User Documentation for the

County

Area Health Resources File (AHRF)

2022-2023 Release

U.S. Department of Health and Human Services

Health Resources and Services Administration

Bureau of Health Workforce

National Center for Health Workforce Analysis

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**AHRF USER DOCUMENTATION**

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# INTRODUCTION

The Health Resources and Services Administration (HRSA) of the Department of Health and Human Services (DHHS) releases a new version of the Area Health Resources Files (AHRF) annually. The 2022-2023 Area Health Resources Files are the most current release and provide the latest health resource requirements and supply data available. These files include extensive health professions and sociodemographic data available at the county level as well as broader health professions demographic, workforce and training data available at the state and national levels. While these data have been made available annually for many years, the content and formats are different on this new release, particularly for the county level file.

The 2022-2023 AHRF contains a number of changes designed to facilitate usage of the data by a broader audience. Among the changes are:

* The provision of new, unique variable identifiers
* The availability of data in additional formats
* The addition of smaller, more focused subset files
* The elimination of redundant data and
* Expanded documentation to provide crosswalks between earlier file naming conventions and new variable names, as well as more explanatory notes.

This document describes the makeup of each component of the 2022-2023 AHRF. Users familiar with AHRF products over time will notice marked differences in the current components as compared to previous releases. Both the composition of the 2022-2023 AHRF products and the differences between the new release and earlier releases are described in this section.

## WHAT’S NEW

In an effort to make the AHRF data more accessible and more easily used by a broader range of users, a number of product enhancements have been incorporated into the AHRF products. The major differences between the 2022-2023 release of the AHRF and earlier versions include:

1. The new AHRF includes files in CSV format;
2. The new county AHRF includes only the most recent two years of data for each variable, largely eliminating redundant historical data across releases and making the file a more manageable size;
3. To also reduce file size and facilitate usage, focused subsets of the county file have been created for users to easily access specific targeted subsets of data in CSV format; these include:

**County Subfiles**

|  |
| --- |
| 1. Codes and classifications |
| 1. Health professions |
| 1. Health facilities |
| 1. Utilization |
| 1. Expenditures |
| 1. Population |
| 1. Environment |

The 2022-2023 version of the state/national AHRF continues to be organized as follows within each health profession:

**State/National Files**

|  |
| --- |
| Workforce |
| Employment |
| Training |

1. The User and Technical Documentation supporting the 2022-2023 AHRF are complementary and linked to one another – by clicking on the Source link for any variable listed in the county Technical Documentation, detailed descriptive information for the variable is accessed including data source, definitions, suppression, geographic coverage and any changes in data definitions or other considerations;
2. The most recent two years of data for each source on the county AHRF are included; any changes or differences in data definitions between the two years are described in this documentation;
3. Data are provided for those data sources that are updated on a regular basis which can be combined with earlier releases of the AHRF to analyze changes across time; and
4. A new unique data variable naming convention is provided with the current release of the AHRF replacing the Field numbers used in prior releases – a cross-walk between these conventions is included and describes how to navigate between the new release and earlier releases.

The latest release of the AHRF is available in the following formats: ASCII, CSV, and as a SAS dataset. The documentation includes complete Technical and User Documentation which describes the data definitions, characteristics, sources, geography, and data anomalies for each variable on the files. Additionally, support documentation is provided which includes a file description along with labels for the ASCII file. The technical details for each variable are defined in the Technical Documentation. The data source and detailed variable definitions are defined in the User Documentation. Details in the User Documentation can be accessed for each specific variable by clicking on the Source link of the Technical Documentation.

Because of the substantial changes in the current AHRF compared to earlier releases, users are cautioned that formats, names and characteristics of the data may have changed. It is recommended that users refer to prior documentation for earlier releases when comparing the current release to earlier AHRF releases.

Users can access the 2022-2023 AHRF products via the HRSA Data Warehouse / Data Downloads website (<https://data.hrsa.gov/data/download>). When opening the AHRF link on the site, users can select from the AHRF products by clicking on the links provided – county or state/national data files; ASCII, SAS or CSV format; and documentation. Users interested in a specific set of data variables (e.g., physicians) can select the associated subfile (e.g., Health Professions) and obtain only that subset of data from the complete county file. Similarly with other data needs, only data of interest can be selected and obtained.

## SUPPORT DOCUMENTATION

AHRF documentation has been expanded to offer users both more information and easier access to the information. The AHRF User Documentations focus on the data sources and specific data variables that comprise the AHRF county and the state/national files. Data source and variable definitions offer clear descriptions of the data as well as information on further breakdowns of the data by sub-category (e.g., short-term general hospital, office-based physician by specialty). Additionally, details as to the sources of the data are provided, including: name of the source data file, year of the data, suppression, and any anomalies and/or restrictions on the data imposed by the data source. For example, data suppression is applied as dictated by the specific data sources and will vary from source to source.

The 2022-2023 AHRF Technical Documentation provides a listing of each data element included on the files. Technical data element descriptor information is provided as follows:

* New Names – see below
* Field/Col - the location identifier on the ASCII file
* Data Category the category of data on the CSV file/subfile
* Year of Data – the year of the data
* Variable Name – the full name of the data element
* Characteristics – additional descriptors of the data
* Source - the name and link to the original data source
* Date On - the date the data variable was first included on the AHRF

The 2022-2023 version of the AHRF files contain a new set of data element names that are more descriptive of the elements than the Field number and also provide details of the characteristics of the data variable. For example, in the county file, Field number F09949-20 is:

* MD physicians, in general practice, in an office-based setting, the practitioner is Non-Federal and provided direct patient care in 2020;
* The new name for this element is: md\_nf\_gp\_pc\_ofc\_20.

The name and characteristics of the data element can be inferred from the new name. The State/National Technical Documentation includes the same presentation as shown above, including New Names.

As a final note on the Technical Documentation, the Source reference listed for each data variable in the document is hyperlinked to the specific location in the User Documentation where the source is described and the associated data elements are defined. Users can click on an element in the Source column in the Technical Documentation and be linked directly to the appropriate descriptive source information in the User Documentation.

# I. DATA ELEMENT DESCRIPTIONS AND REFERENCES

## A. CODES AND CLASSIFICATIONS

### A- 1) Header for AHRF

The AHRF (previously known as the Area Resource File, or ARF) includes a header at the beginning of each record to enhance the use of the county file. The header includes the State and County Code, Date of the File, Date of Creation, and File Length.

Note that beginning with the February 2001 version of the AHRF, data are broken out for all Virginia independent cities and Alaska boroughs/census areas for all data from 1992 through the current. The modified FIPS code is carried as the secondary entity field of the header. This field should be used when matching with earlier versions of the file.

Additionally, beginning with the February 2001 updates to the AHRF, to the extent data were available for the U.S. possessions and territories of Guam, Puerto Rico, and the US Virgin Islands, they are included on the file. Any sources having territory data available are noted in applicable User Documentation source references.

### A- 2) State and County Codes

*FIPS State Code:*

The **FIPS State Code** was established by National Bureau of Standards (now known as the National Institute of Standards and Technology), U.S. Department of Commerce in 1968. It is standard throughout the Federal government and published in *Federal Information Processing Standards Publication June 15, 1970*. The basic structure is a sequential ascending two-digit number, with spaces for all possible new states.

*Note:* The American National Standards Institute (ANSI) has taken over the management of geographic codes to ensure uniform identification of geographic entities through all federal government agencies. ANSI now issues the FIPS geographic codes which are equivalent to ANSI codes that may be referenced on other files.

The following table lists the FIPS State Code, the two‑character State Name Abbreviation used on AHRF and the State Name:

**FIPS CODE ABBREVIATION STATE**

01 AL Alabama

02 AK Alaska

04 AZ Arizona

05 AR Arkansas

06 CA California

08 CO Colorado

09 CT Connecticut

10 DE Delaware

11 DC District of Columbia

12 FL Florida

13 GA Georgia

15 HI Hawaii

16 ID Idaho

17 IL Illinois

18 IN Indiana

19 IA Iowa

20 KS Kansas

21 KY Kentucky

22 LA Louisiana

23 ME Maine

24 MD Maryland

25 MA Massachusetts

26 MI Michigan

27 MN Minnesota

28 MS Mississippi

29 MO Missouri

30 MT Montana

31 NE Nebraska

32 NV Nevada

33 NH New Hampshire

34 NJ New Jersey

35 NM New Mexico

36 NY New York

37 NC North Carolina

38 ND North Dakota

39 OH Ohio

40 OK Oklahoma

41 OR Oregon

42 PA Pennsylvania

44 RI Rhode Island

45 SC South Carolina

46 SD South Dakota

47 TN Tennessee

48 TX Texas

49 UT Utah

50 VT Vermont

51 VA Virginia

53 WA Washington

54 WV West Virginia

55 WI Wisconsin

56 WY Wyoming

Additionally, for data variables added to the February 2001 and later versions of the AHRF, the following codes are included for sources where available:

66 GU Guam

72 PR Puerto Rico

78 VI US Virgin Islands

*FIPS County and Modified FIPS County Codes:*

The **FIPS County Codes** were established by the National Bureau of Standards (now known as the National Institute of Standards and Technology), U.S. Department of Commerce in 1968, and are published in *Federal Information Processing Standards Publication ‑ Counties and County Equivalents of the United States and the District of Columbia*. The current version of this publication is No. 6‑4 dated August 31, 1990 with allrevisions through 2023. The basic structure of the codes is sequential, ascending, three‑digit odd numbers. This document also provides the designated names for all counties and equivalent entities of the United States, its possessions and associated areas.

*Note:* The American National Standards Institute (ANSI) has taken over the management of geographic codes to ensure uniform identification of geographic entities through all federal government agencies. ANSI now issues the FIPS geographic codes which are equivalent to ANSI codes that may be referenced on other files.

Effective with the February 2001 release, the County Codes used in the Area Health Resources File are those published in FIPS, including all Alaska boroughs and census areas and Virginia independent cities. Unless otherwise noted in this document, data are broken out for all data years of 1992 and later.

American National Standards Institute codes (ANSI), and *FIPS Publication Change Notices,* issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) state:

1. Effective January 2, 2019, Chugach Census Area, Alaska (02063) was created from part of the former Valdez-Cordoba Census Area, Alaska (02261). This change was made with the 2021-2022 release of the AHRF.
2. Effective January 2, 2019, Copper River Census Area, Alaska (02066) was created from part of the former Valdez-Cordoba Census Area, Alaska (02261). This change was made with the 2021-2022 release of the AHRF.
3. Effective July 1, 2015, Wade Hampton Census Area, Alaska (02270) was changed to Kusilvak Census Area, Alaska (02158). This change was made with the 2015-2016 release of the AHRF.
4. Effective May 1, 2015, Shannon County, South Dakota (46113) was changed to Oglala Lakota County, South Dakota (46102). This change was made with the 2015-2016 release of the AHRF.
5. Effective July 1, 2013, the independent city of Bedford, VA (51515) reverted to town status. Bedford City, Virginia became an incorporated place within Bedford County (51019). On the AHRF, Bedford City, Virginia data are included in Bedford County for any 2014 or later source data. This change was made with the 2015-2016 release of the AHRF.
6. Effective January 3, 2013, Petersburg Borough, Alaska (02195) was created from part of the former Petersburg Census Area (02195) and part of Hoonah-Angoon Census Area, Alaska (02105). Prince of Wales-Hyder Census Area, Alaska (02198) added part of the former Petersburg Census Area. This change was made with the 2015-2016 release of the AHRF.
7. Effective June 1, 2008, Wrangell-Petersburg Census Area, AK (02280) split to create part of Wrangell City and Borough, AK (02275) and all of Petersburg Census Area, AK (02195). Wrangell City and Borough also includes the Meyers Chuck area of the defunct Prince of Wales-Outer Ketchikan Census Area, AK (02201), see note below. These codes were added with the 2011-2012 release of the AHRF, and to the extent source data report data for Wrangell City and Borough and Petersburg Census Area, they are reported on the AHRF.
8. Effective May 19, 2008, Prince of Wales-Outer Ketchikan Census Area, AK (02201) dissolved. Part (Outer Ketchikan area) was annexed by the existing Ketchikan Gateway Borough, AK (02130), the Meyers Chuck area was included in the new Wrangell City and Borough, AK (02275), see note above; and the remainder was renamed Prince of Wales-Hyder Census Area, AK (02198). These codes were added with the 2011-2012 release of the AHRF, and to the extent source data report data for Prince of Wales-Hyder Census Area and Wrangell City and Borough, they are reported on the AHRF.
9. Effective June 20, 2007, Skagway-Hoonah-Angoon Census Area, AK (02232) split to create Skagway Municipality, AK (02230) and Hoonah-Angoon Census Area, AK (02105). These codes were added effective with the 2011-2012 release of the AHRF, and to the extent source data report data for Skagway Municipality and Hoonah-Angoon Census Area, they are reported on the AHRF.

### A- 3) Federal Region Code and Census Region and Division Codes and Names

**Federal Region Codes** are the codes for the ten Federal Regional Offices from the Department of Health and Human Services. The Federal Region Codes, Regional Office names and the states within each region are as follows:

**CODE DEFINITION**

01 Boston R.O. (Maine, Vermont, Mass., Conn., R.I., N.H.)

02 New York R.O. (N.Y., N.J., Puerto Rico, US Virgin Islands)

03 Philadelphia R.O. (Penn., Del., D.C., Maryland, Va., W. Va.)

04 Atlanta R.O. (Ala., Fla., Georgia, Ky., Miss., N.C., S.C., Tenn.)

05 Chicago R.O. (Ill., Indiana, Minn., Michigan, Ohio, Wisconsin)

06 Dallas R.O. (Arkansas, N.M., Oklahoma, Texas, Louisiana)

07 Kansas City R.O. (Iowa, Kansas, Missouri, Nebraska)

08 Denver R.O. (Colo., Montana, N.D., S.D., Utah, Wyoming)

09 San Francisco R.O. (Ariz., Calif., Hawaii, Nev., Guam)

10 Seattle R.O. (Alaska, Idaho, Oregon, Washington)

The **Census Region Codes and Names** and **Census Division Codes and Names** are those defined by the Census Bureau which can be located at the following link: <https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf>. The codes and names are as follows:

**CENSUS**

**CODES NAME STATES INCLUDED**

Region Division

1 Northeast

1 New England Maine, Vermont, Massachusetts,

New Hampshire, Connecticut,

Rhode Island

2 Middle Atlantic New York, New Jersey,

Pennsylvania

2 Midwest

3 East North Central Ohio, Michigan, Indiana,

Illinois, Wisconsin

4 West North Central Minnesota, Iowa, Missouri,

Kansas, Nebraska, South Dakota,

North Dakota

3 South

5 South Atlantic Delaware, Maryland,

District of Columbia,

Virginia, West Virginia,

North Carolina, South Carolina,

Georgia, Florida

6 East South Central Kentucky, Tennessee,

Mississippi, Alabama

7 West South Central Arkansas, Louisiana, Texas,

Oklahoma

4 West

8 Mountain Montana, Wyoming, Colorado,

New Mexico, Arizona, Utah,

Idaho, Nevada

9 Pacific Washington, Oregon,

California, Alaska, Hawaii

### A- 4) SSA Beneficiary State and County Codes

The **SSA Beneficiary State and County Codes** were updated using the most current Centers for Medicare and Medicaid Services (CMS) *SSA to Federal Information Processing Series (FIPS) State and County Crosswalk File,* supplemented with data for Guam and the US Virgin Islands from the CMS 2023 *Medicare Advantage Ratebook File*. The SSA code consists of a two-byte state and three-byte county code.

*Note:*

1. These codes were originally updated using data from the Social Security Administration's (SSA) Office of Research, Evaluation and Statistics (ORES). Therefore, this data will differ somewhat from the AHRF releases prior to July 2021.
2. There are two SSA beneficiary codes used to identify Los Angeles County, California (05200 and 05210). However, since FIPS has only one code for Los Angeles, only 05200 is assigned to this county.
3. Data are included for Guam, Puerto Rico and the US Virgin Islands.

### A- 5) Metropolitan/Micropolitan and Combined Statistical Areas

The **2020** **Statistical Areas: Metropolitan Statistical Areas, Metropolitan Divisions, Micropolitan Statistical Areas and Combined Statistical Areas** were announced by the Office of Management and Budget in *OMB Bulletin No. 20-01* to be effective March 6, 2020. The delineations of statistical areas reflect the Standards for Delineating Metropolitan and Micropolitan Statistical Areas that the Office of Management and Budget published on June 28, 2010, in the *Federal Register* (75 FR 37246-37252) and the application of those standards to Census Bureau population and journey-to-work data. The 2020 updates are based on the applications of the 2010 Standards for Delineating the Metropolitan and Micropolitan Statistical Areas to Census population estimates for July 1, 2017 and July 1, 2018. The term **“Core Based Statistical Area”** (CBSA), which became effective in 2000, refers collectively to Metropolitan and Micropolitan Statistical Areas.

**Metropolitan Statistical Areas** 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 Statistical Areas** have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. Metropolitan and Micropolitan Statistical Areas are defined in terms of whole counties (or equivalent entities), including in the six New England States.

The term **Metropolitan Division** is used to refer to a county or group of counties within a Metropolitan Statistical Area that has a single core of population of at least 2.5 million. While a Metropolitan Division is a subdivision of a larger Metropolitan Statistical Area, it often functions as a distinct social, economic and cultural area within the larger region. Metropolitan Divisions can be directly compared with each other, but comparison of them with entire Metropolitan Statistical Areas would be inappropriate.

If specified criteria are met, adjacent Metropolitan and Micropolitan Statistical Areas, in various combinations, may become the components of a set of complementary areas called **Combined Statistical Areas**. For instance, a Combined Statistical Area may comprise two or more Metropolitan Statistical Areas, a Metropolitan Statistical Area and a Micropolitan Statistical Area, two or more Metropolitan Statistical Areas, or multiple Metropolitan and Micropolitan Statistical Areas that have social and economic ties as measured by commuting, but at lower levels then are found among counties with Metropolitan and Micropolitan Areas.

Combined Statistical Areas can be characterized as representing larger regions that reflect weekend recreation activities, are likely to be of considerable interest to regional authorities and the private sector. Because Combined Statistical Areas represent groupings of Metropolitan and Micropolitan Statistical Areas (in any combination), they should not be ranked or combined with the individual Metropolitan and Micropolitan Statistical Areas.

OMB’s standards provide for the identification of one or more principal cities within each Metropolitan and Micropolitan Statistical Area. Principal cities encompass both incorporated places and census designated places (CDPs). In addition to identifying the more significant places in each Metropolitan and Micropolitan Statistical Area in terms of population and employment, principal cities also are used in titling Metropolitan and Micropolitan Statistical Areas, Metropolitan Divisions and Combined Statistical Areas. A principal city may be only a part of a place if a portion of that place is outside of the Metropolitan Statistical Area or Micropolitan Statistical Area for which the place is principal.

OMB establishes and maintains the delineations of Metropolitan Statistical Areas, Metropolitan Divisions, Micropolitan Statistical Areas and Combined Statistical Areas solely for statistical purposes. This classification is intended to provide nationally consistent delineations for collecting, tabulating and publishing Federal statistics for a set of geographic areas. The Metropolitan and Micropolitan Statistical Area Standards do not equate to an urban-rural classification; many counties included in Metropolitan and Micropolitan Statistical Areas, and many other counties, contain both urban and rural territory and populations.

The geographic components of Metropolitan and Micropolitan Statistical Areas and Metropolitan Divisions are counties and equivalent entities (boroughs and a municipality in Alaska, parishes in Louisiana, municipios in Puerto Rico, and independent cities in Maryland, Missouri, Nevada and Virginia).

On the AHRF, the fields for Metropolitan code and Micropolitan code were combined into one field, Core Based Statistical Area Code, as were Metropolitan name and Micropolitan name combined to form Core Based Statistical Area Name. The **CBSA Indicator Code** field defines the county’s type. It is defined as follows:

0 = Not a Statistical Area

1 = Metropolitan Statistical Area

2 = Micropolitan Statistical Area

**CBSA County Status** field identifies a county of a Metropolitan or Micropolitan Statistical Area as either central or outlying. Under the standards, the county (or counties) in which at least 50 percent of the population resides within urban areas of 10,000 or more population, or contain at least 5,000 people residing within a single urban area of 10,000 or more population, is identified as a “central county” (counties). Additional “outlying counties” are included in the CBSA if they meet specified requirement of commuting to or from the central counties. County or equivalent entities form geographic “building blocks” for Metropolitan or Micropolitan Statistical Areas throughout the United States and Puerto Rico.

*Note:*

1. Part of Sullivan City in Crawford County MO (FIPS 29055) was added to St. Louis, MO-IL Metropolitan Statistical Area (Metropolitan Code 41180) effective December 22, 1987. On the AHRF, Crawford County is included in St. Louis, MO-IL Metropolitan Statistical Area.
2. Bedford City, VA (FIPS 51515), a component of the Lynchburg, VA Metropolitan Statistical Area (CBSA 31340), changed to town status and was added to Bedford County, VA (FIPS 51009) with the 2015 updates.
3. Data are carried on the AHRF for Puerto Rico.

