**U.S. Department of Labor** Bureau of Labor Statistics

2 Massachusetts Ave. N.E.

Washington, D.C. 20212

|  |  |
| --- | --- |
| December 18, 2012 |  |
| MEMORANDUM FOR: | RICHARD SCHWARTZ, ChiefConsumer Expenditure Surveys BranchDemographic Surveys DivisionU.S. Bureau of the Census |
| FROM: | JAY RYAN, ChiefDivision of Consumer Expenditure SurveyOffice of Prices and Living ConditionsU.S. Bureau of Labor Statistics |
| SUBJECT: | PSUs for the Consumer Expenditure Survey’s 2010 Census-Based Sample Design |

**I.** **Introduction**

Every ten years the Consumer Expenditure (CE) survey updates its sample of primary sampling units (PSUs) based on the latest decennial census. The purpose is to make sure CE’s sample accurately reflects the latest geographic shifts in the American population. This memo provides a list of the 91 PSUs that were recently selected by the Bureau of Labor Statistics (BLS) for the CE survey based on the 2010 census. They are scheduled to be used over the ten-year period 2015-2024.

The list of PSUs is at the end of the memo. It shows the 91 PSUs that were selected, the counties that constitute them, and their populations. The United States has 3,143 counties (or county equivalents) which the BLS and the Bureau of the Census (BOC) partitioned into 1,470 PSUs, and from which the BLS selected 91 of them for CE’s sample.

**II. Overview of CE’s Geographic Sample Design**

CE’s overall geographic sample design remains unchanged from the 2000 census-based sample design. The self-representing PSUs are still the largest metropolitan areas in the country, and the non-self-representing PSUs are still a random sample of smaller geographic areas around the country – metropolitan, micropolitan, and non-CBSA.

However, three noteworthy details did change: the geographic areas used to stratify the PSUs; the number of population size classes used to stratify the PSUs; and the use of a single Core Based Statistical Area (CBSA) to define each self-representing PSUs.

First, the geographic areas used to stratify PSUs were changed from the four Census *regions* of the country to the nine Census *divisions*. This allows the Consumer Price Index (CPI) program to publish more geographically detailed information about inflation rates. Since the nine divisions partition the four regions of the country (they divide them neatly without any overlapping or missing pieces) it will be easy to aggregate CPI’s division-level inflation rate estimates up to region-level estimates to allow the CPI’s inflation rates to be published at both levels of geographic detail. These are the four Census regions and the nine Census divisions:

|  |  |  |  |
| --- | --- | --- | --- |
| **1. Northeast** | **2. Midwest** | **3. South** | **4. West** |
| 1. New England | 3. East North Central | 5. South Atlantic | 8. Mountain |
| 2. Middle Atlantic | 4. West North Central | 6. East South Central | 9. Pacific |
|  |  | 7. West South Central |  |

Second, the number of size classes used to stratify the PSUs was reduced from four to three. The three new size classes are CBSAs with over 2.5 million people (plus Honolulu and Anchorage), CBSAs with under 2.5 million people, and non-CBSA areas:

|  |  |
| --- | --- |
| **Old PSU Size Classes** | **New PSU Size Classes** |
| 1. Metropolitan CBSAs over 2.0 million people (“A” PSUs) **(1),(2)** | 1. CBSAs over 2.5 million people (“S” PSUs) **(2)** |
| 2. Metropolitan CBSAs under 2.0 million people (“X” PSUs) **(1)** | 2. CBSAs under 2.5 million people (“N” PSUs) |
| 3. Micropolitan CBSAs (“Y” PSUs) | 3. Non-CBSA areas (“R” PSUs) |
| 4. Non-CBSA areas (“Z” PSUs) |  |
| **(1)** The cutoff was changed from 2.0 million people to 2.7 million people when CE’s sample was cut in 2006.**(2)** Plus Honolulu and Anchorage. |

The “S” PSUs are self-representing, the “N” PSUs are non-self-representing, and the “R” PSUs are small clusters of non-CBSA (“rural”) counties formed from the counties not assigned to CBSAs.

