



LABOR AND POPULATION

# Demographic, Social, Economic, and Housing Characteristics

Development of a U.S. Contextual Database of  
1990–2010 Measures

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## Preface

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This report describes a neighborhood contextual database containing a specific set of demographic, social, economic, housing, cultural, and urbanization measures that have been generated at the census tract level, plus a smaller subset of similar measures at the county and metropolitan statistical area levels for 1990 to 2010. We created this contextual database to support the study “Neighborhood Characteristics and Cognitive Health in U.S. Older Adults,” a research project grant (R01) that Regina A. Shih led and the National Institute on Aging at the National Institutes of Health funded. The research needs of the parent National Institute on Aging R01 drove the methodological design of this neighborhood database (including variable selection, coverage years, units of observation, and harmonization issues). We are making these data available as a courtesy. The database itself is not yet in public release. Please contact Regina Shih at RAND at [rshih@rand.org](mailto:rshih@rand.org) to request access to the database.

Other related publications that the project staff have produced are as follows:

- Jeremy N. Miles, Margaret M. Weden, Diana Lavery, José J. Escarce, Kathleen A. Cagney, and Regina A. Shih, “Constructing a Time-Invariant Measure of the Socio-Economic Status of U.S. Census Tracts,” *Journal of Urban Health*, Vol. 93, No. 1, February 2016, pp. 213–232.
- Margaret M. Weden, Christine E. Peterson, Jeremy N. V. Miles, and Regina A. Shih, “Evaluating Linearly Interpolated Intercensal Estimates of Demographics and Socio-economic Characteristics for U.S. Counties and Census Tracts 2001–2009,” *Population Research and Policy Review*, Vol. 34, No. 4, August 2015, pp. 541–559.

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## Summary

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Research on the role of neighborhoods and communities in shaping community members' experiences has expanded rapidly in the past two decades. This document describes a neighborhood contextual database created using data from 1990 to about 2010 that contains data on the population, social, economic, and housing characteristics of U.S. census tracts, as well as measures of inequality, segregation, and urbanization of metropolitan statistical areas, counties, and states. We created this contextual database to support the study "Neighborhood Characteristics and Cognitive Health in U.S. Older Adults," a research project that Regina A. Shih led and the National Institute on Aging at the National Institutes of Health funded. The research needs of the parent National Institute on Aging grant drove the methodological design of the neighborhood database (including variable selection, coverage years, units of observation, and harmonization issues).

The main sources used in the construction of this database were the U.S. decennial census and the single- and multiyear estimates from the American Community Survey (ACS), which replaced the census long form and began issuing data for the entire United States in 2006. For intercensal years in which no ACS measures were available, we used linear interpolation to generate estimates. Census and ACS tract-level measures include population counts and percentages covering age and gender groupings, racial and ethnic groupings, nativity, language, education levels, unemployment, occupation, poverty, and rurality, as well as household measures of median household and family income, housing age, tenancy, and crowding. County and metropolitan statistical area measures are limited to Gini coefficients for income inequality and segregation indices for race and for income, with county-level data additionally having an urban-sprawl index and a rural-urban continuum measure.

Geographic units are based on census 2000 boundaries because this was the unit that the project required. We transformed census tract data for 1990 and 2010 boundaries using relevant tract-relationship databases to convert them to 2000 boundaries.

The neighborhood contextual database described in this document is made available to the research community as a courtesy, and we do not support it beyond this documentation. Researchers use these data at their own risk, and we are not responsible for any errors resulting from its use.



## Acknowledgments

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We would like to thank those who provided us with additional contextual measures not readily available online from the U.S. Census Bureau website. RAND colleagues Jeremy Miles and Diana Lavery led the creation of the tract-level neighborhood socioeconomic status measure. Reid Ewing of the University of Utah generously provided us with a county-level urban-compactness and -sprawl measure that he and his Utah colleague Shima Hamidi developed at the university's Metropolitan Research Center. Edward J. Welniak Jr. of the U.S. Census Bureau provided Gini coefficient measures for 1990 and 2000 at the state, county, and metropolitan statistical area levels. We would also like to thank José Escarce for his early input on the construction of this contextual database.



## Abbreviations

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ACS	American Community Survey
CBSA	core-based statistical area
CMSA	consolidated metropolitan statistical area
FIPS	Federal Information Processing Series
LTDB	Longitudinal Tract Data Base
MSA	metropolitan statistical area
NECMA	New England county metropolitan area
NSES	neighborhood socioeconomic status
PMSA	primary metropolitan statistical area
RUCC	Rural–Urban Continuum Code
USDA	U.S. Department of Agriculture



## Introduction

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This report describes a neighborhood contextual database created from data from 1990 to about 2010 that contains data on the population, social, economic, and housing characteristics of U.S. census tracts, as well as measures of inequality, segregation, and urbanization of metropolitan statistical areas (MSAs), counties, and states. We created this contextual database to support the study “Neighborhood Characteristics and Cognitive Health in U.S. Older Adults,” a research project that Regina A. Shih led and the National Institute on Aging at the National Institutes of Health funded. The research needs of the parent National Institute on Aging grant drove the methodological design of the neighborhood database (including variable selection, coverage years, units of observation, and harmonization issues).

The database consists of four data files, one for each of the geographic levels (census tract, county, MSA, and core-based statistical area [CBSA]) of contextual data:

- `census_acs_tract_1990_2010`, with data at the 2000 census tract level
- `contextual_county_1990_2010`, with data at the 2000 Federal Information Processing Series (FIPS) county level
- `contextual_msa_1990_2010`, with data at the 2000 MSA level
- `contextual_cbsa_2006_2010`, with data at the 2010 CBSA level.

The tract-level file is the main component of the database. The county, MSA, and CBSA files provide some additional measures that exist only at those levels.<sup>1</sup>

Table 1.1 lists the general data components in this contextual database.

In the chapters that follow, we describe, in turn, the creation and contents of each of these data files, including harmonization issues for changes in geographic units over time. The appendixes contain a detailed listing of the specific demographic, social, economic, and housing variables pulled from decennial census and American Community Survey (ACS) data and the measures created from them, along with a listing of the contents of each file in the database. Appendix B additionally contains SAS-format assignment code to create the MSA measure used from the FIPS county codes.

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<sup>1</sup> See Appendix A for a table of file names and file sizes.

**Table 1.1**  
**Data Components in the Contextual Database**

Type of Characteristic	Level	Data Source
Demographic	Census tract	U.S. census: 1990, 2000, 2010; interpolated: 1991–1999, 2001–2009
Social, economic, and housing	Census tract	U.S. census long form: 1990, 2000; ACS 5-year estimates: 2005–2009, 2006–2010, 2007–2011, 2008–2012; interpolated: 1991–1999, 2001–2006
Economic inequality	County, MSA, and CBSA	U.S. census: 1990, 2000; ACS 5-year estimates: 2005–2009, 2006–2010, 2007–2011, 2008–2012; interpolated counts used for segregation indices in 1991–1999, 2001–2006
Urbanization	County	USDA RUCCs: 1990, 2000, 2010; Ewing and Hamidi’s urban-sprawl index: 2000, 2010; interpolated urban sprawl: 2001–2009
Segregation indices	County and MSA	Same as for demographic and social, economic, and housing

SOURCES: U.S. Census Bureau, 2013a, 2013b, undated (a), 2016b; Economic Research Service, 2013a, 2013b; Hamidi and Ewing, 2014.

NOTE: Census tracts are 2000 census definitions for all years; counties are 2000 census definitions for all years; MSA used for 1990–2000; CBSA used for 2001–2010. USDA = U.S. Department of Agriculture. RUCC = Rural–Urban Continuum Code.



## Tract-Level Data

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### Introduction

In this chapter, we describe the data file called `census_acs_tract_1990_2010`, which encompasses all tract-level contextual data included in the neighborhood database.<sup>1</sup> The census tract is the unit of observation. Data on census tracts are arranged in a hierarchical format with records for each census tract in each year 1990 through 2010. Observations are uniquely identified in the data set using the 2000 census 11-digit tract codes (TRACT00) and year (YEAR). The data file contains 1,368,544 records: a total of 1,368,423 records for 65,163 tracts with 21 records (one for each year 1990–2010) and a total of 121 records for 11 tracts with only 11 records.<sup>2</sup>

In the rest of this chapter, we discuss the process of creating this tract-level data file. We address sources of data, conversion of the 1990 and 2010 census tract geographical boundaries to the 2000 census tract definitions, and interpolation of data for years in which decennial census or ACS tract-level data are unavailable. We then present the basic types of tract-level measures in the database.

### Data Sources

The tract-level data for the 1990, 2000, and 2010 censuses come from the U.S. Census Bureau's Internet-based data portal.<sup>3</sup> Demographic data by age, gender, and race and ethnicity for 1990, 2000, and 2010 come from the decennial short-form census of the U.S. population. Social, economic, and housing measures for 1990 and 2000 are from the decennial census long-form sample of the U.S. population. Because the long form was discontinued after 2000, we obtained social, economic, and housing measures for the subsequent years from the ACS. These tract-level data are released in five-year multiyear estimates and entail the 2005–2009 ACS, 2006–2010 ACS, 2007–2011 ACS, and 2008–2012 ACS.<sup>4</sup>

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<sup>1</sup> Appendix F presents a complete list of the variables in the data file.

<sup>2</sup> Eleven census tracts in 2000 census definitions have no records for the 1990–1999 period. These 2000 tracts were created from a portion of a 1990 tract that had no population in it in 1990. As noted below, this results in these tracts being excluded (i.e., having a zero weight) when reweighting 1990 tract counts to produce estimates for the 1990 population using the 2000 tract geographies.

<sup>3</sup> For 1990 census data, see U.S. Census Bureau, 2013a. For 2000 census data, see U.S. Census Bureau, 2013b. For the 2010 census data, see U.S. Census Bureau, undated (a).

<sup>4</sup> We obtained ACS data from U.S. Census Bureau, 2016b.

## Census Tract Definition

### Why We Used the 2000 Census Tract Definitions

The contextual database employs the 2000 census tract geographical boundaries. We made this selection to conform with the geographical definitions of the geocoded data available for respondents to the Health and Retirement Study for 2000 to 2010. This choice was also advantageous because the Census Bureau provides both the 2000 census and the 2005–2009 ACS five-year estimates using 2000 census tract definitions. However, the 2006–2010 ACS, 2007–2011 ACS, and 2008–2012 ACS employ 2010 tract definitions, as does the 2010 census. In addition, the contextual database also includes data from the 1990 census data that employ the 1990 census tract definitions. We employed a tract-conversion methodology to harmonize the geographical boundaries of data that were provided using geographical boundaries for tracts other than the 2000 census tract boundaries.

### Tract Conversion

The tract-conversion methodology (also known as spatial-interpolation methodology; see Weden et al., 2015) involves reweighting any census tract population-count data provided using 1990 or 2010 geographic boundaries to estimate the corresponding population-count data using 2000 geographic boundaries. The weights address changes to tract geographic definitions, which can include a lack of change, splits, consolidations, or a combination of splits and consolidations. The weights we employ come primarily from the Longitudinal Tract Data Base (LTDB) for conversions between 2000 and 2010.<sup>5</sup> See Logan, Xu, and Stults, 2014, for a detailed description of the spatial-interpolation methodology and derivation of conversion weights.<sup>6</sup> Table 2.1 lists the conversion method for each data source.

**Table 2.1**  
**Data Sources and Conversion Methods**

Data Source	Original Tract Definition	Conversion Source to 2000 Tract
1990 census	1990	Census tract–relationship file
2000 census	2000	Not applicable
Five-year 2005–2009 ACS	2000	Not applicable
Five-year 2006–2010 ACS	2010	LTDB
Five-year 2007–2011 ACS	2010	LTDB
Five-year 2008–2012 ACS	2010	LTDB
2010 census	2010	LTDB

<sup>5</sup> The LTDB provides transformation coefficients and a tract-correspondence matrix for harmonizing 2000 geographic boundaries and 2010 geographic boundaries. We were able to use these data to produce transformation coefficients for (reverse) harmonizing from 2010 to 2000.

<sup>6</sup> For example, if the entire old tract became a single new tract, 100 percent of the old tract’s count would be assigned to the new tract. Similarly, if the old tract split into two new tracts, one with 60 percent of the old tract population and one with 40 percent, the old tract counts would be apportioned accordingly. Both the Census Bureau weights and LTDB weights are population weights (i.e., the estimated portion of the earlier tract population that is in the later tract boundaries).

Because the LTDB does not provide a similar crosswalk for converting 1990 tract definitions to 2000 tract definitions, we used the publicly available tract-relationship database that the U.S. Census Bureau produces. It is noteworthy that the estimation of conversion weights that the Census Bureau conducts is less precise than those of the LTDB. Both the Census Bureau weights and LTDB weights are population weights (i.e., the estimated portion of the earlier tract population that is in the later tract boundaries). The Census Bureau weights, however, are estimated using the total population of the old tract and the proportion of the old tract land area made up by the new tract. This approach requires the assumption that the population is distributed equally across the tract. The LTDB weights are estimated more precisely using sub-tract information about the geographical distribution of the population within the census tract at the block level and, in some cases, the subblock level (Logan, Xu, and Stults, 2014). It is noteworthy that both methods assume that the social, economic, and demographic characteristics of the population do not influence the conversion weights.<sup>7</sup>

The conversion process uses weights to reapportion population counts accounting for census tracts that split, consolidate, or involve a combination of both. We derive the weights from a spatial accounting of the portion of an old tract that belongs to a new tract. For example, if the entire old tract became a single new tract, 100 percent of the old tract's count would be assigned to the new tract. Similarly, if the old tract split into two new tracts, one with 60 percent of the old tract population and one with 40 percent, the old tract counts would be apportioned accordingly.

We estimate population counts for 2000 tract boundaries as weighted sums of the component 1990 or 2010 population counts. For medians, the conversion process essentially computes weighted averages based on population estimates.

## Linear Interpolation

Tract-level contextual measures are not available for the intercensal years between 1990 and 2000 or years between the 2000 census and the first tract-level ACS estimates for 2005 through 2009. For these years, we produce estimates using linear interpolation. We selected linear interpolation for the intercensal and intercensal-to-ACS years because it is the most commonly employed method for producing annual intercensal estimates of small geographies for longitudinal research. An evaluation of the linear-interpolation methodology employed in the neighborhood database is detailed elsewhere (Weden et al., 2015).

Linear interpolation is achieved by fitting a linear regression (or finding what constant amount must be added in each year) between start and end points. This approach holds the sum of subgroups (e.g., census tracts or counties) equal to their total (i.e., the total U.S. population), something that is not true for geometric interpolation without additional adjustments.

We interpolated counts and medians. We then created the desired percentages from the interpolated counts for the given geographical unit (e.g., tract, county, or MSA). Although linear interpolation of percentages would have produced the same values, by interpolating the counts, we made it possible to later combine the data to create other percentages not considered at the time of the interpolation. See Appendix D for a list of the count variables in the tract-level contextual database.

<sup>7</sup> For a detailed comparison, see Logan, Xu, and Stults, 2014.

Our choice of start points and end points for the interpolated data depended on the type of measure, the time period in question, and the data source for a given measure as seen in Table 2.2. Unlike for the demographic (population) variables, which have decennial censuses as start and end points, no estimate is available for the end point of the interpolation period for the social, economic, housing, and cultural variables. We chose to treat the 2005–2009 ACS multiyear estimate like a point estimate for an end-point year of 2007 and interpolating for the 2001–2006 time period. An evaluation of this assumption with cautious support for employing the midpoint is reported in a validation of the linear-interpolation methodology published elsewhere (Weden et al., 2015).

In the contextual database, the five-year ACS estimates for 2005–2009, 2006–2010, 2007–2011, and 2008–2012 are reported by the midyear of the five-year period (i.e., respectively, 2007, 2008, 2009, and 2010). The rationale for and against employing these data as point estimates when such data are required is summarized in detail elsewhere (Weden et al., 2015).

**Table 2.2**  
**Time Periods and Interpolation Start and End Sources**

Variable Type	Time Period	Interpolation Source	
		Start	End
Demographic	1991–1999	1990 census	2000 census
	2001–2009	2000 census	2010 census
Social, economic, housing, and cultural	1991–1999	1990 census	2000 census
	2001–2006	2000 census	Five-year 2005–2009 ACS

## Types of Measures

The tract-level contextual database contains a set of demographic and social and economic variables using the 2000 tract boundary definitions. Below is a general list of the measures from the census and ACS, followed by discussions of additional measures that we created using these data. The specific set of variables that are available from the contextual database for each of these general categories of variables is listed in Appendix C, and Appendix D provides the data sources:

- demographic
  - *population density*: population per square mile of land area
  - *population counts*: total, by age, gender, race, and ethnicity
  - *population percentages*: age under 18 years, age at least 65 years, Hispanic, non-Hispanic white, non-Hispanic black, Hispanic of Mexican origin<sup>8</sup>
  - *rurality*: counts and percentages of population living in nonurban areas.<sup>9</sup>

<sup>8</sup> The percentage of population who are Hispanic of Mexican origin was created only for 2000 to 2010 because it was a special request added at a later date and was needed only for those years.

<sup>9</sup> The census definition of urban areas consists of two types: urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Nonurban areas are those not included within those two types. For more details, see U.S. Census Bureau, 2015a.

- social and economic
  - *income, wealth*: median-value owner-occupied housing units, median household income in past year, median family income in past year
  - *education*: counts by education level and percentages of population ages 25 and older without high school diplomas, are high school graduates but lack bachelor's degrees, have bachelor's degrees or higher
  - *employment*: counts and percentages of civilian population ages 16 and older: males unemployed, females unemployed, total unemployed
  - *occupation*: counts and percentages of workers ages 16 and older in professional or managerial occupations
  - *poverty*: counts and percentages of households with incomes below the poverty threshold, with public-assistance income; counts and percentages of families headed by women with children; counts and percentages of people living below the poverty threshold
  - *neighborhood socioeconomic status (NSES)*: neighborhood socioeconomic status score.
- housing
  - *housing age*: counts and percentages by year built, median year built
  - *housing-unit tenancy*: counts and percentages of vacant housing units, owner-occupied housing, renter-occupied housing
  - *crowding*: counts and percentages of occupied and rental housing units with 1.01 or more occupants per room.
- cultural
  - *nativity*: counts and percentages of nonnative and foreign born
  - *language spoken*: counts and percentages of population ages 5 and older speaking Spanish, speaking English only
  - *linguistic isolation*: counts and percentages of isolated non-English-speaking households, of isolated Spanish-speaking households.

## Flags for Median Caps

The U.S. Census Bureau top- and bottom-codes median values in the census and in the ACS summary files for household income, family income, housing value, and year in which the housing was built. Table 2.3 lists the cutoff values for each measure and source. Note that, for dollar amounts, the table lists the cutoffs in nominal dollars. Before interpolation, we converted income dollar values to 1999 dollars and housing values to 2000 dollars for consistency with the 2000 census data. We created a series of flags to identify those tracts for which the Census Bureau top- or bottom-coded medians in the source data for a given measure. These variables start with CAP\_ for top codes and JAM\_ for bottom codes. These flags might be useful in evaluating outlier results.

## Neighborhood Socioeconomic Status

We created census tract-level NSES scores using measures from the 1990 and 2000 censuses and the 2008–2012 ACS. The NSES variable is scored such that positive values indicate higher

**Table 2.3**  
**Measures, Sources, and Top and Bottom Cutoffs**

Median Type	Source	Cutoff	
		Top	Bottom
Income, in dollars	1990 census	150,000	2,500
	2000 census	200,000	2,500
	All five-year ACS	250,000	2,500
Year built	1990 census	Not applicable	1939
	2000 census	Not applicable	1939
	2009, 2010, and 2011 for five-year ACS	2005	1939
	2012 for five-year ACS	2006	1939
Housing value, in dollars	1990 census	500,000	7,500
	2000 census	1,000,000	10,000
	All five-year ACS	1,000,000	10,000

NOTE: Dollar amounts are in nominal dollars.

socioeconomic status than in 1990 and negative values indicate lower socioeconomic status than in 1990. We estimate the tract-level scores using a stable, time-invariant NSES modeling methodology that was implemented and validated using exploratory and confirmatory factor analysis (Miles et al., 2016).

To obtain NSES scores for the intercensal years 1991 to 1999, we linearly interpolated between the NSES scores obtained using the 1990 and 2000 censuses; for the years 2001 to 2009, we linearly interpolated between the 2000 NSES score and the score for 2008 to 2012 obtained using the 2008–2012 ACS.<sup>10</sup>

## Other Geographic Codes and Variables

The tract-level database includes FIPS state (STATE) and county (COUNTY) codes, which are from the 2000 census. Because this is a tract-level database, the county codes are based on the 2000 census tract value of the record. County boundary changes that occurred after 2000 have been addressed through the tract-conversion process (i.e., as a consequence of the fact that we obtain interpolated county estimates using the crosswalk between tracts and counties by the 2000 geographic boundaries of tracts and counties and by summing the component

<sup>10</sup> It is noteworthy that, in light of the data corrections required to achieve a time-invariant measure of NSES for 1990, 2000, and 2008–2012 (which are described in detail in Miles et al., 2016), this was the only methodology possible to produce estimates for 1991 to 1999 and 2001 to 2009. For example, because of the time invariance of one component of the model (i.e., the indicator intercepts), estimating a time-invariant measure of NSES for the intercensal periods was not possible using the interpolated indicator variables and factor scores alone.

interpolated tract estimates for a given county, all of which have been harmonized to 2000 geographic boundaries for all time periods).<sup>11</sup>

The file also includes a 2000 MSA-based code for tracts in an MSA (MSAGEO).<sup>12</sup> The MSAGEO variable contains a 2000 MSA, primary MSA (PMSA), or New England county metropolitan area (NECMA)<sup>13</sup> code based on the 2000 FIPS county code in order to have a single MSA-level code. The file also contains the U.S. census MSA, consolidated MSA (CMSA), PMSA, and NECMA codes for each tract in 2000.

