

Community-Focused Exposure and Risk Screening Tool (C-FERST)



Map Layers

Office of Research and Development National Exposure Research Laboratory

C-FERST Map Layers

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• Demographic Data 2008 - 2012

- Total Population
- o Population Density (per square mile)
- Percent Minority
- o Percent below Poverty Level
- o Percent Age Less Than 5 Years Old
- o Percent Age Less Than 18 Years Old
- o Percent Population Age Greater Than 64 Years Old
- o Percent Housing Units Built Before 1950
- Percent 25 Years and Over With Less Than A High School Degree
- Percent 25 Years and Over With A High School Degree
- o Percent Linguistically Isolated Households
- Population of American Indian and Alaskan Native
- o Population of American Indian and Alaskan Native below Poverty Level
- Percent Low Income Population (Less than 2X Poverty Level)
- National Air Toxics Assessment (NATA) 2011
 - Cancer Risk and Respiratory Hazard Index
 - Total Cancer Risk (per Million)
 - Total Non-Cancer Respiratory Risk (Hazard Index)
 - Pollutants: Ambient Concentration (ug/m3), Exposure Concentration (ug/m3), Cancer Risk (per million) and/or Non-Cancer Risk (Hazard Index) for (or attributed) to each of the following:
 - Acetaldehyde
 - Acrolein
 - Arsenic
 - Benzene
 - 1,3-Butadiene
 - Chromium
 - Diesel PM
 - Formaldehyde
 - Lead
 - Naphthalene
 - PAH
- Nonattainment Areas for Air
 - o Ozone 8-hr (2008 standard)

- o Lead (2008 standard)
- o SO2 1-hr (2010 standard)
- o PM2.5 24hr (2006 standard)
- o PM2.5 Annual (2012 standard)
- o PM10 (1987 standard)

• Air Quality Predictions 2012

- Summer Ozone Levels (ppb)
- o Annual PM 2.5 (ug/m3)

• EPA Smart Location Database

- o Housing Units per acre
- People per acre
- o Jobs per acre
- Activity density (housing + jobs per acre)
- o Jobs per household
- Workers per job equilibrium index
- o Land use diversity
- Total road network density
- High-speed road network density
- Street intersection density
- Distance to transit (meters)
- o Percentage of jobs within 0.25 miles of fixed-guideway transit
- o Percentage of jobs within 0.5 miles of fixed-guideway transit
- Transit service frequency
- Transit service frequency per square mile
- o Jobs within a 45 min. transit ride (weighted)
- o Jobs within a 45 min. drive (weighted)
- Working-age population within a 45 min. transit ride (weighted)
- o Working-age population within a 45 min. drive (weighted)
- o Accessibility index Transit to jobs
- o Accessibility index Auto to jobs
- Accessibility Index Transit to working-age population
- o Accessibility Index Auto to working-age population
- Total employment
- Low income workers (home location)
- Low income workers (workplace location)
- Percent low income workers (home location)
- Percent low income workers (workplace location)
- Zero car households
- o Zero car households as a percentage of all households

AIRNow Air Quality Index

C-FERST Map Layers

• EPA Registered Facilities (Sites)

The EPA's Facilities Registry System (FRS) provides location and attribute information on facilities, sites or places subject to environmental regulations or environmental interest. FRS is an integrated source of comprehensive environmental information (air, water, and waste) about facilities, sites or places. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, data collected from EPA's Central Data Exchange registrations and data management personnel. Additional Information on FRS is available at www.epa.gov/frs.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer

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Brownfield Grantee (ACRES)

This data layer provides location and attribute information for brownfields sites in the Assessment, Cleanup and Redevelopment Exchange System (ACRES). ACRES stores information reported by EPA Brownfields grant recipients on Brownfields properties assessed or cleaned up with grant funding, as well as information on Targeted Brownfields Assessments (TBA) performed by EPA Regions. Additional information about EPA Brownfields activities is available at http://www.epa.gov/brownfields.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/0