### 

### A- 6) Rural/Urban Continuum Codes

The **2013 Rural/Urban Continuum Codes** are from the U.S. Department of Agriculture’s Economic Research Service (ERS) website: <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>. The codes form a classification scheme that distinguishes metropolitan (metro) counties by the population size of their metro area and nonmetropolitan (nonmetro) counties by degree of urbanization and adjacency to a metro area. The official Office of Management and Budget (OMB) metro and nonmetro categories have been subdivided into three metro and six nonmetro categories. Each county in the U.S. is assigned one of 9 codes. This scheme allows researchers to break county data into finer residential groups, beyond metro and nonmetro, particularly for analysis of trends in nonmetro areas that are related to population density and metro influence.

The 2013 Rural/Urban Continuum Code scheme classifies all counties in the United States, including 1,167 metro counties and 1,972 nonmetro counties. Also included are 69 metro municipios and 9 nonmetro municipios in Puerto Rico. Several nonmetro independent cities in Virginia have been combined with the counties of origin by ERS. See note below for cities and counties.

To create the 2013 Rural-Urban Continuum Codes, all U.S. counties and county equivalents were first grouped according to their official metro-nonmetro status, defined by the Office of Management and Budget (OMB) as of February, 2013. OMB determined current metropolitan status by applying population and worker commuting criteria to the results of the 2010 Census and the 2006-2010 American Community Survey (ACS) from the U.S. Census Bureau.

Metro counties are divided into three categories according to the total population size of the metro area of which they are a part: 1 million people or more, 250,000 to 1 million people, and below 250,000. Nonmetro counties are classified along two dimensions. First, they are divided into three urban-size categories (an urban population of 19,999 or more, 2,500 to 20,000, and less than 2,500) based on the total population in the county. Second, nonmetro counties in the three urban-sized categories are sub-divided by whether or not the county is adjacent to one or more metro areas. A nonmetro county is defined as adjacent if it physically adjoins one more metro areas, and has at least 2% of its employed labor force commuting to central metro counties. Nonmetro counties that do not meet these criteria are classified as nonadjacent.

In concept, the 2013 version of the Rural-Urban Continuum Codes is comparable with that of earlier decades. However, in 2000, OMB made major changes in its metro-area delineation procedures, and the Census Bureau changed the way in which rural and urban are measured. Therefore, the 2013 and 2003 Rural-Urban Continuum Codes are not fully comparable to those of earlier years. OMB’s changes added some additional metro areas by no longer requiring that a metro area must have at least 100,000 population if its urbanized area includes no place of at least 50,000 people. More importantly, simplifying the worker commuting criteria that determine outlying metro counties had the effect of adding numerous new outlying counties to metro areas while deleting a smaller number that were previously defined as metro.

No major changes were made in either the metro-nonmetro or urban-rural criteria between 2000 and 2010. However, the decennial census long form was eliminated in 2010 and OMB used 5-year average commuting flow data from the 2006-2010 American Community Survey (ACS) rather than a point in time estimate to delineate metropolitan and micropolitan areas. The 2006-2010 ACS commuting flow data was also used to compute adjacency for the Rural-Urban Continuum Codes. This scheme allows researchers to break county data into finer residential groups, beyond metro and nonmetro, particularly for analysis of trends in nonmetro areas that are related to population density and metro influence.

The 2013 Rural/Urban Continuum Codes are defined as follows:

**CODE METROPOLITAN COUNTIES (1-3)**

01 Counties in metro areas of 1 million population or more

02 Counties in metro areas of 250,000 – 1,000,000 population

03 Counties in metro areas of fewer than 250,000 population

**NONMETROPOLITAN COUNTIES (4-9)**

04 Urban population of 20,000 or more, adjacent to a metro area

05 Urban population of 20,000 or more, not adjacent to a metro area

06 Urban population of 2,500-19,999, adjacent to a metro area

07 Urban population of 2,500-19,999, not adjacent to a metro area

08 Completely rural or less than 2,500 urban population, adjacent to a metro area

09 Completely rural or less than 2,500 urban population, not adjacent to a metro area

Blank Missing Value

*Note:*

1. The following Virginia nonmetro independent cities were combined on the source data with their counties of origin when computing the Rural-Urban Continuum Codes:

**FIPS Code and City FIPS Code and County**

51580 Covington City 51005 Alleghany County

51640 Galax City 51035 Carroll County

51595 Emporia City 51081 Greenville County

51690 Martinsville City 51089 Henry County

51590 Danville City 51143 Pittsylvania County

51530 Buena Vista City 51163 Rockbridge County

51678 Lexington City 51163 Rockbridge County

51620 Franklin City 51175 Southampton County

1. Data are carried on the AHRF for Puerto Rico.

### A- 7) Urban Influence Codes

The **2013 Urban Influence Codes** are from the U.S. Department of Agriculture’s Economic Research Service (ERS) website: <http://www.ers.usda.gov/data-products/urban-influence-codes.aspx>. The 2013 Urban Influence Codes form a classification scheme that distinguishes metropolitan (metro) counties by population size of their metro area, and nonmetropolitan (nonmetro) counties by size of the largest city or town and proximity to metropolitan and micropolitan areas. The standard Office of Management and Budget (OMB) metro and nonmetro categories have been subdivided into two metro and 10 nonmetro categories, resulting in a 12-part county classification.

The 2013 Urban Influence Codes classify all counties and county equivalents in the United States and the Commonwealth of Puerto Rico. These include 1,167 metro counties as well as 641 micro and 1,335 noncore nonmetro counties. In Puerto Rico, the Urban Influence Codes comprised 69 metro, 4 micro, and 4 noncore municipios. Several nonmetro independent cities in Virginia have been combined with their counties of origin by ERS.

The 2013 Urban Influence Codes divide 3,143 counties, county equivalents, and independent cities in the United States into 12 groups. Metro counties are divided into two groups according to the population size of the metro area--those in “large” areas have at least 1 million residents and those “small” areas have fewer than 1 million residents. Nonmetro counties include all counties outside metro areas and are delineated as Micropolitan or noncore using OMB’s classification. Nonmetro micropolitan counties are divided into three groups distinguished by metro size and adjacency: adjacent to a large metro area, adjacent to a small metro area, and not adjacent to a metro area. Nonmetro noncore counties are divided into seven groups distinguished by their adjacency to metro or micro areas and whether or not they contain a town of at least 2,500 residents. A town refers to an incorporated city or town, or a Census Designated Place, which is an entity that has no legal definition. Nonmetro independent cities of Virginia have been combined with their counties of origin. See note below for cities and counties.

The 2013 Urban Influence Codes are based on the OMB metropolitan classification announced in February 2013, which in turn are based on population data from the 2010 Census of Population and commuting data from the 2006-2010 American Community Survey (ACS). Nonmetro counties are defined as adjacent if they abut a metro area (or if nonmetro noncore counties abut a micro area) and have at least 2% of employed persons commuting to work in the core of the metro area (or in the micro area). When a nonmetro county meets the adjacency criterion for more than one metro (or micro) area, it is designated as adjacent to the area to which the largest percentage of its workers commuted.

In concept, the 2013 version of the Urban Influence Codes is comparable with the previous version released in 2003. However, OMB’s release of the 2013 Metropolitan Areas used 5-year average commuting data from the 2006-2010 American Community Survey rather than from the decennial Census, since commuting data are no longer collected as part of the decennial census. The codes released in 2003 were based on a point-in-time commuting measure from the 2000 Census of Population.

Comparisons with versions prior to the 2003 release are more problematic.  OMB made major changes in its metro area delineation procedures for the 2000 Census.  These changes added additional metro areas by no longer requiring that a metro area must have at least 100,000 population if its urbanized area has no place of at least 50,000 people. More importantly, the changes simplified the worker commuting criteria that determine outlying metro counties and added numerous new outlying counties to metro areas while removing the metro status of a smaller number of counties that were previously metro.

The Census Bureau also changed its method for defining rural and urban areas by liberalizing the procedures for delineating urbanized areas of 50,000 or more people, and dropping place boundary requirements in measuring urban or rural population. The procedures used in defining urbanized areas were extended down to clusters of 2,500 or more people, based solely on population density per square mile. In this manner, lightly settled sections of municipalities were treated as rural, and densely settled areas adjoining urban cores were treated as urban, regardless of whether they were incorporated or not. Thus "urban clusters" need not include an incorporated or unincorporated place of 2,500 population, and not all incorporated or unincorporated places of 2,500 population constitute urban clusters. It is therefore not possible to redefine Urban Influence Codes for prior censuses in a manner fully consistent with those of 2003.

**CODE METROPOLITAN**

1 In a large metro area of 1 million residents or more

2 In a small metro area of less than 1 million residents

**NONMETROPOLITAN**

3 Micropolitan area adjacent to a large metro area

4 Noncore adjacent to a large metro area

5 Micropolitan area adjacent to a small metro area

6 Noncore adjacent to a small metro area with a town of at least 2,500

7 Noncore adjacent to a small metro area and does not contain a town of at least 2,500 residents

8 Micropolitan area not adjacent to a metro area

9 Noncore adjacent to a micro area and contains a town of at least 2,500 residents

10 Noncore adjacent to micro area and does not contain a town of at least 2,500 residents

11 Noncore not adjacent to a metro or micro area and contains a town of at least 2,500 or more residents

12 Noncore not adjacent to a metro or micro area and does not contain a town of at least 2,500 residents

Blank Missing Value

*Note:*

1. Adjacent counties have at least 2% of employed residents commuting to the central

counties of the physically adjacent metro or micro area.

1. The following Virginia nonmetro independent cities were combined on the source data with their counties of origin when computing the Urban Influence Codes:

**FIPS Code and City FIPS Code and County**

51580 Covington City 51005 Alleghany County

51640 Galax City 51035 Carroll County

51595 Emporia City 51081Greensville County

51690 Martinsville City 51089 Henry County

51590 Danville City 51143 Pittsylvania County

51530 Buena Vista City 51163 Rockbridge County

51678 Lexington City 51163 Rockbridge County

1. Data are carried on the AHRF for Puerto Rico.

### A- 8) County Typology Codes

The **2015 County Typology Codes** are from Economic Research Service (ERS), U.S. Department of Agriculture, [www.ers.usda.gov](http://www.ers.usda.gov). An area’s economic and social characteristics have significant effects on its development and need for various types of public programs. To provide policy-relevant information about diverse county conditions to policymakers, public officials, and researchers. ERS has developed a set of county-level typology codes that captures a range of economic and social characteristics. Although ERS coded the typologies for all U.S. counties, the thresholds for determining the economic dependence types were set using nonmetro counties only. Most thresholds were roughly set at the nonmetro mean plus one standard deviation. ERS used counties that met the 2013 definition of nonmetro (micropolitan and noncore combined) in analyzing the means. The codes are primarily meant to be useful in the analysis of rural conditions, trends, and program needs. ERS coded metro counties to facilitate comparisons across the country.

The County typology classifies all U.S. counties according to six mutually exclusive (non-overlapping) categories of economic dependence and six overlapping categories of policy-relevant themes.

Codes for the field Economic-Dependent Typology are defined as follows:

0 = Nonspecialized

1 = Farming-dependent county

2 = Mining-dependent county

3 = Manufacturing-dependent county

4 = Federal/State government-dependent county

5 = Recreation

Blank = Missing Value

Codes for all other Typology fields are defined as follows:

0 = No

1 = Yes

Blank = Missing Value

***Economic Types:***

*Farming‑dependent*: 25 percent or more of the county’s average annual labor and proprietor’s earnings were derived from farming, or 16 percent or more of jobs were in farming, as measured by 2010-2012 Bureau of Economic Analysis, Local Area Personal Income and Employment data.

*Mining‑dependent*: 13 percent or more of the county’s average annual labor and proprietors’ earnings were derived from mining, or 8 percent or more of jobs were in mining, as measured by 2010-2012 Bureau of Economic Analysis, Local Area Personal Income and Employment data.

*Manufacturing‑dependent*: 23 percent or more of the county’s average annual average annual labor and proprietors’ earnings were derived from manufacturing, or 16 percent or more of jobs were in manufacturing, as measured by the 2010-2012 Bureau of Economic Analysis, Local Area Personal Income and Employment data.

*Federal/State Government‑dependent*: 14 percent or more of the county’s average annual labor and proprietors’ earnings were derived from Federal/State government during or 9 percent or more jobs were in Federal/State government as measured by 2010-2012 Bureau of Economic Analysis, Local Area Personal Income and Employment data.

*Recreation*: Computed using three data sources: 1) Percentage of wage and salary employment in entertainment and recreation, accommodations, eating and drinking places, and real estate as a percentage of all employment reported by the Bureau of Economic Analysis; 2) Percentage of total personal income reported for these same categories by the Bureau of Economic Analysis; and 3) Percentage of vacant housing units intended for seasonal or occasional use reported in the 2010 Census.

*Nonspecialized*: County did not meet the economic dependence threshold for any one of the other above types, as measured by the 2010-2012 Bureau of Economic Analysis, Local Area Personal Income and Employment and Employment data.

***Policy Types*** (these indicators are not mutually exclusive, a county may be none, one or more policy type)**:**

*Low-education*: 20 percent or more of county residents age 25-64 did not have a high school diploma or equivalent, determined by the American Community Survey 5-year average data for 2008-12.

*Low-employment*: Less than 65 percent of county residents age 25-64 were employed, determined by the American Community Survey 5-year average data for 2008-12.

*Persistent poverty*: 20 percent or more of county residents were poor, measured by the 1980, 1990, 2000 censuses, and the American Community Survey 5-year average data for 2007-11. This code was released in April 2014 by ERS and has been carried on the Area Health Resource File since the 2013-14 release.

*Persistent Child poverty*: 20 percent or more of county related children under 18 were poor, measured in the 1980, 1990, 2000 censuses, and the American Community Survey 5-year average data for 2007-11.

*Population loss*: Number of county residents declined between the 1990 and 2000 censuses and also between the 2000 and 2010 censuses.

*Retirement destination*: Number of residents age 60 and older grew by 15 percent or more between 2000 and 2010 censuses due to net migration.

*Note:*

1. Labor and proprietors’ earnings by place of work are the basis for the economic dependence categories. Each industry’s earnings and employment were calculated separately as a percent of total labor and proprietors’ earnings or total employment in the county in 2010, 2011, and 2012. These percentages were summed, and divided by 3 to obtain annual average percentages. This averaging was done to minimize the effects of any one-year anomaly in an industry’s earnings or employment.
2. County-level estimates of earnings and employment by place of work used to measure economic dependence come from the Bureau of Economic Analysis’ (BEA) Regional Local Area Personal Income and Employment data. The BEA income and employment data used were released in November 2014. The BEA industry data use the North American Industry Classification System (NAICS). Publicly available data (with some industry suppression at the county level) were used for Florida, Massachusetts, Mississippi, New Hampshire and Wyoming. For all other States, unsuppressed data, not publically available, were used to develop the economic classifications.
3. If a county qualified for more than one economic type, it was classified in the industry which accounted for the largest percentage of total earnings.
4. Maui, Hawaii (15009) and Kalawao, Hawaii (15005) were analyzed as combined units on the source file and then each component was assigned the combined unit’s typology codes.
5. The following Virginia independent cities and counties were analyzed as combined units on the source file and then each component was assigned the combined unit’s typology codes:

**SOURCE FILE AREA**  **COMBINED WITH**

Bedford City (51515) Bedford (51019)

Bristol (51520) Washington (51191)

Buena Vista (51530) Rockbridge (51163)

Charlottesville (51540) Albemarle (51003)

Colonial Heights (51570) Dinwiddie (51053)

Covington (51580) Alleghany (51005)

Danville (51590) Pittsylvania (51143)

Emporia (51595) Greensville (51081)

Fairfax City (51600) Fairfax (51059)

Falls Church (51610) Fairfax (51059)

Franklin (51620) Southampton (51175)

Fredericksburg (51630) Spotsylvania (51177)

Galax (51640) Carroll (51035)

Harrisonburg (51660) Rockingham (51165)

Hopewell (51670) Prince George (51149)

Lexington (51678) Rockbridge (51163)

Lynchburg (51680) Campbell (51031)

Manassas (51683) Prince William (51153)

Manassas Park (51685) Prince William (51153)

Martinsville (51690) Henry (51089)

Norton (51720) Wise (51195)

Petersburg (51730) Dinwiddie (51053)

Poquoson (51735) York (51199)

Radford (51750) Montgomery (51121)

Salem (51775) Roanoke (51161)

Staunton (51790) Augusta (51015)

Waynesboro (51820) Augusta (51015)

Williamsburg (51830) James City (51095)

Winchester (51840) Frederick (51069)

The **2014 Persistent Poverty and High Poverty County Typology Codes** are from The Atlas of Rural and Small-Town America, release 10.0 April 2014, Economic Research Service (ERS), U.S. Department of Agriculture, [www.ers.usda.gov](http://www.ers.usda.gov).

The typology codes are defined as follows:

0 = No

1 = Yes

Blank = Missing Value

*Note:*

1. Persistent Poverty is a classification of counties by level of poverty over four decades, where 1 is a persistent poverty county and 0 is all other counties. A county was classified as persistent poverty if 20 percent or more of its resident were poor as measured by the 1980, 1990, and 2000 decennial censuses and the American Community Survey 5-year estimates for 2007-2011.
2. High Poverty is a classification of county, where 1 is a high poverty county and 0 is all other counties. A county was classified as high poverty if 20 percent or more of its residents were poor as measured by the American Community Survey five-year estimates for 2008-2012.
3. Data are carried on the AHRF for Puerto Rico for the High Poverty Typology Code only. The source file did not report Puerto Rico for the Persistent Poverty Typology Code.

### A- 9) HPSA Codes

The **2022 and 2023 Health Professional Shortage Area (HPSA) codes** for Primary Medical Care, Dentists and Mental Health Professionals are from the Health Resources and Services Administration (HRSA), Data Warehouse. HPSA county codes on the AHRF were downloaded from the Data Warehouse on the following dates and reflect designation status as of those dates.

**Year of Data Date Downloaded**

2023 05/01/2023

2022 05/02/2022

Designation status is updated on an ongoing basis. For more details regarding specific types of shortage areas with a county and the most current county designation status, refer to the HRSA website: <http://hpsafind.hrsa.gov/>.

HPSA data for Primary Care, Dentists, and Mental Health Professionals are defined as follows:

1. **Primary Care Practitioners** includenon-Federal doctors of medicine (M.D.) and doctors of osteopathy (D.O.) providing direct patient care who practice principally in one of the four primary care specialties-general or family practice, general internal medicine, pediatrics, and obstetrics and gynecology. Those physicians engaged solely in administration, research and teaching will be excluded. A geographic area will be designated as having a shortage of primary medical care professionals if the following three criteria are met:
   1. The area is a rational area for the delivery of primary medical care services.
   2. One of the following conditions prevails within the area:
2. The area has a population to full-time-equivalent primary care physician ratio of at least 3,500:1.
3. The area has a population to full-time-equivalent primary care physician ratio of less than 3,500:1 but greater than 3,000:1 and has unusually high needs for primary care services or insufficient capacity of existing primary care providers.
4. Primary medical care manpower in contiguous areas are overutilized, excessively distant or inaccessible to the population of the area under consideration.

For additional information regarding HPSA Primary Care Designation Criteria, refer to the HRSA website:

<https://data.hrsa.gov/topics/health-workforce/shortage-areas>

2) **Dental Practitioners** include non-Federal dentists providing patient care. Dentists not in general practice or pedodontics will be excluded. A geographic area will be designated as having a shortage of dental professionals if the following three criteria are met:

1. The area is a rational area for the delivery of dental services.
2. One of the following conditions prevails in the area:
   1. The area has a population to full-time-equivalent dentist ratio of at least 5,000:1.
   2. The area has a population to full-time-equivalent dentist ratio of less than 5,000:1 but greater than 4,000:1 and has unusually high needs for dental services or insufficient capacity of existing dental providers.

C. Dental manpower in contiguous areas are overutilized, excessively distant or inaccessible to the population of the area under consideration.

For additional information regarding HPSA Dental Care Designation Criteria, refer to the HRSA website:

<https://data.hrsa.gov/topics/health-workforce/shortage-areas>

3) The criteria for psychiatric HPSAs were expanded to **Mental Health HPSAs** in 1992 as published in the *Federal Register*, Vol. 57, No. 14; Wednesday, January 22, 1992. Professionals include those non-Federal psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists who meet the definitions set forth in the ruling. To be designated as having a shortage of mental health professionals, a geographic area must meet the following three criteria where non-Federal core mental health professionals provide mental health patient care (direct or other, including consultation and supervisory) in ambulatory or other short-term care settings to residents of the area:

1. The area is a rational area for the delivery of mental health services.
2. One of the following conditions prevails within the area:

1. The area has: a) population-to-core-mental-health-professional ratio greater than or equal to 6,000:1 and a population-to-psychiatrist ratio greater than or equal to 20,000:1 or

b) a population-to-core-professional ratio greater than or equal to 9,000:1 or

c) a population-to-psychiatrist ratio greater than or equal to 30,000:1;

2. The area has unusually high needs for mental services, and has:

a) population-to-core-mental-health-professional ratio greater than or equal to 4,500:1 and a population-to-psychiatrist ratio greater than or equal to 15,000:1 or

b) a population-to-core-professional ratio greater than or equal to 6,000:1, or

c) a population-to-psychiatrist ratio greater than or equal to 20,000:1;

1. Mental health professionals in contiguous areas are overutilitized, excessively distant or inaccessible to residents of the area under consideration.