Finally, the file contains the land area in square miles and square meters of the tract in 2000, as well as the water area in square miles and square meters, plus the total area of land and water combined.

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<sup>11</sup> A list of county boundary changes that occurred between 2000 and 2010 can be found at U.S. Census Bureau, 2016a. All but a couple changes were in Alaska.

<sup>12</sup> The SAS PROC FORMAT code that assigns FIPS county codes to an MSAGEO value is included in Appendix B. The MSAGEO format code lists whether the MSAGEO value came from an MSA, PMSA, or NECMA code and provides the name of the given metropolitan area. This format code was obtained from the codebook for the Inter-university Consortium for Political and Social Research—archived RAND Center for Population Health and Health Disparities Data Core Series, Decennial Census Abridged (see Escarce, Lurie, and Jewell, 2011).

<sup>13</sup> The codes PMSA, NECMA, CMSA, and MSA were replaced with the new CBSA system in 2003.





## Data Available Only at the County Level

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Some variables included in the contextual database are available only at the county level. These are variables that we have produced using data from the tract-level variables (i.e., the segregation measures) or variables that have been produced by other research entities for which the geographical boundaries are counties (i.e., the Gini coefficients and RUCC-based urbanization measures). Our 1990–2010 county-level database, which uses 2000 census FIPS codes to define counties and contains 3,141 counties, contains measures that we used for the analysis questions for the project that supported this particular contextual database development. Table 3.1 summarizes the types of measures in the county-level database and is followed by more-detailed discussions of each measure.

The county-level file is called `contextual_county_1990_2010`. It has one geographic identifier, `COUNTY`, which is the 2000 FIPS county code. Appendix G presents a full list of variables for this file.

### Income Inequality

We collected Gini coefficients of income inequality for counties that the U.S. Census Bureau created from the 1990 and 2000 censuses and from the 2006–2012 ACS one-year, three-year, and five-year files, depending on county population size.<sup>1</sup> County Gini coefficients for 1990

**Table 3.1**  
**Measures in the County-Level Database**

Category	Type of Measure	Source
Income inequality	Gini coefficient	U.S. Census Bureau
Urbanization	Compactness and sprawl <sup>a</sup>	Reid Ewing (Hamidi and Ewing, 2014)
	RUCCs <sup>b</sup>	USDA (Economic Research Service, 2013a, 2013b)
Segregation indices	Racial-segregation indices	Tract-level census and ACS

<sup>a</sup> Urban counties only, 2000–2010.

<sup>b</sup> Years 1990, 2000, and 2010 only.

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<sup>1</sup> The ACS releases one-year estimates for each county with a population of at least 65,000 people. It releases three-year estimates for each county with a population of at least 20,000 people and five-year estimates for any remaining geographic unit with a population of fewer than 20,000 people. We did not generate county-level Gini coefficients for the 2005 ACS, so the one-year estimates start in 2006.

and 2000 in 2000 census county definitions came from RTI International's Spatial Impact Factor Data (RTI International, 2012) available from the GeoDa Center for Geospatial Analysis at Arizona State University (now the Center for Spatial Data Science at the University of Chicago; see Center for Spatial Data Science, undated) and were available for the 48 contiguous states (Alaska and Hawaii were excluded). We obtained Gini coefficients from ACS data from the U.S. Census Bureau's American FactFinder (U.S. Census Bureau, undated [b]).<sup>2</sup>

To estimate variable values for years in which data were not available for a given county from either source (primarily pre-ACS intercensal years 1991 to 1999 and 2001 to 2005), we implemented linear interpolation of the Gini coefficients using the reported Gini coefficients for the year preceding and the year following the gap as the respective start and end points.<sup>3</sup> The variable GINI\_TYPE indicates the source of the Gini coefficient: census, ACS one-year estimate, ACS three-year estimate, ACS five-year estimate, or interpolated. Because Alaska and Hawaii had no 1990 or 2000 Gini coefficients to use for interpolation, counties in those states have Gini coefficients only for 2006 to 2012.

Counties in 2000 that no longer existed after 2000<sup>4</sup> do not have any Gini coefficients after 2000. Counties that were newly formed after 2000 are not in the county-level file. Each of the eight counties that experienced boundary changes after 2000<sup>5</sup> but did not have FIPS code changes has a flag called CHANGED=1 to alert the user that this was a county in which the Gini coefficients for 2001 to 2010 are based on a geographic area revised since 1990 to 2000.

The county-level Gini coefficient variable is called GINI\_COUNTY and takes values from 0 to 1, with 0 meaning full equality and 1 meaning maximal inequality.

## Urbanization

The county-level contextual database has two measures of urbanization: a measure of compactness and urban sprawl and a measure of the rural–urban continuum.

### Urban-Sprawl Index

The database includes the Ewing compactness and sprawl index for 2000 and 2010.<sup>6</sup> The Ewing index provides a metric for urban sprawl based on component factors involving development density, land-use mix, activity centering, and street accessibility (Hamidi and Ewing, 2014). Higher values on this index indicate greater compactness, while lower values indicate

<sup>2</sup> For Gini coefficients pulled from the ACS three-year and five-year estimate files, we assigned a year value equal to the midpoint year of the multiyear estimate (e.g., we assigned the 2006–2009 three-year estimate to 2007 and the 2006–2010 five-year estimate to 2008).

<sup>3</sup> After the introduction of the ACS, a county with population below 65,000 people has interpolated values until its first appearance in an ACS multiyear estimate file. We generated no county-level Gini coefficients for the 2005–2009 five-year estimates, so 2006 to 2010 are the first ACS five-year estimates for which Gini coefficients became available.

<sup>4</sup> These counties are in Alaska (FIPS codes 02280, 02201, and 02232) and Virginia (FIPS code 51560).

<sup>5</sup> These counties are in Alaska (FIPS code 02130), Colorado (FIPS codes 08001, 08013, 08059, and 08123), and Virginia (FIPS codes 51005, 51199, and 51700).

<sup>6</sup> These sprawl indices are available from Geographic Information Systems and Science for Cancer Control, undated.

greater sprawl. The Ewing compactness and sprawl index is available at the FIPS county level for 2000 and 2010.

We computed the compactness and sprawl measure for 993 counties that we deemed to be urban. We defined a county as urban if it had at least one census tract with a population density of at least 100 people per square mile. For 62 counties, we did not compute a 2000 compactness and sprawl measure but did compute one for 2010. For 24 counties, this was because they did not meet the population density requirement; for the remaining 38, it appears that they were not in the resource used to compute county urban density (most are independent cities). In the latter case, we linearly imputed the measure by regressing the 2010 on the 2000 measure for counties that had both years of data, then used the intercept and coefficient with the 2010 measure to obtain a “predicted” 2000 measure. A variable called IMPUTED2000 flags those 38 counties for which we imputed the 2000 compactness and sprawl measure. For the 24 counties that did not meet the criterion of having at least one census tract in 2000 that had more than 100 people per square mile, we did not impute any measure.

The compactness and urban-sprawl variable is called URBAN\_SPRAWL.

### **Rural–Urban Continuum**

We obtained RUCC measures for 1990, 2000, and 2010 from USDA (Economic Research Service, 2013b). The data used to construct the estimates come from the 1990, 2000, and 2010 census, and we use the data dates (rather than the release dates, which were three years subsequent) in labeling these variables.

For counties that split between 2000 and 2010, we calculated an estimate for the 2010 time point using the component 2010 counties of the initial 2000 county. We checked the combined population of the component 2010 counties and adjacency to a metro area against the RUCC categories to assign a continuum-code estimate.<sup>7</sup> Finally, we employed an analogous methodology for the independent city of Clifton Forge (2000 FIPS code 51560) that was added to Alleghany County, Virginia (FIPS code 51005) and thus does not appear in the 2013 continuum-code data but does in the 1990 and 2000 continuum-code data. We added a 2010 record for FIPS county code 51560 assigning the continuum code from 2003, which was the same as the 2013 code for FIPS county 51005 (which includes the old 51560 independent city). Note also that the small change made in 2007 between York County and Newport News in Virginia does not affect the continuum codes because both counties have the same continuum codes in the 1990, 2000, and 2010 data. Finally, the other county changes between 2000 and 2010 were in Colorado. The county of Broomfield in Colorado (08014) appears only in 2010. The four counties from which Broomfield was created in 2001 had the same continuum code in the 2000 set as in the 2010 set, so we were able to code Broomfield consistently in the two time periods.

<sup>7</sup> For example, the Skagway–Hoonah–Angoon Census area (2000 FIPS code 02232) was split into the new Skagway municipality and new Hoonah–Angoon census area (2010 FIPS codes 02105 and 02230, respectively) in 2007. We recoded the 2010 RUCC record for 02105 to the 2000 county code of 02232 and set the continuum code to reflect the combined status of the two 2010 counties. Because the combined population of the two 2010 counties was between 2,500 and 19,999 and neither was adjacent to a metro area, we used a continuum code of 7 for the 2000 county from which they were split. We employed the same approach for the 2000 county Wrangell–Petersburg census area (2000 FIPS code 02280) that split in 2008 into the new Wrangell city and borough and new Petersburg census area (2010 FIPS codes 02275 and 02195, respectively).

The values of the RUCC are as follows:

- metropolitan counties
  - 1 = county in a metropolitan area of 1 million people or more
  - 2 = county in a metropolitan area of 250,000 to 1 million people
  - 3 = county in a metropolitan area of fewer than 250,000 people
- nonmetropolitan counties
  - 4 = urban population of 20,000 or more, adjacent to a metro area
  - 5 = urban population of 20,000 or more, not adjacent to a metro area
  - 6 = urban population of 2,500 to 19,999, adjacent to a metro area
  - 7 = urban population of 2,500 to 19,999, not adjacent to a metro area
  - 8 = completely rural or less than 2,500 urban population, adjacent to a metro area
  - 9 = completely rural or less than 2,500 urban population, not adjacent to a metro area.

The variable RUCC\_COUNTY contains the RUCC values for the given year.

We did not attempt to interpolate the categorical RUCC variable over the intercensal years in which it is not made available from USDA. Thus, the database includes continuum-code values for 1990, 2000, and 2010, but the county-year records for 1991 to 1999 and 2001 to 2009 will not have values for the RUCC\_COUNTY variable.

In addition to the RUCC\_ prefix variables above, we provide an indicator variable (METRO prefix) that identifies metro counties (RUCCs 1 through 3) and another indicator variable (NONMETRO\_ADJ prefix) that identifies non-metro-adjacent counties (continuum codes 4, 6, and 8) for 1990, 2000, and 2010.

## Segregation Indices

We generated measures for the extent of segregation by race and ethnicity and by poverty for each county and year between 1990 and 2010. Because we constructed these segregation indices from tract-level data, county changes over time have already been adjusted for as part of the earlier described tract-conversion process. In addition, recall that race and ethnicity counts are interpolated for the intercensal years of 1991 to 1999 and 2001 to 2009 and that poverty population counts are interpolated for the intercensal years of 1991 to 1999 and 2001 to 2006, meaning that indices for those years will be based on interpolated data.

### Racial-Segregation Index

We produced the racial-segregation indices from a Stata program (see Reardon, 2002) that is described in Reardon and Firebaugh, 2002. The program, which uses tract-level counts for the racial and ethnic groups, produces various index types,<sup>8</sup> of which we chose two:

- dissimilarity segregation index (\_d suffix)
- isolation index (\_s suffix).

<sup>8</sup> The Stata program produces ten index types in total. See the program documentation for a full list of them.

We generated these two indices for nine comparisons. In Table 3.2, we list the variable name representing each of those comparisons at the county level to which those suffixes are attached.

For example, the isolation index for the isolation of Hispanics respective to all other racial and ethnic groups is `idxseg_hisp_county5_s`, and the dissimilarity index for that same comparison is `idxseg_hisp_county5_d`.

### Income-Segregation Index

Using the Reardon, 2002, Stata program and tract-level census and ACS data, we also generated county-level dissimilarity and isolation segregation indices. We compare populations below and above the federal poverty threshold. The variable names for the income-segregation indices are `idxseg_poor_county5_d` and `idxseg_poor_county5_s`, respectively.

**Table 3.2**  
**Variables and Comparisons**

Variable Name	Comparison <sup>a</sup>
<code>idxseg_hisp_county5</code>	Hispanics versus all other groups
<code>idxseg_nonhwht_county5</code>	Non-Hispanic whites versus all other groups
<code>idxseg_nonhblk_county5</code>	Non-Hispanic blacks versus all other groups
<code>idxseg_nonhapi_county5</code>	Non-Hispanic Asian and Pacific Islanders versus all other groups
<code>idxseg_nonhoth_county5</code>	Non-Hispanic others versus all other groups
<code>idxseg_hisp_nonhwht_county5</code>	Hispanics versus non-Hispanic whites
<code>idxseg_nonhblk_hisp_county5</code>	Hispanics versus non-Hispanic blacks
<code>idxseg_nonhblk_nonhwht_county5</code>	Non-Hispanic blacks versus non-Hispanic whites
<code>idxseg_nonhapi_nonhwht_county5</code>	Non-Hispanic Asian and Pacific Islanders versus non-Hispanic whites
<code>idxseg_nonhoth_nonhwht_county5</code>	Non-Hispanic others versus non-Hispanic whites

<sup>a</sup> A five-group index is also available called `idxseg_race5_county5`. The five groups are Hispanic, non-Hispanic white, non-Hispanic black, non-Hispanic Asian or Pacific Islander, and non-Hispanic other.



## Metropolitan Statistical Area–Level Data

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The creation of a longitudinal contextual database for 1990 to 2010 at the MSA level, like those described previously at the tract and county levels, was not a major focus of this project. That said, we created several measures at the MSA level—ethnic and income-segregation indices, as well as Gini coefficients—which warrant discussion as provided in this chapter.

Before discussing the measures, we draw the user to a noteworthy change in spatial boundaries—specifically, that the CBSA spatial-designation system replaced the MSA classification system in 2003. Because the MSA-level analysis was a tertiary objective of the study, we did not attempt to spatially interpolate to address this boundary and unit change. We thus provide data in the units of the original source data (e.g., MSA for the segregation measures and either MSA or CBSA for the Gini coefficients, depending on the year of the measure). Spatial interpolation would nonetheless be feasible, despite being beyond the scope of this project, and could be implemented using spatial-interpolation techniques discussed elsewhere (e.g., see areal weighting and combined areal and spatial-weighting methodologies discussed in Reibel, 2007, and Logan, Xu, and Stults, 2014).

The MSA code–level data file is `contextual_msa_1990_2010`. The CBSA code–level data file is called `contextual_cbsa_2006_2010`. Appendix H contains the full list of variables in the MSA file, and Appendix I contains the list for the CBSA file.

Table 4.1 shows the types of MSA information in each of these two files plus the years for which we have these data. Our research project required very limited data at the MSA level, so we primarily include data using the 2000 MSA codes (consistent with the geographical boundary definitions of the tracts and counties). The measures we include in the database have two sets of segregation indices (racial and income) and Gini coefficients.<sup>1</sup>

### Metropolitan Statistical Area–Level Contextual Data File

#### Segregation Indices

At the MSA level, we created the same segregation indices described above at the county level. Although the suffixes denoting index type are the same, the variable names for each of the nine comparisons differ slightly in that they reflect the specific geographic level of the measure (see Table 4.2).

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<sup>1</sup> We generated the Ewing compactness and sprawl scores only for 2010 and only for large and medium-sized CBSAs (about 60 percent of CBSAs), with the 11 largest CBSAs broken down into their metropolitan divisions. Because these data were not of direct use to the project, we did not include these CBSA-level measures in our contextual database.

**Table 4.1**  
**Measures and Years of Statistical-Area Information**

Type of Measure	MSA Code File (318 MSAs)	CBSA Code File (375 CBSAs) <sup>a</sup>
Racial-segregation index	1990–2010 <sup>b</sup>	Not applicable
Income-segregation index	1990–2010 <sup>b</sup>	Not applicable
Gini coefficient	1990–2000 <sup>c</sup>	2006–2010 <sup>d</sup>

<sup>a</sup> 371 CBSAs appear in all five years.

<sup>b</sup> Based on interpolated tract-level data for 1991–1999 and 2001–2006 from either census or ACS.

<sup>c</sup> Interpolated for 1991–1999 (296 MSAs with Gini coefficients in 1990 and 2000).

<sup>d</sup> ACS one-year estimates and a few three-year estimates.

**Table 4.2**  
**Segregation-Index Variable Names**

Variable Name	Comparison <sup>a</sup>
idxseg_hisp_msageo	Hispanics versus all other groups
idxseg_nonhwht_msageo	Non-Hispanic whites versus all other groups
idxseg_nonhblk_msageo	Non-Hispanic blacks versus all other groups
idxseg_nonhapi_msageo	Non-Hispanic Asian and Pacific Islanders versus all other groups
idxseg_nonhoth_msageo	Non-Hispanic others versus all other groups
idxseg_hisp_nonhwht_msageo	Hispanics versus non-Hispanic whites
idxseg_nonhblk_hisp_msageo	Hispanics versus non-Hispanic blacks
idxseg_nonhblk_nonhwht_msageo	Non-Hispanic blacks versus non-Hispanic whites
idxseg_nonhapi_nonhwht_msageo	Non-Hispanic Asian and Pacific Islanders versus non-Hispanic whites
idxseg_nonhoth_nonhwht_msageo	Non-Hispanic others versus non-Hispanic whites
idxseg_poor_msageo	Population below the poverty threshold versus those at or above

<sup>a</sup> A five-group index is also available called `idxseg_race5_msageo`. The five groups are Hispanic, non-Hispanic white, non-Hispanic black, non-Hispanic Asian or Pacific Islander, and non-Hispanic other.

### Gini Coefficients

From the U.S. Census Bureau, we obtained Gini coefficients for 1990 and 2000 at the MSA level.<sup>2</sup> For MSAs that had values for both 1990 and 2000, we performed a linear interpolation between those two point estimates to provide values for 1991 to 1999. We did not include the 26 MSAs that appeared only in the 1990 Gini data because they no longer existed in 2000. We did retain the 22 MSAs that appeared only in the 2000 Gini data (and thus have no Gini coefficient values for 1990 to 1999) because they would link to other 2000 MSA-level data.

The Gini coefficient variable is called `GINI_MSA`. The variable `GINI_TYPE` identifies whether the Gini coefficient is a census value, whether it is an interpolated value, or whether no value existed or could be interpolated.

<sup>2</sup> We obtained the 1990 and 2000 MSA-level Gini coefficients from Edward Welniak Jr. at the U.S. Census Bureau. These data are not available online.



### Metropolitan Statistical Area Codes Used

The MSA code used in generating the segregation indices is the variable MSAGEO described earlier. It is this MSAGEO variable that one would use to link the MSA-level contextual data to the main tract-level contextual database.

The MSA codes in the 1990–2000 Gini coefficient data made available by the U.S. Census Bureau can be mapped directly to the 2000 MSAGEO codes employed in the database. In linking the census MSA code to the MSAGEO code, we found only 12 MSAGEO codes that did not map directly to their 2000 census MSA codes. These 12 were all metropolitan areas in New England for which the code used in MSAGEO was a NECMA, while, in the data from the Census Bureau, the code used was an MSA or CMSA code that differed slightly. For these 12 cases, we assigned the MSAGEO code that mapped to the given metropolitan area.<sup>3</sup>

### Core-Based Statistical Area–Level Contextual Data File

As noted above, the CBSA-level contextual data file contains Gini coefficients for the years 2006 to 2010, in which these data were made available from the U.S. Census Bureau. We obtained these measures from the U.S. Census Bureau’s American FactFinder website using ACS Table B19083 for metropolitan CBSAs for those years (see U.S. Census Bureau, undated [b]). ACS one-year estimates were available for all CBSAs that exceeded the 65,000-person cutoff for the U.S. Census Bureau to release a one-year estimate (i.e., nearly all CBSAs). For the few cases in which a CBSA’s population was below 65,000 people, we used the ACS three-year estimate with a midpoint year that matched the year needed.<sup>4</sup> For example, if a CBSA had a population below 65,000 in 2007, the Gini coefficient estimate comes from the ACS 2006–2008 three-year multiyear data. The variable GINI\_TYPE identifies whether a Gini coefficient is a one-year or three-year estimate.