The third noteworthy change is the use of single CBSAs to define self-representing PSUs. In the 2000 census-based sample design many of the self-representing PSUs were formed by the union of multiple CBSAs in an effort to preserve PSU boundaries that were established in the 1990 census-based sample design. Those PSUs were geographically quite large. The new 2010 census-based sample design replaces those multiple-CBSA PSUs with single-CBSA PSUs, which will make the new self-representing PSUs geographically smaller.

Finally, it is important to note that the PSUs are based on *preliminary* CBSA definitions created jointly by the BOC and the Office of Management and Budget (OMB). Preliminary CBSA definitions will not be published, and some of them may change when the final definitions come out, but the changes are expected to be minor. The CE survey will use the preliminary CBSA definitions for the whole ten-year period and will *not* change to the final CBSA definitions even when they become available.

**III. PSUs Selected for CE’s Sample**

After stratifying the complete universe of 1,470 PSUs into divisions and size classes, the BLS selected 23 “S” PSUs (which are all 21 preliminary CBSAs with over 2.5 million people, plus Honolulu and Anchorage), a stratified random sample of 52 “N” PSUs, and a stratified random sample of 16 “R” PSUs:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | PSU Size Class |  |
| Region | Division | S | N | R | **Total** |
| 1. Northeast | 1. New England | 1 | 2 | 1 | **4** |
|  | 2. Middle Atlantic | 2 | 4 | 1 | **7** |
| 2. Midwest | 3. East North Central | 2 | 8 | 2 | **12** |
|  | 4. West North Central | 2 | 4 | 2 | **8** |
| 3. South | 5. South Atlantic | 5 | 12 | 2 | **19** |
|  | 6. East South Central | 0 | 6 | 2 | **8** |
|  | 7. West South Central | 2 | 8 | 2 | **12** |
| 4. West | 8. Mountain | 2 | 4 | 3 | **9** |
|  | 9. Pacific | 7 | 4 | 1 | **12** |
|  | **Total** | **23** | **52** | **16** | **91** |

Within each division and size class, the “N” and “R” PSUs were stratified according to four variables – latitude, longitude, income, and property value – from which a stratified random sample of PSUs was drawn, one PSU from each stratum. The “N” PSUs were selected using an overlap maximization and controlled selection procedure, while the “R” PSUs were selected with probability proportional to size. This is similar to the procedure used in the 1990 and 2000 census-based sample designs. Although an overlap maximization procedure is used for the “N” PSUs, their unconditional probabilities are equal to the PSU’s population divided by the stratum’s population. For the “R” PSUs their probabilities are the PSU’s population divided by the stratum’s population to which the PSU belongs.[[1]](#footnote-1)

**IV. Honolulu and Anchorage**

The four CBSAs in Hawaii (Honolulu, Hilo, Kahului-Wailuku-Lahaina, Kapaa) were grouped into a state stratum, and Honolulu was selected with certainty to represent it. Likewise, the four CBSAs in Alaska (Anchorage, Fairbanks, Juneau, Ketchikan) were grouped into a state stratum, and Anchorage was selected with certainty to represent it. Honolulu and Anchorage are considered to be self-representing PSUs for publication purposes, but non-self-representing PSUs for the purpose of drawing their samples. When drawing their samples their *stratum* populations should be used as their measure of size.