For additional information regarding HPSA Mental Health Primary Care Designation Criteria, refer to the HRSA website:

<https://data.hrsa.gov/topics/health-workforce/shortage-areas>

4) When the criteria described above are met for a geographic area, the county is designated as a whole county shortage area on the AHRF if the HPSA type description is defined as Geographic or Geographic High Needs for the entire county. Where an entire county does not meet the shortage criteria, but a population group within the area has access barriers, a population group within the county may be designated. Parts of a county (e.g., Minor Civil Divisions or Census Tracts) may be also designated as Geographic or Geographic High Needs. In some cases, facilities may be designated as HPSAs. This applies to correctional facilities and to State mental hospitals. In addition, public and non-profit private facilities located outside designated HPSAs may receive facility HPSA designation if they are shown to be accessible to and serving a designated geographic area or population group HPSA. When a county meets the criteria for only a population group, a partial geographic area and/or facility HPSA, the county is designated as a partial HPSA on the AHRF.

5) HPSA Codes are defined as follows:

0 = None of the county designated as a shortage area;

1 = The whole county designated as a shortage area;

2 = One or more parts of the county designated as a shortage area.

*Note:* HPSAs are provided on the AHRF for US territories of Guam, Puerto Rico and US Virgin Islands.

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### A-10) Contiguous Counties

**Contiguous Counties** were taken from the *United States Department of Commerce, Bureau of the Census, Map of Boundaries of Counties and County Equivalents as of January 1, 1970, U.S. Government Printing Office, 1971, Stock Number 0‑424‑798*. Revisions made to reflect Alaska boroughs and census areas and Virginia independent cities were coded from the *U.S. Bureau of the Census, United States County Outline (base map) Counties and Equivalent Areas of the United States of America* and reflect all new counties and census areas defined through 2023. These fourteen fields contain, for a given county, the FIPS State and County Codes for all counties contiguous to that county. There can be a maximum of fourteen counties contiguous to a given county. Unused fields are blank. Thus, if a county has three counties contiguous to it, the fields for Contiguous Counties # 4‑14 will be blank.

Counties are considered contiguous by water rights to other counties when they both border the same body of water. Islands and peninsulas are considered contiguous to neighboring counties by either water rights or accessibility.

The following Hawaiian counties are considered contiguous by water rights:

**COUNTY CONTIGUOUS TO:**

Hawaii (15001) Maui (15009)

Honolulu (15003) Kauai (15007)

Maui (15009)

Kauai (15007) Honolulu (15003)

Maui (15009) Hawaii (15001)

Honolulu (15003)

The following New York City counties are considered contiguous even though some are separated by water:

**COUNTY CONTIGUOUS TO:**

Bronx, N.Y. (36005) Bergen, N.J. (34003)

New York, N.Y. (36061)

Queens, N.Y. (36081)

Westchester, N.Y. (36119)

Kings, N.Y. (36047) New York, N.Y. (36061)

Queens, N.Y. (36081)

Richmond, N.Y. (36085)

New York, N.Y. (36061) Bronx, N.Y. (36005)

Kings, N.Y. (36047)

Queens, N.Y. (36081)

Richmond, N.Y. (36085)

Queens, N.Y. (36081) Bronx, N.Y. (36005)

Kings, N.Y. (36047)

Nassau, N.Y. (36059)

New York, N.Y. (36061)

Richmond, N.Y. (36085) Essex, N.J. (34013)

Hudson, N.J. (34017)

Middlesex, N.J. (34023)

Union, N.J. (34039)

Kings, N.Y. (36047)

New York, N.Y. (36061)

## B. HEALTH PROFESSIONS

### B- 1) Physicians

*Primary Care Physicians:*

The **2020 and 2021 Non-Federal Primary Care Physician data** arefrom the 2020 and 2021 *American Medical Association Physician Masterfiles* (Copyright). Data are carried for Total Physicians, for M.D.’s and for D.O.’s. The reporting period is as of December 31.

*Note*:

1. Primary Care includes General Family Medicine, General Practice, General Internal Medicine and General Pediatrics. Subspecialties within these specialties are excluded.
2. Fields are carried for Patient Care and Hospital Residents. Patient Care includes Office Based and Hospital Based (FT) Staff.
3. Physicians age 75 and over are excluded.
4. Data are included for Guam, Puerto Rico and the US Virgin Islands.

*M.D. Physicians:*

The **2020 and 2021 AMA Non‑Federal M.D. data** were obtained from the respective year's *American Medical Association Physician Masterfiles* (Copyright). The totals contained on the file are for Total Non‑Federal M.D.'s and are broken out by Specialty and Major Professional Activity, Total and Inactive M.D.'s by Gender, and M.D.'s by Specialty and Age. The reporting period is as of December 31 of the respective year.

*Note:*

* + 1. **Major Professional Activity** classifications are reported by physicians in the Physicians’ Practice Arrangements (PPA) questionnaire. The physician’s professional activity is shown in the two categories of Patient Care and Nonpatient care, the latter category being referred to as Other Professional Activity. Total Patient Care includes Office Based, Hospital Residents (includes Clinical Fellows), and Hospital Based (FT) Staff. Total Hospital Based includes Hospital Residents, and Hospital Based FT Staff. Other Professional Activity includes Administration, Medical Teaching, Research, and Other Activities.
    2. **Office Based Practice** includes physicians engaged in seeing patients. Physicians may be in solo practice, in group practice, two‑physician practice, or other patient care employment. It also includes physicians in patient services such as those provided by pathologists and radiologists.
    3. **Hospital Based Practice** includes physicians employed under contract with hospitals to provide direct patient care. This category includes physicians in residency training and full time members of Hospital Staffs.
    4. **Hospital Full-Time Staff** includes physicians employed under contract with hospitals to provide direct patient care.
    5. **Residents** (all years) include any physician in supervised practice of medicine among patients in a hospital or in its outpatient department with continued instruction in the science and art of medicine by the staff of the facility. These physicians are engaged primarily in patient care.
    6. **Medical Teaching** includes physicians with teaching appointments in medical schools, hospitals, nursing schools, or other institutions of higher learning.
    7. **Medical Research** includes physicians in activities (funded or non-funded) performed to develop new medical knowledge, potentially leading to publication. This category also includes physicians in research fellowship programs distinct from an accredited residency program and primarily engaged in nonpatient care.
    8. **Administration** includes physicians in administrative activities in a hospital, health facility, health agency, clinic, group or any similar organization.
    9. **Other Activity** includes physicians employed by insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, grants, foreign countries, and the like.
    10. **Inactive** includes physicians who are retired, semiretired, working part‑time, temporarily not in practice, or not active for other reasons and indicated they worked 20 hours or less per week.
    11. **Not Classified** includes physicians who did not provide information on their type of practice or their present employment.
    12. Physicians’ fields contain only active physicians with classified activity unless specifically stated that inactive and/or not classified are included.
    13. A physician's self‑designated **practice specialty** (SDPS)is determined, like major professional activity, by the physician from a list of codes included with the PPA questionnaire.
    14. The following subspecialties are included in **Total General Practice:**

General Practice

Family Medicine, General (Family Practice, General prior to 2003)

Family Medicine Subspecialties (Family Practice Subspecialties prior to 2003)

* + 1. The following subspecialties are included in **Medical Specialties Total:**

Allergy and Immunology (beginning in 1990)

Allergy (prior to 1990)

Cardiovascular Disease

Dermatology

Epidemiology (in 2000)

Gastroenterology

Internal Medicine, General (Internal Medicine prior to 1986)

Internal Medicine Subspecialties (beginning in 1986)

Pediatrics, General (Pediatrics prior to 1990)

Pediatric Subspecialties (beginning in 1990)

Pediatric Allergy (prior to 1990)

Pediatric Cardiology

Pulmonary Disease

* + 1. The following subspecialties are included in **Surgical Specialties Total:**

Colon/Rectal Surgery

General Surgery

Neurological Surgery

Obstetrics‑Gynecology, General (OB/Gyn prior to 1990)

Obstetrics‑Gynecology Subspecialties (beginning in 1990)

Ophthalmology

Orthopedic Surgery

Otolaryngology

Plastic Surgery

Thoracic Surgery

Urology

* + 1. The following subspecialties are included in **Other Specialties Total:**

Aerospace Medicine

Anesthesiology

Child & Adolescent Psychiatry

Diagnostic Radiology

Emergency Medicine (beginning in 1981)

Forensic Pathology

General Preventive Medicine

Medical Genetics (beginning in January 1994)

Neurology

Nuclear Medicine (beginning in 1981)

Occupational Medicine

Psychiatry

Pathology, Anatomic/Clinical

Physical Medicine/Rehabilitation

Public Health & General Preventive Medicine

Radiology

Radiation Oncology (Therapeutic Radiology prior to 1986)

Transplant Surgery (part of Surgical Specialties in 2000)

Vascular Medicine (part of Medical Specialties in 2000)

Other Specialties

Unspecified

1. The subspecialty **Nuclear Medicine** was broken out of Radiology in 1981.
2. The subspecialty **Emergency Medicine** was broken out of Other Specialty in 1981.
3. The subspecialty **Therapeutic Radiology** was changed to Radiation Oncology in the 1986 and later data. The data are the same.
4. In 2003, **General Family Practice** and **Family Practice Subspecialties** were changed to **General Family Medicine** and **Family** **Medicine Subspecialties**. The data are the same.
5. In 1986, **Internal Medicine** was broken into **General Internal Medicine** and **Internal Medicine Subspecialties**. The following are included in 2020 and 2021 **Internal Medicine Subspecialties**:

Advanced Heart Failure and Transplant Cardiology (Internal Medicine) (beginning in 2011)

Adolescent Medicine

Clinical Informatics (Internal Medicine) (beginning in 2016)

Critical Care Medicine (Internal Medicine)

Adult Congenital Heart Disease (beginning in 2013)

Diabetes

Endocrinology, Diabetes & Metabolism

Hematology (Internal Medicine)

Hepatology

Hematology/Oncology

Hospitalist

Hospice & Palliative Medicine (Internal Medicine) (beginning in 2008)

Interventional Cardiology

Cardiac Electrophysiology

Infectious Diseases

Clinical & Laboratory Immunology (Internal Medicine)

Internal Medicine Anesthesiology (beginning in 2013)

Geriatric Medicine

Internal Medicine/Nuclear Medicine (in 2010)

Interventional Radiology-Independent (beginning in 2018)

Sports Medicine (Internal Medicine)

Nuclear Cardiology

Nephrology

Nutrition

Oncology

Rheumatology

Sleep Medicine (Internal Medicine) (beginning in 2007)

Transplant Hepatology (Internal Medicine) (beginning in 2007)

1. In 1990, **Pediatrics** was broken into **General Pediatrics** and **Pediatric Subspecialties**. The following are included in 2020 and 2021 **Pediatric Subspecialties**:

Adolescent Medicine

Child Abuse Pediatrics (beginning in 2010)

Clinical Informatics (Pediatrics) (beginning in 2017)

Pediatric Critical Care Medicine

Developmental/Behavioral Pediatrics

Hospice and Palliative Medicine (Pediatrics) (beginning in 2010)

Internal Medicine/Pediatrics

Neurodevelopmental Disabilities (Pediatrics)

Neonatal‑Perinatal Medicine

Pediatric Anesthesiology

Pediatric Allergy

Pediatric Dermatology (beginning in 2007)

Pediatric Endocrinology

Pediatric Hospital Medicine (Pediatrics) (beginning in 2020)

Pediatric Infectious Disease

Pediatrics/Anesthesiology (beginning in 2013)

Pediatric Pulmonology

Medical Toxicology (Pediatrics)

Pediatric Emergency Medicine (Pediatrics)

Pediatric Gastroenterology

Pediatric Hematology/Oncology

Clinical & Laboratory Immunology (Pediatrics)

Pain Management (Physical Medicine & Rehabilitation)

Pediatric Nephrology

Pediatric Rheumatology

Pediatric Transplant Hepatology (beginning in 2011)

Pediatric Rehabilitation Medicine

Sports Medicine (Pediatrics)

Sleep Medicine (Pediatrics) (beginning in 2008)

1. In 1990, **Obstetrics and Gynecology** was broken into **General Obstetrics and Gynecology**, and **Obstetrics and Gynecology Subspecialties**. The following are included in 2020 and 2021 **Obstetrics and Gynecology Subspecialties**:

Female Pelvic Medicine and Reconstructive Surgery (Obstetrics and Gynecology) (beginning in 2011)

Gynecological Oncology

Gynecology

Hospice & Palliative Medicine (Obstetrics & Gynecology) (beginning in 2008)

Maternal and Fetal Medicine

Medical Genetics & Genomic/Maternal-Fetal Medicine (beginning in 2020)

Obstetrics

Critical Care Medicine (Obstetrics & Gynecology)

Reproductive Endocrinology

Complex Family Planning (Obstetrics & Gynecology) (beginning in 2021)

Reproductive Endocrinology/Infertility/Genetics & Genomics (beginning in 2021)

1. In 1993, **Family Practice** was broken into **General Family Practice** and **Family Practice Subspecialties**. In 2003, the name changed to **Family Medicine.**
2. The following are included in 2020 and 2021 **Family Medicine Subspecialties**:

Adolescent Medicine for Family Practice (beginning in 2007)

Clinical Informatics (Family Medicine) (beginning in 2016)

Family Medicine/Preventive Medicine (beginning in 2010)

Geriatric Medicine (Family Medicine)

Sports Medicine (Family Medicine)

Hospice & Palliative Medicine (Family Medicine) (beginning in

2010)

1. Data are included for the following US territories: Guam, Puerto Rico and the US Virgin Islands.

The **2020 and 2021 AMA Federal M.D. Specialty data** were obtained from the 2020 and 2021 *American Medical Association Physician Masterfiles* (Copyright). The totals contained on the file are for Total Federal M.D.'s and are broken out by Specialty and Major Professional Activity.

*Note:*

* + 1. **Federal status** is defined as full‑time employment by the federal government, including the Army, Navy, Air Force, Veteran's Administration, the Public Health Service and other federally funded agencies.
    2. **Major Professional Activity** classifications are reported by the physician in the Census of Physicians' Practice Arrangements questionnaire.
    3. **Residents** (all years) include any physician in supervised practice of medicine among patients in a hospital or in its outpatient department with continued instruction in the science and art of medicine by the staff of the facility. These physicians are engaged primarily in patient care.
    4. **Hospital Full-Time Staff** includes physicians employed under contract with hospitals to provide direct patient care.
    5. **Other Professional Activity** includes Administration, Medical Teaching, Research, and Other. See above notes for AMA Non-Federal M.D. data definitions.
    6. Physicians fields contain only active physicians with classified activity unless specifically stated that inactive and/or not classified are included.

1. A physician's self‑designated **practice specialty** is determined, like major professional activity, by the physician from a list of codes included in the physician on the Physicians' Practice Arrangements questionnaire.
2. The following subspecialties are included in **Total General Practice**: General Practice; Family Medicine, General (Family Practice, General prior to 2003); Family Medicine Subspecialties (Family Practice Subspecialties prior to 2003).
3. In 1990, **Obstetrics and Gynecology** was broken into **Obstetrics and Gynecology**, and **Obstetrics and Gynecology Subspecialties**. The following are included in 2020 and 2021 **Obstetrics and Gynecology Subspecialties**:

Female Pelvic Medicine and Reconstructive Surgery (Obstetrics and Gynecology) (beginning in 2011)

Gynecological Oncology

Gynecology

Hospice & Palliative Medicine (Obstetrics and Gynecology) (beginning in 2008)

Maternal and Fetal Medicine

Medical Genetics & Genomic/Maternal-Fetal Medicine (beginning in 2020)

Obstetrics

Critical Care Medicine (Obstetrics and Gynecology)

Reproductive Endocrinology

Complex Family Planning (Obstetrics & Gynecology) (beginning in 2021)

Reproductive Endocrinology/Infertility/Genetics & Genomics (beginning in 2021)

1. The following subspecialties are included in **Other Medical Subspecialties:**

Allergy and Immunology

Cardiovascular Disease

Dermatology

Epidemiology (in 2000)

Gastroenterology

Pediatric Subspecialties

Pediatric Cardiology

Pulmonary Disease

Internal Medicine Subspecialties

1. The following subspecialties are included in **Other Surgical Subspecialties:**

Colon & Rectal Surgery

Neurological Surgery

Ophthalmology

Orthopedic Surgery

Otolaryngology

Plastic Surgery

Thoracic Surgery

Urological Surgery

1. The following subspecialties are included in **Other Other Subspecialties:**

Aerospace Medicine

Anesthesiology

Child Psychiatry

Diagnostic Radiology

Emergency Medicine

Forensic Pathology

General Preventive Medicine

Medical Genetics (beginning in January 1994)

Neurology

Nuclear Medicine

Occupational Medicine

Public Health and General Preventive Medicine

Physical Health

Physical Medicine & Rehabilitation

Pathology, Anatomic/Clinical

Radiology

Radiation Oncology

Transplantation Surgery (part of Surgical Specialties in 2000)

Vascular Medicine (part of Medical Specialties in 2000)

Other Specialty

Unspecified

1. Data are carried on the AHRF for the following US territories: Guam, Puerto Rico and the US Virgin Islands.

*Physicians by Country of Graduation:*

The **2020 and 2021 Non-Federal Physician Graduate data** arefrom the 2020 and 2021 *American Medical Association Physician Masterfiles* (Copyright). Data are carried for Total Physicians, for M.D.’s and for D.O.’s by country of graduation. The reporting period is as of December 31.

*Note*:

* + 1. Data include those physicians practicing in Total Patient Care which includes Office Based, Hospital Residents and Hospital Based (FT) Staff for graduates of US medical schools, Canadian medical schools and International medical schools.
    2. Data are included for Guam, Puerto Rico and the US Virgin Islands.

*D.O. Physicians:*

The **2020 and 2021 D.O. data are** from the 2020 and 2021 *American Medical Association Physician Masterfiles* (Copyright) and are as of December 31 for the respective year. Total Non-Federal D.O.s and Total Non-Federal D.O.s by major professional category are carried for 2020 and 2021. Data are carried by specialty, gender and age for Non-Federal D.O.’s for 2020 and 2021. Total and Total Active Non-Federal and Federal are also carried for 2020 and 2021.