### Core-Based Statistical Area Code Changes Between 2006 and 2010

A few changes have occurred to the CBSA codes during the period our data represent. In three instances, visual inspection indicated that the CBSA code changed but the area represented did not change or changed very little. In 2008, the CBSA for the Sarasota–Bradenton–Venice area in Florida changed from 42260 to 14600 largely because Bradenton had become the largest city, so the name changed to Bradenton–Sarasota–Venice. In 2010, a similar change occurred when CBSA 23020 (Fort Walton–Crestview–Destin, Florida) became 18880 (Crestview–Fort Walton–Destin) and when CBSA 482609 (Weirton–Steubenville, West Virginia–Ohio) became 44600 (Steubenville–Weirton). For these three instances, we made no revisions to the codes and instead let users determine the value they would like to use. Thus, we provide two

<sup>3</sup> These 12 MSAs were Bangor, Maine (0730 changed to 0733); Barnstable–Yarmouth, Maine (0740 changed to 0743); Boston–Worcester–Lawrence–Lowell, Massachusetts (1122 changed to 1123); Burlington, Vermont (1305 changed to 1303); Hartford–East Hartford–West Hartford, Connecticut (3280 changed to 3283); Lewiston–Auburn, Maine (4240 changed to 4243); New Haven–Bridgeport–Stanford–Waterbury–Danbury, Connecticut (5480 changed to 5483); New London–Norwich, Connecticut (5520 changed to 5523); Pittsfield, Massachusetts (6320 changed to 6323); Portland–South Portland, Maine (6400 changed to 6403); Providence–Warwick–Pawtucket, Rhode Island (6480 changed to 6483); and Springfield, Massachusetts (8000 changed to 8003).

<sup>4</sup> CBSA 16180 (Carson City, Nevada) in 2006, 2007, and 2008; CBSA 29420 (Lake Havasu–Kingman, Arizona) in 2006; CBSA 30300 (Lewiston, Idaho) in 2006, 2007, and 2008; and 37380 (Palm Coast, Florida) in 2006.

new variables, one that holds the value for the “initial” CBSA code (OLDCBSA) and one with the value of the “revised” CBSA code (NEWCBSA).<sup>5</sup>

Another type of change that occurred was when a micropolitan CBSA became a metropolitan CBSA. Metropolitan CBSAs have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. Micropolitan CBSAs have at least one urban cluster of at least 10,000 but less than 50,000 people, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. In our data, we have three CBSAs that became metropolitan CBSAs in 2009 and appear only from 2009 onward.<sup>6</sup> In these cases, the CBSA has records only for the years 2009 and 2010 after it gained the metropolitan designation.

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<sup>5</sup> For example, for CBSA 42260, we have records for 2006 and 2007, with the records for 2008 to 2010 having the CBSA of 14600, and each of those records has the variable OLDCBSA=42260 and NEWCBSA=14600.

<sup>6</sup> 16020 (Cape Girardeau, Missouri–Illinois), 31740 (Manhattan, Kansas), and 31860 (Mankato–North Mankato, Minnesota).

## Data Files in the Neighborhood Contextual Database

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Table A.1 lists the four data files and the number of records, geographic units, and variables in each file.

The files are available in SAS version 9 format and in Stata version 13 format.

**Table A.1**  
**Data Files in the Neighborhood Contextual Database**

<b>File Name</b>	<b>Total Number of Records (Geographic Units Times Number of Years)</b>	<b>Number of Geographic Units</b>	<b>Number of Variables</b>
census_acs_tract_1990_2010	1,368,544	65,174 tracts	350
contextual_county_1990_2010	65,961	3,141 counties	46
contextual_msa_1990_2010	6,678	318 MSAs	28
contextual_cbsa_2006_2010	1,862	375 CBSAs	7



