

# **Definitions**

### <u>Age</u>

Age data is reported for five-year age groups and select summary groups such as 18 years and over.

### **Median Age**

Median age is calculated from the distribution of age by five-year groups. See Median.

### **Average Household Size**

See Household.

#### Block

A census block is a component of a block group identified by a four-digit code. Blocks are small in area, in general, especially in cities. However, blocks in rural or remote areas may cover hundreds of square miles. A block code that starts with a zero indicates a water-only block.

### Block group (BG)

A block group is a collection of one or more blocks and a statistical division of a census tract identified by a one-digit code. Block groups do not cross census tract, county, or state boundaries. In general, a block group is comprised of 600 to 3,000 residents. A zero block group code indicates a water-only BG.

#### **Buffer**

A zone around a location or point on a map that can be measured in time or distance. For example, a store's 15-minute drive-time buffer defines the area in which drivers can reach the store in 15 minutes.

#### Callout line

A line on a map extending between a feature's geographic position and its corresponding symbol or label, used in areas where there is not enough room to display a symbol or label in its correct location.

#### CBSA's

Core Based Statistical Area, a U.S. geographic area defined by the Office of Management and Budget (OMB) based around an urban center of at least 10,000 people and adjacent areas that are socioeconomically tied to the urban center by commuting. Areas defined on the basis of these standards applied to Census 2000 data were announced by OMB in June 2003. These standards are used to replace the definitions of metropolitan areas that were defined in 1990. The OMB expects to define new CBSAs based on the 2010 census in 2013.

### Census Block Groups

The smallest geographic entity for which the U.S. Census Bureau tabulates decennial census data. Many blocks correspond to city blocks bounded by streets, but blocks in rural areas may include

several square miles and have some boundaries that are not streets. The Census Bureau established blocks covering the entire nation for the first time in 1990. Previous censuses dating back to 1940 had blocks established only for part of the nation.

### **Census Tracts**

A small statistical subdivision of a county that usually includes approximately 4,000 inhabitants, but which may include from 2,500 to 8,000 inhabitants. A census tract is designed to encompass a population with relatively uniform economic status, living conditions, and some demographic characteristics. Tract boundaries normally follow physical features, but may also follow administrative boundaries or other nonphysical features.

#### Centroid

The geometric center of a feature. Of a line, it is the midpoint; of a polygon, the center of the area; of a three-dimensional figure, the center of volume.

### Classification

A schema for dividing map features into a specified number of classes according to selected attribute values. For example, sales territories might be divided into five classes according to the number of accounts they contain. Each class is then assigned a unique symbol to create a <a href="thematic">thematic</a> or <a href="tolor-coded map.">color-coded map.</a>

### Color-coded map

Also called a <u>thematic map</u>, it displays geographic areas according to specific values. For example, it could be a map showing census tracts in different colors according to median household income. Light green would represent lower income, medium green would represent a higher income level, and dark green would represent the highest level. A map of drive times is another example of this kind of map.

# Congressional districts (CDs)

Congressional districts are the areas from which individuals are elected to the U.S. House of Representatives. Once the apportionment of congressional seats is made based on census population counts within a state, then each state will establish CDs to elect representatives. A congressional district is uniquely identified using a two-digit state FIPS code and two-digit CD FIPS code.

# Consumer Expenditure (CEX) data

This comprehensive database, developed by Esri, is based on a combination of the latest Consumer Expenditure Surveys (CEX) from the Bureau of Labor Statistics and Esri's Tapestry Segmentation Data. Data is reported by product or service and includes total expenditures, average spending per household, and a Spending Potential Index (SPI). See <a href="Consumer Spending Methodology Statement">Consumer Spending Methodology Statement</a>.

### **Core Based Statistical Area (CBSA)**

Core Based Statistical Areas, which include metropolitan and micropolitan statistical areas, are comprised of one or more counties and are defined by the U.S. Office of Management and Budget (OMB). A metropolitan statistical area is affiliated with at least one urbanized area of 50,000 or more

inhabitants. A micropolitan statistical area is associated with at least one urban cluster of at least 10,000 people, but less than 50,000.

### **County**

The primary legal subdivision of all U.S. states except Alaska and Louisiana. The U.S. Census Bureau uses counties or equivalent entities (boroughs in Alaska, parishes in Louisiana, the District of Columbia in its entirety, and municipals in Puerto Rico) as statistical subdivisions. See <u>FIPS Code</u>.

