

RPC Methodology in the Origin and Formatting of Census 2010 Geographies Joined with Basic Population, Race, and Housing Data (P.L. 94-171 redistricting data)

Ten-parish region: (1) Jefferson Parish, (2) Orleans Parish, (3) Plaquemines Parish, (4) St. Bernard Parish, (5) St. Charles Parish, (6) St. James Parish, (7) St. John the Baptist Parish, (8) St. Tammany Parish, (9) Tangipahoa Parish, (10) Washington Parish

I. Downloading Original Census Data

a. Geography

- i. SHAPE (geographic area) boundary files have been downloaded for census tracts, block groups, and census blocks for each parish (county) in the ten-parish region. Download data in FTP format from:
<http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html>
- ii. These files contain a descriptive name, land and water area measures (in square meters), and the geographic coordinates of the centroid of the boundary (county, tract, block group, block). This unique identifier is referred to as “Geoid10.”
- iii. The Census provides SHAPE files for the 2010 Census geography with the following naming convention for census blocks:
“tl_2010_22071_tabblock.shp”.

[Tiger Line] [Year] [FIPS State Code (22) plus FIPS County Code (071)] [Geographic Level]

Thus this file is made up of the Census block boundaries for Orleans Parish (071) in the state of Louisiana (22) for the 2010 Census.

b. The Census 2010 Redistricting Data (P.L. 94-171)

- i. Original data can be downloaded from:
http://www.census.gov/rdo/data/2010_census_redistricting_data_pl_94-171_summary_files.html
 1. For tips on downloading, refer to:
http://www.census.gov/rdo/tech_tips/
 2. For tips on using Microsoft Access with Census data refer to:
“[HowToUseMicrosoftAccessShells.pdf](#)” and
“[Downloading_PL94-171toAccess.pdf](#)”
- ii. For further information on P.L. 94-171 redistricting data, see:
<http://www.census.gov/support/PLData.html>

II. Formatting and Summarizing the Redistricting Data

These files include all basic population and housing characteristics from the 2010 census P.L. 94-171. The data fields are as follows:

- a. Total Population (field P0010001 renamed “TOTAL_POP” in our files)
- b. Racial categories

- i. The five major racial categories ((P0010003 through P0010007 renamed “WHITE” “BLACK” “AMER_IND” “ASIAN” “PAC_ISLDR”) in which the respondent specified *one race* were given these self-explanatory descriptive headings.
 - ii. *One race* other than the five major categories (field P0010008 renamed “OTHER_RACE”) in which the respondent specified one race, other than those listed in (section II.b.i)
 - iii. *Two or more races* (field P0010009 renamed “MULTI_RACE”) in which the respondent specified some combination of two or more races.
 - iv. The above 7 categories for race sum to “TOTAL_POP”
 - c. Hispanic/Non-Hispanic
 - i. Fields are also included for the Hispanic population (field P0020002 renamed “HISPANIC”) and its complement within the total, the non-Hispanic population (field P002003 renamed “NON_HISPANIC”).
 - ii. It should be noted that Hispanic is not a racial category and that each racial category has a Hispanic component.
 - iii. These two categories (“HISPANIC” and “NON_HISPANIC”) also sum to “TOTAL_POP”
 - d. Housing
 - i. The only housing statistics (fields H0010001 through H0010003 renamed “TOTAL” “OCCUPIED” and “VACANT”) in the P.L. 94-171 data are also included.
- III. Joining the Formatted and Summarized Redistricting Data with Geography
 - a. The “Geoid10” (referred to in section 1.a.i) is a concentrated string of numbers that links the data collection summaries to the appropriate geography.
 - i. See Table 1 below for an example of a Geoid10 with a block number and one with a block group number. Note, the Geoid10 cannot refer to both a block and a block group.

Table 1: Example boundary record for block 2003, Census tract 401.04, St. Tammany Parish, LA

Code (# of characters)	221030401042003
FIPS* state code (2)	22
FIPS* county code (3)	103
Census tract number (6)	040104
Block group number (1)	2
Block number (4)	2003

- b. Joining by geographic boundary

- i. Parish level data joins to redistricting data by the following convention:
 $22(\text{state})071(\text{county}) = 22071 = \text{Geoid10 for Orleans Parish, Louisiana}$
- ii. Tract level data joins to redistricting data by the following convention
 $22(\text{state})071(\text{county})012101(\text{tract}) = 22071012101 = \text{Geoid10 for Tract 121.01 Orleans Parish, Louisiana}$
- iii. Block group level data joins to redistricting data by the following convention:
 $22(\text{state})071(\text{county})012101(\text{tract})2(\text{block group}) = 220710121012 = \text{Geoid10 for Block Group 2 of Tract 121.01 Orleans Parish, Louisiana}$
- iv. Block level data joins to redistricting data by the following convention:
 $22(\text{state})071(\text{county})012101(\text{tract})2009(\text{block-which is in block group 2}) = 220710121012009 = \text{Geoid10 for Block 2009 (within block group 2) Tract 121.01 Orleans Parish, Louisiana}$

IV. Regional Summary File for Ten-parish Area (available soon)
 SHAPE files containing boundaries for all parishes and Census Designated Places (CDP's) in Louisiana will be used to create data files corresponding to those above for each of these geographic levels in the 10-parish region.