FEMA Trailers in Post-Katrina New Orleans Codebook

Daniel P. Aldrich

and

Kevin Crook

14 May 2007

Stata Variable Name: zip_code
Full Variable Name: Zip code Identifier
          type: numeric (long)

          range: [70037,71353]   units: 1
    unique values: 114   missing: 0/114

This variable provides the five digit ZIP-code identified used by the Postal System and the US government for each observation. The dataset includes the 114 zip codes in and around metropolitan New Orleans, Louisiana where temporary FEMA trailers could have been placed post-Katrina.

Stata Variable Name: numftrailersites
Full Variable Name: Number of Trailer Sites

          type: numeric (byte)

          range: [1,73]   units: 1
    unique values: 20   missing: 0/114

          mean: 5.64035
       std. dev: 10.4958

percentiles:	10%	25%	50%	75%	90%
	1	1	2	5	13

This variable measures the number of FEMA trailer sites per zip code area. It is based upon the *TAC-RC-IA Priority Sites Report*. We aggregated individual counts within each zip code to the zip code level.

Stata Variable Name: numtrailerunits
Full Variable Name: Number of Trailer Units

             type: numeric (int)

           range: [3,3787]   units: 1
   unique values: 94   missing: 0/114

            mean: 465.044
       std. dev: 624.175

   percentiles: 10%   25%   50%   75%   90%
                      33   99   227.5   520   1239

This variable uses the *TAC-RC-IA Priority Sites Report* to calculate, per zip code, the number of trailer units, as opposed to trailer sites, per zip code.

Stata Variable Name: nola_dummy
Full Variable Name: New Orleans, Louisiana Dummy Variable

             type: numeric (byte)

           range: [0,1]   units: 1
   unique values: 2   missing: 0/114

      tabulation: Freq. Value
                    96 0
                    18 1

This variable captures whether or not the zip code is within the New Orleans, Louisiana city limits.

Stata Variable Name: total_pop
Full Variable Name: Total Population per Zip Code Bloc

                type: numeric (long)

            range: [472,57638]   units: 1
    unique values: 114   missing: 0/114

            mean: 17426.1
        std. dev: 13516.8

        percentiles: 10%   25%   50%   75%   90%
                        2547   6383   14927   24760   36847

This variable captures the total number of individuals within the zip code according to U.S. census statistics.

Stata Variable Name: voting_age_pop
Full Variable Name: Population of Voting Age Individuals

                type: numeric (long)

            range: [351,40600]   units: 1
    unique values: 114   missing: 0/114

            mean: 12617
        std. dev: 9829.24

        percentiles: 10%   25%   50%   75%   90%
                        1838   4582   10521   18243   28897

This variable calculates the number of individuals of voting age (18 or older) within the population.

Stata Variable Name: votingage_
Full Variable Name: Voting Age Percentage
          type: numeric (float)

          range: [14.3,86.8]   units: .1
   unique values: 74   missing: 0/114

          mean: 71.5421
        std. dev: 6.45761

   percentiles: 10%   25%   50%   75%   90%
                  68.4   69.9   71.65   73.3   76.8

This variable shows what percentage of the total population in a zip code is old enough to vote (18 or older).

Stata Variable Name: perctpop__65
Full Variable Name: Percentage of the Population 65 and older
          type: numeric (float)

          range: [3.8,20.2]   units: .1
   unique values: 70   missing: 0/114

          mean: 11.3175
        std. dev: 2.92288

   percentiles: 10%   25%   50%   75%   90%
                   7.6   9.3   11.3   13.3   15.2

This variable records what percentage of the population within the zip code is aged 65 or older.

Stata Variable Name: areamiles
Full Variable Name: Area in Square Miles

        type: numeric (float)

       range: [.4,445.7]   units: .1
unique values: 108   missing: 0/114

        mean: 75.6921
    std. dev: 98.1641

  percentiles: 10%   25%   50%   75%   90%
                   3.8   8.9   39.3   91.3   217

This records how large the zip code bloc is in square miles.

Stata Variable Name: popdensity
Full Variable Name: Population Density
        type: numeric (float)

       range: [7.4826117,12836.923]   units: 1.000e-07
unique values: 114   missing: 0/114

        mean: 1676.12
    std. dev: 2720.31

  percentiles: 10%   25%   50%   75%   90%
                 46.687   85.5569   277.158   2234.38   5913.54

Calculated using the variables area and population, this measure captures the number of people per square mile within the zip code.

Stata Variable Name: houseprice
Full Variable Name: Median House Price

        type: numeric (long)

       range: [42900,184300]   units: 100
  unique values: 107   missing: 0/114

        mean: 79577.2
    std. dev: 25839.1

    percentiles: 10%   25%   50%   75%   90%
                    51900   61200   75500   89600   112400

This measure captures the median house price in the zip code in dollars.

Stata Variable Name: income
Full Variable Name: Average Income

        type: numeric (long)

       range: [7448,52375]   units: 1
  unique values: 114   missing: 0/114

        mean: 30544.7
    std. dev: 8524.12

    percentiles: 10%   25%   50%   75%   90%
                    20977   24353   29454   35294   44268

This measure captures the median household income in the zip code in US dollars.

