
Rural, Urban and Suburban Codes Documentation

Overview of the Definitions:

Occasionally we've received requests for zip codes with a classification of whether it was rural, urban or suburban, but couldn't find any official definition of what constitutes each category. In 2006, we had a client request this and started doing some research when we found that the Dept. of Defense had come up with the following definition:

Urban: Zip with 3,000+ persons per square mile

Suburban: 1,000 - 3,000 persons per square mile

Rural: less than 1,000 persons per square mile

We figured that this was a good starting point, but as we coded our records, based solely on population, it became apparent that this wouldn't work. Some records met the suburban or rural definitions, but were located very close to a large city and really should have been coded differently. We went back and forth testing various combinations of population density and distance from major population centers. What we thought would be relatively simple became complex and very tedious to develop.

We believe the product that we've created will be useful to marketers and others needing a guideline on what type of area a zip is located in. Because of the subjective nature of these definitions, one could argue that some ZIPs should be coded other than what we have. We will consider any suggestions.

A few things to note about this product:

- We use Census counts and estimations to calculate the population per ZIP. The count is the population count in 2020 and estimations are what the Census Bureau believes the current population to be for that area.
- The Census wasn't counted based on ZIP Codes and the counts are based on what the Census calls a ZCTA (Zip Code Tabulation Area) and is approximately the same area of a ZIP Code.
- Some ZIP Codes weren't around in 2020, so we don't have figures for them.
- Some locations such as the South Pacific territories don't have population counts, therefore we don't code those records.
- It's up to the purchaser to determine if the data fits their needs. We recommend getting the demo version of the data and testing it thoroughly.

Accuracy Matters!



Overview of the Logic:

As mentioned, we've tried multiple ways to code these records and have tested the results repeatedly. Here, we will give an overview of the basic logic we use to determine whether an area is Urban, Suburban or Rural.

- We read each valid ZIP code, but eliminate military and territories such as Guam.
- If a ZIP Code does not have any population assigned to it (such as those used exclusively for PO Boxes), we will use the population of the surrounding ZIP.
- We look for the latest Census population data for that ZIP, including the population density (population per square mile).
- If the center of the ZIP Code is considered to be in a rural area by the USDA, we code it as **Rural**. The USDA spends a lot of time defining areas as rural, so we believe their definition is the most authoritative.
- We now use mapping software to determine how much of a ZIP Code is within the area defined by the USDA as rural, and how much is outside of that area. We factor that percentage in our determination.
- Find the population for the city or town that the ZIP is in, along with its population density.
- Find the nearest Metropolitan areas (cities or towns with over 50,000 people) to the ZIP Code. Based on distance and area size, we'll code it as **Urban** those areas where there is a minimal population density and the nearest metro area is within a certain distance to the metro area, based on the size of the area. For instance, if it's within a given distance of a metro area of 500,000 or more people it will be urban, or within a lesser distance of an area of 250,000 people, etc.
- Records that are neither rural nor urban will be coded as **Suburban**.

File Layout:

We provide the files in a comma-delimited text format, plus an Excel file. The layout is as follows:

- Zip code
- State
- City
- County
- Type code (b=Business/Private Zip Code, e=Exclusively used for PO Boxes, m=Military). If this type code field is blank, then it's for general delivery.
- RUS Code (R=Rural, U=Urban, S=Suburban).

Accuracy Matters!