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Integrated Compliance Information System-Air (ICIS-AIR)

This data layer used to provide location and attribute information for facilities in the Air Facility System (AFS), but AFS was retired in October 2014. The modernized system is ICIS-AIR. The old AFS and new ICIS-AIR contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies. Additional information on ICIS-AIR is available at https://www.epa.gov/enviro/icis-air-overview.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/1

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Integrated Compliance Information System-Air Major (ICIS-AIR)

This data layer used to provide location and attribute information for the **major** facilities in the Air Facility System (AFS), but AFS was retired in October 2014. The modernized system is ICIS-AIR. The old AFS and new ICIS-AIR contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies. Additional information on ICIS-AIR is available at https://www.epa.gov/enviro/icis-air-overview.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/2

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Air Quality Monitoring (AQS)

This data layer provides location and attribute information for air monitoring stations in the Air Quality System (AQS). AQS contains ambient air pollution data collected by EPA, State, Local, and Tribal air pollution control agencies from thousands of monitoring stations. Additional information on AQS is available at https://www.epa.gov/aqs.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/3

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Tribal Schools

This data layer provides location and attribute information for Bureau of Indian Education (BIE) and/or Bureau of Indian Affairs (BIA) schools. Schools may be on or off Tribal lands.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/4

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Military Base Realignment and Closure (BRAC)

This data layer provides location and attribute information for facilities in the Base Realignment and Closure (BRAC) program. BRAC is a process used to close excess military installations and realign the total asset inventory in order to save money on operations and maintenance. Additional information is available at https://www.epa.gov/fedfac/base-closure-federal-facilities.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/5

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Clean Air Markets (CAMDBS or Clean Air Markets Division Business System)

This data layer provides location and attribute information for facilities regulated under the Clean Air Markets Division Business System (CAMDBS). CAMDBS supports the implementation of market-based air pollution control programs administered by the EPA Clean Air Markets Division, within the Office of Air and Radiation. Programs include the Acid Rain Program and regional programs designed to reduce the transport of ozone. Additional information is available at http://www.epa.gov/airmarkets/.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/6

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Superfund (SEMS)

Until 2014, this data layer used to provide location and attribute information for facilities in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). CERCLIS was EPA's inventory of abandoned, inactive, or uncontrolled hazardous waste sites regulated

under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. Now, CERCLIS has been replaced by the Superfund Enterprise Management System (SEMS). SEMS records information about all aspects of hazardous waste sites from initial discovery to listing on the National Priorities List (NPL). Additional information about Superfund is available at http://www.epa.gov/superfund.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/7

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Superfund National Priorities List (SEMS NPL)

This data layer provides location and attribute information for facilities on the *National Priorities List* (NPL). The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. It is tracked in the Superfund Enterprise Management System (SEMS). SEMS is EPA's inventory of abandoned, inactive, or uncontrolled hazardous waste sites regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. Additional information about Superfund is available at http://www.epa.gov/superfund.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/8

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OIL: Spill Prevention, Control and Countermeasure (SPCC) Rule and Facility Response Plans (FRPs)

This data layer provides location and attribute information on facilities regulated under the Spill Prevention, Control, and Countermeasure (SPCC) Rule and required under the Clean Water Act, as amended by the Oil Pollution Act, to submit Facility Response Plans (FRPs). FRPs are plans for responding to a worst case discharge of oil (to the maximum extent practical). Additional information is available at https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/facility-response-plan-frpoverview.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/9

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ICIS: Integrated Compliance Information System

This data layer provides location and attribute information from the Integrated Compliance Information System (ICIS). ICIS contains integrated enforcement and compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Additional information is available at https://www.epa.gov/enviro/icis-model.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/10

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National Compliance Database (NCDB): National Pesticides and Toxic Substances Compliance and Enforcement program

This data layer provides location and attribute information on facilities in the National Compliance Database (NCDB). NCDB supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA) by tracking regional compliance and enforcement activity for the National Pesticides and Toxic Substances Compliance and Enforcement program.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/11

