

Behavioral Risk Factor Surveillance System (BRFSS)

2024 SMART BRFSS Metropolitan/Micropolitan Statistical Area (MMSA) Methodology

December 19, 2025



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Overview

The Behavioral Risk Factor Surveillance System (BRFSS) Selected Metropolitan/Micropolitan Area Risk Trends (SMART) is a documented and verified subset of the 2024 BRFSS that contains the core questions and calculated variables. The optional modules are not included. This dataset has been produced to provide some local-area estimates. These local areas are identified as metropolitan or micropolitan statistical areas (MMSAs), as defined by the Office of Management and Budget (OMB). The dataset was produced by adding new raking weights designed to correspond to the 2024 population estimates for each eligible MMSA.

Typically, BRFSS data are used to produce state-level estimates; however, for the SMART project, BRFSS data were used to produce small area-level estimates for MMSAs as defined by the US Census Bureau. On June 6, 2003, OMB issued new definitions for MMSA and metropolitan divisions. OMB periodically updates the list of MMSAs. The list of areas used for this analysis can be found at the bottom of this linked webpage, inside the [Historical Delineation Files](#). The July 2023 release was used for defining the MMSAs in the 2024 SMART dataset.

County and MMSA Identifiers

A county name was collected from the respondent during the demographics section of the interview. The name of the county was used to determine the corresponding American National Standards Institute (ANSI) county code; this code was retained as a variable in the dataset. The data record from an interview with a respondent was assigned to an MMSA on the basis of the county code.

Landline telephone data records resulting in an entry with a missing county variable value had an imputed county value assigned. The imputed county value represents the county most likely associated with the telephone number and was determined from the purchased telephone sample.

Cellular telephone data records resulting in entries with a missing county variable had an imputed county value assigned from one of three sources:

1. An open-end text response provided by the respondent, or
2. Information derived from the zip code provided by the respondent, or
3. The record was assigned randomly to one of the top three or four largest population counties (in the state) by age and race/ethnicity.

MMSAs were selected in the SMART BRFSS MMSA data if there were 500 or more respondents in that area for the 2024 BRFSS combined landline telephone and cellular telephone data.

Weighting Methodology

The BRFSS raking method used to generate the 2024 final weight is described in the documentation available with the annual aggregate data release. For the details of the description of the raking methodology, refer to the [BRFSS 2024 Survey Data and Documentation web page](#). The MMSA weight was generated from additional raking, beginning with the BRFSS raked dataset. The combined landline telephone and cellular telephone weight variable was raked to five margins: age group, gender, race and ethnicity group, gender by age group, and gender by race and ethnicity group at the MMSA level.

The variable **_MMSA** is the code of metropolitan or micropolitan statistical area where the respondent lives. The variable **_MMSANAM** is the MMSA name. The variable **_MMSAWT** is the MMSA-level weight that is used when generating MMSA-level estimates for variables in the dataset.

Appendix A lists the MMSAs that are in the 2024 SMART BRFSS MMSA data; 126 MMSAs met the criteria.

Appendix B includes examples of SAS code and SUDAAN code used for analysis of the MMSA dataset.

Appendix A:
List of the 126 MMSAs Having MMSA-level Weights in 2024 BRFSS Data

Metropolitan/Micropolitan Statistical Area or Metropolitan Division Codes and Names