*Note:*

* 1. **Major Professional Activity** classifications are reported by physicians in the Physicians’ Practice Arrangements (PPA) questionnaire. The physician’s professional activity is shown in the two categories of Patient Care and Nonpatient care, the latter category being referred to as Other Professional Activity. Total Patient Care includes Office Based, Hospital Residents, and Hospital Based (FT) Staff. Other Professional Activity includes Administration, Medical Teaching, Research, and Other Activities.
  2. **Office Based Practice** includes physicians engaged in seeing patients. Physicians may be in solo practice, in group practice, two‑physician practice, or other patient care employment. It also includes physicians in patient services such as those provided by pathologists and radiologists.
  3. **Hospital Full-Time Staff** includes physicians employed under contract with hospitals to provide direct patient care.
  4. **Residents** (all years) include any physician in supervised practice of medicine among patients in a hospital or in its outpatient department with continued instruction in the science and art of medicine by the staff of the facility. These physicians are engaged primarily in patient care.
  5. **Other Professional Activity** includes Administration, Medical Teaching, Research, and Other Activities. Administrationincludes physicians in administrative activities in a hospital, health facility, health agency, clinic, group or any other organization. Medical Teachingincludes physicians with teaching appointments in medical schools, hospitals, nursing schools, or other institutions of higher learning. Medical Researchincludes physicians in activities (funded or non-funded) performed to develop new medical knowledge, potentially leading to publication. This category also includes physicians in research fellowship programs distinct from an accredited residency program and primarily engaged in nonpatient care. Other Activity includes physicians employed by insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, grants, foreign countries, and the like.
  6. **Inactive** includes physicians who are retired, semiretired, working part‑time, temporarily not in practice, or not active for other reasons and indicated they worked 20 hours or less per week.
  7. **Not Classified** includes physicians who did not provide information on their type of practice or their present employment.
  8. Physician fields contain only active physicians with classified activity unless specifically stated that inactive and/or not classified are included.
  9. A physician's self‑designated **practice specialty** (SDPS)is determined, like major professional activity, by the physician from a list of codes included with the PPA questionnaire.
  10. The following are included in **Family Medicine Subspecialties:**

Adolescent Medicine for Family Practice (beginning in 2011)

Clinical Informatics (Family Medicine) (beginning in 2016)

Family Medicine/Preventive Medicine

Geriatric Medicine (Family Medicine)

Sports Medicine (Family Medicine)

Hospice and Palliative Medicine (Family Medicine)

1. The following are included in **Internal Medicine Subspecialties:**

Advanced Heart Failure and Transplant Cardiology (Internal Medicine) (beginning in 2011)

Adolescent Medicine

Clinical Informatics (Internal Medicine) (beginning in 2016)

Critical Care Medicine (Internal Medicine)

Adult Congenital Disease (beginning in 2013)

Diabetes

Endocrinology, Diabetes & Metabolism

Hematology (Internal Medicine)

Hepatology

Hematology/Oncology

Hospitalist

Hospice & Palliative Medicine (Internal Medicine)

Interventional Cardiology

Cardiac Electrophysiology

Infectious Diseases

Clinical & Laboratory Immunology (Internal Medicine)

Internal Medicine/Anesthesiology (beginning in 2013)

Geriatric Medicine

Internal Medicine/Nuclear Medicine (in 2010 and 2011)

Interventional Radiology-Independent (beginning in 2018)

Sports Medicine (Internal Medicine)

Nuclear Cardiology

Nephrology

Nutrition

Oncology

Rheumatology

Sleep Medicine (Internal Medicine)

Transplant Hepatology (Internal Medicine)

1. The following are included in **Pediatric Medicine Subspecialties:**

Adolescent Medicine

Child Abuse Pediatrics

Clinical Informatics (Pediatrics) (beginning in 2017)

Pediatric Critical Care Medicine

Developmental/Behavioral Pediatrics

Hospice and Palliative Medicine (Pediatrics)

Internal Medicine/Pediatrics

Neurodevelopmental Disabilities (Pediatrics)

Neonatal-Perinatal Medicine

Pediatric Anesthesiology

Pediatric Allergy

Pediatric Dermatology

Pediatric Endocrinology

Pediatric Hospital Medicine (Pediatrics) (beginning in 2020)

Pediatric Infectious Disease

Pediatrics/Anesthesiology (beginning in 2013)

Pediatric Pulmonology

Medical Toxicology (Pediatrics)

Pediatric Emergency Medicine (Pediatrics)

Pediatric Gastroenterology

Pediatric Hematology/Oncology

Clinical & Laboratory Immunology (Pediatrics)

Pain Management (Physical Medicine and Rehabilitation)

Pediatric Nephrology

Pediatric Rheumatology

Pediatric Transplant Hepatology (beginning in 2011)

Pediatric Rehabilitation Medicine

Sports Medicine (Pediatrics)

Sleep Medicine (Pediatrics)

1. The following are included in **Obstetrics-Gynecology Subspecialties:**

Female Pelvic Medicine and Reconstructive Surgery (Obstetrics and

Gynecology) (beginning in 2011)

Gynecological Oncology

Gynecology

Hospice & Palliative Medicine (Obstetrics & Gynecology)

Maternal and Fetal Medicine

Medical Genetics & Genomic/Maternal-Fetal Medicine (beginning in 2020)

Obstetrics

Critical Care Medicine (Obstetrics and Gynecology)

Reproductive Endocrinology

Complex Family Planning (Obstetrics & Gynecology) (beginning in 2021)

Reproductive Endocrinology/Infertility/Genetics & Genomics (beginning in 2021)

1. The following subspecialties are included in **Other Specialties:**

Aerospace Medicine

Allergy and Immunology

Cardiovascular Disease

Child Psychiatry

Colon and Rectal Surgery

Dermatology

Diagnostic Radiology

Forensic Pathology

Gastroenterology

General Preventive Medicine

Medical Genetics

Neurological Surgery

Neurology

Nuclear Medicine

Occupational Medicine

Ophthalmology

Otolaryngology

Pathology, Anatomic/Clinical

Pediatric Cardiology

Plastic Surgery

Public Health & General Preventive Medicine

Pulmonary Disease

Radiation Oncology

Radiology

Thoracic Surgery

Transplantation Surgery

Urological Surgery

Vascular Medicine

Other Specialty

Unspecified

1. Data are included for Guam, Puerto Rico and the US Virgin Islands.

### B- 2) Dentists

*Dentists:*

The **2021 and 2022 Dentists with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

* 1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
  2. Data are from the following files as noted:

**Year of Data** **NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A dentist is a person qualified by a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), licensed by the state to practice dentistry, and practicing within the scope of that license. There is no difference between the two degrees: dentists who have a DMD or DDS have the same education. Universities have the prerogative to determine what degree is awarded. Both degrees use the same curriculum requirements set by the American Dental Association's Commission on Dental Accreditation. Generally, three or more years of undergraduate education plus four years of dental school is required to graduate and become a general dentist. State licensing boards accept either degree as equivalent, and both degrees allow licensed individuals to practice the same scope of general dentistry. Additional post-graduate training is required to become a dental specialist.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

The **2020 and 2021 Total Professionally Active Dentists, Dentists by Professional Activity, Private Practice Full-Time and Part-Time Non-Federal Dentists, Dentists by Age, Dentists by Gender** and **Dentists by Specialty** are from the American Dental Association Masterfile. Dentists by age, by specialty and by gender are those licensed non-federal dentists in private practice and include both full time and part time dentists. Beginning with 2010, the ADA adopted a new approach for reporting active dentists which differs from earlier year estimates.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually. Primary reported address was used for 2010 data. Business address was used for later years’ data when available, otherwise primary address was used.
2. **Total Professionally Active** includes dentists whose primary occupation is dental related. This includes the fields Total Full-time and Total Part-time Private Practice; Dental School Faculty; Armed Forces; Other Federal Service; State or Local Government; Hospital Staff Dentist; Graduate Student/Resident; Other Health/Dental Organization Staff; and Part-Time Faculty/Part-Time Practice. Only those identified as active and licensed are included.
3. Full-time dentists work 30 or more hours per week and part-time dentists work less than 30 hours per week.
4. **Other Specialties** include Oral and Maxillofacial Pathology, Oral and maxillofacial radiology, Oral and Maxillofacial Surgery, Endodontics, Orthodontics and Dentofacial Orthopedics, Periodontics, Prosthodontics, and Public Health Dentistry.
5. Data are included for Guam, Puerto Rico and the US Virgin Islands.

### B- 3) Physician Assistants

The **2021 and 2022 Physician Assistants with an NPI** are from The Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A physician assistant is a person who has successfully completed an accredited education program for physician assistant, is licensed by the state and is practicing within the scope of that license. Physician assistants are formally trained to perform many of the routine, time-consuming tasks a physician can do. In some states, they may prescribe medications. They take medical histories, perform physical exams, order lab tests and x-rays, and give inoculations. Most states require that they work under the supervision of a physician.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

### B- 4) Nurses

*Advanced Practice Registered Nurses:*

The **2021 and 2022 Advanced Practice Registered Nurses (APRN) with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the

US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.

1. Data are from the following files as noted:

**Year of Data** **NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. An APRN is a registered nurse having education beyond the basic nursing education and certified by a nationally recognized professional organization in a nursing specialty, or meeting other criteria established by a Board of Nursing. The Board of Nursing establishes rules specifying which professional nursing organization certifications can be recognized for advanced practice nurses and sets requirements of education, training, and experience. APRN includes **advanced practice** **midwife, certified registered nurse anesthetist, clinical nurse specialist, and nurse practitioner**.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

*Nurse Practitioners:*

The **2021 and 2022 Nurse Practitioners with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A nurse practitioner is a registered nurse provider with a graduate degree in nursing prepared for advanced practice involving independent and interdependent decision making and direct accountability for clinical judgment across the health care continuum or in a certified specialty. A nurse practitioner has completed additional training beyond basic nursing education and provides primary health care services in accordance with state nurse practice laws or statutes. Tasks performed by nurse practitioners vary with practice requirements mandated by geographic, political, economic, and social factors. Nurse practitioner specialists include, but are not limited to, family nurse practitioners, gerontological nurse practitioners, pediatric nurse practitioners, obstetric-gynecologic nurse practitioners, and school nurse practitioners.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

*Certified Registered Nurse Anesthetists:*

The **2021 and 2022 Certified Registered Nurse Anesthetists (CRNA) with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A CRNA is a licensed registered nurse with advanced specialty education in anesthesia who, in collaboration with appropriate health care professionals, provides preoperative, intraoperative, and postoperative care to patients and assists in management and resuscitation of critical patients in intensive care, coronary care, and emergency situations. Nurse anesthetists are certified following successful completion of credentials and state licensure review and a national examination directed by the Council on Certification of Nurse Anesthetists. A CRNA is qualified by special training to administer anesthesia in collaboration with a physician or dentist and who can assist in the care of patients who are in critical condition.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

*Advanced Practice Midwives:*

The **2021 and 2022 Advanced Practice Midwives with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. The Advanced practice midwifery encompasses the independent provision of care during pregnancy, childbirth, and the postpartum period; sexual and reproductive health; gynecologic health; and family planning services, including preconception care. Midwives also provide primary care for individuals from adolescence throughout the lifespan as well as care for the healthy newborn during the first 28 days of life. Midwives provide initial and ongoing comprehensive assessment, diagnosis, and treatment. Midwifery care includes health promotion, disease prevention, risk assessment and management, and individualized wellness education and counseling.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

*Clinical Nurse Specialists:*

The **2021 and 2022 Clinical Nurse Specialists (CNS) with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A clinical nurse specialist is a registered nurse who, through a graduate degree program in nursing, or through a formal post-basic education program or continuing education courses and clinical experience, is expert in a specialty area of nursing practice within one or more of the components of direct patient/client care, consultation, education, research and administration.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

### B- 5) Chiropractors

The **2021 and 2022 Chiropractors with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1) Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service Invalid ZIP codes were resolved matching city and state names and manually.

2) Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A chiropractor is a provider qualified by a Doctor of Chiropractic (D.C.), licensed by the State and who practices chiropractic medicine that discipline within the healing arts which deals with the nervous system and its relationship to the spinal column and its interrelationship with other body systems.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

### B- 6) Optometrists

The **2021 and 2022 Optometrists with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data** **NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. Doctors of optometry (ODs) are the primary health care professionals for the eye. Optometrists examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify related systemic conditions affecting the eye. An optometrist has completed pre-professional undergraduate education in a college or university and four years of professional education at a college of optometry, leading to the doctor of optometry (O.D.) degree. Some optometrists complete an optional residency in a specific area of practice. Optometrists are eye health care professionals state-licensed to diagnose and treat diseases and disorders of the eye and visual system.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

### B- 7) Podiatrists

The **2021 and 2022 Podiatrists with an NPI** are from the Centers from Medicare and Medicaid Services (CMS) *National Provider Identifier (NPI) Downloadable File*. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

*Note:*

1. Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.
2. Data are from the following files as noted:

**Year of Data NPI File Date**

2022 1/08/2023

2021 1/09/2022

1. A podiatrist is a person qualified by a Doctor of Podiatric Medicine (D.P.M.) degree, licensed by the state, and practicing within the scope of that license. Podiatrists diagnose and treat foot diseases and deformities. They perform medical, surgical and other operative procedures, prescribe corrective devices and prescribe and administer drugs and physical therapy.
2. Data are carried on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

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## C. HEALTH FACILITIES

*2020 and 2021 Hospital Data:*

All hospital data are from the *AHA Annual Survey of Hospitals* (Copyright) reporting for a twelve‑month period: preferably each reporting facility’s fiscal year. These data have been taken from the *American Hospital Association Annual Survey Database*. Some of these data have been published in the *AHA Guide to the Health Care Field*.

According to the AHA, the survey’s overall response rate averages approximately 80% each year. For hospitals not responding to the survey, AHA reports estimates for most fields included on the AHRF. These include: type of control, service type, length of stay, total beds, number of bassinets and all of the accreditation and affiliation codes as well as many others. In 2021, AHA reported data for 6,129 U.S. hospitals and 69 hospitals in U.S. territories. Of these 6,198 total hospitals, 2,107 failed to respond, and AHA provided previously‑reported data for the fields described above. In 2020, AHA reported data for 6,093 U.S. hospitals and 69 hospitals in U.S. territories. Of these 6,162 total hospitals, 2,085 failed to respond, and AHA provided previously‑reported data for the fields described above.

For hospitals that do not respond at all or do not respond fully to the survey, the AHA reports estimates for most fields reported on the AHRF using two major approaches. First, estimates are generated from regression models for nine key variables – total admissions; total births; total inpatient days; total expenses; total full-time employees; total surgical operations; total outpatient visits; total part-time employees; and total revenue. The current year’s missing value is “predicted” by multiplying the base year data with corresponding coefficients derived from the regression model.

Additionally, for components of the key variables and all other variables, estimates are generated from a matrix of estimators. An estimator is a ratio of two variables, numerators are the variable to estimate; denominators are an indicator variable such as beds, bassinets or a total variable in which the numerator is an additive component.

Refer to the AHA file documentation for identification of specific fields estimated.

To be reported as a "hospital", an institution must have at least six inpatient beds, cribs or pediatric bassinets which shall be continually available for the care of patients.

*Note*:

1. Data are carried on the AHRF for the following U.S. territories: Puerto Rico, Guam and the US Virgin Islands.
2. **Hospital Beds** are the number of beds regularly maintained (set up and staffed for use) for inpatients as of the close of the reporting period. If the hospital owns and operates a nursing home type unit/facility then total facility beds is a combined total of hospital plus nursing home unit beds. Newborn bassinets are excluded. Hospitals normally set up and assign staffed beds based on an expected patient population, and they evaluate this number routinely. Licensed beds are the maximum number of beds that a licensure agency, usually a state or other governing body, allows to have in operation at any given time. This number is sometimes referred to as the hospital’s bed capacity. The number of licensed beds is always greater than the number of staffed beds. AHA focuses on staffed beds because it is the number of beds routinely available to receive patients, and it is highly correlated to other statistics including admissions, inpatient days, expenses, revenue and staffing.
3. **Hospital Admissions** are the number of patients, excluding newborns, accepted for inpatient service during the reporting period. The number includes patients who visit the emergency room and are later admitted for inpatient services. Neonatal and swing admissions are included.
4. **Neonatal Intensive Care** and **Neonatal Intermediate Care Beds** are excluded from Bassinets Set Up and Staffed.
5. **Other Long-Term Care, Beds Set Up** and **Other Care, Beds Set Up** may vary from year to year depending on what specialties are broken out that year.
6. For the purposes of the AHA survey, a nursing home type unit/facility provides long-term care for the elderly or other patients requiring chronic care in a non-acute setting in any of the following categories: skilled nursing care, intermediate care or other long-term care. The nursing home type units/facilities are to be owned and operated by the hospital.

### C- 1) Hospital Type

*Short Term General Hospitals:*

**Short Term General Hospitals** are those coded as follows by the American Hospital Association: Length of Stay = '1', Short‑term; Type of Service = '10', General medical and surgical. These hospitals provide non‑specialized care, and the majority of their patients stay for fewer than 30 days.

*Short Term Non‑General Hospitals:*

**Short Term Non‑General Hospitals** are those coded as follows by the American Hospital Association: Length of Stay = '1', Short‑term; Type of Service not equal '10', General medical and surgical. These hospitals provide specialized care, and the majority of their patients stay for fewer than 30 days.

*Short Term Hospitals:*

**Short Term Hospitals** are those coded as follows by the American Hospital Association: Length of Stay = '1'. These hospitals may provide either non-specialized or specialized care, and the majority of their patients stay for fewer than 30 days.

*Long Term Hospitals:*

**Long Term Hospitals** are those coded as follows by the American Hospital Association: Length of Stay = '2', Long‑term. These hospitals may provide either non‑specialized or specialized care, and the majority of their patients stay for 30 or more days.

*Short Term Non‑General and Long Term Hospitals:*

**Short Term Non‑General and Long Term Hospitals** are those coded by the American Hospital Association as either:

1. Short Term Non‑General Hospitals (see definition above), or
2. Long Term Hospitals (see definition above).

*Short Term Community Hospitals:*

The following definition of **"Community Hospitals"** was obtained from the American Hospital Association: "Community hospitals are defined as all non‑federal short‑term general and other special hospitals, excluding hospital units of institutions." (Children's hospitals are also included in this type of hospital).

**2020 and 2021 Short Term Community Hospitals** are those coded as follows:

Yr. of Current Data = Current year, e.g., '2021';

Hospital Control = State, County, City, City‑County or

Hospital District/Authority Government, Nonfederal;

Church‑Operated or Other Not‑For‑Profit, Nongovernment;

Individual, Partnership or Corporation, For‑Profit, Nongovernment;

Hospital Type = General Medical and Surgical;

Obstetrics and Gynecology;

Eye, Ear, Nose and Throat;

Rehabilitation;

Orthopedic;

Other Specialty;

Children's General Medical and Surgical;

Children's Eye, Ear, Nose and Throat;

Children's Rehabilitation;

Children's Orthopedic;

Children's Other Specialty;

Length of Stay = Short‑term.

*Length of Stay (LOS):*

**Length of Stay (LOS)** is defined as the following:

If a separate long-term unit is reported and long-term admissions are greater than one-half of total admissions, then LOS is 2; otherwise LOS is 1.

If a separate long-term unit is not reported and the ratio of inpatient days to admissions is thirty or greater, then LOS is 2; otherwise LOS is 1.

*Veterans Administration Hospitals:*

**2020 and 2021 Veterans Administration Hospitals** are those coded as follows by the American Hospital Association: Hospital Control = '45'.

*Psychiatric Hospitals:*

**2020 and 2021 Psychiatric Hospitals** provide diagnostic and therapeutic services to patients with mental or emotional disorders.

*Rehabilitation Hospitals:*

**2020 and 2021 Rehabilitation Hospitals** provide a comprehensive array of restoration services for people with disabilities and all support services necessary to help them attain their maximum functional capacity.

*Children’s General Medical and Surgical Hospitals:*

**2020 and 2021 Children’s General Medical and Surgical Hospitals** provide diagnostic and therapeutic services primarily to children and adolescents for a variety of medical conditions, both surgical and nonsurgical.

*Children’s Psychiatric Hospitals:*

**2020 and 2021 Children’s Psychiatric Hospitals** provide diagnostic and therapeutic services primarily to children with mental or emotional disorders.

*Acute Long-Term Care Hospitals:*

**2020 and 2021 Acute Long-Term Care Hospitals** provide high acuity interdisciplinary services to medically complex patients that require more intensive recuperation and care than can be provided in a typical nursing facility.

*General Medical and Surgical Hospitals:*

**2020 and 2021 General Medical and Surgical Hospitals** provide diagnostic and therapeutic services to patients for a variety of medical conditions, both surgical and nonsurgical.

*Chronic Disease Hospitals:*

**2020 and 2021Chronic Disease Hospitals** provide medical and skilled nursing services to patients with long-term illnesses who are not in an acute phase, but who require an intensity of services not available in nursing homes.

*Intellectual Disabilities Hospital:*

**2020 and 2021 Intellectual Disabilities Hospital (formerly Institution for the Mentally Retarded)** provides health-related care on a regular basis to patients with developmental or intellectual disabilities who cannot be treated in a skilled nursing unit.

### C- 2) Hospital Services (or Facilities)

The number of short term general and number of short term non-general/long term hospitals or hospital subsidiaries which report that they provide certain inpatient and outpatient services were extracted from the 2021 *AHA Annual Survey of Hospitals* (Copyright). The availability of a subset of these services are published in the *AHA Guide to the Health Care Field* (termed as "Facility Codes") for all hospital types.

### C- 3) Hospital Employment

**2020 and 2021 Full‑Time Equivalent Personnel** and number of **Personnel by Occupational Category and Type of Hospital** were extracted from the 2020 and 2021 *AHA Annual Survey of Hospitals* (Copyright), respectively.

*Note*:

1. **Personnel fields** include full-time (35 hours or more) and part-time (less than 35 hours) personnel who were on the hospital/facility payroll at the end of the hospital’s reporting period. Religious orders for whom dollar equivalents were reported are included. Private duty nurses, volunteers and all personnel whose salary is financed entirely by outside research grants are excluded. Physicians and dentists who are paid on a fee basis are also excluded.
2. **Nursing home personnel** are included in all personnel fields except #FTE Total Hospital Personnel and Total Hospital Personnel, Full-Time and Part-Time.
3. **Full‑time equivalent personnel** are calculated by AHA as the number of full‑time personnel plus one‑half the number of part‑time personnel.
4. **# FTE Total Facility Personnel for Short Term General Hospitals** and for **Short‑Term Non‑General and Long Term Hospitals** includes Physicians and Dentists, R.N.s, L.P.N.s and L.V.Ns, Medical and Dental Residents/Interns, Other Trainees and the AHA category Other Personnel.
5. **# FTE Other Trainees** includes all trainees except Medical and Dental Residents/Interns.
6. **# FTE All Other Personnel for Veteran's Hospitals** includes L.P.N.s and L.V.N.s, Medical and Dental Residents/Interns, Other Trainees and the AHA category Other Personnel.
7. Beginning with 2010 data, vacancy data are reported for hospital personnel. A vacancy is defined as a budgeted staff position which is unfilled as of the last day of the reporting period and for which the hospital is actively seeking either a full-time or part-time permanent replacement. The number reported is as of the last day of the hospital’s reporting period.
8. Data are carried on the AHRF for the following U.S. territories: Puerto Rico, Guam and the US Virgin Islands.

