Transport
 - 2.4.3.2.2.1. Tankers
 - 2.4.3.2.2.2. Ports Handling Hazardous Chemicals
 - 2.4.3.2.3. Rail Transport
 - 2.4.3.2.3.1. Railroad Tank Cars
 - 2.4.3.2.3.2. Railroad Loading Racks
 - 2.4.3.2.4. Road Transport
 - 2.4.3.2.4.1. Tanker Trucks

- 2.4.3.2.4.2. Tanker Truck Loading Racks
- 2.4.3.2.5. Air Transport
- 2.4.3.3. HAZARDOUS CHEMICAL STORAGE/STOCKPILE/UTILIZATION/DISTRIBUTION
 - 2.4.3.3.1. Warehousing and Storage
 - 2.4.3.3.1.1. Bulk Storage
 - 2.4.3.3.1.1.1. Land-Based Bulk Terminal
 - 2.4.3.3.1.1.2. Marine Bulk Terminal
 - 2.4.3.3.1.2. Retail Distribution
 - 2.4.3.3.2. Storage at Manufacturing Facilities
 - 2.4.3.3.3. Storage at Non-Manufacturing Facilities
- 2.4.3.4. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.3.4.1. Federal Chemicals Oversight Agencies
 - 2.4.3.4.2. State, Local, Regional Chemicals Oversight Agencies
 - 2.4.3.4.3. Chemical Industry Organizations and Trade Associations
 - 2.4.3.4.4. International Chemical Organizations
- 2.4.3.5. OTHER HAZARDOUS CHEMICAL FACILITIES
- 2.4.4. DEFENSE INDUSTRIAL BASE
 - 2.4.4.1. SHIPBUILDING INDUSTRY
 - 2.4.4.1.1. Surface Shipbuilding and Maintenance
 - 2.4.4.1.2. Subsurface Shipbuilding and Maintenance
 - 2.4.4.1.3. Unmanned Vessel Construction and Maintenance
 - 2.4.4.2. AIRCRAFT INDUSTRY
 - 2.4.4.2.1. Fixed Wing Aircraft Manufacture and Maintenance
 - 2.4.4.2.2. Helicopter Manufacture and Maintenance
 - 2.4.4.2.3. Unmanned Aerial Vehicle Manufacture and Maintenance
 - 2.4.4.3. MISSILE INDUSTRY
 - 2.4.4.3.1. Air/Air Missile Manufacturing and Maintenance
 - 2.4.4.3.2. Air/Surface Missile Manufacturing and Maintenance
 - 2.4.4.3.3. Surface/Air Missile Manufacturing and Maintenance
 - 2.4.4.3.4. Surface/Surface Missile Manufacturing and Maintenance
 - 2.4.4.3.5. Missile Defense System Manufacturing and Maintenance
 - 2.4.4.3.6. Precision Guided Munitions Manufacturing and Maintenance
 - 2.4.4.4. SPACE INDUSTRY
 - 2.4.4.4.1. Launch Vehicle Manufacturing and Maintenance
 - 2.4.4.4.2. Satellite Manufacturing
 - 2.4.4.5. COMBAT VEHICLE INDUSTRY
 - 2.4.4.5.1. Combat Vehicle Manufacture and Maintenance
 - 2.4.4.5.2. Tactical Vehicle Manufacture and Maintenance

- 2.4.4.5.3. Unmanned Vehicle Manufacture and Maintenance
- 2.4.4.6. AMMUNITION INDUSTRY
 - 2.4.4.6.1. Artillery Caliber Munitions Manufacture
 - 2.4.4.6.2. Bomb Manufacture
 - 2.4.4.6.3. Cannon Caliber Munitions Manufacture
 - 2.4.4.6.4. Demolition, Grenade, and Mines Manufacture
 - 2.4.4.6.5. Dispenser Munitions Manufacture
 - 2.4.4.6.6. Family of Scatterable Mines Manufacture
 - 2.4.4.6.7. Fuse Manufacture
 - 2.4.4.6.8. Mortar Manufacture
 - 2.4.4.6.9. Navy Gun Munitions Manufacture
 - 2.4.4.6.10. Propellants and Explosives Manufacture
 - 2.4.4.6.11. Propelling Charge Manufacture
 - 2.4.4.6.12. Pyrotechnics Manufacture
 - 2.4.4.6.13. Rocket and Warhead Manufacture
 - 2.4.4.6.14. Small Caliber Munitions Manufacture
 - 2.4.4.6.15. Tank Ammunition Manufacture
- 2.4.4.7. WEAPONS INDUSTRY
 - 2.4.4.7.1. Cannon Manufacture and Maintenance
 - 2.4.4.7.2. Man-Portable Weapons Manufacture and Maintenance
 - 2.4.4.7.3. Mounted Weapons Manufacture and Maintenance
 - 2.4.4.7.4. Laser Weapons Manufacture and Maintenance
 - 2.4.4.7.5. Nuclear Weapons Manufacture and Maintenance
 - 2.4.4.7.6. Chemical Weapons Manufacture and Maintenance
- 2.4.4.8. TROOP SUPPORT INDUSTRY
 - 2.4.4.8.1. Chemical Biological Defense Systems Manufacture
 - 2.4.4.8.2. Clothing and Textiles Manufacture
 - 2.4.4.8.3. Soldier Systems Manufacture
 - 2.4.4.8.4. Subsistence and Medical Equipment Manufacture
- 2.4.4.9. INFORMATION TECHNOLOGY INDUSTRY
 - 2.4.4.9.1. Hardware Manufacturing and Maintenance
 - 2.4.4.9.2. Network Development and Maintenance
 - 2.4.4.9.3. Security
 - 2.4.4.9.4. Software Production
 - 2.4.4.9.5. Trainers and Simulators
- 2.4.4.10. ELECTRONICS INDUSTRY
 - 2.4.4.10.1. Avionics Manufacture

- 2.4.4.10.2. Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Systems Manufacture
- 2.4.4.10.3. Electronics Manufacture
- 2.4.4.10.4. Sensor Manufacture
- 2.4.4.11. ELECTRICAL INDUSTRY COMMODITIES
 - 2.4.4.11.1. Auxiliary Power Unit Manufacture
 - 2.4.4.11.2. Battery Manufacture
 - 2.4.4.11.3. Electric Motor Manufacture
 - 2.4.4.11.4. Electric Generator Manufacture
 - 2.4.4.11.5. Power Source Manufacture
- 2.4.4.12. ELECTRONIC INDUSTRY COMMODITIES
 - 2.4.4.12.1. Circuit Board Manufacture
 - 2.4.4.12.2. Global Positioning System Receiver Manufacture
 - 2.4.4.12.3. Guidance/Control Equipment Manufacture
 - 2.4.4.12.4. Microwave Device Manufacture
 - 2.4.4.12.5. Optics Manufacture
 - 2.4.4.12.6. Semiconductor Manufacture
- 2.4.4.13. MECHANICAL INDUSTRY COMMODITIES
 - 2.4.4.13.1. Aircraft Transmission Manufacture
 - 2.4.4.13.2. Automotive Transmission Manufacture
 - 2.4.4.13.3. Bearings Manufacture
 - 2.4.4.13.4. Diesel Engine Manufacture
 - 2.4.4.13.5. Hydraulic Equipment Manufacture
 - 2.4.4.13.6. Landing Gear Manufacture
 - 2.4.4.13.7. Nuclear Components Manufacture
 - 2.4.4.13.8. Pump and Compressor Manufacture
 - 2.4.4.13.9. Rocket Engine Manufacture
 - 2.4.4.13.10. Turbine Engine Manufacture
- 2.4.4.14. STRUCTURAL INDUSTRY COMMODITIES
 - 2.4.4.14.1. Castings Manufacture
 - 2.4.4.14.2. Ceramic Armor Manufacture
 - 2.4.4.14.3. Composites Manufacture
 - 2.4.4.14.4. Depleted Uranium Armor Manufacture
 - 2.4.4.14.5. Forgings Manufacture
 - 2.4.4.14.6. Precious Metal Product Manufacture
- 2.4.4.15. RESEARCH & DEVELOPMENT FACILITIES
 - 2.4.4.15.1. Shipbuilding
 - 2.4.4.15.2. Aircraft

- 2.4.4.15.3. Missile
- 2.4.4.15.4. Space
- 2.4.4.15.5. Combat Vehicle Industry
- 2.4.4.15.6. Ammunition Industry
- 2.4.4.15.7. Weapons Industry
- 2.4.4.15.8. Troop Support Industry
- 2.4.4.15.9. Information Technology Industry
- 2.4.4.15.10. Electronics Industry
- 2.4.4.15.11. Electrical Industry Commodities
- 2.4.4.15.12. Mechanical Industry Commodities
- 2.4.4.15.13. Structural Industry Commodities

2.4.5. ENERGY

2.4.5.1. ELECTRICITY

- 2.4.5.1.1. Electricity Generation
 - 2.4.5.1.1.1. Hydroelectric Power Generation
 - 2.4.5.1.1.1.1. Hydroelectric Dams
 - 2.4.5.1.1.1.2. Pumped Storage Facilities
 - 2.4.5.1.1.1.3. Run-of-River Generators
 - 2.4.5.1.1.2. Fossil Fuel Electric Power Generation
 - 2.4.5.1.1.2.1. Coal-fired Generators
 - 2.4.5.1.1.2.2. Natural-gas-fired Generators
 - 2.4.5.1.1.2.3. Oil-fired Generators
 - 2.4.5.1.1.3. Nuclear Electric Power Generation
 - 2.4.5.1.1.3.1. Light Water Reactor Power Plants
 - 2.4.5.1.1.3.2. Other Reactor Power Plants
 - 2.4.5.1.1.4. Other Electric Power Generation
- 2.4.5.1.2. Electricity Transmission
 - 2.4.5.1.2.1.1. Transmission Lines
 - 2.4.5.1.2.1.2. Transmission Substations
 - 2.4.5.1.2.1.3. DC Converter Stations
 - 2.4.5.1.2.1.4. Generation Dispatch and Transmission Control Center
- 2.4.5.1.3. Electricity Distribution
 - 2.4.5.1.3.1. Distribution Lines
 - 2.4.5.1.3.2. Distribution Substations
 - 2.4.5.1.3.3. Distribution Control and Dispatch Centers
- 2.4.5.1.4. Electricity Markets
 - 2.4.5.1.4.1. Generation Markets
 - 2.4.5.1.4.2. Transmission Markets

2.4.5.1.5. Other Electricity Facilities

2.4.5.2. PETROLEUM

2.4.5.2.1. Crude Oil Supply

2.4.5.2.1.1. On-shore Wells

2.4.5.2.1.2. Off-shore Wells

2.4.5.2.1.3. Crude Oil Production from Other Sources

2.4.5.2.1.4. Gas-Oil Separation Plants

2.4.5.2.2. Crude Oil Storage

2.4.5.2.2.1. Strategic Petroleum Reserve

2.4.5.2.2.2. Crude Oil Bulk Storage

2.4.5.2.2.2.1. Crude Oil Land-Based Terminals

2.4.5.2.2.2.2. Crude Oil Marine Terminals

2.4.5.2.3. Crude Oil Transport

2.4.5.2.3.1. Crude Oil Pipelines

2.4.5.2.3.1.1. Crude Oil Pipeline Segments

2.4.5.2.3.1.2. Crude Oil Pipeline Pumping Stations

2.4.5.2.3.1.3. Crude Oil Pipeline Control Centers

2.4.5.2.3.2. Crude Oil Marine Transport

2.4.5.2.3.2.1. Crude Oil Tankers

2.4.5.2.3.2.2. Ports Handling Crude Oil

2.4.5.2.4. Petroleum Processing

2.4.5.2.4.1. Petroleum Refineries

2.4.5.2.5. Petroleum Product Storage

2.4.5.2.5.1. Petroleum Product Bulk Storage

2.4.5.2.5.1.1. Petroleum Product Land-Based Bulk Terminal

2.4.5.2.5.1.2. Petroleum Product Marine Bulk Terminal

2.4.5.2.5.1.3. Petroleum Product Bulk Plant

2.4.5.2.5.2. Underground Petroleum Gas Storage

2.4.5.2.5.3. Petroleum Product Storage for Retail Distribution

2.4.5.2.5.3.1. Motor Vehicle Fueling Stations

2.4.5.2.5.3.2. Heating Oil Dealers

2.4.5.2.5.3.3. Liquefied Petroleum Gas (LPG) Dealers

2.4.5.2.5.4. End User Petroleum Product Storage

2.4.5.2.5.4.1. Non-military End-User Petroleum Product Storage

2.4.5.2.5.4.2. Military End-User Petroleum Product Storage

2.4.5.2.6. Petroleum Product Transport

2.4.5.2.6.1. Petroleum Product Pipelines

2.4.5.2.6.1.1. Petroleum Product Pipeline Segments

- 2.4.5.2.6.1.2. Petroleum Product Pipeline Pumping Stations
- 2.4.5.2.6.1.3. Petroleum Product Pipeline Control Centers
- 2.4.5.2.6.2. Petroleum Product Marine Transport
 - 2.4.5.2.6.2.1. Petroleum Product Tankers
 - 2.4.5.2.6.2.2. Ports Handling Petroleum Products
- 2.4.5.2.6.3. Petroleum Product Rail Transport
 - 2.4.5.2.6.3.1. Railroad Petroleum Tank Cars
- 2.4.5.2.6.4. Petroleum Product Road Transport
 - 2.4.5.2.6.4.1. Tanker Trucks
 - 2.4.5.2.6.4.2. Tanker Truck Loading Racks
- 2.4.5.2.7. Petroleum Supporting Facilities
 - 2.4.5.2.7.1. Crude Oil Markets
 - 2.4.5.2.7.1.1. Petroleum Product Markets
- 2.4.5.2.8. Other Petroleum Facilities
- 2.4.5.3. NATURAL GAS
 - 2.4.5.3.1. Natural Gas Supply
 - 2.4.5.3.1.1. On-shore Wells
 - 2.4.5.3.1.2. Off-shore Wells
 - 2.4.5.3.1.3. Natural Gas Production from Other Sources
 - 2.4.5.3.2. Natural Gas Processing
 - 2.4.5.3.2.1. Natural Gas Processing Plants
 - 2.4.5.3.3. Liquefied Natural Gas (LNG) Plants
 - 2.4.5.3.3.1. LNG Liquefaction Plants
 - 2.4.5.3.3.2. LNG Satellite Storage and Regasification Plants
 - 2.4.5.3.4. Natural Gas Storage
 - 2.4.5.3.4.1. Underground Storage Facilities
 - 2.4.5.3.4.2. Above Ground Storage Facilities
 - 2.4.5.3.4.3. Propane Peak Shaving Facilities
 - 2.4.5.3.5. Natural Gas Transport
 - 2.4.5.3.5.1. Natural Gas Transmission Pipelines
 - 2.4.5.3.5.1.1. Natural Gas Transmission Pipeline Segments
 - 2.4.5.3.5.1.2. Natural Gas Transmission Pipeline Compressor Stations
 - 2.4.5.3.5.1.3. Natural Gas Pipeline Interconnects
 - 2.4.5.3.5.1.4. Natural Gas Pipeline Hub
 - 2.4.5.3.5.1.5. Natural Gas Receipt/Delivery Metering Stations
 - 2.4.5.3.5.1.6. Natural Gas Transmission Pipeline Control Centers
 - 2.4.5.3.5.2. LNG Transport
 - 2.4.5.3.5.2.1. LNG Tankers

- 2.4.5.3.5.2.2. LNG Ports
- 2.4.5.3.6. Natural Gas Distribution
 - 2.4.5.3.6.1. City Gate Stations
 - 2.4.5.3.6.2. Natural Gas Distribution Pipeline Networks
 - 2.4.5.3.6.3. Natural Gas Distribution Control and Dispatch Centers
 - 2.4.5.3.6.4. Compressed Natural Gas (CNG) Plants
- 2.4.5.3.7. Natural Gas Supporting Facilities
 - 2.4.5.3.7.1. Natural Gas Markets
- 2.4.5.3.8. Other Natural Gas Facilities
- 2.4.5.4. COAL
 - 2.4.5.4.1. Coal Supply
 - 2.4.5.4.1.1. Underground Mines
 - 2.4.5.4.1.2. Surface Mines
 - 2.4.5.4.2. Coal Processing
 - 2.4.5.4.2.1. Coal Cleaning Plants
 - 2.4.5.4.2.2. Coal Gasification Plants
 - 2.4.5.4.2.3. Coal Liquefaction Plants
 - 2.4.5.4.3. Coal Transport
 - 2.4.5.4.3.1. Coal Rail Transport
 - 2.4.5.4.3.1.1. Coal Unit Train Routes
 - 2.4.5.4.3.1.2. Other Coal Train Routes
 - 2.4.5.4.3.2. Coal Water Transport
 - 2.4.5.4.3.2.1. Coal Water Transport Routes
 - 2.4.5.4.3.2.2. Coal Ports
 - 2.4.5.4.4. Coal Supporting Facilities
 - 2.4.5.4.4.1. Coal Markets
- 2.4.5.5. ETHANOL
 - 2.4.5.5.1. Ethanol Feed Material Supply
 - 2.4.5.5.2. Ethanol Production Facilities
 - 2.4.5.5.3. Ethanol Storage Facilities
 - 2.4.5.5.4. Ethanol Transport Facilities
 - 2.4.5.5.5. Ethanol Blending Facilities
 - 2.4.5.5.6. Ethanol Supporting Facilities
 - 2.4.5.5.6.1. Ethanol Markets
- 2.4.5.6. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.5.6.1. Federal Energy Agencies
 - 2.4.5.6.2. State, Local, Regional Energy Agencies
 - 2.4.5.6.3. Energy Industry Organizations

2.4.5.6.4. International Energy Organizations

2.4.6. EMERGENCY SERVICES

2.4.6.1. LAW ENFORCEMENT

2.4.6.1.1. Law Enforcement Administrative Offices/Headquarters

2.4.6.1.2. Law Enforcement Facilities

2.4.6.1.3. Specialized Police Units

2.4.6.1.3.1. Bomb Squads

2.4.6.1.3.2. Tactical Units

2.4.6.1.3.3. Crime Scene Investigation Units

2.4.6.1.3.4. K-9 Units

2.4.6.1.3.5. Marine and Port Law Enforcement Units

2.4.6.1.3.6. Air Law Enforcement Units

2.4.6.1.3.7. Other Specialized Units

2.4.6.1.4. Crime Laboratories

2.4.6.1.5. Police Training Facilities

2.4.6.1.6. Law Enforcement Maintenance Facilities

2.4.6.1.7. Correctional Facilities

2.4.6.1.8. Police Communication Facilities

2.4.6.1.9. Law Enforcement Information Systems

2.4.6.1.10. Mobile Response Units

2.4.6.1.11. Intelligence Fusion Centers

2.4.6.2. FIRE, RESCUE, AND EMERGENCY SERVICES

2.4.6.2.1. Fire, Rescue, and Other Emergency Administrative Offices

2.4.6.2.2. Fire Stations

2.4.6.2.3. Specialized Emergency Response Units

2.4.6.2.3.1. HAZMAT Units

2.4.6.2.3.2. Marine Emergency Units

2.4.6.2.3.3. Air Emergency Units

2.4.6.2.3.4. Technical Rescue Units

2.4.6.2.3.5. Other Specialized Fire and Emergency Units

2.4.6.2.4. Fire Investigation Laboratories

2.4.6.2.5. Fire, Rescue, and Other Emergency Training Facilities

2.4.6.2.6. Fire, Rescue, and Other Emergency Maintenance Facilities

2.4.6.2.7. Fire, Rescue, and Other Emergency Communication Facilities

2.4.6.2.7.1. Fire Department Communication Resources

2.4.6.2.7.2. Fire Alarm Systems

2.4.6.2.8. Fire, Rescue, and Other Emergency Apparatus

2.4.6.3. SEARCH AND RESCUE

- 2.4.6.3.1. Search and Rescue Stations
- 2.4.6.3.2. Search and Rescue Supply Facilities
- 2.4.6.3.3. Search and Rescue Training Facilities
- 2.4.6.4. EMERGENCY MEDICAL SERVICES
 - 2.4.6.4.1. Emergency Medical Services Administrative Operations
 - 2.4.6.4.2. Emergency Medical Services Operations
 - 2.4.6.4.3. Specialized Emergency Medical Services Operations
 - 2.4.6.4.4. Emergency Medical Services Training Facilities
 - 2.4.6.4.5. Emergency Medical Services Maintenance Facilities
 - 2.4.6.4.6. Emergency Medical Services Communication Facilities
 - 2.4.6.4.7. Emergency Departments
 - 2.4.6.4.8. Emergency Logistics Storage and Staging Areas
- 2.4.6.5. EMERGENCY MANAGEMENT
 - 2.4.6.5.1. Emergency Management Administrative Offices
 - 2.4.6.5.2. Emergency Command and Control Centers
 - 2.4.6.5.2.1. Public Safety Answering Points
 - 2.4.6.5.2.2. Emergency Operations Centers
 - 2.4.6.5.2.3. Mutual Aid and Multi-Agency Coordination Systems
 - 2.4.6.5.3. Emergency Operations Information Systems
- 2.4.6.6. OTHER EMERGENCY SERVICES
- 2.4.7. INFORMATION TECHNOLOGY
 - 2.4.7.1. IT PRODUCTS AND SERVICES
 - 2.4.7.1.1. Networking elements
 - 2.4.7.1.2. Security and policy compliance elements
 - 2.4.7.1.3. Operating system services software
 - 2.4.7.1.4. Business operations, database, and business intelligence software and services
 - 2.4.7.1.5. Managed network/data center elements
 - 2.4.7.1.6. Semiconductors
 - 2.4.7.1.7. Storage hardware, software, and services
 - 2.4.7.1.8. Lifecycle product and service integrity, certification, and other assurance functions and mechanisms
 - 2.4.7.1.9. DNS Software
 - 2.4.7.1.10. Develop and provide secure appliances that support DNS
 - 2.4.7.1.11. Produce and provide control systems products, Supervisory Control and Data Acquisition (SCADA), and other automation systems
 - 2.4.7.2. INCIDENT MANAGEMENT CAPABILITIES
 - 2.4.7.2.1. Provide Preventative Guidance, Best Practices, Simulation, and Testing

- 2.4.7.2.2. Provide and Operate Indications, Alerting and Warning Capabilities
- 2.4.7.2.3. Provide and Operate Operation Centers and Teams
- 2.4.7.2.4. Provide and Participate in Information Sharing, Situational Awareness, and Information Fusion Activities
- 2.4.7.2.5. Coordinate and Provide Response, Recovery and Reconstitution
- 2.4.7.3. INTERNET-BASED CONTENT, INFORMATION, AND COMMUNICATIONS SERVICES
 - 2.4.7.3.1. Provide and support critical National Security Emergency Preparedness (NS/EP), and Law Enforcement functions
 - 2.4.7.3.2. Provide Mapping and Geospatial data and imagery services to support NS/EP functions
 - 2.4.7.3.3. Provide and Operate Critical Web Search capabilities
 - 2.4.7.3.4. Provide and Operate Critical e-Commerce and Financial Transaction Services
 - 2.4.7.3.5. Provide Communications and Collaboration Services (e.g., VoIP conferencing, P2P, IM, etc.
- 2.4.7.4. DOMAIN NAME RESOLUTION SERVICES
 - 2.4.7.4.1. Provide and Operate Domain Name Registry/Registrar Services
 - 2.4.7.4.2. Provide and Operate Root, TLDs, and Lower Level Domains
 - 2.4.7.4.3. Provide DNS Provisioning
 - 2.4.7.4.4. Provide Name Resolution Services for Client Hosts
 - 2.4.7.4.5. Provide Security and Incident Management for DNS Operations
- 2.4.7.5. IDENTITY MANAGEMENT AND ASSOCIATED TRUST SUPPORT SERVICES
 - 2.4.7.5.1. Provide Organizational Digital Identity and Certificate Provisioning Services
 - 2.4.7.5.2. Provide Individual Digital Identity and Certificate Provisioning Services
 - 2.4.7.5.3. Provide Organizational Revocation Services for Digital Identity and Certificate
 - 2.4.7.5.4. Provide Individual Revocation Services for Digital Identity and Certificate
 - 2.4.7.5.5. Operate infrastructure for trusted root certificate authorities
 - 2.4.7.5.6. Ensure the Chain of Trust and the ability to attest to it
- 2.4.7.6. INTERNET ROUTING, ACCESS AND CONNECTION SERVICES
 - 2.4.7.6.1.1. Provide and operate critical collocation facilities/carrier hotelling
 - 2.4.7.6.1.2. Provide and operate critical Internet exchange fabric
 - 2.4.7.6.1.3. Provide and operate Critical local access capabilities
 - 2.4.7.6.1.4. Provide and operate Critical Internet Backbone/Core Services and Capabilities.
 - 2.4.7.6.1.5. Routing/Peering Security Operations and Incident management
 - 2.4.7.6.1.6. Provide and support critical National Security, Emergency Preparedness, and Law Enforcement functions
 - 2.4.7.6.1.7. Provide address and ASN Allocation services
- 2.4.8. COMMUNICATIONS

2.4.8.1. WIRED COMMUNICATIONS

2.4.8.1.1. Switching Facilities

2.4.8.1.1.1. Local Exchange Facilities

2.4.8.1.1.2. Local and Access Tandem Switching Facilities

2.4.8.1.1.3. Inter-Exchange Switching Facilities

2.4.8.1.2. Signaling Network Facilities

2.4.8.1.2.1. Signaling System (SS7) Centers

2.4.8.1.2.2. Signaling Links

2.4.8.1.3. Transport Facilities

2.4.8.1.3.1. Trunk Line Links

2.4.8.1.3.2. Submarine Cables

2.4.8.1.3.3. Customer Lines

2.4.8.1.4. Operations Management

2.4.8.1.4.1. Network Operations Centers

2.4.8.1.4.2. Call Center / Customer Service Center

2.4.8.1.4.3. Billing Centers

2.4.8.1.4.4. Emergency Operations Centers

2.4.8.1.4.5. Data Centers

2.4.8.1.5. Wired Telecommunication Service Provider Facilities

2.4.8.1.6. Access Infrastructure

2.4.8.1.6.1. End Offices

2.4.8.1.6.2. Internet Service Provider Point of Presence

2.4.8.1.6.3. Access Tandems

2.4.8.1.6.4. Local Loops and Metro Rings

2.4.8.1.7. Wireline Communications Customer Hosting Center Facilities

2.4.8.1.8. Cable

2.4.8.1.8.1. Business/Operations Office

2.4.8.1.8.2. Headend

2.4.8.1.8.3. Distribution Hubs

2.4.8.1.8.4. Fiber Nodes

2.4.8.2. WIRELESS COMMUNICATIONS

2.4.8.2.1. Cellular Telephone Facilities

2.4.8.2.1.1. Cell Phone Towers

2.4.8.2.1.2. Cell Phone Switching Centers

2.4.8.2.1.3. Cellular Phone Network Operations Centers

2.4.8.2.1.4. Mobile Switching Office

2.4.8.2.2. Pager Facilities

2.4.8.2.2.1. Pager Towers

- 2.4.8.2.2.2. Pager Operations Centers
- 2.4.8.2.3. Wireless Telecommunication Service Provider Facilities
- 2.4.8.2.4. Operations Management
 - 2.4.8.2.4.1. Network Operations Centers
 - 2.4.8.2.4.2. Call Center / Customer Service Center
 - 2.4.8.2.4.3. Billing Centers
 - 2.4.8.2.4.4. Emergency Operations Centers
 - 2.4.8.2.4.5. Data Centers
- 2.4.8.3. SATELLITE COMMUNICATIONS
 - 2.4.8.3.1. Satellite Communications Ground Stations
 - 2.4.8.3.2. Operations Management
 - 2.4.8.3.2.1. Network Operations Centers
 - 2.4.8.3.2.2. Satellite Operations Centers
 - 2.4.8.3.2.3. Call Centers,
 - 2.4.8.3.2.4. Billing Centers
 - 2.4.8.3.2.5. Emergency Operations Centers
 - 2.4.8.3.2.6. Data Centers
 - 2.4.8.3.3. Satellite Control Stations
 - 2.4.8.3.4. Satellite Telecommunication Ground Links
 - 2.4.8.3.5. Communication Satellites
 - 2.4.8.3.6. Satellite Telecommunication Service Provider Facilities
 - 2.4.8.3.7. User Terminals
 - 2.4.8.3.7.1. Broadband Global Area Network
 - 2.4.8.3.7.2. Very Small Aperture Terminal
 - 2.4.8.3.7.3. Satellite Phones
- 2.4.8.4. INTERNET
 - 2.4.8.4.1. Internet Service Providers
 - 2.4.8.4.2. Points of Presence
 - 2.4.8.4.3. Network Access Points
 - 2.4.8.4.4. Peering Points
 - 2.4.8.4.5. Domain Name Servers
 - 2.4.8.4.6. Internet Backbone Links
 - 2.4.8.4.7. Web Search Portals
- 2.4.8.5. INFORMATION SERVICES
 - 2.4.8.5.1. Broadcasting
 - 2.4.8.5.1.1. Radio Broadcasting
 - 2.4.8.5.1.1.1. Radio Network Headquarters
 - 2.4.8.5.1.2. Television Broadcasting

- 2.4.8.5.1.2.1. Network Headquarters
- 2.4.8.5.1.2.2. Local Broadcast Stations
- 2.4.8.5.1.2.3. National News and Sports Transponders
- 2.4.8.5.1.2.4. News Vehicles
- 2.4.8.5.1.3. Cable and Other Subscription Programming
 - 2.4.8.5.1.3.1. Network Headquarters
 - 2.4.8.5.1.3.2. Local Broadcast Stations
 - 2.4.8.5.1.3.3. National News and Sports Transponders
 - 2.4.8.5.1.3.4. News Vehicles
- 2.4.8.6. NEXT GENERATION NETWORKS
- 2.4.8.7. REGULATORY, OVERSIGHT, INDUSTRY ORGANIZATIONS
 - 2.4.8.7.1. Federal Communications Agencies
 - 2.4.8.7.2. State, Local, Regional Communications Agencies
 - 2.4.8.7.3. Communications Industry Organizations
 - 2.4.8.7.4. International Communications Organizations
- 2.4.8.8. OTHER TELECOMMUNICATION FACILITIES
- 2.4.9. POSTAL AND SHIPPING
 - 2.4.9.1. U.S. POSTAL SERVICE
 - 2.4.9.1.1. USPS Administrative Offices
 - 2.4.9.1.2. USPS Information System Centers
 - 2.4.9.1.3. USPS Mail Centers
 - 2.4.9.1.3.1. USPS International Exchange Office
 - 2.4.9.1.3.2. USPS Processing and Distribution Centers
 - 2.4.9.1.3.3. USPS Airport Mail Centers
 - 2.4.9.1.3.4. USPS Bulk Mail Centers
 - 2.4.9.1.3.5. USPS Other Mail Centers
 - 2.4.9.1.3.6. USPS Retail Centers
 - 2.4.9.1.3.7. USPS Delivery Units
 - 2.4.9.1.3.8. USPS Vehicle Maintenance Facilities
 - 2.4.9.2. COURIERS
 - 2.4.9.2.1. Courier Administrative Offices
 - 2.4.9.2.2. Courier Information System Centers
 - 2.4.9.2.3. Courier Processing Centers
 - 2.4.9.2.3.1. Courier International/National Hub
 - 2.4.9.2.3.2. Courier Regional Hub
 - 2.4.9.2.3.3. Courier Air Gateway
 - 2.4.9.2.3.4. Courier Pick up/Delivery Station
 - 2.4.9.2.4. Courier Retail Facility

2.4.9.2.5. Courier Aircraft Maintenance Facility

2.4.9.3. OTHER POSTAL AND SHIPPING FACILITIES

2.4.10. HEALTHCARE AND PUBLIC HEALTH

2.4.10.1. DIRECT PATIENT HEALTHCARE

2.4.10.1.1. Hospitals

2.4.10.1.1.1. General Medical and Surgical Hospitals

2.4.10.1.1.1.1. Private and Private Not-for-profit General Medical and Surgical Hospitals

2.4.10.1.1.1.2. Federal General Medical and Surgical Hospitals

2.4.10.1.1.1.3. State, Local, and Tribal General Medical and Surgical Hospitals

2.4.10.1.1.2. Psychiatric and Substance Abuse Hospitals

2.4.10.1.1.2.1. Private and Not-for-profit Psychiatric and Substance Abuse Hospitals

2.4.10.1.1.2.2. Federal Psychiatric and Substance Abuse Hospitals

2.4.10.1.1.2.3. State, Local, and Tribal Psychiatric and Substance Abuse Hospitals

2.4.10.1.1.3. Children's Hospitals

2.4.10.1.1.4. Specialty Hospitals

2.4.10.1.1.5. Critical Access Hospitals

2.4.10.1.2. Ambulatory Healthcare Facilities

2.4.10.1.2.1. Family Planning Centers

2.4.10.1.2.2. Outpatient Mental Health and Substance Abuse Centers

2.4.10.1.2.3. HMO Medical Centers

2.4.10.1.2.4. Kidney Dialysis Centers

2.4.10.1.2.5. Freestanding Surgical Care Centers

2.4.10.1.2.6. Urgent Care Centers

2.4.10.1.2.7. Rehabilitation Facilities

2.4.10.1.2.8. Birthing Centers

2.4.10.1.2.9. Prosthetic Limb Centers

2.4.10.1.2.10. Community Healthcare centers

2.4.10.1.2.11. Occupational Health Clinics

2.4.10.1.3. Extended Care Facilities

2.4.10.1.3.1. Nursing Care Facilities

2.4.10.1.3.2. Residential Care Facilities

2.4.10.1.3.3. Hospices

2.4.10.1.4. Health Practitioner Offices and Clinics

2.4.10.1.4.1. Physicians Offices

2.4.10.1.4.2. Dental Offices

- 2.4.10.1.4.3. Mental Health Practitioner Offices
- 2.4.10.1.5. Home Healthcare
- 2.4.10.2. PUBLIC HEALTH AGENCIES
 - 2.4.10.2.1. Clinical Agencies/Departments
 - 2.4.10.2.1.1. Federal Agencies
 - 2.4.10.2.1.2. Regional Agencies
 - 2.4.10.2.1.3. State Agencies
 - 2.4.10.2.1.4. Local Agencies
 - 2.4.10.2.1.5. Tribal Agencies
 - 2.4.10.2.2. Non-Clinical Agencies/Departments
 - 2.4.10.2.2.1. Federal Agencies
 - 2.4.10.2.2.2. Regional Agencies
 - 2.4.10.2.2.3. State Agencies
 - 2.4.10.2.2.4. Local Agencies
 - 2.4.10.2.2.5. Tribal Agencies
- 2.4.10.3. HEALTHCARE EDUCATIONAL FACILTIES
 - 2.4.10.3.1. Medical Schools
 - 2.4.10.3.2. Dental Schools
 - 2.4.10.3.3. Nursing Schools
 - 2.4.10.3.4. Pharmacy Schools
 - 2.4.10.3.5. Allied Health Schools
- 2.4.10.4. HEALTH SUPPORTING FACILITIES
 - 2.4.10.4.1. Medical And Diagnostic Laboratories
 - 2.4.10.4.1.1. In-Hospital/Clinic Laboratories
 - 2.4.10.4.1.2. Stand-Alone Medical and Diagnostic Laboratories
 - 2.4.10.4.1.2.1. Agency Operating Laboratory
 - 2.4.10.4.1.2.2. BSL- Government
 - 2.4.10.4.1.2.3. Private
 - 2.4.10.4.1.3. Public Health Laboratories
 - 2.4.10.4.1.3.1. Agency Operating Laboratory
 - 2.4.10.4.1.3.2. BSL- Government
 - 2.4.10.4.1.3.3. Private
 - 2.4.10.4.1.4. Other Laboratories
 - 2.4.10.4.1.4.1. Agency Operating Laboratory
 - 2.4.10.4.1.4.2. BSL- Government
 - 2.4.10.4.1.4.3. Private
 - 2.4.10.4.2. Blood, Organ, and Tissue Facilities
 - 2.4.10.4.2.1. Blood/Blood Component Banks

- 2.4.10.4.2.2. Organ, Tissue, and Bone Marrow Centers
- 2.4.10.4.3. Pharmaceuticals/Biopharmaceuticals
 - 2.4.10.4.3.1. Pharmaceutical/Biopharmaceutical Manufacturing Facilities
 - 2.4.10.4.3.2. Pharmaceutical/Biopharmaceutical Storage and Stockpiles
 - 2.4.10.4.3.2.1. Strategic National Stockpiles
 - 2.4.10.4.3.2.2. Military Stockpiles
 - 2.4.10.4.3.2.3. Federal Agency Stockpiles
 - 2.4.10.4.3.2.4. State and Local Stockpiles
 - 2.4.10.4.3.2.5. Hospital Stockpiles
 - 2.4.10.4.3.2.6. Commercial Pharmaceutical Storage for Wholesale Distribution
 - 2.4.10.4.3.3. Pharmaceutical/Biopharmaceutical Distribution Centers
 - 2.4.10.4.3.4. Mail-Order Pharmacies
 - 2.4.10.4.3.5. Pharmacies
 - 2.4.10.4.3.6. Tribal Pharmacies
- 2.4.10.4.4. Medical Supplies, Devices, and Equipment
 - 2.4.10.4.4.1. Medical Supplies, Devices, Equipment Manufacturing Facilities
 - 2.4.10.4.4.2. Medical Supplies, Devices, and Equipment Storage and Stockpiles
 - 2.4.10.4.4.2.1. Strategic National Stockpiles
 - 2.4.10.4.4.2.2. Military Stockpiles
 - 2.4.10.4.4.2.3. Federal Stockpiles
 - 2.4.10.4.4.2.4. State and Local Stockpiles
 - 2.4.10.4.4.2.5. Hospital Stockpiles
 - 2.4.10.4.4.2.6. Commercial Medical Supplies, Devices and Equipment Storage for Wholesale Distributors
- 2.4.10.4.5. Medical Practitioner Registries and Referral Centers
 - 2.4.10.4.5.1. Physician Referral Centers
 - 2.4.10.4.5.2. Nursing Registries
- 2.4.10.4.6. Healthcare, Public Health, and Vital Records Information Networks
 - 2.4.10.4.6.1. Vital Records Centers
 - 2.4.10.4.6.2. Public Health Data Centers
 - 2.4.10.4.6.3. Poison Control Centers
 - 2.4.10.4.6.4. Other Healthcare Information Networks
- 2.4.10.4.7. Medical Research Facilities
 - 2.4.10.4.7.1. Industrial Medical Research Facilities
 - 2.4.10.4.7.2. Academic Medical Research Facilities
 - 2.4.10.4.7.3. Government Medical Research Facilities
- 2.4.10.4.8. Health Insurance Facilities
 - 2.4.10.4.8.1. Government Health Insurance Agencies (includes Tribal agencies)