**V. SAS Dataset with PSU Information**

In addition to providing the complete list of 91 selected PSUs at the end of the memo, a SAS dataset is also being provided to BOC with this memo. The file is called CECPI\_PSULIST\_2010DESIGN.sas7bdat. It has 3,143 records, one for every county (or county equivalent) in the United States, and it contains the following variables:

|  |  |  |
| --- | --- | --- |
| **Variable name** | **Format** | **Description** |
| PSU\_Code | Character $7 | PSU code (N12B.01, N12B.02, etc.) |
| PSU\_Name | Character $46 | PSU Name (Washington-Arlington-Alexandria, DC-VA-MD-WV) |
| PSU\_Type | Character $5 | CBSA type (metropolitan, micropolitan, non-CBSA or “rural”) |
| Selected | Character $1 | Was the PSU selected for sample? (Y/N) |
| Preliminary\_CBSA\_Code | Character $5 | Preliminary CBSA code |
| State\_FIPS | Character $2 | State FIPS code (01,02,…,56) |
| County\_FIPS | Character $3 | County FIPS code (001,002,003,…) |
| State\_Name | Character $2 | State Name (DC, MD, VA, WV, etc.) |
| County\_Name | Character $33 | County name (Montgomery, Howard, Fairfax, Loudon, etc.) |
| County\_Population | Numeric | Number of people in the county |
| PSU\_Population | Numeric | Number of people in the PSU |
| Stratum\_Population | Numeric | Number of people in the stratum |

Most of the variables on the dataset are self-explanatory. However, the variable “PSU\_Code” needs some explanation. The PSU codes have seven characters, with the first four characters identifying the stratum, followed by a decimal point, and then two more characters identifying the specific PSU within the stratum.

• 1st character: S, N, R (self-representing, non-self-representing, “rural”)

• 2nd character: Region (1,2,3,4)

• 3rd character: Division (1,2,…,9)

• 4th character: Stratum (A,B,C,…)

• 5th character: Decimal point to separate the stratum and PSU

• 6th and 7th characters: PSU (01,02,03,…)

Also “PSU\_Name” is the preliminary CBSA name given to us by BOC earlier this year; “PSU\_Type” indicates whether the PSU is a metropolitan CBSA, a micropolitan CBSA, or a non-CBSA area; “Preliminary\_CBSA\_Code” is the preliminary CBSA code number given to us by BOC earlier this year; and “County\_Population” is the county’s resident population from the 2010 census.

Here is an example for an “N” stratum in the South Atlantic division. The stratum has 9 counties that were clustered together into 3 PSUs. Raleigh, NC was randomly selected to represent the stratum as denoted by “Y” in the column labeled “Selected.” That particular PSU has three counties and its population is 1,130,490 (= 60,619 + 168,878 + 900,993). Since the total population of all 9 counties in the stratum is 2,549,176, the PSU’s unconditional probability of selection is 0.4435 (= 1,130,490 / 2,549,176).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PSU Code | PSU\_Name | PSU Type | Selected | State FIPS | County FIPS | State Name | County Name | County Population | PSU Population | Stratum Population |
| N35I.01 | Jacksonville, FL | metro | N | 12 | 003 | FL | Baker | 27,115 | 1,345,596 | 2,549,176 |
| N35I.01 | Jacksonville, FL | metro | N | 12 | 019 | FL | Clay | 190,865 | 1,345,596 | 2,549,176 |
| N35I.01 | Jacksonville, FL | metro | N | 12 | 031 | FL | Duval | 864,263 | 1,345,596 | 2,549,176 |
| N35I.01 | Jacksonville, FL | metro | N | 12 | 089 | FL | Nassau | 73,314 | 1,345,596 | 2,549,176 |
| N35I.01 | Jacksonville, FL | metro | N | 12 | 109 | FL | St. Johns | 190,039 | 1,345,596 | 2,549,176 |
| N35I.02 | Key West, FL | micro | N | 12 | 087 | FL | Monroe | 73,090 | 73,090 | 2,549,176 |
| N35I.03 | Raleigh, NC | metro | Y | 37 | 069 | NC | Franklin | 60,619 | 1,130,490 | 2,549,176 |
| N35I.03 | Raleigh, NC | metro | Y | 37 | 101 | NC | Johnston | 168,878 | 1,130,490 | 2,549,176 |
| N35I.03 | Raleigh, NC | metro | Y | 37 | 183 | NC | Wake | 900,993 | 1,130,490 | 2,549,176 |

***Note***: The county, PSU, and stratum populations over the whole United States sum to 308,745,538, which is the Census Bureau’s official estimate of the U.S. resident population on April 1, 2010 (the 2010 decennial census).