### C- 4) Medicare Fee-For-Service Readmission Data

**The 2020 and 2021 Medicare Fee-For-Service Readmission data** are from the Geographic Variation Public Use File (February 2023), Centers for Medicare and Medicaid Services (CMS). The February 2023 Geographic Variation Public Use File includes data for 2007 through 2021; this update supersedes data on earlier releases. These public use files are based primarily on information from CMS’s Chronic Condition Data Warehouse (CCW), which contains 100 percent of Medicare claims for beneficiaries who are enrolled in the fee-for-service (FFS) program as well as enrollment and eligibility data.

Data include Medicare beneficiaries who have no months of HMO enrollment and both Part A (hospital insurance) and Part B (medical insurance) for whatever portion of the year they are covered by FFS Medicare (i.e., they have no months of A-only or B-only coverage). Beneficiaries who died in the year are included.

Medicare Beneficiary FFS Hospital Readmission Rate has two decimals.

*Note:*

1. Data are suppressed where count of beneficiaries is less than 11.
2. Medicare Beneficiary FFS Acute Hospital Readmission is the total count of inpatient readmissions within 30 days of an acute hospital stay during the reference period. Medicare Beneficiary FFS Hospital Readmission Rate is the percent of inpatient readmissions within 30 days of an acute hospital stay during the reference period.
3. Data are reported for the US Virgin Islands.

### C- 5) Preventable Hospital Stays Rate

The **2020 Preventable Hospital Stays Rate** data are from the County Health Ranking (CHR) 2023 Trends Data file. The **2019 Preventable Hospital Stays Rate** data are from the County Health Ranking (CHR) 2022 Trends Data file. The data source for these files is the Centers for Medicare & Medicaid Services Office of Minority Health’s Mapping Medicare Disparities (MMD) Tool. For more information regarding these data, the CHR website <http://www.countyhealthrankings.org> should be referenced. The method for calculating Preventable Hospitals Stays Rate has changed from the original fields. Please read the notes below for the current methodology.

*Note:*

1. Preventable Hospital Stays is the hospital discharge rate for ambulatory care-sensitive conditions per 100,000 fee-for-service Medicare enrollees ages 18 and older. This measure is age-adjusted.
2. As noted above, effective with the CHR 2019 Trends Data file, the data source and the method for calculating Preventable Hospital Stays Rate have changed from prior years and the data on the current AHRF cannot be compared to earlier years.
3. Ambulatory care-sensitive conditions include: diabetes with short- or long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, dehydration, bacterial pneumonia, or urinary tract infection.
4. Medicare enrollees are ages 18 years or older enrolled in Medicare fee-for-service Part A. Individuals enrolled in Medicare Advantage at any point during the year are excluded. In addition, beneficiaries who died during the year, but otherwise were continuously enrolled up until the date of death, as well as beneficiaries who became eligible for enrollment following the first of the year, but were continuously enrolled from that date to the end of the year, are included in the analysis population.
5. Hospitalization for ambulatory-care sensitive conditions, diagnoses usually treatable in outpatient services, suggests that the quality of care provided in the outpatient setting was not accessible. The measure may also represent a tendency to overuse emergency room and urgent care as a main source of care.

### C- 6) Nursing and Other Health Facilities

The **2021 and 2022 Provider of Services data** are from the Centers for Medicare and Medicaid Services’ (CMS) *Quality Improvement Evaluation System (QIES)* database. The Medicare is a Federal insurance program providing a wide range of benefits for specific periods of time through providers and suppliers participating in the program. The Act designates those providers and suppliers that are subject to Federal health care quality standards. The Federal Government makes payments for services through designated intermediaries and carriers to the providers and suppliers. The data carried on the AHRF include the number of active Medicare-certified providers for the following types of facilities:

**CMS PROVIDER TYPE CATEGORY OF PROVIDER**

**Skilled Nursing Facilities (SNF), including:**

**- SNF/NF, Dually Certified** Category 02

**- SNF/NF, Distinct Part** Category 03

**- SNF** Category 04

Defined as a facility (meeting specific regulatory certification requirements) which primarily provides inpatient skilled nursing care and related services to patients who require medical, nursing or rehabilitative services but does not provide the level of care or treatment available in a hospital. Skilled nursing care can only be performed by a licensed nurse, either a registered nurse or a licensed practical nurse. A dually-certified facility is both a Medicare Skilled Nursing Facility and a Medicaid nursing facility. A Distinct Part SNF/NF operates as a component of, or ‘distinct part’ of a larger organization such as a hospital.

**Home Health Agencies** Category 05

Defined as an agency or organization which is primarily engaged in providing skilled nursing services and other therapeutic services. It has policies established by a group of professionals (associated with the agency or organization), including one or more physicians and one or more registered professional nurses, to govern the services which it provides.

**Nursing Facilities** Category 10

Defined as a facility which primarily provides skilled nursing care and related services for the rehabilitation of injured, disabled, or sick persons, or on a regular basis, health related care services above the level of custodial care to other than individuals with intellectual disabilities.

**Rural Health Clinics (RHC)** Category 12

The Rural Health Clinic Services Act of 1977 was enacted to address an inadequate supply of physicians serving Medicare patients in rural areas and to increase the use of non-physician practitioners such as nurse practitioners (NPs) and physician assistants (PAs) in rural areas. An RHC is an outpatient center that provides medically-necessary primary health services and qualified preventive health services furnished by a RHC practitioner. The clinic must be located in a medically under-served area that is not urbanized as defined by the U. S. Census Bureau.

**Ambulatory Surgical Centers (ASC)** Category 15

An ASC for Medicare purposes is a distinct entity that operates exclusively for the purpose of furnishing outpatient surgical services to patients who do not require hospitalization and in which the expected duration of services does not exceed 24 hours following admission. The ASC must enter into a “participating provider” agreement with CMS.

**Hospice s** Category 16

Defined as a public agency or private organization or a subdivision of either that is primarily engaged in providing care to terminally ill individuals, meets the conditions of participation for hospices, and has a valid Medicare provider agreement. Although some hospices are located as part of a hospital, nursing home, or home health agency, hospices must meet specific Federal requirements and be separately certified and approved for Medicare participation.

**Community Mental Health Centers (CMHC)** Category 19

A CMHC must provide 4 core services:

1. Outpatient services, including specialized outpatient services for children, the elderly, individuals who are chronically ill, and residents of the CMHC’s mental health services area who have been discharged from inpatient treatment at a mental health facility.
2. 24 hour-a-day emergency care services.
3. Day treatment, or other partial hospitalization services, or psychosocial rehabilitation services.
4. Screening for patients being considered for admission to State mental health facilities to determine the appropriateness of such admission.

**Federally Qualified Health Centers (FQHC)** Category 21

FQHC are safety net providers that primarily provide services typically furnished in an outpatient clinic. FQHCs include community health centers, migrant health centers, health care for the homeless health centers, public housing primary care centers and health center program “look-alikes.” They also include outpatient health programs or facilities operated by a tribe or tribal organization or by an urban Indian organization.

*Note:*

1. Aleutians, AK (02010) was broken into Aleutians East and Aleutians West. Data from the source that were reported in Aleutians, AK were put in Aleutians West (02016) on the AHRF.
2. Data on the AHRF includes data for Puerto Rico, Guam, and the Virgin Islands.

### C- 7) Community Health Centers (CHC)

**The 2022 and 2023 Community Health Centers (CHC), Grantees Only** are from the Health Resources and Services Administration (HRSA) Health Center Service Delivery and Look-Alike Sites file, Data Warehouse <https://data.hrsa.gov/data/download>. Community Health Centers are Health Center Program grantees (health center applicant) that receive funding to target a general underserved community or population (as opposed to targeted funding to serve one of the statutorily defined special populations: migrant/seasonal farmworkers and their families, persons experiencing homelessness, and/or residents of public housing).

Data for each year are as of:

**Year of Data Data as of Date**

2023 03/06/2023

2022 03/08/2022

*Note:*

1) The term “grantees” is used to refer to organizations that receive grants under the Health Center Program as authorized under section 330 of the Public Health Service Act, as amended. It does not refer to Federally Qualified Health Center (FQHC) Look-

Alikes or clinics that are sponsored by tribal or Urban Indian Health Organizations, except for those that receive Health Center Program grants.

1. Data are reported for Guam, Puerto Rico and the US Virgin Islands.

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### C- 8) National Health Service Corps (NHSC)

**The 2023 National Health Service Corps (NHSC) Sites and Providers** for Total, Primary Care, Dental, and Mental Health are from the Health Resources and Services Administration (HRSA)’s Division of National Health Service Corps, within the Bureau of Health Workforce. **The 2022 National Health Service Corps (NHSC) Sites and Providers** for Total, Primary Care, Dental and Mental Health are from the Health Resources and Services Administration (HRSA), Data Warehouse.Data for each year are as of:

**Year of Data Data as of Date**

2023 07/07/2023

2022 06/01/2022

During 2023 the system used to track the NHSC program has gone through a modernization which now uses a Location ID rather than UDS number to identify sites. The NHSC has been building healthy communities by connecting NHSC participants to areas of the United States dedicated to ensuring access to health care for everyone, preventing disease and illness and caring for the most vulnerable populations who may otherwise go without care. The NHSC programs provide scholarships and student loan repayment for health care professionals engaged in providing comprehensive primary care medical, dental and mental health care in areas across the country with a shortage of health care professionals. The NHSC participants fulfill their service requirements by working at NHSC-approved sites located in Health Professions Shortage Areas (HPSAs), which are communities with limited access to care. The FTE Provider fields have two decimal places.

*Note:*

1. NHSC health professionals can be assigned to one or more sites, therefore a count of individuals assigned to sites would over-count the actual number of providers. Each provider spends a certain amount of time at a site, and their involvement at a site is measured in Full Time Equivalents (FTE). FTE is the amount of time a provider is working at a particular site relative to a full-time schedule of 40 hours per week. If a provider is working 40 hours per week at a site then the FTE value for that provider is 1.00, and if a provider is working 20 hours per week at a site then the FTE value for that provider is 0.50. If a provider is working more than 40 hours per week at one or more sites they will still be counted as a maximum of 1.00 FTE. In these scenarios, the FTE calculation per site will be based on percentage of time spent at each site. For example, if a provider is working 30 hours at one site and 20 hours at another they will be considered 0.60 FTE at one site and 0.40 at the other. NHSC participants serve in NHSC-approved sites designated by HRSA as being in a HPSA (Health Profession Shortage Area).
2. Data are reported for Guam, Puerto Rico and the US Virgin Islands.

## D. UTILIZATION

All **Hospital Utilization data** are from the *AHA Annual Survey of Hospitals* (Copyright) reporting for 12‑month periods in 2020 and 2021. These data have been extracted from the AHA Hospital Database and have been published in the *AHA Guide to the Health Care Field*. See Section C above for information concerning the sources and definitions of hospital types. The utilization figures available can be broken down into the following four categories.

*Note*: Data are reported for Guam, Puerto Rico and the US Virgin Islands.

### D- 1) Utilization Rate

The **Utilization rate** is the result of dividing the total inpatient days by the product of 365 times the number of beds. This differs from the figure published in the *AHA Guide to the Health Care Field* in that the latter includes an adjustment for the number of outpatients seen.

### D- 2) Inpatient Days

**Inpatient Days** for short term general hospitals and short term non-general and long term hospitals are available for 2020 and 2021. Inpatient Days are also available for selected individual short term hospitals and long term hospitals, for short term community hospitals, and for veteran’s hospitals for 2020 and 2021.

*Note*: Inpatient days are the number of adult and pediatric days of care, excluding newborn days of care, rendered during the entire reporting period. Neonatal and swing admissions are included.

### D- 3) Outpatient Visits

**Outpatient utilization** consists of emergency visits, other visits (including clinic and referred visits), and total visits. Total Outpatient Visits for short term general hospitals, short term non‑general hospitals and long term hospitals and for Veterans hospitals are available for 2020 and 2021.

*Note*: An outpatient visit is defined as a visit by a patient not lodged in the hospital while receiving medical, dental, or other services. Each visit an outpatient makes to a discrete unit constitutes one visit regardless of the number of diagnostic and/or therapeutic treatments that the patient receives.

### D- 4) Surgical Operations and Operating Rooms

**2020 and 2021 number of Surgical Operations by Patient Status** (i.e., inpatient versus outpatient) are tallied for short term general hospitals, and short term non‑general and long term hospitals which were open in each of the respective years. Number of Surgical Operations are also available for Veterans hospitals which were open in 2020 and 2021. **Number of Operating Rooms** are available for short term general hospitals and short term non-general and long term hospitals for 2020 and 2021.

### D- 5) Medicare Fee-For-Service Emergency Department Data

**The 2020 and 2021 Medicare Fee-For-Service Emergency Department Visits data** are from the Geographic Variation Public Use File (February 2023), Centers for Medicare and Medicaid Services (CMS). The February 2023 Geographic Variation Public Use File includes data for 2007 through 2021; this update supersedes data on earlier releases. These public use files are based primarily on information from CMS’s Chronic Condition Data Warehouse (CCW), which contains 100 percent of Medicare claims for beneficiaries who are enrolled in the fee-for-service (FFS) program as well as enrollment and eligibility data.

Data include Medicare beneficiaries who have no months of HMO enrollment and both Part A (hospital insurance) and Part B (medical insurance) for whatever portion of the year they are covered by FFS Medicare (i.e., they have no months of A-only or B-only coverage). Beneficiaries who died in the year are included.

*Note:*

1) Data are suppressed where count of beneficiaries is less than 11.

2) Medicare Beneficiary Emergency Department Visits is the total count of inpatient or hospital outpatient emergency department visits. Emergency Department Visits per 1,000 Medicare Beneficiaries is the rate per 1,000 beneficiaries of inpatient or hospital outpatient emergency department visits.

3) Data are reported for the US Virgin Islands.

## E. EXPENDITURES

### E- 1) Hospital Expenditures

The total reported **hospital expenditures** and the number of hospitals reporting expenses for short term general hospitals, short term non‑general and long term hospitals, and for Veterans Hospitals are recorded for the years 2020 and 2021.

*Note*: Data are reported for Guam, Puerto Rico and the US Virgin Islands.

### E- 2) Medicare Fee-For-Service Cost Data

**The 2020 and 2021 Medicare Fee-For-Service Cost data** are from the Geographic Variation Public Use File (February 2023), Centers for Medicare and Medicaid Services (CMS). The February 2023 Geographic Variation Public Use File includes data for 2007 through 2021; this update supersedes data on earlier releases. These public use files are based primarily on information from CMS’s Chronic Condition Data Warehouse (CCW), which contains 100 percent of Medicare claims for beneficiaries who are enrolled in the fee-for-service (FFS) program as well as enrollment and eligibility data.

Data include Medicare beneficiaries who have no months of HMO enrollment and both Part A (hospital insurance) and Part B (medical insurance) for whatever portion of the year they are covered by FFS Medicare (i.e., they have no months of A-only or B-only coverage). Beneficiaries who died in the year are included.

Total Actual, Standardized, and Standardized Risk-Adjusted Medicare Costs; Actual, Standardized, and Standardized Risk-Adjusted Per Capita Medicare Costs; Inpatient Actual and Per Capita Medicare Costs; Inpatient Actual Cost as a % of Total Actual Costs; Inpatient per User Actual Medicare Costs; and % Medicare Beneficiaries using Inpatient Services have two decimals.

*Note:*

1. Data are suppressed where count of beneficiaries is less than 11.
2. Actual Medicare costs, standardized Medicare costs, and standardized risk-adjusted Medicare costs are carried. Cost is standardized to remove geographic differences in payment rates for individual services as a source of variation. To standardize cost, CMS examined Medicare’s various FFS payment systems and identified the factors that lead to different payment rates for the same service. In general, those factors are adjustments that Medicare makes to account for local wages or input prices, and extra payments that Medicare makes to advance other program goals, such as compensating certain hospitals for the cost of training doctors. CMS then estimated what Medicare would have paid for each claim without those adjustments.
3. Medicare FFS Beneficiary Inpatient (IP) Users with covered stay is number of Medicare beneficiaries using hospital inpatient services with at least one covered stay.
4. Data are reported for the US Virgin Islands.

### E- 3) Medicare Advantage Rates

**The 2022 and 2023 Medicare Advantage Risks Part A and B Payment Rates** were obtained from the Centers for Medicare and Medicaid Services *Medicare Advantage Ratebook File*. A Medicare Advantage Plan is a type of Medicare health plan offered by a private company that contracts with Medicare to provide all the Part A (hospital insurance) and Part B (supplemental medical insurance) benefits. Plans include Health Maintenance Organizations, Preferred Provider Organizations, Private Fee-for-Service Plans, Special Needs Plans, and Medicare Medical Saving Accounts Plans. Medicare Advantage Plans are sometimes called “Part C” or “MA Plans”. Those enrolled get Part A and Part B coverage from the Medicare Advantage Plan and not Original Medicare.

The Affordable Care Act (ACA) established a new blended benchmark as the Medicare Advantage county rate, effective 2012. Beginning in 2012, county rates were determined by blending two components: an applicable amount (pre-Affordable Care Act rate set under section 1853(k)(1) of the Act) and a specified amount (new Affordable Care Act rate set under section 1853(n)(2) of the Act). As required under section 1853(n)(4) of the Act, the blended benchmark is capped at the level of the 1853(k)(1) applicable amount. County rates represent the upper limit that the government will pay Medicare Advantage Plans, on a standardized basis, per person per month for coverage of original Medicare benefits. Beginning in 2015, Medicare Advantage Payment Rates are reported by 5% bonus rate, 3.5% bonus rate and 0% bonus rate. For more information regarding Medicare Payment Rates, the CMS website <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Ratebooks-and-Supporting-Data.html> should be referenced.

*Note:*

1. All rates include Medicare Improvements for Patients and Providers Act (MIPPA) indirect medical education (IME) deduction.
2. Rates do not include Program of All-inclusive Care for the Elderly (PACE) plans.
3. Data are included on the AHRF for Guam, Puerto Rico and the US Virgin Islands. In the US Virgin Islands, St. Thomas and St. John are reported combined. On the AHRF, the data are carried in St. Thomas (78030) and St. John (78020) is reported as missing.

### E- 4) Veteran Expenditures Data

**The 2020 and 2021 Veteran Expenditures data are** from the Office of Policy and Planning, Department of Veterans Affairs. The source for each year is noted below:

**YEAR OF SOURCE FILES**

**DATA**

2021 FY21 Geographic Distribution of VA Expenditures (GDX) Report.

2020 FY20 Geographic Distribution of VA Expenditures (GDX) Report.

*Note*:

1. A Veteran, as defined in the U.S. Code Title 38, is a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable. Active military, naval, or air service includes (1) active duty which represents full-time duty in the Armed Forces, other than active duty for training or (2) any period of active/inactive duty for training which the individual concern was disabled. “Veterans” excludes current service members (i.e., active duty personnel who have not yet separated), those dishonorably discharged, those whose active duty was training only, and those who have previously separated but are on active duty as of the estimation date. For more information go to: <http://www.ssa.gov/OP_Home/comp2/D-USC-38.html>.
2. Patients receiving treatment at a VAhealth care facility data are provided by the Allocation Resource Center (ARC). A patient is counted as a unique patient in each division from which they receive care. For example, if a patient receives Primary Care at one VA facility and specialty care from another VA facility, he/she will be counted as a unique patient in each division.
3. Medical Care Expenditures are rounded to the nearest thousand dollars ($000s). For example, $500 to $1,000 are rounded to $1; $0 to $499 are rounded to $0.
4. Medical Care Expenditures include dollars for medical services, medical administration, facility maintenance, educational support, research support, and other overhead items. Medical Care expenditures do not include dollars for construction or other non-medical support. Data are provided by the Allocation Resource Center (ARC).
5. Medical Care Expenditures are based on where patients live instead of where care is delivered.
6. Data are suppressed for counties where number of patients seen in a VA facility is less than 10 and for the next smallest county to prevent imputing any counties with a value of less than 10.
7. Data are carried on the AHRF for Puerto Rico and Guam.

## F. POPULATION

### F- 1) Population Estimates

The **2021 and 2022** **Population Estimates** are from the Census Bureau and include the calculated number of people living in an area as of July 1. The estimated population is calculated from a components of change model that incorporates information on natural change (births, deaths) and net migration (net internal migration, net international migration) that has occurred in an area since a Census 2020 reference date for 2021 and 2022 estimates. The source for each year of data is noted below:

**YEAR OF SOURCE FILES FOR U.S.**

**DATA**

2022 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2020 to July 1, 2022.

2021 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2020 to July 1, 2021.

**YEAR OF SOURCE FILES FOR PUERTO RICO**

**DATA**

2022 Annual Estimates of the Resident Population for Puerto Rico Municipos: April 1, 2020 to July 1, 2022.

2021 Annual Estimates of the Resident Population for Puerto Rico Municipos: April 1, 2020 to July 1, 2021.

*Note*:

1) Beginning with the 2022 source file, the Census Bureau began using Connecticut’s nine planning regions replacing the eight counties which ceased to function as governmental and administrative entities in 1960. Below are the population estimates for the nine planning regions. On the AHRF, 2022 population estimates for the eight Connecticut counties are carried as missing.