# **County subdivisions (CSDs)**

County subdivisions are the primary divisions of counties, and include census county divisions (CCDs), minor civil divisions (MCDs), census subareas, and unorganized territories. CSDs can be uniquely identified using a two-digit state FIPS code, three-digit county FIPS code, and five-digit CSD FIPS code.

### Customer market analysis

A type of analysis that uses mostly customer data.

# **Customer profiling**

A process that establishes a demographic profile of a set of customers by tagging them with demographic values of the geographic area they fall within.

# **Customer prospecting**

A type of analysis that locates regions with ideal demographic characteristics for targeting new customers.

# **Demographics**

The statistical characteristics (such as age, birth rate, and income) of a human population.

# Demographic data

The Esri Updated Demographic data includes current-year estimates and five-year projections for key demographic data. With the exception of the Tapestry Segmentation data, which is not available at the block group level of geography in the standard product, all data is available at census block group, census tract, county, state, U.S., CBSA, DMA, and ZIP Code levels of geography.

# **Demography**

The statistical study of human populations, especially their locations, distribution, economic statistics and vital statistics.

# Designated Market Area (DMA)

Designated Market Areas are television markets defined by The Nielsen Company, revised on an annual basis. The majority of DMAs are comprised of one or more whole counties, although a few include parts of counties.

### **Diversity Index**

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). For example, a diversity index of 59 means there is a 59 percent probability that two people randomly chosen would belong to different race or ethnic groups.

#### **Donuts**

Donut rings define unique study areas around a center point, such as a store location. They are defined by distance and do not overlap. For example, if you had 5-, 10-, and 15- mile donut rings around a location with 10 households in each, the total number of households in each donut ring would be 10.

#### DPI

Dots Per Inch is a measure of spatial printing or video dot density, in particular the number of individual dots that can be placed in a line within the span of 1 inch (2.54 cm). The DPI value tends to correlate with image resolution, but is related only indirectly

#### **Drive times**

These are areas defined by distance that can be driven away from a site location within a specified time (in minutes) assuming posted speed limits for the road network. Drive-time polygons (shapes) take into account barriers such as mountains, rivers, bridges, or highways under normal traffic conditions. You can choose up to 300 minutes or 1,000 miles of drive time to the specified location.

# **Equal interval classification method**

A classification method in which each class has an equal range of values. Use this if your data is evenly distributed and you want to emphasize the difference in values between features.

#### Esri

is a software development and services company providing Geographic Information System (GIS) software and geodatabase management applications. The headquarters of Esri is in Redlands, California.

#### **Families**

Households in which one or more persons in the household are related to the householder (formerly, the head of the household) by birth, marriage or adoption. The Census tabulates only one family per household.

#### **Feature**

Store sites, customer locations, streets, census tracts, and ZIP Codes are examples of map features.

#### FIPS Code

Federal Information Processing Standards (FIPS) for numeric codes used to identify states and counties.

### **Gap Analysis**

A tool that helps companies compare actual performance with potential performance. At its core are two questions: "Where are we?" and "Where do we want to be?" If a company or organization does not make the best use of current resources, or forgoes investment in capital or technology, it may produce or perform below its potential. This concept is similar to the base case of being below the production possibilities frontier

#### Geocentric

Measured from the earth or the earth's center; Having the earth as a center

### Geocode

To assign a street address to a location; a code representing the location of an object, such as an address a census tract, a postal code, or x,y coordinates

#### **GIS**

Geographic Information System, is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographically referenced data.[1] In the simplest terms, GIS is the merging of cartography, statistical analysis, and database technology

#### **GIF**

Acronym for Graphic Interchange Format. A low resolution file format for image files, commonly used on the Internet. It is well-suited for images with sharp edges and reduced numbers of colors.

#### Graticule

A network of longitude and latitude lines on a map or a chart that relates points on a map to their true locations on the earth.

# Hispanic origin

Defined by self-identification, Hispanic origin refers to ethnicity, not race. Persons of Hispanic origin may be of any race.

#### Home Value

The estimate of value is presented for total owner-occupied units. For a discussion of home value projections, see the Update Methodology.

#### Household

A household is an occupied housing unit. Household type is identified by the presence of relatives and the number of persons living in the household. Family households, with or without children, include married couples and other families—a male or female householder with no spouse present. Nonfamily households may be a group of unrelated persons or a single person living alone.

### **Average Household Size**

Average household size is calculated by dividing the number of persons in households by the number of households.

#### Household Income

See Income.

#### **Household Income Base**

This is the sum of the household income distribution.