- 2.4.10.4.8.2. Private Health Insurance Companies
- 2.4.10.5. FATALITY/MORTUARY FACILITIES
 - 2.4.10.5.1. Morgues
 - 2.4.10.5.2. Funeral Homes and Crematoriums
 - 2.4.10.5.3. Cemeteries
- 2.4.10.6. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.10.6.1. Federal Healthcare Agencies and Departments
 - 2.4.10.6.2. State Healthcare and Public Health Agencies and Departments
 - 2.4.10.6.3. Professional Licensing Boards
 - 2.4.10.6.4. Local Healthcare and Public Health Agencies and Departments (includes Tribal)
 - 2.4.10.6.5. Regional Healthcare and Public Health Agencies and Departments
 - 2.4.10.6.6. Occupational Health and Environmental Health Programs
 - 2.4.10.6.7. Healthcare Industry Organizations
 - 2.4.10.6.8. Professional and Business Associations
 - 2.4.10.6.9. Accreditation Organizations
- 2.4.10.7. OTHER HEALTHCARE AND PUBLIC HEALTH ENTITIES
- 2.4.11. WATER
 - 2.4.11.1. RAW WATER SUPPLY
 - 2.4.11.1.1. Surface Water
 - 2.4.11.1.2. Ground Water
 - 2.4.11.2. RAW WATER TRANSMISSION
 - 2.4.11.2.1. Aqueducts
 - 2.4.11.2.2. Water Pipelines
 - 2.4.11.2.2.1. Water Pipeline Segments
 - 2.4.11.2.2.2. Water Pipeline Pumping Stations
 - 2.4.11.3. RAW WATER STORAGE
 - 2.4.11.3.1. Raw Water Storage Reservoirs
 - 2.4.11.3.2. Raw Water Storage Tanks
 - 2.4.11.4. WATER TREATMENT FACILITIES
 - 2.4.11.5. TREATED (FINISHED) WATER STORAGE
 - 2.4.11.5.1. Water Towers
 - 2.4.11.5.2. Standpipes
 - 2.4.11.5.3. Covered Reservoirs
 - 2.4.11.5.4. Uncovered Reservoirs
 - 2.4.11.5.5. Clearwells
 - 2.4.11.6. TREATED WATER DISTRIBUTION SYSTEMS
 - 2.4.11.6.1. Water Transmission/Distribution Mains

- 2.4.11.6.2. Water Service Lines
- 2.4.11.6.3. Water Distribution Pumping Stations
- 2.4.11.6.4. Fire Hydrants
- 2.4.11.6.5. Booster Disinfection Facilities
- 2.4.11.6.6. Backflow Preventers
- 2.4.11.6.7. Meters
- 2.4.11.7. TREATED WATER MONITORING SYSTEMS
- 2.4.11.8. TREATED WATER DISTRIBUTION CONTROL CENTERS
- 2.4.11.9. WASTEWATER FACILITIES
 - 2.4.11.9.1. Wastewater Collection Systems
 - 2.4.11.9.1.1. Sewers
 - 2.4.11.9.1.2. Inverted Siphon
 - 2.4.11.9.1.3. Manholes
 - 2.4.11.9.1.4. Lift/Pump Station
 - 2.4.11.9.2. Wastewater Raw Influent Storage
 - 2.4.11.9.3. Wastewater Treatment Plants
 - 2.4.11.9.4. Treated Wastewater Storage
 - 2.4.11.9.5. Treated Wastewater Discharge Systems
 - 2.4.11.9.6. Treated Wastewater Monitoring Systems
 - 2.4.11.9.7. Wastewater Control Centers
- 2.4.11.10. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.11.10.1. Federal Water Agencies
 - 2.4.11.10.2. State, Local, Regional Water Agencies
 - 2.4.11.10.3. Water Industry Organizations
 - 2.4.11.10.4. International Water Organizations
- 2.4.12. NATIONAL MONUMENTS AND ICONS
 - 2.4.12.1. NATIONAL MONUMENT/ICON STRUCTURES
 - 2.4.12.1.1. Buildings
 - 2.4.12.1.2. Monuments and Memorials
 - 2.4.12.1.3. Other Monument/Icon Structures
 - 2.4.12.2. NATIONAL MONUMENT/ICON GEOGRAPHIC AREAS
 - 2.4.12.2.1. Parks and Public Lands
 - 2.4.12.2.2. Historical and Heritage Lands
 - 2.4.12.2.3. Other Monument/Icon Geographic Areas
 - 2.4.12.3. NATIONAL MONUMENT/ICON DOCUMENTS AND OBJECTS
 - 2.4.12.3.1. Historical/Significant Documents
 - 2.4.12.3.2. Historical/Significant Objects
 - 2.4.12.4. OTHER NATIONAL MONUMENTS AND ICONS

2.4.13. COMMERCIAL FACILITIES

2.4.13.1. ENTERTAINMENT AND MEDIA FACILITIES

2.4.13.1.1. Broadcasting

2.4.13.1.1.1. Cable and Other Subscription Programming

2.4.13.1.1.2. Radio Broadcasting

2.4.13.1.1.3. Television Broadcasting

2.4.13.1.2. Internet Publishing

2.4.13.1.3. Motion Picture and Sound Recording Facilities

2.4.13.1.4. Print Media

2.4.13.1.4.1. Newspaper and Periodical Publishing

2.4.13.1.4.2. Other Print Publishing

2.4.13.2. GAMBLING FACILITIES/CASINOS (RESORTS)

2.4.13.2.1. Gambling Cruises

2.4.13.2.2. Riverboat Casinos

2.4.13.2.3. Casino Complexes

2.4.13.2.4. Stand Alone Casino

2.4.13.2.5. Permanently-Moored Casinos

2.4.13.2.6. Other Gambling Establishments

2.4.13.3. LODGING FACILITIES

2.4.13.3.1. Bed and Breakfast Inns

2.4.13.3.2. Hotels and Motels

2.4.13.3.3. Resorts (not gambling)

2.4.13.3.4. Recreational Vehicle) Parks and Recreational Camps

2.4.13.3.5. Other Lodging Facilities

2.4.13.4. OUTDOOR EVENTS FACILITIES

2.4.13.4.1. Amusement, Theme, and Water Parks

2.4.13.4.2. Community Parks, Fairgrounds, Pavilions

2.4.13.4.3. Community Water Facilities

2.4.13.4.4. Community Special Gatherings

2.4.13.4.4.1. Parades

2.4.13.4.4.2. Special Events

2.4.13.4.5. Marinas

2.4.13.4.6. Skiing Facilities

2.4.13.5. PUBLIC ASSEMBLY

2.4.13.5.1. Sports leagues

2.4.13.5.1.1. Motor Racetracks

2.4.13.5.1.2. Horse and Dog tracks

2.4.13.5.1.3. Arenas

- 2.4.13.5.1.4. Stadiums
- 2.4.13.5.2. Cultural Properties
 - 2.4.13.5.2.1. Amphitheatres
 - 2.4.13.5.2.2. Museums, Planetariums
 - 2.4.13.5.2.3. Performing Arts Centers and Auditoriums
 - 2.4.13.5.2.4. Zoos, Aquariums, Botanical Gardens
- 2.4.13.5.3. Other Facilities
 - 2.4.13.5.3.1. Convention Centers
 - 2.4.13.5.3.2. Golf Courses and Country Clubs
 - 2.4.13.5.3.3. Movie Theaters
 - 2.4.13.5.3.4. Stadiums
 - 2.4.13.5.3.5. Arenas
 - 2.4.13.5.3.6. Other
 - 2.4.13.5.3.7. Entertainment Districts
 - 2.4.13.5.3.8. Fitness and Recreational Facilities
 - 2.4.13.5.3.9. All Other Amusement and Recreational Facilities
 - 2.4.13.5.3.10. Religious Facilities
- 2.4.13.6. REAL ESTATE FACILITIES
 - 2.4.13.6.1. Office Buildings
 - 2.4.13.6.1.1. Office Buildings - Stand Alone
 - 2.4.13.6.1.2. Office Districts
 - 2.4.13.6.1.3. Office Parks
 - 2.4.13.6.2. Residential Units
 - 2.4.13.6.2.1. Multi-Family Residences
 - 2.4.13.6.2.2. Single-Family Residences
 - 2.4.13.6.3. Self-storage facilities
 - 2.4.13.6.4. Mixed Use properties
 - 2.4.13.6.5. Community Organization Facilities
- 2.4.13.7. RETAIL FACILITIES
 - 2.4.13.7.1. Store Retailers
 - 2.4.13.7.1.1. Shopping Centers and Malls
 - 2.4.13.7.1.2. Shopping Districts
 - 2.4.13.7.1.3. Stand-Alone Stores
 - 2.4.13.7.2. Non-Store Retailers
- 2.4.13.8. OTHER COMMERCIAL FACILITIES
- 2.4.14. GOVERNMENT FACILITIES
 - 2.4.14.1. PERSONNEL-ORIENTED GOVERNMENT FACILITIES
 - 2.4.14.1.1. Personnel-Oriented Buildings and Structures

- 2.4.14.1.1.1. Offices and Office Building Complexes
 - 2.4.14.1.1.1.1. Agency Headquarters
 - 2.4.14.1.1.1.2. Field, District, and Satellite Offices
 - 2.4.14.1.1.1.3. Legislative Chambers and Offices
 - 2.4.14.1.1.1.4. Judicial Chambers and Offices
 - 2.4.14.1.1.1.5. Data and Call Centers
- 2.4.14.1.1.2. Housing
- 2.4.14.1.1.3. Correctional Facilities
- 2.4.14.1.1.4. Embassies, Consulates, and Border Facilities
- 2.4.14.1.2. Personnel-Oriented Land
- 2.4.14.2. SERVICE-ORIENTED GOVERNMENT FACILITIES
 - 2.4.14.2.1. Service-Oriented Buildings and Structures
 - 2.4.14.2.1.1. Emergency Services
 - 2.4.14.2.1.2. Maintenance and Repair Shops
 - 2.4.14.2.1.3. Operations, Command, Dispatch, and Control Centers
 - 2.4.14.2.1.4. Training Buildings
 - 2.4.14.2.1.5. Libraries
 - 2.4.14.2.2. Service-Oriented Land
- 2.4.14.3. GOVERNMENT RESEARCH FACILITIES
 - 2.4.14.3.1. Government Research and Development Buildings and Structures
 - 2.4.14.3.1.1. Analysis And Assessment Research Facilities
 - 2.4.14.3.1.2. Environmental Research
 - 2.4.14.3.1.3. Basic Science Research
 - 2.4.14.3.1.4. Aerospace Research Facilities
 - 2.4.14.3.1.5. Military Research
 - 2.4.14.3.2. Government Research and Development Land
- 2.4.14.4. GOVERNMENT STORAGE AND PRESERVATION FACILITIES
 - 2.4.14.4.1. Storage and Preservation Buildings and Structures
 - 2.4.14.4.1.1. Archive and Record Centers
 - 2.4.14.4.1.2. Warehouses
 - 2.4.14.4.1.3. Weapons and Ammunition Storage
 - 2.4.14.4.1.4. Precious Metal Storage
 - 2.4.14.4.1.5. Currency Storage
 - 2.4.14.4.1.6. Special Nuclear Materials and Waste Storage
 - 2.4.14.4.2. Storage and Preservation Land
- 2.4.14.5. GOVERNMENT SENSOR AND MONITORING SYSTEMS
 - 2.4.14.5.1. Global Positioning System
 - 2.4.14.5.1.1. GPS Space Segment

- 2.4.14.5.1.2. GPS Control Segment
- 2.4.14.5.2. Government Observation Systems
- 2.4.14.6. GOVERNMENT SPACE SYSTEMS
 - 2.4.14.6.1. Military Facilities
 - 2.4.14.6.1.1. Launch Vehicles
 - 2.4.14.6.1.2. Launch Facilities
 - 2.4.14.6.1.3. Mission Control Facilities
 - 2.4.14.6.1.4. Satellites
 - 2.4.14.6.2. NASA Facilities
 - 2.4.14.6.2.1. Launch Vehicles
 - 2.4.14.6.2.2. Launch Facilities
 - 2.4.14.6.2.3. Mission Control Facilities
 - 2.4.14.6.2.4. Satellites
- 2.4.14.7. MILITARY FACILITIES
 - 2.4.14.7.1. Army Bases
 - 2.4.14.7.2. Navy Bases
 - 2.4.14.7.3. Marine Corps Bases
 - 2.4.14.7.4. Air Force Bases
 - 2.4.14.7.5. Coast Guard Bases
 - 2.4.14.7.6. National Guard Facilities
 - 2.4.14.7.7. Joint and Combined Military Installations and Reservations
- 2.4.14.8. EDUCATION FACILITIES
 - 2.4.14.8.1. Pre K-12 Schools
 - 2.4.14.8.2. Higher Education Facilities
 - 2.4.14.8.3. Specialized Education Facilities
- 2.4.14.9. OTHER GOVERNMENT FACILITIES
 - 2.4.14.9.1. Other Government Buildings and Structures
 - 2.4.14.9.2. Other Government Land
- 2.4.15. DAMS
 - 2.4.15.1. DAM PROJECTS
 - 2.4.15.1.1. Water Retention Structures
 - 2.4.15.1.1.1. Impounding Structure
 - 2.4.15.1.2. Water Control Structures
 - 2.4.15.1.2.1. Spillway
 - 2.4.15.1.2.2. Outlet Works
 - 2.4.15.1.3. Impoundments
 - 2.4.15.1.3.1. Reservoir
 - 2.4.15.1.4. Hydropower Generation Facilities

- 2.4.15.1.4.1. Conventional Plant
- 2.4.15.1.4.2. Run-Of-The-River Plant
- 2.4.15.1.4.3. Pumped-Storage Plant
- 2.4.15.1.5. Navigation Structures
 - 2.4.15.1.5.1. Navigation Lock
- 2.4.15.1.6. Water Transmission Structures
 - 2.4.15.1.6.1. Canal
- 2.4.15.1.7. Remote Operation & Control Facilities
 - 2.4.15.1.7.1. Operation & Control Center
- 2.4.15.2. FLOOD DAMAGE REDUCTION SYSTEMS
 - 2.4.15.2.1. Flood Protection Structures
 - 2.4.15.2.1.1. Levee
 - 2.4.15.2.1.2. Flood Wall
 - 2.4.15.2.1.3. Dike
 - 2.4.15.2.1.4. River Control Structures
 - 2.4.15.2.2. Water Control Structures
 - 2.4.15.2.2.1. Pumping Station
 - 2.4.15.2.3. Water Transmission Structures
 - 2.4.15.2.3.1. Canal
- 2.4.15.3. HURRICANE & STORM SURGE PROTECTION SYSTEMS
 - 2.4.15.3.1. Structural Protection Systems
 - 2.4.15.3.1.1. Hurricane Barrier
 - 2.4.15.3.1.2. Dike
 - 2.4.15.3.1.3. Shoreline Protection Structure
 - 2.4.15.3.1.4. levee
 - 2.4.15.3.2. Non-Structural Protection Systems
- 2.4.15.4. MINE TAILINGS PROJECTS
 - 2.4.15.4.1. Impoundment Retention Structures
 - 2.4.15.4.1.1. Impounding Structure
 - 2.4.15.4.2. Impoundment Control Structures
 - 2.4.15.4.2.1. Spillway
 - 2.4.15.4.2.2. Outlet Works
 - 2.4.15.4.3. Impoundments
 - 2.4.15.4.3.1. Tailings / Mine Waste Impoundment
- 2.4.15.5. REGULATORY, OVERSIGHT, & INDUSTRY ORGANIZATIONS
 - 2.4.15.5.1. Federal Agencies
 - 2.4.15.5.2. State Agencies
 - 2.4.15.5.3. Industry & Trade Organizations

2.4.15.5.4. Regional & Cross-Sector Organizations

2.4.15.5.5. International Organizations

2.4.16. NUCLEAR

2.4.16.1. NUCLEAR FACILITIES

2.4.16.1.1. Nuclear Power Plants

2.4.16.1.1.1. CANDU (Canadian Deuterium)

2.4.16.1.1.2. Boiling Water Reactor

2.4.16.1.1.3. Pressurized Water Reactor

2.4.16.1.1.4. High Temperature Gas Cooled Reactors (HTGRs)

2.4.16.1.1.5. Liquid Metal Cooled Reactors

2.4.16.1.2. Research, Training, and Test Reactors

2.4.16.1.2.1. Government Research and Test Reactors

2.4.16.1.2.2. University Research and Training Reactors

2.4.16.1.2.3. Private Research and Test Reactors

2.4.16.1.2.4. Deactivated Nuclear Facilities

2.4.16.1.2.5. Deactivated Reactors

2.4.16.1.2.6. Other Deactivated Nuclear Facilities

2.4.16.2. NUCLEAR MATERIALS

2.4.16.2.1. Nuclear Fuel Cycle Facilities

2.4.16.2.1.1. Uranium Mining or In-Situ Uranium Leaching

2.4.16.2.1.2. Uranium Ore Milling or Leachate Processing

2.4.16.2.1.3. Uranium Conversion Facilities

2.4.16.2.1.4. Uranium Enrichment Facilities

2.4.16.2.1.5. Fuel Fabrication Facilities

2.4.16.2.1.5.1. Category I (Special Nuclear Materials) Facilities

2.4.16.2.1.5.2. Category II (Special Nuclear Materials - Moderate Strategic Significance) Facilities

2.4.16.2.1.5.3. Category III (Special Nuclear Materials - Low Strategic Significance) Facilities

2.4.16.2.2. Nuclear Materials Transport

2.4.16.2.2.1. Low Hazard Radioactive Materials Transport

2.4.16.2.2.2. High Hazard Radioactive Materials Transport

2.4.16.2.3. Radioactive Material Users

2.4.16.2.3.1. Medical Facilities with Radioactive Materials

2.4.16.2.3.2. Research Facilities Using Radioactive Materials

2.4.16.2.3.3. Irradiation Facilities

2.4.16.2.3.4. Industrial Facilities with Nuclear Materials

2.4.16.2.4. Radioactive Source Production and Distribution Facilities

- 2.4.16.2.4.1. Radioactive Device Manufacturers
- 2.4.16.2.4.2. Radioactive Source Producers
- 2.4.16.2.4.3. Radioactive Source Importers
- 2.4.16.2.4.4. Radioactive Source Manufacturers
- 2.4.16.3. NUCLEAR WASTE
 - 2.4.16.3.1. Low Level Radioactive Waste Processing and Storage Facilities
 - 2.4.16.3.2. Sites Managing Accumulations of Naturally Occurring Radioactive Materials (NORM)
 - 2.4.16.3.3. Spent Nuclear Fuel Processing and Storage Facilities
 - 2.4.16.3.3.1. Spent Nuclear Fuel Wet Storage Facilities
 - 2.4.16.3.3.2. Spent Nuclear Fuel Dry Storage Facilities
 - 2.4.16.3.4. Transuranic Waste Processing and Storage Facilities
 - 2.4.16.3.5. High Level Radioactive Waste Storage and Disposal Facilities
 - 2.4.16.3.6. Mixed waste processing
- 2.4.16.4. REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS
 - 2.4.16.4.1. Federal Nuclear Agencies
 - 2.4.16.4.2. State, Local, Regional Nuclear Agencies
 - 2.4.16.4.3. Nuclear Industry Organizations
 - 2.4.16.4.4. International Nuclear Organizations
 - 2.4.16.4.5. Professional and Technical Societies
- 2.4.16.5. OTHER NUCLEAR FACILITIES, MATERIALS OR WASTE
- 2.4.17. MANUFACTURING
 - 2.4.17.1. FOOD MANUFACTURING
 - 2.4.17.1.1. Animal Food Manufacturing
 - 2.4.17.1.2. Grain and Oilseed Milling
 - 2.4.17.1.3. Sugar and Confectionary Product Manufacture
 - 2.4.17.1.4. Fruit/Vegetable Preserving, Specialty Food Manufacturing Facilities
 - 2.4.17.1.5. Dairy Product Manufacturing
 - 2.4.17.1.6. Animal Slaughtering and Processing Facilities
 - 2.4.17.1.7. Seafood Product Processing
 - 2.4.17.1.8. Bakery Products Manufacturing
 - 2.4.17.1.9. All Other Food Manufacturing
 - 2.4.17.2. BEVERAGE MANUFACTURING
 - 2.4.17.3. TOBACCO PRODUCT MANUFACTURING
 - 2.4.17.4. TEXTILE, TEXTILE PRODUCT, APPAREL, LEATHER MANUFACTURING
 - 2.4.17.4.1. Fiber, yard and thread mills
 - 2.4.17.4.2. Fabric mills
 - 2.4.17.4.3. Textile and Fabric Finishing and fabric Coating Mills

- 2.4.17.4.4. Textile Furnishings Mills
- 2.4.17.4.5. Other Textile Product Mills
- 2.4.17.4.6. Apparel Manufacturing
- 2.4.17.4.7. Apparel Knitting Mills
- 2.4.17.4.8. Cut and Sew apparel Manufacturing
- 2.4.17.4.9. Apparel Accessories and Other Apparel Manufacturing
- 2.4.17.4.10. Leather and Allied Product Manufacturing
- 2.4.17.5. WOOD PRODUCT MANUFACTURING
 - 2.4.17.5.1. Sawmills
 - 2.4.17.5.2. Wood Preservation
 - 2.4.17.5.3. Veneer, Plywood, and Engineered Wood Product Manufacturing
 - 2.4.17.5.4. Millwork
 - 2.4.17.5.5. Wood Container and Pallet Manufacturing
 - 2.4.17.5.6. All Other Wood Product Manufacturing
- 2.4.17.6. PAPER MANUFACTURING
 - 2.4.17.6.1. Pulp, Paper, and Paperboard Mills
 - 2.4.17.6.2. Converted Paper Product Manufacturing
- 2.4.17.7. PRINTING AND RELATED SUPPORT ACTIVITIES
 - 2.4.17.7.1. Printing
 - 2.4.17.7.2. Support Activities for printing
- 2.4.17.8. PETROLEUM AND COAL PRODUCTS MANUFACTURING
 - 2.4.17.8.1. Petroleum Refineries
 - 2.4.17.8.2. Asphalt Paving, Roofing, and Saturated Materials Manufacturing
 - 2.4.17.8.3. Other Petroleum and coal Products Manufacturing
- 2.4.17.9. CHEMICAL MANUFACTURING
- 2.4.17.10. PLASTICS AND RUBBER PRODUCTS MANUFACTURING
 - 2.4.17.10.1. Plastics Products Manufacturing
 - 2.4.17.10.2. Rubber Product Manufacturing
- 2.4.17.11. NON-METALLIC MINERAL PRODUCTS MANUFACTURING
 - 2.4.17.11.1. Clay Product and Refractory Manufacturing
 - 2.4.17.11.2. Glass and Glass Product Manufacturing
 - 2.4.17.11.3. Cement and Concrete Product Manufacturing
 - 2.4.17.11.4. Lime and Gypsum Product Manufacturing
 - 2.4.17.11.5. Other Nonmetallic Mineral Product Manufacturing
- 2.4.17.12. PRIMARY METAL MANUFACTURING
 - 2.4.17.12.1. Iron and Steel Mills and Ferroalloy Manufacturing
 - 2.4.17.12.2. Steel Product Manufacturing from Purchased Steel
 - 2.4.17.12.3. Alumina and Aluminum Production and Processing

- 2.4.17.12.4. Nonferrous Metal (except Aluminum) Production and Processing
- 2.4.17.12.5. Foundries
- 2.4.17.13. FABRICATED METAL PRODUCT MANUFACTURING
 - 2.4.17.13.1. Forging and Stamping
 - 2.4.17.13.2. Cutlery and Hand tool Manufacturing
 - 2.4.17.13.3. Architectural and Structural Metals Manufacturing
 - 2.4.17.13.4. Boiler, Tank, and Shipping Container Manufacturing
 - 2.4.17.13.5. Hardware Manufacturing
 - 2.4.17.13.6. Spring and Wire Product Manufacturing
 - 2.4.17.13.7. Machine Shops Turned Product and Screw, Nut, and Bolt Manufacturing
 - 2.4.17.13.8. Coating, Engraving, Heat Treating, and Allied Activities
 - 2.4.17.13.9. Other Fabricated Metal Product Manufacturing
- 2.4.17.14. MACHINERY MANUFACTURING
 - 2.4.17.14.1. Agriculture, Construction, and Mining Machinery Manufacturing
 - 2.4.17.14.2. Mining and Oil and Gas Field Machinery Manufacturing
 - 2.4.17.14.3. Oil and Gas Field Machinery and Equipment Manufacturing
 - 2.4.17.14.4. Industrial Machinery Manufacturing
 - 2.4.17.14.5. Commercial and Service Industry Machinery Manufacturing
 - 2.4.17.14.6. Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration
 - 2.4.17.14.7. Metalworking Machinery Manufacturing
 - 2.4.17.14.8. Engine, Turbine, and Power Transmission Equipment
- 2.4.17.15. COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING
 - 2.4.17.15.1. Computer and Peripheral Equipment Manufacturing
 - 2.4.17.15.2. Communications Equipment Manufacturing
 - 2.4.17.15.3. Audio and Video Equipment Manufacturing
 - 2.4.17.15.4. Semiconductor and Other Electronic Component Manufacturing
 - 2.4.17.15.5. Navigational, Measuring, Electro medical, and Control Instruments Manufacturing
 - 2.4.17.15.6. Manufacturing and Reproducing Magnetic and Optical Media
- 2.4.17.16. ELECTRICAL EQUIPMENT, APPLIANCE, COMPONENT MANUFACTURING
 - 2.4.17.16.1. Electric Lighting Equipment Manufacturing
 - 2.4.17.16.2. Household Appliance Manufacturing
 - 2.4.17.16.3. Electrical Equipment Manufacturing
 - 2.4.17.16.4. Other Electrical Equipment and Component Manufacturing
- 2.4.17.17. TRANSPORTATION EQUIPMENT MANUFACTURING
 - 2.4.17.17.1. Motor Vehicle Manufacturing
 - 2.4.17.17.2. Motor Vehicle Body and Trailer Manufacturing
 - 2.4.17.17.3. Motor Vehicle Parts Manufacturing

- 2.4.17.17.4. Aerospace Product and Parts Manufacturing
- 2.4.17.17.5. Railroad Rolling Stock Manufacturing
- 2.4.17.17.6. Ship and Boat Building
- 2.4.17.17.7. Other Transportation Equipment Manufacturing
- 2.4.17.18. FURNITURE AND RELATED PRODUCTS MANUFACTURING
 - 2.4.17.18.1. Household and Institutional Furniture and Kitchen Cabinet Manufacturing
 - 2.4.17.18.2. Office Furniture (including Fixtures) Manufacturing
 - 2.4.17.18.3. Other Furniture Related Product Manufacturing
- 2.4.17.19. MISCELLANEOUS MANUFACTURING
 - 2.4.17.19.1. Medical Equipment and Supplies Manufacturing
 - 2.4.17.19.2. Other Miscellaneous Manufacturing
- 2.4.17.20. MINING, QUARRYING, AND OIL AND GAS EXTRACTION
 - 2.4.17.20.1. Oil and Natural Gas Extraction
 - 2.4.17.20.2. Mining (except Oil and Gas)
 - 2.4.17.20.3. Metal Ore Mining
 - 2.4.17.20.4. Nonmetallic Mineral Mining and Quarrying

2.5. GEOPHYSICAL

- 2.5.1. Soils
- 2.5.2. Geology
- 2.5.3. Oceanography
- 2.5.4. Geomorphology
- 2.5.5. Climate
- 2.5.6. Atmospheric

2.6. MAP REFERENCE

- 2.6.1. Quad Indexes (1-degree, 250K, 100K, 24K, 12K, 6K)
- 2.6.2. Topographic Maps
- 2.6.3. Geographic Names Information System (GNIS – Place Names)
- 2.6.4. Address Points
- 2.6.5. Search and Rescue Grids (SARs)

2.7. BIOLOGICAL

- 2.7.1. Wildlife
- 2.7.2. Fisheries
- 2.7.3. Vegetation
- 2.7.4. Endangered Species

2.8. ENVIRONMENTAL

- 2.8.1. Air
- 2.8.2. Water
- 2.8.3. Land

2.9. ECONOMIC

2.9.1. Economic Development

2.9.2. Employment

2.9.3. Tax Credit & Divisions

2.9.4. Business Listings

1. FGDC NSDI – FRAMEWORK

1.1. GEODETIC CONTROL

A network of geodetic control points, or a set of known reference positions, used as a basis for obtaining positions of other features. A geodetic control point has precisely determined coordinates from which the location of other features or points can be spatially referenced. (Source: FGDC Framework Introduction and Guide)

1.1.1. Geodetic Control Stations (Benchmarks)

Monumented points with precisely measured horizontal or vertical locations which are used as a basis for determining the positions of other points. (Source: FGDC-STD-014.4-2008)

1.1.2. Global Positioning System Control Stations (CORS)

A permanent GPS facility whose GPS receiver continuously provides observables from the GPS satellites, allowing stations occupied temporarily by GPS receivers to be differentially positioned relative to it. The CORS system enables positioning accuracies that approach a few centimeters relative to the National Spatial Reference System, both horizontally and vertically. (Source: NGS CORS website)

1.1.3. Coordinate Systems

A reference framework consisting of a set of points, lines, and/or surfaces, and a set of rules, used to define the positions of points in space in either two or three dimensions. (Source: ESRI GIS Dictionary)

1.2. ORTHOIMAGERY (IMAGERY)

Georeferenced and non-georeferenced images of the Earth's surface. (Source: LGISC Digital Data Subcommittee)

1.2.1. Aerial

Imagery acquired from a position above the surface of the Earth (Source: LGISC Digital Data Subcommittee)

1.2.1.1. Film Based Photography

Imagery acquired with a film-based camera and digitally scanned. (Source: LGISC Digital Data Subcommittee)

1.2.1.1.1. Ortho

A georeferenced digital image prepared from a perspective photograph, or other remotely-sensed data, in which displacement of objects in the image, due to sensor orientation and terrain relief, have been removed (Source: FGDC–STD-008-1999).

1.2.1.1.2. Oblique

An aerial photograph taken with the axis of the camera held at an angle between the horizontal plane of the ground and the vertical plane perpendicular to the ground. (Source: ESRI GIS Dictionary)

1.2.1.2. Digital Camera Based Photography

Imagery acquired with a digital camera. (Source: LGISC Digital Data Subcommittee)

1.2.1.2.1. Ortho

A georeferenced digital image prepared from a perspective photograph, or other remotely-sensed data, in which displacement of objects in the image, due to sensor orientation and terrain relief, have been removed. (Source: FGDC–STD-008-1999)

1.2.1.2.2. Oblique

An aerial photograph taken with the axis of the camera held at an angle between the horizontal plane of the ground and the vertical plane perpendicular to the ground. (Source: ESRI GIS Dictionary)

1.2.1.2.3. Video

Aerial imagery or video acquired with a video camera. (Source: LGISC Digital Data Subcommittee)

1.2.2. Satellite

Data acquired from an artificial satellite or other means, usually hundreds of miles above the Earth's surface. (Source: LGISC Digital Data Subcommittee)

1.2.2.1. Image

Imagery of the Earth acquired by an artificial satellite. (Source: LGISC Digital Data Subcommittee)

1.2.2.2. Radar

Radar is an acronym for Radio Detection and Ranging. It generates its own illumination as an outgoing signal that interacts with the target such that some of the signal is returned as backscatter that is picked up by the same antenna that emitted the radar beam. (Source: NASA website http://rst.gsfc.nasa.gov/Sect8/Sect8_1.html)

1.2.3. Ground

Data acquired from a position on the earth's surface. (Source: LGISC Digital Data Subcommittee)

1.2.3.1. Image

Imagery acquired using a sensor grounded to the Earth's surface (hand-held, tripod, vehicle-mounted camera, etc.). (Source: LGISC Digital Data Subcommittee)

1.2.3.2. Video

Video acquired using a sensor grounded to the Earth's surface (hand-held, tripod, vehicle-mounted video recorder, etc.). (Source: LGISC Digital Data Subcommittee)

1.3. ELEVATION AND BATHYMETRY

Elevation data contain georeferenced digital representations of terrestrial surfaces, natural or manmade, which describe vertical position above or below a datum surface. Data may be encapsulated in an evenly spaced grid (raster form) or randomly spaced (triangular irregular network, hypsography, single points). The elevation points can have varying horizontal and vertical resolution and accuracy. Bathymetric data for inland and intercoastal waterways is highly accurate bathymetric sounding information collected to ensure that federal navigation channels are maintained to their authorized depths. Bathymetric survey activities support the Nation's critical nautical charting program. This data is also used to create Electronic Navigational Charts. The bathymetric sounding data supports the elevation layer of the geospatial data framework. (Circular A-16)

1.3.1. Photogrammetric Methods

Elevation datasets acquired using aerial orthophotography or satellite data sources. (Source: Content Standards for Framework Land Elevation Data, January 1999)

1.3.2. Traditional Ground Surveys

Terrestrial collection systems such as distance ranging, geodetic leveling, and angle measuring may be used to collect highly accurate spot elevations, or to build generalized planar surfaces which represent the general slope and trend of the surrounding terrain. (Source: Content Standards for Framework Land Elevation Data, January 1999)

1.3.3. Terrestrial LIDAR

optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target. (Source: USGS <http://www.usgs.gov/pubprod/aerial.html>)

1.3.3.1. Aerial Based Survey

Data acquired from a position above the surface of the Earth. (Source: LGISC Digital Data Subcommittee)

1.3.3.2. Fixed-Point Survey

Data acquired from a position on the Earth's surface. (Source: LGISC Digital Data Subcommittee)

1.3.4. Traditional Bathymetric Surveys

Surveys which measure water depths (usually in the ocean) in order to determine bottom topography. (Source: FGDC-STD-001.2-2001)

1.3.5. Hydrographic Surveys

Surveys conducted to determine the configuration of the bottom of water bodies and to identify and locate all features, natural and man-made, that may affect navigation. (Source: FGDC-STD-007.5-2005)

1.3.5.1. Side-scan

Side scan sonar is a specialized sonar system for searching and detecting objects on the seafloor. Like other sonars, a side scan transmits sound energy and analyzes the return signal (echo) that has bounced off the seafloor or other objects. (Source: NOAA website <http://www.nauticalcharts.noaa.gov/hsd/SSS.html>)

1.3.5.2. Multibeam

Multibeam systems measure and record the time for the acoustic signal to travel from the transmitter (transducer) to the seafloor (or object) and back to the receiver. Multibeam sonars produce a "swath" of soundings (i.e., depths) to ensure full coverage of an area. (Source: NOAA website <http://www.nauticalcharts.noaa.gov/hsd/multibeam.html>)

1.3.6. Bathymetric LIDAR

Bathymetric LIDAR systems use laser pulses received at two frequencies. Water depths are determined by measuring the time delay between the transmission of a pulse and its return signal detecting the seafloor. (Source: NOAA website <http://www.nauticalcharts.noaa.gov/hsd/lidar.html>)

1.4. ADMINISTRATIVE (GOVERNMENTAL) UNITS

These data describe, by a consistent set of rules and semantic definitions, the official boundary of federal, state, local, and tribal governments as reported/certified to the U.S. Census Bureau by responsible officials of each government for purposes of reporting the Nation's official statistics. (Source: Circular A-16)

1.4.1. The Nation (Federal)

Administrative units maintained by the United States government. (Source: LGISC Digital Data Subcommittee)

1.4.2. States

A primary governmental division of the United States. (Source: FGDC-STD-014.5-2008)

1.4.2.1. Departmental

Administrative units maintained by an agency of the State of Louisiana (Source: LGISC Digital Data Subcommittee)

1.4.3. Counties (or Parishes)

A governmental unit that is the primary legal division of Louisiana. (Source: FGDC-STD-014.5-2008)

1.4.4. Incorporated Places and Consolidated Cities (Local)

The U.S. Census Bureau refers to a governmental unit for which the functions of an incorporated place and its county or minor civil division have merged as a consolidated government. (Source: FGDC-STD-014.5-2008)

1.4.4.1. Municipal

A governmental unit that is a primary legal division. (Source: FGDC-STD-014.5-2008)

1.4.4.2. Urban

A geographic entity defined to represent the extent of urban development, according to agency- or organization-specified criteria. (Source: FGDC-STD-014.5-2008)

1.4.4.3. Metropolitan Statistical Areas (MSA)

An MA contains a core area with a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that core. (Source: FGDC-STD-014.5-2008)

1.4.5. Functioning and Legal Minor Civil Divisions

A type of governmental unit that is the primary governmental or administrative division of a county or statistically equivalent entity in many States and statistically equivalent entities. (Source: FGDC-STD-014.5-2008)

1.4.5.1. Historic districts

1.4.6. Federal- or State-recognized American Indian Reservations and Trustlands

A Federal American Indian reservation is an area that has been set aside by the United States for the use of one or more federally recognized American Indian tribes. Together with off-reservation trust land, a reservation covers territory over which one or more tribes have primary governmental authority. (Source: FGDC-STD-014.5-2008)

1.4.7. Alaska Native Regional Corporations

A corporate entity established to conduct both business and nonprofit affairs of Alaska Natives, pursuant to the Alaska Native Claims Settlement Act of 1972 (Public Law 92-203, as amended by Public Law 94-204). (Source: (Source: FGDC-STD-014.5-2008)

1.4.8. Regional

1.4.8.1. Levee Districts

A levee district is defined by state legislation and acts as the non-Federal sponsor providing rights-of-way and operation and maintenance to the Corps (The Corps is responsible for planning and building). The levee districts are charged with protection, maintenance and repair of levees and are allowed to regulate activities on and adjacent to levees. Certain districts have additional powers and responsibilities unique to those districts and specifics are defined in the legislation for each district. (Source: Regional Planning Commission)

1.4.8.2. Planning and Developmental Districts

There are eight sub-state regional planning and development districts covering all 64 parishes designated by LA Legislation. Each district is governed by a board composed of public and private sector leaders representing both planning economic development programs. Each agency works to improve the physical and social needs of their multi-parish area and acts as a separate organization with a staff of diverse professional backgrounds. (Source: Regional Planning Commission)

NOTE: All definitions in Section 1.5 are adopted from the U.S. Department of Homeland Security Infrastructure Taxonomy version 3, 2008.

1.5 TRANSPORTATION

The Transportation Sector Is Comprised of a Multitude of Network of Transportation Systems. Systems Vary in Size and Complexity, but All Modes of Transportation Have One Element in Common, They Have Defined Origin and Destination Points, and the Assets That Comprise the System of Interest Exist for the Sole Purpose of Facilitating the Flow of Either People or Products. For the Purposes of this Taxonomy, Assets Are Comprised of Nodes and Linkages. One Example of a Node Is a Rail Yard; One Example of a Link Is the Stretch of Rail Track That Joins Two Rail Yards. Hence, Users of the Transportation Portion of this Taxonomy Must First Think in Terms of Specifically Defined Systems and the Flow of Either People or Products through the Defined Systems. The Individual Assets Provided in this Taxonomy, Then, Are the Physical Elements That Comprise the Systems of Interest.