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Water Discharger

This data layer used to provide location and attribute information on facilities in the Permit Compliance System (PCS) that tracked National Pollutant Discharge Elimination System (NPDES) surface water permits issued under the Clean Water Act. This system was replaced by the NPDES module of ICIS. Additional information about PCS-ICIS is available at https://www.epa.gov/enviro/facts/pcs-icis/search.html. Additional information on NPDES is available at https://www.epa.gov/npdes.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/15

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Major Water Discharger

This data layer used to provide location and attribute information on the Major facilities in the Permit Compliance System (PCS) that tracked National Pollutant Discharge Elimination System (NPDES) surface water permits issued under the Clean Water Act. This system was replaced by the NPDES module of ICIS. Additional information about PCS-ICIS is available at https://www.epa.gov/enviro/facts/pcs-icis/search.html. Additional information on NPDES is available at https://www.epa.gov/npdes.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/16

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Radiation Information Database (RADInfo)

This data layer provides location and attribute information on facilities in the Radiation Information System (RADINFO). RADInfo contains information about facilities that are regulated by US EPA for radiation and radioactivity. Additional information is available at https://www.epa.gov/enviro/radinfo-overview.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/17

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Air Pollution Reduction (RBLC): RACT/BACT/LAER Clearinghouse for Emissions Control Technologies

This data layer provides location and attribute information on facilities in the RACT/BACT/LAER Clearinghouse (RBLC) database. The RBLC database contains case-specific information on the "best available" air pollution technologies that have been required to reduce the emission of air pollutions

from stationary sources. RACT, or Reasonably Available Control Technology, is required on existing sources in areas that are not meeting national ambient air quality standards. BACT, or Best Available Control Technology, is required on major new or modified sources in clean areas. LAER, or Lowest Achievable Emission Rate, is required on major new or modified sources in non-attainment areas. Additional information is available at

http://cfpub.epa.gov/rblc/index.cfm?action=Home.Home&lang=en.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/18

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Hazardous Waste (RCRA): All Resource Conservation and Recovery Act Hazardous Waste facilities

This data layer provides location and attribute information on **ALL active and inactive** hazardous waste facilities regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at http://www.epa.gov/hw. Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/19

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Hazardous Waste (Active): Active RCRA facilities

This data layer provides location and attribute information on all **ACTIVE** hazardous waste facilities regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at https://www.epa.gov/hw.Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/20

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Hazardous Waste (Inactive): Inactive RCRA facilities

This data layer provides location and attribute information on **INACTVE** hazardous waste facilities regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at https://www.epa.gov/hw.Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/21

Hazardous Waste (Large Quantity Generator): RCRA facilities

This data layer provides location and attribute information on all Large Quantity Generator (LQG) hazardous waste facilities regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at http://www.epa.gov/hw. Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/22

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Hazardous Waste (Transporter): RCRA Transmitters

This data layer provides location and attribute information on all **Transporters** of hazardous waste regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at https://www.epa.gov/hw.Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/23

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Hazardous Waste (Treater, Storer, Disposer): RCRA Treatment, Storage and Disposal (TSD) facilities

This data layer provides location and attribute information on all Hazardous Waste **Treatment, Storage and Disposal (TSD)** facilities regulated under the Resource Conservation and Recovery Act (RCRA) and tracked in the RCRAInfo database. RCRAInfo is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste. Additional information about hazardous waste is available at http://www.epa.gov/hw. Additional information about RCRA is available at https://www.epa.gov/rcra.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS INTERESTS/MapServer/24

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Toxics Release Inventory (TRI)

This data layer provides location and attribute information on facilities regulated under the Toxics Release Inventory System (TRIS). The Toxic Release Inventory System (TRIS) is a publicly available EPA

database of information reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. Additional information is available at https://www.epa.gov/toxics-release-inventory-tri-program.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/26