**VI. Other Aspects of CE’s Sample Design**

The purpose `of this memo is only to provide PSU definitions for CE’s 2010 census-based sample design. Other aspects of the redesign, such as the sample size and whether there will still be a bounding interview, will be covered in separate memos.

OPLC/SMD/Swanson/12182012/A1204.4

|  |  |  |
| --- | --- | --- |
| cc: | **BLS** | **Census** |
|  | Steven Paben (SMD) | Stephen Ash (DSMD) |
|  | Bill Johnson (SMD) | Danielle Castelo (DSMD) |
|  | Susan King (SMD) | James Farber (DSMD) |
|  | John Schilp (SMD) | Howard McGowan (DSD) |
|  | David Swanson (SMD) | Carolyn Pickering (DSD) |
|  | Rob Cage (DCPPI) |  |
|  | Robert Eddy (OPLC) |  |
|  | John Layng (CPI) |  |

**U.S. Consumer Expenditure Survey:**

**2010 Census-Based Sample Design (91 PSUs)**

|  |
| --- |
| **Division 1 (New England), Northeast Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S11A | Boston-Cambridge-Newton, MA-NH | MA: Essex, Middlesex, Norfolk, Plymouth, SuffolkNH: Rockingham, Strafford | 4,552,402 | 4,552,402 |
| N11B | Hartford-West Hartford-East Hartford, CT | CT: Hartford, Middlesex, Tolland | 1,212,381 | 5,005,793 |
| N11C | Springfield, MA | MA: Hampden, Hampshire | 621,570 | 4,233,926 |
| R11D | Addison, VT | VT: Addison | 36,821 | 652,744 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 2 (Middle Atlantic), Northeast Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S12A | New York-Newark-Jersey City, NY-NJ-PA | NJ: Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, UnionNY: Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, WestchesterPA: Pike | 19,567,410 | 19,567,410 |
| S12B | Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | DE: New CastleMD: CecilNJ: Burlington, Camden, Gloucester, SalemPA: Bucks, Chester, Delaware, Montgomery, Philadelphia | 5,965,343 | 5,965,343 |
| N12C | Pittsburgh, PA | PA: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, Westmoreland | 2,356,285 | 4,065,877 |
| N12D | Buffalo-Cheektowaga-Niagara Falls, NY | NY: Erie, Niagara | 1,135,509 | 3,483,174 |
| N12E | Rochester, NY | NY: Livingston, Monroe, Ontario, Orleans, Wayne, Yates | 1,079,671 | 3,925,318 |
| N12F | Reading, PA | PA: Berks | 411,442 | 3,562,332 |
| R12G | Northeast Pennsylvania | PA: Susquehanna, Wayne | 96,178 | 825,870 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 3 (East North Central), Midwest Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S23A | Chicago-Naperville-Elgin, IL-IN-WI | IL: Cook, De Kalb, Du Page, Grundy, Kane, Kendall, Lake, McHenry, WillIN: Jasper, Lake, Newton, PorterWI: Kenosha | 9,461,105 | 9,461,105 |
| S23B | Detroit-Warren-Dearborn, MI | MI: Lapeer, Livingston, Macomb, Oakland, St. Clair, Wayne | 4,296,250 | 4,296,250 |
| N23C | Cincinnati, OH-KY-IN | IN: Dearborn, Ohio, UnionKY: Boone, Bracken, Campbell, Gallatin, Grant, Kenton, PendletonOH: Brown, Butler, Clermont, Hamilton, Warren | 2,114,580 | 3,395,853 |
| N23D | Cleveland-Elyria, OH | OH: Cuyahoga, Geauga, Lake, Lorain, Medina | 2,077,240 | 3,257,953 |