1.5.1 AVIATION

Assets involved in the aviation industry.

1.5.1.1 Aviation Conveyances

Includes all types of aircraft.

1.5.1.2 Airports

Fields for handling aircraft landings and takeoffs.

1.5.1.2.1 Certificated Airports

Airports that hold certificates under Federal regulations (14 CFR Part 139). Includes runways, taxiways, apron areas, passenger terminals, baggage handling areas, cargo terminals, maintenance facilities, parking lots and garages, customs and immigration facilities (if handling international flights), and other ancillary service facilities. Using the applicability paragraph of Part 139, a certificated airport (11.1.2.1) is defined as "Any airport in any State of the United States, the District of Columbia, or any territory or possession of the United States serving any (1) Scheduled passenger-carrying operations of an air carrier operating aircraft designed for more than 9 passenger seats, as determined by the aircraft type certificate issued by a competent civil aviation authority and (2) Unscheduled passenger-carrying operations of an air carrier operating aircraft designed for at least 31 passenger seats, as determined by the aircraft type certificate issued by a competent civil aviation authority. Included are those portions of a joint-use or shared-use airport that are within the authority of a person serving passenger-carrying operations. This does not include (1) Airports serving scheduled air carrier operations only by reason of being designated as an alternate airport (2) Airports operated by the United States (3) Airports located in the State of Alaska that only serve scheduled operations of small air carrier aircraft and do not serve scheduled or unscheduled operations of large air carrier aircraft (4) Airports located in the State of Alaska during periods of time when not serving operations of large air carrier aircraft or (5) Heliports.

1.5.1.2.1.1 Category X Airports

An airport where screening is performed pursuant to 1544.101(a)(1) or 1546.101(a) and the number of annual enplanements is 5 million or more and international enplanements of 1 million or more.

1.5.1.2.1.2 Category I Airports

An airport where screening is performed pursuant to 1544.101(a)(1) or 1546.101(a) and the number of annual enplanements is 1.25 million or more.

1.5.1.2.1.3 Category II Airports

An airport where screening is performed pursuant to 1544.101(a)(1) or 1546.101(a) and the number of annual enplanements is 250,000 or more, but less than 1.25 million.

1.5.1.2.1.4 Category III Airports

An airport where screening is performed pursuant to 1544.101(a)(1) or 1546.101(a) and the number of annual enplanements is less than 250,000.

1.5.1.2.1.5 Category IV Airports

An airport with screening operations pursuant to 1544.101(a)(2), (b) or (f) or 1546.101(b) or (c).

1.5.1.2.2 Non-Certificated Airports

Airports that do not hold certificates under Federal regulations (14 CFR Part 139). Includes runways, taxiways, apron areas, and other facilities. Using the applicability paragraph of Part 139, a non-certificated airport (11.1.2.2) is defined as "Any airport with scheduled passenger-carrying operations of an air carrier operating aircraft designed for 9 or less passenger seats or unscheduled passenger-carrying operations of an air carrier operating aircraft designed for 30 or less passenger seats and includes (1) Airports serving scheduled air carrier operations only by reason of being designated as an alternate airport (2) Airports operated by the United States (3) Airports located in the State of Alaska that only serve scheduled operations of small air carrier aircraft and do not serve scheduled or unscheduled

operations of large air carrier aircraft (4) Airports located in the State of Alaska during periods of time when not serving operations of large air carrier aircraft or (5) Heliports."

1.5.1.2.2.1 Public Airports

Public use airports that are not certificated (e.g., some general aviation airports).

1.5.1.2.2.2 Private Airports

Airports owned by an individual or a business that cannot be used without the owner's permission. May or may not have any facilities beyond a runway or landing strip.

1.5.1.2.3 Military Airfields

Airfields owned and operated by the military. Includes runways, taxiways, apron areas, maintenance and other facilities.

1.5.1.2.3.1 Air Force Airfields

Airfields operated by the Air Force.

1.5.1.2.3.2 Army Airfields

Airfields operated by the Army.

1.5.1.2.3.3 Navy Airfields

Airfields operated by the Navy.

1.5.1.2.3.4 Marine Corps Airfields

Airfields operated by the Marine Corps.

1.5.1.2.3.5 Coast Guard Airfields

Airfields operated by the Coast Guard.

1.5.1.2.4 Foreign Airports

Airports outside the U.S.

1.5.1.3 Air Traffic Control And Navigation Facilities

Includes control centers, radar installations, and communication facilities.

1.5.1.3.1 Air Route Traffic Control Facilities

Air traffic service to aircraft operating within controlled airspace, and principally during the en route phase of flight.

1.5.1.3.2 Airport Traffic Control Towers

Facilities providing for the safe, orderly, and expeditious flow of traffic on and in the vicinity of an airport and, when designated, provide for the separation of aircraft in the terminal areas.

1.5.1.3.3 Flight Service Stations

Facilities that provide information (e.g., weather, route, terrain, flight plans) for private pilots flying into and out of small airports and rural areas. Also assists pilots in emergencies and coordinates search-and-rescue operations for missing or overdue aircraft.

1.5.1.3.4 Other Air Traffic Control Facilities

Facilities not elsewhere classified or future facilities.

1.5.1.4 Space Transportation Facilities

1.5.1.4.1 Military Facilities

Facilities for the processing, integration, and assembly of military launch vehicles and payloads, launch and recovery operations, and range support for military launches.

1.5.1.4.1.1 Launch Vehicles

Military launch vehicles.

1.5.1.4.1.2 Launch Facilities

Facilities for launching military space vehicles.

1.5.1.4.1.3 Mission Control Facilities

Facilities for control of military space vehicles after launch.

1.5.1.4.1.4 Satellites

Military satellites.

1.5.1.4.2 Commercial Facilities

Spaceports and facilities for the processing, integration, and assembly of civilian and commercial orbital and suborbital launch vehicles and payloads, launch and recovery operations, and range support for civilian and commercial space activities.

1.5.1.4.2.1 Launch Vehicles

Civilian and commercial launch vehicles.

1.5.1.4.2.2 Launch Facilities

Facilities for launching civilian space vehicles.

1.5.1.4.2.3 Mission Control Facilities

Facilities for control of civilian space vehicles after launch.

1.5.1.4.2.4 Satellites

Civilian satellites (e.g., weather, communications, research).

1.5.1.4.3 NASA Facilities

Spaceports and facilities for the processing, integration, and assembly of NASA orbital and suborbital launch vehicles and payloads, launch and recovery operations, and range support for NASA space activities.

1.5.1.4.3.1 Launch Vehicles

NASA launch vehicles.

1.5.1.4.3.2 Launch Facilities

Facilities for launching NASA space vehicles.

1.5.1.4.3.3 Mission Control Facilities

Facilities for control of NASA space vehicles after launch.

1.5.1.4.3.4 Satellites

NASA satellites (e.g., weather, communications, research).

1.5.1.5 Aviation Sector Command Control Communication Coordination Facilities

Facilities involved in providing, maintaining, or restoring a safe and secure aviation system. Includes facilities such as FAA Air Traffic Control System Command Center, National Capitol Region Command Center, Transportation Security Operations Center, and NORAD Cheyenne Mountain Operations Center.

1.5.1.6 Other Aviation Facilities

Aviation facilities not elsewhere classified.

1.5.2 RAILROAD

Assets involved in rail transportation.

1.5.2.1 Railroad Conveyance

Includes all types of trains.

1.5.2.1.1 Freight Conveyance

Trains that handle the movement of goods from producer to consumer.

1.5.2.1.2 Passenger Conveyance

Trains that handle the movement of people by rail.

1.5.2.1.2.1 Passenger Trains Long Distance/Intercity

Trains that handle the movement of people by rail between cities and towns other than for daily commuting.

1.5.2.1.2.2 Passenger Trains Commuter

Passenger Trains Commuter (also called metropolitan rail, regional rail, or suburban rail) is an electric or diesel propelled railway for urban passenger train service consisting of local short distance travel operating between a central city and adjacent suburbs. Service must be operated on a regular basis by or under contract with a transit operator for the purpose of transporting passengers within urbanized areas, or between urbanized areas and outlying areas. Such rail service, using either locomotive hauled or self propelled railroad passenger cars, is generally characterized by multi-trip tickets, specific station to station fares, railroad employment practices and usually only one or two stations in the central business district. Intercity rail service is excluded, except for that portion of such service that is operated by or under contract with a public transit agency for predominantly commuter services, which means that for any given trip segment (i.e., distance between any two stations), more than 50% of the average daily ridership travels on the train at least three times a week.

1.5.2.2 Railroad Rights-of-Way

Routes along which trains operate.

1.5.2.2.1 Railroad Track

Includes main line tracks, sidings, switches, crossovers.

1.5.2.2.1.1 STRACNET Track

Track identified as part of the Strategic Rail Corridor Network (STRACNET) and necessary to national defense activities.

1.5.2.2.1.2 Other Track

Track other than STRACNET.

1.5.2.2.2 Railroad Bridges

Bridges carrying rail traffic. May also carry commuter rail traffic and/or road traffic.

1.5.2.2.3 Railroad Tunnels

Tunnels carrying rail traffic. May also carry commuter rail traffic and/or road traffic

1.5.2.3 Railroad Yards

Areas having a network of tracks and sidings for handling cars.

1.5.2.3.1 Rail Yard - Local

A railroad yard used primarily for makeup and breakdown of local trains. Provide storage and maintenance of cars and/or locomotives. May also contain an area to load and unload cars.

1.5.2.3.2 Rail Yard - Classification

A railroad yard with special facilities to efficiently group rail cars according to destination to facilitate the makeup and breakdown of trains. May have areas adjacent for the loading/unloading of cars.

1.5.2.3.3 Rail Yard - Intermodal

A railroad yard that is used specifically for handling the transfer of containers and/or trailers between trains and other modes of transport (e.g., truck, ship). Note Included in this category are facilities that have the label "Inland Port." These facilities, in spite of the label, handle rail-to-road transfers. They are labeled Inland Ports since all traffic moves to and from the facility by rail to the marine docks.

1.5.2.3.4 Rail Yard - HAZMAT

A railroad yard that has special facilities for handling hazardous materials.

1.5.2.4 Railroad Stations

Sites along and at the end of rail lines to which service is provided.

1.5.2.4.1 Railroad Passenger Stations

Sites along or at the end of rail lines for the boarding of Passengers on trains for either Long Distance/Intercity trains or Commuter trains. May include connections to heavy rail, light rail, mass transit, urban rapid transit, buses, or other modes of transport.

1.5.2.5 Railroad Operations Centers

Facilities to provide operational control of railroads

1.5.2.5.1 Railroad Dispatch and Operations Control Centers

Facilities where railroad personnel monitor and control the movement of trains.

1.5.2.5.2 Railroad Communications Centers

Facilities and equipment where railroad communications are handled.

1.5.2.5.3 Railroad Signaling Facilities and Equipment

Facilities and equipment used to control signals used to direct train traffic.

1.5.2.6 Other Railroad Facilities

Railroad facilities not elsewhere classified.

1.5.3 ROAD

Assets involved in road transportation.

1.5.3.1 Roadways and Supporting Facilities

Facilities supporting road transport.

1.5.3.1.1 Roadways

Highways and roads for motor vehicles. Note: Some roads are designated as part of the Strategic Highway Network (STRAHNET).

1.5.3.1.1.1 Limited Access Highways

Includes expressways, freeways, toll roads.

1.5.3.1.1.2 Multi-Lane Non-Limited Access Highways

Roads with more than one lane in each direction and with many access points.

1.5.3.1.1.3 Two Lane Numbered Highways

Numbered routes with one lane in each direction.

1.5.3.1.1.4 Other Roads

Roads in urban and rural areas that are not part of an intercity numbered route.

1.5.3.1.2 Road Bridges

Bridges carrying road traffic. May also carry rail and/or pedestrian traffic.

1.5.3.1.3 Road Tunnels

Tunnels carrying road traffic. May also carry rail and/or pedestrian traffic.

1.5.3.1.4 Highway Rest and Service Areas

Service facilities attached to highways

1.5.3.1.4.1 Highway Rest Stops

Parking areas attached to highways without fuel or maintenance facilities. May have food service facilities. May have tourist information centers.

1.5.3.1.4.2 Highway Service Areas

Parking areas attached to highways with fuel and vehicle maintenance facilities. Service provided to automobiles and/or trucks. May have food service facilities.

1.5.3.1.4.3 Vehicle Weigh Stations

Scales used to ensure vehicles (primarily trucks) are within weight limits.

1.5.3.1.4.4 Truck Stops

1.5.3.1.5 Road Transportation Support Facilities

Facilities providing supporting services to road transportation

1.5.3.1.5.1 Operations and Traffic Management Centers

Centers, usually in urban areas, that monitor and control the flow of road traffic through remote operation of traffic signals and barriers.

1.5.3.1.5.2 Road International Border Facilities

Facilities providing immigration and customs control at borders with Canada and Mexico.

1.5.3.1.5.3 Motor Vehicle Fueling Stations

Facilities storing and dispensing motor vehicle fuels (e.g., gasoline, diesel, gasohol) to consumers. May include maintenance and repair facilities.

1.5.3.2 Trucking

Vehicles and facilities related to freight movement by truck

1.5.3.2.1 Truck Conveyance

Includes all types of trucks

1.5.3.2.2 Truck Terminals

Facilities operated by a trucking company handles a large number of truck arrivals and departures. Used for handling and temporary storage of freight pending transfer to other locations. In general, freight is stored at a terminal for relatively short periods (e.g., hours, days). Less-than-truckload (LTL) terminals have buildings where smaller quantities of freight are broken apart and reassembled based on destination. Truckload (TL) facilities handle only full truckloads and typically have large open spaces for truck parking and possibly small or no buildings. Both LTL and TL terminals generally have truck maintenance facilities.

1.5.3.2.2.1 Truck Terminal HAZMAT Facilities

Facilities at truck terminals specially designed to handle hazardous materials.

1.5.3.2.2.2 Truck Terminal non-HAZMAT Facilities

Facilities at truck terminals designed to handle materials other than hazardous materials.

1.5.3.2.3 Truck Rental Facilities

Establishments primarily engaged in renting or leasing, without drivers, trucks, truck tractors, or semitrailers.

1.5.3.2.4 Truck Dispatch Centers

Facilities where communication equipment is located, trucks are dispatched, and fleet operations are coordinated.

1.5.3.2.5 Truck Operations Centers

Facilities where communication equipment is located, trucks are dispatched, and fleet operations are coordinated.

1.5.3.3 Over-the-Road Motorcoach System

Bus system providing service principally outside a single metropolitan area and its adjacent nonurban areas. Includes both regularly scheduled and charter bus service. Does not include urban mass transit bus systems or school bus service, which are classified under mass transit.

1.5.3.3.1 Motorcoach Conveyance

Includes all types of buses

1.5.3.3.2 Over-the-Road Motorcoach Passenger Terminals

Terminals designed to board and unload passengers and luggage. May be a dedicated facility (e.g., in an urban area) or may be a drop-off point (e.g., in a rural area). May have multi-modal facilities (e.g., rail, mass transit).

1.5.3.3.3 Over-the-Road Motorcoach Facilities

Parking and maintenance facilities for buses.

1.5.3.3.3.1 Storage Facilities

Facilities utilized for parking Over-the-Road Motorcoaches.

1.5.3.3.3.2 Maintenance Facilities

Facilities where routine and specific maintenance is performed on Over-the-Road Motorcoaches.

1.5.3.3.4 Over-the-Road Motorcoach Operations Centers

Facilities where communication equipment is located, buses are dispatched, and fleet operations are coordinated.

1.5.3.3.5 Over-the-Road Motorcoach Dispatch Centers

Facilities where communication equipment is located, buses are dispatched, and fleet operations are coordinated.

1.5.3.4 School Bus Systems

Bus transportation systems for transport of children to and from school and school-related events.

1.5.3.4.1 School Bus Conveyance

Includes all types of school buses.

1.5.3.4.2 School Bus Routes

Routes followed by school buses. Usually streets shared with other vehicles and pedestrians.

1.5.3.4.3 School Bus Stops

Stops for loading and unloading children. May be in a terminal with connections to other transport modes.

1.5.3.4.4 School Bus Maintenance Facilities

Storage and maintenance facilities for school buses.

1.5.3.4.5 School Bus Dispatch Centers

Facilities where school bus personnel monitor and control the movement of buses.

1.5.3.4.6 School Bus Communication Centers

Facilities where communication equipment is located and school bus fleet operations are coordinated.

1.5.3.5 Other Road Facilities

Road transportation facilities not elsewhere classified.

1.5.4 MARITIME

Assets involved in the movement of passengers and freight by water.

1.5.4.1 Vessels

Includes marine vessels.

1.5.4.1.1 Shallow Draft Vessels

Vessels with less than 15 ft draft.

1.5.4.1.1.1 Tugs and Towboats

Includes harbor tugs, line-haul towboats, offshore tugs.

1.5.4.1.1.2 Small Vehicle/Passenger Ferries

Vessels designed to carry relatively small vehicles (e.g., passenger cars, small vans) and passengers. Includes commuter ferries. Generally certificated to carry <150 passengers.

1.5.4.1.1.3 River Ferries

Vessels designed to carry small vehicles and a small number of passengers operate primarily on inland waterways.

1.5.4.1.1.4 Excursion/Tour Boat

Vessels designed to carry a small number of passengers. Includes dinner cruise boats, tour boats, sightseeing boats.

1.5.4.1.1.5 Supply/Work Boat

Includes offshore supply, inshore workboat, Police/Fire boat.

1.5.4.1.1.6 Recreational Vessel

Privately owned pleasure craft <150 length overall.

1.5.4.1.1.7 Barge - Tank

Barges designed to carry liquids in tanks.

1.5.4.1.1.8 Barge – Hopper

Barges designed to carry bulk solids.

1.5.4.1.1.9 Barge - Gas

Barges designed to carry gaseous materials.

1.5.4.1.2 Deep Draft Vessels

Vessels with draft equal to or more than 15 feet.

1.5.4.1.2.1 General Cargo Ship

Includes general cargo, tween-deck, multipurpose, heavy lift, and other vessels.

1.5.4.1.2.2 Container Ship

Vessels specially designed to transport containerized cargo

1.5.4.1.2.3 Dry Bulk Cargo Ship

Vessels specially designed to transport dry bulk cargo (e.g., ore, grain).

1.5.4.1.2.4 Tank Ship

Vessels specially designed to transport liquid cargo (e.g., chemicals).

1.5.4.1.2.5 Gas Carrier Ship

Vessels specially designed to transport gases.

1.5.4.1.2.6 Roll-on/Roll-off and Pure Car Carrier

Vessels specially designed to transport vehicles and to load and unload them under their own power.

1.5.4.1.2.7 Cruise Ship

Vessels specially designed to carry passengers on cruise route, returning to the port of origin.

1.5.4.1.2.8 Large Vehicle/Passenger Ferries

Vessels designed to carry large vehicles (e.g., large trucks) and passengers. Includes commuter ferries. Generally certificated to carry 500 or more passengers.

1.5.4.1.2.9 Medium Vehicle/Passenger Ferries

Vessels designed to carry medium size vehicles (e.g., trucks) and passengers. Generally certificated to carry 150 to 499 passengers.

1.5.4.1.2.10 Military Combatant Vessel

Military warship.

1.5.4.1.2.11 Military Support Vessels

Military vessels other than warships.

1.5.4.1.2.12 Other Vessels

Includes Lighter Aboard Ship (LASH) ships, research vessels, survey vessels, livestock vessels, factory vessels, dredges, integrated tug barges (ITB), and other ships.

1.5.4.2 Ports

Facilities designed to dock, load, and unload marine vessels.

1.5.4.2.1 Shallow Draft Ports

Ports capable of handling vessels with drafts less than 15 feet.

1.5.4.2.1.1 Shallow Draft General Cargo Terminal

Terminals designed to handle a variety of general cargo. These facilities may have transit sheds, open storage areas, and warehouses on site.

1.5.4.2.1.2 Shallow Draft Dry Bulk Cargo Terminal

Terminals designed to load or unload flowable dry commodities. These facilities may have ship loaders or unloaders on the wharf, or may utilize mobile cranes. Storage may be in structures (e.g., silos, sheds) or open (e.g., on pads, in bins).

1.5.4.2.1.3 Shallow Draft Liquid Bulk Cargo Terminal

Terminals designed to load or unload liquid commodities. These facilities have pipelines and manifolds at the waterside. They may or may not have wharves. Those without wharves have cells or "dolphins" for

tying up vessels. These terminals may have tank storage on site or may feed pipelines directly from the vessel.

1.5.4.2.1.4 Shallow Draft Barge Fleeting Area

A parking or staging area for barges awaiting loading, unloading, or transport.

1.5.4.2.1.5 Shallow Draft Passenger Terminal

A terminal designed to handle the embarkation and debarkation of passengers from a vessel.

1.5.4.2.2 Deep Draft Ports

Ports capable of handling vessels with drafts of 15 feet or more.

1.5.4.2.2.1 Deep Draft General Cargo Terminal

Terminals designed to handle a variety of general cargo. These facilities may have transit sheds, open storage areas, and warehouses on site. Includes breakbulk, container, heavy-lift, RO/RO, and parcel-sized dry bulk shipments.

1.5.4.2.2.2 Deep Draft Containerized Cargo Terminal

Terminals designed to move cargo containers to and from vessels. These terminals have rail-mounted gantry cranes on the wharf a container yard served by rubber-tired gantries (RTGs), straddle carriers, top-lift or side-lift forklifts and a container freight station for stuffing and unstuffing containers.

1.5.4.2.2.3 Deep Draft Dry Bulk Cargo Terminal

Terminals designed to load or unload flowable dry commodities. These facilities may have ship loaders or unloaders on the wharf, or may utilize mobile cranes. Storage may be in structures (e.g., silos, sheds) or open (e.g., on pads, in bins).

1.5.4.2.2.4 Deep Draft Liquid Bulk Cargo Terminal - Crude/Product

Terminals designed to load or unload liquid commodities. These facilities have pipelines and manifolds at the waterside. They may or may not have wharves. Those without wharves have cells or "dolphins" for tying up vessels. These terminals may have tank storage on site or may feed pipelines directly from the vessel.

1.5.4.2.2.5 Deep Draft Liquid Bulk Cargo Terminal - Chemical

Terminals designed to load or unload liquid chemical commodities. These facilities have pipelines and manifolds at the waterside. They may or may not have wharves. Those without wharves have cells or "dolphins" for tying up vessels. These terminals may have tank storage on site or may feed pipelines directly from the vessel.

1.5.4.2.2.6 Deep Draft Bulk Gas Cargo Terminal

Terminals designed to load or unload gas commodities. These facilities have pipelines and manifolds at the waterside. They may or may not have wharves. Those without wharves have cells or "dolphins" for tying up vessels. These terminals may have tank storage on site or may feed pipelines directly from the vessel.

1.5.4.2.2.7 Deep Draft Industrial Cargo Terminal

Terminals co-located with an industrial facility (e.g., industrial factory, refinery). Generally handle dry or liquid bulk materials that are processed at the industrial facility.

1.5.4.2.2.8 Off-Shore Terminals or Platforms

Terminals designed to handle bulk liquid or gas shipments in open seas. Berthing of vessels is normally done at anchoring buoys. Currently used mostly for crude oil and LNG cargo. Does not include oil and gas exploration or production platforms.

1.5.4.2.2.9 Outer Continental Shelf Crude Oil Platforms

(Also referred to as off-shore drilling platforms, off-shore rigs.) Sea-based facilities used for the extraction of crude oil. This category includes equipment such as gathering lines used to bring the output on shore. Note: Natural gas is sometimes extracted from the same wells that are used to extract oil. This is referred to as "associated gas."

1.5.4.2.2.10 Outer Continental Shelf Natural Gas Platforms

(Also referred to as off-shore drilling platforms, off-shore rigs.) Sea-based facilities used for the extraction of natural gas. This category includes equipment such as gathering lines used to bring the output on shore.

1.5.4.2.2.11 Cruise Ship Passenger Terminal

Terminals designed to handle ocean-going cruise ships.

1.5.4.2.2.12 Ferry Terminals

May be specially designed docks to allow drive-on/drive-off of vehicles or conventional piers with alongside docking.

1.5.4.2.3 Port Public Access Areas

Public gathering places in a port, such as parks, fishing piers, dining/shopping sites, etc. May have large numbers of people gathered for events.

1.5.4.2.4 Public Access Areas

1.5.4.3 Military and Strategic Seaports

1.5.4.3.1 Military and Strategic Deep Draft Ports

1.5.4.3.1.1 Military Cargo Terminal

1.5.4.3.1.2 Military Ammunition Terminal

1.5.4.3.1.3 Strategic Commercial and Military Terminal

1.5.4.3.1.4 Military Combatant Vessel Terminal

1.5.4.4 Waterways

Navigable waterways capable of carrying marine traffic.

1.5.4.4.1 Inland Waterways

Natural waterways (e.g., rivers, lakes, bayous, estuaries) capable of carrying marine traffic.

1.5.4.4.2 Intracoastal Waterways

Partly natural, partly manmade waterways providing sheltered passage for commercial and leisure boats along the U.S. Atlantic coast and along the Gulf of Mexico coast.

1.5.4.4.3 Navigation Locks

Walled section of a river or canal, closed by water gates at both ends, in which the water level can be raised or lowered by means of valves or sluiceways to match the level in the upper or lower reach, as desired. When the levels are the same, the water gate is opened to permit a vessel to enter or leave the lock.

1.5.4.4.4 Canals

A constructed channel, usually open, that conveys water by gravity to farms, municipalities, etc. Artificial watercourse of perceptible extent, with a definite bed and banks to confine and conduct continuously or periodically flowing water.

1.5.4.4.5 Dams

Water retention structures used for irrigation, electricity generation, water supply storage, flood control, navigation, fisheries, recreation, sediment and hazardous materials control, or mine tailings impoundments. Many dams have multiple uses.

1.5.4.5 Maritime Supporting Facilities

Facilities supporting the operation of marine vessels.

1.5.4.5.1 Navigation Facilities

Facilities providing marine navigation support.

1.5.4.5.1.1 Lighthouses and Beacons

Land-based facilities to mark shorelines or other marine hazards.

1.5.4.5.1.2 Buoys

Water-anchored markers to designate channel boundaries or underwater hazards.

1.5.4.5.1.3 Electronic Navigation Facilities

Radar beacon (RACON) and Long-range navigation system (LORAN-C) facilities used to provide navigation support on inland waterways and coastlines.

1.5.4.5.2 Emergency Search and Rescue Facilities

Facilities equipped to respond to maritime emergencies.

1.5.4.5.2.1 U.S. Coast Guard Marine Emergency Response Facilities

Coast Guard stations (marine, air) providing emergency search and rescue vessels, aircraft, equipment, communications, personnel.

1.5.4.5.2.2 State and Local Marine Emergency Response Facilities

State and local stations providing emergency search and rescue capabilities. May be attached to the local fire department.

1.5.4.6 Other Maritime Facilities

Maritime transportation facilities not elsewhere classified.

1.5.5 MASS TRANSIT

Mass transportation (mass transit) means transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or sightseeing transportation.

1.5.5.1 Rail Mass Transit

Rail mass transit is the system for carrying transit passengers described by specific right-of-way, technology and operational features.

1.5.5.1.1 Rail Transit Cars

1.5.5.1.1.1 Heavy Rail Transit

Heavy rail transit (metro, subway, rapid transit, or rapid rail) is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails separate rights-of-way from which all other vehicular and foot traffic are excluded sophisticated signaling, and high platform loading.

1.5.5.1.1.2 Light Rail Transit

Light rail transit (streetcar, tramway, or trolley) is lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much

of the way. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

1.5.5.1.1.3 Commuter Rail

Commuter rail transit (metropolitan rail, regional rail, or suburban rail) is an electric or diesel propelled railway for urban passenger train service consisting of local short distance travel operating between a central city and adjacent suburbs. Intercity rail service is excluded, except for that portion of such service that is operated by or under contract with a public transit agency for predominantly commuter services.

1.5.5.1.1.4 Other Rail Transit

Other rail transit includes a variety of other modes not defined by heavy rail transit or light rail transit. Other modes include the following Aerial Tramway, an electric system of aerial cables with suspended powerless passenger vehicles Automated Guideway Transit, an electric railway (single or multi-car trains) of guided transit vehicles operating without an onboard crew Cable Car, an electric railway with individually controlled transit vehicles attached to a moving cable located below the street surface and powered by engines or motors at a central location on board the vehicle Inclined Plane, a railway operating over exclusive right-of-way on steep grades with powerless vehicles propelled by engines or motors at a central location not on board the vehicle and Monorail, an electric railway of guided transit vehicles operating singly or in multi-car trains that are suspended from or straddle a guideway formed by a single beam, rail, or tube.

1.5.5.1.2 Rail Transit Passenger Stations

A station on a rail transit line that provides passenger loading and unloading. May be above or below ground. May connect with other modes of transport.

1.5.5.1.3 Rail Transit Rights-of-Way

Includes rail transit track, bridges, tunnels.

1.5.5.1.3.1 Rail Transit Track

Includes main line tracks, sidings, switches, crossovers.

1.5.5.1.3.2 Rail Transit Bridges

Bridges carrying rail transit traffic. May also carry freight and intercity passenger rail traffic and/or road traffic.

1.5.5.1.3.3 Rail Transit Tunnels

Tunnels carrying rail transit traffic. May also carry freight and intercity passenger rail traffic and/or road traffic.

1.5.5.1.4 Rail Transit Yards

Areas having a network of tracks and sidings used primarily for makeup, breakdown, storage, and maintenance of trains.

1.5.5.1.5 Rail Transit Dispatch and Operations Control Centers

Facilities where rail transit personnel monitor and control the movement of trains.

1.5.5.1.6 Rail Transit Communications Centers

Facilities and equipment where rail transit communications are handled.

1.5.5.1.7 Rail Transit Signaling Facilities and Equipment

Facilities and equipment to signal trains and direct traffic of trains in transit.

1.5.5.2 Bus Mass Transit

Mass transit operating fixed routes and schedules on streets shared with other vehicles and pedestrians.

1.5.5.2.1 Transit Bus Vehicles

Includes Bus-vehicles powered by diesel, gasoline, battery or alternative fuel engines contained within the vehicle. Can be single unit or articulated. Trolleybus-vehicles propelled by a motor drawing current from overhead wires via a connecting pole called a trolley from a central power source not on board the vehicle.

1.5.5.2.2 Transit Bus Routes

Routes followed by transit buses. Usually streets shared with other vehicles and pedestrians.

1.5.5.2.3 Transit Bus Terminals

(Also called bus stations or bus depots.) Central facilities or hubs for buses to load and unload passengers. May have connections to other transport modes.

1.5.5.2.4 Transit Bus Stops

Stops for loading and unloading passengers. May have a shelter.

1.5.5.2.5 Transit Bus Garages

Storage and maintenance facilities for transit buses.

1.5.5.2.6 Transit Bus Dispatch and Operations Control Centers

Facilities where transit bus personnel monitor and control the movement of buses.

1.5.5.2.7 Transit Bus Communication Centers

Facilities and equipment where bus communications are handled.

1.5.5.3 Other Mass Transit Systems

Mass transit facilities not elsewhere classified.

1.5.6 PIPELINES

Pipelines for transporting liquids and gases. Includes petroleum and natural gas pipelines (both of which are also itemized in the Energy Sector), water pipelines (also itemized in the Water Sector), hazardous chemicals (also itemized in the Chemical and Hazardous Materials Sector), and other liquids and gases.

1.5.6.1 Crude Oil Pipelines

Pipeline facilities for the transport of crude oil.

1.5.6.1.1 Crude Oil Pipeline Components

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

1.5.6.1.2 Crude Oil Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

1.5.6.1.3 Crude Oil Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

1.5.6.1.4 Crude Oil Storage

(Also referred to as tank farms.) Facilities used for the storage and/or marketing of crude oil. Includes storage tanks, pipes and pumps, control machinery, and other equipment. Does not include storage at refineries.

1.5.6.1.5 Crude Oil Pipeline Hub

(Also known as a Market Center.) A market or supply area for pooling and delivery of Crude Oil where transactions occur to facilitate the movement of crude oil between and among interstate pipelines. Transactions can include a change in title of crude ownership, a change in crude transporter, or other similar items.

1.5.6.2 Petroleum Product Pipelines

Pipeline facilities for the transport of petroleum products.

1.5.6.2.1 Petroleum Product Pipeline Components and Interconnects

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments. Facilities that link one company to another company to transfer products custody or provide emergency transportation service between companies This includes facilities such as pipeline segments, valves, or pressure reduction stations.

1.5.6.2.2 Petroleum Product Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

1.5.6.2.3 Petroleum Product Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

1.5.6.2.4 Petroleum Product Storage

(Also referred to as tank farms.) Facilities used for the storage and/or marketing of petroleum products. Includes storage tanks, pipes and pumps, control machinery, and other equipment. Does not include storage at refineries.

1.5.6.3 Natural Gas Transmission Pipelines

Large, high-volume pipelines.

1.5.6.3.1 Natural Gas Transmission Pipeline Components and Interconnects

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments. Facilities that link one company to another company to transfer gas custody or provide emergency transportation service between companies. This includes facilities such as pipeline segments, valves, or metering and or pressure reduction stations.

1.5.6.3.2 Natural Gas Transmission Pipeline Compressor Stations

Stations along the length of a transmission pipeline. Includes gas-powered or electric compressors, valves, control systems, and associated equipment.

1.5.6.3.3 Natural Gas Transmission Pipeline Control Centers

Central control facilities that monitor and operate a transmission pipeline(s). Generally includes SCADA system control equipment.

1.5.6.3.4 Natural Gas Transmission Storage

Facilities for storing natural gas.

1.5.6.3.5 Natural Gas Pipeline Hub

(Also known as a Market Center.) A market or supply area for pooling and delivery of gas where transactions occur to facilitate the movement of gas between and among interstate pipelines. Transactions can include a change in title of gas ownership, a change in gas transporter, aggregation of gas supply, or other similar items.

1.5.6.3.6 Natural Gas Receipt/Delivery Metering Stations

Gas custody transfer metering stations along transmission pipelines. Used to monitor the amount of gas that is transported and to provide quantity measurements for billing purposes.

1.5.6.3.7 Liquefied Natural Gas Storage (Terminal)

Facilities that store LNG and regasify it for injection into pipelines. Includes specially designed tanks to store the LNG.

1.5.6.4 Natural Gas Distribution

Facilities, generally owned by local distribution companies (LDCs), to distribute natural gas to final consumers

1.5.6.4.1 City Gate Stations

Measuring, custody transfer, and pressure regulating stations where a natural gas distribution company receives gas from a transmission company and where pressure is reduced and odorant is added to meet distribution network requirements.

1.5.6.4.2 Natural Gas Distribution Pipeline Networks

Natural Gas Distribution Pipeline Networks The network of lower pressure pipelines that provide natural gas to consumers.

1.5.6.4.3 Natural Gas Distribution Control and Dispatch Centers

Natural Gas Distribution Control and Dispatch Centers These centers control the lower pressure gas distribution system. Includes distribution SCADA systems.

1.5.6.4.4 Natural Gas Distribution Storage

Natural Gas Distribution Storage Facilities for storing natural gas for peak shaving and distribution

1.5.6.5 LNG Transport

LNG Transport Facilities to move liquefied natural gas

1.5.6.5.1 LNG Tankers

LNG Tankers Specially-designed ships for carrying LNG and maintaining very low temperatures. Generally used for imported LNG.

1.5.6.5.2 LNG Ports

LNG Ports Port facilities designed to handle LNG tankers. Includes mooring facilities, loading and unloading facilities. Includes specially designed storage tanks. Includes regasification equipment to regasify LNG for injection into pipelines.

1.5.6.6 Other Pipelines

Pipelines carrying other liquids or gases

1.5.6.6.1 Other Pipeline Components

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

1.5.6.6.2 Other Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

1.5.6.6.3 Other Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

1.5.6.6.4 Other Pipeline Terminals

Facilities where multiple pipelines interconnect. May include storage facilities where material being transported is stored temporarily.

1.5.6.7 Other Pipeline Facilities

Not elsewhere classified

1.5.7 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the various components of the transportation system.

1.5.7.1 Federal Transportation Agencies

Federal Transportation Agencies Federal agencies dealing with transportation including Department of Transportation, Federal Aviation Administration, U.S. Coast Guard, U.S. Army Corps of Engineers, etc.

1.5.7.2 State, Local, Regional Transportation Agencies

State, Local, Regional Transportation Agencies State, local, regional agencies deal with transportation in their jurisdictions.

1.5.7.3 Transportation Industry Organizations

Transportation Industry Organizations Industry organizations that provide industry-wide support.

1.5.7.4 International Transportation Organizations

International Transportation Organizations International organizations dealing with transportation issues

1.6. CADASTRAL

Cadastral data describe the geographic extent of past, current, and future right, title, and interest in real property, including above, surface, and below ground and water, and the conceptual structure to support the description of that geographic extent. (Source: FGDC-STD-014.0-2008)

1.6.1. Public Land Survey System (PLSS)

The survey carried out by the Bureau of Land Management and its predecessors for establishing boundaries and subdivisions of public lands of the United States, using the rules embodied in the U.S. Public Land System. The system is frequently used for designating the locations of a parcel of land. (Source: FGDC Framework Introduction and Guide, Appendix A: Terminology)

1.6.2. Land survey & Land records

A Survey is a measurement of the land recorded on a survey, map, that describes areas of land and is completed by a State certified Registered Land Surveyor and filed according to State laws. (Source: Cadastral Data Content Standard for the National Spatial Data Infrastructure – May 2008 – Version 1.4)

1.6.3. Parcels

A parcel is a quantity of land identified for taxation purposes. (Source: Regional Planning Commission)

1.6.4. Lots

A Lot is a recognized subdivisions of property with a written legal description that denotes permissions or constraints upon its development. (Source: Regional Planning Commission)

1.6.5. Buildings

Line and area features that represent the footprint outlines of buildings and other structures. (Source: Regional Planning Commission)

1.6.6. Building Permits

An authorization by a designated government agency to proceed with construction or reconfiguration of a specific structure at the particular site in accordance with approved drawings and specifications. (Source: Regional Planning Commission)

1.6.7. Parking

Line and area features designating an open area or structure used specifically for the purpose of parking vehicles. (Source: Regional Planning Commission)

1.6.8. Assessor

Verified property information by parcel with accompanying ownership information which may also contain current real property tax information. (Source: Regional Planning Commission)

1.6.9. Zoning

Land use regulation designating the kinds of uses to which each individual property may be put. Written codes are attached to each designation. Zoning typically specifies areas in which residential, industrial, commercial and recreational activities may take place. (Source: Regional Planning Commission)

1.6.10. Subdivisions

A Subdivision is a unit of land defined by a survey which is governed by State subdivision law or local ordinance. A subdivision plat is a simultaneous conveyance where all divisions of land within the subdivision plat have equal standing with each other. (Source: Cadastral Data Content Standard for the National Spatial Data Infrastructure – May 2008 – Version 1.4)

1.6.11. Right-of-Way (ROWs) & Servitudes

A document describing the non-possessing interest held by one person in the land of another whereby the first person is accorded partial use of such land for a specific purpose. (Source: Cadastral Data Content Standard for the National Spatial Data Infrastructure – May 2008 – Version 1.4) – definition for “easement”.