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All Sites

This data layer provides location and attribute information about all facilities, sites, or places subject to environmental regulation or of environmental interest through EPA's national program systems. **Note:** The data layer omits facilities without latitude/longitude coordinates.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/FRS_INTERESTS/MapServer/27

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National Emissions Inventory by Pollutant (2011)

This data layer provides location and attribute information for National Emissions Inventory (NEI) facilities that emit select NEI pollutants: Acetaldehyde, Acrolein, Arsenic, Benzene, 1,3-Butadiene, Chromium, Diesel PM, Formaldehyde, Lead, Naphthalene, and PAH. The NEI is a comprehensive inventory of air emissions of both criteria air pollutants (CAPs) and hazardous air pollutants (HAPs) from all air emission sources for the United States. This map service displays 2011 USEPA National Emissions Inventory (NEI) point facility information. The NEI is prepared every three years by the USEPA based primarily on emission estimates and emission model inputs provided by state, local, and tribal air agencies for sources in their jurisdictions and supplemented by data developed by the USEPA. Additional information about 2011 NEI data is available at https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data.

Metadata description: https://gispub.epa.gov/arcgis/rest/services/ORD/USEPA NEI 2011/MapServer

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• Water Quality Inventory Report (305b)

This data layer provides location and attribute information for the National Water Quality Inventory Report to Congress (305(b) report). The 305(b) Report is the primary vehicle for informing Congress and the public about general water quality conditions in the United States. The report characterizes our water quality, identifies widespread water quality problems of national significance, and describes various programs implemented to restore and protect our waters. This map service contains GIS data from the EPA Office of Water 305(b) Assessed Waters Program. The information supporting this service resides in the Reach Address Database (RAD) which is part of the Watershed Assessment, Tracking & Environmental Results System (WATERS). This map service displays Assessed Waters as points, lines and areas. More information on 305(b) Assessed Waters is available at https://www.epa.gov/waterdata/national-water-quality-inventory-report-congress.

Metadata description: https://watersgeo.epa.gov/arcgis/rest/services/OWRAD_NP21/305B_NP21/MapServer

• BEACH Environmental Assessment and Coastal Health

This data layer provides location and attribute information for the Beaches Environmental Assessment and Coastal Health (BEACH) Program. The BEACH Program focuses on the following five areas to meet the goals of improving public health and environmental protection for beach goers and providing the public with information about the quality of their beach water: strengthening beach standards and testing, providing faster laboratory test methods-predicting pollution, investing in health and methods research, informing the public. Under the BEACH Act Grant Program states (including tribes and territories) are required to submit their beach monitoring (water quality), notification (advisory and closing), and beach location data to EPA. This map service displays beaches as lines on the map. Additional information is available at http://www.epa.gov/beach-tech.

Metadata description: https://watersgeo.epa.gov/arcgis/rest/services/OWRAD NP21/BEACH NP21/MapServer

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Permitted Water Discharge Sites (NPDES)

This data layer provides location and attribute information on facilities regulated under the National Pollutant Discharge Elimination System (NPDES), a mandated provision of the Clean Water Act. Additional information on NPDES is available at https://www.epa.gov/npdes.

Metadata description: https://watersgeo.epa.gov/arcgis/rest/services/OWRAD NP21/NPDES NP21/MapServer

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• STORET Water Monitoring Sites

This data layer provides location and attribute information for STORET (STOrage and RETrieval) monitoring sites. STORET is a repository for water quality, biological, and physical data pertaining to rivers and streams at a stream site level. Additional information is available at https://www.epa.gov/waterdata/storage-and-retrieval-and-water-quality-exchange.

Metadata description:

https://watersgeo.epa.gov/arcgis/rest/services/OWRAD NP21/STORET NP21/MapServer

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Impaired Waters with Total Maximum Daily Load (TMDLs)

This data layer provides location and attribute information for assessed waters that are listed by the states as impaired under Section 303(d) of the Clean Water Act. These waters are designated as Not Supporting their designated uses and tracked in the Total Maximum Daily Load (TMDL) Tracking System. A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. This map service displays impaired water bodies with TMDLs as points, lines and areas. Additional information is available at https://www.epa.gov/tmdl.