## SAS PROC FORMAT Code to Assign MSAGEO for 2000 from 2000 Federal Information Processing Series County Codes

---

```

/*
Source: OMB, 2000
Description: Fips-To-MSAGEO County Format (FIPS year = 2000)
           Use this format to translate County FIPs codes to MSAs
           (either NECMA/MSA/PMSAs)
           All counties are geo-coterminous with MSAs.
           Counties in New England are associated with NECMAs, and thus will
           have NECMA codes.
*/
proc format ;
value $cf00mg /* COUNTY (FIPS) = MSA (Geographic, NECMA/MSA/PMSAs) */
'01001' = '5240' /* (MSA Montgomery, AL MSA )*/
'01003' = '5160' /* (MSA Mobile, AL MSA )*/
'01009' = '1000' /* (MSA Birmingham, AL MSA )*/
'01015' = '0450' /* (MSA Anniston, AL MSA )*/
'01033' = '2650' /* (MSA Florence, AL MSA )*/
'01045' = '2180' /* (MSA Dothan, AL MSA )*/
'01051' = '5240' /* (MSA Montgomery, AL MSA )*/
'01055' = '2880' /* (MSA Gadsden, AL MSA )*/
'01069' = '2180' /* (MSA Dothan, AL MSA )*/
'01073' = '1000' /* (MSA Birmingham, AL MSA )*/
'01077' = '2650' /* (MSA Florence, AL MSA )*/
'01079' = '2030' /* (MSA Decatur, AL MSA )*/
'01081' = '0580' /* (MSA Auburn-Opelika, AL MSA )*/
'01083' = '3440' /* (MSA Huntsville, AL MSA )*/
'01089' = '3440' /* (MSA Huntsville, AL MSA )*/
'01097' = '5160' /* (MSA Mobile, AL MSA )*/
'01101' = '5240' /* (MSA Montgomery, AL MSA )*/
'01103' = '2030' /* (MSA Decatur, AL MSA )*/
'01113' = '1800' /* (MSA Columbus, GA-AL MSA )*/
'01115' = '1000' /* (MSA Birmingham, AL MSA )*/
'01117' = '1000' /* (MSA Birmingham, AL MSA )*/
'01125' = '8600' /* (MSA Tuscaloosa, AL MSA )*/
'02020' = '0380' /* (MSA Anchorage, AK MSA )*/
'04005' = '2620' /* (MSA Flagstaff, AZ-UT MSA )*/
'04013' = '6200' /* (MSA Phoenix-Mesa, AZ MSA )*/
'04015' = '4120' /* (MSA Las Vegas, NV-AZ MSA )*/
'04019' = '8520' /* (MSA Tucson, AZ MSA )*/
'04021' = '6200' /* (MSA Phoenix-Mesa, AZ MSA )*/
'04027' = '9360' /* (MSA Yuma, AZ MSA )*/
'05007' = '2580' /* (MSA Fayetteville-Springdale-Rogers, AR MSA )*/
'05031' = '3700' /* (MSA Jonesboro, AR MSA )*/
'05033' = '2720' /* (MSA Fort Smith, AR-OK MSA )*/
'05035' = '4920' /* (MSA Memphis, TN-AR-MS MSA )*/
'05045' = '4400' /* (MSA Little Rock-North Little Rock, AR MSA )*/
'05069' = '6240' /* (MSA Pine Bluff, AR MSA )*/
'05085' = '4400' /* (MSA Little Rock-North Little Rock, AR MSA )*/
'05091' = '8360' /* (MSA Texarkana, TX-Texarkana, AR MSA )*/
'05119' = '4400' /* (MSA Little Rock-North Little Rock, AR MSA )*/
'05125' = '4400' /* (MSA Little Rock-North Little Rock, AR MSA )*/
'05131' = '2720' /* (MSA Fort Smith, AR-OK MSA )*/

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'05143' = '2580' /\* (MSA Fayetteville-Springdale-Rogers, AR MSA )\*/  
 '06007' = '1620' /\* (MSA Chico-Paradise, CA MSA )\*/  
 '06019' = '2840' /\* (MSA Fresno, CA MSA )\*/  
 '06029' = '0680' /\* (MSA Bakersfield, CA MSA )\*/  
 '06039' = '2840' /\* (MSA Fresno, CA MSA )\*/  
 '06047' = '4940' /\* (MSA Merced, CA MSA )\*/  
 '06053' = '7120' /\* (MSA Salinas, CA MSA )\*/  
 '06073' = '7320' /\* (MSA San Diego, CA MSA )\*/  
 '06077' = '8120' /\* (MSA Stockton-Lodi, CA MSA )\*/  
 '06079' = '7460' /\* (MSA San Luis Obispo-Atascadero-Paso Robles, CA MSA )\*/  
 '06083' = '7480' /\* (MSA Santa Barbara-Santa Maria-Lompoc, CA MSA )\*/  
 '06089' = '6690' /\* (MSA Redding, CA MSA )\*/  
 '06099' = '5170' /\* (MSA Modesto, CA MSA )\*/  
 '06101' = '9340' /\* (MSA Yuba City, CA MSA )\*/  
 '06107' = '8780' /\* (MSA Visalia-Tulare-Porterville, CA MSA )\*/  
 '06115' = '9340' /\* (MSA Yuba City, CA MSA )\*/  
 '08041' = '1720' /\* (MSA Colorado Springs, CO MSA )\*/  
 '08069' = '2670' /\* (MSA Fort Collins-Loveland, CO MSA )\*/  
 '08077' = '2995' /\* (MSA Grand Junction, CO MSA )\*/  
 '08101' = '6560' /\* (MSA Pueblo, CO MSA )\*/  
 '10001' = '2190' /\* (MSA Dover, DE MSA )\*/  
 '12001' = '2900' /\* (MSA Gainesville, FL MSA )\*/  
 '12005' = '6015' /\* (MSA Panama City, FL MSA )\*/  
 '12009' = '4900' /\* (MSA Melbourne-Titusville-Palm Bay, FL MSA )\*/  
 '12015' = '6580' /\* (MSA Punta Gorda, FL MSA )\*/  
 '12019' = '3600' /\* (MSA Jacksonville, FL MSA )\*/  
 '12021' = '5345' /\* (MSA Naples, FL MSA )\*/  
 '12031' = '3600' /\* (MSA Jacksonville, FL MSA )\*/  
 '12033' = '6080' /\* (MSA Pensacola, FL MSA )\*/  
 '12035' = '2020' /\* (MSA Daytona Beach, FL MSA )\*/  
 '12039' = '8240' /\* (MSA Tallahassee, FL MSA )\*/  
 '12053' = '8280' /\* (MSA Tampa-St. Petersburg-Clearwater, FL MSA )\*/  
 '12057' = '8280' /\* (MSA Tampa-St. Petersburg-Clearwater, FL MSA )\*/  
 '12069' = '5960' /\* (MSA Orlando, FL MSA )\*/  
 '12071' = '2700' /\* (MSA Fort Myers-Cape Coral, FL MSA )\*/  
 '12073' = '8240' /\* (MSA Tallahassee, FL MSA )\*/  
 '12081' = '7510' /\* (MSA Sarasota-Bradenton, FL MSA )\*/  
 '12083' = '5790' /\* (MSA Ocala, FL MSA )\*/  
 '12085' = '2710' /\* (MSA Fort Pierce-Port St. Lucie, FL MSA )\*/  
 '12089' = '3600' /\* (MSA Jacksonville, FL MSA )\*/  
 '12091' = '2750' /\* (MSA Fort Walton Beach, FL MSA )\*/  
 '12095' = '5960' /\* (MSA Orlando, FL MSA )\*/  
 '12097' = '5960' /\* (MSA Orlando, FL MSA )\*/  
 '12099' = '8960' /\* (MSA West Palm Beach-Boca Raton, FL MSA )\*/  
 '12101' = '8280' /\* (MSA Tampa-St. Petersburg-Clearwater, FL MSA )\*/  
 '12103' = '8280' /\* (MSA Tampa-St. Petersburg-Clearwater, FL MSA )\*/  
 '12105' = '3980' /\* (MSA Lakeland-Winter Haven, FL MSA )\*/  
 '12109' = '3600' /\* (MSA Jacksonville, FL MSA )\*/  
 '12111' = '2710' /\* (MSA Fort Pierce-Port St. Lucie, FL MSA )\*/  
 '12113' = '6080' /\* (MSA Pensacola, FL MSA )\*/  
 '12115' = '7510' /\* (MSA Sarasota-Bradenton, FL MSA )\*/  
 '12117' = '5960' /\* (MSA Orlando, FL MSA )\*/  
 '12127' = '2020' /\* (MSA Daytona Beach, FL MSA )\*/  
 '13013' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13015' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13021' = '4680' /\* (MSA Macon, GA MSA )\*/  
 '13029' = '7520' /\* (MSA Savannah, GA MSA )\*/  
 '13045' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13047' = '1560' /\* (MSA Chattanooga, TN-GA MSA )\*/  
 '13051' = '7520' /\* (MSA Savannah, GA MSA )\*/  
 '13053' = '1800' /\* (MSA Columbus, GA-AL MSA )\*/  
 '13057' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13059' = '0500' /\* (MSA Athens, GA MSA )\*/  
 '13063' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13067' = '0520' /\* (MSA Atlanta, GA MSA )\*/  
 '13073' = '0600' /\* (MSA Augusta-Aiken, GA-SC MSA )\*/

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'13077' = '0520' /* (MSA Atlanta, GA MSA )*/
'13083' = '1560' /* (MSA Chattanooga, TN-GA MSA )*/
'13089' = '0520' /* (MSA Atlanta, GA MSA )*/
'13095' = '0120' /* (MSA Albany, GA MSA )*/
'13097' = '0520' /* (MSA Atlanta, GA MSA )*/
'13103' = '7520' /* (MSA Savannah, GA MSA )*/
'13113' = '0520' /* (MSA Atlanta, GA MSA )*/
'13117' = '0520' /* (MSA Atlanta, GA MSA )*/
'13121' = '0520' /* (MSA Atlanta, GA MSA )*/
'13135' = '0520' /* (MSA Atlanta, GA MSA )*/
'13145' = '1800' /* (MSA Columbus, GA-AL MSA )*/
'13151' = '0520' /* (MSA Atlanta, GA MSA )*/
'13153' = '4680' /* (MSA Macon, GA MSA )*/
'13169' = '4680' /* (MSA Macon, GA MSA )*/
'13177' = '0120' /* (MSA Albany, GA MSA )*/
'13189' = '0600' /* (MSA Augusta-Aiken, GA-SC MSA )*/
'13195' = '0500' /* (MSA Athens, GA MSA )*/
'13215' = '1800' /* (MSA Columbus, GA-AL MSA )*/
'13217' = '0520' /* (MSA Atlanta, GA MSA )*/
'13219' = '0500' /* (MSA Athens, GA MSA )*/
'13223' = '0520' /* (MSA Atlanta, GA MSA )*/
'13225' = '4680' /* (MSA Macon, GA MSA )*/
'13227' = '0520' /* (MSA Atlanta, GA MSA )*/
'13245' = '0600' /* (MSA Augusta-Aiken, GA-SC MSA )*/
'13247' = '0520' /* (MSA Atlanta, GA MSA )*/
'13255' = '0520' /* (MSA Atlanta, GA MSA )*/
'13289' = '4680' /* (MSA Macon, GA MSA )*/
'13295' = '1560' /* (MSA Chattanooga, TN-GA MSA )*/
'13297' = '0520' /* (MSA Atlanta, GA MSA )*/
'15003' = '3320' /* (MSA Honolulu, HI MSA )*/
'16001' = '1080' /* (MSA Boise City, ID MSA )*/
'16005' = '6340' /* (MSA Pocatello, ID MSA )*/
'16027' = '1080' /* (MSA Boise City, ID MSA )*/
'17007' = '6880' /* (MSA Rockford, IL MSA )*/
'17019' = '1400' /* (MSA Champaign-Urbana, IL MSA )*/
'17027' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'17073' = '1960' /* (MSA Davenport-Moline-Rock Island, IA-IL MSA )*/
'17083' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'17113' = '1040' /* (MSA Bloomington-Normal, IL MSA )*/
'17115' = '2040' /* (MSA Decatur, IL MSA )*/
'17119' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'17129' = '7880' /* (MSA Springfield, IL MSA )*/
'17133' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'17141' = '6880' /* (MSA Rockford, IL MSA )*/
'17143' = '6120' /* (MSA Peoria-Pekin, IL MSA )*/
'17161' = '1960' /* (MSA Davenport-Moline-Rock Island, IA-IL MSA )*/
'17163' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'17167' = '7880' /* (MSA Springfield, IL MSA )*/
'17179' = '6120' /* (MSA Peoria-Pekin, IL MSA )*/
'17201' = '6880' /* (MSA Rockford, IL MSA )*/
'17203' = '6120' /* (MSA Peoria-Pekin, IL MSA )*/
'18001' = '2760' /* (MSA Fort Wayne, IN MSA )*/
'18003' = '2760' /* (MSA Fort Wayne, IN MSA )*/
'18011' = '3480' /* (MSA Indianapolis, IN MSA )*/
'18019' = '4520' /* (MSA Louisville, KY-IN MSA )*/
'18021' = '8320' /* (MSA Terre Haute, IN MSA )*/
'18023' = '3920' /* (MSA Lafayette, IN MSA )*/
'18033' = '2760' /* (MSA Fort Wayne, IN MSA )*/
'18035' = '5280' /* (MSA Muncie, IN MSA )*/
'18039' = '2330' /* (MSA Elkhart-Goshen, IN MSA )*/
'18043' = '4520' /* (MSA Louisville, KY-IN MSA )*/
'18057' = '3480' /* (MSA Indianapolis, IN MSA )*/
'18059' = '3480' /* (MSA Indianapolis, IN MSA )*/
'18061' = '4520' /* (MSA Louisville, KY-IN MSA )*/
'18063' = '3480' /* (MSA Indianapolis, IN MSA )*/
'18067' = '3850' /* (MSA Kokomo, IN MSA )*/
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'18069' = '2760' /\* (MSA Fort Wayne, IN MSA )\*/  
 '18081' = '3480' /\* (MSA Indianapolis, IN MSA )\*/  
 '18095' = '3480' /\* (MSA Indianapolis, IN MSA )\*/  
 '18097' = '3480' /\* (MSA Indianapolis, IN MSA )\*/  
 '18105' = '1020' /\* (MSA Bloomington, IN MSA )\*/  
 '18109' = '3480' /\* (MSA Indianapolis, IN MSA )\*/  
 '18129' = '2440' /\* (MSA Evansville-Henderson, IN-KY MSA )\*/  
 '18141' = '7800' /\* (MSA South Bend, IN MSA )\*/  
 '18143' = '4520' /\* (MSA Louisville, KY-IN MSA )\*/  
 '18145' = '3480' /\* (MSA Indianapolis, IN MSA )\*/  
 '18157' = '3920' /\* (MSA Lafayette, IN MSA )\*/  
 '18159' = '3850' /\* (MSA Kokomo, IN MSA )\*/  
 '18163' = '2440' /\* (MSA Evansville-Henderson, IN-KY MSA )\*/  
 '18165' = '8320' /\* (MSA Terre Haute, IN MSA )\*/  
 '18167' = '8320' /\* (MSA Terre Haute, IN MSA )\*/  
 '18173' = '2440' /\* (MSA Evansville-Henderson, IN-KY MSA )\*/  
 '18179' = '2760' /\* (MSA Fort Wayne, IN MSA )\*/  
 '18183' = '2760' /\* (MSA Fort Wayne, IN MSA )\*/  
 '19013' = '8920' /\* (MSA Waterloo-Cedar Falls, IA MSA )\*/  
 '19049' = '2120' /\* (MSA Des Moines, IA MSA )\*/  
 '19061' = '2200' /\* (MSA Dubuque, IA MSA )\*/  
 '19103' = '3500' /\* (MSA Iowa City, IA MSA )\*/  
 '19113' = '1360' /\* (MSA Cedar Rapids, IA MSA )\*/  
 '19153' = '2120' /\* (MSA Des Moines, IA MSA )\*/  
 '19155' = '5920' /\* (MSA Omaha, NE-IA MSA )\*/  
 '19163' = '1960' /\* (MSA Davenport-Moline-Rock Island, IA-IL MSA )\*/  
 '19181' = '2120' /\* (MSA Des Moines, IA MSA )\*/  
 '19193' = '7720' /\* (MSA Sioux City, IA-NE MSA )\*/  
 '20015' = '9040' /\* (MSA Wichita, KS MSA )\*/  
 '20045' = '4150' /\* (MSA Lawrence, KS MSA )\*/  
 '20079' = '9040' /\* (MSA Wichita, KS MSA )\*/  
 '20091' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '20103' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '20121' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '20173' = '9040' /\* (MSA Wichita, KS MSA )\*/  
 '20177' = '8440' /\* (MSA Topeka, KS MSA )\*/  
 '20209' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '21017' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21019' = '3400' /\* (MSA Huntington-Ashland, WV-KY-OH MSA )\*/  
 '21029' = '4520' /\* (MSA Louisville, KY-IN MSA )\*/  
 '21043' = '3400' /\* (MSA Huntington-Ashland, WV-KY-OH MSA )\*/  
 '21047' = '1660' /\* (MSA Clarksville-Hopkinsville, TN-KY MSA )\*/  
 '21049' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21059' = '5990' /\* (MSA Owensboro, KY MSA )\*/  
 '21067' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21089' = '3400' /\* (MSA Huntington-Ashland, WV-KY-OH MSA )\*/  
 '21101' = '2440' /\* (MSA Evansville-Henderson, IN-KY MSA )\*/  
 '21111' = '4520' /\* (MSA Louisville, KY-IN MSA )\*/  
 '21113' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21151' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21185' = '4520' /\* (MSA Louisville, KY-IN MSA )\*/  
 '21209' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '21239' = '4280' /\* (MSA Lexington, KY MSA )\*/  
 '22001' = '3880' /\* (MSA Lafayette, LA MSA )\*/  
 '22005' = '0760' /\* (MSA Baton Rouge, LA MSA )\*/  
 '22015' = '7680' /\* (MSA Shreveport-Bossier City, LA MSA )\*/  
 '22017' = '7680' /\* (MSA Shreveport-Bossier City, LA MSA )\*/  
 '22019' = '3960' /\* (MSA Lake Charles, LA MSA )\*/  
 '22033' = '0760' /\* (MSA Baton Rouge, LA MSA )\*/  
 '22051' = '5560' /\* (MSA New Orleans, LA MSA )\*/  
 '22055' = '3880' /\* (MSA Lafayette, LA MSA )\*/  
 '22057' = '3350' /\* (MSA Houma, LA MSA )\*/  
 '22063' = '0760' /\* (MSA Baton Rouge, LA MSA )\*/  
 '22071' = '5560' /\* (MSA New Orleans, LA MSA )\*/  
 '22073' = '5200' /\* (MSA Monroe, LA MSA )\*/  
 '22075' = '5560' /\* (MSA New Orleans, LA MSA )\*/



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'22079' = '0220' /* (MSA Alexandria, LA MSA )*/
'22087' = '5560' /* (MSA New Orleans, LA MSA )*/
'22089' = '5560' /* (MSA New Orleans, LA MSA )*/
'22093' = '5560' /* (MSA New Orleans, LA MSA )*/
'22095' = '5560' /* (MSA New Orleans, LA MSA )*/
'22097' = '3880' /* (MSA Lafayette, LA MSA )*/
'22099' = '3880' /* (MSA Lafayette, LA MSA )*/
'22103' = '5560' /* (MSA New Orleans, LA MSA )*/
'22109' = '3350' /* (MSA Houma, LA MSA )*/
'22119' = '7680' /* (MSA Shreveport-Bossier City, LA MSA )*/
'22121' = '0760' /* (MSA Baton Rouge, LA MSA )*/
'24001' = '1900' /* (MSA Cumberland, MD-WV MSA )*/
'26005' = '3000' /* (MSA Grand Rapids-Muskegon-Holland, MI MSA )*/
'26017' = '6960' /* (MSA Saginaw-Bay City-Midland, MI MSA )*/
'26021' = '0870' /* (MSA Benton Harbor, MI MSA )*/
'26025' = '3720' /* (MSA Kalamazoo-Battle Creek, MI MSA )*/
'26037' = '4040' /* (MSA Lansing-East Lansing, MI MSA )*/
'26045' = '4040' /* (MSA Lansing-East Lansing, MI MSA )*/
'26065' = '4040' /* (MSA Lansing-East Lansing, MI MSA )*/
'26075' = '3520' /* (MSA Jackson, MI MSA )*/
'26077' = '3720' /* (MSA Kalamazoo-Battle Creek, MI MSA )*/
'26081' = '3000' /* (MSA Grand Rapids-Muskegon-Holland, MI MSA )*/
'26111' = '6960' /* (MSA Saginaw-Bay City-Midland, MI MSA )*/
'26121' = '3000' /* (MSA Grand Rapids-Muskegon-Holland, MI MSA )*/
'26139' = '3000' /* (MSA Grand Rapids-Muskegon-Holland, MI MSA )*/
'26145' = '6960' /* (MSA Saginaw-Bay City-Midland, MI MSA )*/
'26159' = '3720' /* (MSA Kalamazoo-Battle Creek, MI MSA )*/
'27003' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27009' = '6980' /* (MSA St. Cloud, MN MSA )*/
'27019' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27025' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27027' = '2520' /* (MSA Fargo-Moorhead, ND-MN MSA )*/
'27037' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27053' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27055' = '3870' /* (MSA La Crosse, WI-MN MSA )*/
'27059' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27109' = '6820' /* (MSA Rochester, MN MSA )*/
'27119' = '2985' /* (MSA Grand Forks, ND-MN MSA )*/
'27123' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27137' = '2240' /* (MSA Duluth-Superior, MN-WI MSA )*/
'27139' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27141' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27145' = '6980' /* (MSA St. Cloud, MN MSA )*/
'27163' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'27171' = '5120' /* (MSA Minneapolis-St. Paul, MN-WI MSA )*/
'28033' = '4920' /* (MSA Memphis, TN-AR-MS MSA )*/
'28035' = '3285' /* (MSA Hattiesburg, MS MSA )*/
'28045' = '0920' /* (MSA Biloxi-Gulfport-Pascagoula, MS MSA )*/
'28047' = '0920' /* (MSA Biloxi-Gulfport-Pascagoula, MS MSA )*/
'28049' = '3560' /* (MSA Jackson, MS MSA )*/
'28059' = '0920' /* (MSA Biloxi-Gulfport-Pascagoula, MS MSA )*/
'28073' = '3285' /* (MSA Hattiesburg, MS MSA )*/
'28089' = '3560' /* (MSA Jackson, MS MSA )*/
'28121' = '3560' /* (MSA Jackson, MS MSA )*/
'29003' = '7000' /* (MSA St. Joseph, MO MSA )*/
'29019' = '1740' /* (MSA Columbia, MO MSA )*/
'29021' = '7000' /* (MSA St. Joseph, MO MSA )*/
'29037' = '3760' /* (MSA Kansas City, MO-KS MSA )*/
'29043' = '7920' /* (MSA Springfield, MO MSA )*/
'29047' = '3760' /* (MSA Kansas City, MO-KS MSA )*/
'29049' = '3760' /* (MSA Kansas City, MO-KS MSA )*/
'29071' = '7040' /* (MSA St. Louis, MO-IL MSA )*/
'29077' = '7920' /* (MSA Springfield, MO MSA )*/
'29095' = '3760' /* (MSA Kansas City, MO-KS MSA )*/
'29097' = '3710' /* (MSA Joplin, MO MSA )*/
'29099' = '7040' /* (MSA St. Louis, MO-IL MSA )*/

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'29107' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '29113' = '7040' /\* (MSA St. Louis, MO-IL MSA )\*/  
 '29145' = '3710' /\* (MSA Joplin, MO MSA )\*/  
 '29165' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '29177' = '3760' /\* (MSA Kansas City, MO-KS MSA )\*/  
 '29183' = '7040' /\* (MSA St. Louis, MO-IL MSA )\*/  
 '29189' = '7040' /\* (MSA St. Louis, MO-IL MSA )\*/  
 '29219' = '7040' /\* (MSA St. Louis, MO-IL MSA )\*/  
 '29225' = '7920' /\* (MSA Springfield, MO MSA )\*/  
 '29510' = '7040' /\* (MSA St. Louis, MO-IL MSA )\*/  
 '30013' = '3040' /\* (MSA Great Falls, MT MSA )\*/  
 '30063' = '5140' /\* (MSA Missoula, MT MSA )\*/  
 '30111' = '0880' /\* (MSA Billings, MT MSA )\*/  
 '31025' = '5920' /\* (MSA Omaha, NE-IA MSA )\*/  
 '31043' = '7720' /\* (MSA Sioux City, IA-NE MSA )\*/  
 '31055' = '5920' /\* (MSA Omaha, NE-IA MSA )\*/  
 '31109' = '4360' /\* (MSA Lincoln, NE MSA )\*/  
 '31153' = '5920' /\* (MSA Omaha, NE-IA MSA )\*/  
 '31177' = '5920' /\* (MSA Omaha, NE-IA MSA )\*/  
 '32003' = '4120' /\* (MSA Las Vegas, NV-AZ MSA )\*/  
 '32023' = '4120' /\* (MSA Las Vegas, NV-AZ MSA )\*/  
 '32031' = '6720' /\* (MSA Reno, NV MSA )\*/  
 '35001' = '0200' /\* (MSA Albuquerque, NM MSA )\*/  
 '35013' = '4100' /\* (MSA Las Cruces, NM MSA )\*/  
 '35028' = '7490' /\* (MSA Santa Fe, NM MSA )\*/  
 '35043' = '0200' /\* (MSA Albuquerque, NM MSA )\*/  
 '35049' = '7490' /\* (MSA Santa Fe, NM MSA )\*/  
 '35061' = '0200' /\* (MSA Albuquerque, NM MSA )\*/  
 '36001' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36007' = '0960' /\* (MSA Binghamton, NY MSA )\*/  
 '36011' = '8160' /\* (MSA Syracuse, NY MSA )\*/  
 '36013' = '3610' /\* (MSA Jamestown, NY MSA )\*/  
 '36015' = '2335' /\* (MSA Elmira, NY MSA )\*/  
 '36029' = '1280' /\* (MSA Buffalo-Niagara Falls, NY MSA )\*/  
 '36037' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '36043' = '8680' /\* (MSA Utica-Rome, NY MSA )\*/  
 '36051' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '36053' = '8160' /\* (MSA Syracuse, NY MSA )\*/  
 '36055' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '36057' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36063' = '1280' /\* (MSA Buffalo-Niagara Falls, NY MSA )\*/  
 '36065' = '8680' /\* (MSA Utica-Rome, NY MSA )\*/  
 '36067' = '8160' /\* (MSA Syracuse, NY MSA )\*/  
 '36069' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '36073' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '36075' = '8160' /\* (MSA Syracuse, NY MSA )\*/  
 '36083' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36091' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36093' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36095' = '0160' /\* (MSA Albany-Schenectady-Troy, NY MSA )\*/  
 '36107' = '0960' /\* (MSA Binghamton, NY MSA )\*/  
 '36113' = '2975' /\* (MSA Glens Falls, NY MSA )\*/  
 '36115' = '2975' /\* (MSA Glens Falls, NY MSA )\*/  
 '36117' = '6840' /\* (MSA Rochester, NY MSA )\*/  
 '37001' = '3120' /\* (MSA Greensboro--Winston-Salem--High Point, NC MSA )\*/  
 '37003' = '3290' /\* (MSA Hickory-Morganton-Lenoir, NC MSA )\*/  
 '37019' = '9200' /\* (MSA Wilmington, NC MSA )\*/  
 '37021' = '0480' /\* (MSA Asheville, NC MSA )\*/  
 '37023' = '3290' /\* (MSA Hickory-Morganton-Lenoir, NC MSA )\*/  
 '37025' = '1520' /\* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )\*/  
 '37027' = '3290' /\* (MSA Hickory-Morganton-Lenoir, NC MSA )\*/  
 '37035' = '3290' /\* (MSA Hickory-Morganton-Lenoir, NC MSA )\*/  
 '37037' = '6640' /\* (MSA Raleigh-Durham-Chapel Hill, NC MSA )\*/  
 '37051' = '2560' /\* (MSA Fayetteville, NC MSA )\*/  
 '37053' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '37057' = '3120' /\* (MSA Greensboro--Winston-Salem--High Point, NC MSA )\*/

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'37059' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'37063' = '6640' /* (MSA Raleigh-Durham-Chapel Hill, NC MSA )*/
'37065' = '6895' /* (MSA Rocky Mount, NC MSA )*/
'37067' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'37069' = '6640' /* (MSA Raleigh-Durham-Chapel Hill, NC MSA )*/
'37071' = '1520' /* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )*/
'37081' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'37101' = '6640' /* (MSA Raleigh-Durham-Chapel Hill, NC MSA )*/
'37109' = '1520' /* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )*/
'37115' = '0480' /* (MSA Asheville, NC MSA )*/
'37119' = '1520' /* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )*/
'37127' = '6895' /* (MSA Rocky Mount, NC MSA )*/
'37129' = '9200' /* (MSA Wilmington, NC MSA )*/
'37133' = '3605' /* (MSA Jacksonville, NC MSA )*/
'37135' = '6640' /* (MSA Raleigh-Durham-Chapel Hill, NC MSA )*/
'37147' = '3150' /* (MSA Greenville, NC MSA )*/
'37151' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'37159' = '1520' /* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )*/
'37169' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'37179' = '1520' /* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )*/
'37183' = '6640' /* (MSA Raleigh-Durham-Chapel Hill, NC MSA )*/
'37191' = '2980' /* (MSA Goldsboro, NC MSA )*/
'37197' = '3120' /* (MSA Greensboro--Winston-Salem--High Point, NC MSA )*/
'38015' = '1010' /* (MSA Bismarck, ND MSA )*/
'38017' = '2520' /* (MSA Fargo-Moorhead, ND-MN MSA )*/
'38035' = '2985' /* (MSA Grand Forks, ND-MN MSA )*/
'38059' = '1010' /* (MSA Bismarck, ND MSA )*/
'39003' = '4320' /* (MSA Lima, OH MSA )*/
'39011' = '4320' /* (MSA Lima, OH MSA )*/
'39013' = '9000' /* (MSA Wheeling, WV-OH MSA )*/
'39019' = '1320' /* (MSA Canton-Massillon, OH MSA )*/
'39023' = '2000' /* (MSA Dayton-Springfield, OH MSA )*/
'39029' = '9320' /* (MSA Youngstown-Warren, OH MSA )*/
'39033' = '4800' /* (MSA Mansfield, OH MSA )*/
'39041' = '1840' /* (MSA Columbus, OH MSA )*/
'39045' = '1840' /* (MSA Columbus, OH MSA )*/
'39049' = '1840' /* (MSA Columbus, OH MSA )*/