**Region** **2022 Estimate Population**

Capitol Planning Region 981,447

Greater Bridgeport Planning Region 327,286

Lower Connecticut River Valley Planning Region 176,622

Naugatuck Valley Planning Region 454,083

Northeastern Connecticut Planning Region 96,196

Northwest Hills Planning Region 113,234

South Central Connecticut Planning Region 573,244

Southeastern Connecticut Planning Region 280,403

Western Connecticut Planning Region 623,690

1. Data are included on the AHRF for Puerto Rico and Guam. Guam data are from the U.S. Census Bureau, International Data Base.

The **2020 and 2021 Population Estimates 65+** are from the U.S. Census Bureau. The sources for each year of data are noted below:

**YEAR OF SOURCE FILES FOR U.S.**

**DATA**

2021 Annual County Resident Population Estimates by Age, Sex and Race and Hispanic origin: April 1, 2020 to July 1, 2021.

2020 Annual County Resident Population Estimates by Age, Sex and Race and Hispanic origin: April 1, 2010 to July 1, 2020.

**YEAR OF** **SOURCE FILES FOR PUERTO RICO**

**DATA**

2021 Annual County and Puerto Rico Municipios Resident Population Estimates by Selected Age Groups and Sex: April 1, 2020 to July 1, 2021.

2020 Annual County and Puerto Rico Municipios Resident Population Estimates by Selected Age Groups and Sex: April 1, 2010 to July 1, 2020.

*Note:* The data on the AHRF for Guam are from the International Data Base, U.S. Census Bureau.

The 2**020 and 2021 Population Estimates by Characteristic: Gender, Race and Hispanic Origin** are from the U.S. Census Bureau. The sources for each year of data are noted below:

**YEAR OF SOURCE FILES FOR U.S.**

**DATA**

2021Annual County Resident Population Estimates by Age, Sex and Race and Hispanic origin: April 1, 2020 to July 1, 2021.

2020Annual County Resident Population Estimates by Age, Sex and Race and Hispanic origin: April 1, 2010 to July 1, 2020.

**YEAR OF** **SOURCE FILES FOR PUERTO RICO**

**DATA**

2021 Annual County and Puerto Rico Municipios Resident Population Estimates by Selected Age Groups and Sex: April 1, 2020 to July 1, 2021.

2020 Annual County and Puerto Rico Municipios Resident Population Estimates by Selected Age Groups and Sex: April 1, 2010 to July 1, 2020.

*Note*:

1. Total Population will equal the sum of White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander and Two or more races.
2. The sum of White Non-Hispanic and White Hispanic equals Total White population. The sum of Black/African American Non-Hispanic and Black/African American Hispanic equals Black/African American population.
3. Individuals of Hispanic Origin may be of any race and are included in the counts by race for White (total), Black/African American (total), American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander and Two or more races. Therefore, when calculating total population, Hispanic Origin should not be included in the calculation.
4. The 2020 estimates are based on the 2010 Census and were created without incorporation or consideration of the 2020 Census results. The estimates add births to, subtract deaths from, and add net migration to the enumerated resident population from the 2010 Census. The enumerated resident population is the total population (citizen and noncitizen) with usual residence in the 50 states, the District of Columbia and Puerto Rico. The 2021 estimates are based on a Blended Base Process. The three sources used to create the Blended Base are 2020 Census PL94-171 Redistricting File, 2020 Demographic Analysis Estimates and Vintage 2020 Postcensal Population Estimates.
5. Data by race are not carried for Puerto Rico on the source file. Therefore, Total Male and Total Female Population are the only fields carried.
6. Data on the AHRF for Guam are from the Bureau of Census of the Census International Data Base. Total Male and Total Female Population are the only fields carried. Data by race are not available from the source.

The **2021 and 2022 Population Estimates in Group Quarters** are from the U.S. Census Bureau. The source for each year of data is noted below:

**YEAR OF SOURCE FILE**

**DATA**

2022 Annual Resident Population Estimates, Estimated Components of

Resident Population Change, and Rates of the Components of Resident

Population Change for States and Counties: April 1, 2020 to July 1, 2022.

2021 Annual Resident Population Estimates, Estimated Components of

Resident Population Change, and Rates of the Components of Resident

Population Change for States and Counties: April 1, 2020 to July 1, 2021.

*Note:*

1) Group quarters are places where people live or stay other than the usual house, apartment, or mobile home. Two general types of group quarters are recognized: institutional (for example, nursing homes, mental hospitals or wards, hospitals or wards for chronically ill patients, hospices, and prison wards) and non-institutional (for example, college or university dormitories, military barracks, group homes, shelters, missions, and flophouses). Group quarters may have housing units on the premises for staff or guests.

1. Beginning with the 2022 source file, the Census Bureau began using Connecticut’s nine planning regions replacing the eight counties which ceased to function as governmental and administrative entities in 1960. Below are the population estimates for the nine planning regions. On the AHRF, the eight Connecticut counties are carried as missing.

**Region** **2022 Group Pop Estimates**

Capitol Planning Region 42,691

Greater Bridgeport Planning Region 10,760

Lower Connecticut River Valley Planning Region 7,207

Naugatuck Valley Planning Region 7,473

Northeastern Connecticut Planning Region 1,678

Northwest Hills Planning Region 2,391

South Central Connecticut Planning Region 27,098

Southeastern Connecticut Planning Region 11,805

Western Connecticut Planning Region 8,633

### F- 2) Population Counts and Number of Families and Households

*2020 Census Population Counts:*

**2020 Census population by race/ethnicity** are from the *2020 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* The race categories for Census 2020 are defined as follows:

White - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as “White” or report responses such as German, Irish, English, Italian, Lebanese, and Egyptian. This category also includes groups such as Polish, French, Iranian, Slavic, Cajun, Chaldean, etc.

Black or African American - A person having origins in any of the Black racial groups in Africa. It includes people who indicate their race as “Black or African American” or report responses such as African America, Jamaican, Haitian, Nigerian, Ethiopian, or Somali This category also includes groups such as Ghanaian, South African, Barbadian, Kenyan, Liberian, Bahamian, etc.

American Indian or Alaska Native - A person having origins in any of the peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment. This category includes people who indicate their race as “American Indian or Alaska Native” or report responses such as Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, or Nome Eskimo Community.

Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, India, China, the Philippine Islands, Japan, Korea, or Vietnam. It includes people who indicate their race as Asian Indian, Chinese, Filipino, Korean, Japanese, Vietnamese, and Other Asian or provide other detailed Asian responses such as Pakistani, Cambodian, Hmong, Thai, Bengali, Mien, etc.

Native Hawaiian or Other Pacific Islander – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as Native Hawaiian, Chamorro, Samoan, and Other Pacific Islander or provide other detailed Other Pacific Islander responses such as Palauan, Tahitian, Chuukese, Pohnpeian, Saipanese, Yapese, etc.

Some Other Race (one race) – Includes all other responses not included in “White,” “Black or African American,” “American Indian or Alaska Native,” “Asian,” and “Native Hawaiian or Other Pacific Islander” race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Two or More Races – People may choose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. The race response categories shown on the questionnaire are collapsed into five minimum race groups identified by OMB and the Census Bureau’s “Some Other Race” category. For data product purposes, “Two or More Races” refers to combinations of two or more of the following race categories:

1. White

2. Black or African American

3. American Indian or Alaska Native

4. Asian

5. Native Hawaiian or Other Pacific Islander

6. Some Other Race

The federal government considers race and Hispanic origin to be two separate and distinct concepts. The data on Hispanic or Latino population were derived from answers to a question that was asked of all people. The 2020 Census Hispanic origin question included three detailed checkboxes (Mexican, Puerto Rican, Cuban), along with a “Yes, another Hispanic, Latino or Spanish origin” checkbox, updated example groups, and a write-in area to collect additional detailed responses. The terms “Hispanic,” “Latino,” and “Spanish” are used interchangeably. Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before arrival in the United States. People who identify their origins as Hispanic, Latino, or Spanish may be of any race.

When comparing 2020 Census data to prior years, it is important to note that the questionnaires have changed over time. For detailed information regarding differences between the 2020 Census and earlier ones, refer to the census website [www.census.gov](http://www.census.gov).

*Note:*

1. Total Census Population will equal the sum of White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race and Two or more Races.
2. Total Population, One Race will equal the sum of White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander and Some Other Race.
3. Individuals of Hispanic Origin may be of any race and are included in the counts by race for White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race and Two or more Races. Therefore, when calculating total population, Hispanic Origin should not be included in the calculation.
4. Non-Hispanic/Latino Population will equal the sum of White Non-Hispanic, Black/African American Non-Hispanic, American Indian/Alaska Native Non-Hispanic, Asian Non-Hispanic, Native Hawaiian/Other Pacific Islander Non-Hispanic, Some Other Race Non-Hispanic and Two or more Races Non-Hispanic.
5. Data are included on the AHRF for Puerto Rico for the 2020 Census population.
6. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile*. Non-Hispanic population counts for Guam do not include counts by race.
7. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*.
8. Due to COVID-19 restrictions impacting data collection for the 2020 Census of the U.S. Virgin Islands, data tables reporting social and economic characteristics do not include the group quarters population in the table universe. As a result, impacted 2020 data tables should not be compared to 2010 and other past census data tables reporting the same characteristics. The Census Bureau advises data users to verify table universes are the same before comparing data across census years. For more information about data collection limitations and the impacts on the U.S. Virgin Islands' data products, see the [2020 Island Areas Censuses Technical Documentation](https://www.census.gov/programs-surveys/decennial-census/technical-documentation/island-areas-censuses.html).
9. Due to operational changes for military installation enumeration, the 2020 Census of Guam data tables reporting housing, social, and economic characteristics do not include housing units or populations living on Guam's U.S. military installations in the table universe. As a result, impacted 2020 data tables should not be compared to 2010 and other past census data tables reporting the same characteristics. The Census Bureau advises data users to verify table universes are the same before comparing data across census years. For more information about operational changes and the impacts on Guam's data products, see the [2020 Island Areas Censuses Technical Documentation](https://www.census.gov/programs-surveys/decennial-census/technical-documentation/island-areas-censuses.html).

*2010 Census Population Counts:*

**2010 Census population by race/ethnicity** are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* The race categories for Census 2010 are defined as follows:

White - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as “white” or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.

Black or African American - A person having origins in any of the Black racial groups in Africa. It includes people who indicate their race as “Black, African Am., or Negro” or report entries such as African America, Kenyan, Nigerian, or Haitian.

American Indian or Alaska Native - A person having origins in any of the peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment. This category includes people who indicate their race as “American Indian or Alaska Native” or report entries such as Navajo, Blackfeet, Inupiat, Yup’ik, or Central American Indian groups or South American Indian groups.

Asian – A persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, Indian, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicate their race as “Asian Indian,” “Chinese,” “Filipino,” “Korean,” “Japanese,” “Vietnamese,” and “Other Asian” or provide other detailed Asian responses.

Native Hawaiian or Other Pacific Islander – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as “Native Hawaiian,” “Guamanian or Chamorro,” “Samoan,” and “Other Pacific Islander” or provide other detailed Pacific Islander responses.

Some Other Race (one race) – Includes all other responses not included in “White,” “Black or African American,” “American Indian or Alaska Native,” “Asian,” and “Native Hawaiian or Other Pacific Islander” race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Two or More Races – People may choose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. The race response categories shown on the questionnaire are collapsed into five minimum race groups identified by OMB and the Census Bureau’s “Some Other Race” category. “Two or More Races” refers to combinations of two or more of the following race categories:

1. White

2. Black or African American

3. American Indian or Alaska Native

4. Asian

5. Native Hawaiian or Other Pacific Islander

6. Some Other Race

The federal government considers race and Hispanic origin to be two separate and distinct concepts. The data on Hispanic or Latino population were derived from answers to a question that was asked of all people. The terms “Hispanic,” “Latino,” and “Spanish” are used interchangeably. Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before arrival in the United States. People who identify their origins as Hispanic, Latino, or Spanish may be of any race.

When comparing 2010 Census data to prior years, it is important to note that the questionnaires have changed over time. For detailed information regarding differences between the 2010 Census and earlier ones, refer to the census website [www.census.gov](http://www.census.gov).

*Note:*

1. Total Census Population (F04530-10) will equal the sum of White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race and Two or more Races.
2. Total Population, One Race (F13325-10) will equal the sum of White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander and Some Other Race.
3. Individuals of Hispanic Origin may be of any race and are included in the counts by race for White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race and Two or more Races. Therefore, when calculating total population, Hispanic Origin should not be included in the calculation.
4. Non-Hispanic/Latino Population will equal the sum of White Non-Hispanic, Black/African American Non-Hispanic, American Indian/Alaska Native Non-Hispanic, Asian Non-Hispanic, Native Hawaiian/Other Pacific Islander Non-Hispanic, Some Other Race Non-Hispanic and Two or more Races Non-Hispanic.
5. Data are carried for Hoonah-Angoon Census Area, AK (02105), Skagway Municipality, AK (02230), Prince of Wales-Hyder Census Area, AK (02198), Petersburg Census Area, AK (02195) and Wrangell City and Borough, AK (02275).
6. Data are included on the AHRF for Puerto Rico for the 2010 Census population.
7. 2010 Census Population data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
8. Total Census Population (F04530-10) for Guam will equal the sum of White, Black/African American, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race, Hispanic/Latino, and Two or more Races. Some Other Race includes American Indian/Alaska Native which is not carried separately. Hispanic/Latino Population is included in Guam’s total population unlike all other U.S., Puerto Rico and U.S. Virgin Island population counts where Hispanic/Latino is an origin and can be any race.
9. Total Population, One Race (F13325-10) for Guam will equal the sum of White, Black/African American, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race and Hispanic/Latino.
10. 2010 Census Population data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

**2020 Census age and gender** data are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*.

*Note:*

1. The data on age were derived from answers to a two-part question (i.e., age and date of birth). The age classification for a person in census tabulations is the age of the person in completed years as of April 1, 2020, the census reference date. Both age and date of birth responses are used in combination to determine the most accurate age for the person as of the census reference date. Inconsistently reported and missing values are assigned or allocated based on the values of other variables for that person, from other people in the household, from administrative records, from people in other households, or from other group quarters residents (i.e., hot-deck imputation)
2. Data are included on the AHRF for Puerto Rico.
3. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile* .
4. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*.

**2010 Census age and gender** data are from the *2010 Census of Population and Housing: Summary File 1 (SF1).* Individuals of Hispanic/Latino Origin are included in the counts by race (White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Some Other Race and Two or more Races). Therefore when calculating a total, Hispanic/Latino Origin should not be included in the calculations. The exception to this is any White Non-Hispanic field, which excludes individuals of Hispanic/Latino Origin.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. The age classification for a person in census tabulation is the age of the person in completed years as of April 1, 2010, the census reference date. Both age and date of birth responses are used in combination to determine the most accurate age for the person as of the census reference data.
3. Data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
4. Total population by age and gender for Guam will equal the sum of White, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race, and Two or more Races. Some Other Race includes Black/African American and American Indian/Alaska Native and Hispanic/Latino which are not carried separately. Note Hispanic/Latino Population is included in the Guam’s total population unlike all other U.S., Puerto Rico and U.S. Virgin Island population counts where Hispanic/Latino is an origin and can be any race.
5. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
6. Total population by age and gender for the U.S. Virgin Islands will equal the sum of White, Black/African American, Some Other Race, and Two or more Races. Some Other Race includes American Indian/Alaska Native, Asian, and Native Hawaiian/Other Pacific Islander which are not carried separately.

*2020 and 2021 Population (Persons):*

**2020 and 2021** **Population** (**Persons)** estimates are from the *CAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income* file, U.S. Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. The 2021 data are from the November 16, 2022 file. The 2020 data are from the November 16, 2021 file. Data are downloaded from Regional Economic Accounts, Local Area Personal Income downloads: <https://apps.bea.gov/regional/downloadzip.cfm>.

*Note:*

1. BEA uses the Census Bureau mid-year population estimates. The 2020 estimates reflect population estimates available March 2021. The 2020 estimates are based on the 2010 Census. The 2021 estimates reflect population estimates available March 2022. The 2021 estimates are based on the 2020 Census.
2. Data for the Virginia city of Galax (normally included in Grayson county ‑ 51077) have been included in Carroll county (51035) in the source data.
3. Data for the Virginia city of Colonial Heights (normally included in Chesterfield county ‑ 51041) have been included in Dinwiddie county (51053) in the source data.
4. The source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

**SOURCE FILE AREA**  **COMBINED WITH**

**FIPS COUNTY**

**Hawaii**

Kalawao County (15005) Maui (15009)

**Virginia**

Bedford City (51515) Bedford (51019)

Bristol (51520) Washington (51191)

Buena Vista (51530) Rockbridge (51163)

Charlottesville (51540) Albemarle (51003)

Colonial Heights (51570) Dinwiddie (51053)

Covington (51580) Alleghany (51005)

Danville (51590) Pittsylvania (51143)

Emporia (51595) Greensville (51081)

Fairfax City (51600) Fairfax (51059)

Falls Church (51610) Fairfax (51059)

Franklin (51620) Southampton (51175)

Fredericksburg (51630) Spotsylvania (51177)

Galax (51640) Carroll (51035)

Harrisonburg (51660) Rockingham (51165)

Hopewell (51670) Prince George (51149)

Lexington (51678) Rockbridge (51163)

Lynchburg (51680) Campbell (51031)

Manassas (51683) Prince William (51153)

Manassas Park (51685) Prince William (51153)

Martinsville (51690) Henry (51089)

Norton (51720) Wise (51195)

Petersburg (51730) Dinwiddie (51053)

Poquoson (51735) York (51199)

Radford (51750) Montgomery (51121)

Salem (51775) Roanoke (51161)

Staunton (51790) Augusta (51015)

Waynesboro (51820) Augusta (51015)

Williamsburg (51830) James City (51095)

Winchester (51840) Frederick (51069)

**2020 Median Age by race and gender** are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*. Refer to 2020 Census Population Counts for definition of race/ethnicity.

*Note:*

1. This measure divides the age distribution into two equal parts: one-half of the cases falling below the median value and one-half above the value.
2. Data are included on the AHRF for Puerto Rico.
3. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile* . Data by race are not carried.
4. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*. Data by race are not carried.

**2010 Median Age by race and gender** are from the *2010 Census of Population and Housing: Summary File 1 (SF1).* These fields have one decimal point. Refer to 2010 Census Population Counts for definition of race/ethnicity.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. This measure divides the age distribution into two equal parts: one-half of the cases falling below the median value and one-half above the value.
3. Data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder. Data by race are not carried.
4. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
5. Data for American Indian/Alaska Native, Asian and Native Hawaiian/Other Pacific Islander, which are not carried separately, are included in Other Race for the U. S. Virgin Islands.

*Rural Population:*

**2020 Rural Population** data are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*. For 2020, rural consists of all territory, population, and housing units located outside urban areas. See Urban Population for definition of urban areas. For the 2020 Census, the urban and rural classification was applied to the 50 states, the District of Columbia, and Puerto Rico.

*Note:* Data are included on the AHRF for Puerto Rico.

**2010 Rural Population** data are from the *2010 Census of Population and Housing: Summary File 1 (SF1) Urban/Rural Update, U.S. Census Bureau*. The definition for rural consists of all territory, population, and housing units outside of Urban Areas and Urban Clusters. See Urban Population for definition of Urban Areas and Clusters.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. Data on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
3. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

*Marriages and Divorces:*

The **2016-2020 and 2017-2021 Percent Females Divorced and Number Divorced Females** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. Divorced includes people who are legally divorced and who have not remarried. Those without a final divorce decree are classified as “separated.” For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent Females Divorced has one decimal place.

*Note:*

1. Before 2008, the marital status and marital history was asked of all people. Beginning in 2008, the question on marital status was asked only for people 15 years old and over.
2. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

*Population for Foreign and Urban Populations:*

**2020 Urban Population** data are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*. For the 2020 Census, the Census Bureau classified as urban all territory, population, and housing units located within densely developed urban areas of at least 2,000 housing units or at least 5,000 people. The Census Bureau delineates urban area boundaries that represent densely developed territory, encompassing residential, commercial, and other nonresidential urban land uses. In general, this territory consists of areas of high housing unit density, high population density, and urban land use resulting in a representation of the “urban footprint.” For the 2010 Census and American Community Survey data tabulations during the decade leading up to 2020, the Census Bureau identified two types of urban areas: urbanized areas of at least 50,000 people and urban clusters of at least 2,500 and less than 50,000 people. Beginning with the 2020 Census, the Census Bureau stopped making the distinction between urbanized areas and urban clusters. The Census Bureau does not specifically define “suburban,” but land use, population, and housing that data users typically consider suburban are included within the Census Bureau’s urban definition. Percent Urban Population has one decimal point. For data on the AHRF, the 2020 Census urban and rural classification was applied to the 50 states, the District of Columbia, and Puerto Rico.

*Note:* Data are included on the AHRF for Puerto Rico.