Metadata description: https://watersgeo.epa.gov/arcgis/rest/services/OWRAD NP21/TMDL NP21/MapServer

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Schools

This data layer provides location and attribute information for a database of Public and Private Schools, Colleges and Universities, Supplemental Colleges and Day Care Center developed by Oak Ridge National Laboratories. The data cover all 50 states, as well as Puerto Rico and other U.S. territories.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL Education/MapServer

Colleges and Universities

This data layer provides location and attribute information for all post secondary education facilities as defined by the Integrated Post Secondary Education System (IPEDS), National Center for Education Statistics, US Department of Education. Included are doctoral/research universities, masters colleges and universities, baccalaureate colleges, associates Colleges, theological seminaries, medical Schools and other health care professions, schools of engineering and technology, business and management, art, music, design, law schools, teachers colleges, tribal colleges, and other specialized institutions. In a significant number of instances, IPEDS contains only one record for an institution when there exists one or more branch campuses for the institution. The Multiple Campus College layer is intended as a supplement to account for additional public post secondary education campuses of colleges and universities.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL Education/MapServer/5

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Supplemental Colleges

This data layer represents a supplement to the of the Colleges and Universities layer. The Colleges and Universities layer is sourced to the Integrated Post Secondary Education System (IPEDS), National Center for Education Statistics, US Department of Education. In a significant number of instances, IPEDS contains only one record for an institution when there exists one or more branch campuses for the institution. The MultiCampus layer attempts to capture these additional public post secondary education campuses of colleges and universities associated with a single campus listed in the Integrated Post Secondary Education System (IPEDS). NCES provides enrollment and other information for one college or university (IPEDSID) and the data, in many cases, actually represents more than one campus. **Note:** for important information regarding limitations of this data please see the metadata description.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL Education/MapServer/6

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Private Schools

This data layer provides location and attribute information for all private elementary and secondary education in the United States as defined by the Private School Survey, National Center for Education Statistics, US Department of Education. This includes all Kindergarten through 12th grade schools as tracked by the Private School Survey. Overall, there is full private school data coverage for all 50 states, but not for Puerto Rico or other U.S. territories.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL_Education/MapServer/7

o Public Schools

This data layer provides location and attribute information for all public elementary and secondary education in the United States as defined by the Common Core of Data, National Center for Education Statistics, US Department of Education. This includes all kindergarten through 12th grade schools as tracked by the Common Core of Data. Included in this dataset are the military schools abroad and referenced in the city field with an APO or FPO address and referenced in the state field with the abbreviation AE.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL Education/MapServer/8

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Day Care Centers

This data layer provides location and attribute information for all day care centers for 50 states and Washington D.C. and Puerto Rico. **Note:** The dataset only includes center based day care locations (including schools and religious institutes) and does not include home and family based day cares. All the data was acquired from respective states' departments or their open source websites and then geocoded and converted into a spatial database.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/ORNL Education/MapServer/9

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• Neighborhood Boundaries

This data layer provides neighborhood boundaries, labels, centroids, and areas in 393 U.S. cities. Neighborhoods are defined based on information collected from official city websites, maps and background imagery, city officials, residents and real estate agents. Neighborhood delineation is based on three different methodologies: Neighborhood Descriptive Boundaries Method, Deduction Method and Scatter Plot Method. Additional information regarding the development of this dataset can be found at: http://dret.net/netdret/docs/wilde-tipugg2008-neighborhoods.pdf or http://www.factle.com.

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OEI/Factle Neighborhoods/MapServer

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• Tribal Boundaries

This data provides tribal geographic areas. Map Service of the tribal areas for lower 48 states and Alaska Native Villages, Alaska Native Allotments and Alaska Reservations in Alaska.