| N23E | Columbus, OH | OH: Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Perry, Pickaway, Union | 1,901,974 | 3,758,510 |
| N23F | Milwaukee-Waukesha-West Allis, WI | WI: Milwaukee, Ozaukee, Washington, Waukesha | 1,555,908 | 3,256,494 |
| N23G | Dayton, OH | OH: Greene, Miami, Montgomery | 799,232 | 3,924,320 |
| N23H | Flint, MI | MI: Genesee | 425,790 | 3,911,189 |
| N23I | Janesville-Beloit, WI | WI: Rock | 160,331 | 3,745,126 |
| N23J | Frankfort, IN | IN: Clinton | 33,224 | 3,427,365 |
| R23K | Northern Michigan | MI: Cheboygan, Montmorency, Presque Isle | 49,293 | 1,605,685 |
| R23L | Holmes, OH | OH: Holmes | 42,366 | 1,351,458 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 4 (West North Central), Midwest Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S24A | Minneapolis-St. Paul-Bloomington, MN-WI | MN: Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Le Sueur, Mille Lacs, Ramsey, Scott, Sherburne, Sibley, Washington, WrightWI: Pierce, St. Croix | 3,348,859 | 3,348,859 |
| S24B | St. Louis, MO-IL | IL: Bond, Calhoun, Clinton, Jersey, Macoupin, Madison, Monroe, St. Clair MO: Franklin, Jefferson, Lincoln, St. Charles, St. Louis, St. Louis City, Warren | 2,787,701 | 2,787,701 |
| N24C | Omaha-Council Bluffs, NE-IA | IA: Harrison, Mills, PottawattamieNE: Cass, Douglas, Sarpy, Saunders, Washington | 865,350 | 2,974,017 |
| N24D | Wichita, KS | KS: Butler, Harvey, Kingman, Sedgwick, Sumner | 630,919 | 2,842,770 |
| N24E | Lincoln, NE | NE: Lancaster, Seward | 302,157 | 3,288,318 |
| N24F | Wahpeton, ND-MN | MN: WilkinND: Richland | 22,897 | 2,947,903 |
| R24G | Northern Missouri | MO: Daviess, Gentry, Grundy, Harrison, Mercer, Worth | 40,345 | 1,838,073 |
| R24H | Northeast Nebraska | NE: Cedar, Knox | 17,553 | 1,547,801 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 5 (South Atlantic), South Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S35A | Washington-Arlington-Alexandria, DC-VA-MD-WV | DC: District of ColumbiaMD: Calvert, Charles, Frederick, Montgomery, Prince George’sVA: Alexandria City, Arlington, Clarke, Culpeper, Fairfax, Fairfax City, Falls Church City, Fauquier, Fredericksburg City, Loudoun, Manassas City, Manassas Park City, Prince William, Rappahannock, Spotsylvania, Stafford, WarrenWV: Jefferson | 5,636,232 | 5,636,232 |
| S35B | Miami-Fort Lauderdale-West Palm Beach, FL | FL: Broward, Miami-Dade, Palm Beach | 5,564,635 | 5,564,635 |
| S35C | Atlanta-Sandy Springs-Roswell, GA | GA: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, Walton | 5,286,728 | 5,286,728 |
| S35D | Tampa-St. Petersburg-Clearwater, FL | FL: Hernando, Hillsborough, Pasco, Pinellas | 2,783,243 | 2,783,243 |
| S35E | Baltimore-Columbia-Towson, MD | MD: Anne Arundel, Baltimore, Baltimore City, Carroll, Harford, Howard, Queen Anne’s | 2,710,489 | 2,710,489 |
| N35F | Charlotte-Concord-Gastonia, NC-SC | NC: Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, UnionSC: Chester, Lancaster, York | 2,217,012 | 3,035,149 |
| N35G | Orlando-Kissimmee-Sanford, FL | FL: Lake, Orange, Osceola, Seminole | 2,134,411 | 2,642,941 |
