



DATA & APPLICATIONS ONLINE

Infrastructure

Overview

The NASA Socioeconomic Data and Applications Center (SEDAC) offers a variety of data sets on infrastructure. Data and maps are available for download at sedac.ciesin.columbia.edu/theme/infrastructure.

Selected Data

Global Summer Land Surface Temperature Grids (LSTs) and **Global Urban Heat Island (UHI)** gridded data products represent global summer day-time maximum/nighttime minimum surface temperatures in urban areas. Urban extents are from the Global Rural-Urban Mapping Project (GRUMP) collection; LSTs are from 2013 MODIS composite data.

Gridded Population of the World (GPW) version 4.11 includes among its nine data sets a vector (point) version of the administrative input units and data context; pixel-level land and water estimates; and a national identifier grid.

Global Man-Made Impervious Surface (GMIS) and **Global Human Built-up and Settlement Extent (HBASE)** are high-resolution companion data sets derived from global 30 m Landsat satellite data for 2010.

Dar es Salaam Land Use and Informal Settlement represents urban land use and consolidation of informal settlements for the years 1982, 1992, 1998, and 2002, in Dar es Salaam, Tanzania.

Global Roads Open Access combines the best available roads data 1980–2010 by country into a global roads coverage, using the UN Spatial Data Infrastructure Transport v2 as a common data model.

Global Reservoir and Dams contains 6,862 spatially-explicit records of reservoirs and associated dams.

Population Exposure Estimates in Proximity to Nuclear Power Plants, Locations combines a global data set of plant locations with PRIS, a database of nuclear reactors maintained by the International Atomic Energy Agency, for reactor specification and performance history attributes as of March 2012.



China Dimensions is a collection of geographic information system databases providing information on administrative regions of China, including hospitals and epidemiology stations, census, agricultural statistics, maps, economic and social development plans, and administrative geography; at 1:1 M; for various time periods.

Georeferenced Population Data Sets of Mexico consists of several products including ~100,000 geographic and census items for Mexican states, municipalities, and localities.

Mapping Resources

Use the **Data Visualization and Access Tool** to view and download GMIS and HBASE data sets by country, tile, shapefile, rectangle or polygon, tutorial included.

The **Population Estimation Service** and other **SEDAC Map Services** let users integrate and understand infrastructure-related data in new ways.

The **SEDAC Map Viewer** can visualize all SEDAC data set map layers, organized by approximately 15 interdisciplinary topics, with an innovative four-window map view option.



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EODIS DAACs
SEDAC is one of twelve NASA Earth Observing System Data and Information System (EODIS) Distributed Active Archive Centers (DAACs)