Check out the metadata links for the details:

Lower 48 States:

https://edg.epa.gov/metadata/rest/document?id=%7B8077CD55-74FB-4107-8047-3DEC0D55966A%7D&xsl=metadata to html full

Alaska Native Villages:

https://edg.epa.gov/metadata/rest/document?id=%7BE4341D1B-656F-4E76-86DB-

9216E8A968EA%7D&xsl=metadata to html full

Alaska Reservations:

https://edg.epa.gov/metadata/rest/document?id=%7BE37B0B2C-EB0B-436C-B993-

C18D8895E522%7D&xsl=metadata to html full

Alaska Native Allotments:

https://edg.epa.gov/metadata/rest/document?id=%7B15FEB09B-752E-4B48-B01B-

D9F2D360623A%7D&xsl=metadata to html full

Metadata description: https://map11.epa.gov/arcgis/rest/services/EMEF/tribal/MapServer

Federal and State Boundaries

This data provides Zip Codes, States, Counties, Cities, Townships, Federal/EPA Regions, Urbanized Lands, Federally Owned Lands, and Congressional Districts.

Metadata description: https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer

Zip Codes

Zip Codes are numbers that identify each postal delivery area in the United States. The Zip Code boundaries layer is provided by Tele Atlas, 2008.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/0

Congressional Districts

A congressional district is an electoral constituency that elects a single member of a congress. A congressional district is based on population, which in the United States is determined by taking a census every ten years.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/1

City Boundary

City boundaries are derived from the 2014 U.S. Census Bureau TIGER/Line data. These boundaries include incorporated cities and Census Designated Places.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/2

Urbanized Areas

Urbanized Areas are derived from the 2014 U.S. Census Bureau TIGER/Line Urban Areas. Urbanized Areas are contiguous areas of populations greater than 50,000.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/3

Federal Lands

This data layer provides boundary and feature information for federally owned or administered lands of the United States, Puerto Rico, and the U.S. Virgin Islands. Federal Lands are any land other than tribal lands that are controlled or owned by the United States, including lands selected by, but not yet conveyed to, Alaska Native Corporations and groups organized pursuant to the Alaska Native Claims Settlement Act of 1971. This layer is downloaded from the U.S. Geological Survey (USGS).

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/4

Township Boundaries

This data set portrays the Public Land Surveys of the United States, including areas of private survey, Donation Land Claims, and Land Grants and Civil Colonies. It is intended for geographic display and analysis at the national level, and for large regional areas. The data should be displayed and analyzed at scales appropriate for 1:2,000,000-scale data.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/5

Counties

The Counties layer portrays the county boundaries of the United States. A county is the largest territorial division for local government within a state in the United States. This map layer is downloaded from the U.S. Census Bureau.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/6

States

State boundaries are derived from 2000 U.S. Census Bureau TIGER/Line generalized boundaries for state and state equivalent areas.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/7

o EPA Regions

This data layer provides EPA Regional Boundaries, generated from state boundaries.

Metadata description:

https://nepassisttool.epa.gov/arcgis/rest/services/NEPAssist/Boundaries/MapServer/8

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Demographic Data 2008 - 2012

This map service group layer contains data derived from the 2008-2012 American Community Survey (ACS) by census tract. Values derived from the ACS and used for this map service include: Total Population, Population Density (per square mile), Percent Minority, Percent Below Poverty Level, Percent Age (less than 5, less than 18, and greater than 64), Percent Housing Units Built Before 1950, Percent (population) 25 years and over (with less

than a High School Degree and with a High School Degree), Percent Linguistically Isolated Households, Population of American Indians and Alaskan Natives, Population of American Indians and Alaskan Natives Below Poverty Level, and Percent Low Income (less than 2 X Poverty Level) Population.