#### **Income**

Income amounts are expressed in current dollars, including an adjustment for inflation or cost-of-living increases. For a discussion of income projections, see the <u>Esri Demographic Update Methodology Statement</u>.

### Median Household Income

This is the value that divides the distribution of household income into two equal parts. Pareto interpolation is used if the median falls in an income interval other than the first or last. For the lowest interval, < \$10,000, linear interpolation is used. If the median falls in the upper income interval of \$500,000+, it is represented by the value of \$500,001.

### Median Home Value

This estimate divides the distribution of home value into two equal parts. Linear interpolation is used if the median home value falls below \$1,000,000. If the median falls in the upper home value interval of \$1,000,000+, it is represented by \$1,000,001.

### Per Capita Income

This is the average income for all persons calculated from the aggregate income of persons 15 years and older.

#### Index

An index is the ratio of a local percent (rate) to a U.S. percent (rate) or other base.

#### **Interval Classification**

A data classification method that divides a set of attribute values into groups that contain an equal range of values.

#### **JPEG**

Acronym for Joint Photographic Experts Group. A glossy image compression format commonly used on the Internet. JPEG is well-suited for photographs or images that have graduated colors.

#### **Leakage**

occurs when members of a community spend money outside that community or when money spent inside that community is transferred outside the community. For example, crossing a border to buy goods forgoes the same purchase that could have been made inside the community. Many chain stores have high leakages rates due to the transferring of sales revenue to a corporate headquarters

### **Lifestyle Segmentation**

Separating consumers into groups, based on their hobbies, interests, and other aspects of their lifestyles.

#### **Market Area**

An area of people who are likely to purchase your goods or services. Market areas can be determined by the number of customers and any other information about them. For example, for a coffee shop, the market area may be the number of college students within three miles of a store location.

#### **Market Potential**

A process that determines the percentage of a market area being reached based on the number of customers within an area divided by the total population in that area.

#### Manual classification method

A classification method in which you decide how many values are in each class.

#### Median

This is a value that divides a distribution into two equal parts. A median is a positional measure that is unaffected by extremely high or low values in a distribution that may affect an average.

### Median Age

See Age.

### Median Home Value

See Home Value.

#### **Median Household Income**

See Income.

#### MSA

Acronym for metropolitan statistical area. A geographic entity defined by the U.S. Office of Management and Budget for use by federal statistical agencies, including the U.S. Census Bureau. An MSA is based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core area. According to the 1990 standards, to qualify as an MSA the area must include at least one city or urbanized area with 50,000 or more inhabitants and a total metropolitan population of at least 100,000 (75,000 in New England). The county or counties containing the largest city and surrounding densely settled territory are central counties of the MSA. Additional outlying counties qualify to be included in the MSA if they meet specified requirements. MSAs in New England are defined in terms of cities and towns rather than counties.

#### **NAICS**

Acronym for North American Industry Classification System. A system for classifying individual business locations by their types of economic activity. The statistics agencies of Canada, Mexico, and the United States collaborated on NAICS to standardize the industry statistics produced by the three countries. NAICS is used as an identification system by all federal statistical agencies, as well as many state and local agencies, trade associations, private businesses, and other organizations. NAICS replaced Standard Industrial Classification codes in 1997.

### Oblique images

The name of a patented aerial image capture process that produces imagery showing the fronts and slides of buildings and locations on the ground. Images are captured by low-flying airplanes, depicting up to 12 oblique perspectives (shot from a 40 degree angle) as well as an orthogonal (overhead) view of every location flown. These perspectives can then be stitched together to create composite aerial maps that seamlessly span many miles of terrain. Because they are taken from an angle, the pixels associated with Pictometry images are trapezoidal, rather than rectangular.[1] This necessitates special software and algorithms to accurately determine objects' size and position on the maps.

#### **Parcel**

A piece or unit of land, defined by a series of measured straight or curved lines that connect to form a polygon.

### Per Capita Income

See Income.

#### **PNG**

Portable Networks Graphics, a bitmapped image format that employs lossless data compression. PNG was created to improve upon and replace GIF (Graphics Interchange Format) as an image-file format not requiring a patent license.

# Polygon

A polygon is a hand-drawn area on a map. Draw a polygon to define a study area rather than use a census tract, county, state, or ZIP Code area.

# **Population**

This is the total number of residents in an area. Residence refers to the "usual place" where a person lives, which is not necessarily the legal residence. For example, college students are counted where they attend school.

# **Psychographic**

Any attributes relating to personality, values, attitudes, interests, or lifestyles. They are also called IAO variables (for Interests, Activities, and Opinions). They can be contrasted with demographic variables (such as age and gender), behavioral variables (such as usage rate or loyalty), and firmographic variables (such as industry, seniority and functional area).