1.7. HYDROGRAPHY

This data theme includes surface water features such as lakes, ponds, streams and rivers, canals, oceans, and coastlines. Each hydrography feature is assigned a permanent feature identification code (Environmental Protection Agency Reach Code) and may also be identified by a feature name. Spatial positions of features are encoded as centerlines and polygons. Also encoded is network connectivity and direction of flow. (Source: FGDC-STD-014.0-2008)

1.7.1. National Hydrography Dataset (NHD)

The NHD is a comprehensive set of digital spatial data representing the surface water of the United States using common features such as lakes, ponds, streams, rivers, canals, and oceans. (Source: USGS NHD website <http://nhd.usgs.gov>)

1.7.2. Lakes and Ponds

A standing body of water with a nearly horizontal water surface and a predominantly natural shoreline surrounded by land. May be natural or formed by a dam/weir. (Source: FGDC-STD-014.6-2008)

1.7.3. Streams and Rivers

A body of flowing water. (Source: FGDC-STD-014.6-2008)

1.7.4. Canals

An artificial open waterway constructed to transport water, to irrigate or drain land, to connect two or more bodies of water, or to serve as a waterway for watercraft. (Source: FGDC-STD-014.6-2008)

1.7.5. Oceans

The great body of salt water that covers much of the Earth. (Source: FGDC-STD-014.6-2008)

1.7.6. Shorelines

The contact line between land and an inland waterbody. (Source: FGDC-STD-014.6-2008)

2. LOUISIANA – FRAMEWORK

2.1. LAND USE

The classification of land according to what activities take place on it or how humans occupy it; for example, agricultural, industrial, residential, urban, rural, or commercial. (Source: ESRI GIS Dictionary)

2.2. LAND COVER

The classification of land according to the vegetation or material that covers most of its surface; for example, pine forest, grassland, ice, water, or sand. (Source: ESRI GIS Dictionary)

2.3. DEMOGRAPHICS

2.3.1. US CENSUS

The TIGER/Line Shapefiles are extracts containing selected geographic and cartographic information from the Census Bureau's MAF/TIGER database. The MAF/TIGER database was developed at the Census Bureau to support a variety of geographic programs and operations including functions such as mapping, geocoding, and geographic reference files that are used in decennial and economic censuses and sample survey programs. Spatial data for geographic features such as roads, railroads, rivers, and lakes, as well as legal and statistical geographic areas are included in the product. Other information about these features, such as the name, the type of feature, address ranges, and the geographic relationship to other features, also are included. The TIGER/Line Shapefiles and associated relationship files are offered in a compressed format. (Source: US Census Bureau website: <http://www.census.gov/geo/www/tiger/faq.html>)

2.3.1.1. American Community Survey (ACS)

The 2008 American Community Survey (ACS) 1-year data release provides data products for geographic areas with a population of 65,000 or more. The 2006-2008 ACS 3-year data release provides data products for geographic areas with a population of 20,000 or more. The population sizes for both the 1-year and 3-year data products are based on the July 1, 2008 population estimates from the Census Bureau's Population Estimates Program. The Census Bureau also publishes 2008 ACS data products for geographic areas that fall below the estimate type population threshold, provided such areas were published in the 2007 ACS and the population estimate for the same areas is within 5 percent of the population threshold for that estimate type. (Source: US Census Bureau website: <http://www.census.gov/acs/www/UseData/geo.htm>)

2.3.2. LA CENSUS

Includes zip code, census tract, congressional district, metro area, block group, and block information. (Source: Louisiana State Census Data Center website: http://www.louisiana.gov/Explore/Demographics_and_Geography/)

2.3.3. Projections

Generally based upon the latest census, demographic trends are developed by states to project population increases and decreases and demographic changes based upon such factors as birth rates, death rates, school age children rates, aging population rates, and migration rates until the next census. (Source: Regional Planning Commission)

2.3.4. Private demographics

Third-party analysis of population and demographic trends for Census regions and divisions, states, counties, metropolitan areas, and cities. (Source: Regional Planning Commission)

NOTE: All definitions in Section 2.4 are adopted from the U.S. Department of Homeland Security Infrastructure Taxonomy version 3, 2008.

2.4 INFRASTRUCTURE

2.4.1 AGRICULTURE AND FOOD

Agriculture comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats. Food establishments 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 and beverage products. The food and beverage products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers.

2.4.1.1 SUPPLY

Facilities that supply the livestock and agricultural raw materials.

2.4.1.1.1 Crop Production

These facilities comprise establishments, such as farms, orchards, groves, greenhouses, and nurseries, primarily engaged in growing crops, plants, vines, or trees and their seeds.

2.4.1.1.1.1 Oilseed and Grain Farms

Farms are engaged in growing oilseed and/or grain crops and/or producing oilseed and grain seeds. These crops have an annual life cycle and are typically grown in open fields. Includes soybeans, oilseeds, dry pea and beans, wheat, corn, oats, rice, and others.

2.4.1.1.1.2 Vegetable and Melon Farms

Farms primarily engaged in growing root and tuber crops (except sugar beets and peanuts) or edible plants and/or producing root and tuber or edible plant seeds. The crops included in this group have an annual growth cycle and are grown in open fields. Climate and cultural practices limit producing areas but often permit the growing of a combination of crops in a year.

2.4.1.1.1.3 Fruit and Tree Nut Farms

These farms are primarily engaged in growing fruit and/or tree nut crops. The crops included are generally not grown from seeds and have a perennial life cycle. Includes citrus and non-citrus fruits and nuts.

2.4.1.1.1.4 Greenhouse, Nursery, and Floriculture Facilities

Facilities primarily engaged in growing crops of any kind under cover and/or growing nursery stock and flowers. "Under cover" is generally defined as greenhouses, cold frames, cloth houses, and lath houses. The crops grown are removed at various stages of maturity and have annual and perennial life cycles. The nursery stock includes short rotation woody crops that have growth cycles of 10 years or less.

2.4.1.1.1.5 Other Crop Farms

These farms grow crops, such as tobacco, cotton, sugarcane, hay, sugar beets, peanuts, agave, herbs and spices, and hay and grass seeds or grow a combination of crops (except a combination of oilseed(s) and grain(s) and a combination of fruit(s) and tree nut(s)).

2.4.1.1.2 Animal Production

Facilities in this category raise or fatten animals for the sale of animals or animal products, and are comprised of ranches, farms, and feedlots primarily engaged in keeping, grazing, breeding, or feeding animals. The animals are generally raised in various environments, from total confinement or captivity to feeding on an open range pasture.

2.4.1.1.2.1 Cattle Ranches and Farms

Facilities primarily engaged in raising cattle, milking dairy cattle, or feeding cattle for fattening.

2.4.1.1.2.1.1 Beef Cattle Ranches

Establishments primarily engaged in raising cattle (including cattle for dairy herd replacements)

2.4.1.1.2.1.2 Livestock Order Buyers

Livestock dealers who purchase or hold livestock (generally for up to one week) while the animals are aggregated into a large enough group to meet specific customer orders.

2.4.1.1.2.1.3 Livestock Backgrounders

Establishments that condition livestock between pasture and feedlots (generally for up to several weeks) so they will grow well in feedlots.

2.4.1.1.2.1.4 Cattle Feedlots

Establishments primarily engaged in feeding cattle prior to slaughter and processing for human consumption

2.4.1.1.2.1.5 Dairy Cattle Farms

Establishments primarily engaged in milking dairy cattle

2.4.1.1.2.2 Hog and Pig Farms

Facilities primarily engaged in raising hogs and pigs, and may include farming activities, such as breeding, farrowing, and the raising of weanling pigs, feeder pigs, or market size hogs.

2.4.1.1.2.3 Poultry and Egg Production Farms

Facilities are primarily engaged in breeding, hatching, and raising poultry for meat or egg production. Includes chickens, turkeys, duck, geese, and others.

2.4.1.1.2.3.1 Poultry for Meat

Establishments primarily engaged in raising poultry for meat.

2.4.1.1.2.3.2 Egg Production

Establishments primarily engaged in raising poultry for egg production

2.4.1.1.2.4 Sheep & Goat Farms

Facilities primarily engaged in raising sheep, lambs, and goats, or feeding lambs for fattening.

2.4.1.1.2.5 Animal Aquaculture Facilities

Facilities primarily engaged in the farm raising of finfish, shellfish, or any other kind of animal aquaculture, and use some form of intervention in the rearing process to enhance production, such as holding in captivity, regular stocking, feeding, and protecting from predators.

2.4.1.1.2.6 Other Farm Facilities

Facilities primarily engaged in raising animals and insects (except those identified above) such as bees, horses and other equines, rabbits and other fur-bearing animals, etc.

2.4.1.1.3 Forestry

Facilities that grow and harvest timber on a long production cycle (i.e., of 10 years or more). Includes forest tract operations, forest nurseries, gathering of forest products (e.g., gum, aromatic woods), and logging (i.e., cutting of trees).

2.4.1.1.4 Fishing

Harvesting of fish from their natural habitats. Usually requires specialized vessels that, by the nature of their size, configuration and equipment, are not suitable for any other type of production, such as transportation. Includes fishing for finfish, shellfish, and other marine animals.

2.4.1.2 PROCESSING/PACKAGING/PRODUCTION

The transformation of livestock and agricultural products into products for intermediate or final consumption. This category is sometimes referred to as Food Manufacturing.

2.4.1.2.1 Animal Food Manufacturing

Facilities primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products. These products are not intended for human consumption.

2.4.1.2.1.1 Farm Animal Feed Manufacturing

Manufacture of feed for cattle, hogs, pigs, poultry, aquaculture fish, and other farm animals. Includes grain and meat feed, supplements, concentrates, mixes, and other animal feed.

2.4.1.2.1.1.1 On-Site Feed Mills

Establishments located at animal raising operations that produce animal feed intended primarily for local consumption

2.4.1.2.1.1.2 Off-Site Feed Mills

Establishments located apart from animal raising operations that produce animal feed intended primarily for general sale

2.4.1.2.1.2 Rendering and Meat Byproduct Manufacturing

Establishments primarily engaged in rendering animal fat, bones, and meat scraps

2.4.1.2.1.3 Pet Food Manufacturing

Manufacture of food for household pets (e.g., dogs, cats, gerbils, hamsters, aquarium fish, and others). Includes grain and meat feed, supplements, concentrates, mixes, and other pet food.

2.4.1.2.2 Grain and Oilseed Milling

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables (2) preparing flour mixes or doughs from flour milled in the same establishment (3) milling, cleaning, and polishing rice and (4) manufacturing malt from barley, rye, or other grains.

2.4.1.2.2.1 Grains, Fats, and Oils Processing

Grains, Fats, and Oils Processing Facilities engaged in milling, crushing, refining, blending, and other processing of grains, fats, and oils. Includes flour, corn, and rice milling malt, starch, vegetable fats and oils manufacturing soybean and other oilseed processing and fats and oils processing. Products are used primarily as ingredients.

2.4.1.2.2.2 Breakfast Food Manufacturing

Manufacture of breakfast cereal foods. Products intended for final consumption.

2.4.1.2.3 Sugar and Confectionary Product Manufacture

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate), and (2) those that begin with sugar and chocolate and process these further.

2.4.1.2.3.1 Sugar Manufacturing

Facilities primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

2.4.1.2.3.2 Confectionary Manufacturing

Establishments primarily engaged in manufacturing confectioneries. Includes chocolate and non-chocolate confectionaries.

2.4.1.2.4 Fruit/Vegetable Preserving, Specialty Food Manufacturing Facilities

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices canned baby foods canned soups (except seafood) canned dry beans canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

2.4.1.2.4.1 Frozen Food Manufacturing Facilities

Facilities primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes frozen pizza frozen whipped toppings and others.

2.4.1.2.4.2 Fruit and Vegetable Canning, Pickling, Drying

Facilities primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods, and may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made in these facilities are canned juices canned baby foods canned soups

(except seafood) canned dry beans canned tomato-based sauces, pickles, relishes, jams and jellies, dried soup mixes and bullions, and others.

2.4.1.2.5 Dairy Product Manufacturing

Facilities primarily engaged in manufacturing dairy products from raw milk and/or processed milk products manufacturing dairy substitutes from soybeans and other nondairy substances and manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

2.4.1.2.5.1 Fluid Milk Manufacturing

Facilities primarily engaged in manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

2.4.1.2.5.2 Other Non-Frozen Dairy Product Manufacturing

Facilities engaged in manufacturing butter, cheese, and dry, condensed, evaporated dairy products.

2.4.1.2.5.3 Ice Cream and Frozen Dessert Manufacturing

Establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen dairy desserts.

2.4.1.2.6 Animal Slaughtering and Processing Facilities

Establishments primarily engaged in slaughtering animals preparing processed meats and meat byproducts and rendering and/or refining animal fat, bones, and meat scraps. Includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

2.4.1.2.6.1 Non-Poultry Animal Slaughtering and Processing

Includes facilities for processing beef, hogs, pigs, lamb, and other such animals.

2.4.1.2.6.2 Poultry Slaughtering and Processing

Includes facilities for processing chickens, ducks, geese, turkeys and other small game.

2.4.1.2.7 Seafood Product Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup) (2) smoking, salting, and drying seafood (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails (4) shucking and packing fresh shellfish (5) processing marine fats and oils and (6) freezing seafood. Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

2.4.1.2.7.1 Seafood Canning

Facilities are primarily engaged in canning seafood (including soup) and marine fats and oils and/or smoking, salting, and drying seafood.

2.4.1.2.7.2 Fresh and Frozen Seafood Processing

Facilities primarily engaged in eviscerating fresh fish by removing heads, fins, scales, bones, and entrails shucking and packing fresh shellfish manufacturing frozen seafood and processing fresh and frozen marine fats and oils.

2.4.1.2.8 Bakery Products Manufacturing

Establishments producing bakery products. Includes breads, cakes, cookies, crackers, pastas, tortillas, flour mixes, and similar products

2.4.1.2.9 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food grain and oilseed milling sugar and confectionery products preserved fruit, vegetable, and specialty foods dairy products meat products seafood products and bakeries and tortillas). The industry group

includes industries with different production processes, such as snack food manufacturing coffee and tea manufacturing concentrate, syrup, condiment, and spice manufacturing and, in general, an entire range of other miscellaneous food product manufacturing.

2.4.1.2.9.1 Snack Food Manufacturing

Establishments primarily engaged in salting, roasting, drying, cooking, or canning nuts processing grains or seeds into snacks manufacturing peanut butter and manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

2.4.1.2.9.2 Coffee and Tea Manufacturing

Establishments primarily engaged in roasting coffee manufacturing coffee and tea concentrates (including instant and freeze-dried) blending tea manufacturing herbal tea and manufacturing coffee extracts, flavorings, and syrups.

2.4.1.2.9.3 All Other Food Manufacturing

Includes condiments, spices, syrups, and other food products.

2.4.1.2.10 Beverage Manufacturing

Industries in the Beverage Manufacturing subsector manufacture beverage 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, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

2.4.1.2.10.1 Soft Drink Manufacturing

Establishments primarily engaged in manufacturing soft drinks; manufacturing ice; and purifying and bottling water

2.4.1.2.10.2 Ice Manufacturing

Establishments primarily engaged in manufacturing soft drinks; manufacturing ice; and purifying and bottling water

2.4.1.2.10.3 Alcoholic Beverage Manufacturing

Establishments primarily engaged in manufacturing alcoholic beverages.

2.4.1.2.10.3.1 Breweries

Establishments primarily engaged in brewing beer, ale, malt liquors.

2.4.1.2.10.3.2 Wineries

Establishments primarily engaged growing grapes and manufacturing wine and brandies manufacturing wine and brandies from grapes and other fruits grown elsewhere and blending wines and brandies.

2.4.1.2.10.3.3 Distilleries

Establishments primarily engaged in distilling potable liquors distilling and blending liquors and blending and mixing liquors and other ingredients.

2.4.1.2.11 Tobacco Product Manufacturing

Establishments engaged in the stemming and redrying of tobacco and the manufacture of tobacco products including cigarettes, cigars, pipe tobacco, and similar products.

2.4.1.3 AGRICULTURAL AND FOOD PRODUCT STORAGE

Establishments engaged in operating warehousing and storage facilities for agricultural and food products. These establishments provide facilities to store goods. They do not sell the goods they handle. These establishments take responsibility for storing the goods and keeping them secure. They may also provide a range of services, often referred to as logistics services, related to the distribution of goods.

2.4.1.3.1 Bulk Food Storage Facilities

Establishments primarily engaged in operating warehousing and storage facilities for bulk food (e.g., grains, unprocessed vegetables and fruits). Includes grain elevators. Facilities may be unrefrigerated or refrigerated.

2.4.1.3.1.1 Grain Elevators

Facilities for storing large quantities of grains. Generally located in farming areas and receive grain from several farms.

2.4.1.3.1.2 Non-Refrigerated Bulk Food Storage Facilities

Facilities for storing bulk farm products (e.g., vegetables, fruits) in unrefrigerated areas.

2.4.1.3.1.3 Refrigerated Bulk Food Storage Facilities

Facilities for storing bulk farm products in refrigerated areas.

2.4.1.3.2 Processed Food Storage Facilities

Establishments primarily engaged in operating warehousing and storage facilities for processed foods, either intermediate or finished products. Facilities may be unrefrigerated or refrigerated.

2.4.1.3.2.1 Non-Refrigerated Processed Food Storage Facilities

Facilities for storing processed food products in unrefrigerated areas.

2.4.1.3.2.2 Refrigerated Processed Food Storage Facilities

Facilities for storing processed food products in refrigerated areas.

2.4.1.4 AGRICULTURAL AND FOOD PRODUCT TRANSPORTATION

Establishments engaged in transporting agricultural and food products. These establishments provide facilities to store goods.

2.4.1.4.1 Road Transport of Agricultural and Food Products

This category includes transportation facilities (e.g., trucks, truck terminals, truck wash and disinfection facilities, highways, bridges, tunnels) involved in the transport of agricultural and food products by truck.

2.4.1.4.2 Rail Transport of Agricultural and Food Products

This category includes transportation facilities (e.g., rail tank cars, rail car loading/unloading terminals, rail car wash and disinfection facilities, rail rights-of-way, railroad bridges, railroad tunnels) involved in the transport of agricultural and food products by rail.

2.4.1.4.3 Maritime Transport of Agricultural and Food Products

This category includes transportation facilities (e.g., barges, loading/unloading piers, waterways, canals and locks, ports) involved in the transport of agricultural and food products by water.

2.4.1.4.4 Air Transport of Agricultural and Food Products

This category includes aviation facilities (e.g., aircraft, airports) involved in the transport of agricultural and food products by air.

2.4.1.5 AGRICULTURAL AND FOOD PRODUCT DISTRIBUTION

Wholesale and retail distribution of agricultural and food products.

2.4.1.5.1 Farm Product Wholesalers

Establishments primarily engaged in the merchant wholesale distribution of agricultural products such as grains, field beans, livestock, and other farm product raw materials (excluding seeds).

2.4.1.5.1.1 Grain and Field Bean Wholesalers

Establishments primarily engaged in the merchant wholesale distribution of grains, such as corn, wheat, oats, barley, and unpolished rice dry beans and soybeans and other inedible beans.

2.4.1.5.1.2 Livestock Markets

Establishments that receive, hold, and sell livestock (cattle, sheep, swine, horses, llamas, bison, etc) to all entities within the production chain (from ranchers, to backgrounders, to feedlots) and to processing (slaughter) facilities.

2.4.1.5.1.3 Other Farm Product Wholesalers

Establishments primarily engaged in the merchant wholesale distribution of other farm products.

2.4.1.5.2 Grocery and Related Product Wholesalers

Establishments primarily engaged in the merchant wholesale distribution of a general line (wide range) of groceries. Includes general line groceries, packaged frozen foods, dairy products, poultry products, confectionaries, fish and seafood products, meat and meat products, fresh fruits and vegetables, and others.

2.4.1.5.3 Food and Beverage Retailers

Establishments retailing food and beverages merchandise from fixed point-of-sale locations. Generally have special equipment (e.g., freezers, refrigerated display cases, refrigerators) for displaying food and beverage goods. Generally have staff trained in the processing of food products to guarantee the proper storage and sanitary conditions required by regulatory authority.

2.4.1.5.3.1 Supermarkets and Grocery Stores

Establishments generally known as supermarkets and grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods fresh fruits and vegetables and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments primarily engaged in retailing a general line of food.

2.4.1.5.3.2 Convenience Stores

Establishments known as convenience stores or food marts primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda, and snacks. May be located at motor vehicle refueling stations.

2.4.1.5.3.3 Specialty Food Stores

Establishments primarily engaged in retailing specialized lines of food. Includes meat markets, fish and seafood markets, fruit and vegetable markets, baked goods stores, and others.

2.4.1.5.3.4 Beer, Wine, and Liquor Stores

Establishments primarily engaged in retailing packaged alcoholic beverages, such as ale, beer, wine, and liquor.

2.4.1.5.4 Food Service and Drinking Facilities

Facilities preparing meals, snacks, and beverages to customer order for immediate on-premises and off-premises consumption.

2.4.1.5.4.1 Full Service Restaurants

Establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating. May also provide other services, such as takeout services. May be stand-alone facilities or may be attached to another facility (e.g., hotel).

2.4.1.5.4.2 Limited Service Food Facilities

Establishments primarily engaged in providing food services where patrons generally order or select items and pay before eating. Most establishments do not have waiter/waitress service. Includes carry out restaurants, delicatessen restaurants, fast food restaurants, pizzerias, sandwich shops, cafeterias, snack bars, ice cream stands, doughnut shops, mobile food service vehicles, and similar facilities.

2.4.1.5.4.3 Drinking Establishments

Facilities primarily engaged in preparing and serving alcoholic beverages for immediate consumption. May also provide limited food services.

2.4.1.5.4.3.1 Bars

Facilities serving alcoholic beverages generally with no or limited live entertainment. Includes bars, taverns, cocktail lounges.

2.4.1.5.4.3.2 Nightclubs

Facilities serving alcoholic beverages and with regular live entertainment and/or dancing.

2.4.1.5.4.3.3 Nightclub Districts

Areas in which there is a concentration of nightclubs and related facilities.

2.4.1.6 AGRICULTURE AND FOOD SUPPORTING FACILITIES

Facilities providing supporting services in agriculture and food.

2.4.1.6.1 Agricultural Chemical Manufacture

Includes fertilizers, pesticides, others.

2.4.1.6.2 Veterinary Pharmaceutical Manufacture

2.4.1.6.3 Farm Supply Wholesalers

Establishments primarily engaged in the merchant wholesale distribution of farm supplies, such as animal feeds, fertilizers, agricultural chemicals, pesticides, plant seeds, and plant bulbs.

2.4.1.6.4 Farm Supply Retailers

Establishments primarily engaged in retailing farm supplies.

2.4.1.6.5 Veterinary Services

Establishments engaged in the practice of veterinary medicine, dentistry, or surgery for animals.

2.4.1.6.6 Agricultural Testing Laboratories

Establishments conducting soil, seed, plant, animal and related testing.

2.4.1.6.7 Agricultural and Food Research

Establishments engaged in conducting research and experimental development in agriculture and food sciences.

2.4.1.7 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the agriculture and food sector.

2.4.1.7.1 Federal Agriculture and Food Agencies

Federal agencies that deal with the agriculture and food system including Department of Agriculture, Food and Drug Administration, and others. Includes federal extension services.

2.4.1.7.2 State, Local, Regional Agriculture and Food Agencies

State, local, and regional agencies dealing with agriculture and food in their jurisdiction including public health departments, agricultural extension services, and others.

2.4.1.7.4 International Agriculture and Food Organizations

International organizations dealing with agriculture and food issues.

2.4.1.8 OTHER AGRICULTURE AND FOOD

Agriculture and Food facilities not elsewhere classified.

2.4.2 BANKING AND FINANCE

Establishments Primarily Engaged In Financial Transactions (Transactions Involving the Creation, Liquidation, or Change in Ownership of Financial Assets) and/or in Facilitating Financial Transactions. Included are Banking and Credit Establishments, Securities and Commodities Establishments, Insurance Establishments, and Other Financial Establishments.

2.4.2.1 BANKING AND CREDIT

Establishments that lend funds raised from depositors lend funds raised from credit market borrowing or facilitate the lending of funds or issuance of credit.

2.4.2.1.1 Federal Reserve System

The system that serves as the country's central bank.

2.4.2.1.1.1 Federal Reserve Headquarters

The headquarters of the Federal Reserve. Includes the operations of the Board of Governors of the Federal Reserve System and the Federal Open Market Committee. Sets monetary policy for the country.

2.4.2.1.1.2 Federal Reserve Banks

Reserve Banks in 12 Federal Reserve Districts. Reserve Banks hold the cash reserves of depository institutions and make loans to them move currency and coin into and out of circulation, and collect and process millions of checks provide checking accounts for the Treasury issue and redeem government securities and act in other ways as fiscal agent for the U.S. government. They supervise and examine member banks for safety and soundness. The Reserve Banks also participate in the setting of monetary policy. Includes Reserve Banks and branch offices. Includes operations centers, data and information systems, telecommunication systems.

2.4.2.1.2 Depository Credit Institutions

Establishments primarily engaged in accepting deposits (or share deposits) and in lending funds from these deposits.

2.4.2.1.2.1 Commercial Banks

Establishments primarily engaged in accepting demand and other deposits and making commercial, industrial, and consumer loans. Commercial banks and branches of foreign banks are included.

2.4.2.1.2.1.1 Bank Office Buildings

Facilities holding the administrative office of the institution. Includes operations centers, data and information systems, telecommunication systems.

2.4.2.1.2.1.2 Bank Customer Service Facilities

Facilities that provide open access to customers. Includes teller windows, safe deposit boxes, and other such facilities.

2.4.2.1.2.2 Savings Institutions

Establishments primarily engaged in accepting time deposits, making mortgage and real estate loans, and investing in high-grade securities.

2.4.2.1.2.2.1 Savings Institution Office Buildings

Facilities holding the administrative office of the institution. Includes operations centers, data and information systems, telecommunication systems.

2.4.2.1.2.2.2 Savings Institution Customer Service Facilities

Facilities that provide open access to customers. Includes teller windows, safe deposit boxes, and other such facilities

2.4.2.1.2.3 Credit Unions

Establishments primarily engaged in accepting members' share deposits in cooperatives that are organized to offer consumer loans to their members

2.4.2.1.2.3.1 Credit Union Office Buildings

Facilities holding the administrative office of the institution. Includes operations centers, data and information systems, telecommunication systems.

2.4.2.1.2.3.2 Credit Union Customer Service Facilities

Facilities that provide open access to customers. Includes teller windows, safe deposit boxes, and other such facilities

2.4.2.1.2.4 Other Depository Credit Institutions

Other establishments primarily engaged in accepting deposits and lending funds (except those itemized above).

2.4.2.1.1 Other Depository Credit Institution Office Buildings

Facilities holding the administrative office of the institution. Includes operations centers, data and information systems, telecommunication systems.

2.4.2.1.2 Other Depository Credit Institution Customer Service Facilities

Facilities that provide open access to customers. Includes teller windows, safe deposit boxes, and other such facilities

2.4.2.1.3 Non-Depository Credit Institutions

Establishments, both public (government-sponsored enterprises) and private, primarily engaged in extending credit or lending funds raised by credit market borrowing, such as issuing commercial paper or other debt instruments or by borrowing from other financial intermediaries.

2.4.2.1.3.1 Credit Card Companies

Establishments primarily engaged in providing credit by issuing credit cards. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.3.3 Consumer Lending

Establishments primarily engaged in making unsecured cash loans to consumers. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.3.4 Business Lending

Establishments primarily engaged in lending funds to businesses (with or without real estate as collateral). Includes administrative offices, operations centers, data and information systems, communication systems.

2.4.2.1.3.5 Real Estate Credit

Establishments primarily engaged in lending funds with real estate as collateral. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.3.6 International Trade Financing

Establishments primarily engaged in providing working capital funds to U.S. exporters lending funds to foreign buyers of U.S. goods and/or lending funds to domestic buyers of imported goods. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.3.7 Government Sponsored Enterprises

Establishments primarily engaged in buying, pooling, and repackaging loans for sale to others on the secondary market. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.3.8 Other Non-Depository Credit Institutions

Establishments primarily engaged in providing nondepository credit other than those itemized above. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.4 Banking and Credit Supporting Activities

Establishments primarily engaged in facilitating credit intermediation by performing activities, such as arranging loans by bringing borrowers and lenders together and clearing checks and credit card transactions.

2.4.2.1.4.1 Loan Brokerages

Establishments primarily engaged in arranging loans by bringing borrowers and lenders together on a commission or fee basis. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.4.2 Financial Transaction Processing and Clearinghouse Activities

Establishments primarily engaged in providing financial transaction processing (except central bank) reserve and liquidity services (except central bank) and/or check or other financial instrument clearinghouse services (except central bank). Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.1.4.3 Banking and Credit Emergency Redundancy Service Facilities

Facilities that provide backup capability for employees and data, information, telecommunications networks to allow banking and credit institutions to continue functioning in the event of a disruption to their primary facilities.

2.4.2.1.4.3.1 Banking and Credit Company Emergency Redundancy Service Facilities

Facilities that are owned and operated by the company utilizing them.

2.4.2.1.4.3.2 Banking and Credit Contract Emergency Redundancy Service Facilities

Facilities that are owned and operated by a service provider. Services may be offered to a number of companies

2.4.2.1.4.4 Physical Repositories

Secured facilities where large quantities of currency and/or precious metals are stored. Includes both government and private repositories.

2.4.2.1.5 Banking and Credit Regulatory, Oversight, And Industry Organizations

Organizations that provide technical, operation, pricing, and business oversight and support to banking and credit organizations.

2.4.2.1.5.1 Federal Banking and Credit Agencies

Federal agencies that deal with the banking and credit system including Department of Treasury, Federal Deposit Insurance Corporation, and others. Note Federal Reserve System is itemized separately in 2.1.1.

2.4.2.1.5.2 State, Local, Regional Banking and Credit Agencies

State, local, and regional agencies dealing with banking and credit in their jurisdiction including banking departments, consumer protection departments, and others.

2.4.2.1.5.3 Banking and Credit Industry Organizations

2.4.2.1.5.4 International Banking and Credit Organizations International organizations dealing with banking and credit issues

Industry organizations that provide industry-wide support..

2.4.2.1.5.4 International Banking and Credit Organizations

International organizations dealing with banking and credit issues.

2.4.2.2 SECURITIES, COMMODITIES, AND FINANCIAL INVESTMENTS

Establishments that are primarily engaged in underwriting securities issues and/or making markets for securities and commodities acting as agents (i.e., brokers) between buyers and sellers of securities and commodities providing securities and commodities exchange services and providing other services, such as managing portfolios of assets providing investment advice and trust, fiduciary, and custody services.

2.4.2.2.1 Securities and Commodities Brokers

Establishments primarily engaged in putting capital at risk in the process of underwriting securities issues or in making markets for securities and commodities and those acting as agents and/or brokers between buyers and sellers of securities and commodities, usually charging a commission. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.2.2 Securities and Commodities Exchanges

Establishments primarily engaged in furnishing physical or electronic marketplaces for the purpose of facilitating the buying and selling of stocks, stock options, bonds, or commodities contracts. Includes administrative offices, exchange floors, operations centers, data and information systems, telecommunication systems.

2.4.2.2.3 Other Financial Investment Activities

Includes portfolio managers, investment fund managers, mutual fund managers, pension fund managers, investment advice, quotation services, trust and estate managers, and others.

2.4.2.2.4 Securities, Commodities, and Financial Investment Supporting Activities

Establishments primarily engaged in facilitating securities, commodities, and other financial investments by performing supporting activities.

2.4.2.2.2.1 Securities, Commodities, and Financial Investment Processing and Clearinghouse Activities

Establishments primarily engaged in providing financial transaction processing, clearinghouse services, quotation. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.2.4.2 Securities, Commodities Emergency Redundancy Service

Facilities that provide backup capability for employees and data, information, telecommunications networks to allow securities, commodities, and financial investment institutions to continue functioning in the event of a disruption to their primary facilities.

2.4.2.2.4.2.1 Securities, Commodities Company Emergency Facilities Redundancy Service Facilities

Facilities that are owned and operated by the company utilizing them.

2.4.2.2.4.2.2 Securities, Commodities Contract Emergency Redundancy Service Facilities

Facilities that are owned and operated by a service provider. Services may be offered to a number of companies

2.4.2.2.5 Securities, Commodities, Financial Investment Regulatory, Oversight, and Industry Organizations

Organizations that provide technical, operation, pricing, and business oversight and support to securities, commodities, and financial investment organizations.

2.4.2.2.5.1 Federal Securities, Commodities, and Financial Investment Agencies

Federal agencies that deal with the securities, commodities, and financial investment industry including Securities and Exchange Commission and others.

2.4.2.2.5.2 State, Local, Regional Securities, Commodities, and Financial Investment Agencies

State agencies dealing with the securities, commodities, and financial investment industry in their jurisdiction including banking departments, consumer protection departments, and others.

2.4.2.2.5.3 Securities, Commodities, and Financial Investment Industry Organizations

Organizations Industry organizations that provide industry-wide support.

2.4.2.2.5.4 International Securities, Commodities, and Financial Investment Organizations

International organizations dealing with securities, commodities, and financial investment issues.

2.4.2.3 INSURANCE COMPANIES

Establishments that are primarily engaged in underwriting (assuming the risk, assigning premiums, and so forth) annuities and insurance policies or facilitating such underwriting by selling insurance policies, and by providing other insurance and employee-benefit related services.

2.4.2.3.1 Direct Insurance Companies

Direct insurance carriers are establishments that are primarily engaged in initially underwriting and assuming the risk of annuities and insurance policies. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.3.2 Reinsurance Companies

Establishments primarily engaged in assuming all or part of the risk associated with existing insurance policies originally underwritten by other insurance carriers. Includes administrative offices, operations centers, data and information systems, telecommunication systems.

2.4.2.3.3 Insurance producers

Establishments primarily engaged in acting as agents (i.e., brokers) in selling annuities and insurance policies.

2.4.2.3.4 Insurance Support Organizations

Establishments primarily engaged in facilitating insurance activities by performing supporting activities. Includes claims adjustment, claims investigation, claims processing, actuarial services, loss prevention services, rate making services, medical cost evaluation, and others.

2.4.2.3.5 Insurance Regulatory, Oversight, And Industry Organizations

Organizations that provide technical, operation, pricing, and business oversight and support to insurance organizations.

2.4.2.3.5.1 Federal Insurance Agencies

Federal agencies that deal with the insurance industry.

2.4.2.3.5.2 State, Local, Regional Insurance Agencies

State agencies dealing with insurance activities in their jurisdiction including consumer protection departments, and others.

2.4.2.3.5.3 Insurance Industry Organizations

Industry organizations that provide industry-wide support.

2.4.2.3.5.4 International Insurance Organizations

International organizations dealing with insurance issues.

2.4.3 CHEMICAL AND HAZARDOUS MATERIALS INDUSTRY

2.4.3.1 CHEMICAL MANUFACTURING AND PROCESSING PLANTS

Facilities that manufacture chemicals. They focus on the transformation of organic and inorganic raw materials by a chemical process and the formulation of basic chemicals that are used in the production of intermediate and end products. Some chemical manufacturing facilities manufacture toxic or flammable

chemicals and are subject to EPA's Chemical Accident Prevention regulations that require a Risk Management Program (RMP) under 40 CFR Part 68 and/or to OSHA Process Safety Management (PSM) regulations under 29 CFR 1910.119. Other facilities are also subject to these regulations if they have more than a threshold quantity of a regulated substance on site. There are 77 toxic substances and 63 flammable substances that are regulated. The industries that are specifically identified as falling under RMP requirements are identified below. Other chemical manufacturers, which may or may not fall under the RMP regulations depending on whether or not they have more than a threshold quantity of a regulated substance, are classified under 3.1.1.5 Other Inorganics or 3.1.1.2.3 Other Organic. Facilities that do not manufacture chemicals, but use hazardous Chemicals In Their Processes, Are Classified Under 3.3.2 Storage At Manufacturing Facilities Or 3.3.3 Storage At Non Manufacturing Facilities

2.4.3.1.1 Basic Chemicals

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

2.4.3.1.1.1 Inorganic Chemicals

2.4.3.1.1.1.1 Alkalies and Chlorine

2.4.3.1.1.1.2 Industrial Gases

2.4.3.1.1.1.3 Inorganic Pigments

2.4.3.1.1.1.4 Acids

2.4.3.1.1.1.5 Other Inorganics

2.4.3.1.1.2 Petrochemicals and Derivatives

2.4.3.1.1.2.1 Organics

2.4.3.1.1.2.2 Synthetic Materials

2.4.3.1.1.2.3 Other Organics

2.4.3.1.1.3 Other Industrial Chemicals

2.4.3.1.2 Specialty Chemicals

These establishments are primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalis often using an electrolysis process. These facilities fall under EPA RMP requirements.

2.4.3.1.2.1 Coatings

2.4.3.1.2.2 Other Specialties

2.4.3.1.2.3 Explosives

2.4.3.1.3 Agricultural Chemicals

2.4.3.1.3.1 Fertilizers

This industry comprises establishments primarily engaged in one or more of the following manufacturing nitrogenous fertilizer materials and mixing ingredients into fertilizers manufacturing fertilizers from sewage or animal waste and manufacturing nitrogenous materials and mixing them into fertilizers. These facilities fall under EPA RMP requirements.

2.4.3.1.3.2 Crop Protection

2.4.3.1.3.2.1 Pesticides

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers). These facilities fall under EPA RMP requirements.

2.4.3.1.3.2.2 Herbicides

2.4.3.1.3.2.3 Other Crop Protection Chemicals

2.4.3.1.4 Pharmaceuticals

2.4.3.1.5 Consumer Products

2.4.3.1.6 Potential Chemical Weapon Agents and Precursors

2.4.3.2 HAZARDOUS CHEMICAL TRANSPORT

This category includes assets used to transport hazardous chemicals.

2.4.3.2.1 Pipelines

Pipeline facilities for the transport of hazardous chemicals.

2.4.3.2.1.1 Pipeline Components

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

2.4.3.2.1.2 Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

2.4.3.2.1.3 Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

2.4.3.2.2 Marine Transport

Marine facilities for transporting hazardous chemicals

2.4.3.2.2.1 Tankers

2.4.3.2.2.2 Ports Handling Hazardous Chemicals

2.4.3.2.3 Rail Transport

Railroad facilities for transporting hazardous chemicals.