Stata Variable Name: perctuniv
Full Variable Name: Percentage of the Population which Attended University

           type: numeric (float)

          range: [0,50.6]   units: .1
  unique values: 93   missing: 0/114

           mean: 14.6254
       std. dev: 9.65234

    percentiles: 10%   25%   50%   75%   90%
                       5.4   8.2   11.3   18.2   29.1

This variable captures the percentage of the population which has obtained at least a
bachelors degree. Specifically, it is the percentage of the population with bachelors
degree plus the percentage of population holding a graduate or professional degree.

Stata Variable Name: percthighschool
Full Variable Name: Percentage of the Population which Graduated from High School

           type: numeric (float)

          range: [40.1,92.1]   units: .1
  unique values: 93   missing: 0/114

           mean: 70.0579
       std. dev: 9.77869

    percentiles: 10%   25%   50%   75%   90%
                       58.6   63.1   69.55   78.4   82.9

This variable captures the percentage of the population (per zip code) that graduated from
high school.

Stata Variable Name: perctnonwhite
Full Variable Name: Percentage of the Population which is Non-White

       type: numeric (float)

       range: [2.4,98.5]   units: .1
 unique values: 108   missing: 0/114

       mean: 42.9325
    std. dev: 26.1834

  percentiles: 10%   25%   50%   75%   90%
                   9.8   22.2   40.4   58   84.7

This variable captures the minority percentage in the zip code.

Stata Variable Name: perctbelowpoverty
Full Variable Name: Percentage of Families below the Poverty Line

       type: numeric (float)

       range: [5.6,71.9]   units: .1
 unique values: 97   missing: 0/114

       mean: 23.1061
    std. dev: 10.3692

  percentiles: 10%   25%   50%   75%   90%
                   9.9   15.8   22.25   28.4   35.5

This variable captures the percentage of families within the zip code who were below the
poverty line.

Stata Variable Name: perctunemployed
Full Variable Name: Percentage of the Population which is Unemployed

        type: numeric (float)

        range: [1,10.3]   units: .1
  unique values: 56   missing: 0/114

        mean: 4.59649
    std. dev: 1.9069

    percentiles: 10%   25%   50%   75%   90%
                   2.5   3.2   4.3   5.4   7.2

This variable records the percentage of the population in the zip code which is unemployed.

Stata Variable Name: voterturnout
Full Variable Name: Percentage of Registered Votes who Voted in Presidential Election
          type: numeric (float)

      range: [.39053255,.76980484]   units: 1.000e-08
  unique values: 109   missing: 5/114

        mean: .605261
    std. dev: .065191

    percentiles: 10%   25%   50%   75%   90%
              .538486 .569165 .604528 .635445 .694561

This variable captures the voter turnout for each zip code bloc by averaging each voting precinct's voter turnout from the 2004 presidential election within the zip code. Voter turnout was defined as the number of people who actually voted in the election divided by the number of registered voters. The Louisiana Secretary of State website provided the number of voters that turned out for the 2004 presidential election for each of the voting precincts. (Voting precincts are smaller than zip code blocs). Using GIS data maps, we overlaid voting precincts with zip codes to calculate the average voter turnout per zip code.

Stata Variable Name: waterlevelrasterest
Full Variable Name: Water Level (Post-Katrina) Calculated using a Raster Map
        type: numeric (float)

        range: [0,8.5]   units: 1.000e-08
    unique values: 20   missing: 0/114

        mean: .727339
      std. dev: 1.6574

    percentiles: 10%   25%   50%   75%   90%
                        0   0   0   .5   2.5

This variable captures water depth per zip code as estimated by raster map observations.

Stata Variable Name: waterlevelpointest
Full Variable Name: Water Level (Post-Katrina) Calculated using both Raster Maps and
Available Estimates
        type: numeric (float)

        range: [0,8.2200003]   units: 1.000e-08
    unique values: 29   missing: 0/114

        mean: .74068
      std. dev: 1.65805

    percentiles: 10%   25%   50%   75%   90%
                        0   0   0   .4   2.45

This variable captures the post-Katrina water level per zip code. It was calculated
through averaging two observers' recorded estimates for these flood levels based on
raster maps, FEMA maps, and a Times-Picayune map (sources are detailed at the end of
this code book).

Stata Variable Name: waterlevelcga
Full Variable Name: Water Level (Post-Katrina) Calculated by the Center for Geographic Analysis
       type: numeric (float)

    range: [0,8.117]   units: .001
unique values: 29   missing: 0/114

     mean: .601588
  std. dev: 1.53446

percentiles:	10%	25%	50%	75%	90%
	0	0	0	.011	2.207

This variable records, by zip code, the estimated level of water taken on using an analysis carried out by the Harvard University Center for Geographic Analysis on a LIDAR generated map created by C&C Technologies.

Data Sources for this Dataset:

Trailer Sites:

TAC-RC-IA Priority Sites Report (Master Copy). Dated 29 June 2006. Provided by New Orleans Housing Department and the Governor's Hurricane Housing Task Force officials.

Demographic Data:

United States Census Website (www.census.gov)

Political Data:

Louisiana Secretary of State Website (http://www.sec.state.la.us/).

Geographic Data:

ESRI Data and Maps, Louisiana. Tiger 95 Louisiana Voting District Polygons.

Flood Levels:

C&C Technologies LIDAR points (direct communication with Scott Croft). Harvard University Center for Geographic Analysis (CGS) 10-hour analysis of C&C LIDAR point blocs. Lorena Iniguez (Los Angeles Times) (undated) Times Picayune map. ITS FEMA Map dated 9/8/05.