**2010 Census Urban Population Counts** are from the *2010 Census of Population and Housing: Summary File 1 (SF1) Urban/Rural Update, U.S. Census Bureau*. For the 2010 Census, the Census Bureau classified as urban all territory, population, and housing units located within urbanized areas (UAs) and urban clusters (UCs). An urbanized area consists of densely developed territory that contains 50,000 or more people. An urban cluster consists of densely settled territory that has at least 2,500 people but fewer than 50,000 people. Rural consists of all territory, population, and housing units outside of UAs and UCs. Percent Urban Population has one decimal point. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. Data on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
3. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

**2016-2020 and 2017-2021 Foreign Born Population** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. The foreign born population includes anyone who was not a U.S. citizen at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen.

*Note:* Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

*Non-English Speaking Persons:*

**2016-2020 and 2017-2021 Non-English Speaking Persons by age** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. These fields include data for persons who reported they spoke a language other than English and indicated their ability to speak English. These fields include data for persons who reported they spoke a language other than English and indicated their ability to speak English “not well” or “not at all”. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:* Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

*Number of Families and Households:*

**2020 Group Quarters** data are from the *2020 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.*

*Note:*

1. All people not living in housing units are classified by the Census Bureau as living in group quarters. Group quarters are places where people live or stay, in a group living arrangement that are owned or managed by an entity or organization providing housing and/or services for the residents. There are two general categories of group quarters: institutional and noninstitution.
2. Institutional group quarters are facilities that house those who are primarily ineligible, unable, or unlikely to participate in the labor force while residents. The following population fields carried on the AHRF are in this category: Correctional Institutions for Adults; Juvenile Facilities; Nursing Facilities/Skilled-Nursing Facilities; and Other Institutional Facilities. Other Institutional Facilities include: Mental (psychiatric) hospitals and psychiatric units in other hospitals; Hospitals with patients who have no usual home elsewhere; In-patient hospice facilities (both free-standing and units in hospitals); Military treatment facilities with assigned patients; and Residential schools for people with disabilities.
3. Noninstitutional group quarters are facilities that house those who are primarily eligible, able, or likely to participate in the labor force while residents. Noninstitutional Group Quarters include: College/University student housing; Military quarters; Emergency and transitional shelters (with sleeping facilities) for people experiencing homelessness; Soup kitchens, regularly scheduled mobile food vans, and targeted non-sheltered outdoor locations; Group homes intended for adults; Residential treatment centers for adults; Maritime/Merchant vessels, Workers’ group living quarters and Job Corps centers; Living quarters for victims of natural disasters; and Other noninstitutional group quarters.
4. Data are included on the AHRF for Puerto Rico.
5. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile* . Data for population in Group Quarters and Population in Noninstitutional Group Quarters are included.
6. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*. Data for population in Group Quarters and Population in Noninstitutional Group Quarters are included.

**2020 Family and Household** data are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*.

*Note:*

1. **Household** A household includes all the people who occupy a housing unit. People not living in households are classified as living in group quarters.
2. **Housing Unit** A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other people in the building and that have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living arrangements. Both occupied and vacant housing units are included in the housing unit inventory. Boats, recreational vehicles (RVs), vans, tents, railroad cars, and the like are included only if they are occupied as someone’s current place of residence.
3. **Relationship to Householder: Householder**—In most cases, the householder is the person, or one of the people, in whose name the home is owned, being bought, or rented and who is listed as Person 1 on the census questionnaire. If there is no such person in the household, any adult household member 15 years old and over could be designated as the householder (i.e., Person 1).
4. **Relationship to Householder: Spouse**—Includes a person married to and living with the householder. The categories “oppositesex husband/wife/spouse” and “same-sex husband/wife/spouse” include people in formal marriages, as well as people in common-law marriages.
5. **Relationship to Householder: Child**—The “child” category includes a son or daughter by birth, a stepchild, or adopted child of the householder, regardless of the child’s age or marital status. The category excludes sons-in-law, daughters-in-law, and foster children. Biological Son or Daughter—The son or daughter of the householder by birth. Adopted Son or Daughter—The son or daughter of the householder by legal adoption. If a stepson, stepdaughter, or foster child has been legally adopted by the householder, the child is then classified as an adopted child. Stepson or Stepdaughter—The son or daughter of the householder through marriage but not by birth, excluding sons-in-law and daughters-in-law. If a stepson or stepdaughter of the householder has been legally adopted by the householder, the child is then classified as an adopted child. Own Children—A child under 18 years who is a son or daughter by birth, a stepchild, or an adopted child of the householder is included in the “own children” category. If a foster child is related to the householder, respondents are advised to select the appropriate relative category, such as grandchild, or include in the “Other relative” category.
6. **Family Household (Family)**—A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder’s family in census tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may be comprised of a group of people unrelated to the householder or one person living alone—these are called nonfamily households. Unmarried partner households, both opposite-sex and same-sex, are included in the family households category only if there is at least one additional person related to the householder by birth or adoption.
7. **Family Type:** Families are classified by type as either a “married couple family” or “other family” according to the sex of the householder and the presence of relatives. Married Couple Family—A family in which the householder and his or her spouse are enumerated as members of the same household.
8. **Other Family:** Male householder, no spouse present—A family with a male householder and no spouse of the householder present. Female householder, no spouse present—A family with a female householder and no spouse of the householder present.
9. **Comparability**—The category “foster child” was dropped because of space limitations on the 2010 questionnaire. The category “roomer or boarder” was dropped in 2020. Foster children in 2010 and roomers or boarders in 2020 are included in the category “Other nonrelatives” and cannot be tabulated separately. As a result, caution should be exercised when comparing 2020 with 2010; data for all of the nonrelative categories can be collapsed when comparing. The categories “husband and wife” and “unmarried partner” were expanded to “opposite-sex husband/wife/spouse,” “same-sex husband/wife/spouse,” “opposite-sex unmarried partner,” and “same-sex unmarried partner” in 2020. The 2020 spouse and unmarried partner categories can be collapsed back to the 2010 categories. The term “husband-wife” family in tabulations has been replaced by “married couple” family. In the 2010 tabulations, same-sex married couples were categorized as unmarried partners. For the 2020 tabulation, same-sex married couples are retained in the data as married couple families. In the 2020 Census, spouses were collected as same-sex spouses and opposite-sex spouses.
10. Data are included on the AHRF for Puerto Rico.
11. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile* . Data by race are not carried.
12. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*. Data by race are not carried.

**2010 Family, Household, and Group Quarters** data are from the *2010 Census of Population and Housing: Summary File 1(SF1).*

*Note:*

1. A family consists of a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couples are included in the families category if there is at least one additional person related to the householder by birth or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may be a group of unrelated people or one person living alone.
2. A household includes all the people who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living arrangements. In the 2010 Census data products, the count of households or householders equals the count of occupied housing units.
3. Average family size is calculated by dividing the number of people in families by the total number of families or family householders. This field has two decimal places.
4. Average household size is obtained by dividing the number of people in households by the number of households. This field has two decimals.
5. All people not living in housing units are classified by the Census Bureau as living in group quarters. Group quarters are places where people live or stay in a group living arrangement, which are owned or managed by an entity or organization providing housing and/or services for the residents. There are two general categories of group quarters, institutional and noninstitution.
6. Institutional group quarters are facilities that house those who are primarily ineligible, unable, or unlikely to participate in the labor force while residents. The following population fields carried on the AHRF are in this category: Correctional Institutions for Adults; Juvenile Facilities; Nursing Facilities/Skilled-Nursing Facilities; Mental (Psychiatric) Hospitals and Psychiatric Units in Other Hospitals; and Other Institutional Facilities. Other Institutional Facilities include: Hospitals with patients who have no usual home elsewhere; In-patient hospice facilities; Military treatment facilities with assigned patients; and Residential schools for people with disabilities.
7. Noninstitutional group quarters are facilities that house those who are primarily eligible, able, or likely to participate in the labor force while residents. The following population fields carried on the AHRF are in this category: Noninstitutional Group Quarters and Group Homes for Adults. Noninstitutional Group Quarters include: College/University student housing; Military quarters; Emergency and transitional shelters (with sleeping facilities) for people experiencing homelessness; Residential treatment centers for adults; Maritime/merchant vessels, workers’ group living quarters and Job Corps centers; and Other noninstitutional facilities.
8. A husband-wife family is a family in which the householder and his or her spouse of the opposite sex are enumerated as members of the same household.
9. An unmarried-partner household is a household other than a ‘husband-wife household’ that includes a householder and an unmarried partner. An ‘unmarried partner’ can be of the same sex or of the opposite sex as the householder. An ‘unmarried partner’ in an ‘unmarried-partner household’ is an adult who is unrelated to the householder but shares living quarters and has a close personal relationship with the householder. Responses of ‘same-sex spouse’ were edited by the Census Bureau during processing to ‘unmarried partner’.
10. Data are included on the AHRF for Puerto Rico.
11. Data are on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder. Data for American Indian/Alaska Natives households, which are not reported separately, are included in the Some Other Race field for number of households.
12. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder. Data for American Indian/Alaska Native, Asian and Native Hawaiian/Other Pacific Islander, which are not carried separately, are included in Other Race.

### F- 3) Population Percents

*Population Percents:*

**2010 and 2020 Percent Population by race/ethnicity and Hispanic or Latino Origin** datawere calculated from the 2010 and 2020 Census Redistricting Data (Public Law 94-171) Summary Files prepared by the US Census Bureau. These fields have one decimal place. Refer to F-2 for definitions of race/ethnicity and Hispanic/Latino origin.

*Note:*

1. Data are included on the AHRF for Puerto Rico for the 2010 and 2020 Census Populations.
2. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile*.
3. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*.
4. 2010 data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder. Data for American Indian/Alaska Natives, which are not reported separately, are included in the Some Other Race field.
5. 2010 data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

*Percent Foreign Born Population:*

**2016-2020 and 2017-2021 Percent Foreign Born Population** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. The foreign born population includes anyone who was not a U.S. citizen or a U.S. national at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. Percent Foreign Born Population has one decimal place.

*Note:* Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F- 4) Labor Force

The **2021 and 2022 Labor Force** data are from the *Local Area Unemployment Statistics File*, for each respective year, obtained from the Bureau of Labor Statistics. Data are for persons 16 years and older, and include the following: Civilian Labor Force, Number Employed, Number Unemployed and Unemployment Rate. The current Population Survey (CPS) estimates are a key input to the Local Area Unemployment Statistics. The **2021 and 2022 Unemployment Rate** is carried as a percentage with one decimal.

*Note:*

1. Civilian labor force includes all persons 16 years and older in the civilian noninstitutional population classified as either employed or unemployed.
2. Employed are persons 16 years and older who, during the reference week, did any work as paid employees, worked in their own business or profession or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of their family; or were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or seeking other jobs. Each employed person is counted only once, even if he or she holds more than one job.
3. Unemployed are all persons aged 16 years and older who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the 4 week-period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.
4. Unemployment rate is the ratio of unemployed to the civilian labor force [(unemployed/labor force) times 100].
5. Data are included on the AHRF for Puerto Rico.
6. No data for Kalawao, HI (15005) are reported on the source file.

The **2016-2020 and 2017-2021 Employment and Labor Force** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent fields have one decimal place.

*Note:*

1. The data on employment status and journey to work relate to the reference week, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents since the interviewing was conducted over a 12-month period.
2. Employed includes all civilians 16 years old and over who either (1) were “at work,” that is, those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were “with a job but not at work,” that is, those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are all institutionalized people and people on active duty in the United States Armed Forces.
3. Unemployed includes all civilians 16 years old and over who (1) were neither “at work” nor “with a job but not at work” during reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to start a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.
4. Veterans are men and women who have served (even for a short time), but are not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or Coast Guard, or who served in the U.S. Merchant Marine during World War II. People who served in the National Guard or Reserves are classified as veterans only if they were ever called or ordered to active duty, not counting the initial training or yearly summer camps. All other civilians are classified as nonveterans.
5. People who used different means of transportation on different days of the week were asked to specify the one they used most often, that is, the greatest number of days. People who used more than one means of transportation to get to work each day were asked to report the one used for the longest distance during the work trip. The category, “Car, truck, or van,” includes workers using a car (including company cars but excluding taxicabs), a truck of one-ton capacity or less, or a van. The category, “Public transportation,” includes workers who used a bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, or ferryboat, even if each mode is not shown separately in the tabulation. “Carro público” is included in the public transportation category in Puerto Rico. The category, “Other means,” includes workers who used a mode of travel that is not identified separately within the data distribution. The category, “Other means,” may vary from table to table, depending on the amount of detail shown in a particular distribution.
6. Workers in Other Industries include: wholesale trade; retail trade; transportation and warehousing, and utilities; information; finance and insurance, and real estate and rental and leasing; professional, scientific, and management, and administration and waste management services; arts, entertainment, and recreation, and accommodation and food services; other services, except public administration; and public administration.
7. Mean travel time to work (in minutes) is the average travel time that workers usually took to get from home to work (one way) during the reference week. This measure is obtained by dividing the total number of minutes taken to get from home to work (the aggregate travel time) by the number of workers 16 years old and over who did not work at home. The travel time includes time spent waiting for public transportation, picking up passengers and carpools, and time spent in other activities related to getting to work.
8. The field Work in Principal City of Micro Area is workers who live and work in the principal city of their Micropolitan Statistical Area of residence.
9. The field work in Principal City of Metro Area is workers who live and work in the principal city of their Metropolitan Statistical Area of residence.
10. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F- 5) Per Capita Incomes

*2020 and 2021 Per Capita Personal Income:*

**2020 and 2021** **Per Capita Personal Income** estimates are from the *CAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income* file, U.S. Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. The 2021 data are from the November 16, 2022 file. The 2020 data are from the November 16, 2021 file. Data are downloaded from Regional Economic Accounts, Local Area Personal Income downloads: <https://apps.bea.gov/regional/downloadzip.cfm>.

Per Capita Personal Income, which is reported in dollars, is calculated as total the personal income of the residents of a given area divided by the population of the area. Personal Income is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of the world. It does not include realized or unrealized capital gains or losses. In computing Per Capita Personal Income, BEA uses the Census Bureau mid-year population estimates.

*Note:*

1. The 2020 estimates of local area personal income were impacted by the response to the spread of COVID-19, as governments issued and lifted "stay-at-home" orders and government pandemic assistance payments were distributed to households and businesses. The full economic effects of the COVID-19 pandemic cannot be quantified in the local area personal income estimates, because the impacts are generally embedded in source data and cannot be separately identified. For more information see <https://www.bea.gov/recovery>.
2. BEA uses the Census Bureau mid-year population estimates. The 2020 estimates reflect population estimates available March 2021. The 2020 estimates are based on the 2010 Census. The 2021 estimates reflect population estimates available March 2022. The 2021 estimates are based on the 2020 Census.
3. Per Capita Personal Income data for the Virginia city of Galax (normally included in Grayson county ‑ 51077) have been included in Carroll county (51035) in the source data.
4. Per Capita Personal Income data for the Virginia city of Colonial Heights (normally included in Chesterfield county ‑ 51041) have been included in Dinwiddie county (51053) in the source data.
5. The source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

**SOURCE FILE AREA**  **COMBINED WITH**

**FIPS COUNTY**

**Hawaii**

Kalawao County (15005) Maui (15009)

**Virginia**

Bedford City (51515) Bedford (51019)

Bristol (51520) Washington (51191)

Buena Vista (51530) Rockbridge (51163)

Charlottesville (51540) Albemarle (51003)

Colonial Heights (51570) Dinwiddie (51053)

Covington (51580) Alleghany (51005)

Danville (51590) Pittsylvania (51143)

Emporia (51595) Greensville (51081)

Fairfax City (51600) Fairfax (51059)

Falls Church (51610) Fairfax (51059)

Franklin (51620) Southampton (51175)

Fredericksburg (51630) Spotsylvania (51177)

Galax (51640) Carroll (51035)

Harrisonburg (51660) Rockingham (51165)

Hopewell (51670) Prince George (51149)

Lexington (51678) Rockbridge (51163)

Lynchburg (51680) Campbell (51031)

Manassas (51683) Prince William (51153)

Manassas Park (51685) Prince William (51153)

Martinsville (51690) Henry (51089)

Norton (51720) Wise (51195)

Petersburg (51730) Dinwiddie (51053)

Poquoson (51735) York (51199)

Radford (51750) Montgomery (51121)

Salem (51775) Roanoke (51161)

Staunton 51790) Augusta (51015)

Waynesboro (51820) Augusta (51015)

Williamsburg (51830) James City (51095)

Winchester (51840) Frederick (51069)

### F- 6) Income

*2020 and 2021 Total Personal Income:*

**2020 and 2021** **Total** **Personal Income** estimates are from the *CAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income* file, U.S. Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. The 2021 data are from the November 16, 2022 file. The 2020 data are from the November 16, 2021 file. Data are downloaded from Regional Economic Accounts, Local Area Personal Income downloads: <https://apps.bea.gov/regional/downloadzip.cfm>.

Total Personal Income is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of the world. It does not include realized or unrealized capital gains or losses. Total Personal Income estimates are in thousands of current dollars (not adjusted for inflation).

*Note:*

1. The 2020 estimates of local area personal income were impacted by the response to the spread of COVID-19, as governments issued and lifted "stay-at-home" orders and government pandemic assistance payments were distributed to households and businesses. The full economic effects of the COVID-19 pandemic cannot be quantified in the local area personal income estimates, because the impacts are generally embedded in source data and cannot be separately identified. For more information see <https://www.bea.gov/recovery>.
2. Total Personal Income data for the Virginia city of Galax (normally included in Grayson county ‑ 51077) have been included in Carroll county (51035) in the source data.
3. Total Personal Income data for the Virginia city of Colonial Heights (normally included in Chesterfield county ‑ 51041) have been included in Dinwiddie county (51053) in the source data.
4. The source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

**SOURCE FILE AREA**  **COMBINED WITH**

**FIPS COUNTY**

**Hawaii**

Kalawao County (15005) Maui (15009)

**Virginia**

Bedford City (51515) Bedford (51019)

Bristol (51520) Washington (51191)

Buena Vista (51530) Rockbridge (51163)

Charlottesville (51540) Albemarle (51003)

Colonial Heights (51570) Dinwiddie (51053)

Covington (51580) Alleghany (51005)

Danville (51590) Pittsylvania (51143)

Emporia (51595) Greensville (51081)

Fairfax City (51600) Fairfax (51059)

Falls Church (51610) Fairfax (51059)

Franklin (51620) Southampton (51175)

Fredericksburg (51630) Spotsylvania (51177)

Galax (51640) Carroll (51035)

Harrisonburg (51660) Rockingham (51165)

Hopewell (51670) Prince George (51149)

Lexington (51678) Rockbridge (51163)

Lynchburg (51680) Campbell (51031)

Manassas (51683) Prince William (51153)

Manassas Park (51685) Prince William (51153)

Martinsville (51690) Henry (51089)

Norton (51720) Wise (51195)

Petersburg (51730) Dinwiddie (51053)

Poquoson (51735) York (51199)

Radford (51750) Montgomery (51121)

Salem (51775) Roanoke (51161)

Staunton (51790) Augusta (51015)

Waynesboro (51820) Augusta (51015)

Williamsburg (51830) James City (51095)

Winchester (51840) Frederick (51069)

### F- 7) Persons and Families Below Poverty Level

The **2016-2020 and 2017-2021 Persons and Families below Poverty Level** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent Persons below Poverty Level and % Families below Poverty Level have one decimal place.

*Note:*

1. Poverty statistics adhere to the standards specified by the Office of Management and Budget in Statistical Policy Directive 14. The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. Further, poverty thresholds for people living alone or with nonrelatives (unrelated individuals) vary by age (under 65 years or 65 years and older). The poverty thresholds for two-person families also vary by age of the householder. If a family’s total income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. If an unrelated individual’s total income is less than the appropriate threshold, then that individual is considered to be in poverty. To determine a person’s poverty status, one compares the person’s total family income in the last 12 months with the poverty threshold appropriate for that person’s family size and composition. If the total income of that person’s family is less than the threshold appropriate for that family, then the person is considered “below the poverty level,” together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person’s own income is compared with his or her poverty threshold. The total number of people below the poverty level is the sum of people in families and the number of unrelated individuals with incomes in the last 12 months below the poverty threshold.
2. Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates.
3. A family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in the household who are related to the householder are regarded as members of his or her family.
4. Income and earnings estimates in the 2016-2020 ACS 5-year data set are inflation-adjusted to 2020 dollars. Income and earnings estimates in the 2017-2021 ACS 5-year data set are inflation-adjusted to 2021 dollars.
5. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

The **2020 and 2021 Estimates of Persons in Poverty; Estimate of Persons Age 0-17 in Poverty; and Estimate of Children 5-17 in Families in Poverty** data are from the Census Bureau’s' *Small Area Income Poverty Estimates (SAIPE)* files for the respectiveyears. In addition, Percent Persons in Poverty, Percent Persons Age 0-17 in Poverty and Percent Persons Age 5-17 in Families in Poverty data are also available. One decimal place is carried for each of these percent fields. The SAIPE program provides annual estimates of income and poverty statistics for all school districts, counties and states. The estimates are used annually for the administration of federal programs and the allocation of federal funds to local jurisdictions. Through modeling and using auxiliary data sources, the SAIPE program enhances survey estimates, reducing margins of error, especially for small geographic areas. Data sources for SAIPE include the American Community Survey, the Decennial Census, federal income tax records, Supplemental Nutrition Assistance Program (SNAP) records, Bureau of Economic Analysis personal income estimates, Supplemental Security Income recipients and population estimates.