2.4.3.2.3.1 Railroad Tank Cars

Railroad tank cars designed for carrying hazardous chemicals. Note: Railroad tank cars are sometimes used as mobile storage that is, the product is not off-loaded into a stationary tank but is used directly from the tank car.

2.4.3.2.3.2 Railroad Loading Racks

2.4.3.2.4 Road Transport

Road facilities for transporting hazardous chemicals.

2.4.3.2.4.1 Tanker Trucks

Trucks (generally semi-trailers) designed to carry hazardous chemicals.

2.4.3.2.4.2 Tanker Truck Loading Racks

2.4.3.2.5 Air Transport

This category includes aviation facilities (e.g., aircraft, airports) involved in the transport of hazardous chemicals by air.

2.4.3.3 HAZARDOUS CHEMICAL STORAGE/ STOCKPILE/UTILIZATION/DISTRIBUTION

This category includes facilities that do not manufacture hazardous chemicals but have hazardous chemicals on-site, in storage, for use in other manufacturing operations, or for an end use activity. Facilities that manufacture hazardous chemicals are included in the Hazardous Chemical Manufacturing Plant category above.

2.4.3.3.1 Warehousing and Storage

Facilities primarily engaged in operating warehousing and storage facilities for hazardous chemicals and potentially other warehouse products. May or may not sell the goods they handle. May provide a range of services, often referred to as logistics services, and related to the distribution of hazardous chemicals.

2.4.3.3.1.1 Bulk Storage

(Also referred to as tank farms.) Facilities used for the storage and/or marketing of hazardous chemicals. Includes storage tanks, pipes and pumps, control machinery, and other equipment. These facilities are not used to store hazardous chemical for final consumption.

2.4.3.3.1.1.1 Land-Based Bulk Terminal

Receives and distributes its chemicals via pipeline, marine vessel, rail, or truck from either domestic or import suppliers. Includes the valves, piping, control machinery, and other equipment to connect to the suppliers serving it.

Marine Bulk Terminal

Large terminal located on a waterway. Generally receives and distributes its petroleum via pipeline, barge, or marine tanker from either domestic or import suppliers.

2.4.3.3.1.2 Retail Distribution

Facilities used to store hazardous chemicals for retail distribution to end use customers.

2.4.3.3.2 Storage at Manufacturing Facilities

This category includes establishments (other than chemical manufacturers) that use hazardous chemicals in the manufacture and production of other products. They purchase hazardous chemicals from manufacturers and/or from wholesalers. Note: Facilities in this category are classified under the appropriate industrial category in 14.9.1 Commercial Assets / Industrial Assets / Manufacturing Facilities. If they have hazardous chemicals on site that are used in the manufacturing process, this CATEGORIZATION is added.

2.4.3.3.3 Storage at Non-Manufacturing Facilities

This category includes establishments that are not manufacturers but that have hazardous chemicals on-site to use in their activities. Note Facilities in this category are listed in their primary categorization (e.g., wastewater treatment plants). If they have hazardous chemicals on site (e.g., chlorine), this categorization is added.

2.4.3.4 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the chemical industry.

2.4.3.4.1 Federal Chemicals Oversight Agencies

Federal agencies that deal with the chemical industry including Environmental Protection Agency, Department of Transportation and others.

2.4.3.4.2 State, Local, Regional Chemicals Oversight Agencies

State, local, and regional agencies regulating chemical companies operating in their jurisdiction including environmental agencies, transportation agencies, and others.

2.4.3.4.3 Chemical Industry Organizations and Trade Associations

Industry organizations (e.g., American Chemistry Council) that provide industry-wide support.

2.4.3.4.4 International Chemical Organizations

International organizations dealing with hazardous chemical issues.

2.4.3.5 OTHER HAZARDOUS CHEMICAL FACILITIES

Hazardous chemical facilities not elsewhere classified.

2.4.4 DEFENSE INDUSTRIAL BASE

The Department of Defense, Government, and Private Sector Industrial Complex with Capabilities to Perform Research and Development, Design, Produce, and Maintain Military Weapon Systems, Subsystems, Components and Parts to Meet Military Requirements.

2.4.4.1 SHIPBUILDING INDUSTRY

Establishments primarily engaged in operating a shipyard. Does not include civilian shipyards.

2.4.4.1.1 Surface Shipbuilding and Maintenance

Shipyards building, maintaining, and repairing surface ships.

2.4.4.1.2 Subsurface Shipbuilding and Maintenance

Shipyards specializing in building, maintaining, and repairing submarines and other submersibles.

2.4.4.1.3 Unmanned Vessel Construction and Maintenance

Shipyards specializing in the construction, maintenance and repair of unmanned marine vessels

2.4.4.2 AIRCRAFT INDUSTRY

Establishments primarily engaged manufacturing or assembling complete aircraft. Does not include those building civilian aircraft.

2.4.4.2.1 Fixed Wing Aircraft Manufacture and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of fixed wing airplanes.

2.4.4.2.2 Helicopter Manufacture and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of helicopters.

2.4.4.2.3 Unmanned Aerial Vehicle Manufacture and Maintenance

Facilities specializing in the manufacture of unmanned aircraft.

2.4.4.3 MISSILE INDUSTRY

Establishments primarily engaged in manufacturing missile systems.

2.4.4.3.1 Air/Air Missile Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of air-to-air missiles.

2.4.4.3.2 Air/Surface Missile Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of air-to-surface missiles.

2.4.4.3.3 Surface/Air Missile Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of surface-to-air missiles.

2.4.4.3.4 Surface/Surface Missile Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of surface-to-surface missiles.

2.4.4.3.5 Missile Defense System Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of missile defense systems.

2.4.4.3.6 Precision Guided Munitions Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of precision guided munitions (PGMs).

2.4.4.4 SPACE INDUSTRY

Establishments primarily engaged in manufacturing complete space vehicles.

2.4.4.4.1 Launch Vehicle Manufacturing and Maintenance

Facilities specializing in the manufacture, maintenance, and repair of space launch vehicles.

2.4.4.4.2 Satellite Manufacturing

Facilities specializing in the manufacture of space satellites.

2.4.4.5 COMBAT VEHICLE INDUSTRY

Establishments manufacturing military land vehicles.

2.4.4.5.1 Combat Vehicle Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing tanks and other such vehicles intended for use in combat.

2.4.4.5.2 Tactical Vehicle Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing tactical vehicles.

2.4.4.5.3 Unmanned Vehicle Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing unmanned vehicles.

2.4.4.6 AMMUNITION INDUSTRY

Establishments manufacturing military ammunition. Does not include those manufacturing ammunition solely for civilian use.

2.4.4.6.1 Artillery Caliber Munitions Manufacture

Facilities manufacturing artillery caliber munitions.

2.4.4.6.2 Bomb Manufacture

Facilities manufacturing large military ordinance.

2.4.4.6.3 Cannon Caliber Munitions Manufacture

Facilities manufacturing cannon caliber munitions.

2.4.4.6.4 Demolition, Grenade, and Mines Manufacture

Facilities manufacturing demolition explosives, grenades, and mines.

2.4.4.6.5 Dispenser Munitions Manufacture

Facilities manufacturing dispenser munitions (i.e., munitions that are separated from a parent munition on detonation).

2.4.4.6.6 Family of Scatterable Mines Manufacture

Facilities manufacturing scatterable mines.

2.4.4.6.7 Fuse Manufacture

Facilities manufacturing military fuses.

2.4.4.6.8 Mortar Manufacture

Facilities manufacturing mortars.

2.4.4.6.9 Navy Gun Munitions Manufacture

Facilities manufacturing munitions for use in naval guns.

2.4.4.6.10 Propellants and Explosives Manufacture

Facilities manufacturing military propellants and explosives.

2.4.4.6.11 Propelling Charge Manufacture

Facilities manufacturing military propelling charges.

2.4.4.6.12 Pyrotechnics Manufacture

Facilities manufacturing military pyrotechnics.

2.4.4.6.13 Rocket and Warhead Manufacture

Facilities manufacturing military rockets and warheads.

2.4.4.6.14 Small Caliber Munitions Manufacture

Facilities manufacturing small caliber ammunition.

2.4.4.6.15 Tank Ammunition Manufacture

Facilities manufacturing ammunition for use in tanks.

2.4.4.7 WEAPONS INDUSTRY

Facilities manufacturing military weapons. Does not include those manufacturing weapons intended solely for civilian use.

2.4.4.7.1 Cannon Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing cannon caliber firearms.

2.4.4.7.2 Man-Portable Weapons Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing firearms that can be carried by an individual soldier.

2.4.4.7.3 Mounted Weapons Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing firearms designed to be mounted on a vehicle or vessel.

2.4.4.7.4 Laser Weapons Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing laser weapons systems.

2.4.4.7.5 Nuclear Weapons Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing nuclear weapons systems.

2.4.4.7.6 Chemical Weapons Manufacture and Maintenance

Facilities manufacturing, maintaining, and repairing chemical weapons systems.

2.4.4.8 TROOP SUPPORT INDUSTRY

Facilities manufacturing material supporting military personnel.

2.4.4.8.1 Chemical Biological Defense Systems Manufacture

Equipment to protect troops against chemical and biological agents.

2.4.4.8.2 Clothing and Textiles Manufacture

Military uniforms, boots, gloves, and other clothing.

2.4.4.8.3 Soldier Systems Manufacture

Equipment and gear (other than firearms and munitions) carried by military personnel (e.g., helmets, goggles, knives, etc.).

2.4.4.8.4 Subsistence and Medical Equipment Manufacture

Food (e.g., Meals-Ready-to-Eat [MRE], mess hall supplies, bottled water, drinks) and medical supplies and equipment (e.g., individual field medical supplies, field hospital supplies).

2.4.4.9 INFORMATION TECHNOLOGY INDUSTRY

Establishments manufacturing military-use information technology.

2.4.4.9.1 Hardware Manufacturing and Maintenance

Assets that support the production, maintenance, and repair of hardware computing equipment, such as computer peripherals, networking equipment, personal computers, and similar electronic products, or that manufacture components for such products.

2.4.4.9.2 Network Development and Maintenance

Assets that support the production, maintenance, and repair of network access and communication devices, routing and switching equipment, and wireless networking products.

2.4.4.9.3 Security

Facilities engaged in manufacturing military electronic equipment and developing software used to secure information.

2.4.4.9.4 Software Production

Assets that support the production of software, such as operating systems, utilities software, wireless software, or that produce components for such products.

2.4.4.9.5 Trainers and Simulators

Facilities engaged in developing and deploying military training equipment and simulators.

2.4.4.10 ELECTRONICS INDUSTRY

Establishments engaged in the manufacture of electronics specifically aimed at military applications (other than those itemized above). Does not include facilities manufacturing equipment solely for civilian use.

2.4.4.10.1 Avionics Manufacture

Establishments engaged in the manufacture of electronic equipment for use primarily in aircraft.

2.4.4.10.2 Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Systems Manufacture

Establishments engaged in the manufacture of C4ISR systems.

2.4.4.10.3 Electronics Manufacture

Establishments engaged in the manufacture of electronic equipment other than those listed above.

2.4.4.10.4 Sensor Manufacture

Establishments engaged in the manufacture of sensors and detectors.

2.4.4.11 ELECTRICAL INDUSTRY COMMODITIES

Establishments engaged in the manufacture of electrical equipment commodities (other than those itemized above). Includes facilities manufacturing equipment for both military and civilian use.

2.4.4.11.1 Auxiliary Power Unit Manufacture

Establishments engaged in the manufacture of auxiliary power units used primarily in aircraft.

2.4.4.11.2 Battery Manufacture

Establishments engaged in the manufacture of batteries.

2.4.4.11.3 Electric Motor Manufacture

Establishments engaged in the manufacture of electric motors.

2.4.4.11.4 Electric Generator Manufacture

Establishments engaged in the manufacture of electric generators.

2.4.4.11.5 Power Source Manufacture

Establishments engaged in the manufacture of power sources (other than batteries and electric generators).

2.4.4.12 ELECTRONIC INDUSTRY COMMODITIES

Establishments engaged in the manufacture of electronic commodities (other than those itemized above). Includes facilities manufacturing equipment for both military and civilian use.

2.4.4.12.1 Circuit Board Manufacture

Establishments engaged in the manufacture of circuit boards.

2.4.4.12.2 Global Positioning System Receiver Manufacture

Establishments engaged in the manufacture of GPS receivers.

2.4.4.12.3 Guidance/Control Equipment Manufacture

Establishments engaged in the manufacture of guidance and control equipment.

2.4.4.12.4 Microwave Device Manufacture

Establishments engaged in the manufacture of microwave devices.

2.4.4.12.5 Optics Manufacture

Establishments engaged in the manufacture of optical instruments and lenses.

2.4.4.12.6 Semiconductor Manufacture

Establishments engaged in the manufacture of semiconductors.

2.4.4.13 MECHANICAL INDUSTRY COMMODITIES

Establishments engaged in the manufacture of mechanical commodities (other than those itemized above). Includes facilities manufacturing equipment for both military and civilian use.

2.4.4.13.1 Aircraft Transmission Manufacture

Establishments engaged in the manufacture of aircraft transmissions.

2.4.4.13.2 Automotive Transmission Manufacture

Establishments engaged in the manufacture of automotive transmissions.

2.4.4.13.3 Bearings Manufacture

Establishments engaged in the manufacture of bearings.

2.4.4.13.4 Diesel Engine Manufacture

Establishments engaged in the manufacture of diesel engines.

2.4.4.13.5 Hydraulic Equipment Manufacture

Establishments engaged in the manufacture of hydraulic equipment.

2.4.4.13.6 Landing Gear Manufacture

Establishments engaged in the manufacture of aircraft landing gear.

2.4.4.13.7 Nuclear Components Manufacture

Establishments engaged in the manufacture of nuclear components.

2.4.4.13.8 Pump and Compressor Manufacture

Establishments engaged in pump and compressor manufacture.

2.4.4.13.9 Rocket Engine Manufacture

Establishments engaged in the manufacture of rocket engines.

2.4.4.13.10 Turbine Engine Manufacture

Establishments engaged in the manufacture of turbine engines.

2.4.4.14 STRUCTURAL INDUSTRY COMMODITIES

Establishments engaged in the manufacture of mechanical commodities (other than those itemized above). Includes facilities manufacturing equipment for both military and civilian use.

2.4.4.14.1 Castings Manufacture

Establishments engaged in pouring molten metal into molds or dies to form castings.

2.4.4.14.2 Ceramic Armor Manufacture

Establishments engaged in the manufacture of ceramic armor.

2.4.4.14.3 Composites Manufacture

Establishments engaged in the manufacture of composites.

2.4.4.14.4 Depleted Uranium Armor Manufacture

Establishments engaged in the manufacture of depleted uranium armor.

2.4.4.14.5 Forgings Manufacture

Establishments engaged in the manufacture of forgings.

2.4.4.14.6 Precious Metal Product Manufacture

Establishments engaged in manufacturing products using precious metals.

2.4.4.15 RESEARCH & DEVELOPMENT FACILITIES

This industry group comprises establishments engaged in conducting original investigation undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). The industries within this industry group are defined on the basis of the domain of research that is, on the scientific expertise of the establishment. This particular classification is focused on those enterprises that are focused primarily on the Defense Industrial Base.

2.4.4.15.1 Shipbuilding

2.4.4.15.2 Aircraft

2.4.4.15.3 Missile

2.4.4.15.4 Space

2.4.4.15.5 Combat Vehicle Industry

2.4.4.15.6 Ammunition Industry

2.4.4.15.7 Weapons Industry

2.4.4.15.8 Troop Support Industry

2.4.4.15.9 Information Technology Industry

2.4.4.15.10 Electronics Industry

2.4.4.15.11 Electrical Industry Commodities

2.4.4.15.12 Mechanical Industry Commodities

2.4.4.15.13 Structural Industry Commodities

2.4.5 ENERGY

Energy

2.4.5.1 ELECTRICITY

Facilities involved in the generation, transmission, distribution, marketing, and regulation of electricity.

2.4.5.1.1 Electricity Generation

Facilities converting other forms of energy, such as water power (i.e., hydroelectric), fossil fuels, nuclear power, and solar power, into electrical energy.

2.4.5.1.1.1 Hydroelectric Power Generation

Facilities using water power to drive a turbine and produce electric energy.

2.4.5.1.1.1.1 Hydroelectric Dams

These facilities have a dam and a water storage reservoir. Water is released at controlled rates through the turbines. The dams are categorized as high-, medium-, or low-head depending on their height.

2.4.5.1.1.1.2 Pumped Storage Facilities

These facilities have a dam and a water storage reservoir. Water is pumped up behind the dam during low electricity demand periods. It is released to run through the turbines to generate electricity during peak load periods.

2.4.5.1.1.1.3 Run-of-River Generators

These facilities do not have a dam, or only a relatively small one, and rely on the continuous flow of a river to run through the turbines.

2.4.5.1.1.2 Fossil Fuel Electric Power Generation

These facilities use fossil fuels, such as coal, oil, or natural gas, in steam turbine, internal combustion, or combustion turbine processes to produce electric energy.

2.4.5.1.1.2.1 Coal-Fired Generators

These facilities use coal as the fuel source.

2.4.5.1.1.2.2 Natural-Gas-Fired Generators

These facilities use natural gas as the fuel source.

2.4.5.1.1.2.3 Oil-Fired Generators

These facilities use oil (e.g., residual fuel oil, diesel fuel) as the fuel source.

2.4.5.1.1.3 Nuclear Electric Power Generation

Facilities using nuclear power to produce electricity for use in the electric power grid.

2.4.5.1.1.3.1 Light Water Reactor Power Plants

Light Water Reactor Power Plants Nuclear power plants with pressurized water reactors or boiling water reactors. Includes all equipment (e.g., steam generators, turbines, generators, transformers, switchgear) used to provide electricity to the grid.

2.4.5.1.1.3.2 Other Reactor Power Plants

Other Reactor Power Plants Nuclear power plants cooled by other than light water. There are no facilities of this type currently operating in the U.S., although there are several in Canada and other countries. Includes all equipment (e.g., steam generators, turbines, generators, transformers, switchgear) used to provide electricity to the grid.

2.4.5.1.1.4 Other Electric Power Generation

These facilities convert other forms of energy into electric energy.

2.4.5.1.2 Electricity Transmission

Facilities used to transmit bulk quantities of electricity over relatively long distances using high voltages (usually =69 kV).

2.4.5.1.2.1 Transmission Lines

Transmission towers and lines.

2.4.5.1.2.2 Transmission Substations

Connection points in the transmission network and may include transformers, switches, reactors, circuit breakers, series or shunt capacitors, phase shifters, and switchgear.

2.4.5.1.2.3 DC Converter Stations

Facilities that convert high voltage power between alternating current (AC) and direct current (DC) for improved efficiency in transmission.

2.4.5.1.2.4 Generation Dispatch and Transmission Control Center

Centers controlling dispatching of generators and the high voltage transmission system. Includes generation and transmission SCADA systems. Includes Independent System Operator (ISO) facilities.

2.4.5.1.3 Electricity Distribution

Facilities used to transmit electricity to final consumers at lower voltages (usually <69 kV).

2.4.5.1.3.1 Distribution Lines

These facilities include lines, poles, transformers, meters.

2.4.5.1.3.2 Distribution Substations

These are connection points in the distribution system and from the distribution system to the transmission system may include transformers, capacitors, switchgear.

2.4.5.1.3.3 Distribution Control and Dispatch Centers

These centers control the lower voltage distribution system. Includes distribution SCADA systems.

2.4.5.1.4 Electricity Markets

Business operations that deal in the sale and purchase of electricity on the wholesale level.

2.4.5.1.4.1 Generation Markets

Markets into which generation companies bid capacity. May be operated by an Independent System Operator (ISO).

2.4.5.1.4.2 Transmission Markets

Markets for transmission capacity. May be operated by an ISO or by a transmission company. Includes Open Access Same-time Information System (OASIS) systems.

2.4.5.1.5 Other Electricity Facilities

Facilities and assets elsewhere classified.

2.4.5.2 PETROLEUM

Facilities involved in the supply, processing, storage, transport, distribution, marketing, and regulation of petroleum. Includes crude oil and refined petroleum products.

2.4.5.2.1 Crude Oil Supply

These facilities are involved in supplying crude oil.

2.4.5.2.1.1 On-Shore Wells

Land-based facilities used for the extraction of crude oil from the ground. A number of wells may be grouped closely together to extract oil from a reservoir. This category includes equipment such as gathering lines used to bring the output of several wells to a central point, storage tanks, and other equipment. Note: Natural gas is sometimes extracted from the same wells that are used to extract oil. This is referred to as "associated gas."

2.4.5.2.1.2 Off-Shore Wells

Sea-based facilities used for the extraction of crude oil. This category includes equipment such as gathering lines used to bring the output on shore. Note: Natural gas is sometimes extracted from the same wells that are used to extract oil. This is referred to as "associated gas."

2.4.5.2.1.3 Crude Oil Production from Other Sources

Facilities designed to extract crude oil from other sources.

2.4.5.2.1.4 Gas-Oil Separation Plants

Facilities designed to separate natural gas from crude oil when both are present in the producing reservoir.

2.4.5.2.2 Crude Oil Storage

Facilities for storing crude oil other than storage at refineries.

2.4.5.2.2.1 Strategic Petroleum Reserve

The Strategic Petroleum Reserve is a U.S. Government complex of four sites created in deep underground salt caverns along the Texas and Louisiana Gulf Coast that hold emergency supplies of crude oil.

2.4.5.2.2.2 Crude Oil Bulk Storage

Facilities used for the storage and/or marketing of crude oil. Includes storage tanks, pipes and pumps, control machinery, and other equipment. Does not include storage at refineries.

2.4.5.2.2.2.1 Crude Oil Land-Based Terminals

Land-based terminals for storing crude oil. Generally receives and distributes crude oil via pipeline from either domestic or import suppliers. Includes the valves, piping, control machinery, and other equipment to connect to the pipelines serving it.

2.4.5.2.2.2.2 Crude Oil Marine Terminals

Terminals located on a waterway. Generally receives and distributes crude oil via pipeline, barge, or marine tanker from either domestic or import suppliers. Includes storage tanks, piping, control machinery, and other equipment.

2.4.5.2.3 Crude Oil Transport

Facilities for the transport of crude oil.

2.4.5.2.3.1 Crude Oil Pipelines

Pipeline facilities for the transport of crude oil.

2.4.5.2.3.1.1 Crude Oil Pipeline Segments

Components Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

2.4.5.2.3.1.2 Crude Oil Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

2.4.5.2.3.1.3 Crude Oil Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

2.4.5.2.3.2 Crude Oil Marine Transport

Marine facilities for transporting crude oil.

2.4.5.2.3.2.1 Crude Oil Tankers

Marine vessels for moving crude oil. Includes crude carriers for importing crude oil, tankers and barges for movement of crude oil on coastal and inland waterways.

2.4.5.2.3.2.2 Ports Handling Crude Oil

Port facilities for mooring, docking, loading, and unloading marine vessels with crude oil. Includes shuttle tankers to off-load larger vessels. Note Port may also handle other marine cargo.

2.4.5.2.4 Petroleum Processing

Facilities involved in producing petroleum products from crude oil.

2.4.5.2.4.1 Petroleum Refineries

Facilities that manufacture finished petroleum products (e.g., gasoline, LPG, diesel oil, fuel oil, etc.) from crude oil, natural gas liquids, or other sources. Includes on-site storage.

2.4.5.2.5 Petroleum Product Storage

Facilities for storing petroleum products. Does not include storage at refineries, in production fields, and breakout storage along pipeline routes.

2.4.5.2.5.1 Petroleum Product Bulk Storage

(Also referred to as tank farms.) Facilities used for the storage and/or marketing of petroleum products. Includes storage tanks, pipes and pumps, control machinery, and other equipment. These facilities are not used to store petroleum products for final consumption. Does not include storage at refineries.

2.4.5.2.5.1.1 Petroleum Product Land-Based Bulk Terminal

Large land-based terminals (generally >50,000 barrels storage capacity). Generally receives and distributes its petroleum products via pipeline from either domestic or import suppliers. Includes the valves, piping, control machinery, and other equipment to connect to the pipelines serving it.

2.4.5.2.5.1.2 Petroleum Product Marine Bulk Terminal

Large terminal (generally >50,000 barrels storage capacity) located on a waterway. Generally receives and distributes its petroleum via pipeline, barge, or marine tanker from either domestic or import suppliers.

2.4.5.2.5.1.3 Petroleum Product Bulk Plant

(Also referred to as bulk stations.) Smaller facilities (generally <50,000 barrels storage capacity) used for the storage and/or marketing of petroleum products. Includes storage tanks, pipes and pumps, control machinery, and other equipment. Generally receives and distributes its petroleum via rail tank car and/or truck.

2.4.5.2.5.2 Underground Petroleum Gas Storage

Underground facilities (e.g., salt caverns) used to store large quantities of petroleum gases (e.g., LPG). (Note: Does not include underground storage of natural gas, which is classified elsewhere.)

2.4.5.2.5.3 Petroleum Product Storage for Retail Distribution

Facilities used to store petroleum products for retail distribution to end use customers.

2.4.5.2.5.3.1 Motor Vehicle Fueling Stations

2.4.5.2.5.3.2 Heating Oil Dealers

Facilities for retailing heating oil to consumers with deliveries generally made by truck.

2.4.5.2.5.3.3 Liquefied Petroleum Gas (LPG) Dealers

Facilities for retailing LPG. Deliveries generally made by truck or in consumer-sized tanks.

2.4.5.2.5.4 End User Petroleum Product Storage

Facilities at end user sites (e.g., factories, airports) used for the storage of petroleum products for ultimate end use.

2.4.5.2.5.4.1 Non-military End-User Petroleum Product Storage

Petroleum product storage facilities for non-military users including agriculture, industry, electric utilities, commercial, federal/state/local government facilities.

2.4.5.2.5.4.2 Military End-User Petroleum Product Storage

2.4.5.2.6 Petroleum Product Transport

Facilities for the transport of crude oil and petroleum products.

2.4.5.2.6.1 Petroleum Product Pipelines

Pipeline facilities for the transport of petroleum products.

2.4.5.2.6.1.1 Petroleum Product Pipeline Segments

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

2.4.5.2.6.1.2 Petroleum Product Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

2.4.5.2.6.1.3 Petroleum Product Pipeline Control Centers

Central control facilities that monitor and operate a pipeline(s). Includes SCADA system control centers.

2.4.5.2.6.2 Petroleum Product Marine Transport

Marine facilities for transporting petroleum products.

2.4.5.2.6.2.1 Petroleum Product Tankers

Marine vessels for moving petroleum products. Includes ocean-going tankers for movement of imported and domestic petroleum products, tankers and barges for movement of petroleum products on coastal and inland waterways.

2.4.5.2.6.2.2 Ports Handling Petroleum Products

Port facilities for mooring, docking, loading, and unloading marine vessels with petroleum products. Includes shuttle tankers to off-load larger vessels. Note Port may also handle other marine cargo.

2.4.5.2.6.3 Petroleum Product Rail Transport

Railroad facilities for transporting petroleum products.

2.4.5.2.6.3.1 Railroad Petroleum Tank Cars

Railroad tank cars designed for carrying petroleum products. Note: Railroad tank cars are sometimes used as mobile storage that is, the product is not off-loaded into a stationary tank but is used directly from the tank car.

2.4.5.2.6.4 Petroleum Product Road Transport

Road facilities for transporting petroleum products.

2.4.5.2.6.4.1 Tanker Trucks

Trucks (generally semi-trailers) designed to carry petroleum products.

2.4.5.2.6.4.2 Tanker Truck Loading Racks

Facilities at some storage facilities and refineries that are used to load tanker trucks that deliver petroleum products.

2.4.5.2.7 Petroleum Supporting Facilities

Facilities providing support functions in the petroleum system.

2.4.5.2.7.1 Crude Oil Markets

Business operations that deal in the sale and purchase of crude oil and crude oil futures. Includes centralized exchanges (e.g., NYMEX) and trading houses.

2.4.5.2.7.2 Petroleum Product Markets

2.4.5.2.8 Other Petroleum Facilities

Not elsewhere classified.

2.4.5.3 NATURAL GAS

Facilities involved in the supply, processing, storage, transport, distribution, marketing, and regulation of natural gas.

2.4.5.3.1 Natural Gas Supply

Facilities involved in supplying natural gas.

2.4.5.3.1.1 On-shore Wells

Land-based facilities used for the extraction of natural gas from the ground. A number of wells may be grouped closely together to extract gas from a reservoir. This category includes equipment such as gathering lines used to bring the output of several wells to a central point. Note Natural gas is sometimes extracted from the same wells that are used to extract oil. This is referred to as "associated gas." Natural gas that is produced from wells that do not produce oil is referred to as "non-associated gas."

2.4.5.3.1.2 Off-Shore Wells

(Also referred to as drilling platforms, off-shore rigs.) Sea-based facilities used for the extraction of natural gas. This category includes equipment such as gathering lines used to bring the output on shore.

2.4.5.3.1.3 Natural Gas Production from Other Sources

Facilities designed to produce natural gas from other sources.

2.4.5.3.2 Natural Gas Processing

Facilities that process natural gas.

2.4.5.3.2.1 Natural Gas Processing Plants

Facilities that separate liquid hydrocarbons (other than crude oil e.g., propane) from extracted natural gas, remove moisture and other impurities from gas, and/or add odorants to natural gas.

2.4.5.3.3 Liquefied Natural Gas (LNG) Plants

Facilities involved in LNG.

2.4.5.3.3.1 LNG Liquefaction Plants

Facilities that liquefy natural gas by reducing its temperature to very low levels (-263° F) at atmospheric pressure. Includes specially designed tanks to store the LNG. May include regasification facilities to regasify LNG for injection into pipelines.

2.4.5.3.3.2 LNG Satellite Storage and Regasification Plants

Facilities that store LNG and regasify it for injection into pipelines. Includes specially designed tanks to store the LNG.

2.4.5.3.4 Natural Gas Storage

Facilities for storing natural gas.

2.4.5.3.4.1 Underground Storage Facilities

Natural gas that is stored underground in aquifers, depleted oil and gas reservoirs, salt caverns, and other geologic formations. Includes surface facilities to inject, monitor, and extract gas. These facilities are typically used to meet peak load gas demands. (Note: Does not include LNG, CNG, or LPG storage.)

2.4.5.3.4.2 Above Ground Storage Facilities

Natural gas that is stored in tanks above ground. Includes facilities to inject, monitor, and withdraw gas. (Note: Does not include LNG, CNG, or LPG storage facilities.)

2.4.5.3.4.3 Propane Peak Shaving Facilities

Facilities used by natural gas supplies to store propane for use in meeting peak gas demands.

2.4.5.3.5 Natural Gas Transport

Facilities for moving large volumes of natural gas over long distances.

2.4.5.3.5.1 Natural Gas Transmission Pipelines

Large, high-volume pipelines.

2.4.5.3.5.1.1 Natural Gas Transmission Pipeline Segments

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

2.4.5.3.5.1.2 Natural Gas Transmission Pipeline Compressor Stations

Stations along the length of a transmission pipeline. Includes gas-powered or electric compressors, valves, control systems, and associated equipment.

2.4.5.3.5.1.3 Natural Gas Pipeline Interconnects

Facilities that link one company to another company to transfer gas custody or provide emergency transportation service between companies. This includes facilities such as pipeline segments, valves, or metering and or pressure reduction stations.

2.4.5.3.5.1.4 Natural Gas Pipeline Hub

A market or supply area for pooling and delivery of gas where transactions occur to facilitate the movement of gas between and among interstate pipelines. Transactions can include a change in title of gas ownership, a change in gas transporter, aggregation of gas supply, or other similar items.

2.4.5.3.5.1.5 Natural Gas Receipt/Delivery Metering Stations

Gas custody transfer metering stations along transmission pipelines. Used to monitor the amount of gas that is transported and to provide quantity measurements for billing purposes.

2.4.5.3.5.1.6 Natural Gas Transmission Pipeline Control Centers

Central control facilities that monitor and operate a transmission pipeline(s). Generally includes SCADA system control equipment.

2.4.5.3.5.2 LNG Transport

Facilities to move liquefied natural gas.

2.4.5.3.5.2.1 LNG Tankers

Specially-designed ships for carrying LNG and maintaining very low temperatures. Generally used for imported LNG.

2.4.5.3.5.2.2 LNG Ports

Port facilities designed to handle LNG tankers. Includes mooring facilities, loading and unloading facilities. Includes specially designed storage tanks. Includes regasification equipment to regasify LNG for injection into pipelines.

2.4.5.3.6 Natural Gas Distribution

Facilities, generally owned by local distribution companies (LDCs), to distribute natural gas to final consumers.

2.4.5.3.6.1 City Gate Stations

Measuring, custody transfer, and pressure regulating stations where a natural gas distribution company receives gas from a transmission company and where pressure is reduced and odorant is added to meet distribution network requirements.

2.4.5.3.6.2 Natural Gas Distribution Pipeline Networks

The network of lower pressure pipelines that provide natural gas to consumers.

2.4.5.3.6.3 Natural Gas Distribution Control and Dispatch Centers

These centers control the lower pressure gas distribution system. Includes distribution SCADA systems.

2.4.5.3.6.4 Compressed Natural Gas (CNG) Plants

Facilities that compress natural gas to very high pressures (2,000-5,000 psi) Includes specially designed tanks to store the gas. May include facilities to dispense the gas to smaller tanks (e.g., CNG-fueled vehicles).

2.4.5.3.7 Natural Gas Supporting Facilities

Facilities providing support functions in the natural gas system.

2.4.5.3.7.1 Natural Gas Markets

Business operations that deal in the sale and purchase of natural gas on the wholesale level.

2.4.5.3.8 Other Natural Gas Facilities

Not elsewhere classified.

2.4.5.4 COAL

Facilities involved in the supply, processing, storage, transport, distribution, marketing, and regulation of coal.

2.4.5.4.1 Coal Supply

Facilities involved in supplying coal.

2.4.5.4.1.1 Underground Mines

Coal mines where the coal seam is underground and is accessed through tunnels.

2.4.5.4.1.2 Surface Mines

Coal mines where the coal seam is close to the surface and is mined by stripping away top layers of soil (referred to as overburden). Also called "strip mines" or "open pit mines."

2.4.5.4.2 Coal Processing

Facilities that process coal.

2.4.5.4.2.1 Coal Cleaning Plants

Facilities that process coal to remove mineral impurities, crush and grind to create more uniform size distribution, and/or reduce sulfur content,

2.4.5.4.2.2 Coal Gasification Plants

Facilities that process coal to produce synthetic natural gas.

2.4.5.4.2.3 Coal Liquefaction Plants

Facilities that process coal to produce synthetic liquid fuels (e.g., gasoline, diesel fuel).

2.4.5.4.3 Coal Transport

Facilities for moving large volumes of coal over long distances.

2.4.5.4.3.1 Coal Rail Transport

Rail facilities for transport of coal.

2.4.5.4.3.1.1 Coal Unit Train Routes

Rail lines used by trains that haul only coal.

2.4.5.4.3.1.2 Other Coal Train Routes

Rail lines used by trains that haul coal and other commodities.

2.4.5.4.3.2 Coal Water Transport

Water facilities for transport of coal by ship or barge.

2.4.5.4.3.2.1 Coal Water Transport Routes

Routes for movement of large quantities of coal.

2.4.5.4.3.2.2 Coal Ports

Port facilities for handling large quantities of coal.

2.4.5.4.4 Coal Supporting Facilities

2.4.5.4.4.1 Coal Markets

2.4.5.5 ETHANOL

Facilities involved in the supply, processing, storage, transport, distribution, marketing, and regulation of ethanol.

2.4.5.5.1 Ethanol Feed Material Supply

Facilities involved in supplying feed material (e.g., corn, sugar cane, other biomass) for the production of ethanol.

2.4.5.5.2 Ethanol Production Facilities

Facilities involved in the production of ethanol.

2.4.5.5.3 Ethanol Storage Facilities

Facilities for storing ethanol.

2.4.5.5.4 Ethanol Transport Facilities

Facilities for transporting ethanol primarily tanker trucks.

2.4.5.5.5 Ethanol Blending Facilities

Facilities involved in blending ethanol with gasoline. Frequently done at terminals where tanker trucks are loaded for delivery to motor vehicle fueling stations.

2.4.5.5.6 Ethanol Supporting Facilities

2.4.5.5.6.1 Ethanol Markets

Markets trading in ethanol.

2.4.5.6 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the energy system.

2.4.5.6.1 Federal Energy Agencies

Federal agencies that deal with the energy system including Department of Energy, Federal Energy Regulatory Commission, Department of Transportation, and others.

2.4.5.6.2 State, Local, Regional Energy Agencies

State agencies regulating energy companies operating in their jurisdiction including public utility commissions, environmental agencies, and others.

2.4.5.6.3 Energy Industry Organizations

Industry organizations (e.g., National Electric Reliability Council (NERC), American Petroleum Institute, American Gas Association, etc.) that provide industry-wide support.

2.4.5.6.4 International Energy Organizations

International organizations dealing with global energy issues.

2.4.6 EMERGENCY SERVICES

Assets Involved in Emergency Response Designed to Save Lives, Protect Property and the Environment, Assist in the Management of Disasters (Both Natural and Manmade), and Aid in Recovery.

2.4.6.1 LAW ENFORCEMENT

Assets used by sworn officers to protect the public, enforce the law, conduct criminal investigations, gather evidence, and apprehend perpetrators of crime. Includes local, state, and federal assets.

2.4.6.1.1 Law Enforcement Administrative Offices/Headquarters

Central offices where law enforcement activities in a jurisdiction are managed. Note In many communities, these offices are located in a police station.

2.4.6.1.2 Law Enforcement Facilities

Local facilities used for the day-to-day operation of law enforcement officers. Smaller communities may have only one station serving their jurisdiction. Larger communities may have several stations.

2.4.6.1.3 Specialized Police Units

Facilities housing specially trained officers and their equipment (e.g., bomb squads, tactical units, crime scene investigation units, K-9 units, SWAT teams, federal law enforcement response units).

2.4.6.1.3.1 Bomb Squads

Specialized police units focused on dealing with explosive devices. Generally have specialized training and equipment (e.g., protective suits, robotics).

2.4.6.1.3.2 Tactical Units

Specialized police units focused on dealing with specific situations (e.g., Special Weapons and Tactics [SWAT] teams, gang crimes units). Generally have specialized training and equipment (e.g., automatic weapons, night vision equipment).

2.4.6.1.3.3 Crime Scene Investigation Units

Specialized police units focused on gathering evidence and information at the scene of an incident. Generally have specialized training and equipment (e.g., photographic equipment, fingerprint equipment).

2.4.6.1.3.4 K-9 Units

Specialized police units that have specially-trained dogs for tracking, explosives detection, and other functions.

2.4.6.1.3.5 Marine and Port Law Enforcement Units

Units specialized in water law enforcement operations (e.g., drug interdiction, smuggling). Includes supporting facilities for vessels (e.g., docks, fueling stations for police boats).