MMSA Number	MMSA Name
10100	Aberdeen, SD, Micropolitan Statistical Area
10580	Albany-Schenectady-Troy, NY, Metropolitan Statistical Area
10740	Albuquerque, NM, Metropolitan Statistical Area
11260	Anchorage, AK, Metropolitan Statistical Area
11694	Arlington-Alexandria-Reston, VA-WV, Metropolitan Division
12060	Atlanta-Sandy Springs-Roswell, GA, Metropolitan Statistical Area
12100	Atlantic City-Hammonton, NJ, Metropolitan Statistical Area
12260	Augusta-Richmond County, GA-SC, Metropolitan Statistical Area
12420	Austin-Round Rock-San Marcos, TX, Metropolitan Statistical Area
12580	Baltimore-Columbia-Towson, MD, Metropolitan Statistical Area
12940	Baton Rouge, LA, Metropolitan Statistical Area
13140	Beaumont-Port Arthur, TX, Metropolitan Statistical Area
13740	Billings, MT, Metropolitan Statistical Area
13780	Binghamton, NY, Metropolitan Statistical Area
13820	Birmingham, AL, Metropolitan Statistical Area
13900	Bismarck, ND, Metropolitan Statistical Area
14260	Boise City, ID, Metropolitan Statistical Area
14454	Boston, MA, Metropolitan Division
14860	Bridgeport-Stamford-Danbury, CT, Metropolitan Statistical Area
15380	Buffalo-Cheektowaga, NY, Metropolitan Statistical Area
15540	Burlington-South Burlington, VT, Metropolitan Statistical Area
15764	Cambridge-Newton-Framingham, MA, Metropolitan Division
15804	Camden, NJ, Metropolitan Division
16300	Cedar Rapids, IA, Metropolitan Statistical Area
16620	Charleston, WV, Metropolitan Statistical Area
16700	Charleston-North Charleston, SC, Metropolitan Statistical Area
16740	Charlotte-Concord-Gastonia, NC-SC, Metropolitan Statistical Area
16980	Chicago-Naperville-Elgin, IL-IN, Metropolitan Statistical Area
17140	Cincinnati, OH-KY-IN, Metropolitan Statistical Area
17410	Cleveland, OH, Metropolitan Statistical Area
17820	Colorado Springs, CO, Metropolitan Statistical Area
17900	Columbia, SC, Metropolitan Statistical Area
18140	Columbus, OH, Metropolitan Statistical Area
19060	Cumberland, MD-WV, Micropolitan Statistical Area
19124	Dallas-Plano-Irving, TX, Metropolitan Division
19340	Davenport-Moline-Rock Island, IA-IL, Metropolitan Statistical Area

19430	Dayton-Kettering-Beavercreek, OH, Metropolitan Statistical Area
19740	Denver-Aurora-Centennial, CO, Metropolitan Statistical Area
19780	Des Moines-West Des Moines, IA, Metropolitan Statistical Area
20260	Duluth, MN-WI, Metropolitan Statistical Area
22020	Fargo, ND-MN, Metropolitan Statistical Area
22220	Fayetteville-Springdale-Rogers, AR, Metropolitan Statistical Area
23060	Fort Wayne, IN, Metropolitan Statistical Area
23104	Fort Worth-Arlington-Grapevine, TX, Metropolitan Division
23224	Frederick-Gaithersburg-Bethesda, MD, Metropolitan Division
23540	Gainesville, FL, Metropolitan Statistical Area
24020	Glens Falls, NY, Metropolitan Statistical Area
24220	Grand Forks, ND-MN, Metropolitan Statistical Area
24260	Grand Island, NE, Metropolitan Statistical Area
24340	Grand Rapids-Wyoming-Kentwood, MI, Metropolitan Statistical Area
24580	Green Bay, WI, Metropolitan Statistical Area
24860	Greenville-Anderson-Greer, SC, Metropolitan Statistical Area
25180	Hagerstown-Martinsburg, MD-WV, Metropolitan Statistical Area
25540	Hartford-West Hartford-East Hartford, CT, Metropolitan Statistical Area
25720	Heber, UT, Micropolitan Statistical Area
25740	Helena, MT, Metropolitan Statistical Area
25940	Hilton Head Island-Bluffton-Port Royal, SC, Metropolitan Statistical Area
26420	Houston-Pasadena-The Woodlands, TX, Metropolitan Statistical Area
26580	Huntington-Ashland, WV-KY-OH, Metropolitan Statistical Area
26900	Indianapolis-Carmel-Greenwood, IN, Metropolitan Statistical Area
27260	Jacksonville, FL, Metropolitan Statistical Area
28140	Kansas City, MO-KS, Metropolitan Statistical Area
28420	Kennewick-Richland, WA, Metropolitan Statistical Area
28880	Kiryas Joel-Poughkeepsie-Newburgh, NY, Metropolitan Statistical Area
29484	Lakewood-New Brunswick, NJ, Metropolitan Division
29620	Lansing-East Lansing, MI, Metropolitan Statistical Area
30150	Lebanon-Claremont, NH-VT, Micropolitan Statistical Area
30500	Lexington Park, MD, Metropolitan Statistical Area
30700	Lincoln, NE, Metropolitan Statistical Area
30780	Little Rock-North Little Rock-Conway, AR, Metropolitan Statistical Area
30860	Logan, UT-ID, Metropolitan Statistical Area
31080	Los Angeles-Long Beach-Anaheim, CA, Metropolitan Statistical Area
31140	Louisville/Jefferson County, KY-IN, Metropolitan Statistical Area
31540	Madison, WI, Metropolitan Statistical Area
33100	Miami-Fort Lauderdale-West Palm Beach, FL, Metropolitan Statistical Area
33340	Milwaukee-Waukesha, WI, Metropolitan Statistical Area
33460	Minneapolis-St. Paul-Bloomington, MN-WI, Metropolitan Statistical Area
33500	Minot, ND, Metropolitan Statistical Area
33540	Missoula, MT, Metropolitan Statistical Area
35004	Nassau County-Suffolk County, NY, Metropolitan Division
35084	Newark, NJ, Metropolitan Division