'39051' = '8400' /* (MSA Toledo, OH MSA )*/
'39057' = '2000' /* (MSA Dayton-Springfield, OH MSA )*/
'39081' = '8080' /* (MSA Steubenville-Weirton, OH-WV MSA )*/
'39087' = '3400' /* (MSA Huntington-Ashland, WV-KY-OH MSA )*/
'39089' = '1840' /* (MSA Columbus, OH MSA )*/
'39095' = '8400' /* (MSA Toledo, OH MSA )*/
'39097' = '1840' /* (MSA Columbus, OH MSA )*/
'39099' = '9320' /* (MSA Youngstown-Warren, OH MSA )*/
'39109' = '2000' /* (MSA Dayton-Springfield, OH MSA )*/
'39113' = '2000' /* (MSA Dayton-Springfield, OH MSA )*/
'39129' = '1840' /* (MSA Columbus, OH MSA )*/
'39139' = '4800' /* (MSA Mansfield, OH MSA )*/
'39151' = '1320' /* (MSA Canton-Massillon, OH MSA )*/
'39155' = '9320' /* (MSA Youngstown-Warren, OH MSA )*/
'39167' = '6020' /* (MSA Parkersburg-Marietta, WV-OH MSA )*/
'39173' = '8400' /* (MSA Toledo, OH MSA )*/
'40017' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40027' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40031' = '4200' /* (MSA Lawton, OK MSA )*/
'40037' = '8560' /* (MSA Tulsa, OK MSA )*/
'40047' = '2340' /* (MSA Enid, OK MSA )*/
'40083' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40087' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40109' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40113' = '8560' /* (MSA Tulsa, OK MSA )*/
'40125' = '5880' /* (MSA Oklahoma City, OK MSA )*/
'40131' = '8560' /* (MSA Tulsa, OK MSA )*/
'40135' = '2720' /* (MSA Fort Smith, AR-OK MSA )*/
'40143' = '8560' /* (MSA Tulsa, OK MSA )*/

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### 30 Demographic, Social, Economic, and Housing Characteristics

'40145' = '8560' /\* (MSA Tulsa, OK MSA )\*/  
 '41003' = '1890' /\* (MSA Corvallis, OR MSA )\*/  
 '41029' = '4890' /\* (MSA Medford-Ashland, OR MSA )\*/  
 '41039' = '2400' /\* (MSA Eugene-Springfield, OR MSA )\*/  
 '42003' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42007' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42011' = '6680' /\* (MSA Reading, PA MSA )\*/  
 '42013' = '0280' /\* (MSA Altoona, PA MSA )\*/  
 '42019' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42021' = '3680' /\* (MSA Johnstown, PA MSA )\*/  
 '42025' = '0240' /\* (MSA Allentown-Bethlehem-Easton, PA MSA )\*/  
 '42027' = '8050' /\* (MSA State College, PA MSA )\*/  
 '42037' = '7560' /\* (MSA Scranton--Wilkes-Barre--Hazleton, PA MSA )\*/  
 '42041' = '3240' /\* (MSA Harrisburg-Lebanon-Carlisle, PA MSA )\*/  
 '42043' = '3240' /\* (MSA Harrisburg-Lebanon-Carlisle, PA MSA )\*/  
 '42049' = '2360' /\* (MSA Erie, PA MSA )\*/  
 '42051' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42069' = '7560' /\* (MSA Scranton--Wilkes-Barre--Hazleton, PA MSA )\*/  
 '42071' = '4000' /\* (MSA Lancaster, PA MSA )\*/  
 '42075' = '3240' /\* (MSA Harrisburg-Lebanon-Carlisle, PA MSA )\*/  
 '42077' = '0240' /\* (MSA Allentown-Bethlehem-Easton, PA MSA )\*/  
 '42079' = '7560' /\* (MSA Scranton--Wilkes-Barre--Hazleton, PA MSA )\*/  
 '42081' = '9140' /\* (MSA Williamsport, PA MSA )\*/  
 '42085' = '7610' /\* (MSA Sharon, PA MSA )\*/  
 '42095' = '0240' /\* (MSA Allentown-Bethlehem-Easton, PA MSA )\*/  
 '42099' = '3240' /\* (MSA Harrisburg-Lebanon-Carlisle, PA MSA )\*/  
 '42111' = '3680' /\* (MSA Johnstown, PA MSA )\*/  
 '42125' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42129' = '6280' /\* (MSA Pittsburgh, PA MSA )\*/  
 '42131' = '7560' /\* (MSA Scranton--Wilkes-Barre--Hazleton, PA MSA )\*/  
 '42133' = '9280' /\* (MSA York, PA MSA )\*/  
 '45003' = '0600' /\* (MSA Augusta-Aiken, GA-SC MSA )\*/  
 '45007' = '3160' /\* (MSA Greenville-Spartanburg-Anderson, SC MSA )\*/  
 '45015' = '1440' /\* (MSA Charleston-North Charleston, SC MSA )\*/  
 '45019' = '1440' /\* (MSA Charleston-North Charleston, SC MSA )\*/  
 '45021' = '3160' /\* (MSA Greenville-Spartanburg-Anderson, SC MSA )\*/  
 '45035' = '1440' /\* (MSA Charleston-North Charleston, SC MSA )\*/  
 '45037' = '0600' /\* (MSA Augusta-Aiken, GA-SC MSA )\*/  
 '45041' = '2655' /\* (MSA Florence, SC MSA )\*/  
 '45045' = '3160' /\* (MSA Greenville-Spartanburg-Anderson, SC MSA )\*/  
 '45051' = '5330' /\* (MSA Myrtle Beach, SC MSA )\*/  
 '45063' = '1760' /\* (MSA Columbia, SC MSA )\*/  
 '45077' = '3160' /\* (MSA Greenville-Spartanburg-Anderson, SC MSA )\*/  
 '45079' = '1760' /\* (MSA Columbia, SC MSA )\*/  
 '45083' = '3160' /\* (MSA Greenville-Spartanburg-Anderson, SC MSA )\*/  
 '45085' = '8140' /\* (MSA Sumter, SC MSA )\*/  
 '45091' = '1520' /\* (MSA Charlotte-Gastonia-Rock Hill, NC-SC MSA )\*/  
 '46083' = '7760' /\* (MSA Sioux Falls, SD MSA )\*/  
 '46099' = '7760' /\* (MSA Sioux Falls, SD MSA )\*/  
 '46103' = '6660' /\* (MSA Rapid City, SD MSA )\*/  
 '47001' = '3840' /\* (MSA Knoxville, TN MSA )\*/  
 '47009' = '3840' /\* (MSA Knoxville, TN MSA )\*/  
 '47019' = '3660' /\* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )\*/  
 '47021' = '5360' /\* (MSA Nashville, TN MSA )\*/  
 '47023' = '3580' /\* (MSA Jackson, TN MSA )\*/  
 '47037' = '5360' /\* (MSA Nashville, TN MSA )\*/  
 '47043' = '5360' /\* (MSA Nashville, TN MSA )\*/  
 '47047' = '4920' /\* (MSA Memphis, TN-AR-MS MSA )\*/  
 '47065' = '1560' /\* (MSA Chattanooga, TN-GA MSA )\*/  
 '47073' = '3660' /\* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )\*/  
 '47093' = '3840' /\* (MSA Knoxville, TN MSA )\*/  
 '47105' = '3840' /\* (MSA Knoxville, TN MSA )\*/  
 '47113' = '3580' /\* (MSA Jackson, TN MSA )\*/  
 '47115' = '1560' /\* (MSA Chattanooga, TN-GA MSA )\*/  
 '47125' = '1660' /\* (MSA Clarksville-Hopkinsville, TN-KY MSA )\*/  
 '47147' = '5360' /\* (MSA Nashville, TN MSA )\*/

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'47149' = '5360' /* (MSA Nashville, TN MSA )*/
'47155' = '3840' /* (MSA Knoxville, TN MSA )*/
'47157' = '4920' /* (MSA Memphis, TN-AR-MS MSA )*/
'47163' = '3660' /* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )*/
'47165' = '5360' /* (MSA Nashville, TN MSA )*/
'47167' = '4920' /* (MSA Memphis, TN-AR-MS MSA )*/
'47171' = '3660' /* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )*/
'47173' = '3840' /* (MSA Knoxville, TN MSA )*/
'47179' = '3660' /* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )*/
'47187' = '5360' /* (MSA Nashville, TN MSA )*/
'47189' = '5360' /* (MSA Nashville, TN MSA )*/
'48009' = '9080' /* (MSA Wichita Falls, TX MSA )*/
'48021' = '0640' /* (MSA Austin-San Marcos, TX MSA )*/
'48027' = '3810' /* (MSA Killeen-Temple, TX MSA )*/
'48029' = '7240' /* (MSA San Antonio, TX MSA )*/
'48037' = '8360' /* (MSA Texarkana, TX-Texarkana, AR MSA )*/
'48041' = '1260' /* (MSA Bryan-College Station, TX MSA )*/
'48055' = '0640' /* (MSA Austin-San Marcos, TX MSA )*/
'48061' = '1240' /* (MSA Brownsville-Harlingen-San Benito, TX MSA )*/
'48091' = '7240' /* (MSA San Antonio, TX MSA )*/
'48099' = '3810' /* (MSA Killeen-Temple, TX MSA )*/
'48135' = '5800' /* (MSA Odessa-Midland, TX MSA )*/
'48141' = '2320' /* (MSA El Paso, TX MSA )*/
'48181' = '7640' /* (MSA Sherman-Denison, TX MSA )*/
'48183' = '4420' /* (MSA Longview-Marshall, TX MSA )*/
'48187' = '7240' /* (MSA San Antonio, TX MSA )*/
'48199' = '0840' /* (MSA Beaumont-Port Arthur, TX MSA )*/
'48203' = '4420' /* (MSA Longview-Marshall, TX MSA )*/
'48209' = '0640' /* (MSA Austin-San Marcos, TX MSA )*/
'48215' = '4880' /* (MSA McAllen-Edinburg-Mission, TX MSA )*/
'48245' = '0840' /* (MSA Beaumont-Port Arthur, TX MSA )*/
'48303' = '4600' /* (MSA Lubbock, TX MSA )*/
'48309' = '8800' /* (MSA Waco, TX MSA )*/
'48329' = '5800' /* (MSA Odessa-Midland, TX MSA )*/
'48355' = '1880' /* (MSA Corpus Christi, TX MSA )*/
'48361' = '0840' /* (MSA Beaumont-Port Arthur, TX MSA )*/
'48375' = '0320' /* (MSA Amarillo, TX MSA )*/
'48381' = '0320' /* (MSA Amarillo, TX MSA )*/
'48409' = '1880' /* (MSA Corpus Christi, TX MSA )*/
'48423' = '8640' /* (MSA Tyler, TX MSA )*/
'48441' = '0040' /* (MSA Abilene, TX MSA )*/
'48451' = '7200' /* (MSA San Angelo, TX MSA )*/
'48453' = '0640' /* (MSA Austin-San Marcos, TX MSA )*/
'48459' = '4420' /* (MSA Longview-Marshall, TX MSA )*/
'48469' = '8750' /* (MSA Victoria, TX MSA )*/
'48479' = '4080' /* (MSA Laredo, TX MSA )*/
'48485' = '9080' /* (MSA Wichita Falls, TX MSA )*/
'48491' = '0640' /* (MSA Austin-San Marcos, TX MSA )*/
'48493' = '7240' /* (MSA San Antonio, TX MSA )*/
'49011' = '7160' /* (MSA Salt Lake City-Ogden, UT MSA )*/
'49025' = '2620' /* (MSA Flagstaff, AZ-UT MSA )*/
'49035' = '7160' /* (MSA Salt Lake City-Ogden, UT MSA )*/
'49049' = '6520' /* (MSA Provo-Orem, UT MSA )*/
'49057' = '7160' /* (MSA Salt Lake City-Ogden, UT MSA )*/
'51003' = '1540' /* (MSA Charlottesville, VA MSA )*/
'51009' = '4640' /* (MSA Lynchburg, VA MSA )*/
'51019' = '4640' /* (MSA Lynchburg, VA MSA )*/
'51023' = '6800' /* (MSA Roanoke, VA MSA )*/
'51031' = '4640' /* (MSA Lynchburg, VA MSA )*/
'51036' = '6760' /* (MSA Richmond-Petersburg, VA MSA )*/
'51041' = '6760' /* (MSA Richmond-Petersburg, VA MSA )*/
'51053' = '6760' /* (MSA Richmond-Petersburg, VA MSA )*/
'51065' = '1540' /* (MSA Charlottesville, VA MSA )*/
'51073' = '5720' /* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )*/
'51075' = '6760' /* (MSA Richmond-Petersburg, VA MSA )*/
'51079' = '1540' /* (MSA Charlottesville, VA MSA )*/

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## 32 Demographic, Social, Economic, and Housing Characteristics

'51085' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51087' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51093' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51095' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51115' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51127' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51143' = '1950' /\* (MSA Danville, VA MSA )\*/  
 '51145' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51149' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51161' = '6800' /\* (MSA Roanoke, VA MSA )\*/  
 '51169' = '3660' /\* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )\*/  
 '51191' = '3660' /\* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )\*/  
 '51199' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51515' = '4640' /\* (MSA Lynchburg, VA MSA )\*/  
 '51520' = '3660' /\* (MSA Johnson City-Kingsport-Bristol, TN-VA MSA )\*/  
 '51540' = '1540' /\* (MSA Charlottesville, VA MSA )\*/  
 '51550' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51570' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51590' = '1950' /\* (MSA Danville, VA MSA )\*/  
 '51650' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51670' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51680' = '4640' /\* (MSA Lynchburg, VA MSA )\*/  
 '51700' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51710' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51730' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51735' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51740' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51760' = '6760' /\* (MSA Richmond-Petersburg, VA MSA )\*/  
 '51770' = '6800' /\* (MSA Roanoke, VA MSA )\*/  
 '51775' = '6800' /\* (MSA Roanoke, VA MSA )\*/  
 '51800' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51810' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '51830' = '5720' /\* (MSA Norfolk-Virginia Beach-Newport News, VA-NC MSA )\*/  
 '53005' = '6740' /\* (MSA Richland-Kennewick-Pasco, WA MSA )\*/  
 '53021' = '6740' /\* (MSA Richland-Kennewick-Pasco, WA MSA )\*/  
 '53063' = '7840' /\* (MSA Spokane, WA MSA )\*/  
 '53073' = '0860' /\* (MSA Bellingham, WA MSA )\*/  
 '53077' = '9260' /\* (MSA Yakima, WA MSA )\*/  
 '54009' = '8080' /\* (MSA Steubenville-Weirton, OH-WV MSA )\*/  
 '54011' = '3400' /\* (MSA Huntington-Ashland, WV-KY-OH MSA )\*/  
 '54029' = '8080' /\* (MSA Steubenville-Weirton, OH-WV MSA )\*/  
 '54039' = '1480' /\* (MSA Charleston, WV MSA )\*/  
 '54051' = '9000' /\* (MSA Wheeling, WV-OH MSA )\*/  
 '54057' = '1900' /\* (MSA Cumberland, MD-WV MSA )\*/  
 '54069' = '9000' /\* (MSA Wheeling, WV-OH MSA )\*/  
 '54079' = '1480' /\* (MSA Charleston, WV MSA )\*/  
 '54099' = '3400' /\* (MSA Huntington-Ashland, WV-KY-OH MSA )\*/  
 '54107' = '6020' /\* (MSA Parkersburg-Marietta, WV-OH MSA )\*/  
 '55009' = '3080' /\* (MSA Green Bay, WI MSA )\*/  
 '55015' = '0460' /\* (MSA Appleton-Oshkosh-Neenah, WI MSA )\*/  
 '55017' = '2290' /\* (MSA Eau Claire, WI MSA )\*/  
 '55025' = '4720' /\* (MSA Madison, WI MSA )\*/  
 '55031' = '2240' /\* (MSA Duluth-Superior, MN-WI MSA )\*/  
 '55035' = '2290' /\* (MSA Eau Claire, WI MSA )\*/  
 '55063' = '3870' /\* (MSA La Crosse, WI-MN MSA )\*/  
 '55073' = '8940' /\* (MSA Wausau, WI MSA )\*/  
 '55087' = '0460' /\* (MSA Appleton-Oshkosh-Neenah, WI MSA )\*/  
 '55093' = '5120' /\* (MSA Minneapolis-St. Paul, MN-WI MSA )\*/  
 '55105' = '3620' /\* (MSA Janesville-Beloit, WI MSA )\*/  
 '55109' = '5120' /\* (MSA Minneapolis-St. Paul, MN-WI MSA )\*/  
 '55117' = '7620' /\* (MSA Sheboygan, WI MSA )\*/  
 '55139' = '0460' /\* (MSA Appleton-Oshkosh-Neenah, WI MSA )\*/  
 '56021' = '1580' /\* (MSA Cheyenne, WY MSA )\*/  
 '56025' = '1350' /\* (MSA Casper, WY MSA )\*/  
 '06001' = '5775' /\* (PMSA Oakland, CA PMSA )\*/  
 '06013' = '5775' /\* (PMSA Oakland, CA PMSA )\*/

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'06017' = '6920' /* (PMSA Sacramento, CA PMSA )*/
'06037' = '4480' /* (PMSA Los Angeles-Long Beach, CA PMSA )*/
'06041' = '7360' /* (PMSA San Francisco, CA PMSA )*/
'06055' = '8720' /* (PMSA Vallejo-Fairfield-Napa, CA PMSA )*/
'06059' = '5945' /* (PMSA Orange County, CA PMSA )*/
'06061' = '6920' /* (PMSA Sacramento, CA PMSA )*/
'06065' = '6780' /* (PMSA Riverside-San Bernardino, CA PMSA )*/
'06067' = '6920' /* (PMSA Sacramento, CA PMSA )*/
'06071' = '6780' /* (PMSA Riverside-San Bernardino, CA PMSA )*/
'06075' = '7360' /* (PMSA San Francisco, CA PMSA )*/
'06081' = '7360' /* (PMSA San Francisco, CA PMSA )*/
'06085' = '7400' /* (PMSA San Jose, CA PMSA )*/
'06087' = '7485' /* (PMSA Santa Cruz-Watsonville, CA PMSA )*/
'06095' = '8720' /* (PMSA Vallejo-Fairfield-Napa, CA PMSA )*/
'06097' = '7500' /* (PMSA Santa Rosa, CA PMSA )*/
'06111' = '8735' /* (PMSA Ventura, CA PMSA )*/
'06113' = '9270' /* (PMSA Yolo, CA PMSA )*/
'08001' = '2080' /* (PMSA Denver, CO PMSA )*/
'08005' = '2080' /* (PMSA Denver, CO PMSA )*/
'08013' = '1125' /* (PMSA Boulder-Longmont, CO PMSA )*/
'08031' = '2080' /* (PMSA Denver, CO PMSA )*/
'08035' = '2080' /* (PMSA Denver, CO PMSA )*/
'08059' = '2080' /* (PMSA Denver, CO PMSA )*/
'08123' = '3060' /* (PMSA Greeley, CO PMSA )*/
'10003' = '9160' /* (PMSA Wilmington-Newark, DE-MD PMSA )*/
'11001' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'12011' = '2680' /* (PMSA Fort Lauderdale, FL PMSA )*/
'12086' = '5000' /* (PMSA Miami, FL PMSA )*/
'17031' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17037' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17043' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17063' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17089' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17091' = '3740' /* (PMSA Kankakee, IL PMSA )*/
'17093' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17097' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17111' = '1600' /* (PMSA Chicago, IL PMSA )*/
'17197' = '1600' /* (PMSA Chicago, IL PMSA )*/
'18029' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'18089' = '2960' /* (PMSA Gary, IN PMSA )*/
'18115' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'18127' = '2960' /* (PMSA Gary, IN PMSA )*/
'21015' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'21037' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'21077' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'21081' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'21117' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'21191' = '1640' /* (PMSA Cincinnati, OH-KY-IN PMSA )*/
'24003' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24005' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24009' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'24013' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24015' = '9160' /* (PMSA Wilmington-Newark, DE-MD PMSA )*/
'24017' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'24021' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'24025' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24027' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24031' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'24033' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'24035' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'24043' = '3180' /* (PMSA Hagerstown, MD PMSA )*/
'24510' = '0720' /* (PMSA Baltimore, MD PMSA )*/
'26049' = '2640' /* (PMSA Flint, MI PMSA )*/
'26087' = '2160' /* (PMSA Detroit, MI PMSA )*/
'26091' = '0440' /* (PMSA Ann Arbor, MI PMSA )*/
'26093' = '0440' /* (PMSA Ann Arbor, MI PMSA )*/

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'26099' = '2160' /\* (PMSA Detroit, MI PMSA )\*/  
 '26115' = '2160' /\* (PMSA Detroit, MI PMSA )\*/  
 '26125' = '2160' /\* (PMSA Detroit, MI PMSA )\*/  
 '26147' = '2160' /\* (PMSA Detroit, MI PMSA )\*/  
 '26161' = '0440' /\* (PMSA Ann Arbor, MI PMSA )\*/  
 '26163' = '2160' /\* (PMSA Detroit, MI PMSA )\*/  
 '34001' = '0560' /\* (PMSA Atlantic-Cape May, NJ PMSA )\*/  
 '34003' = '0875' /\* (PMSA Bergen-Passaic, NJ PMSA )\*/  
 '34005' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '34007' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '34009' = '0560' /\* (PMSA Atlantic-Cape May, NJ PMSA )\*/  
 '34011' = '8760' /\* (PMSA Vineland-Millville-Bridgeton, NJ PMSA )\*/  
 '34013' = '5640' /\* (PMSA Newark, NJ PMSA )\*/  
 '34015' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '34017' = '3640' /\* (PMSA Jersey City, NJ PMSA )\*/  
 '34019' = '5015' /\* (PMSA Middlesex-Somerset-Hunterdon, NJ PMSA )\*/  
 '34021' = '8480' /\* (PMSA Trenton, NJ PMSA )\*/  
 '34023' = '5015' /\* (PMSA Middlesex-Somerset-Hunterdon, NJ PMSA )\*/  
 '34025' = '5190' /\* (PMSA Monmouth-Ocean, NJ PMSA )\*/  
 '34027' = '5640' /\* (PMSA Newark, NJ PMSA )\*/  
 '34029' = '5190' /\* (PMSA Monmouth-Ocean, NJ PMSA )\*/  
 '34031' = '0875' /\* (PMSA Bergen-Passaic, NJ PMSA )\*/  
 '34033' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '34035' = '5015' /\* (PMSA Middlesex-Somerset-Hunterdon, NJ PMSA )\*/  
 '34037' = '5640' /\* (PMSA Newark, NJ PMSA )\*/  
 '34039' = '5640' /\* (PMSA Newark, NJ PMSA )\*/  
 '34041' = '5640' /\* (PMSA Newark, NJ PMSA )\*/  
 '36005' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36027' = '2281' /\* (PMSA Dutchess County, NY PMSA )\*/  
 '36047' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36059' = '5380' /\* (PMSA Nassau-Suffolk, NY PMSA )\*/  
 '36061' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36071' = '5660' /\* (PMSA Newburgh, NY-PA PMSA )\*/  
 '36079' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36081' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36085' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36087' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '36103' = '5380' /\* (PMSA Nassau-Suffolk, NY PMSA )\*/  
 '36119' = '5600' /\* (PMSA New York, NY PMSA )\*/  
 '39007' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39015' = '1640' /\* (PMSA Cincinnati, OH-KY-IN PMSA )\*/  
 '39017' = '3200' /\* (PMSA Hamilton-Middletown, OH PMSA )\*/  
 '39025' = '1640' /\* (PMSA Cincinnati, OH-KY-IN PMSA )\*/  
 '39035' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39055' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39061' = '1640' /\* (PMSA Cincinnati, OH-KY-IN PMSA )\*/  
 '39085' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39093' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39103' = '1680' /\* (PMSA Cleveland-Lorain-Elyria, OH PMSA )\*/  
 '39133' = '0080' /\* (PMSA Akron, OH PMSA )\*/  
 '39153' = '0080' /\* (PMSA Akron, OH PMSA )\*/  
 '39165' = '1640' /\* (PMSA Cincinnati, OH-KY-IN PMSA )\*/  
 '41005' = '6440' /\* (PMSA Portland-Vancouver, OR-WA PMSA )\*/  
 '41009' = '6440' /\* (PMSA Portland-Vancouver, OR-WA PMSA )\*/  
 '41047' = '7080' /\* (PMSA Salem, OR PMSA )\*/  
 '41051' = '6440' /\* (PMSA Portland-Vancouver, OR-WA PMSA )\*/  
 '41053' = '7080' /\* (PMSA Salem, OR PMSA )\*/  
 '41067' = '6440' /\* (PMSA Portland-Vancouver, OR-WA PMSA )\*/  
 '41071' = '6440' /\* (PMSA Portland-Vancouver, OR-WA PMSA )\*/  
 '42017' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '42029' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '42045' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '42091' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '42101' = '6160' /\* (PMSA Philadelphia, PA-NJ PMSA )\*/  
 '42103' = '5660' /\* (PMSA Newburgh, NY-PA PMSA )\*/  
 '48039' = '1145' /\* (PMSA Brazoria, TX PMSA )\*/



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'48071' = '3360' /* (PMSA Houston, TX PMSA )*/
'48085' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48113' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48121' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48139' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48157' = '3360' /* (PMSA Houston, TX PMSA )*/
'48167' = '2920' /* (PMSA Galveston-Texas City, TX PMSA )*/
'48201' = '3360' /* (PMSA Houston, TX PMSA )*/
'48213' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48221' = '2800' /* (PMSA Fort Worth-Arlington, TX PMSA )*/
'48231' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48251' = '2800' /* (PMSA Fort Worth-Arlington, TX PMSA )*/
'48257' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48291' = '3360' /* (PMSA Houston, TX PMSA )*/
'48339' = '3360' /* (PMSA Houston, TX PMSA )*/
'48367' = '2800' /* (PMSA Fort Worth-Arlington, TX PMSA )*/
'48397' = '1920' /* (PMSA Dallas, TX PMSA )*/
'48439' = '2800' /* (PMSA Fort Worth-Arlington, TX PMSA )*/
'48473' = '3360' /* (PMSA Houston, TX PMSA )*/
'51013' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51043' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51047' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51059' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51061' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51099' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51107' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51153' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51177' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51179' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51187' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51510' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51600' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51610' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51630' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51683' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'51685' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'53011' = '6440' /* (PMSA Portland-Vancouver, OR-WA PMSA )*/
'53029' = '7600' /* (PMSA Seattle-Bellevue-Everett, WA PMSA )*/
'53033' = '7600' /* (PMSA Seattle-Bellevue-Everett, WA PMSA )*/