Metadata description:

https://geodata.epa.gov/arcgis/rest/services/OEI/ACS Demographics by Tract 2008 2012/MapServer

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National Air Toxics Assessment (NATA) 2011

The following data sources (and layers) are contained in this service: USEPA's 2011 National-Scale Air Toxic Assessment (NATA) data. Data are shown at the census tract level (2010 census tract boundaries, US Census Bureau) for Total Cancer and Non-Cancer Respiratory risks for all 180 air toxics. In addition, individual pollutant estimates of Ambient Concentration and Exposure Concentration, and, where applicable, Cancer Risk and Non-Cancer Risk are provided for: Acetaldehyde, Acrolein, Arsenic, Benzene, 1,3-Butadiene, Chromium, Diesel particulate matter (PM), Formaldehyde, Lead, Naphthalene, and Polycyclic Aromatic Hydrocarbon (PAH). The original data were downloaded from USEPA's Office of Air and Radiation (OAR) (https://www.epa.gov/nationalair-toxics-assessment/2011-nata-assessment-results). The data classification for this web service were developed for USEPA's Office of Research and Development's (ORD) C-FERST per guidance provided by OAR. The NATA is EPA's comprehensive evaluation of air toxics in the United States, based on modeled air quality. EPA developed the NATA as a tool for EPA and State/Local/Tribal Agencies to prioritize air toxics, emission sources, and locations of interest for further study in order to gain a better understanding of risks. NATA is a state-of-thescience screening tool that does not incorporate refined information about emission sources, but rather, uses general information about sources to develop estimates of risks using analytical methods. NATA assessments provide screening-level estimates of the risk of cancer and other serious health effects from breathing (inhaling) air toxics in order to inform both national and more localized efforts to identify and prioritize air toxics, emission source types, and locations that are of greatest potential concern in terms of contribution to population risk. Emission source types included in NATA are major stationary sources, also referred to as point sources (e.g., large waste incinerators, factories); area and other smaller stationary sources, also referred to as nonpoint sources (e.g., dry cleaners, small manufacturers); onroad and nonroad mobile sources (e.g., cars, trucks, boats); fires (e.g., wildfires, prescribed burning) and biogenic (e.g., naturally-occurring emissions) sources. In addition, estimates were also included for background emissions (e.g., natural sources, anthropogenic air toxics emitted in prior years that persist in the environment, air toxics emitted from distant sources); and secondarily formed emissions (i.e., chemicals not directly emitted from a source but formed in the atmosphere through photochemical reactions, examples include formaldehyde, acetaldehyde, and acrolein). http://www.epa.gov/national-air-toxics-assessment/2011-nata-assessment-methods#nei These screening level estimates help air pollution experts focus limited analytical resources on areas or populations where the potential for health risks are highest. NATA provides a snapshot of the outdoor air quality

These screening level estimates help air pollution experts focus limited analytical resources on areas or populations where the potential for health risks are highest. NATA provides a snapshot of the outdoor air quality and the risks to human health that would result if air toxic emission levels remained unchanged. A more detailed explanation of NATA and the methods used may be found in the Technical Support Document (https://www.epa.gov/national-air-toxics-assessment/2011-nata-technical-support-document). See the NATA Homepage (https://www.epa.gov/national-air-toxics-assessment/nata-technical-support-document), limitations (https://www.epa.gov/national-air-toxics-assessment/nata-limitations), frequent questions (https://www.epa.gov/national-air-toxics-assessment/nata-frequent-questions), fact sheet

(http://www.epa.gov/national-air-toxics-assessment/2011-nata-fact-sheet), and glossary (https://www.epa.gov/national-air-toxics-assessment/nata-glossary-terms).

Metadata Description: https://gispub.epa.gov/arcgis/rest/services/ORD/Air Pollutants CFERST/MapServer

Cancer Risk and Respiratory Hazard Index

This map shows Total Cancer Risk and Total Non-Cancer Respiratory Risk from the census tract level.