| N35H | Richmond, VA | VA: Amelia, Caroline, Charles City, Chesterfield, Colonial Heights City, Dinwiddie, Goochland, Hanover, Henrico, Hopewell City, King William, New Kent, Petersburg City, Powhatan, Prince George, Richmond City, Sussex | 1,208,101 | 3,027,856 |
| N35I | Raleigh, NC | NC: Franklin, Johnston, Wake | 1,130,490 | 2,549,176 |
| N35J | Greenville-Anderson-Mauldin, SC | SC: Anderson, Greenville, Laurens, Pickens | 824,112 | 3,094,518 |
| N35K | Winston-Salem, NC | NC: Davidson, Davie, Forsyth, Stokes, Yadkin | 640,595 | 2,637,083 |
| N35L | Cape Coral-Fort Myers, FL | FL: Lee | 618,754 | 3,091,153 |
| N35M | Ocala, FL | FL: Marion | 331,298 | 2,568,744 |
| N35N | Gainesville, FL | FL: Alachua, Gilchrist | 264,275 | 2,913,140 |
| N35O | Wilmington, NC | NC: New Hanover, Pender | 254,884 | 2,736,321 |
| N35P | Jacksonville, NC | NC: Onslow | 177,772 | 3,100,604 |
| N35Q | Big Stone Gap, VA | VA: Dickenson, Norton City, Wise | 61,313 | 2,563,098 |
| R35R | Southern Virginia | VA: Charlotte, Cumberland, Halifax, Lunenburg, Mecklenburg, Prince Edward | 127,888 | 1,543,021 |
| R35S | Southwest West Virginia | WV: McDowell, Mingo, Wyoming | 72,748 | 1,853,703 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 6 (East South Central), South Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| N36A | Louisville/Jefferson County, KY-IN | IN: Clark, Floyd, Harrison, Scott, WashingtonKY: Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble | 1,235,708 | 2,529,624 |
| N36B | Birmingham-Hoover, AL | AL: Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair, Walker | 1,128,047 | 2,483,606 |
| N36C | Chattanooga, TN-GA | GA: Catoosa, Dade, WalkerTN: Hamilton, Marion, Sequatchie | 528,143 | 2,620,595 |
| N36D | Huntsville, AL | AL: Limestone, Madison | 417,593 | 2,801,399 |
| N36E | Florence-Muscle Shoals, AL | AL: Colbert, Lauderdale | 147,137 | 2,550,408 |
| N36F | Meridian, MS | MS: Clarke, Kemper, Lauderdale | 107,449 | 2,397,313 |
| R36G | Eastern Kentucky | KY: Floyd, Johnson, Knott, Lawrence, Magoffin, Martin, Pike | 186,299 | 1,567,733 |
| R36H | Western Tennessee | TN: Carroll, Gibson, Henderson | 105,974 | 1,406,973 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 7 (West South Central), South Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S37A | Dallas-Fort Worth-Arlington, TX | TX: Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Somervell, Tarrant, Wise | 6,426,214 | 6,426,214 |
| S37B | Houston-The Woodlands-Sugar Land, TX | TX: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller | 5,920,416 | 5,920,416 |
| N37C | San Antonio-New Braunfels, TX | TX: Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, Wilson | 2,142,508 | 2,436,095 |
| N37D | Oklahoma City, OK | OK: Canadian, Cleveland, Grady, Lincoln, Logan, McClain, Oklahoma | 1,252,987 | 2,812,948 |
| N37E | Baton Rouge, LA | LA: Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, West Baton Rouge, West Feliciana | 802,484 | 2,543,610 |