'53035' = '1150' /* (PMSA Bremerton, WA PMSA )*/
'53053' = '8200' /* (PMSA Tacoma, WA PMSA )*/
'53061' = '7600' /* (PMSA Seattle-Bellevue-Everett, WA PMSA )*/
'53067' = '5910' /* (PMSA Olympia, WA PMSA )*/
'54003' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'54037' = '8840' /* (PMSA Washington, DC-MD-VA-WV PMSA )*/
'55059' = '3800' /* (PMSA Kenosha, WI PMSA )*/
'55079' = '5080' /* (PMSA Milwaukee-Waukesha, WI PMSA )*/
'55089' = '5080' /* (PMSA Milwaukee-Waukesha, WI PMSA )*/
'55101' = '6600' /* (PMSA Racine, WI PMSA )*/
'55131' = '5080' /* (PMSA Milwaukee-Waukesha, WI PMSA )*/
'55133' = '5080' /* (PMSA Milwaukee-Waukesha, WI PMSA )*/
'09001' = '5483' /* (NECMA New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT NECMA)*/
'09003' = '3283' /* (NECMA Hartford, CT NECMA )*/
'09007' = '3283' /* (NECMA Hartford, CT NECMA )*/
'09009' = '5483' /* (NECMA New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT NECMA)*/
'09011' = '5523' /* (NECMA New London-Norwich, CT NECMA )*/
'09013' = '3283' /* (NECMA Hartford, CT NECMA )*/
'23001' = '4243' /* (NECMA Lewiston-Auburn, ME NECMA )*/
'23005' = '6403' /* (NECMA Portland, ME NECMA )*/
'23019' = '0733' /* (NECMA Bangor, ME NECMA )*/
'25001' = '0743' /* (NECMA Barnstable-Yarmouth, MA NECMA )*/
'25003' = '6323' /* (NECMA Pittsfield, MA NECMA )*/
'25005' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/
'25009' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/
'25013' = '8003' /* (NECMA Springfield, MA NECMA )*/
'25015' = '8003' /* (NECMA Springfield, MA NECMA )*/

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'25017' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'25021' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'25023' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'25025' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'25027' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'33011' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'33015' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'33017' = '1123' /* (NECMA Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA )*/  
'44001' = '6483' /* (NECMA Providence-Warwick-Pawtucket, RI NECMA )*/  
'44003' = '6483' /* (NECMA Providence-Warwick-Pawtucket, RI NECMA )*/  
'44007' = '6483' /* (NECMA Providence-Warwick-Pawtucket, RI NECMA )*/  
'44009' = '6483' /* (NECMA Providence-Warwick-Pawtucket, RI NECMA )*/  
'50007' = '1303' /* (NECMA Burlington, VT NECMA )*/  
'50011' = '1303' /* (NECMA Burlington, VT NECMA )*/  
'50013' = '1303' /* (NECMA Burlington, VT NECMA )*/  
;
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## Contextual Data Measures Created

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Tables C.1 through C.4 list all the variables we used and a brief description of each.

**Table C.1**  
**Demographic Variables**

Variable	Description
RAT_DENSITY_TOT_POPL	Total population per square mile of land area
PCT_RURALPOP	Percentage of the population living in nonurban areas
PCT_AGE65PLUS	Percentage of the population age 65 and older
PCT_AGE0TO17	Percentage of the population under age 18
PCT_HISP	Percentage Hispanic in the population
PCT_NONHISP	Percentage non-Hispanic in the population
PCT_NHBLACK	Percentage non-Hispanic black in the population
PCT_NHWHITE	Percentage non-Hispanic white in the population
PCT_NHASIAN	Percentage non-Hispanic Asian in the population
PCT_NHPI	Percentage non-Hispanic Pacific Islander in the population
PCT_NHNA	Percentage non-Hispanic Native American in the population
PCT_NHOTHER	Percentage non-Hispanic other or multirace in the population
PCT_NHAPI	Percentage non-Hispanic Asian or Pacific Islander
PCT_NHOTH2	Percentage non-Hispanic other, Native American, or multirace
PCT_HWHITE	Percentage Hispanic white in the population
PCT_HBLACK	Percentage Hispanic black in the population
PCT_HASIAN	Percentage Hispanic Asian in the population
PCT_HPI	Percentage Hispanic Pacific Islander in the population
PCT_HNA	Percentage Hispanic Native American in the population
PCT_HOTHER	Percentage Hispanic other and multirace in the population
PCT_HAPI	Percentage Hispanic Asian or Pacific Islander in the population
PCT_HOTH2	Percentage Hispanic other, Native American, or multirace in the population
PCT_MEX_HISP	Percentage Hispanic of Mexican origin in the population

**Table C.1—Continued**

<b>Variable</b>	<b>Description</b>
PCT_AGE05	Percentage of the population ages 0 to 4 years
PCT_AGE05TO09	Percentage of the population ages 5 to 9 years
PCT_AGE10TO14	Percentage of the population ages 10 to 14 years
PCT_AGE15TO19	Percentage of the population ages 15 to 19 years
PCT_AGE20TO24	Percentage of the population ages 20 to 24 years
PCT_AGE25TO29	Percentage of the population ages 25 to 29 years
PCT_AGE30TO34	Percentage of the population ages 30 to 34 years
PCT_AGE35TO39	Percentage of the population ages 35 to 39 years
PCT_AGE40TO44	Percentage of the population ages 40 to 44 years
PCT_AGE45TO49	Percentage of the population ages 45 to 49 years
PCT_AGE50TO54	Percentage of the population ages 50 to 54 years
PCT_AGE55TO59	Percentage of the population ages 55 to 59 years
PCT_AGE60TO64	Percentage of the population ages 60 to 64 years
PCT_AGE65TO69	Percentage of the population ages 65 to 69 years
PCT_AGE70TO74	Percentage of the population ages 70 to 74 years
PCT_AGE75TO79	Percentage of the population ages 75 to 79 years
PCT_AGE80TO84	Percentage of the population ages 80 to 84 years
PCT_AGE85P	Percentage of the population ages 85 years and older
PCT_AGEM65PLUS	Percentage of the male population ages 65 and older
PCT_AGEM0TO17	Percentage of the male population under age 18
PCT_AGEM05	Percentage of the male population ages 0 to 4 years
PCT_AGEM05TO09	Percentage of the male population ages 5 to 9 years
PCT_AGEM10TO14	Percentage of the male population ages 10 to 14 years
PCT_AGEM15TO19	Percentage of the male population ages 15 to 19 years
PCT_AGEM20TO24	Percentage of the male population ages 20 to 24 years
PCT_AGEM25TO29	Percentage of the male population ages 25 to 29 years
PCT_AGEM30TO34	Percentage of the male population ages 30 to 34 years
PCT_AGEM35TO39	Percentage of the male population ages 35 to 39 years
PCT_AGEM40TO44	Percentage of the male population ages 40 to 44 years
PCT_AGEM45TO49	Percentage of the male population ages 45 to 49 years
PCT_AGEM50TO54	Percentage of the male population ages 50 to 54 years
PCT_AGEM55TO59	Percentage of the male population ages 55 to 59 years
PCT_AGEM60TO64	Percentage of the male population ages 60 to 64 years

**Table C.1—Continued**

<b>Variable</b>	<b>Description</b>
PCT_AGEM65TO69	Percentage of the male population ages 65 to 69 years
PCT_AGEM70TO74	Percentage of the male population ages 70 to 74 years
PCT_AGEM75TO79	Percentage of the male population ages 75 to 79 years
PCT_AGEM80TO84	Percentage of the male population ages 80 to 84 years
PCT_AGEM85P	Percentage of the male population ages 85 years and older
PCT_AGEF65PLUS	Percentage of the female population ages 65 or older
PCT_AGEF0TO17	Percentage of the female population under age 18
PCT_AGEF05	Percentage of the female population ages 0 to 4 years
PCT_AGEF05TO09	Percentage of the female population ages 5 to 9 years
PCT_AGEF10TO14	Percentage of the female population ages 10 to 14 years
PCT_AGEF15TO19	Percentage of the female population ages 15 to 19 years
PCT_AGEF20TO24	Percentage of the female population ages 20 to 24 years
PCT_AGEF25TO29	Percentage of the female population ages 25 to 29 years
PCT_AGEF30TO34	Percentage of the female population ages 30 to 34 years
PCT_AGEF35TO39	Percentage of the female population ages 35 to 39 years
PCT_AGEF40TO44	Percentage of the female population ages 40 to 44 years
PCT_AGEF45TO49	Percentage of the female population ages 45 to 49 years
PCT_AGEF50TO54	Percentage of the female population ages 50 to 54 years
PCT_AGEF55TO59	Percentage of the female population ages 55 to 59 years
PCT_AGEF60TO64	Percentage of the female population ages 60 to 64 years
PCT_AGEF65TO69	Percentage of the female population ages 65 to 69 years
PCT_AGEF70TO74	Percentage of the female population ages 70 to 74 years
PCT_AGEF75TO79	Percentage of the female population ages 75 to 79 years
PCT_AGEF80TO84	Percentage of the female population ages 80 to 84 years
PCT_AGEF85P	Percentage of the female population ages 85 years and older

**Table C.2**  
**Socioeconomic Variables**

<b>Variable</b>	<b>Description</b>
MED_HHINC	Median household income in 1999 dollars
MED_FAMINC	Median family income in 1999 dollars
QTILE_HUVALQ2	Median value of owner-occupied housing unit in 2000 dollars
PCT_EDLHS	Percentage of the population ages 25 and older without high school diplomas
PCT_EDHS_NOBA	Percentage of the population ages 25 and older with high school diplomas but no bachelor's degree
PCT_EDGECOLL	Percentage of the population ages 25 and older with bachelor's degree or higher
PCT_WKSTATUEM	Percentage of the male population ages 16 and older who are unemployed
PCT_WKSTATUEF	Percentage of the female population ages 16 and older who are unemployed
PCT_WKSTATUET	Percentage of the total population ages 16 and older who are unemployed
PCT_PROFOCC	Percentage of workers ages 16 and older in professional or managerial occupations
PCT_POVHH100	Percentage of households with incomes below the poverty threshold
PCT_INCOMEPA	Percentage of households with public-assistance income
PCT_FAMHHWRCFH	Percentage of families headed by women only with children
PCT_POVPOP	Percentage of the population living below the poverty threshold
NSES	NSES (score)

**Table C.3**  
**Cultural Variables**

<b>Variable</b>	<b>Description</b>
PCT_NCITNNFB	Percentage of the population who are nonnative and foreign born
PCT_LANGSPN	Percentage of the population ages 5 and older speaking Spanish
PCT_LANGENG	Percentage of the population ages 5 and older speaking English only
PCT_NONENGLI	Percentage of linguistically isolated non-English-only households
PCT_SPANLI	Percentage of linguistically isolated Spanish-speaking households

**Table C.4**  
**Housing Variables**

<b>Variable</b>	<b>Description</b>
PCT_VACANT	Percentage of housing units that are vacant
PCT_HU_OSTATO	Percentage of occupied housing occupied by the owner
PCT_OCCRENT	Percentage of occupied housing that is renter occupied
PCT_CROWDED	Percentage of occupied housing with more than one occupant per room
PCT_HUAGE_OLD	Percentage of housing units built before 1950
PCT_HUAGE_MED	Percentage of housing units built 1950–1979
PCT_HUAGE_YNG	Percentage of housing units built 1980–1999
PCT_HUAGE_2000	Percentage of housing units built 2000 or later
PCT_HU_GT50YR	Percentage of housing units more than 50 years old
PCT_HU_20TO50YR	Percentage of housing units 20 to 50 years old
PCT_HU_LT20YR	Percentage of housing units less than 20 years old
MED_HUYRBUILT	Median year housing units built





## 2000 and 2010 Census and American Community Survey Source Variables

Table D.1 lists the variables from the 2000 or 2010 census and the ACS.

**Table D.1**  
2000 and 2010 Census and American Community Survey Source Variables

Variable	2000 Census	2010 Census	ACS
NUM_POP_URT	P005001 <sup>a</sup>	P0020001	N/A
NUM_POP_URBAN	P005002 <sup>a</sup>	P0020002	N/A
NUM_POP_RURAL	P005005 <sup>a</sup>	P0020005	N/A
NUM_POP_ETHT	P008001 <sup>b</sup>	P0050001	N/A
NUM_POP_NONHISP	P008002 <sup>b</sup>	P0050002	N/A
NUM_POP_HISP	P008010 <sup>b</sup>	P0050010	N/A
NUM_POP_NHWHITE	P008003 <sup>b</sup>	P0050003	N/A
NUM_POP_NHBLACK	P008004 <sup>b</sup>	P0050004	N/A
NUM_POP_NHASIAN	P008006 <sup>b</sup>	P0050006	N/A
NUM_POP_NHOTHER	P008005/7-9 <sup>b</sup>	P0050005/7-9	N/A
NUM_POP_NHAPI	P008006/7 <sup>b</sup>	P0050006/7	N/A
NUM_POP_NHOTH2	P008005/8/9 <sup>b</sup>	P0050005/8/9	N/A
NUM_POP_HWHITE	P008011 <sup>b</sup>	P0050011	N/A
NUM_POP_HBLACK	P008012 <sup>b</sup>	P0050012	N/A
NUM_POP_HASIAN	P008014 <sup>b</sup>	P0050014	N/A
NUM_POP_HOTHER	P008013/15-17 <sup>b</sup>	P0050013/15-17	N/A
NUM_POP_HAPI	P008015 <sup>b</sup>	P0050015	N/A
NUM_POP_HOTH2	P008013/16/17 <sup>b</sup>	P0050013/16/17	N/A
NUM_POP_NHPI	P008007 <sup>b</sup>	P0050007	N/A
NUM_POP_HPI	P008015 <sup>b</sup>	P0050015	N/A
NUM_POP_NHNA	P008005 <sup>b</sup>	P0050005	N/A
NUM_POP_HNA	P008013 <sup>b</sup>	P0050013	N/A
NUM_POP_TOT_HO	PCT11001 <sup>b</sup>	PCT11001	N/A

Table D.1—Continued

Variable	2000 Census	2010 Census	ACS
NUM_POP_NONHISP_HO	PCT11002 <sup>b</sup>	PCT11002	N/A
NUM_POP_HISP_HO	PCT11003 <sup>b</sup>	PCT11003	N/A
NUM_POP_MEX_HO	PCT11004 <sup>b</sup>	PCT11004	N/A
NUM_POP_PR_HO	PCT11005 <sup>b</sup>	PCT11005	N/A
NUM_POP_CUBAN_HO	PCT11006 <sup>b</sup>	PCT11006	N/A
NUM_POP_DOM_HO	PCT11007 <sup>b</sup>	PCT11007	N/A
NUM_POP_CENTAMER_HO	PCT11008 <sup>b</sup>	PCT11008	N/A
NUM_POP_SOAMER_HO	PCT11016 <sup>b</sup>	PCT11016	N/A
NUM_POP_OTH_HO	PCT11027 <sup>b</sup>	PCT11027	N/A
NUM_POP_AGEM	P012002 <sup>b</sup>	P012002	N/A
NUM_POP_AGEF	P012026 <sup>b</sup>	P012026	N/A
NUM_POP_AGET	P012001 <sup>b</sup>	P012001	N/A
NUM_POP_AGEM05	P014003/7 <sup>b</sup>	P012003	N/A
NUM_POP_AGEM05TO09	P014008/12 <sup>b</sup>	P012004	N/A
NUM_POP_AGEM10TO14	P014013/17 <sup>b</sup>	P012005	N/A
NUM_POP_AGEM15TO19	P014018/22 <sup>b</sup>	P012006/7	N/A
NUM_POP_AGEM20TO24	P012023/25 <sup>b</sup>	P012008/10	N/A
NUM_POP_AGEM25TO29	P012026 <sup>b</sup>	P012011	N/A
NUM_POP_AGEM30TO34	P012027 <sup>b</sup>	P012012	N/A
NUM_POP_AGEM35TO39	P012028 <sup>b</sup>	P012013	N/A
NUM_POP_AGEM40TO44	P012029 <sup>b</sup>	P012014	N/A
NUM_POP_AGEM45TO49	P012030 <sup>b</sup>	P012015	N/A
NUM_POP_AGEM50TO54	P012031 <sup>b</sup>	P012016	N/A
NUM_POP_AGEM55TO59	P012032 <sup>b</sup>	P012017	N/A
NUM_POP_AGEM60TO64	P012033/34 <sup>b</sup>	P012018/19	N/A
NUM_POP_AGEM65TO69	P012035/36 <sup>b</sup>	P012020/21	N/A
NUM_POP_AGEM70TO74	P012037 <sup>b</sup>	P012022	N/A
NUM_POP_AGEM75TO79	P012038 <sup>b</sup>	P012023	N/A
NUM_POP_AGEM80TO84	P012039 <sup>b</sup>	P012024	N/A
NUM_POP_AGEM85P	P012040 <sup>b</sup>	P012025	N/A
NUM_POP_AGEM0TO17	P012003/20 <sup>b</sup>	P012003/6	N/A
NUM_POP_AGEM65PLUS	P012035/40 <sup>b</sup>	P012020/25	N/A
NUM_POP_AGEF05	P014024/28 <sup>b</sup>	P012027	N/A

Table D.1—Continued

Variable	2000 Census	2010 Census	ACS
NUM_POP_AGEF05TO09	P014029/33 <sup>b</sup>	P012028	N/A
NUM_POP_AGEF10TO14	P014034/38 <sup>b</sup>	P012029	N/A
NUM_POP_AGEF15TO19	P014039/43 <sup>b</sup>	P012030/31	N/A
NUM_POP_AGEF20TO24	P012032/34 <sup>b</sup>	P012032/34	N/A
NUM_POP_AGEF25TO29	P012035 <sup>b</sup>	P012035	N/A
NUM_POP_AGEF30TO34	P012036 <sup>b</sup>	P012036	N/A
NUM_POP_AGEF35TO39	P012037 <sup>b</sup>	P012037	N/A
NUM_POP_AGEF40TO44	P012038 <sup>b</sup>	P012038	N/A
NUM_POP_AGEF45TO49	P012039 <sup>b</sup>	P012039	N/A
NUM_POP_AGEF50TO54	P012040 <sup>b</sup>	P012040	N/A
NUM_POP_AGEF55TO59	P012041 <sup>b</sup>	P012041	N/A
NUM_POP_AGEF60TO64	P012042/43 <sup>b</sup>	P012042/43	N/A
NUM_POP_AGEF65TO69	P012044/45 <sup>b</sup>	P012044/45	N/A
NUM_POP_AGEF70TO74	P120406 <sup>b</sup>	P120406	N/A
NUM_POP_AGEF75TO79	P012047 <sup>b</sup>	P012047	N/A
NUM_POP_AGEF80TO84	P012048 <sup>b</sup>	P012048	N/A
NUM_POP_AGEF85P	P012049 <sup>b</sup>	P012049	N/A
NUM_POP_AGEF0TO17	P012027/30 <sup>b</sup>	P012027/30	N/A
NUM_POP_AGEF65PLUS	P012044/49 <sup>b</sup>	P012044/49	N/A
NUM_POP_AGE05	SUM M/F	SUM M/F	N/A
NUM_POP_AGE05TO09	SUM M/F	SUM M/F	N/A
NUM_POP_AGE10TO14	SUM M/F	SUM M/F	N/A
NUM_POP_AGE15TO19	SUM M/F	SUM M/F	N/A
NUM_POP_AGE20TO24	SUM M/F	SUM M/F	N/A
NUM_POP_AGE25TO29	SUM M/F	SUM M/F	N/A
NUM_POP_AGE30TO34	SUM M/F	SUM M/F	N/A
NUM_POP_AGE35TO39	SUM M/F	SUM M/F	N/A
NUM_POP_AGE40TO44	SUM M/F	SUM M/F	N/A
NUM_POP_AGE45TO49	SUM M/F	SUM M/F	N/A
NUM_POP_AGE50TO54	SUM M/F	SUM M/F	N/A
NUM_POP_AGE55TO59	SUM M/F	SUM M/F	N/A
NUM_POP_AGE60TO64	SUM M/F	SUM M/F	N/A
NUM_POP_AGE65TO69	SUM M/F	SUM M/F	N/A

Table D.1—Continued

Variable	2000 Census	2010 Census	ACS
NUM_POP_AGE70TO74	SUM M/F	SUM M/F	N/A
NUM_POP_AGE75TO79	SUM M/F	SUM M/F	N/A
NUM_POP_AGE80TO84	SUM M/F	SUM M/F	N/A
NUM_POP_AGE85P	SUM M/F	SUM M/F	N/A
NUM_POP_AGE65PLUS	SUM M/F	SUM M/F	N/A
NUM_POP_AGE0TO17	SUM M/F	SUM M/F	N/A
HH_P2F	P010001 <sup>a</sup>	N/A	B11003e1
HH_P2OFK	P010015 <sup>a</sup>	N/A	B11003e16
NUM_NONPOOR	P087010 <sup>a</sup>	N/A	B17001e31
NUM_POOR	P087002 <sup>a</sup>	N/A	B17001e2
NUM_POP_LANGSPN	P019004, 26, and 48 <sup>a</sup>	N/A	B16004e4, 26, and 48
NUM_NONENG	P020003, 6, 9, and 12 <sup>a</sup>	N/A	B16002e3, 6, 9, and 12
NUM_NONENGLI	P020004, 7, 10, and 13 <sup>a</sup>	N/A	B16002e4, 7, 10, and 13
HLLISO	P020001 <sup>a</sup>	N/A	B16002e1
HLLISOA	P020009 <sup>a</sup>	N/A	B16002e9
HLLISOAI	P020010 <sup>a</sup>	N/A	B16002e10
HLLISOO	P020012 <sup>a</sup>	N/A	B16002e12
HLLISOOI	P020013 <sup>a</sup>	N/A	B16002e13
HLLISOS	P020003 <sup>a</sup>	N/A	B16002e3
HLLISOSI	P020004 <sup>a</sup>	N/A	B16002e4
HLLISOI	P020006 <sup>a</sup>	N/A	B16002e6
HLLISOII	P020007 <sup>a</sup>	N/A	B16002e7
HHPAW	P064002 <sup>a</sup>	N/A	B19057e2
HHPRT	P092001 <sup>a</sup>	N/A	B17017e1
HHPAT	P064001 <sup>a</sup>	N/A	B19057e1
HHPRBP	P092002 <sup>a</sup>	N/A	B17017e2
HUBUILT	H034001 <sup>a</sup>	N/A	B25034e1
HUBUILT30S	H034009 <sup>a</sup>	N/A	B25034e9
HUBUILT40S	H034010 <sup>a</sup>	N/A	B25034e10
HUBUILT50S	H034008 <sup>a</sup>	N/A	B25034e8
HUBUILT60S	H034007 <sup>a</sup>	N/A	B25034e7
HUBUILT70S	H034006 <sup>a</sup>	N/A	B25034e6
HUBUILT80S	H034005 <sup>a</sup>	N/A	B25034e5

Table D.1—Continued

Variable	2000 Census	2010 Census	ACS
HUBUILT90S	H034002/4 <sup>a</sup>	N/A	B25034e4
HUBUILT00	N/A	N/A	B25034e2/3
HU_OSTATO	H006002 <sup>a</sup>	N/A	B25002e2
HU_OSTATT	H006001 <sup>a</sup>	N/A	B25002e1
HU_OSTATV	H006003 <sup>a</sup>	N/A	B25002e3
HU_TSTATO	H007002 <sup>a</sup>	N/A	B25003e2
HU_TSTATR	H007003 <sup>a</sup>	N/A	B25003e3
HU_TSTATT	H007001 <sup>a</sup>	N/A	B25003e1
POP_16P_FLF	P043010 <sup>a</sup>	N/A	B23001e90, 97, 104, 111, 118, 125, 132, 139, 146, 153, 160, 165, and 170
POP_16P_FLFCU	P043014 <sup>a</sup>	N/A	B23001e94, 101, 108, 115, 122, 129, 136, 143, 150, 157, 162, 167, and 172
POP_16P_MLF	P043003 <sup>a</sup>	N/A	B23001e4, 11, 18, 25, 32, 39, 46, 53, 60, 67, 74, 79, and 84
POP_16P_MLFCU	P043007 <sup>a</sup>	N/A	B23001e8, 15, 22, 29, 36, 43, 50, 57, 64, 71, 76, 81, and 86
POP_5PENGME	P019025 <sup>a</sup>	N/A	B16004e25
POP_5PENGOE	P019047 <sup>a</sup>	N/A	B16004e47
POP_5PENGYE	P019003 <sup>a</sup>	N/A	B16004e3
POP_5PENGTT	P019001 <sup>a</sup>	N/A	B16004e1
POP_5PENGYS	P019004 <sup>a</sup>	N/A	B16004e4
POP_5PENGMS	P019026 <sup>a</sup>	N/A	B16004e26
POP_5PENGOS	P019048 <sup>a</sup>	N/A	B16004e48
POP_PBCITFB	P021013 <sup>a</sup>	N/A	B05002e13
POP_SXEDT	P037001	N/A	B15002e1
POP_EDGE COLL	P037015/18 and 32/35 <sup>a</sup>	N/A	B15002e15/18 and 32/35
POP_EDHSG	P037011 and 28 <sup>a</sup>	N/A	B15002e11 and 28
POP_EDLHS	P037003/10 and 20/27 <sup>a</sup>	N/A	B15002e3/10 and 20/27
POP_EDSCO	P037012/14 and 29/31 <sup>a</sup>	N/A	B15002e12/14 and 29/31
POP_EDHS_NOBA	P037011/14 and 28/31 <sup>a</sup>	N/A	B15002e11/14 and 28/31
HUAGE_GT50YR	H034009/10 <sup>a</sup>	N/A	B25034e8/10
HUAGE_20TO50YR	H034006/8 <sup>a</sup>	N/A	B25034e5/7
HUAGE_LT20YR	H034002/5 <sup>a</sup>	N/A	B25034e2/4
POP_PBCIT	P021001 <sup>a</sup>	N/A	B05002e1

Table D.1—Continued

Variable	2000 Census	2010 Census	ACS
POP_OCCM_MP	P050003 <sup>a</sup>	N/A	C24020e3
POP_OCCF_MP	P050050 <sup>a</sup>	N/A	C24020e40
POP_OCC_MP	P050003,50 <sup>a</sup>	N/A	C24020e3,40
POP_OCC	P050001 <sup>a</sup>	N/A	C24020e1
OHUBRT	H020001 <sup>a</sup>	N/A	B25014e1
OHUBROGT1	H020005/7 <sup>a</sup>	N/A	B24014e5/7
OHUBRRGT1	H020011/13 <sup>a</sup>	N/A	B24014e11/13
OHUBRO1TOH	H020005 <sup>a</sup>	N/A	B24014e5
OHUBROOHT2	H020006 <sup>a</sup>	N/A	B25014e6
OHUBRO2P	H020007 <sup>a</sup>	N/A	B25014e7
OHUBRR1TOH	H020011 <sup>a</sup>	N/A	B25014e11
OHUBRROHT2	H020012 <sup>a</sup>	N/A	B25014e12
OHUBRR2P	H020013 <sup>a</sup>	N/A	B25014e13
MED_FAMINC	P077001 <sup>a</sup>	N/A	B19113e1
MED_HHINC	P053001 <sup>a</sup>	N/A	B19013e1
MED_HUYRBUILT	H035001 <sup>a</sup>	N/A	B25035e1
QTILE_HUVALQ2	H076001 <sup>a</sup>	N/A	B25077e1

NOTE: N/A = not applicable. SUM M/F is the sum of the male and female count variables (e.g., NUM\_POP\_AGE05 = NUM\_POP\_AGEM05 + NUM\_POP\_AGEF05).

<sup>a</sup> SOURCE: U.S. Census Bureau, 2011b.

<sup>b</sup> SOURCE: U.S. Census Bureau, 2011a.

## 1990 Census-to-2000 Census Crosswalk for Source Variables

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Table E.1 provides a crosswalk for the source variables from the 1990 to the 2000 census.

**Table E.1**  
**1990 Census-to-2000 Census Table Crosswalk for Source Variables**

Source File	2000 Census	1990 Census
Summary file 1 (U.S. Census Bureau, 2011a) or summary tape file 1	P008	P10
	P012	P12 (summed over race)
	P014	(No counterpart)
	PCT11	(P011 but did not extract)
Summary file 3 (U.S. Census Bureau, 2011b) or summary tape file 3	P005	P6
	P010	P19
	P019	P28
	P020	P29
	P021	P42
	P037	P57
	P043	P70
	P050	P78
	P053	P80A
	P064	P95
	P077	P107A
	P087	P117_2
	P092	P127
	H006	H4
	H007	H8
	H020	H69
H034	H25	
H035	H25A	
H076	H61	





## Contents of census\_acs\_tract\_1990\_2010: Tract-Level Contextual Data

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### Variables in Creation Order

# Variable Label

- 1 MSAGEO CN00SF3: Geo construct - FIPS county codes as translated to MSAs
- 2 STATE CN00SF3: Geo file - State (FIPS)
- 3 COUNTY CN00SF3: Geo file - County
- 4 TRACT CN00SF3: Geo file - Census Tract
- 5 MSACMSA CN00SF3: Geo file - Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area
- 6 CMSA CN00SF3: Geo file - Consolidated Metropolitan Statistical Area
- 7 PMSA CN00SF3: Geo file - Primary Metropolitan Statistical Area
- 8 NECMA CN00SF3: Geo file - New England County Metropolitan Area
- 9 AREALAND CN00SF3: Geo file - Land area in square meters (directly off of census file)
- 10 AREAWATR CN00SF3: Geo file - Water area in square meters (directly off of census file)
- 11 AREALAND\_MILES CN00SF3: Geo file - Land area in square miles
- 12 AREAWATER\_MILES CN00SF3: Geo file - Water area in square miles
- 13 AREATOTAL\_MILES CN00SF3: Geo file - Land+Water area in square miles
- 14 tract00 2000 Census tract: 11 character
- 15 year Year
- 16 num\_pop\_urt Total population: from urban/rural table
- 17 num\_pop\_urban Number of total population who are urban
- 18 num\_pop\_rural Number of total population who are rural
- 19 pct\_ruralpop Percentage of total population who are rural
- 20 num\_pop\_etht Total population: from ethnic table
- 21 num\_pop\_nonhisp Number of total population who are non-Hispanic
- 22 num\_pop\_hisp Number of total population who are Hispanic
- 23 num\_pop\_nhwhite Number of total population who are non-Hispanic white
- 24 num\_pop\_nhblack Number of total population who are non-Hispanic black
- 25 num\_pop\_nhasian Number of total population who are non-Hispanic Asian
- 26 num\_pop\_nhother Number of total population who are non-Hispanic other, multirace
- 27 num\_pop\_nhapi Number of total population who are non-Hispanic Asian/Pacific Islander
- 28 num\_pop\_nhoth2 Number of total population who are non-Hispanic other, Native American, multirace
- 29 num\_pop\_hwhite Number of total population who are Hispanic white
- 30 num\_pop\_hblack Number of total population who are Hispanic black
- 31 num\_pop\_hasian Number of total population who are Hispanic Asian