2.4.6.1.3.6 Air Law Enforcement Units

Units specialized in providing law enforcement air services. Includes supporting facilities for aircraft (e.g., landing strips, heliports).

2.4.6.1.3.7 Other Specialized Units

Other specialized police units.

2.4.6.1.4 Crime Laboratories

Facilities equipped to do forensic investigations.

2.4.6.1.5 Police Training Facilities

Facilities used for law enforcement officer training. Includes police academies, firing ranges.

2.4.6.1.6 Law Enforcement Maintenance Facilities

Facilities used to maintain law enforcement equipment and vehicles.

2.4.6.1.7 Correctional Facilities

Local facilities for the treatment of offenders through a system of penal incarceration, rehabilitation, probation, and parole, or the administrative system by which these are effectuated.

2.4.6.1.8 Police Communication Facilities

Communication equipment (e.g., radios, transmitter and repeater towers, communication centers) used by law enforcement. Note This equipment is frequently shared with other emergency response organizations and government public service agencies.

2.4.6.1.9 Law Enforcement Information Systems

Computers, databases, and other information technology used in law enforcement.

2.4.6.1.10 Mobile Response Units

Vehicles used in law enforcement activities. Includes police cruisers, squadrons, mobile command centers, marine vessels, aircraft.

2.4.6.1.11 Intelligence Fusion Centers

Multi-agency collection point for cross-connecting criminal information data. Center (regional or state) for collection and analysis of information and intelligence for homeland security purposes.

2.4.6.2 FIRE, RESCUE, AND EMERGENCY SERVICES

Assets used by trained personnel in fire suppression, fire prevention, hazardous materials (HazMat) control, emergency rescue, building code enforcement, public fire safety education. Includes assets used to respond to chemical/biological/radiological incidents. Includes local, state, and federal assets.

2.4.6.2.1 Fire, Rescue, and Other Emergency Administrative Offices

Central offices where fire and hazmat activities in a jurisdiction are managed. Note: In many communities these offices are located in a fire station.

2.4.6.2.2 Fire Stations

Local facilities used for the day-to-day operations, staffed by response personnel. Includes vehicle bays for fire apparatus, sleeping quarters for crews.

2.4.6.2.3 Specialized Emergency Response Units

Facilities housing specially trained officers and their equipment (e.g., hazmat units, chemical/biological/radiological response units, marine rescue and fireboat units, air rescue units).

2.4.6.2.3.1 HAZMAT Units

Units specialized in responding to hazardous materials emergencies.

2.4.6.2.3.2 Marine Emergency Units

Units specialized in water emergency operations (e.g., water rescue, firefighting). Includes supporting facilities for emergency vessels (e.g., docks, fueling stations for fireboats).

2.4.6.2.3.3 Air Emergency Units

Units specialized in providing emergency air services. Includes supporting facilities for aircraft (e.g., landing strips, heliports).

2.4.6.2.3.4 Technical Rescue Units

Units specific to structural collapse, trench, confined space, and rope rescue.

2.4.6.2.3.5 Other Specialized Fire and Emergency Units

Other specialized units.

2.4.6.2.4 Fire Investigation Laboratories

Facilities equipped to do forensic investigations on fires.

2.4.6.2.5 Fire, Rescue, and Other Emergency Training Facilities

Facilities used for fire and hazmat training. Includes fire academies, training sites.

2.4.6.2.6 Fire, Rescue, and Other Emergency Maintenance Facilities

Facilities used to maintain equipment and vehicles.

2.4.6.2.7 Fire, Rescue, and Other Emergency Communication Facilities

Communication equipment.

2.4.6.2.7.1 Fire Department Communication Resources

Communication equipment (e.g., radios, transmitter and repeater towers, communication centers) used by fire and emergency teams. Note This equipment is frequently shared with other emergency response organizations.

2.4.6.2.7.2 Fire Alarm Systems

Equipment used to convey fire alarms to a central dispatching center. Includes alarm equipment on public and private property, central alarm receiving center.

2.4.6.2.8 Fire, Rescue, and Other Emergency Apparatus

Fire apparatus and other vehicles used in fire and hazmat activities. Includes pumpers, ladder trucks, mobile command centers, marine vessels, aircraft.

2.4.6.3 SEARCH AND RESCUE

Includes Urban Search and Rescue and Wildlands Search and Rescue. Assets used by teams that specialize in the location, extrication, and initial medical stabilization of victims trapped in confined spaces, underwater, in caves, in structures, in wildlands, and other settings. Frequently involved with

structural collapse. Assets may be operated by state or local agencies, the Federal Emergency Management Agency (FEMA), or the U.S. Coast Guard.

2.4.6.3.1 Search and Rescue Stations

Facilities housing search and rescue response personnel and their equipment. These stations are intended to provide immediate response capability.

2.4.6.3.2 Search and Rescue Supply Facilities

Facilities stockpiling search and rescue equipment, communication gear, provisions. These facilities are designed to store larger quantities of supplies that are ready for rapid deployment to site of an incident. If local agency, may be attached to a fire station or specialized fire unit. If FEMA or USCG, located at specific facilities around the country.

2.4.6.3.3 Search and Rescue Training Facilities

Facilities used for search and rescue training. Includes academies, training sites.

2.4.6.4 EMERGENCY MEDICAL SERVICES

Includes assets designed to provide medical care at the scene of an incident and during transport of victims to hospitals. (Does not include hospital assets, which are classified elsewhere.) Includes local, state, and federal assets.

2.4.6.4.1 Emergency Medical Services Administrative Operations

Central offices where EMS activities in a jurisdiction are managed. Other functions include billing, report storage, policy development, and administration Note In many communities these offices are located with fire department offices and/or in a fire station.

2.4.6.4.2 Emergency Medical Services Operations

Facilities used for the day-to-day operation of EMS crews. Includes vehicle bays for ambulances, sleeping quarters for paramedics. Includes heliports for medivac helicopters. Includes vehicles used in emergency medical activities Such as ambulances, mobile intensive care units, medivac helicopters.

2.4.6.4.3 Specialized Emergency Medical Services Operations

Facilities housing specially trained medical personnel and their equipment (e.g., National Disaster Medical System units, Disaster Medical Assistance Teams, Disaster Mortuary Operational Response Teams).

2.4.6.4.4 Emergency Medical Services Training Facilities

Facilities used to train EMS personnel.

2.4.6.4.5 Emergency Medical Services Maintenance Facilities

Facilities used to maintain EMS equipment and vehicles.

2.4.6.4.6 Emergency Medical Services Communication Facilities

Communication equipment (e.g., radios, transmitter and repeater towers, communication centers) used by emergency medical crews. Note This equipment is frequently shared with other emergency response organizations.

2.4.6.4.7 Emergency Departments

Department of a hospital that provides initial care and stabilization for both urgent and nonurgent patients who may arrive by private or public vehicle. This department acts as the forefront receiver for the patients from emergency responders, in addition to medical control and communication. It also provides equipment, supply and pharmaceutical caches, housing unit for medical personnel and nonmedical support members, and the place that augments the final treatment plan (e.g., transfer, admission, treatment and discharge, operating room).

2.4.6.4.8 Emergency Logistics Storage and Staging Areas

Pre-identified storage and staging areas for emergency relief supplies and equipment.

2.4.6.5 EMERGENCY MANAGEMENT

Assets providing mitigation, prevention, preparedness (including planning, training, and exercising), response (including coordination, resource acquisition, and resource prioritization), recovery efforts, and public information before, during, and after disasters and catastrophic events.

2.4.6.5.1 Emergency Management Administrative Offices

Central offices where emergency management planning and administrative activities in a jurisdiction are carried out.

2.4.6.5.2 Emergency Command and Control Centers

Assets used to establish and maintain control of an emergency incident.

2.4.6.5.2.1 Public Safety Answering Points

Centers for receiving emergency calls and dispatching responders. Generally handles law enforcement, fire and hazmat, and emergency medical operations. Also referred to as "911 Centers."

2.4.6.5.2.2 Emergency Operations Centers

Facilities activated during an emergency. Includes communication capability, information access.

2.4.6.5.2.3 Mutual Aid and Multi-Agency Coordination Systems

Communication facilities designed to connect agencies in different jurisdictions and allow for coordinated response to emergencies. May be operated in conjunction with other communication systems.

2.4.6.5.3 Emergency Operations Information Systems

Computers, databases, and other information technology used in emergency management.

2.4.6.6 OTHER EMERGENCY SERVICES

Facilities and assets not elsewhere classified.

2.4.7 INFORMATION TECHNOLOGY

The IT Sector Conducts Operations and Services That Provide for the Design, Development, Distribution, and Support of IT Products (Hardware And Software) and Operational Support Services That are Essential or Critical to the Assurance of National and Economic Security and Public Health, Safety, and Confidence. These Hardware and Software Products and Services Are Limited to Those Necessary to Maintain or Reconstitute the Network and Its Associated Services.

2.4.7.1 IT PRODUCTS AND SERVICES

2.4.7.1.1 Networking Elements

The IT Sector conducts operations and services that support the production of network access and communication devices, security hardware, routing and switching equipment, and wireless networking products.

2.4.7.1.2 Security and Policy Compliance Elements

The IT Sector conducts operations and services that support production of software for cyber security and policy compliance elements.

2.4.7.1.3 Operating System Services Software

The IT Sector conducts operations and services that support the production of software that communicates with computer hardware. Operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers (e.g., Microsoft, Unix, Apple, IBM, Supercomputing, Render farms, Mainframes, servers, workstations, desktops, handheld devices, real-time systems, embedded systems, and components).

2.4.7.1.4 Business Operations, Database, and Business Intelligence Software and Services

The IT Sector conducts operations and services that support the production of software that: manages industrial processes, customer care, and retail operations; controls the organization, storage, retrieval, security and integrity of data in a database; and enables analytics, data mining, data warehousing, forecasting, querying, reporting, and data analysis.

Routing/Peering Security Operations and Incident Management

2.4.7.1.5 Managed Network/Data Center Elements

The IT Sector conducts operations and services that support the production of services for outsourced functions for a particular area of IT on a long-term basis (e.g., managed data center services, managed security services, managed storage services, managed network services, technical support services, application service provider services, collocation services, custom software development, and systems integration).

2.4.7.1.6 Semiconductors

The IT Sector conducts operations and services that support the production of electronic devices used by or incorporated into other hardware equipment.

2.4.7.1.7 Storage Hardware, Software, and Services

The IT Sector conducts operations and services that support the production of large-scale storage systems, including magnetic and optical data storage systems.

2.4.7.1.8 Lifecycle Product and Service Integrity, Certification, and Other Assurance Functions and Mechanisms

The IT Sector conducts operations and services that support steps taken by an organization to ensure that the system is designed, developed, and maintained using formalized and rigorous controls and standards.

2.4.7.1.9 DNS Software

The It sector conducts operations and services that support the production of software designed to operate and manage DNS registry, provisioning and resolution

2.4.7.1.10 Develop and Provide Secure Appliances that Support DNS

The IT Sector conducts operations and services that support the production of appliances that support DNS functions. Examples include (but are not limited to) firewalls, servers, network management appliances, and specialized DNS appliances.

2.4.7.1.11 Produce and Provide Control Systems Products, Supervisory Control and Data Acquisition (SCADA), and Other Automation Systems

The IT Sector conducts operations and services that support the production of hardware and software designed to monitor and control sensitive processes and physical functions. This hardware includes distributed control systems (typically used within a single processing plant or over a small geographic area) and supervisory control and data acquisition (SCADA) systems (typically used for large, geographically dispersed systems).

2.4.7.2 INCIDENT MANAGEMENT CAPABILITIES

The IT Sector develops, provides, and operates incident management capabilities for itself and other sectors that are essential or critical to the assurance of national and economic security and public health, safety, and confidence.

2.4.7.2.1 Provide Preventative Guidance, Best Practices, Simulation, and Testing

The IT Sector conducts operations and services that support the production of security services, such as penetration testing, risk assessments, system testing, disaster recovery services, and incident response services, and damage assessments.

2.4.7.2.2 Provide and Operate Indications, Alerting and Warning Capabilities

The IT Sector conducts operations and services that support the management of cyber security emergencies through indication, alert, and warning capabilities.

2.4.7.2.3 Provide and Operate Operation Centers and Teams

The IT Sector conducts operations and services that support the management of emergencies in its own systems, and, if requested, facilitate crisis management in other sector's critical infrastructure. Also, these management capabilities include actionable response to emergencies.

2.4.7.2.4 Provide and Participate in Information Sharing, Situational Awareness, and Information Fusion Activities

The IT Sector conducts operations and services that support the overarching process of managing the flow of information and intelligence across all levels and sectors of the public and private sectors to support the rapid identification of emerging cyber-related threats and other circumstances requiring intervention by government and private-sector authorities. This process supports the implementation of risk-based, information-driven prevention, response, and consequence management programs. Simultaneously, it supports efforts to address immediate and/or emerging, threat-related circumstances and events.

2.4.7.2.5 Coordinate and Provide Response, Recovery and Reconstitution

The IT Sector conducts operations and services that support operational activities related to critical infrastructure protection security measures, including incident response, recovery, and reconstitution from events both man-made and naturally occurring. For example, the IT Sector's services include (but are not limited to) backup/recovery, retention, archival, capacity management, and continuity of operations (COOP). Like many other sectors, the IT Sector supports also response, recovery and reconstitution through corporate social responsibility and community support activities, which occur at many levels (e.g., international, national, organization, volunteer).

2.4.7.3 INTERNET-BASED CONTENT, INFORMATION, AND COMMUNICATIONS SERVICES

The IT Sector produces and provides technologies, services, and infrastructure that deliver key content, information and communications capabilities that are essential or critical to the assurance of national and economic security and public health, safety, and confidence.

2.4.7.3.1 Provide and Support Critical National Security Emergency Preparedness (NS/EP), and Law Enforcement Functions

The IT Sector conducts and operates services that support preparedness and response to all kinds of emergencies. Capabilities may also include NS/EP communications to government support functions during an emergency.

2.4.7.3.2 Provide Mapping and Geospatial Data and Imagery Services to Support NS/EP Functions

The IT Sector conducts and operates services that provide Mapping and Geospatial data and imagery services to support NS/EP functions.

2.4.7.3.3 Provide and Operate Critical Web Search Capabilities

The IT Sector conducts and operates services that support searches for resources on the World Wide Web.

2.4.7.3.4 Provide and Operate Critical e-Commerce and Financial Transaction Services

The IT Sector conducts and operates services that provide and operate Critical e-Commerce and Financial Transaction Services. Critical e-Commerce refers to business that is done online that if disrupted in anyway would cause a significant impact to any of the Critical sectors. Key services provided by the sector include transaction software, transaction settlement, and Secure Socket Layers (SSL) Certificate Authorities. SSL enables secure e-commerce and communications for Web sites, intranets, and extranets.

2.4.7.3.5 Provide Communications and Collaboration Services (e.g., VoIP conferencing, P2P, IM, etc.

The IT Sector conducts and operates services that provide and operate Communications and Collaboration Services such as instant messaging, online communities, online meetings, calendar sharing, Voice over Internet Protocol (VoIP) conferencing, and Peer to Peer (P2P) file sharing. .

2.4.7.4 DOMAIN NAME RESOLUTION SERVICES

The IT Sector provides and operates domain registration services, top-level domain (TLD)/root infrastructures, and resolution services that are essential or critical to the assurance of national and economic security and public health, safety, and confidence.

2.4.7.4.1 Provide and Operate Domain Name Registry/Registrar Services

The IT Sector conducts and operates services that provide Domain Name Registry/ Registrar Services. Domain Name Registry Services translate alphabetic domain names into an IP address.

2.4.7.4.2 Provide and Operate Root, TLDs, and Lower Level Domains

The IT Sector conducts and operates services that provide Root Domains, Top Level Domains (TLDs), and Lower Level Domains. The final dot in an IP address is known as the root domain or TLD (e.g., .com, .org). A root name server is a DNS server that answers requests for the root namespace domain, and redirects requests for a particular top-level domain to that TLD's name servers. There are currently 13 root name servers. All other DNS servers are installed at lower levels of the hierarchy and maintain only certain pieces of the overall database.

2.4.7.4.3 Provide DNS Provisioning

The IT Sector conducts and operates DNS provisioning services.

2.4.7.4.4 Provide Name Resolution Services for Client Hosts

The IT Sector conducts and operates Domain Name Resolution Services for Client Hosts that provide distributed and delegated resolution of DNS queries by client hosts.

2.4.7.4.5 Provide Security and Incident Management for DNS Operations

The IT Sector conducts and operates services that provide security and incident management for DNS operations. The security and incident management services may be provided through indication, alert, warning capabilities, response, and recovery services.

2.4.7.5 IDENTITY MANAGEMENT AND ASSOCIATED TRUST SUPPORT SERVICES

The IT Sector produces and provides technologies, services, and infrastructure to ensure the identity, authenticate, and authorize entities and ensure confidentiality, integrity, and availability of devices, services, data, and transactions that are essential or critical to the assurance of national and economic security and public health, safety, and confidence.

2.4.7.5.1 Provide Organizational Digital Identity and Certificate Provisioning Services

The IT Sector conducts operations and services that support the incorporation and verification of legitimate organizational digital identities.

2.4.7.5.2 Provide Individual Digital Identity and Certificate Provisioning Services

The IT Sector conducts operations and services that support the incorporation and verification of legitimate individual digital identities.

2.4.7.5.3 Provide Organizational Revocation Services for Digital Identity and Certificate

The IT Sector conducts operations and services that support the incorporation and verification of legitimate individual digital identities.

2.4.7.5.4 Provide Individual Revocation Services for Digital Identity and Certificate

The IT Sector conducts operations and services that ensure secure email, file transfer, and Web interactions in a manner that is private, reliable, and efficient.

2.4.7.5.5 Operate Infrastructure for Trusted Root Certificate Authorities

The IT Sector conducts operations and services that enable certificate authorities (including root certificate authorities) to verify and validate digital certificates on a network.

2.4.7.5.6 Ensure the Chain of Trust and the Ability to Attest to It

The IT Sector provides software that establishes trust between the hardware platform and the user applications.

2.4.7.6 INTERNET ROUTING, ACCESS AND CONNECTION SERVICES

The IT Sector (in close collaboration with the Communications Sector) provides and supports Internet backbone infrastructures, points of presence, peering points, local access services and capabilities that are essential or critical to the assurance of national and economic security and public health, safety and confidence.

2.4.7.6.1 Provide and Operate Critical Collocation Facilities/Carrier Hotelling

The IT Sector provides centers that facilitate interconnection between communications carriers. These locations house critical carrier equipment and data servers.

2.4.7.6.2 Provide and Operate Critical Internet Exchange Fabric

The IT Sector provides direct peering between ISPs to maintain efficiency and fault-tolerance in distributing data traffic.

2.4.7.6.3 Provide and Operate Critical Local Access Capabilities

DSL to CO DSL to neighborhood Fiber to homes Cable Fixed and mobile wireless Satellite

2.4.7.6.4 Provide and Operate Critical Internet Backbone/Core Services and Capabilities

Includes manage, monitor and maintain AS-AS Routing/Peering Assignment and configuration management

2.4.7.6.5 The IT Sector provides near real-time response to track exploits and compromised NSP and ISP networks, and mitigates effects to these networks

2.4.7.6.6 Provide and Support Critical National Security, Emergency Preparedness, and Law Enforcement Functions

The IT Sector provides priority services to the government to improve performance for essential communications during times of emergency and in response to Law enforcement/CALEA requirements and requests.

2.4.7.6.7 Provide Address and ASN Allocation Services

The IT Sector provides allocation of Internet number resources used in BGP routing.

2.4.8 Establishments Primarily Engaged in Operating, Maintaining, and/or Providing Access to Facilities for the Transmission of Voice, Data, Text, Sound, and Video. A Communications Facility May Be Based on a Single Technology or a Combination of Technologies.

2.4.8.1 WIRED COMMUNICATIONS

Establishments engaged in operating and maintaining switching and transmission facilities to provide point-to-point communications via landlines (i.e., copper wire, fiber optic), microwave, or a combination of landlines and satellite linkups or furnishing telegraph and other non-vocal communications using their own facilities. Includes facilities termed the Public Switched Telephone Network (PSTN).
Other Coal Train Routes

2.4.8.1.1 Switching Facilities

Nodes in the Communications network where lines and trunks are connected to form a communication path.

2.4.5.4.3.2 Coal Water Transport

2.4.8.1.1.1 Local Exchange Facilities

Also called end offices, central offices. Switching facilities that serve a local area. Lines from homes and businesses terminate in a local exchange facility (end office, central office). These facilities connect customers within the area together. Typically, calls within an exchange area served by these facilities are considered local calls.

2.4.8.1.1.2 Local and Access Tandem Switching Facilities

Switching facilities that concentrate and distribute call traffic. They generally connect higher volume trunk lines to each other. Local tandem switches generally connect trunk lines from one local exchange to another within a metropolitan area. Access tandem switches generally connect trunk lines from local exchange facilities into the long distance network.

Routes for movement of large quantities of coal.

2.4.8.1.1.3 Inter-Exchange Switching Facilities

Switching facilities that handle long distance traffic. Sometimes referred to as "toll" switches. A facility may house the switches owned by competing telephone service providers that have a "point-of-presence" at the facility.

2.4.8.1.2 Signaling Network Facilities

Facilities that carry network signaling information (e.g., address, supervision, switching information) that is used to handle call traffic. These facilities may be co-located with or be separate from switching facilities.

2.4.8.1.2.1 Signaling System (SS7) Centers

Facilities where signaling equipment is installed and operated.

2.4.8.1.2.2 Signaling Links

Lines or other connection routes carrying network signaling information.

2.4.8.1.3 Transport Facilities

Links in the Communications network that carry call information. Includes copper wire, fiber optic, microwave and other technologies. Includes high volume trunk lines and individual customer lines.

2.4.8.1.3.1 Trunk Line Links

Communication lines between switching facilities. Generally carry large volume of call traffic from many users simultaneously. The links include physical lines (copper wire, fiber optic), microwave connections, and other transmission technologies.

2.4.8.1.3.2 Submarine Cables

Submarine Cables Trunk lines laid in the ocean and across lakes, bays, and rivers to connect across waterways. Also includes cable landing stations where the lines come ashore and are connected to the telephone network.

2.4.8.1.3.3 Customer Lines

Communication lines linking end use customers to a switching facility.

2.4.8.1.4 Operations Management

2.4.8.1.4.1 Network Operations Centers

Central facilities from which large portions of the telephone network are monitored and managed. In general, each Communications company has its own network operations center. Larger companies may have more than one center, including backup facilities.

2.4.8.1.4.2 Call Center / Customer Service Center

2.4.8.1.4.3 Billing Centers

2.4.8.1.4.4 Emergency Operations Centers

2.4.8.1.4.5 Data Centers

2.4.8.1.5 Wired Telecommunication Service Provider Facilities

Administrative facilities of companies that own and operate wired Communications networks.

2.4.8.1.6 Access Infrastructure

2.4.8.1.6.1 End offices

2.4.8.1.6.2 Internet Service Provider Point of Presence

2.4.8.1.6.3 Access Tandems

2.4.8.1.6.4 Local Loops and Metro Rings

2.4.8.1.7 Wireline Communications Customer Hosting Center Facilities

2.4.8.1.8 Cable

2.4.8.1.8.1 Business/Operations Office

2.4.8.1.8.2 Headend

2.4.8.1.8.3 Distribution Hubs

2.4.8.1.8.4 Fiber Nodes

2.4.8.2 WIRELESS COMMUNICATIONS

Establishments primarily engaged in operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound, and video using wireless Communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Note Does not include satellite Communications systems, which are itemized below.

2.4.8.2.1 Cellular Telephone Facilities

Establishments engaged in operating cellular Communications. These facilities generally provide two-way communication capability.

2.4.8.2.1.1 Cell Phone Towers

Also referred to as cell base stations. Towers, receivers, and transmitters that handle cell phone traffic within a relatively small area or cell.

2.4.8.2.1.2 Cell Phone Switching Centers

Also referred to as mobile telephone switching offices. A facility that controls the operation of all the cell phone towers in an area and connects the wireless telecommunication system to the wired telecommunication network.

2.4.8.2.1.3 Cellular Phone Network Operations Centers

Central facilities from which large portions of a cell phone network, perhaps nationwide, are monitored and managed. In general, each wireless Communications company has its own network operations center. Larger companies may have more than one center, including backup facilities.

2.4.8.2.1.4 Mobile Switching Office

2.4.8.2.2 Pager Facilities

Establishments engaged in operating pager communications. These facilities generally provide one-way text message communication capability although some provide two-way message capability. Note: some cellular telephone companies provide paging services.

2.4.8.2.2.1 Pager Towers

Towers, receivers, and transmitters that handle pager traffic.

2.4.8.2.2.2 Pager Operations Centers

Facilities that accept messages to be sent and direct them to pager towers for transmittal.

2.4.8.2.3 Wireless Telecommunication Service Provider Facilities

Administrative facilities of companies that own and operate wireless Communications networks.

2.4.8.2.4 Operations Management

2.4.8.2.4.1 Network Operations Centers

2.4.8.2.4.2 Call Center / Customer Service Center

2.4.8.2.4.3 Billing Centers

2.4.8.2.4.4 Emergency Operations Centers

2.4.8.2.4.5 Data Centers

2.4.8.3 SATELLITE COMMUNICATIONS

Establishments primarily engaged in providing point-to-point Communications services to other establishments in the Communications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite Communications. Communications conveyed by satellite include voice, data, video, television, radio, text, sound, and other material.

2.4.8.3.1 Satellite Communications Ground Stations

Facilities that transmit and receive signals from satellites and process communication traffic. These stations can also provide the connections to other communication networks (e.g., telephone, broadcast television).

2.4.8.3.2 Operations Management

Central facilities from which multiple ground stations are monitored and managed.

2.4.8.3.2.1 Network Operations Centers

2.4.8.3.2.2 Satellite Operations Centers

2.4.8.3.2.3 Call Centers

2.4.8.3.2.4 Billing Centers

2.4.8.3.2.5 Emergency Operations Centers

2.4.8.3.2.6 Data Centers

2.4.8.3.3 Satellite Control Stations

Facilities that provide monitoring and control of satellite orbits, orientation, performance, and related parameters. May be co-located with network operations centers.

2.4.8.3.4 Satellite Telecommunication Ground Links

Ground communication links in the satellite Communications network that connect ground stations, network operations centers, satellite control stations and administration offices. These links also connect ground stations to end user facilities. Includes copper wire, fiber optic, microwave and other technologies.

2.4.8.3.5 Communication Satellites

The network of low earth orbit and geostationary orbit communication satellites.

2.4.8.3.6 Satellite Telecommunication Service Provider Facilities

Administrative facilities of companies that own and operate satellite Communications networks.

2.4.8.3.7 User Terminals

2.4.8.3.7.1 Broadband Global Area Network

2.4.8.3.7.2 Very Small Aperture Terminal

2.4.8.3.7.3 Satellite Phones

2.4.8.4 INTERNET

Facilities and establishments engaged in the operation of the Internet.

2.4.8.4.1 Internet Service Providers

Establishments providing clients access to the Internet and generally providing related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity.

2.4.8.4.2 Points of Presence

Locations where Internet Service Providers have equipment to connect their customers to the rest of the Internet. Such equipment includes routers, digital/analog aggregators, servers, and switches. Larger ISP have multiple POPs. The POP may be located at a facility owned by a Communications company. More than one ISP may have POP equipment at the same location.

2.4.8.4.3 Network Access Points

Points of access to the Internet used by ISPs and providers of Internet regional and local subnets. NAPs provide a junction where ISPs exchange traffic and routes. NAPs provide a means of direct connection to the Internet, rather than an intermediate point of exchanging commercial traffic.

2.4.8.4.4 Peering Points

Points where ISPs, usually the larger ones, exchange traffic under peering arrangements. Frequently peering points are located at network access points.

2.4.8.4.5 Domain Name Servers

The set of computers and databases that translate Internet domain names, which are alphabetic, into numerical IP addresses. Used to locate each computer on the Internet.

2.4.8.4.6 Internet Backbone Links

The high speed, high capacity communication lines (primarily fiber optic but also other technologies) connecting major metropolitan areas.

2.4.8.4.7 Web Search Portals

Establishments operating web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format.

2.4.8.5 INFORMATION SERVICES

Facilities engaged in producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data.

2.4.8.5.1 Broadcasting

Facilities that create content or acquire the right to distribute content and subsequently broadcast the content.

2.4.8.5.1.1 Radio Broadcasting

Facilities operating radio broadcasting studios and facilities for the transmission of aural programming by radio to the public, to affiliates, or to subscribers.

2.4.8.5.1.1.1 Radio Network Headquarters

Establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public.

2.4.8.5.1.2 Television Broadcasting

2.4.8.5.1.2.1 Network Headquarters

2.4.8.5.1.2.2 Local Broadcast Stations

2.4.8.5.1.2.3 National News and Sports Transponders

2.4.8.5.1.2.4 News Vehicles

Facilities primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.

2.4.8.5.1.3 Cable and Other Subscription Programming

2.4.8.5.1.3.1 Network Headquarters

2.4.8.5.1.3.2 Local Broadcast Stations

2.4.8.5.1.3.3 National News and Sports Transponders

2.4.8.5.1.3.4 News Vehicles

Advanced telecommunication networks. To be developed.

2.4.8.6 NEXT GENERATION NETWORKS

Organizations that provide technical, operation, pricing, and business oversight and support to the various components of the Communications system.

2.4.8.7 REGULATORY, OVERSIGHT, INDUSTRY ORGANIZATIONS

Federal agencies dealing with Communications including Federal Communications Commission, etc.

2.4.8.7.1 Federal Communications Agencies

State, local, and regional agencies that deal with Communications in their jurisdictions.

2.4.8.7.2 State, Local, Regional Communications Agencies

Industry organizations that provide industry-wide support.

2.4.8.7.3 Communications Industry Organizations

Industry organizations that provide industry-wide support.

2.4.8.7.4 International Communications Organizations

International organizations dealing with Communications issues

2.4.8.8 OTHER TELECOMMUNICATION FACILITIES

Telecommunication facilities not elsewhere classified.

2.4.9 POSTAL AND SHIPPING

Assets Related to the Delivery of Letters and Small Parcels.

2.4.9.1 U.S. POSTAL SERVICE

Assets related to the U.S. Postal Service (USPS). Includes facilities operated by contractors on behalf of the USPS.

2.4.9.1.1 USPS Administrative Offices

Includes USPS headquarters, district offices, area offices, and engineering offices.

2.4.9.1.2 USPS Information System Centers

Data centers that house information systems or are the location from which information systems are deployed. Includes information system service centers, field computing service centers, and national network service centers. Information systems refer to databases and computing resources.

2.4.9.1.3 USPS Mail Centers

Centralized facilities for sorting and processing mail.

2.4.9.1.3.1 USPS International Exchange Office

Facilities that receive, concentrate, transfer, dispatch, and distribute mail internationally.

2.4.9.1.3.2 USPS Processing and Distribution Centers

Mail facilities that process and dispatch part or all of both incoming and outgoing mail for a designated service area.

2.4.9.1.3.3 USPS Airport Mail Centers

Mail facilities at airports that receive, concentrate, transfer, dispatch, and distribute mail transported by air.

2.4.9.1.3.4 USPS Bulk Mail Centers

Highly mechanized mail processing plants that distribute standard mail in piece and bulk form.

2.4.9.1.3.5 USPS Other Mail Centers

Other centralized mail processing facilities (e.g., Priority Mail Processing Centers).

2.4.9.1.4 USPS Retail Centers

Facilities serving a specific local area to receive mail and provide other postal services (i.e., Post Office, retail store fronts, etc.).

2.4.9.1.5 USPS Delivery Units

Facilities serving a specific local area to deliver mail (i.e., Post Office, other Delivery Units).

2.4.9.1.6 USPS Vehicle Maintenance Facilities

Centralized facilities that provide vehicle maintenance support to a specific local area.

2.4.9.2 COURIERS

Commercial companies providing delivery of letters and parcels (e.g., United Parcel Service, Federal Express, DHL, Airborne, etc.).

2.4.9.2.1 Courier Administrative Offices

Includes courier company headquarters and regional offices.

2.4.9.2.2 Courier Information System Centers

Data centers that house information systems or are the location from which information systems are deployed. Information systems refer to databases and other computing resources.

2.4.9.2.3 Courier Processing Centers

Centralized facilities for sorting and processing letters and parcels. Some vehicle maintenance might also be performed at these centers.

2.4.9.2.3.1 Courier International/National Hub

Facilities at airports that receive, concentrate, transfer, dispatch, and distribute letters and parcels internationally and have reach to all hubs and gateways.

2.4.9.2.3.2 Courier Regional Hub

Facilities that receive, concentrate, transfer, dispatch, and distribute letters and parcels primarily within a region, but may also have reach to other regional hubs. These can be at air facilities, trucking hubs, or a combination of both.

2.4.9.2.3.3 Courier Air Gateway

Facilities at airports that receive, concentrate, transfer, dispatch, and distribute letters and parcels via air, truck, or rail for transport between Regional Hubs and Pick up / Delivery Stations.

2.4.9.2.3.4 Courier Pick up/Delivery Station

Local facilities at that receive, concentrate, transfer, dispatch, and distribute letters and parcels to / from customers.

2.4.9.2.4 Courier Retail Facility

Facilities serving a specific local area to collect letters and parcels and provide other customer services.

2.4.9.2.5 Courier Aircraft Maintenance Facility

Centralized facilities that provide aircraft maintenance support.

2.4.9.3 OTHER POSTAL AND SHIPPING FACILITIES

Other postal and shipping facilities not elsewhere classified.

2.4.10 HEALTHCARE AND PUBLIC HEALTH

Assets Related to the Provision of Health-Related Services to Individuals (Generally Referred to as Healthcare), the Provision of Health-Related Services to Populations Including the General Community, at the Workplace, at Academic Institutions, and in the Military (Generally Referred to as Public Health), and the Provision of Health-Related Supporting Services. Includes Public and Private Facilities.

2.4.10.1 DIRECT PATIENT HEALTHCARE

Facilities providing healthcare services to individuals including diagnosis and treatment of injuries and diseases.

2.4.10.1.1 Hospitals

Facilities providing medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients.

2.4.10.1.1.1 General Medical and Surgical Hospitals

Hospitals primarily engaged in providing diagnostic and medical treatment (both surgical and nonsurgical) to inpatients with any of a wide variety of medical conditions.

2.4.10.1.1.1.1 Private and Private Not-for-profit General Medical and Surgical Hospitals

Hospitals operated by private organizations, both profit and non-profit.

2.4.10.1.1.1.2 Federal General Medical and Surgical Hospitals

Hospitals operated by government organizations (e.g., Veterans hospitals, community hospitals).

2.4.10.1.1.1.3 State, Local, and Tribal General Medical and Surgical Hospitals

2.4.10.1.1.2 Psychiatric and Substance Abuse Hospitals

Hospitals primarily engaged in providing diagnostic, medical treatment, and monitoring services for inpatients who suffer from mental illness or substance abuse disorders.

2.4.10.1.1.2.1 Private and Not-for-profit Psychiatric and Substance Abuse Hospitals

Hospitals operated by private organizations, both profit and non-profit.

2.4.10.1.1.2.2 Federal Psychiatric and Substance Abuse Hospitals

Hospitals operated by government organizations (e.g., Veterans hospitals).

2.4.10.1.1.2.3 State, Local, and Tribal Psychiatric and Substance Abuse Hospitals

2.4.10.1.1.3 Children's Hospitals

Hospitals primarily engaged in providing diagnostic and medical treatment to children.

2.4.10.1.1.4 Specialty Hospitals

Hospitals primarily engaged in providing diagnostic and medical treatment to inpatients with a specific type of disease or medical condition (e.g., cancer hospitals, orthopedic hospitals).

2.4.10.1.1.5 Critical Access Hospitals

Those hospitals that receive funding and support from Medicare that are located in rural and mountainous regions that do not have access to traditional hospital systems. These Critical Access Hospitals may not even be staffed by a physician 24 hours a day. These hospitals have a distinct set of rules and eligibility requirements and number over 1200 across the nation,

2.4.10.1.2 Ambulatory Healthcare Facilities

Facilities providing medical, diagnostic, and treatment services that include physician, nursing, and other health services to outpatients.

2.4.10.1.2.1 Family Planning Centers

Establishments with medical staff primarily engaged in providing a range of family planning services on an outpatient basis, such as contraceptive services, genetic and prenatal counseling, voluntary sterilization, and therapeutic and medically indicated termination of pregnancy.

2.4.10.1.2.2 Outpatient Mental Health and Substance Abuse Centers

Establishments with medical staff primarily engaged in providing outpatient services related to the diagnosis and treatment of mental health disorders and alcohol and other substance abuse. These establishments generally treat patients who do not require inpatient treatment. They may provide a counseling staff and information regarding a wide range of mental health and substance abuse issues and/or refer patients to more extensive treatment programs, if necessary.

2.4.10.1.2.3 HMO Medical Centers

Establishments with physicians and other medical staff primarily engaged in providing a range of outpatient medical services to the health maintenance organization (HMO) subscribers with a focus generally on primary health care. These establishments are owned by the HMO.

2.4.10.1.2.4 Kidney Dialysis Centers

Establishments with medical staff primarily engaged in providing outpatient kidney or renal dialysis services.

2.4.10.1.2.5 Freestanding Surgical Care Centers

Establishments with physicians and other medical staff primarily engaged in providing surgical services (e.g., orthoscopic, cataract, and plastic surgery) on an outpatient basis.

2.4.10.1.2.6 Urgent Care Centers

Establishments with physicians and other medical staff primarily engaged in providing treatment of unexpected sickness or injuries that are not life threatening but require immediate attention.

2.4.10.1.2.7 Rehabilitation Facilities

Establishments providing physical, occupational, and vocational therapy on an outpatient basis to patients recovering from an illness or injury.

2.4.10.1.2.8 Birthing Centers

Establishments offering a home-like setting for childbirth. Usually a woman labors, delivers, and recovers in the same room. It's designed for women with low-risk pregnancies.

2.4.10.1.2.9 Prosthetic Limb Centers

Establishments providing fitting and servicing of prosthetic limbs.

2.4.10.1.2.10 Community Healthcare centers

2.4.10.1.2.11 Occupational Health Clinics

Health services focused on the needs of employees. attached to specific industrial and other facilities.

2.4.10.1.3 Extended Care Facilities

Facilities providing residential care combined with either nursing, supervisory, or other types of care as required by the residents over an extended period of time. Includes facilities such as nursing homes, mental health and substance abuse homes, assisted living facilities, child group foster homes, disabled group homes, halfway houses, orphanages, and others.

2.4.10.1.3.1 Nursing Care Facilities

Facilities primarily engaged in providing inpatient nursing and rehabilitative services. The care is generally provided for an extended period of time to individuals requiring nursing care. These establishments have a permanent core staff of registered or licensed practical nurses who, along with other staff, provide nursing and continuous personal care services.