- o Pollutants: Ambient Concentration (ug/m³), Exposure Concentration (ug/m³), Cancer Risk (per million) and/or Non-Cancer Risk (Hazard Index) for (or attributed) to each of the following:
 - Acetaldehyde
 - Acrolein
 - Arsenic
 - Benzene
 - 1,3-Butadiene
 - Chromium
 - Diesel PM
 - Formaldehyde
 - Lead
 - Naphthalene
 - PAH

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• Nonattainment Areas for Air

This U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning and Standards (OAQPS) web service contains the following state level layers related to nonattainment areas and designations: Ozone 8-hr (1997 standard), Ozone 8-hr (2008 standard), Lead (2008 standard), SO2 1-hr (2010 standard), PM2.5 24hr (2006 standard), PM2.5 Annual (1997 standard), PM2.5 Annual (2012 standard), and PM10 (1987 standard). These are areas of the country where air pollution levels consistently exceed the national ambient air quality standards. Details about the US EPA's Non-Attainment data are available at https://www3.epa.gov/airquality/greenbook/. NAAQS are air quality standards set by the US EPA to protect health and the environment. Additional information on NAAQS is available at https://www.epa.gov/criteria-air-pollutants/naags-table.

Metadata Description:

https://geodata.epa.gov/arcgis/rest/services/OAR OAQPS/NonattainmentAreas/MapServer

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• Air Quality Predictions 2012

A Bayesian space-time downscaling fusion model approach described in a series of three published journal papers is used to provide daily, predictive PM2.5 (daily average in ug/m3) and O3 (daily 8-hr maximum in ppb) surfaces for 2012. Summer (O3) and annual (PM2.5) means were calculated and published. The downscaling fusion model uses both air quality monitoring data from the National Air Monitoring Stations/State and Local Air Monitoring Stations (NAMS/SLAMS) and numerical output from the Models-3/Community Multiscale Air Quality (CMAQ).

Metadata description:

https://geodata.epa.gov/arcgis/rest/services/OAR OAQPS/Fused AQ Predictions Downscaling/MapServer

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• EPA Smart Location Database

The Smart Location Database (SLD) characterizes the built environment within every U.S. Census block group using several variables that are demonstrated in the transportation research literature to have an effect on residential travel behavior. These variables are all related to factors known as the five D's: Density (of population, housing, or jobs), land use Diversity, urban Design (intersection density), Destination accessibility, and Distance to transit. See SLD website for background information, technical report, data dictionary and other details. Includes the following map layers:

- o Housing Units per acre
- People per acre
- o Jobs per acre
- Activity density (housing + jobs per acre)
- o Jobs per household
- Workers per job equilibrium index
- Land use diversity
- o Total road network density
- High-speed road network density
- Street intersection density
- Distance to transit (meters)
- o Percentage of jobs within 0.25 miles of fixed-guideway transit
- o Percentage of jobs within 0.5 miles of fixed-guideway transit
- Transit service frequency
- o Transit service frequency per square mile
- o Jobs within a 45 min. transit ride (weighted)
- o Jobs within a 45 min. drive (weighted)
- o Working-age population within a 45 min. transit ride (weighted)
- Working-age population within a 45 min. drive (weighted)
- o Accessibility index Transit to jobs
- o Accessibility index Auto to jobs
- Accessibility Index Transit to working-age population
- Accessibility Index Auto to working-age population
- Total employment
- o Low income workers (home location)
- Low income workers (workplace location)
- Percent low income workers (home location)
- Percent low income workers (workplace location)
- o Zero car households
- Zero car households as a percentage of all households

Metadata description: https://geodata.epa.gov/arcgis/rest/services/OA/SmartLocationDatabase/MapServer

• AIRNow Air Quality Index

This map service displays the Air Quality Index (AQI) information for yesterday's observed conditions, current observed conditions, today's forecast and tomorrow's forecast. The AQI is an index for reporting daily air quality. It reports air quality and associated short-term health effects you may experience within a few hours or days after breathing polluted air. AIRNow is a website developed by the U.S. EPA, National Oceanic and Atmospheric Administration, U.S. National Park Service, tribal, state, and local agencies to provide the public with easy access to national air quality information. AIRNow offers daily AQI forecasts as well as real-time AQI conditions for over 300 cities across the US, and provides links to more detailed State and local air quality Web sites. Additional information is available at www.airnow.gov.

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