- 32 num\_pop\_hother Number of total population who are Hispanic other, multirace
- 33 num\_pop\_hapi Number of total population who are Hispanic Asian/Pacific Islander
- 34 num\_pop\_hoth2 Number of total population who are Hispanic other, Native American, multirace
- 35 num\_pop\_nhpi Number of total population who are non-Hispanic Pacific Islander
- 36 num\_pop\_hpi Number of total population who are Hispanic Pacific Islander
- 37 num\_pop\_nhna Number of total population who are non-Hispanic Native American
- 38 num\_pop\_hna Number of total population who are Hispanic Native American
- 39 pct\_hisp Percentage of total population who are Hispanic
- 40 pct\_nonhisp Percentage of total population who are non-Hispanic
- 41 pct\_nhwhite Percentage of total population who are non-Hispanic white
- 42 pct\_nhblack Percentage of total population who are non-Hispanic black
- 43 pct\_nhasian Percentage of total population who are non-Hispanic Asian
- 44 pct\_nhother Percentage of total population who are non-Hispanic other, multirace
- 45 pct\_nhapi Percentage of total population who are non-Hispanic Asian/Pacific Islander
- 46 pct\_nhoth2 Percentage of total population who are non-Hispanic other, Native American,

52 Demographic, Social, Economic, and Housing Characteristics

multirace

47 pct\_hwhite Percentage of total population who are Hispanic white

48 pct\_hblack Percentage of total population who are Hispanic black

49 pct\_hasian Percentage of total population who are Hispanic Asian

50 pct\_hother Percentage of total population who are Hispanic other, multirace

51 pct\_hapi Percentage of total population who are Hispanic Asian/Pacific Islander

52 pct\_hoth2 Percentage of total population who are Hispanic other, Native American, multi-race

53 pct\_nhpi Percentage of total population who are non-Hispanic Pacific Islander

54 pct\_nhna Percentage of total population who are non-Hispanic Native American

55 pct\_hpi Percentage of total population who are Hispanic Pacific Islander

56 pct\_hna Percentage of total population who are Hispanic Native American

57 num\_pop\_agem Total male population

58 num\_pop\_agef Total female population

59 num\_pop\_aget Total population: from age/sex table

60 num\_pop\_agem05 Number of male population who are ages 0-4

61 num\_pop\_agem05to09 Number of male population who are ages 5-9

62 num\_pop\_agem10to14 Number of male population who are ages 10-14

63 num\_pop\_agem15to19 Number of male population who are ages 15-19

64 num\_pop\_agem20to24 Number of male population who are ages 20-24

65 num\_pop\_agem25to29 Number of male population who are ages 25-29

66 num\_pop\_agem30to34 Number of male population who are ages 30-34

67 num\_pop\_agem35to39 Number of male population who are ages 35-39

68 num\_pop\_agem40to44 Number of male population who are ages 40-44

69 num\_pop\_agem45to49 Number of male population who are ages 45-49

70 num\_pop\_agem50to54 Number of male population who are ages 50-54

71 num\_pop\_agem55to59 Number of male population who are ages 55-59

72 num\_pop\_agem60to64 Number of male population who are ages 60-64

73 num\_pop\_agem65to69 Number of male population who are ages 65-69

74 num\_pop\_agem70to74 Number of male population who are ages 70-74

75 num\_pop\_agem75to79 Number of male population who are ages 75-79

76 num\_pop\_agem80to84 Number of male population who are ages 80-84

77 num\_pop\_agem85p Number of male population who are ages 85 and older

78 num\_pop\_agem0to17 Number of male population who are ages 17 and younger

79 num\_pop\_agem65plus Number of male population who are ages 65 and older

80 pct\_agem05 Percentage of male population who are ages 0-4

81 pct\_agem05to09 Percentage of male population who are ages 5-9

82 pct\_agem10to14 Percentage of male population who are ages 10-14

83 pct\_agem15to19 Percentage of male population who are ages 15-19

84 pct\_agem20to24 Percentage of male population who are ages 20-24

85 pct\_agem25to29 Percentage of male population who are ages 25-29

86 pct\_agem30to34 Percentage of male population who are ages 30-34

87 pct\_agem35to39 Percentage of male population who are ages 35-39

88 pct\_agem40to44 Percentage of male population who are ages 40-44

89 pct\_agem45to49 Percentage of male population who are ages 45-49

90 pct\_agem50to54 Percentage of male population who are ages 50-54

91 pct\_agem55to59 Percentage of male population who are ages 55-59

92 pct\_agem60to64 Percentage of male population who are ages 60-64

93 pct\_agem65to69 Percentage of male population who are ages 65-69

94 pct\_agem70to74 Percentage of male population who are ages 70-74

95 pct\_agem75to79 Percentage of male population who are ages 75-79

96 pct\_agem80to84 Percentage of male population who are ages 80-84

97 pct\_agem85p Percentage of male population who are ages 85 and older

98 pct\_agem65plus Percentage of male population who are ages 65 and older

99 pct\_agem0to17 Percentage of male population who are ages 17 and younger

100 num\_pop\_agef05 Number of female population who are ages 0-4

101 num\_pop\_agef05to09 Number of female population who are ages 5-9

102 num\_pop\_agef10to14 Number of female population who are ages 10-14

103 num\_pop\_agef15to19 Number of female population who are ages 15-19

104 num\_pop\_agef20to24 Number of female population who are ages 20-24

105 num\_pop\_agef25to29 Number of female population who are ages 25-29

106 num\_pop\_agef30to34 Number of female population who are ages 30-34

107 num\_pop\_agef35to39 Number of female population who are ages 35-39

108 num\_pop\_agef40to44 Number of female population who are ages 40-44

109 num\_pop\_agef45to49 Number of female population who are ages 45-49

110 num\_pop\_agef50to54 Number of female population who are ages 50-54

111	num_pop_agef55to59	Number of female population who are ages 55-59
112	num_pop_agef60to64	Number of female population who are ages 60-64
113	num_pop_agef65to69	Number of female population who are ages 65-69
114	num_pop_agef70to74	Number of female population who are ages 70-74
115	num_pop_agef75to79	Number of female population who are ages 75-79
116	num_pop_agef80to84	Number of female population who are ages 80-84
117	num_pop_agef85p	Number of female population who are ages 85 and older
118	num_pop_agef0to17	Number of female population who are ages 17 and younger
119	num_pop_agef65plus	Number of female population who are ages 65 and older
120	pct_agef05	Percentage of female population who are ages 0-4
121	pct_agef05to09	Percentage of female population who are ages 5-9
122	pct_agef10to14	Percentage of female population who are ages 10-14
123	pct_agef15to19	Percentage of female population who are ages 15-19
124	pct_agef20to24	Percentage of female population who are ages 20-24
125	pct_agef25to29	Percentage of female population who are ages 25-29
126	pct_agef30to34	Percentage of female population who are ages 30-34
127	pct_agef35to39	Percentage of female population who are ages 35-39
128	pct_agef40to44	Percentage of female population who are ages 40-44
129	pct_agef45to49	Percentage of female population who are ages 45-49
130	pct_agef50to54	Percentage of female population who are ages 50-54
131	pct_agef55to59	Percentage of female population who are ages 55-59
132	pct_agef60to64	Percentage of female population who are ages 60-64
133	pct_agef65to69	Percentage of female population who are ages 65-69
134	pct_agef70to74	Percentage of female population who are ages 70-74
135	pct_agef75to79	Percentage of female population who are ages 75-79
136	pct_agef80to84	Percentage of female population who are ages 80-84
137	pct_agef85p	Percentage of female population who are ages 85 and older
138	pct_agef65plus	Percentage of female population who are ages 65 and older
139	pct_agef0to17	Percentage of female population who are ages 17 and younger
140	num_pop_age05	Number of total population who are ages 0-4
141	num_pop_age05to09	Number of total population who are ages 5-9
142	num_pop_age10to14	Number of total population who are ages 10-14
143	num_pop_age15to19	Number of total population who are ages 15-19
144	num_pop_age20to24	Number of total population who are ages 20-24
145	num_pop_age25to29	Number of total population who are ages 25-29
146	num_pop_age30to34	Number of total population who are ages 30-34
147	num_pop_age35to39	Number of total population who are ages 35-39
148	num_pop_age40to44	Number of total population who are ages 40-44
149	num_pop_age45to49	Number of total population who are ages 45-49
150	num_pop_age50to54	Number of total population who are ages 50-54
151	num_pop_age55to59	Number of total population who are ages 55-59
152	num_pop_age60to64	Number of total population who are ages 60-64
153	num_pop_age65to69	Number of total population who are ages 65-69
154	num_pop_age70to74	Number of total population who are ages 70-74
155	num_pop_age75to79	Number of total population who are ages 75-79
156	num_pop_age80to84	Number of total population who are ages 80-84
157	num_pop_age85p	Number of total population who are ages 85 and older
158	num_pop_age65plus	Number of total population who are ages 65 and older
159	num_pop_age0to17	Number of total population who are ages 17 and younger
160	pct_age05	Percentage of total population who are ages 0-4
161	pct_age05to09	Percentage of total population who are ages 5-9
162	pct_age10to14	Percentage of total population who are ages 10-14
163	pct_age15to19	Percentage of total population who are ages 15-19
164	pct_age20to24	Percentage of total population who are ages 20-24
165	pct_age25to29	Percentage of total population who are ages 25-29
166	pct_age30to34	Percentage of total population who are ages 30-34
167	pct_age35to39	Percentage of total population who are ages 35-39
168	pct_age40to44	Percentage of total population who are ages 40-44
169	pct_age45to49	Percentage of total population who are ages 45-49
170	pct_age50to54	Percentage of total population who are ages 50-54
171	pct_age55to59	Percentage of total population who are ages 55-59
172	pct_age60to64	Percentage of total population who are ages 60-64
173	pct_age65to69	Percentage of total population who are ages 65-69
174	pct_age70to74	Percentage of total population who are ages 70-74
175	pct_age75to79	Percentage of total population who are ages 75-79
176	pct_age80to84	Percentage of total population who are ages 80-84

177 pct\_age85p Percentage of total population who are ages 85 and older  
 178 pct\_age65plus Percentage of total population who are ages 65 and older  
 179 pct\_age0to17 Percentage of total population who are ages 17 and younger  
 180 rat\_density\_tot\_popl Total population per sq. mile of land area  
 181 num\_pop\_tot\_ho Total population: from Hispanic origin table  
 182 num\_pop\_nonhisp\_ho non-Hispanic population: from Hispanic origin table  
 183 num\_pop\_hisp\_ho Hispanic population: from Hispanic origin table  
 184 num\_pop\_mex\_ho Hispanic of Mexican origin population  
 185 num\_pop\_pr\_ho Hispanic of Puerto Rican origin population  
 186 num\_pop\_cuban\_ho Hispanic of Cuban origin population  
 187 num\_pop\_dom\_ho Hispanic of Dominican origin population  
 188 num\_pop\_centamer\_ho Hispanic of Central American origin population  
 189 num\_pop\_soamer\_ho Hispanic of South American origin population  
 190 num\_pop\_oth\_ho Hispanic of other origin population  
 191 pct\_mex\_hisp Percentage of total pop that are Hispanic of Mexican origin  
 192 cap\_hhinc90 Number of 1990 tracts in this tract with household income capped at \$150,000 in 1990 census  
 193 cap\_faminc90 Number of 1990 tracts in this tract with family income capped at \$150,000 in 1990 census  
 194 cap\_huvalq290 Number of 1990 tracts in this tract with huvalq2 capped at \$500,000 in 1990 census  
 195 jam\_hhinc90 Number of 1990 tracts in this tract with household income <=2500 in 1990 census  
 196 jam\_faminc90 Number of 1990 tracts in this tract with family income <=2500 in 1990 census  
 197 jam\_huvalq290 Number of 1990 tracts in this tract with huvalq2 <=7500 in 1990 census  
 198 jam\_huyrbuilt90 Number of 1990 tracts in this tract with med\_huyrbuilt<=1939 in 1990 census  
 199 num\_1990tracts Number of 1990 tracts that went into this 2000 tract  
 200 HH\_P2F >1-person family HHs (interpolated)  
 201 HH\_P20FK >1-person oth-fam HHs w/ female w/ kids 17-, husband not present  
 202 HLLISO Households: total (interpolated)  
 203 HLLISOA Pac.Isl./Asian-speaking households (interpolated)  
 204 HLLISOAI Linguistically isolated, Pac.Isl./Asian-speaking households (interpolated)  
 205 HLLISOO Other-language-speaking households (interpolated)  
 206 HLLISOOI Linguistically isolated, other-language-speaking households (interpolated)  
 207 HLLISOS Spanish-language households (interpolated)  
 208 HLLISOSI Linguistically isolated, Spanish-language households (interpolated)  
 209 HHPAW Number of households w/ public assistance income (interpolated)  
 210 hhpwt Households (HHs): total (interpolated)  
 211 HUBUILT Housing units: total (interpolated)  
 212 HUBUILT30S Housing units built 1939 or earlier (interpolated)  
 213 HUBUILT40S Housing units built 1940 to 1949 (interpolated)  
 214 HUBUILT50S Housing units built 1950 to 1959 (interpolated)  
 215 HUBUILT60S Housing units built 1960 to 1969 (interpolated)  
 216 HUBUILT70S Housing units built 1970 to 1979 (interpolated)  
 217 HU\_OSTATO Occupied housing units (interpolated)  
 218 HU\_OSTATT Housing units: total (interpolated)  
 219 HU\_OSTATV Vacant housing units (interpolated)  
 220 HU\_TSTATO Occupied housing units that are owner-occupied (interpolated)  
 221 HU\_TSTATR Occupied housing units that are renter-occupied (interpolated)  
 222 HU\_TSTATT Occupied housing units (interpolated)  
 223 POP\_16P\_FLF 16+ population: female in labor force (interpolated)  
 224 POP\_16P\_FLFCU 16+ population: female civilian unemployed (interpolated)  
 225 POP\_16P\_MLF 16+ population: male in labor force (interpolated)  
 226 POP\_16P\_MLFCU 16+ population: male civilian unemployed (interpolated)  
 227 POP\_5PENGME 18-64 pop. speaking Eng only (interpolated)  
 228 POP\_5PENG0E 65+ pop. speaking Eng only (interpolated)  
 229 POP\_5PENGYE 5-17 pop. speaking Eng only (interpolated)  
 230 POP\_PBCITFB Non-native, foreign born pop. (interpolated)  
 231 num\_nonpoor Pop. w/ income >= poverty level (interpolated)  
 232 num\_poor Pop. w/ income < poverty level (interpolated)  
 233 hubuilt80s Housing units built in 1980-1989  
 234 ohubrt Occupied HU by tenure and plumbing total: owner and renter  
 235 pop\_sxedt 25+ population total: summed from male/female age counts  
 236 pop\_edgcoll 25+ pop w/BA or advanced degree

237 pop\_edhsg 25+ pop w/ed attainment of high school diploma  
 238 pop\_edlhs 25+ pop w/o high school diploma or equivalent  
 239 pop\_edsc0 25+ pop w/some college but no bachelor's degree  
 240 pop\_edhs\_noba 25+ pop w/ high school diploma but no bachelor's degree  
 241 pop\_occ\_mp 16+ pop in prof/mgmt occupation: civ labor force  
 242 hhprbp Number of households < 100% of poverty line  
 243 pop\_5pengt Age 5+ population total: summed from male/female age counts  
 244 num\_pop\_langspn Age 5+ pop. speaking Spanish  
 245 MED\_HHINC median household income (1999 dollars)  
 246 MED\_FAMINC median family income (1999 dollars)  
 247 MED\_HUYRBUILT median year structure built  
 248 QTILE\_HUVALQ2 median value of owner-occupied housing units (1999 dollars)  
 249 hhpat Number of households  
 250 pop\_occ 16+ civ wkrs, total  
 251 pct\_hu\_gt50yr Percentage of housing units more than 50 yrs old  
 252 pct\_hu\_20to50yr Percentage of housing units 20-50 yrs old  
 253 pct\_hu\_lt20yr Percentage of housing units less than 20 yrs old  
 254 PCT\_HUAGE\_OLD Percentage of housing units built before 1950  
 255 PCT\_HUAGE\_MED Percentage of housing units built 1950-1979  
 256 PCT\_HUAGE\_YNG Percentage of housing units built 1980-1989  
 257 huage\_gt50yr Housing units more than 50 yrs old : from table B25034  
 258 huage\_20to50yr Housing units 20 to 50 yrs old : from table B25034  
 259 huage\_lt20yr Housing units less than 20 yrs old : from table B25034  
 260 num\_noneng Number of non-English language households  
 261 num\_nonengli Number of linguistically isolated non-English lang households  
 262 pct\_nonengli Percentage of non-English speaking hh that are linguistically isolated  
 263 pct\_spanli Percentage of Spanish speaking hh that are linguistically isolated  
 264 pct\_hu\_ostato Percentage of occupied housing occupied by owner  
 265 pct\_povpop Percentage of population living below federal poverty level  
 266 PCT\_WKSTATUEM Percentage of male population 16+ that is unemployed  
 267 PCT\_WKSTATUEF Percentage of female population 16+ that is unemployed  
 268 pct\_wkstatuet Percentage of total population 16+ that is unemployed  
 269 PCT\_VACANT Percentage of housing units that are vacant  
 270 PCT\_OCCRENT Percentage of occupied housing units that are renter-occupied  
 271 PCT\_INCOMEPA Percentage of households with public assistance income  
 272 PCT\_FAMHHWRCFH Percentage of households headed by women only with children under age 18  
 273 PCT\_LANGENG Percentage of population age 5+ speaking English only  
 274 pop\_pbcit Population total for nativity pbcit: summed pbcit counts  
 275 PCT\_NCITNNFB Percentage of population foreign-born  
 276 pct\_crowded Percentage of households with more than 1.00 occupants per room (crowded housing)  
 277 ohubrog1 Owner Occupied HU w/1.01 or more occupants per room  
 278 ohubrrgt1 Renter Occupied HU w/1.01 or more occupants per room  
 279 pct\_edgcoll Percentage of 25+ pop w/BA or advanced degree  
 280 PCT\_EDLHS Percentage of population 25+ w/o high school diploma or equivalent  
 281 pct\_edhs\_noba Percentage of population 25+ who are high school grads but no bachelor's degree  
 282 pct\_profocc Percentage of workers age 16+ in management, professional, and related occupations  
 283 PCT\_POVHH100 Percentage of households with income <100% of poverty line  
 284 PCT\_LANGSPN Percentage of population age 5+ speaking Spanish  
 285 cap\_hhinc00 MED\_HHINC capped at 200K in Census 2000  
 286 cap\_faminc00 MED\_FAMINC capped at 200K in Census 2000  
 287 cap\_huvalq200 QTILE\_HUVALQ2 capped at 1 million in Census 2000  
 288 jam\_hhinc00 MED\_HHINC < 2,500 in Census 2000  
 289 jam\_faminc00 MED\_FAMINC < 2,500 in Census 2000  
 290 jam\_huvalq200 QTILE\_HUVALQ2 < 10,000 in Census 2000  
 291 jam\_huyrbuilt00 MED\_HUYRBUILT is 1939 or earlier  
 292 cap\_hhinc07 MED\_HHINC capped at 250K in ACS 2009SF5yr  
 293 cap\_faminc07 MED\_FAMINC capped at 250K in ACS 2009SF5yr  
 294 cap\_huvalq207 QTILE\_HUVALQ2 capped at 1 million in ACS 2009SF5yr  
 295 jam\_hhinc07 MED\_HHINC < 2,500 in ACS 2009SF5yr  
 296 jam\_faminc07 MED\_FAMINC < 2,500 in ACS 2009SF5yr  
 297 jam\_huvalq207 QTILE\_HUVALQ2 < 10,000 in ACS 2009SF5yr  
 298 jam\_huyrbuilt07 MED\_HUYRBUILT is 2005 or later or before 1939 in ACS 2009SF5yr: check

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value

299 cap\_hhinc08 MED\_HHINC capped at 250K in ACS 2010SF5yr

300 cap\_faminc08 MED\_FAMINC capped at 250K in ACS 2010SF5yr

301 cap\_huvalq208 QTILE\_HUVALQ2 capped at 1 million in ACS 2010SF5yr

302 jam\_hhinc08 MED\_HHINC < 2,500 in ACS 2010SF5yr

303 jam\_faminc08 MED\_FAMINC < 2,500 in ACS 2010SF5yr

304 jam\_huvalq208 QTILE\_HUVALQ2 < 10,000 in ACS 2010SF5yr

305 jam\_huyrbuilt08 MED\_HUYRBUILT is 2005 or later or before 1939 in ACS 2010SF5yr: check value

306 cap\_hhinc09 MED\_HHINC capped at 250K in ACS 2011SF5yr

307 cap\_faminc09 MED\_FAMINC capped at 250K in ACS 2011SF5yr

308 cap\_huvalq209 QTILE\_HUVALQ2 capped at 1 million in ACS 2011SF5yr

309 jam\_hhinc09 MED\_HHINC < 2,500 in ACS 2011SF5yr

310 jam\_faminc09 MED\_FAMINC < 2,500 in ACS 2011SF5yr

311 jam\_huvalq209 QTILE\_HUVALQ2 < 10,000 in ACS 2011SF5yr

312 jam\_huyrbuilt09 MED\_HUYRBUILT is 2005 or later or before 1939 in ACS 2009SF5yr: check value

313 cap\_hhinc10 MED\_HHINC capped at 250K in ACS 2012SF5yr

314 cap\_faminc10 MED\_FAMINC capped at 250K in ACS 2012SF5yr

315 cap\_huvalq210 QTILE\_HUVALQ2 capped at 1 million in ACS 2012SF5yr

316 jam\_hhinc10 MED\_HHINC < 2,500 in ACS 2012SF5yr

317 jam\_faminc10 MED\_FAMINC < 2,500 in ACS 2012SF5yr

318 jam\_huvalq210 QTILE\_HUVALQ2 < 10,000 in ACS 2012SF5yr

319 jam\_huyrbuilt10 MED\_HUYRBUILT is 2005 or later or before 1939 in ACS 2012SF5yr: check value

320 STUSAB CN00SF3: Geo file - State/U.S.-Abbreviation (USPS)

321 cap\_huyrbuilt07 MED\_HUYRBUILT is 2005 or later in ACS 2009SF5yr: check value

322 hubuilt90s HU built 1990-1999: b25034e4

323 pop\_5pengys Number age 5-17 who speak Spanish: b16004e4

324 pop\_5pengms Number age 18-64 who speak Spanish: b16004e26

325 pop\_5pengos Number age 65+ who speak Spanish: b16004e48

326 hhlisoi Number of Other IndoEuro-speaking households: b16002e6

327 hhlisoi Number of Linguistically isolated Other IndoEuro-speaking households: b16002e7

328 pop\_occ\_m\_16+ civilian male workers in management,professional and related occup : c24020e3

329 ohubro1toh Owner-occupied housing units w/ 1.01 to 1.50 occupants per room : b25014e5

330 ohubrooht2 Owner-occupied housing units w/ 1.51 to 2.00 occupants per room : b25014e6

331 ohubro2p Owner-occupied housing units w/ 2.01 or more occupants per room : b25014e7

332 ohubrr1toh Renter-occupied housing units w/ 1.01 to 1.50 occupants per room : b25014e11

333 ohubrrroht2 Renter-occupied housing units w/ 1.51 to 2.00 occupants per room : b25014e12

334 ohubrr2p Renter-occupied housing units w/ 2.01 or more occupants per room : b25014e13

335 pop\_occf\_m\_16+ civilian female workers in management,professional and related occup: c24020e40

336 hubuilt00 Housing units built 2000 or later

337 PCT\_HUAGE\_2000 Percentage of housing units built in 2000 or later

338 cap\_hhincacs MED\_HHINC capped at 250K in this ACS year

339 cap\_famincacs MED\_FAMINC capped at 250K in this ACS year

340 cap\_huvalq2acs QTILE\_HUVALQ2 capped at 1 million in this ACS year

341 jam\_hhincacs MED\_HHINC < 2,500 in this ACS year

342 jam\_famincacs MED\_FAMINC < 2,500 in this ACS year

343 jam\_huvalq2acs QTILE\_HUVALQ2 < 10,000 in this ACS year

344 cap\_huyrbuiltacs MED\_HUYRBUILT is 2005 or later (2006 for 2010) in this ACS year: check value

345 jam\_huyrbuiltacs MED\_HUYRBUILT is before 1939 in this ACS year: check value

346 cap\_huyrbuilt08 MED\_HUYRBUILT is 2005 or later in ACS 2010SF5yr: check value

347 cap\_huyrbuilt09 MED\_HUYRBUILT is 2005 or later in ACS 2009SF5yr: check value

348 cap\_huyrbuilt10 MED\_HUYRBUILT is 2006 or later in ACS 2012SF5yr: check value

349 NSE5 Neighborhood Socio-Economic Score: interpolated

## Contents of contextual\_county\_1990\_2010: County-Level Contextual File

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### Variables in Creation Order