2.4.10.1.3.2 Residential Care Facilities

Establishments primarily engaged in providing residential care and treatment for patients with mental health and substance abuse illnesses and for the elderly. These establishments provide room, board, supervision, counseling services and assistance in daily living, such as housekeeping services. Medical services may or may not be available at these establishments.

2.4.10.1.3.3 Hospices

Establishments primarily engaged in providing services for terminally ill patients, generally with a prognosis of six months or less.

2.4.10.1.4 Health Practitioner Offices and Clinics

Offices and clinics of health practitioners having primarily engaged in the independent practice of general or specialized healthcare. Does not include public health offices.

2.4.10.1.4.1 Physicians Offices

Offices of health practitioners having the degree of M.D. (Doctor of medicine) or D.O. (Doctor of osteopathy) primarily engaged in the independent practice of general or specialized medicine (e.g., anesthesiology, oncology, ophthalmology, psychiatry) or surgery. Includes offices of mental health specialists engaged in independent practice of psychiatry or psychoanalysis.

2.4.10.1.4.2 Dental Offices

Offices of health practitioners having the degree of D.M.D. (Doctor of dental medicine), D.D.S. (Doctor of dental surgery), or D.D.Sc. (Doctor of dental science) primarily engaged in the independent practice of general or specialized dentistry or dental surgery.

2.4.10.1.4.3 Mental Health Practitioner Offices

Offices of independent mental health practitioners (except physicians) primarily engaged in the diagnosis and treatment of mental, emotional, and behavioral disorders and/or the diagnosis and treatment of individual or group social dysfunction brought about by such causes as mental illness, alcohol and substance abuse, physical and emotional trauma, or stress.

2.4.10.1.5 Home Healthcare

This industry comprises establishments primarily engaged in providing skilled nursing services in the home, along with a range of the following: personal care services homemaker and companion services physical therapy medical social services medications medical equipment and supplies counseling 24-hour home care occupation and vocational therapy dietary and nutritional services speech therapy audiology and high-tech care, such as intravenous therapy.

2.4.10.2 PUBLIC HEALTH AGENCIES

Agencies and departments engaged in public health services.

2.4.10.2.1 Clinical Agencies/Departments

Clinics that are primarily engaged in providing healthcare related to public health issues (e.g., epidemic control, mass vaccination programs, etc.) Level of healthcare (e.g., physician, nurse) varies with availability of staff.

2.4.10.2.1.1 Federal Agencies

2.4.10.2.1.2 Regional Agencies

2.4.10.2.1.3 State Agencies

2.4.10.2.1.4 Local Agencies

2.4.10.2.1.5 Tribal Agencies

2.4.10.2.2 Non-Clinical Agencies/Departments

Facilities that are primarily engaged in providing non-clinical services related to public health.

2.4.10.2.2.1 Federal Agencies

2.4.10.2.2.2 Regional Agencies

2.4.10.2.2.3 State Agencies

2.4.10.2.2.4 Local Agencies

2.4.10.2.2.5 Tribal Agencies

2.4.10.3 HEALTHCARE EDUCATIONAL FACILITIES

Facilities providing education and training for healthcare professionals.

2.4.10.3.1 Medical Schools

Establishments providing education of physicians.

2.4.10.3.2 Dental Schools

Establishments providing education of dentists.

2.4.10.3.3 Nursing Schools

Establishments providing education of nurses.

2.4.10.3.4 Pharmacy Schools

Establishments providing education of pharmacists.

2.4.10.3.5 Allied Health Schools

Establishments providing education of allied health workers (e.g., medical technologists, therapists, physician assistants, etc.).

2.4.10.4 HEALTH SUPPORTING FACILITIES

Facilities providing supporting functions to healthcare activities.

2.4.10.4.1 Medical And Diagnostic Laboratories

Facilities primarily engaged in providing analytic or diagnostic services, including body fluid analysis and diagnostic imaging, generally to the medical profession or to the patient on referral from a health practitioner.

2.4.10.4.1.1 In-Hospital/Clinic Laboratories

Laboratories located in a hospital or clinic.

2.4.10.4.1.2 Stand-Alone Medical and Diagnostic Laboratories

Laboratories not in a hospital or clinic.

2.4.10.4.1.2.1 Agency Operating Laboratory

2.4.10.4.1.2.2 BSL- Government

2.4.10.4.1.2.3 Private

2.4.10.4.1.3 Public Health Laboratories

Laboratories that focus on providing analytic or diagnostic services that is focused on public health issues (e.g., epidemiologic testing).

2.4.10.4.1.3.1 Agency Operating Laboratory

2.4.10.4.1.3.2 BSL- Government

2.4.10.4.1.3.3 Private

2.4.10.4.1.4 Other Laboratories

Laboratories not elsewhere classified.

2.4.10.4.1.4.1 Agency Operating Laboratory

2.4.10.4.1.4.2 BSL- Government

2.4.10.4.1.4.3 Private

2.4.10.4.2 Blood, Organ, and Tissue Facilities

Establishments primarily engaged in collecting, storing, and distributing blood and blood products and storing and distributing body organs.

2.4.10.4.2.1 Blood/Blood Component Banks

Facilities primarily engaged in collecting, storing, and distributing blood and blood products.

2.4.10.4.2.2 Organ, Tissue, and Bone Marrow Centers

Facilities primarily engaged in storing and distributing body organs.

2.4.10.4.3 Pharmaceuticals/Biopharmaceuticals

Assets involved with medicinal chemical and biologic products.

2.4.10.4.3.1 Pharmaceutical/Biopharmaceutical Manufacturing Facilities

Facilities primarily engaged in manufacturing biological and medicinal products processing (i.e., grading, grinding, and milling) botanical drugs and herbs isolating active medicinal principals from botanical drugs and herbs and/or manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

2.4.10.4.3.2 Pharmaceutical/Biopharmaceutical Storage and Stockpiles

Facilities for the storage and stockpiling of pharmaceuticals.

2.4.10.4.3.2.1 Strategic National Stockpiles

Stockpiles of pharmaceuticals (and other medical supplies and equipment) maintained by the federal government (Centers for Disease Control and Prevention) for use in large scale emergencies. Includes Receipt, Staging, and Storage (RSS) warehouses and RSS warehouse distribution sites.

2.4.10.4.3.2.2 Military Stockpiles

Stockpiles of pharmaceuticals (and other medical supplies and equipment) maintained by the military for use in military operations.

2.4.10.4.3.2.3 Federal Agency Stockpiles

2.4.10.4.3.2.4 State and Local Stockpiles

Stockpiles of pharmaceuticals (and other medical supplies and equipment) maintained by state or municipal agencies for use in large scale emergencies.

2.4.10.4.3.2.5 Hospital Stockpiles

Stockpiles of pharmaceuticals (and other medical supplies and equipment) maintained by hospitals.

2.4.10.4.3.2.6 Commercial Pharmaceutical Storage for Wholesale Distribution

Storage of pharmaceuticals used for wholesale distribution to hospitals, pharmacies, and other distributors.

2.4.10.4.3.3 Pharmaceutical/Biopharmaceutical Distribution Centers

Facilities engaged in retailing prescription or nonprescription drugs and medicines and retail medical supplies and equipment. Includes pharmacies, drug stores, apothecaries.

2.4.10.4.3.4 Mail-Order Pharmacies

2.4.10.4.3.5 Pharmacies

2.4.10.4.3.6 Tribal Pharmacies

2.4.10.4.4 Medical Supplies, Devices, and Equipment

Facilities primarily engaged in medical supplies, devices, and equipment.

2.4.10.4.4.1 Medical Supplies, Devices, Equipment Manufacturing Facilities

Facilities primarily engaged in manufacturing medical supplies and equipment. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

2.4.10.4.4.2 Medical Supplies, Devices, and Equipment Storage and Stockpiles

Facilities engaged in the distribution of medical equipment and supplies to hospitals, pharmacies, healthcare practitioners, and other users.

2.4.10.4.4.2.1 Strategic National Stockpiles

2.4.10.4.4.2.2 Military Stockpiles

2.4.10.4.4.2.3 Federal Stockpiles

2.4.10.4.4.2.4 State and Local Stockpiles

2.4.10.4.4.2.5 Hospital Stockpiles

2.4.10.4.4.2.6 Commercial Medical Supplies, Devices and Equipment Storage for Wholesale Distributors

2.4.10.4.5 Medical Practitioner Registries and Referral Centers

Facilities that provide directories of medical personnel.

2.4.10.4.5.1 Physician Referral Centers

Establishments that maintain and disseminate information on physicians, dentists, and other medical professionals.

2.4.10.4.5.2 Nursing Registries

Agencies that provide the services of registered or licensed practical nurses for short-term, temporary assignments.

2.4.10.4.6 Healthcare, Public Health, and Vital Records Information Networks

Facilities that store and disseminate healthcare, public health, and vital records information. Includes facilities to communicate health alert messages to federal, state, local agencies.

2.4.10.4.6.1 Vital Records Centers

Establishments that maintain and disseminate vital records (e.g., births, deaths).

2.4.10.4.6.2 Public Health Data Centers

Establishments that maintain and disseminate public health data and statistics (e.g., epidemiology centers, disease breakout monitoring).

2.4.10.4.6.3 Poison Control Centers

Establishments that maintain and disseminate information on poisonous substances.

2.4.10.4.6.4 Other Healthcare Information Networks

Information networks not classified above.

2.4.10.4.7 Medical Research Facilities

Facilities engaged in medical research and experimental development. Includes research on drugs, treatments, medical equipment, epidemiology, and related activities.

2.4.10.4.7.1 Industrial Medical Research Facilities

Medical research facilities owned and operated by a private sector organization, either profit or non-profit. Includes facilities conducting clinical, pharmaceutical, biological, and other medical-related research.

2.4.10.4.7.2 Academic Medical Research Facilities

Medical research facilities owned and operated by an educational institution (e.g., college, university). Includes facilities conducting clinical, pharmaceutical, biological, and other medical-related research.

2.4.10.4.7.3 Government Medical Research Facilities

Medical research facilities owned and operated by a government agency. Includes facilities conducting clinical, pharmaceutical, biological, and other medical-related research.

2.4.10.4.8 Health Insurance Facilities

Organizations providing health insurance. Includes government and private insurance organizations.

2.4.10.4.8.1 Government Health Insurance Agencies (includes Tribal agencies)

Government agencies providing health insurance. Includes federal Medicare, Medicaid state and local agencies.

2.4.10.4.8.2 Private Health Insurance Companies

Private companies providing health insurance.

2.4.10.5 FATALITY/MORTUARY FACILITIES

Facilities for dealing with end-of-life issues.

2.4.10.5.1 Morgues

Coroner facilities dealing with the investigation and determination of cause of death. Coroners are elected officials may or may not have medical training.

2.4.10.5.2 Funeral Homes and Crematoriums

Medical Examiner facilities dealing with the investigation and determination of cause of death. Medical examiners are physicians typically a forensic pathologist who is specifically trained in death investigation.

2.4.10.5.3 Cemeteries

Facilities where the dead are kept pending burial or cremation.

2.4.10.6 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide professional, technical, operation, and business oversight and support to the various components of the healthcare system.

2.4.10.6.1 Federal Healthcare Agencies and Departments

Federal agencies dealing with healthcare including Department of Health and Human Services, Food and Drug Administration, Centers for Disease Control and Prevention etc. Does not include clinical facilities involved in direct patient care these are categorized elsewhere.

2.4.10.6.2 State Healthcare and Public Health Agencies and Departments

State agencies dealing with healthcare and public health in their jurisdictions. Does not include clinical facilities involved in direct patient care these are categorized elsewhere.

2.4.10.6.2.1 Professional Licensing Boards

2.4.10.6.3 Local Healthcare and Public Health Agencies and Departments (includes Tribal)

Municipal and other local agencies dealing with healthcare and public health in their jurisdictions. Does not include clinical facilities involved in direct patient care these are categorized elsewhere.

2.4.10.6.4 Regional Healthcare and Public Health Agencies and Departments

Organizations that coordinate healthcare and public health activities across jurisdictions.

2.4.10.6.5 Occupational Health and Environmental Health Programs

Healthcare industry organizations that provide industry-wide support.

2.4.10.6.6 Healthcare Industry Organizations

Professional societies (e.g., American Medical Association, American Dental Association) and industry trade organizations.

2.4.10.6.6.1 Professional and Business Associations

2.4.10.6.7 Accreditation Organizations

International organizations dealing with healthcare and public health issues.

2.4.10.7 OTHER HEALTHCARE AND PUBLIC HEALTH ENTITIES

Facilities not elsewhere classified.

2.4.11 WATER

2.4.11.1 RAW WATER SUPPLY

Sources for raw water that are used by commercial and private water purveyors to supply drinking water. Note that some water supplies may be ground water, surface water, or a combination of the two. The vast majority of community water systems serving fewer than 10,000 people use ground water as their source. Large community water systems obtain most of their water from surface sources.

2.4.11.1.1 Surface Water

Sources of raw water that are located above ground that are used to supply water, including lakes, reservoirs, and rivers.

2.4.11.1.2 Ground Water

Sources of raw water that are located below ground (i.e., aquifers) that are used to supply water.

2.4.11.2 RAW WATER TRANSMISSION

Facilities that are used to convey water from a remote raw water source to a treatment plant. Community water systems may use pipes or open canals (aqueducts). The water may be pumped or gravity-fed.

2.4.11.2.1 Aqueducts

Open-channel conduits used to convey water from a source area to a treatment facility.

2.4.11.2.2 Water Pipelines

Closed conduits (i.e., pipes and tunnels) used to convey water from a source area to a treatment facility.

2.4.11.2.2.1 Water Pipeline Segments

Lengths of pipeline, interconnections, valves. Includes above ground, underground, river crossings, and other segments.

2.4.11.2.2.2 Water Pipeline Pumping Stations

Stations along the length of a pipeline. Includes pumps, valves, control machinery, breakout storage.

2.4.11.3 RAW WATER STORAGE

Facilities to store raw water from the source before it is treated.

2.4.11.3.1 Raw Water Storage Reservoirs

Reservoirs used to hold raw water prior to treatment. May be in remote or urban areas.

2.4.11.3.2 Raw Water Storage Tanks

Tanks used to hold raw water prior to treatment.

2.4.11.4 WATER TREATMENT FACILITIES

Facilities used to provide safe, potable water for domestic use, adequate quantities of water at sufficient pressure for fire protection and other emergencies, and industrial water for manufacturing. A variety of

physical and chemical treatments are applied. Steps in treatment may include clarification, coagulation, sedimentation, filtration, disinfection, and fluoridation.

2.4.11.5 TREATED (FINISHED) WATER STORAGE

Facilities to store treated (i.e., finished) water for a short time prior to distribution to customers.

2.4.11.5.1 Water Towers

Elevated storage tanks that are used to provide additional system pressure by using gravity.

2.4.11.5.2 Standpipes

Flat-bottomed cylindrical tanks with a shell height that is greater than its diameter that is used for storing treated water.

2.4.11.5.3 Covered Reservoirs

Flat-bottomed cylindrical tanks that have a shell height that is equal to or smaller than its diameter that is used for storing treated water either above or below the ground surface.

2.4.11.5.4 Uncovered Reservoirs

Reservoirs without covers used to store treated water.

2.4.11.5.5 Clearwells

Used to provide interim contact time during the water treatment process.

2.4.11.6 TREATED WATER DISTRIBUTION SYSTEMS

Facilities that transport treated water to end users. This includes the network of pipes, tanks, pumps, and valves that convey and that adjust the flow such that the proper volume and pressure of water is delivered when and where needed.

2.4.11.6.1 Water Transmission/Distribution Mains

Pipes used to transport large quantities of water within the distribution network.

2.4.11.6.2 Water Service Lines

Pipes that transport smaller quantities of water in the distribution network to the end uses.

2.4.11.6.3 Water Distribution Pumping Stations

Facilities used to increase the pressure in the distribution network when end users are located far from the treatment plant.

2.4.11.6.4 Fire Hydrants

Devices used to provide access to the distribution network for obtaining emergency water, washing down streets, and flushing water mains.

2.4.11.6.5 Booster Disinfection Facilities

Facilities that include pumps and valves used to inject additional disinfectant in the treated water to maintain desired water quality.

2.4.11.6.6 Backflow Preventers

Devices used to prevent contaminated water from entering the distribution network if the downstream pressure exceeds the pressure upstream.

2.4.11.6.7 Meters

Devices used to track consumption of water in the distribution network.

2.4.11.7 TREATED WATER MONITORING SYSTEMS

Facilities to monitor treated water quality for conventional regulated and unregulated contaminants. Some systems have sensors installed at critical points to monitor a range of physical properties, such as water pressure and water-quality indicators.

2.4.11.8 TREATED WATER DISTRIBUTION CONTROL CENTERS

Central control facilities that monitor and operate the distribution system. Some systems have electronic networks, often including wireless communication, to link the monitoring system, and the controls for the treatment and distribution systems, to a central display and operations room. These systems may also help to automate control of a drinking water system with monitoring-system readouts serving as inputs for control. Supervisory Control and Data Acquisition systems are part of an integrated control system.

2.4.11.9 WASTEWATER FACILITIES

Facilities used to collect and treat wastewater for safe discharge or reuse, and disposal of produced biosolids.

2.4.11.9.1 Wastewater Collection Systems

The network of pipes that conveys wastewater from the source to the treatment plant. In some older cities, the wastewater and storm water collection systems are integrated (combined sewer systems), and in wet weather the combined effluent may discharge directly to the receiving body, bypassing the treatment plant.

2.4.11.9.1.1 Sewers

Underground conduits used to collect and convey wastewater by gravity flow from an urban area to points of disposal or treatment. Laterals connect residences and industries to branch sewers, submain lines, and main line sewers (also called trunks or force mains, if driven by a pump).

2.4.11.9.1.2 Inverted Siphon

A sewer that is buried deeper below ground in order to avoid an obstruction such as a stream, railway cut, or depressed highway.

2.4.11.9.1.3 Manholes

Openings to the sewer system that are used for inspection and cleaning.

2.4.11.9.1.4 Lift/Pump Station

Stations are used to elevate and transport wastewater in collection systems using a system of pumps when gravity flow is insufficient or no longer feasible.

2.4.11.9.2 Wastewater Raw Influent Storage

Facilities to store raw sewage and/or industrial effluents prior to treatment. Generally used for the purpose of flow equalization. May be tanks or impoundments.

2.4.11.9.3 Wastewater Treatment Plants

Plants providing a combination of physical and biological processes that are designed to remove organic matter from solution and treat the water to a degree that it can be released to the environment. Processes include screening, grit removal, flotation, flocculation and sedimentation, aeration, clarification, disinfection, chemical coagulation, and filtration. The processes are applied to the plant influent to reduce pollutant levels to the concentrations specified in the National Pollutant Discharge Elimination System (NPDES) permit, in the case of a direct discharger, or other specified discharge limits, in the case of an indirect discharger.

2.4.11.9.4 Treated Wastewater Storage

Facilities where treated wastewater is held (e.g., in lagoons, detention basins) prior to discharge.

2.4.11.9.5 Treated Wastewater Discharge Systems

Facilities that discharge treated wastewater to a surface water body, in the case of a direct discharger, or to a publicly owned treatment works (POTW) collection system, in the case of an indirect discharger.

2.4.11.9.6 Treated Wastewater Monitoring Systems

Facilities to monitor a range of physical properties, such as flow rates and water-quality indicators, and detect levels of contaminants before, during, and after wastewater treatment.

2.4.11.9.7 Wastewater Control Centers

Central control facilities that monitor and operate the wastewater system. Some systems have electronic networks, often including wireless communication, to link the monitoring system, and the controls for the treatment and distribution systems, to a central display and operations room. These systems may also help to automate control of a drinking water system with monitoring-system readouts serving as inputs for control. Supervisory Control and Data Acquisition (SCADA) systems are part of an integrated control system.

2.4.11.10 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the various components of the water system.

2.4.11.10.1 Federal Water Agencies

Federal agencies dealing with water including Environmental Protection Agency, U.S. Army Corps of Engineers, etc.

2.4.11.10.2 State, Local, Regional Water Agencies

State and local agencies deal with water in their jurisdictions.

2.4.11.10.3 Water Industry Organizations

Industry organizations that provide industry-wide support.

2.4.11.10.4 International Water Organizations

International organizations dealing with water issues.

2.4.12 NATIONAL MONUMENTS AND ICONS

Assets Including National Monuments, Symbols, and Icons that Represent the Nation's Heritage, Traditions, Values and Political Power. Includes a Wide Variety of Sites and Structures such as Prominent Historical Attractions, Monuments, Cultural Icons, and Centers of Commerce and Business. Includes Assets with Significance at the Local, Regional, or National Level. Includes Assets that are Government-Owned (Federal, State, Local) and Privately Owned. Includes Both Structures, Geographical Areas, Documents and Objects. Many Assets are Listed in the Department of Interior's National Register of Historic Places or National Historic Landmarks. Note: Some Assets can be Classified Only in this Category (e.g., Statue of Liberty, Washington Monument). Other Assets are Primarily Identified as Part of Another Sector but also have Icon Status (e.g., Golden Gate Bridge, U.S. Capitol). These Assets have both their Primary Categorization and this Icon Categorization.

2.4.12.1 NATIONAL MONUMENT/ICON STRUCTURES

National monument/icon assets that are structures. May or may not be located in a monument/icon geographic area.

2.4.12.1.1 Buildings

Assets that are buildings. Includes historic buildings, homes, and others.

2.4.12.1.2 Monuments and Memorials

Assets that are monuments, memorials, statues, and others.

2.4.12.1.3 Other Monument/Icon Structures

Assets other than buildings and monuments (e.g., famous bridges),

2.4.12.2 NATIONAL MONUMENT/ICON GEOGRAPHIC AREAS

National monument/icon assets that are primarily geographical areas. May or may not contain any structures.

2.4.12.2.1 Parks and Public Lands

National, state, local parks, forests, recreational areas.

2.4.12.2.2 Historical and Heritage Lands

Historic battlefields, landmarks, and others.

2.4.12.2.3 Other Monument/Icon Geographic Areas

Assets other than parks and historical areas (e.g., commercial districts).

2.4.12.3 NATIONAL MONUMENT/ICON DOCUMENTS AND OBJECTS

National monument/icon assets including historical documents and historical objects. Generally on display in museums, libraries, historic sites, and other such locations. They would retain their iconic value if temporarily moved to another location, e.g., for an exhibition.

2.4.12.3.1 Historical/Significant Documents

Documents of historical significance nationally, regionally, or locally (e.g., Declaration of Independence, United States Constitution).

2.4.12.3.2 Historical/Significant Objects

Objects of historical or other significance nationally, regionally, or locally (e.g., Liberty Bell).

2.4.12.4 OTHER NATIONAL MONUMENTS AND ICONS

Facilities and assets not elsewhere classified.

2.4.13 COMMERCIAL FACILITIES

Includes Commercial Businesses, Community Facilities, and Industrial Activities. Most are Privately Owned, but Some are Publicly Owned and Operated .

2.4.13.1 ENTERTAINMENT AND MEDIA FACILITIES

Facilities engaged in producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data.

2.4.13.1.1 Broadcasting

Facilities that create content or acquire the right to distribute content and subsequently broadcast the content.

2.4.13.1.1.1 Cable and Other Subscription Programming

Facilities primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.

2.4.13.1.1.2 Radio Broadcasting

Facilities operating radio broadcasting studios and facilities for the transmission of aural programming by radio to the public, to affiliates, or to subscribers.

2.4.13.1.1.3 Television Broadcasting

Establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public.

2.4.13.1.2 Internet Publishing

Establishments engaged in publishing and/or broadcasting content on the Internet exclusively. Establishments in this industry provide textual, audio, and/or video content of general or specific interest on the Internet. Includes Internet host web sites. Does not include the hardware and software to operate

the Internet system, which are classified under 7. INFORMATION TECHNOLOGY and 8. TELECOMMUNICATIONS.

2.4.13.1.3 Motion Picture and Sound Recording Facilities

Establishments involved in the production and distribution of motion pictures and sound recordings.

2.4.13.1.4 Print Media

Businesses engaged in publication of printed materials.

2.4.13.1.4.1 Newspaper and Periodical Publishing

Publishing Includes facilities for preparing, printing, and distributing newspapers, magazines, and other periodicals.

2.4.13.1.4.2 Other Print Publishing

Includes facilities for publishing, printing, and distributing non-periodical material including books, directories, and other material.

2.4.13.2 GAMBLING FACILITIES/CASINOS (RESORTS)

Establishments primarily engaged in operating gambling facilities that offer table wagering games along with other gambling activities, such as slot machines and sports betting. Often provide food and beverage services. May be attached to a hotel.

2.4.13.2.1 Gambling Cruises

Casinos on marine vessels capable of operating outside U.S. territorial waters

2.4.13.2.2 Riverboat Casinos

Casinos operating from a riverboat.

2.4.13.2.3 Casino Complexes

Casinos operating in a land-based facility.

2.4.13.2.4 Stand Alone Casino

Land or water based casinos that have no other functions such as lodging or cruises

2.4.13.2.5 Permanently-Moored Casinos

Includes casinos operating from a vessel that is not sea-worthy.

2.4.13.2.6 Other Gambling Establishments

Includes bingo parlors, slot machine parlors, video gaming device operators, lottery ticket vendors. May be included in other facilities such as hotels.

2.4.13.3 LODGING FACILITIES

Facilities providing lodging or short-term accommodations for travelers, vacationers, and others.

2.4.13.3.1 Bed and Breakfast Inns

Establishments primarily engaged in providing short-term lodging in private homes or small buildings converted for this purpose.

2.4.13.3.2 Hotels and Motels

Includes hotels, motels, motor hotels, lodges, spas, resorts, seasonal lodges. May have other facilities associated (e.g., restaurants, golf courses, casinos, conference, and convention facilities, etc.)

2.4.13.3.3 Resorts (not gambling)

2.4.13.3.4 Recreational Vehicle Parks and Recreational Camps

This industry comprises establishments primarily engaged in operating recreational vehicle parks and campgrounds and recreational and vacation camps. These establishments cater to outdoor enthusiasts and are characterized by the type of accommodation and by the nature and the range of recreational facilities and activities provided to their clients.

2.4.13.3.5 Other Lodging Facilities

Other types of lodging including cabins, cottages, hostels, etc.

2.4.13.4 OUTDOOR EVENTS FACILITIES

Facilities in an outdoor setting where large numbers of people congregate to enjoy recreational pastimes and/or conduct personal commercial transactions.

2.4.13.4.1 Amusement, Theme, and Water Parks

Entertainment facilities featuring rides, games, food, and sometimes shows. Includes theme parks in which the attractions revolve around a central theme or group of themes, traditional amusement parks in which the activities do not focus on a common theme, and water parks in which the attractions center on water-based rides and activities.

2.4.13.4.2 Community Parks, Fairgrounds, Pavilions

Community areas open to the public. Does not include parklands identified as National Icons.

2.4.13.4.3 Community Water Facilities

Beaches, piers, boardwalks, swimming pools open to the public.

2.4.13.4.4 Community Special Gatherings

Parades, festivals, carnivals, scenic tours, holiday events, demonstration protests.

2.4.13.4.4.1 Parades

Parades scheduled in advance along a pre-determined route.

2.4.13.4.4.2 Special Events

Festivals, carnivals, scenic tours, holiday events. Generally scheduled well in advance.

2.4.13.4.5 Marinas

Marinas are primarily covered in transportation. This section is concerned with the land based operations associated with a marina such as the docking and/or storage facilities for pleasure craft owners, retailing marine supplies, repairing, maintaining, or renting pleasure boats, and shopping areas or districts associated or adjacent to the marina. Includes boating and sailing clubs, yacht basins. Other marina activities such as the docks, regulation of water activities, and commercial shipping, navigation and fishing are covered in transportation sector.

2.4.13.4.6 Skiing Facilities

Establishments engaged in operating downhill, cross-country, or related skiing areas. May include accommodation and food service facilities.

Spillway

2.4.13.5 PUBLIC ASSEMBLY

Facilities where large numbers of people congregate to pursue business activities, conduct personal transactions, or enjoy recreational pastimes.

2.4.13.5.1 Sports Leagues

Outdoor facilities in which performing arts are presented to audiences. Generally smaller than stadiums (see below 14.5.9 Stadiums).

2.4.13.5.1.1 Motor Racetracks

2.4.13.5.1.2 Horse and Dog Tracks

2.4.13.5.1.3 Arenas

Large indoor facilities in which events are held for large audiences. Generally designed primarily for spectator sports but also with the ability to host concerts, lectures, rallies, circuses and other events with large audiences.

2.4.13.5.1.4 Stadiums

Large outdoor facilities in which events are held for large audiences. May or may not have retractable domes for dealing with inclement weather. Generally designed primarily for spectator sports but also with the ability to host concerts, lectures, rallies, circuses and other events with large audiences.

2.4.13.5.2 Cultural Properties

2.4.13.5.2.1 Amphitheaters

2.4.13.5.2.2 Museums, Planetariums

Facilities engaged in the preservation and exhibition of objects, sites, and natural wonders of historical, cultural, and/or educational value.

2.4.13.5.2.3 Performing Arts Centers and Auditoriums

Indoor facilities in which performing arts are presented to audiences. Includes concert halls, live theatrical production theaters, dance theaters, community theaters, and other such facilities. Generally smaller than arenas (see below).

2.4.13.5.2.4 Zoos, Aquariums, Botanical Gardens

Establishments primarily engaged in the preservation and exhibition of live plant and animal life displays.

2.4.13.5.3 Other Facilities

Facilities where large numbers of people congregate to pursue business activities, conduct personal commercial transactions, or enjoy recreational pastimes.

2.4.13.5.3.1 Convention Centers

Facilities where large groups of people (e.g., political party, professional organization, civic group, etc.) meet to exchange information and where trade shows displaying products are held. May also host other events such as concerts, theater performances, and sporting events. May be attached to other facilities such as hotels.

2.4.13.5.3.2 Golf Courses and Country Clubs

Establishments primarily engaged in operating golf courses. May include dining facilities and other recreational facilities that are known as country clubs.

2.4.13.5.3.3 Movie Theaters

Facilities in which motion pictures are shown. May have multiple screens.

2.4.13.5.3.4 Stadiums

Large outdoor facilities in which events are held for large audiences. May or may not have retractable domes for dealing with inclement weather. This category is focused on facilities not normally used for spectator sporting events.

2.4.13.5.3.5 Arenas

Large indoor facilities in which events are held for large audiences. This category is focused on facilities not normally used for spectator sporting events.

2.4.13.5.3.6 Other

2.4.13.5.3.7 Entertainment Districts

Areas with a concentration of different types of entertainment facilities in close proximity. May include restaurant, nightclub and other such establishments.

2.4.13.5.3.8 Fitness and Recreational Facilities

Establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.

2.4.13.5.3.9 All Other Amusement and Recreational Facilities

Not elsewhere classified.

2.4.13.5.3.10 Religious Facilities

2.4.13.6 REAL ESTATE FACILITIES

Facilities that are owned and/or operated by commercial stakeholders. May be leased or sold to business or residential tenants.

2.4.13.6.1 Office Buildings

Facilities housing business offices. Includes small single-story offices for small businesses and large multi-story office buildings housing a number of tenants.

2.4.13.6.1.1 Office Buildings - Stand Alone

Individual office buildings. May be single- or multi-tenant.

2.4.13.6.1.2 Office Districts

A number of office buildings that are in a common area (e.g., central business district) but are not under common management. May not have dedicated parking.

2.4.13.6.1.3 Office Parks

Groupings of office buildings in a common area. Buildings generally under common management for operation and maintenance. May have dedicated parking.

2.4.13.6.2 Residential Units

Residential facilities including single and multi-family.

2.4.13.6.2.1 Multi-Family Residences

Residences with more than one household

2.4.13.6.2.2 Single-Family Residences

Residences with a notable owner or that are a significant structure.

2.4.13.6.3 Self-Storage Facilities

2.4.13.6.4 Mixed Use Properties

2.4.13.6.5 Community Organization Facilities

Facilities where members of a community gather for social, educational, religious, political, recreational, or other purposes. May be publicly or privately run facility. Examples include, but are not limited to: churches, religious temples, mosques, and monasteries, places of worship, shrines, retreat houses, organization's administrative offices. Also includes but limited to: Lodges, clubs, ethnic associations, retirement clubs, veterans membership clubs, etc.

2.4.13.7 RETAIL FACILITIES

Establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise in small quantities to the general public. This sector comprises two main types of retailers store and non-store retailers.

2.4.13.7.1 Store Retailers

Establishments operating fixed point-of-sale locations, located and designed to attract a high volume of walk-in customers.

2.4.13.7.1.1 Shopping Centers and Malls

A number of stores in a central facility that is operated under common management. Generally has dedicated parking. Includes shopping centers that are located on large plots of land and smaller "strip malls" that are located along roads. May include recreational facilities (e.g., theaters, game arcades) and/or restaurants on-site.

2.4.13.7.1.2 Shopping Districts

A number of stores that are in a common area (e.g., a downtown shopping district, commercial shopping area along a roadway) but are not operated under common management. May not have dedicated parking. May have recreational and entertainment facilities in the district.

2.4.13.7.1.3 Stand-Alone Stores

Stores that are separated from other stores. May be large facilities with dedicated parking or small independent shops in an isolated location.

2.4.13.7.2 Non-Store Retailers

Establishments serving the general public without using fixed store locations. Includes merchandise retailed by catalogs, television "infomercials," Internet advertising, portable stalls, and other such techniques. Generally includes a warehouse location where merchandise is stored and shipped from.

2.4.13.8 OTHER COMMERCIAL FACILITIES

Commercial assets not elsewhere classified

2.4.14 GOVERNMENT FACILITIES

Buildings, Structures, and Associated Land Owned, Leased, or Otherwise Acquired by Government Agencies.

2.4.14.1 PERSONNEL-ORIENTED GOVERNMENT FACILITIES

Government facilities with the primary function of housing personnel in the course of their official business or personal pursuits.

2.4.14.1.1 Personnel-Oriented Buildings and Structures

Government buildings primarily used to accommodate personnel.

2.4.14.1.1.1 Offices and Office Building Complexes

Government buildings used for office space.

2.4.14.1.1.1.1 Agency Headquarters

Buildings housing the headquarters and chief executives of government departments or agencies.

2.4.14.1.1.1.2 Field, District, and Satellite Offices

Field offices that house federal, state, or local agency operations that are agency-specific or administrative in nature.

2.4.14.1.1.1.3 Legislative Chambers and Offices

Government buildings used to conduct and support the business of the legislative branch.

2.4.14.1.1.1.4 Judicial Chambers and Offices

Government buildings used to conduct and support the business of the judicial branch, including courthouses.

2.4.14.1.1.1.5 Data and Call Centers

Government buildings providing data warehousing or informational support to department, agency, legislative, or judicial functions.

2.4.14.1.1.2 Housing

Government buildings primarily used for living space. Includes government-owned detached and attached houses, apartment buildings, and barracks whose primary purpose is to provide living quarters for government employees.

2.4.14.1.1.3 Correctional Facilities

Government buildings designed for the confinement, correction, and rehabilitation of adult and/or juvenile offenders sentenced by a court. Includes correctional institutions, detention centers, community corrections centers, and holding cells in courthouses.

2.4.14.1.1.4 Embassies, Consulates, and Border Facilities

Government buildings used to facilitate foreign relations and border crossings. Includes United States government embassies and consulates located in foreign countries, Foreign government embassies and consulates located in the United States, and buildings providing immigration and customs control at borders with Canada and Mexico.

2.4.14.1.2 Personnel-Oriented Land

Government land surrounding and supporting the function and activities of personnel-centric buildings or planned buildings and structures. Includes areas used to provide training on weapons systems. Also includes land held in trust by the government.

2.4.14.2 SERVICE-ORIENTED GOVERNMENT FACILITIES

Facilities geared towards providing services to government and the public. These facilities typically experience large numbers of visitors and house technical equipment necessary to carry out and deliver government services.

2.4.14.2.1 Service-Oriented Buildings and Structures

Buildings geared towards providing services to government and the public.

2.4.14.2.1.1 Emergency Services

2.4.14.2.1.2 Maintenance and Repair Shops

Government buildings used for the upkeep and repair of government property. Includes vehicle maintenance and service stations.

2.4.14.2.1.3 Operations, Command, Dispatch, and Control Centers

Government buildings used to control and coordinate personnel and operations over a specific area.

2.4.14.2.1.4 Training Buildings

Government buildings used to conduct specialized training for personnel to conduct government functions.

2.4.14.2.1.5 Libraries

Government buildings used to store and facilitate public access to reference and reading material. This includes public libraries and Presidential Libraries.

2.4.14.2.2 Service-Oriented Land

Land associated with service-oriented buildings and structures. Includes land used for parking areas attached to highways without fuel or maintenance facilities.

2.4.14.3 GOVERNMENT RESEARCH FACILITIES

Specialized facilities to conduct research. Includes government facilities, government-owned-contractor-operated facilities. Categorized by the type of research conducted.

2.4.14.3.1 Government Research and Development Buildings and Structures

Specialized buildings to conduct research and development activities.

2.4.14.3.1.1 Analysis and Assessment Research Facilities

Government buildings where primarily studies and computer analyses are conducted. May have significant computer facilities. No laboratory or experimental facilities.

2.4.14.3.1.2 Environmental Research

Government buildings where environmental and ecosystem research is conducted.

2.4.14.3.1.3 Basic Science Research

Government buildings where basic physical science research is conducted.

2.4.14.3.1.4 Aerospace Research Facilities

Government buildings where aeronautical and space research is conducted.

2.4.14.3.1.5 Military Research

Government buildings where military research is conducted. Includes weapons development, warfare center, nuclear weapons.

2.4.14.3.2 Government Research and Development Land

Government land used for the specific purpose of carrying out experiments in furtherance of research and development activities.

2.4.14.4 GOVERNMENT STORAGE AND PRESERVATION FACILITIES

Specialized government facilities used to house, protect, store, and preserve goods.

2.4.14.4.1 Storage and Preservation Buildings and Structures

Buildings used to house, protect, store, and preserve goods and materials.

2.4.14.4.1.1 Archive and Record Centers

Buildings, or components of buildings, used to store, organize, and preserve official records.

2.4.14.4.1.2 Warehouses

Buildings used to store property and equipment. Examples include government agency supplies, seized assets.

2.4.14.4.1.3 Weapons and Ammunition Storage

Buildings used to house and process weapons and ammunition.

2.4.14.4.1.4 Precious Metal Storage

Buildings used to house and protect precious metals.

2.4.14.4.1.5 Currency Storage

Buildings used to store large amounts of currency.

2.4.14.4.1.6 Special Nuclear Materials and Waste Storage

Buildings used to store weapons grade nuclear materials and waste.

2.4.14.4.2 Storage and Preservation Land

Government land used to house, protect, store, and preserve goods and materials. This includes land to store surplus property.