35380	New Orleans-Metairie, LA, Metropolitan Statistical Area
35614	New York-Jersey City-White Plains, NY-NJ, Metropolitan Division
36084	Oakland-Fremont-Berkeley, CA, Metropolitan Division
36260	Ogden, UT, Metropolitan Statistical Area
36420	Oklahoma City, OK, Metropolitan Statistical Area
36540	Omaha, NE-IA, Metropolitan Statistical Area
36740	Orlando-Kissimmee-Sanford, FL, Metropolitan Statistical Area
37964	Philadelphia, PA, Metropolitan Division
38060	Phoenix-Mesa-Chandler, AZ, Metropolitan Statistical Area
38300	Pittsburgh, PA, Metropolitan Statistical Area
38860	Portland-South Portland, ME, Metropolitan Statistical Area
38900	Portland-Vancouver-Hillsboro, OR-WA, Metropolitan Statistical Area
39300	Providence-Warwick, RI-MA, Metropolitan Statistical Area
39340	Provo-Orem-Lehi, UT, Metropolitan Statistical Area
39580	Raleigh-Cary, NC, Metropolitan Statistical Area
39660	Rapid City, SD, Metropolitan Statistical Area
39900	Reno, NV, Metropolitan Statistical Area
40060	Richmond, VA, Metropolitan Statistical Area
40140	Riverside-San Bernardino-Ontario, CA, Metropolitan Statistical Area
40380	Rochester, NY, Metropolitan Statistical Area
40484	Rockingham County-Strafford County, NH, Metropolitan Division
40900	Sacramento-Roseville-Folsom, CA, Metropolitan Statistical Area
41180	St. Louis, MO-IL, Metropolitan Statistical Area
41420	Salem, OR, Metropolitan Statistical Area
41540	Salisbury, MD, Metropolitan Statistical Area
41620	Salt Lake City-Murray, UT, Metropolitan Statistical Area
41700	San Antonio-New Braunfels, TX, Metropolitan Statistical Area
41980	San Juan-Bayamón-Caguas, PR, Metropolitan Statistical Area
43580	Sioux City, IA-NE-SD, Metropolitan Statistical Area
43620	Sioux Falls, SD-MN, Metropolitan Statistical Area
43780	South Bend-Mishawaka, IN-MI, Metropolitan Statistical Area
44060	Spokane-Spokane Valley, WA, Metropolitan Statistical Area
45060	Syracuse, NY, Metropolitan Statistical Area
45220	Tallahassee, FL, Metropolitan Statistical Area
45300	Tampa-St. Petersburg-Clearwater, FL, Metropolitan Statistical Area
45780	Toledo, OH, Metropolitan Statistical Area
45820	Topeka, KS, Metropolitan Statistical Area
46140	Tulsa, OK, Metropolitan Statistical Area
46540	Utica-Rome, NY, Metropolitan Statistical Area
47260	Virginia Beach-Chesapeake-Norfolk, VA-NC, Metropolitan Statistical Area
47664	Warren-Troy-Farmington Hills, MI, Metropolitan Division
47764	Washington, DC-MD, Metropolitan Division
47940	Waterloo-Cedar Falls, IA, Metropolitan Statistical Area
48620	Wichita, KS, Metropolitan Statistical Area
48864	Wilmington, DE-MD-NJ, Metropolitan Division

Appendix B: Sample Codes for Analysis

SUDAAN Code Example:

Generating an estimate for the Atlanta-Sandy Springs-Roswell, GA, Metropolitan Statistical Area (MMSA code = 12060).

```
proc sort data=xxxx;
by _STSTR_SEQNO;
run;

proc descript data=xxxx filetype=sas design=wr;
nest _STSTR_SEQNO / missunit;
weight _MMSAWT;
subpopn _MMSA=12060 / name=" Atlanta-Sandy Springs-Roswell, GA";
var (your analysis variable);
catlevel (the level of your analysis variable for which you want an estimate);
run;
```

SAS Code Example:

```
proc surveymeans data=xxxx nobs mean stderr sum sumwgt;
strata _ststr;
weight _mmsawt;
var (your analysis variable);
class (your analysis variable);
domain _mmsa;
run;
```