```

# Variable Label
1 COUNTY County Fips Code-- 5-digit character format
2 county_fips FIPS county code: numeric
3 gini_type Source of GINI coefficient
4 year Year
5 gini_county GINI coefficient, county-level
6 idxseg_race5_county5_d Race Seg: 5-group : Dissim.
7 idxseg_race5_county5_s Race Seg: 5-group : Isolation
8 idxseg_hisp_county5_d Race Seg: Hispanic vs rest: Dissim.
9 idxseg_hisp_county5_s Race Seg: Hispanic vs rest: Isolation
10 idxseg_nonhwht_county5_d Race Seg: NonHisp White vs rest: Dissim.
11 idxseg_nonhwht_county5_s Race Seg: NonHisp White vs rest: Isolation
12 idxseg_nonhblk_county5_d Race Seg: NonHisp Black vs rest: Dissim.
13 idxseg_nonhblk_county5_s Race Seg: NonHisp Black vs rest: Isolation
14 idxseg_nonhapi_county5_d Race Seg: NonHisp Asian/PI vs rest: Dissim.
15 idxseg_nonhapi_county5_s Race Seg: NonHisp Asian/PI vs rest: Isolation
16 idxseg_hisp_nonhwht_county5_d Race Seg: Hispanic vs NonHisp White: Dissim.
17 idxseg_hisp_nonhwht_county5_s Race Seg: Hispanic vs NonHisp White: Isolation
18 idxseg_nonhblk_hisp_county5_d Race Seg: NonHisp Black vs Hispanic: Dissim.
19 idxseg_nonhblk_hisp_county5_s Race Seg: NonHisp Black vs Hispanic: Isolation
20 idxseg_nonhblk_nonhwht_county5_d Race Seg: NonHisp Black vs NonHisp White: Dissim.
21 idxseg_nonhblk_nonhwht_county5_s Race Seg: NonHisp Black vs NonHisp White: Isolation
22 idxseg_nonhapi_nonhwht_county5_d Race Seg: NonHisp Asian/PI vs NonHisp White: Dissim.
23 idxseg_nonhapi_nonhwht_county5_s Race Seg: NonHisp Asian/PI vs NonHisp White: Isolation
24 idxseg_nonhoth_nonhwht_county5_d Race Seg: NonHisp Other vs NonHisp White: Dissim.
25 idxseg_nonhoth_nonhwht_county5_s Race Seg: NonHisp Other vs NonHisp White: Isolation
26 idxseg_nonhoth_county5_d Race Seg: NonHisp Other vs rest: Dissim.
27 idxseg_nonhoth_county5_s Race Seg: NonHisp Other vs rest: Isolation
28 idxseg_poor_county5_d Income Seg: Below poverty level versus above : Dissim.
29 idxseg_poor_county5_s Income Seg: Below poverty level versus above : Isolation
30 Name County name
31 imputed2000 2000 compactness score missing so was imputed
32 changed county area changed after 2000: affects gini, rucc, sprawl
33 urban_sprawl Ewing compactness score: higher value, more compact
34 rucc_1990 RuralUrban Continuum code: 1993 based on 1990 Census
35 rucc_2000 RuralUrban Continuum code: 2003 based on 2000 Census
36 rucc_2010 RuralUrban Continuum code: 2013 based on 2010 Census
37 metro_1990 Metro County: 1993 ruralurban code
38 metro_2000 Metro County: 2003 ruralurban code
39 metro_2010 Metro County: 2013 ruralurban code
40 nonmetro_adj_1990 NonMetro county: adjacent to metro, 1993 ruralurban code
41 nonmetro_adj_2000 NonMetro county: adjacent to metro, 2003 ruralurban code
42 nonmetro_adj_2010 NonMetro county: adjacent to metro, 2013 ruralurban code
43 rucc_county Rural-Urban Continuum code
44 metro_county Metro county: RUCC codes 1-3
45 nonmetro_adj_county Nonmetro adjacent to metro county: RUCC codes 4, 6, 8

```





## Contents of contextual\_msa\_1990\_2010: Metropolitan Statistical Area–Level Contextual Data

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### Variables in Creation Order

#### # Variable Label

1 gini\_type Source of Gini Coefficient  
 2 year Year  
 3 gini\_msa Gini Coefficient for income inequality: 2000 MSA level  
 4 msageo MSA code combining MSA/PMSA/NECMA for 2000  
 5 idxseg\_race5\_msageo\_d Race Seg: 5-group : Dissim.  
 6 idxseg\_race5\_msageo\_s Race Seg: 5-group : Isolation  
 7 idxseg\_hisp\_msageo\_d Race Seg: Hispanic vs rest: Dissim.  
 8 idxseg\_hisp\_msageo\_s Race Seg: Hispanic vs rest: Isolation  
 9 idxseg\_nonhwht\_msageo\_d Race Seg: NonHisp White vs rest: Dissim.  
 10 idxseg\_nonhwht\_msageo\_s Race Seg: NonHisp White vs rest: Isolation  
 11 idxseg\_nonhblk\_msageo\_d Race Seg: NonHisp Black vs rest: Dissim.  
 12 idxseg\_nonhblk\_msageo\_s Race Seg: NonHisp Black vs rest: Isolation  
 13 idxseg\_nonhapi\_msageo\_d Race Seg: NonHisp Asian/PI vs rest: Dissim.  
 14 idxseg\_nonhapi\_msageo\_s Race Seg: NonHisp Asian/PI vs rest: Isolation  
 15 idxseg\_hisp\_nonhwht\_msageo\_d Race Seg: Hispanic vs NonHisp White: Dissim.  
 16 idxseg\_hisp\_nonhwht\_msageo\_s Race Seg: Hispanic vs NonHisp White: Isolation  
 17 idxseg\_nonhblk\_hisp\_msageo\_d Race Seg: NonHisp Black vs Hispanic: Dissim.  
 18 idxseg\_nonhblk\_hisp\_msageo\_s Race Seg: NonHisp Black vs Hispanic: Isolation  
 19 idxseg\_nonhblk\_nonhwht\_msageo\_d Race Seg: NonHisp Black vs NonHisp White: Dissim.  
 20 idxseg\_nonhblk\_nonhwht\_msageo\_s Race Seg: NonHisp Black vs NonHisp White: Isolation  
 21 idxseg\_nonhapi\_nonhwht\_msageo\_d Race Seg: NonHisp Asian/PI vs NonHisp White: Dissim.  
 22 idxseg\_nonhapi\_nonhwht\_msageo\_s Race Seg: NonHisp Asian/PI vs NonHisp White: Isolation  
 23 idxseg\_nonhoth\_nonhwht\_msageo\_d Race Seg: NonHisp Other vs NonHisp White: Dissim.  
 24 idxseg\_nonhoth\_nonhwht\_msageo\_s Race Seg: NonHisp Other vs NonHisp White: Isolation  
 25 idxseg\_nonhoth\_msageo\_d Race Seg: NonHisp Other vs rest: Dissim.  
 26 idxseg\_nonhoth\_msageo\_s Race Seg: NonHisp Other vs rest: Isolation  
 27 idxseg\_poor\_msageo\_d Income Seg: Below poverty level versus above : Dissim.  
 28 idxseg\_poor\_msageo\_s Income Seg: Below poverty level versus above : Isolation



## Contents of contextual\_cbsa\_2006\_2010: Core-Based Statistical Area–Level Contextual Data

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Variables in Creation Order

# Variable Label

1 CBSA\_NUM CBSA numeric version

2 CBSA CBSA code : 5-digit character format

3 gini\_type Source of Gini Coefficient

4 year Year

5 gini\_cbsa Gini Coefficient for income inequality: CBSA code level

6 newcbsa Code CBSA changed to between 2006 and 2010

7 oldcbsa Code CBAS changed from between 2006 and 2010



## Comparison Data Used in Interpolation Validation Analysis

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The programs and data files mentioned in this appendix are available upon request.

### Population Estimate Program

Intercensal county population estimates for 2001–2009 pulled from the following files from U.S. Census Bureau, 2012:

- `co_est00int_tot`: total population
- `co_est00int_agesex_5yr`: age by gender for five-year age groups
- `co_est00int_sexracehisp`: race and ethnicity by gender.

The program that created the population estimate program comparison data for total population, age groupings, gender, and race and ethnicity is `make_ctyall_pep_data.sas`. The data file created by that program is `ctyall_pep.sas7bdat`. Both files are available upon request.

### Small Area Income and Poverty Estimates

Intercensal county estimates for 2001–2010 for median household income and population below poverty line were pulled from the following files at U.S. Census Bureau, 2015b:

- `Est01all.txt`
- `Est02all.txt`
- `Est03all.txt`
- `Est04all.txt`
- `Est05all.txt`
- `Est06all.txt`
- `Est07all.txt`
- `Est08all.txt`
- `Est09all.txt`
- `Est10all.txt`.

The program that created the Small Area Income and Poverty Estimates comparison data from these files is `read_saipe.sas`. The file created by the program is `saipe_2001_2010.sas7bdat`. Both files are available upon request.

## American Community Survey One-Year Estimates for Counties of 65,000 Population and Over

We pulled ACS one-year county-level estimates from the 2006–2010 surveys from the Census data download website (U.S. Census Bureau, 2016b).

The desired comparison data are from the specific segment files for each year listed in Table J.1.<sup>1</sup>

**Table J.1**  
Comparison Data from Segment Files for Each Year

Item Type	2006 Segment	2007 Segment	2008 Segment	2009 Segment
Population by age and gender	10	13	13	13
Population by race and whether Hispanic	13	16	16	16
Population below the poverty threshold	58	62	62	62
Households below the poverty threshold	65	70	70	70
Occupation	114	119	114	115
Education	51	55	56	56
Median household income	78	83	78	79

Appendix D lists the relevant table numbers for these items. Programs that read in the original segment files are found in the directory COGNHOODS/ACS/ACS1YR\_SUB/pgms. The following Unix scripts call the relevant SAS programs to read in the raw data and create SAS files for each segment/year combination:

- runinputpgm: population by age and gender and by race and whether Hispanic
- runinputpgmpovpop: population below the poverty threshold
- runinputpgmpv: households below the poverty threshold and occupation
- runinputpgmx: education and median household income.

The output files from the above include more than just county-level estimates (SUMLEVEL=50) but do not contain tract- or block-level estimates. We extracted the county-level records only for our comparison analyses. The Unix scripts and the SAS programs they call are available upon request.

Data file `ctyall_acs1yr_2006_2009.sas7bdat` has the ACS one-year age, race, and gender population variables for 2006–2009. The program that created this file is `make_acs1yr_validation_data.sas`.

Both files are available upon request.

<sup>1</sup> The ACS data are a set of tables. Because there are so many of them, the Census Bureau breaks that data into segment files, in which a segment contains a specific subset of tables. Each segment file name has a number that serves as its identifier. In 2006, population by age and gender was in segment file 10. In 2007–2009, it was in segment file 13.

Data file `ctyall_ses_acs1yr_2006_2009.sasy7bdat` has the ACS one-year poverty, occupation, education, and median-income variables for 2006 to 2009. The program that created this file is `make_ses2006_2009_validation_data.sas`. Both files are available upon request.





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