2.4.14.5 GOVERNMENT SENSOR AND MONITORING SYSTEMS

Government facilities for gathering data and information.

2.4.14.5.1 Global Positioning System

A worldwide, satellite-based radio navigation system providing specially coded satellite signals that can be processed in a GPS receiver, enabling the receiver to compute position in three dimensions, velocity, and time. GPS is funded by and controlled by the U. S. Department of Defense (DOD).

2.4.14.5.1.1 GPS Space Segment

The space segment consists of 24 operational satellites in six orbital planes (four satellites in each plane).

2.4.14.5.1.2 GPS Control Segment

The control segment consists of Monitor Stations, Ground Antennas, and a Master Control Station. The monitor stations passively track all satellites in view, accumulating ranging data. This information is processed at the MCS to determine satellite orbits and to update each satellite's navigation message. Updated information is transmitted to each satellite via the Ground Antennas.

2.4.14.5.2 Government Observation Systems

Systems used to gather information and data (e.g., NOAA weather stations, telescope facilities, early warning systems).

2.4.14.6 GOVERNMENT SPACE SYSTEMS

Space facilities operated by NASA and other civilian agencies.

2.4.14.6.1 Military Facilities

Facilities for the processing, integration, and assembly of military launch vehicles and payloads, launch and recovery operations, and range support for military launches.

2.4.14.6.1.1 Launch Vehicles

Military launch vehicles.

2.4.14.6.1.2 Launch Facilities

Facilities for launching military space vehicles.

2.4.14.6.1.3 Mission Control Facilities

Facilities for control of military space vehicles after launch.

2.4.14.6.1.4 Satellites

Military satellites.

2.4.14.6.2 NASA Facilities

Spaceports and facilities for the processing, integration, and assembly of NASA orbital and suborbital launch vehicles and payloads, launch and recovery operations, and range support for NASA space activities.

2.4.14.6.2.1 Launch Vehicles

NASA launch vehicles.

2.4.14.6.2.2 Launch Facilities

Facilities for launching NASA space vehicles.

2.4.14.6.2.3 Mission Control Facilities

Facilities for control of NASA space vehicles after launch.

2.4.14.6.2.4 Satellites

NASA satellites (e.g., weather, communications, research).

2.4.14.7 MILITARY FACILITIES

Military bases.

2.4.14.7.1 Army Bases

Posts operated by the U.S. Army accommodating soldiers. May also include Army airfields.

2.4.14.7.2 Navy Bases

Bases operated by the U.S. Navy and accommodating ships and possibly aircraft.

2.4.14.7.3 Marine Corps Bases

Bases operated by the Marines. May include air bases and facilities accommodating ships.

2.4.14.7.4 Air Force Bases

Bases operated by the U.S. Air Force. Includes air fields.

2.4.14.7.5 Coast Guard Bases

Bases operated by the U.S. Coast Guard and accommodating marine vessels. May include air bases.

2.4.14.7.6 National Guard Facilities

Facilities operated by the National Guard in each state. May include air bases as well as land-based facilities.

2.4.14.7.7 Joint and Combined Military Installations and Reservations

Facilities operated by more than one branch of the military.

2.4.14.8 EDUCATION FACILITIES

Buildings and Structures used primarily for education and extra-curricular activities of its students. This includes both Government owned and operated and Privately owned and operated schools, specialized schools, colleges and universities. This also includes College and University stadiums and arenas associated with the college or university and includes all State owned, and private owned facilities.

2.4.14.8.1 Pre K-12 Schools

Education facilities used primarily for education and extra-curricular activities of students, preKindergarten through 12th grade (preK-12).

2.4.14.8.2 Higher Education Facilities

Education facilities used primarily for education and extra-curricular activities at 2 to 4-year degree-granting institutions.

2.4.14.8.3 Specialized Education Facilities

Education facilities that provide trade, technical, and certificate degree programs.

2.4.14.9 OTHER GOVERNMENT FACILITIES

Government facilities not elsewhere classified.

2.4.14.9.1 Other Government Buildings and Structures

Government buildings not elsewhere classified.

2.4.14.9.2 Other Government Land

Government land not elsewhere classified.

2.4.15 DAMS

Water Retention and Control Structures Used for Flood Control, Hydroelectric/Hydropower Generation, Water Supply, Navigation, Environmental/Ecological, Irrigation, Recreation, Storm Surge Protection and Sediment And Hazardous Material Control or Mine Tailing Impoundments. Dams Have Many Multiple Use Purposes. Dams Include Conventional Dams, Navigation Locks, Mine Tailing Dams, Hurricane Barriers, River Control Structures, Canals and Levees.

2.4.15.1 DAM PROJECTS

A barrier built across a watercourse to impound or divert water. The barrier obstructs, directs, retards, or stores the flow of water. Includes some or all of the following dam structure (the structural part of the dam that holds back the flow of water), reservoir (the body of water impounded by the dam), spillways (the structure that passes normal and/or flood flows in a manner that protects the structural integrity of the dam), outlet works (the combination of structures and equipment required for the safe operation and control of water released from a reservoir), powerhouse (structure that houses turbines, generators, and associated control equipment for the production of hydroelectricity), and canal/aqueduct (constructed channel, usually open, that conveys water by gravity to farms, municipalities, etc some also used for navigation).

2.4.15.1.1 Water Retention Structures

2.4.15.1.1.1 Impounding Structure

2.4.15.1.2 Water Control Structures

2.4.15.1.2.1 Spillway

2.4.15.1.2.2 Outlet Works

2.4.15.1.3 Impoundments

2.4.15.1.3.1 Reservoir

2.4.15.1.4 Hydropower Generation Facilities

2.4.15.1.4.1 Conventional Plant

2.4.15.1.4.2 Run-of-The-River Plant

2.4.15.1.4.3 Pumped-Storage Plant

2.4.15.1.5 Navigation Structures

2.4.15.1.5.1 Navigation Lock

Walled section of a river or canal, closed by water gates at both ends, in which the water level can be raised or lowered by means of valves or sluiceways to match the level in the upper or lower reach, as desired. When the levels are the same, the water gate is opened to permit a vessel to enter or leave the lock.

2.4.15.1.6 Water Transmission Structures

2.4.15.1.6.1 Canal

2.4.15.1.7 Remote Operation & Control Facilities

2.4.15.1.7.1 Operation & Control Center

2.4.15.2 FLOOD DAMAGE REDUCTION SYSTEMS

2.4.15.2.1 Flood Protection Structures

2.4.15.2.1.1 Levee

An embankment whose primary purpose is to furnish flood protection from seasonal high water and which is therefore subject to water loading for periods of only a few days or weeks a year.

2.4.15.2.1.2 Flood Wall

2.4.15.2.1.3 Dike

2.4.15.2.1.4 River Control Structures

2.4.15.2.2 Water Control Structures

2.4.15.2.2.1 Pumping Station

2.4.15.2.3 Water Transmission Structures

2.4.15.2.3.1 Canal

2.4.15.3 HURRICANE & STORM SURGE PROTECTION SYSTEMS

2.4.15.3.1 Structural Protection Systems

2.4.15.3.1.1 Hurricane Barrier

Structures that extend completely across the waterway, except for gaps at navigation channels, and designed to reduce the magnitude of hurricane surges upstream of the barrier.

2.4.15.3.1.2 Dike

2.4.15.3.1.3 Shoreline Protection Structure

2.4.15.3.1.4 Levee

2.4.15.3.2 Non-Structural Protection Systems

2.4.15.4 MINE TAILINGS PROJECTS

2.4.15.4.1 Impoundment Retention Structures

2.4.15.4.1.1 Impounding Structure

2.4.15.4.2 Impoundment Control Structures

2.4.15.4.2.1 Spillway

2.4.15.4.2.2 Outlet Works

2.4.15.4.3 Impoundments

2.4.15.4.3.1 Tailings / Mine Waste Impoundment

A structure which is used to impound water, sediment, or slurry, or any combination of such materials from mining operations.

2.4.15.5 REGULATORY, OVERSIGHT, & INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, and business oversight and support to dam owners.

2.4.15.5.1 Federal Agencies

Federal departments, boards and commissions that deal with dam related issues including U.S. Department of Agriculture (USDA), U.S. Department of Defense (DoD), U. S. Department of Energy (DOE), U. S. Environmental Protection Agency (EPA), U. S. Department of Homeland Security (DHS), U. S. Department of Interior (DOI), U. S. Department of Labor (DOL), U. S Department of State (DOS), Mine Safety and Health Administration (MSHA), National Dam Safety Review Board (NDSRB), Interagency Committee on Dam Safety (ICODS), International Boundary and Water Commission (IBMC), Federal Energy Regulatory Commission (FERC), Nuclear Regulatory Commission (NRC), and the Tennessee Valley Authority (TVA).

2.4.15.5.2 State Agencies

State, local, and regional government entities that deal with dams and related issues within their jurisdiction including State Dam Safety Offices, State Natural Resource Offices, State Fish and Wildlife/Game, Regional Water Quality Boards, and Emergency Response Offices and others.

2.4.15.5.3 Industry & Trade Organizations

Associations, Boards, Committees, that provide technical, operation and business oversight and support to the various components of the dam sector including the Association of State Dam Safety Officials (ASDSO), American Society of Engineers (ASCE), National Society of Professional Engineers (NSPE), United States Society on Dams (USSD) and others.

2.4.15.5.4 Regional & Cross-Sector Organizations

2.4.15.5.5 International Organizations

International and foreign government departments or agencies that deal with across border dam issues.

2.4.16 NUCLEAR

2.4.16.1 NUCLEAR FACILITIES

Assets involved in civilian uses of radioactive material. Does not include military use radioactive materials and weapons.

2.4.16.1.1 Nuclear Power Plants

Facilities using nuclear power to produce electricity for use in the electric power grid.

2.4.16.1.1.1 CANDU (Canadian Deuterium)

Heavy Water Moderated, Natural Uranium fuel.

2.4.16.1.1.2 Boiling Water Reactor

Primary Coolant boils and passes through the turbine.

2.4.16.1.1.3 Pressurized Water Reactor

Primary Coolant circulates in a closed loop, Steam Generator boils water for turbine

2.4.16.1.1.4 High Temperature Gas Cooled Reactors (HTGRs)

Helium Cooled, Carbon moderated.

2.4.16.1.1.5 Liquid Metal Cooled Reactors

Sodium or Lead Bismuth Coolant.

2.4.16.1.2 Research, Training, and Test Reactors

Also known as "non-power" reactors. Used primarily to conduct research, to develop theoretical practices, in education or medical applications. Are licensed by the NRC.

2.4.16.1.2.1 Government Research and Test Reactors

Reactors owned by the federal government.

2.4.16.1.2.2 University Research and Training Reactors

Reactors at universities or other educational institutions.

2.4.16.1.2.3 Private Research and Test Reactors

Reactors at private companies.

2.4.16.1.3 Deactivated Nuclear Facilities

Nuclear facilities that have been deactivated but not yet fully decontaminated and decommissioned. Note Fully decommissioned facilities can be released back to public use.

2.4.16.1.3.1 Deactivated Reactors

Reactors that have been deactivated. May have spent fuel or other radioactive material on-site.

2.4.16.1.3.2 Other Deactivated Nuclear Facilities

Nuclear facilities other than reactors that have been deactivated.

2.4.16.2 NUCLEAR MATERIALS

2.4.16.2.1 Nuclear Fuel Cycle Facilities

Assets used to produce fuel for use in nuclear power plants. Some may also produce material for military applications. Nuclear fuel cycle facilities are categorized by the Nuclear Regulatory Commission (NRC) based on the type and quantity of nuclear material stored or produced at the facility. Category I facilities handle the largest quantities of the most sensitive (i.e., highly enriched material). Category II facilities handle material of moderate strategic significance. Category III facilities handle material of low strategic significance.

2.4.16.2.1.1 Uranium Mining or In-Situ Uranium Leaching

Mining operations to extract uranium ore from the ground.

2.4.16.2.1.2 Uranium Ore Milling or Leachate Processing

Facilities that mill uranium ore or process uranium-bearing leachate and produce uranium oxide (U₃O₈, also known as yellowcake).

2.4.16.2.1.3 Uranium Conversion Facilities

Facilities that convert yellowcake (U₃O₈) into uranium hexafluoride (UF₆).

2.4.16.2.1.4 Uranium Enrichment Facilities

Facilities that begin with UF₆ and enrich the concentration of selected isotopes (235U) to allow them to be used as reactor fuel. Process also produces significant quantities of depleted UF₆ as a waste product, which must be secured.

2.4.16.2.1.5 Fuel Fabrication Facilities

Facilities that utilize enriched uranium (and possibly other materials such as plutonium from deactivated weapons) to produce fuel rods for reactors.

2.4.16.2.1.5.1 Category I (Special Nuclear Materials) Facilities

Facilities handling special nuclear materials designated as Category I by the Nuclear Regulatory Commission.

2.4.16.2.1.5.2 Category II (Special Nuclear Materials - Moderate Strategic Significance) Facilities

Facilities handling special nuclear materials designated as Category II by the Nuclear Regulatory Commission.

2.4.16.2.1.5.3 Category III (Special Nuclear Materials - Low Strategic Significance) Facilities

Facilities handling special nuclear materials designated as Category III by the Nuclear Regulatory Commission.

2.4.16.2.2 Nuclear Materials Transport

Transport of nuclear materials for use and for waste disposal.

2.4.16.2.2.1 Low Hazard Radioactive Materials Transport

Transportation of low hazard radioactive materials as defined by NRC (e.g., smoke detectors, radiopharmaceuticals) by conventional transportation means. (i.e., materials that may be transported in DOT Type A containers or industrial packaging [IP]).

2.4.16.2.2.2 High Hazard Radioactive Materials Transport

Transportation of high hazard radioactive materials i.e., materials (e.g., spent fuel or transuranic waste) that must be transported in DOT Type B containers or higher-level packaging (e.g., casks). Generally via rail, truck, or barge.

2.4.16.2.3 Radioactive Material Users

Facilities, other than those listed above, that have radioactive materials on-site. Includes those facilities requiring certification and licensing or that are regulated by the NRC.

2.4.16.2.3.1 Medical Facilities with Radioactive Materials

Medical facilities that have radioactive materials on-site in sufficient quantities to require NRC licensing.

2.4.16.2.3.2 Research Facilities Using Radioactive Materials

Research facilities using radioactive materials in their research efforts.

2.4.16.2.3.3 Irradiation Facilities

Facilities using radioactive sources to sterilize food or other materials.

2.4.16.2.3.4 Industrial Facilities with Nuclear Materials

Industrial facilities using radioactive sources for inspection, testing, and other activities in the manufacturing process.

2.4.16.2.4 Radioactive Source Production and Distribution Facilities

Facilities of private organizations that import radioactive sources or that fabricate or re-manufacture radioactive sources.

2.4.16.2.4.1 Radioactive Device Manufacturers

Organizations that import sources from foreign suppliers.

2.4.16.2.4.2 Radioactive Source Producers

Organizations that manufacture or remanufacture radioactive sources (e.g., radiopharmaceuticals and medical isotopes).

2.4.16.2.4.3 Radioactive Source Importers

Assemble sources into devices that allow for irradiation, sterilization, or medical procedures.

2.4.16.2.4.4 Radioactive Source Manufacturers

Produce radioisotopes in bulk by irradiation of targets or reprocessing spent reactor fuel.

2.4.16.3 NUCLEAR WASTE

2.4.16.3.1 Low Level Radioactive Waste Processing and Storage Facilities

Facilities handling low level radioactive wastes such as contaminated clothing, medical equipment, laboratory animal carcasses, etc. Low level waste is categorized by NRC as Class A, B, or C based on the concentration of specific radionuclide, with Class A being the least radioactive.

2.4.16.3.2 Sites Managing Accumulations of Naturally Occurring Radioactive Materials (NORM)

Sites where large quantities of naturally-occurring materials are handled or processed (such as oil fields or phosphate mines) and radioactive components of those materials build up (such as radium or radioactive potassium).

2.4.16.3.3 Spent Nuclear Fuel Processing and Storage Facilities

Facilities for storing spent reactor fuel assemblies.

2.4.16.3.3.1 Spent Nuclear Fuel Wet Storage Facilities

Facilities where spent fuel is stored in a pool of water. May be at an operating reactor site or may be an Independent Spent Fuel Storage Installation (ISFSI).

2.4.16.3.3.2 Spent Nuclear Fuel Dry Storage Facilities

Facilities where spent fuel is stored dry in specially designed casks.

2.4.16.3.4 Transuranic Waste Processing and Storage Facilities

Facilities that process and/or store radioactive waste containing more than regulatory-prescribed minimum amounts of radioactive elements of atomic number greater than 92.

2.4.16.3.5 High Level Radioactive Waste Storage and Disposal Facilities

Facilities for storing high level radioactive waste for extended periods of time.

2.4.16.3.6 Mixed Waste Processing

2.4.16.4 REGULATORY, OVERSIGHT, AND INDUSTRY ORGANIZATIONS

Organizations that provide technical, operation, pricing, and business oversight and support to the various components of the nuclear system.

2.4.16.4.1 Federal Nuclear Agencies

Federal agencies dealing with nuclear materials safety and safeguards including Nuclear Regulatory Commission, Department of Energy, Department of Transportation, Environmental Protection Agency, etc.

2.4.16.4.2 State, Local, Regional Nuclear Agencies

State, local, regional agencies deal with nuclear issues in their jurisdictions.

2.4.16.4.3 Nuclear Industry Organizations

Industry organizations that provide industry-wide support.

2.4.16.4.4 International Nuclear Organizations

International organizations dealing with nuclear issues.

2.4.16.4.5 Professional and Technical Societies

2.4.16.5 OTHER NUCLEAR FACILITIES, MATERIALS OR WASTE

Facilities and assets not elsewhere classified.

2.4.17 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 Construction. Establishments in the Manufacturing Sector 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. Manufacturing Establishments May Process Materials or May Contract with Other Establishments to Process Their Materials for Them. Both Types of Establishments Are Included in Manufacturing. The Materials, Substances, or Components Transformed by Manufacturing Establishments Are Raw Materials That Are Products of Agriculture, Forestry, Fishing, Mining, or Quarrying as well as Products of Other Manufacturing Establishments. The Materials Used May Be Purchased Directly from Producers, Obtained Through Customary Trade Channels, or Secured Without Recourse to the Market by Transferring the Product from One Establishment to Another, under the Same Ownership. Manufacturing Establishments Often Perform One or More Activities That Are Classified Outside the Manufacturing Sector.

2.4.17.1 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.

2.4.17.1.1 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

2.4.17.1.2 Grain and Oilseed Milling

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables (2) preparing flour mixes or doughs from flour milled in the same establishment (3) milling, cleaning, and polishing rice and (4) manufacturing malt from barley, rye, or other grains.

2.4.17.1.3 Sugar and Confectionary Product Manufacture

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate), and (2) those that begin with sugar and chocolate and process these further.

2.4.17.1.4 Fruit/Vegetable Preserving, Specialty Food Manufacturing Facilities

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices canned baby foods canned soups (except seafood) canned dry beans canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

2.4.17.1.5 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

2.4.17.1.6 Animal Slaughtering and Processing Facilities

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals (2) preparing processed meats and meat byproducts and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

2.4.17.1.7 Seafood Product Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup) (2) smoking, salting, and drying seafood (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails (4) shucking and packing fresh shellfish (5) processing marine

fats and oils and (6) freezing seafood. Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

2.4.17.1.8 Bakery Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

2.4.17.1.9 All Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food grain and oilseed milling sugar and confectionery products preserved fruit, vegetable, and specialty foods dairy products meat products seafood products and bakeries and tortillas). The industry group includes industries with different production processes, such as snack food manufacturing coffee and tea manufacturing concentrate, syrup, condiment, and spice manufacturing and, in general, an entire range of other miscellaneous food product manufacturing.

2.4.17.2 BEVERAGE MANUFACTURING

Industries in the Beverage Manufacturing subsector manufacture beverage 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, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

2.4.17.3 TOBACCO PRODUCT MANUFACTURING

Industries in Tobacco Product Manufacturing subsector manufacture tobacco products. The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and, (2) those that manufacture tobacco products, such as cigarettes and cigars.

2.4.17.4 TEXTILE, TEXTILE PRODUCT, APPAREL, LEATHER MANUFACTURING

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.

2.4.17.4.1 Fiber, Yarn and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn (2) manufacturing thread of any fiber (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments and (4) producing hemp yarn and further processing into rope or bags.

2.4.17.4.2 Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

2.4.17.4.3 Textile and Fabric Finishing and Fabric Coating Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

2.4.17.4.4 Textile Furnishings 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 nonapparel textile products, such as sheets and towels).

2.4.17.4.5 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

2.4.17.4.6 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. Knitting, when done alone, is classified in the Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

2.4.17.4.7 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories.

2.4.17.4.8 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is 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.

2.4.17.4.9 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

2.4.17.4.10 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. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. 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). They are made in the same establishments, so it is not practical to separate them.

2.4.17.5 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. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

2.4.17.5.1 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

2.4.17.5.2 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives, such as alkaline copper quat, copper azole, and sodium borates, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

2.4.17.5.3 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood (2) manufacturing engineered wood members and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

2.4.17.5.4 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes) wood windows and wood doors and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

2.4.17.5.5 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shook, wood boxes, other wood containers, and wood parts for pallets and containers.

2.4.17.5.6 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

2.4.17.6 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 includes coating and laminating activities.

2.4.17.6.1 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

2.4.17.6.2 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

2.4.17.7 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, platemaking 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.

2.4.17.7.1 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print, but may perform postprinting activities, such as folding, cutting, or laminating the materials they print, and mailing.

2.4.17.7.2 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

2.4.17.8 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. However, establishments that manufacture petrochemicals from refined petroleum are classified in Petrochemical Manufacturing in the Energy sector.

2.4.17.8.1 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation (2) straight distillation of crude oil and (3) cracking.

2.4.17.8.2 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

2.4.17.8.3 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

2.4.17.9 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.

2.4.17.10 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.

2.4.17.10.1 Plastics Products Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding extrusion molding injection molding blow molding and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

2.4.17.10.2 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural, synthetic, or reclaimed rubber materials into intermediate or final products using processes, such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

2.4.17.11 NON-METALLIC MINERAL PRODUCTS 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. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

2.4.17.11.1 Clay Product and Refractory Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

2.4.17.11.2 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

2.4.17.11.3 Cement and Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzolanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

2.4.17.11.4 Lime and Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

2.4.17.11.5 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

2.4.17.12 PRIMARY METAL MANUFACTURING

Industries in the Primary Metal Manufacturing subsector 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.

2.4.17.12.1 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore (2) manufacturing pig iron in molten or solid form (3) converting pig iron into steel (4) manufacturing ferroalloys (5) making steel (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire) and (7) making steel and forming pipe and tube.

2.4.17.12.2 Steel Product Manufacturing from Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

2.4.17.12.3 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina (2) making (i.e., the primary production) aluminum from alumina (3) recovering aluminum from scrap or dross (4) alloying purchased aluminum and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

2.4.17.12.4 Nonferrous Metal (except Aluminum) Production and Processing

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

2.4.17.12.5 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping, threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

2.4.17.13 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.

2.4.17.13.1 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals (2) manufacturing metal custom roll forming products (3) manufacturing metal stamped and spun products (except automotive, cans, coins) and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture

2.4.17.13.2 Cutlery and Hand Tool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware (2) manufacturing nonpowered hand and edge tools (3) manufacturing nonpowered handsaws (4) manufacturing saw blades, all types (including those for sawing machines) and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

2.4.17.13.3 Architectural and Structural Metals Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels and sections (2) structural metal products and (3) metal plate work products.

2.4.17.13.4 Boiler, Tank, and Shipping Container Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

2.4.17.13.5 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

2.4.17.13.6 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

2.4.17.13.7 Machine Shops Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments known as machine shops primarily engaged in machining metal and plastic parts and parts of other composite materials on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled) automatic screw machines and machines for boring, grinding, and milling.

2.4.17.13.8 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products (2) enameling, lacquering, and varnishing metals and metal products (3) hot dip galvanizing metals and metal products (4) engraving, chasing, or etching metals and metal products (except jewelry personal goods carried on or about the person, such as compacts and cigarette cases precious metal products (except precious plated flatware and other plated ware) and printing plates) (5) powder coating metals and metal products (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products and (7) providing other metal surfacing services for the trade. Establishments in this industry coat, engrave, and heat treat metals and metal formed products fabricated elsewhere.

2.4.17.13.9 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

2.4.17.14 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 that are 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. Moreover, complex assembly operations are an inherent part of the production process.

2.4.17.14.1 Agriculture, Construction, and Mining Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment and other powered home lawn and garden equipment. It also includes establishments primarily engaged in manufacturing construction machinery, surface mining

machinery, logging equipment, manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

2.4.17.14.2 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

2.4.17.14.3 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment oil and gas field production machinery and equipment and oil and gas field derricks and (2) manufacturing water well drilling machinery.

2.4.17.14.4 Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery. This industry also includes plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment. Other manufacturing industrial machinery includes paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery.

2.4.17.14.5 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

2.4.17.14.6 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

2.4.17.14.7 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools cutting tools and accessories for metalworking machinery special dies, tools, jigs, and fixtures industrial molds rolling mill machinery assembly machinery coil handling, conversion, or straightening equipment and wire drawing and fabricating machines.

2.4.17.14.8 Engine, Turbine, and Power Transmission Equipment

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

2.4.17.15 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. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition 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. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the

equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically-related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. 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. As new activities emerge, they are less likely therefore, to cross the subsector boundaries of the classification.

2.4.17.15.1 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program (2) can be freely programmed in accordance with the requirements of the user (3) perform arithmetical computations specified by the user and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

2.4.17.15.2 Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

2.4.17.15.3 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicles, and public address and musical instrument amplification. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

2.4.17.15.4 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

2.4.17.15.5 Navigational, Measuring, Electro medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

2.4.17.15.6 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

2.4.17.16 ELECTRICAL EQUIPMENT, APPLIANCE, COMPONENT MANUFACTURING

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. This includes items such as Electric Lighting Equipment Manufacturing establishments that produce electric lamp bulbs, lighting fixtures, and parts. Household Appliance Manufacturing establishments that make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments that make goods, such as electric motors, generators, transformers, and switchgear apparatus. And other Electrical Equipment and Component Manufacturing establishments that 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).

2.4.17.16.1 Electric Lighting Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs). This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics), and lighting fixture components (except current-carrying wiring devices). This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence. This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures. This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

2.4.17.16.2 Household Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric house wares, household-type fans, household-type vacuum cleaners, floor care machines, electric vacuum cleaners, electric floor waxing machines, household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units, household-type electric and nonelectric cooking equipment, household-type refrigerators and upright and chest freezers, household-type laundry equipment, electric and nonelectric major household-type appliances, refrigerators, upright and chest freezers, and household-type laundry equipment.

2.4.17.16.3 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers electric motors, generators, and motor generator sets switchgear and switchboard apparatus relays and industrial controls.

2.4.17.16.4 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

2.4.17.17 TRANSPORTATION EQUIPMENT MANUFACTURING

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

2.4.17.17.1 Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody), manufacturing chassis only, complete light trucks and utility vehicles (i.e., body and chassis) or manufacturing light truck and utility vehicle chassis only, manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or manufacturing heavy duty truck chassis only.

2.4.17.17.2 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

2.4.17.17.3 Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines, and engine parts, whether or not for vehicular use. Some of the manufactured items include, carburetors, pistons, piston rings, engine intake and exhaust valves, rebuilding gasoline motor vehicle engines, gasoline motor vehicle engine parts, vehicular lighting, vehicular lighting fixtures, electrical and electronic equipment, motor vehicle steering mechanisms and suspension components, rebuilding motor vehicle brake systems and related components, motor vehicle transmissions, power train parts, motor vehicle seating, seats, seat frames, seat belts, and interior trimmings. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

2.4.17.17.4 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts (3) developing and making prototypes of aerospace products (4) aircraft conversion (i.e., major modifications to systems) and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

2.4.17.17.5 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service and (3) manufacturing rail layers, ballast distributors, rail tamping equipment and other railway track maintenance equipment.

2.4.17.17.6 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

2.4.17.17.7 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

2.4.17.18 FURNITURE AND RELATED PRODUCTS 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. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

2.4.17.18.1 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen and bedroom furniture and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

2.4.17.18.2 Office Furniture (including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

2.4.17.18.3 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

2.4.17.19 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 establishments 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 from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

2.4.17.19.1 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, ophthalmic goods, dentures, and orthodontic appliances.

2.4.17.19.2 Other Miscellaneous Manufacturing

This industry comprises 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). Examples: Artificial Christmas trees manufacturing Floor and dust mops manufacturing Burial caskets and cases manufacturing Gasket, packing, and sealing devices manufacturing Candles manufacturing Musical instruments (except toy) manufacturing Coin-operated amusement machines (except jukebox) manufacturing Portable fire extinguishers manufacturing Fasteners, buttons, needles, and pins (except precious metals or precious and semiprecious stones and gems) manufacturing Umbrellas manufacturing

2.4.17.2 MINING, QUARRYING, AND OIL AND GAS EXTRACTION

The Mining, Quarrying, and Oil and Gas Extraction sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores liquid minerals, such as crude petroleum and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity. The Mining, Quarrying, and Oil and Gas Extraction sector distinguishes two basic activities: mine operation and mining support activities. Mine operation includes establishments operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis. Mining support activities include establishments that perform exploration (except geophysical surveying) and/or other mining services on a contract or fee basis (except mine site preparation and construction of oil/gas pipelines). Establishments in the Mining, Quarrying, and Oil and Gas Extraction sector are grouped and classified according to the natural resource mined or to be mined. Industries include establishments that develop the mine site, extract the natural resources, and/or those that beneficiate (i.e., prepare) the mineral mined. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and

waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. In contrast, manufacturing operations primarily use chemical and electrochemical processes, such as electrolysis and distillation. However, some treatments, such as heat treatments, take place in both the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

2.4.17.20.1 Oil and Natural Gas Extraction

Industries in the Oil and Gas Extraction subsector operate and/or develop oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas drilling, completing, and equipping wells operating separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum and natural gas and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This subsector includes the production of crude petroleum, the mining and extraction of oil from oil shale and oil sands, and the production of natural gas, sulfur recovery from natural gas, and recovery of hydrocarbon liquids.

2.4.17.20.2 Mining (except Oil and Gas)

Industries in the Mining (except Oil and Gas) subsector primarily engage in mining, mine site development, and beneficiating (i.e., preparing) metallic minerals and nonmetallic minerals, including coal. The term "mining" is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g., crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site.

2.4.17.20.3 Metal Ore Mining

This industry group comprises establishments primarily engaged in developing mine sites or mining metallic minerals, and establishments primarily engaged in ore dressing and beneficiating (i.e., preparing) operations, such as crushing, grinding, washing, drying, sintering, concentrating, calcining, and leaching. Beneficiating may be performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately.

2.4.17.20.4 Nonmetallic Mineral Mining and Quarrying

This industry group comprises establishments primarily engaged in developing mine sites, or in mining or quarrying nonmetallic minerals (except fuels). Also included are certain well and brine operations, and preparation plants primarily engaged in beneficiating (e.g., crushing, grinding, washing, and concentrating) nonmetallic minerals.

2.5.1. Soils

These data are part of a digital soil survey and generally is the most detailed level of soil geographic data developed by the National Cooperative Soil Survey. The information was prepared by digitizing maps, by compiling information onto a planimetric correct base and digitizing, or by revising digitized maps using remotely sensed and other information.

This data set consists of georeferenced digital map data and computerized attribute data. The map data are in a soil survey area extent format and include a detailed, field verified inventory of soils and miscellaneous areas that normally occur in a repeatable pattern on the landscape and that can be cartographically shown at the scale mapped. A special soil features layer (point and line features) is optional. This layer displays the location of features too small to delineate at the mapping scale, but they are large enough and contrasting enough to significantly influence use and management. The soil map units are linked to attributes in the National Soil Information System relational database, which gives the proportionate extent of the component soils and their properties.

2.5.2. Geology

Geologic maps constitute a fundamental and objective scientific foundation on which land-use, water-use, and resource-use decisions are based. A geologic map records the distribution of rock and soil materials at and near the land surface, and is the best science product to display the information that decision

makers need to identify and protect valuable resources, avoid risks from natural hazards, and make wise use of our land. (Source: National Cooperative Geologic Mapping Program website: <http://ncgmp.usgs.gov/ncgmpgeomaps/>)

2.5.3. Oceanography

These data include, but are not limited to, bathymetry, shoreline, sea floor mapping, habitat, landcover, seismic data, fisheries, and marine boundaries. (Source: Interagency Working Group on Ocean and Coastal Mapping)

2.5.4. Geomorphology

Geologic data dealing with surface land features and the processes that create and change them. (Source: USGS)

2.5.5. Climate

Data related to drought, precipitation, temperature, wind, and other weather parameters and associated patterns. (Source: LGISC Digital Data Subcommittee)

2.5.6. Atmospheric

Data related to the blanket of air surrounding the earth, consisting of the troposphere, stratosphere, mesosphere, thermosphere, and exosphere. (Source: NASA)

2.6. MAP REFERENCE

2.6.1. Quad Indexes (1-degree, 250K, 100K, 24K, 12K, 6K)

Datasets showing names and boundaries of USGS quadrangles. (Source: LGISC Digital Data Subcommittee)

2.6.2. Topographic Maps

USGS primary map series. These maps show and name prominent natural and cultural features. They show and name works of nature including mountains, valleys, plains, lakes, rivers, and vegetation. They also identify the principal works of man, such as roads, boundaries, transmission lines, and major buildings. (Source: USGS website <http://egsc.usgs.gov/isb/pubs/booklets/topo/topo.html>)

2.6.3. Geographic Names Information System (GNIS – Place Names)

The Geographic Names Information System (GNIS) is the Federal and national standard for geographic nomenclature. The GNIS contains information about physical and cultural geographic features of all types in the United States, associated areas, and Antarctica, current and historical, but not including roads and highways. The database holds the Federally recognized name of each feature and defines the feature location by state, county, USGS topographic map, and geographic coordinates. (Source: USGS GNIS website <http://www.gnis.usgs.gov>)

2.6.4. Address Points

Point features assigned to specific lots or parcels noting the legal address. Generally the point layer is updated by the local 911 agency. (Source: Regional Planning Commission)

2.6.5. Search and Rescue Grids (SARs)

The Louisiana Search & Rescue Grid (LA SAR Grid) and additional grid reference systems. The LA SAR was commissioned by the Emergency Data Committee of the Louisiana Geographic Information Systems Council for the purpose of creating a single grid to support rescue and recovery efforts in emergency response operations. The Grid is based on a 15-second interval grid. (Source: LGISC Digital Data Subcommittee)

2.7. BIOLOGICAL

Features related to living organisms. (Source: LA Dept of Wildlife and Fisheries)

2.7.1. Wildlife

Undomesticated animals living in the wild, of which species are considered either game or nongame. Title 56 of the Louisiana Revised Statutes defines "Wildlife" as "all species of wild vertebrates." Geospatial information used in the management of wildlife. (Source: Louisiana Department of Wildlife and Fisheries)

2.7.2. Fisheries

The occupation, industry, or season of taking fish or other sea animals. Also the management and technology of fisheries. Geospatial information used in the management of fisheries (Source: Merriam-Webster and Louisiana Department of Wildlife and Fisheries)

2.7.3. Vegetation

Total plant cover of an area (Source: Merriam-Webster).

2.7.4. Endangered Species

Title 56 of the Louisiana Revised Statutes defines Threatened or Endangered species as "any species of wildlife determined by the Secretary (of the Department of Wildlife and Fisheries) or by the Secretary of the United States Department of the Interior, with concurrence by the (Louisiana Wildlife and Fisheries) Commission, to be of a class that requires protective regulation to prevent its extinction or the destruction or deterioration of its economic usefulness within this state, presently or in the foreseeable future. (Source: Louisiana Department of Wildlife and Fisheries)

2.8. ENVIRONMENTAL

2.8.1. Air

Resources and information relative to both short and long range air quality planning for the state and for development and maintenance of federally required state implementation plans (SIPs) to ensure compliance with the National Ambient Air Quality Standards (NAAQS) found in Section 110 of the Clean Air Act (CAA). Proposed nonattainment designations for the 2008 Ozone NAAQS. (Source: LA DEQ website <http://www.deq.louisiana.gov/portal/tabid/68/Default.aspx>)

2.8.2 Water

Data developed to support compliance of the Clean Water Act, which has been enacted to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." (Source: Louisiana Department of Environmental Quality, Water Quality Management Plan 2004)

2.8.3 Land

Under the Resource Conservation and Recovery Act (RCRA), generators, transporters, treaters, storers, and disposers of hazardous waste as defined by the federally recognized hazardous waste codes, are required to provide information concerning their activities to state environmental agencies. **Cleanup of contaminated sites:** DEQ identifies contaminated sites and works with responsible parties to ensure the cleanup of a site meets the standards for its intended use. DEQ provides technical assistance, conducts inspections and provides oversight to ensure the cleanup meets the appropriate standards. The dedicated state Hazardous Waste Site Cleanup Fund (can be utilized for assessment, investigation and remediation of abandoned hazardous and non-hazardous sites. Due to limited funding for the HWSCF, sites are prioritized based upon the potential threat to human health and the environment. DEQ also works with EPA Region 6 to prioritize Louisiana sites for removal actions where no financially viable responsible party can be identified. Louisiana competes with the other four states in Region 6 for its use of limited removal funding. **Solid waste:** DEQ issues permits for and monitors landfills throughout the state. Landfills are a venue for proper disposal of waste. Permits issued by DEQ delineate what materials a landfill can accept, while providing discharge limitations that are protective of human health and the environment. (Source: Louisiana Department of Environmental Quality website <http://www.deq.louisiana.gov>)

2.9. ECONOMIC

2.9.1. Economic Development

Accurate, timely, comprehensive data that helps agencies, businesses, and nonprofit organizations understand customers, analyze site locations, and identify untapped potential. Background data usage includes transportation, imagery, demographics, consumer spending patterns, and lifestyle segmentation, small business development centers, incubators/accelerators, wetlab incubators, industrial parks-public and private, business parks-public and private, megasites, economic development regional organization territories, cadastral, community and technical colleges with programs offered. (Source: Louisiana Department of Economic Development)

2.9.2. Employment

Data that provides detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls and/or monthly and annual employment, unemployment, and labor force data for Census regions and divisions, states, counties, metropolitan areas, and cities. (Source: Louisiana Department of Economic Development)

2.9.3. Tax Credit & Divisions

Specific geographic area targeted for economic revitalizing, as well as to attract new investments. (Source: Louisiana Department of Economic Development)

2.9.4. Business Listings

Data developed to provide detailed information about businesses in an area for product inventory management in a spatial context, including an inventory of products manufactured and/or distributed by NAICS and SIC code identification of upstream and downstream market opportunities for business retention and expansion. (Source: Louisiana Department of Economic Development)