| N37F | Lafayette, LA | LA: Acadia, Iberia, Lafayette, St. Martin, Vermilion | 466,750 | 2,444,837 |
| N37G | Brownsville-Harlingen, TX | TX: Cameron | 406,220 | 2,581,037 |
| N37H | Amarillo, TX | TX: Armstrong, Carson, Oldham, Potter, Randall | 251,933 | 2,756,117 |
| N37I | Russellville, AR | AR: Pope, Yell | 83,939 | 2,620,998 |
| N37J | Paris, TX | TX: Lamar | 49,793 | 2,851,943 |
| R37K | Northeast Texas | TX: Camp, Rains, Van Zandt, Wood | 117,858 | 1,315,398 |
| R37L | Northern Arkansas | AR: Cleburne, Conway, Stone, Van Buren | 76,932 | 1,587,948 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 8 (Mountain), West Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S48A | Phoenix-Mesa-Scottsdale, AZ | AZ: Maricopa, Pinal | 4,192,887 | 4,192,887 |
| S48B | Denver-Aurora-Lakewood, CO | CO: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, Park | 2,543,482 | 2,543,482 |
| N48C | Las Vegas-Henderson-Paradise, NV | NV: Clark | 1,951,269 | 3,227,960 |
| N48D | Provo-Orem, UT | UT: Juab, Utah | 526,810 | 3,724,271 |
| N48E | Yuma, AZ | AZ: Yuma | 195,751 | 3,840,701 |
| N48F | St. George, UT | UT: Washington | 138,115 | 3,206,759 |
| R48G | Ravalli, MT | MT: Ravalli | 40,212 | 481,660 |
| R48H | Lincoln, NM | NM: Lincoln | 20,497 | 399,341 |
| R48I | Gooding, ID | ID: Gooding | 15,464 | 447,390 |
|  |  |  |  |  |
|  |  |  |  |  |
| **Division 9 (Pacific), West Region** |
| PSU | PSU Name | PSU Definition (State and County) | PSU Population | Stratum Population |
| S49A | Los Angeles-Long Beach-Anaheim, CA | CA: Los Angeles, Orange | 12,828,837 | 12,828,837 |
| S49B | San Francisco-Oakland-Hayward, CA | CA: Alameda, Contra Costa, Marin, San Francisco, San Mateo | 4,335,391 | 4,335,391 |
| S49C | Riverside-San Bernardino-Ontario, CA | CA: Riverside, San Bernardino | 4,224,851 | 4,224,851 |
| S49D | Seattle-Tacoma-Bellevue, WA | WA: King, Pierce, Snohomish | 3,439,809 | 3,439,809 |
| S49E | San Diego-Carlsbad, CA | CA: San Diego | 3,095,313 | 3,095,313 |
| S49F | Honolulu, HI | HI: Honolulu | 953,207 | 1,360,301 |
| S49G | Anchorage, AK | AK: Anchorage, Matanuska-Susitna | 380,821 | 523,154 |
| N49H | Portland-Vancouver-Hillsboro, OR-WA | OR: Clackamas, Columbia, Multnomah, Washington, YamhillWA: Clark, Skamania | 2,226,009 | 5,208,366 |
| N49I | Santa Rosa, CA | CA: Sonoma | 483,878 | 5,163,670 |
| N49J | Chico, CA | CA: Butte | 220,000 | 4,623,339 |
| N49K | Moses Lake, WA | WA: Grant | 89,120 | 4,363,676 |
| R49L | Tillamook, OR | OR: Tillamook | 25,250 | 714,395 |

1. The overlap maximization procedure that was used was based on Larry Ernst’s 1986 method: Lawrence R. Ernst, “*Maximizing the Overlap Between Surveys when Information is Incomplete*,” European Journal of Operations Research, volume 27 (1986), pp. 192-200. For details on how it was applied to CE’s 2010 census-based sample, see: William Johnson, Steve Paben, John Schilp, “*The Use of Sample Overlap Methods in the Consumer Price Index Area Redesign*,” 2012 Proceedings of the International Conference on Establishment Surveys. [↑](#footnote-ref-1)