#### **Quantile Classification Method**

A classification method in which each class has roughly the same number of features. Use this method if your data is evenly distributed and you want to emphasize the difference in relative position between features.

#### Race

Defined by self-identification, race detail from Census 2000 was expanded to include a multiracial component. For the first time, each individual could report up to six race categories, resulting in 63 possible race combinations. The six basic race categories are White, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, and "some other" race for persons who do not identify with one of the specified groups.

### Raster image

or bitmap is a data structure representing a generally rectangular grid of pixels, or points of color, viewable via a monitor, paper, or other display medium. Raster images are stored in image files with varying formats.

# Rings

Rings define study areas around a center point, such as a store location, but the values in the rings are cumulative and overlap. For example, if you had 5-, 10-, and 15-mile rings around a location with 10 households in each, the total number of households in the 5-mile ring would be 10; in the 10-mile ring, it would be 20; and in the 15-mile ring, it would be 30.

# **Segmentation**

Segmentation explains customer diversity, simplifies marketing campaigns, describes lifestyle and lifestage, and incorporates a wide variety of data. See Esri Tapestry Segmentation Reference Guide.

#### **Shaded Relief**

A raster image that shows changes in elevation using light and shadows on terrain from a given angle and altitude of the sun.

# **Shaded Relief Maps**

A map showing changes in elevation using light and shadows on terrain from a given angle and altitude of the sun.

# **Shapefile**

A vector data (points, lines, or polygons) storage format for storing the location, shape, and attributes of geographic features. A shapefile is stored in a set of related files and contains one feature class.

# **Shopping Center data**

Directory of Major Malls tracks information on over 4,000 major shopping centers and malls across the United States. The file used in Business Analyst includes all shopping centers with a gross leasable area (GLA) of approximately 225,000+ square feet. Lifestyle/Specialty centers of any size are also

included in this file, as this classification of centers has recently become a primary focus in shopping center development. In addition, the data in Business Analyst contains the data for up to four anchor stores.

#### SIC

Standard Industrial Classification, a United States government system for classifying industries by a four-digit code. Established in 1937, it is being supplanted by the six-digit North American Industry Classification System (NAICS code), which was released in 1997; however certain government departments and agencies, such as the U.S. Securities and Exchange Commission (SEC), still use the SIC codes.

#### Site

A site can be defined by rings, donuts, drive-time polygons, or hand-drawn shapes. You can also use standard geographic units such as the entire United States or a single state, congressional district, county, county subdivision, place, ZIP Code, or census tract. You can use any combination of these to provide a side-by-side comparison of a specific site to the region in which it is located.

### Site prospecting

Run reports on a site to evaluate its potential.

#### State

States are identified by a two-digit FIPS Code. The District of Columbia is included as a state-equivalent area in the Esri database. See FIPS Code.

#### Street data

Nationwide detailed street maps with supporting basemap data. See the Data table for update frequency.

# Surplus

Economic surplus refers to two related quantities. Consumer surplus or consumers' surplus is the monetary gain obtained by consumers because they are able to purchase a product for a price that is less than the highest price that they would be willing to pay. Producer surplus or producers' surplus is the amount that producers benefit by selling at a market price that is higher than the least that they would be willing to sell for.

# **Tapestry Segmentation data**

Esri's Tapestry Segmentation system provides an accurate, detailed description of America's neighborhoods. U.S. residential areas are divided into 67 segments based on demographic variables such as age, income, home value, occupation, household type, education, and other consumer behavior characteristics.

### Thematic map

Also called a <u>color-coded map</u>, it displays study areas according to specific values. For example, it could be a map showing census tracts in different colors according to median household income. Light green would represent lower income, medium green would represent a higher income level, and dark green would represent the highest level. A map of drive times is another example of this kind of map.

### Topographic map

A map that represents the vertical and horizontal positions of features showing relief in some measurable form, such as contour lines, hysometric tints, and relief shading.

### Places (Cities and Towns)

Places include incorporated places (usually cities, towns, villages or boroughs), census designated places, and balance portions of consolidated cities. Places are uniquely identified using a two-digit state FIPS code and five-digit place FIPS code.

### **ZIP** Code

Created by the U.S. Postal Service to deliver the mail, ZIP Codes do not represent standard census geographic areas for data reporting. Because ZIP Code boundaries are not contiguous with census geographic areas or stable over time, data estimated for ZIP Codes are also subject to change.