*Note:*

1. Poverty status is determined by comparing total annual family before-tax income to a table of federal poverty thresholds that vary based on family size, number of related children, and age of householder. If a family’s income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual’s total income to their threshold.
2. Related children aged 5 to 17 in families denotes children who are related to householder by birth, marriage or adoption. Foster children are not included in families.

### F- 8) Deep Poverty

The **2016-2020 and 2017-2021 Persons in Deep Poverty** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent fields have one decimal place.

*Note:*

1. Deep Poverty is living with income below half of one’s poverty threshold.
2. Poverty statistics adhere to the standards specified by the Office of Management and Budget in Statistical Policy Directive 14. The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. Further, poverty thresholds for people living alone or with nonrelatives (unrelated individuals) vary by age (under 65 years or 65 years and older). The poverty thresholds for two-person families also vary by age of the householder. If a family’s total income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. If an unrelated individual’s total income is less than the appropriate threshold, then that individual is considered to be in poverty. To determine a person’s poverty status, one compares the person’s total family income in the last 12 months with the poverty threshold appropriate for that person’s family size and composition. If the total income of that person’s family is less than the threshold appropriate for that family, then the person is considered “below the poverty level,” together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person’s own income is compared with his or her poverty threshold. The total number of people below the poverty level is the sum of people in families and the number of unrelated individuals with incomes in the last 12 months below the poverty threshold.
3. Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates.
4. The data on income were asked of the population 15 years and older for the last 12 months. "Total income" is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or railroad retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.
5. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F- 9) Ratio of Income to Poverty Level

The **2016-2020 and 2017-2021 Ratio of Income to Poverty Level** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Poverty statistics adhere to the standards specified by the Office of Management and Budget in Statistical Policy Directive 14. The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. Further, poverty thresholds for people living alone or with nonrelatives (unrelated individuals) vary by age (under 65 years or 65 years and older). The poverty thresholds for two-person families also vary by age of the householder. If a family’s total income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. If an unrelated individual’s total income is less than the appropriate threshold, then that individual is considered to be in poverty. To determine a person’s poverty status, one compares the person’s total family income in the last 12 months with the poverty threshold appropriate for that person’s family size and composition. If the total income of that person’s family is less than the threshold appropriate for that family, then the person is considered “below the poverty level,” together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person’s own income is compared with his or her poverty threshold. The total number of people below the poverty level is the sum of people in families and the number of unrelated individuals with incomes in the last 12 months below the poverty threshold.
2. Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates.
3. The data on income were asked of the population 15 years and older for the last 12 months. "Total income" is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.
4. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F-10) Median Family Income

**2016-2020 and 2017-2021 Median Family Income** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. A family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in the household who are related to the householder are regarded as members of his or her family.
2. The data on income were asked of the population 15 years and older for the last 12 months. The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For families, the median income is based on the distribution of the total number of families including those with no income.
3. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F-11) Household Income

**2016-2020 and 2017-2021 Household Income** and **Median Household Income** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. A household includes all of the people who occupy a housing unit. People not living in households are classified as living in group quarters.
2. The data on income were asked of the population 15 years and older for the last 12 months. "Total income" is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or railroad retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.
3. The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households, the median income is based on the distribution of the total number of households including those with no income.
4. Income and earnings estimates in the 2016-2020 ACS 5-year data set are inflation-adjusted to 2020 dollars. Income and earnings estimates in the 2017-2021 ACS 5-year data set are inflation-adjusted to 2021 dollars.
5. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

The **2020 and 2021 Estimates of Median Household Income** are from the U.S. Census Bureau’s' *Small Area Income Poverty Estimates (SAIPE)* files for the respectiveyears. The estimates are used annually for the administration of federal programs and the allocation of federal funds to local jurisdictions. Through modeling and using auxiliary data sources, the SAIPE program enhances survey estimates, reducing margins of error, especially for small geographic areas. Data sources for SAIPE include the American Community Survey, the Decennial Census, federal income tax records, Supplemental Nutrition Assistance Program (SNAP) records, Bureau of Economic Analysis personal income estimates, Supplemental Security Income recipients and population estimates.

*Note*:

1. Household income includes income of the householder and all other people 15 years and older in the household, whether or not they are related to the householder
2. Median is the point that divides the household income distributions into halves, one-half with income above the median and the other with income below the median. The median is based on the income distribution of all households, including those with no income.

### F-12) Medicare Enrollment Data

**The 2021 Medicare Enrollment data** are from Medicare Monthly Enrollment Dashboard December 2022 Data File, Centers for Medicare and Medicaid Services (CMS). **The 2020 Medicare Enrollment data** are from Medicare Monthly Enrollment Dashboard December 2021 Data File, Centers for Medicare and Medicaid Services (CMS). Medicare is the federal health insurance program for people who are 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant, sometimes called ESRD). The data reported are based on CMS administrative enrollment data for beneficiaries enrolled in the Medicare program. The data are available from the CMS Chronic Conditions Data Warehouse (CCW), a database with 100% of Medicare enrollment and fee-for-service claims data.

The data include counts of Medicare beneficiaries with Medicare Part A which is also known as Hospital Insurance and Medicare Part B which is also known as Medical Insurance. These counts include Original Medicare and Medicare Advantage and Other Health Plans. Original Medicare is Medicare’s traditional health care system (fee-for-service). Medicare Advantage and Other Health Plans are health plans offered by private companies approved by Medicare to provide hospital and medical coverage.

These Medicare enrollment counts are determined using a person-year methodology. For each calendar year, total person-year counts are determined by summing the total number of months that each beneficiary is enrolled in Parts A and/or B (Hospital Insurance and/or Medical Insurance) during the year and dividing by 12. Using this methodology, a beneficiary’s partial-year enrollment may be counted in more than one category. This method differs from enrollee counts previously reported in the Medicare and Medicaid Supplement, which were based on a mid-year snapshot where beneficiaries were counted as enrolled in Parts A and/or B based on their respective July enrollment status. While both methods arrive at an average monthly enrollment count, the person-year method more closely represents true enrollment and is a method generally used by the insurance industry.

*Note:*

1. Enrollee counts of 1-10 on the source file are suppressed. Additional counts are cross-suppressed to prevent the recalculation of suppressed counts of 1-10. Both types of suppression are carried as missing (blank) on the AHRF. Numbers may not add to totals because of rounding.
2. On the source file, each state included a data record for county unknown, which was not included on the AHRF. In addition, there was a data record with unknown state designation not included on the AHRF.
3. Data are carried on the AHRF for Puerto Rico, Guam, and the US Virgin Islands.

### F-13) Medicare Fee-For-Service Demographic Data

**The 2020 and 2021 Medicare Fee-For-Service Demographic data** are from the Geographic Variation Public Use File (February 2023), Centers for Medicare and Medicaid Services (CMS). The February 2023 Geographic Variation Public Use File includes data for 2007 through 2021; this update supersedes data on earlier releases. These public use files are based primarily on information from CMS’s Chronic Condition Data Warehouse (CCW), which contains 100 percent of Medicare claims for beneficiaries who are enrolled in the fee-for-service (FFS) program as well as enrollment and eligibility data.

Data include Medicare beneficiaries who have no months of HMO enrollment and both Part A (hospital insurance) and Part B (medical insurance) for whatever portion of the year they are covered by FFS Medicare (i.e., they have no months of A-only or B-only coverage). Beneficiaries who died in the year are included.

% Medicare FFS Male and Female Beneficiaries, % Medicare FFS Beneficiaries Eligible for Medicaid and Medicare FFS Beneficiary Average HCC Score have two decimals.

*Note:*

1. Data are suppressed where count of beneficiaries is less than 11.
2. CMS developed a risk-adjustment model that uses HCCs (hierarchical condition categories) to assign risk scores. Those scores estimate how beneficiaries’ FFS spending will compare to the overall average for the entire Medicare population. The risk score for the overall average is set at 1.0; beneficiaries with scores greater than that are expected to have above-average spending, and vice versa. Risk scores are based on a beneficiary’s age and sex; whether the beneficiary is eligible for Medicaid, first qualified for Medicare on the basis of disability, or lives in an institution (usually a nursing home); and the beneficiary’s diagnoses from the previous year. CMS used total risk scores to adjust spending data at the geographic level. The risk scores were used to adjust spending data at the beneficiary level rather than in aggregate. As a result, the aggregate standardized, risk-adjusted spending in a region does not equal the aggregate standardized costs divided by the average HCC risk score. In addition, the HCC model was not designed to risk adjust spending for individual services and therefore is not applied to service-level spending.
3. Data are reported for the US Virgin Islands.

### F-14) Medicare Advantage Penetration

**2021 and 2022 Number of Medicare Eligibles, Number of Medicare Advantage Enrollees** and **Percent Medicare Advantage Penetration** are from the *State County Penetration Data for Medicare Advantage Files,* as of December, Centers for Medicare and Medicaid Service (CMS).

*Note:*

1. Eligibles include those enrolled in either Medicare Part A (hospital insurance) or Part B (supplemental medical insurance).
2. Enrollees include individuals who are currently enrolled in a Medicare Advantage plan. The Medicare Advantage program was created as part of the Medicare Prescription Drug Improvement and Modernization Act (MMA) of 2003. It gives beneficiaries the option to receive their healthcare through a variety of private health plans.
3. The source file lists enrollees by their legal state and county of residence. This is the county used for payment purposes by Medicare.
4. Penetration is the ratio of enrollees over eligibles multiplied by 100.
5. The privacy laws of the HIPPA have been interpreted to prohibit publishing enrollment data with values of 10 or less and are set to an asterisk on the source file. These instances are reported as missing on the AHRF.
6. Pilot contracts were excluded from the source file.
7. On the source file, the eligible data may contain some records that have not yet been associated with a specific state and county or a county within a state. These records have not been included on the AHRF.
8. Bedford City, VA (51515) changed from independent city to town status July 1, 2013. It has been added to Bedford County, VA (51019). Bedford City data, which is carried separately on the source file, has been combined with Bedford County on the AHRF beginning with the 2014 source file. Bedford City will be carried as missing.
9. Data are carried on the AHRF for Guam.
10. Data are carried on the AHRF for the US Virgin Islands and Puerto Rico. In the US Virgin Islands, St. Thomas and St. John are combined and carried in St. Thomas (78030). St. John (78020) is reported as missing.

### F-15) Medicare Prescription Drug Plan (PDP) Penetration

**2021 and 2022 Number of Prescription Drug Plan (PDP) Enrollees** and **Percent Prescription Drug Plan Penetration** are from the *State County Penetration Data for Prescription Drug Plan Files,* as of December, Centers for Medicare and Medicaid Service (CMS). Medicare prescription drug coverage is also known as Medicare Part D.

*Note:*

1. Enrollees include individuals who are currently enrolled in a Stand Alone Prescription Drug Plan. The Medicare Prescription Drug Improvement and Modernization Act (MMA) of 2003 added prescription drug coverage to Medicare (Part D) beginning January 1, 2006.
2. The source file lists enrollees by their legal state and county of residence. This is the county used for payment purposes by Medicare.
3. Penetration is the ratio of enrollees over eligibles multiplied by 100.
4. The privacy laws of the HIPPA have been interpreted to prohibit publishing enrollment data with values of 10 or less and are set to an asterisk on the source file. These instances are reported as missing on the AHRF.
5. On the source file, the eligible data may contain some records that have not yet been associated with a specific state and county or a county within a state. These records have not been included on the AHRF.
6. Pilot contracts were excluded from the source file.
7. Bedford City, VA (51515) changed from independent city to town status July 1, 2013. It has been added to Bedford County, VA (51019). Bedford City data, which is carried separately on the source file, has been combined with Bedford County on the AHRF beginning with the 2014 source file. Bedford City will be carried as missing.
8. Data are carried on the AHRF for Guam.
9. Data are carried on the AHRF for the US Virgin Islands and Puerto Rico. In the US Virgin Islands, St. Thomas and St. John are combined and carried in St. Thomas (78030). St. John (78020) is reported as missing.

### F-16) Health Insurance Estimates

**The 2019 and 2020 Estimates of Persons with and without Health Insurance, and Percent without Health Insurance by age and gender** data are from the U.S. Census Bureau’s’ *Small Area Health Insurance Estimates (SAHIE)* file. All percent fields are carried with one decimal. The SAHIE program produces model-based estimates of health insurance coverage for demographic and income groups within counties and states. For further detailed information about methodology, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Programs model health insurance coverage by combining survey data with population estimates and administrative records. Estimates are based on the American Community Survey (ACS), demographic population estimates, aggregated federal tax returns, Supplemental Nutrition Program (SNAP) (formerly, Food Stamps Program) Participation records, the County Business Patterns data set, Medicaid and Children’s Health Insurance Program (CHIP) participation records, and the Decennial Census.
2. Income-to-poverty ratio (IPR) is the family income divided by the appropriate Federal poverty threshold. Income-to-poverty ratio categories on the AHRF are 0-138%, 0-200% and 0-400% of the poverty threshold. A lower ratio indicates lower income. Less than or equal to 138 percent of poverty indicates people in families with total money less than or equal to 138 percent of the federal poverty threshold applicable to that family. The same reasoning holds for the additional IPRs listed. Poverty thresholds are the dollar amounts used by the U.S. Census Bureau to determine poverty status.
3. The CPS ASEC asks about health insurance coverage “at any time” during the previous year. People who had health insurance coverage for only part of the year are considered to be insured. Note that coverage solely by Indian Health Services (HIS) does not count as health insurance, i.e., people who were only covered by HIS in the previous year are counted as uninsured.
4. The source data does not include Kalawao County, HI (15005) due to insufficient data. Kalawao is carried as missing on the AHRF.

### F-17) Marketplace Health Insurance Enrollment

**The 2021 and 2022 County-Level Marketplace Health Insurance Enrollment** data were released by the Centers for Medicare and Medicaid Services. See below for file names. These data provide the total number of Qualified Health Plan (QHP) selections by county for the 33 states in 2022 and the 36 states in 2021 that used the HealthCare.gov platform for the Marketplace open enrollment period. The open enrollment period for 2022 was November 1, 2021 through January 15, 2022. The open enrollment period for 2021 was November 1, 2020 through December 15, 2020 with data reported through December 21, 2020.

The data represent the number of unique individuals who were determined eligible to enroll in a Qualified Health Plan and had selected a plan, were automatically re-enrolled or were placed into a suggested alternate plan by the deadline.

Qualified Health Plans Selections in the Marketplace are carried on the AHRF by type of consumer, household income as a percent of the Federal Poverty Level (FPL), age and gender (beginning in 2018) group.

**YEAR OF SOURCE FILE**

**DATA**

2022 2022 Open Enrollment Period (OEP) County-Level Public Use File

2021 2021 Open Enrollment Period (OEP) County-Level Public Use File

*Note*:

1. Data reported on the file are for the 33 states in 2022 and the 36 states in 2021 using the HealthCare.gov platform during the open enrollment period. See notes 2 and 3 for specific states and years which are included in data on the AHRF and note 4 for states using their own platform which are not included.
2. States using the Federally-Facilitated Marketplaces are included in the data on the AHRF. These are Alabama, Alaska, Arizona, Arkansas (2015 and 2016 only), Delaware, Florida, Georgia, Hawaii (beginning in 2017), Illinois, Indiana, Iowa, Kansas, Louisiana, Maine (2015 through 2021), Michigan, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey (2015 through 2019) , North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania (2015 through 2019), South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia (2015 through 2021), West Virginia, Wisconsin and Wyoming.
3. States with State-Based Marketplaces (SBMs) using the HealthCare.gov platform are included in the data on the AHRF. These are Arkansas (beginning in 2017), Hawaii (in 2016 only), Kentucky (2017 through 2021), Nevada (2015 through 2019), New Jersey (in 2020 only), New Mexico (2015 through 2021), Oregon and Pennsylvania (in 2020 only).
4. State-Based Marketplaces using their own Marketplace platforms are not included in this data. These are the District of Columbia and the following states: California, Colorado, Connecticut, Hawaii (in 2015 only), Idaho, Kentucky (in 2015, 2016 and 2022), Maine (beginning in 2022), Maryland, Massachusetts, Minnesota, Nevada (beginning in 2020), New Jersey (beginning in 2021), New Mexico (beginning in 2022), New York, Pennsylvania (beginning in 2021), Rhode Island, Vermont and Washington. All counties in these states are carried as missing on the AHRF.
5. The 10.3 million plan selections for 33 states in 2022, 8.3 million plan selections for 36 states in 2021, 8.2 million plan selections for 38 states in 2020, 8.4 million plan selections for 39 states in 2019, 8.7 million plan selections for 39 states in 2018, 9.2 million plan selections for 39 states in 2017, 9.6 million plan selections for 38 states in 2016 and 8.8 million plan selections for 37 states in 2015 were tabulated by county according to the home address provided by each Marketplace applicant. Data for counties with 10 or fewer plan selections are suppressed to protect consumer privacy. This may require the use of complimentary cell suppression. These are carried as missing on the AHRF.
6. Data represent cumulative data on the number of unique individuals who have selected or have been automatically reenrolled into; or beginning in 2017, have been placed into a suggested alternate Marketplace medical plan for enrollment through the Marketplaces (with or without the first premium payment having been received directly by the issuer). This is also known as pre-effectuated enrollment, because enrollment is not considered effectuated until the first premium payment is made, and these figures include plan selections for which enrollment has not yet been effectuated. Individuals who have cancelled or terminated their Marketplace plans are not included in the total number of plan selections. These data also do not include standalone dental plan selections. Count includes only consumers with non-canceled Qualified Health Plans.
7. New Consumers are those individuals who selected a plan through the Marketplaces (with or without the first premium payment having been received directly by the issuer) and did not have coverage the prior year. These data do not include stand-alone dental plan selections. Additionally, individuals who have cancelled or terminated their Marketplace plans are not included in the total number of Marketplace plan selections.
8. Kentucky changed Marketplace eligibility and enrollment platforms in 2022. Therefore, their 2021 Marketplace plan selections are generally classified as new consumers for operational enrollment and reporting purposes. However, a small number of 2022 plan selections in Kentucky may be classified as consumers reenrolling in coverage through the Marketplaces in cases where an individual who had an active 2022 Marketplace plan selection in a HealthCare.gov state signed up for 2022 coverage in Kentucky.
9. Consumers who are Actively Reenrolling in Marketplace Coverage are people who had a Marketplace plan selection the prior year and return to the Marketplace to select a new plan or actively renew their existing plan. A consumer is considered to have actively selected a plan, if they are a consumer with coverage in the prior year who returned to the Marketplace and selected a plan. The consumer could have actively selected their plan, decided to choose a new plan from their existing insurer or selected a new plan from a different insurer. A consumer could have actively selected a plan prior to the deadline or could have come back after being automatically reenrolled and decided to update their information and select a plan.
10. Consumers who have been Automatically Re-enrolled into Marketplace Coverage (also known as “Automatic Re-enrollees”) are people who had a medical plan selection that was the result of automatic re-enrollment into the prior year’s plan or automatic placement into a suggested alternate plan. Beginning with the 2017 data, this category includes individuals who did not make an active selection and were placed in a suggested alternate plan because they would not have a plan offered by their previous issuer.
11. Source data for 2017 through 2021 did not report data for those consumers with incomes below 100% FPL or above 400% FPL. They are grouped in the field “Other Income”. For those years the “Unknown Income” field was also dropped, and those data are included in Other Income. Beginning in 2022, the fields reported are consistent with the 2015 and 2016 groups reported.
12. The application only collects household income data when consumers are requesting financial assistance. Consumers who do not request financial assistance do not enter their household income information. For 2018 through 2021 source data, “Not Requesting Financial Assistance” was added as a new field. As stated in note 11, incomes below 100% FPL or above 400% FPL were not reported. On the 2018 through 2021 source data, these consumers are included in the field “Other FPL” along with consumers who were requesting financial assistance but may be missing incomes due to data anomalies or a tax filing status that makes them Advance Payment of the Premium Tax Credit (APTC) ineligible.
13. Household Income is reported as a percentage of the Federal Poverty Level (FPL). The 2021 Federal Poverty Guidelines, which are used for 2022 coverage, can be accessed at <https://aspe.hhs.gov/2021-poverty-guidelines>.The 2020 Federal Poverty Guidelines, which are used for 2021 coverage, can be accessed at [https://aspe.hhs.gov/2020-poverty-guidelines](https://aspe.hhs.gov/2019-poverty-guidelines). The 2019 Federal Poverty Guidelines, which are used for 2020 coverage, can be accessed at <https://aspe.hhs.gov/2019-poverty-guidelines>. The 2018 Federal Poverty Guidelines, which are used for 2019 coverage, can be accessed at <https://aspe.hhs.gov/2018-poverty-guidelines>. The 2017 Federal Poverty Guidelines, which are used for 2018 coverage, can be accessed at <https://aspe.hhs.gov/2017-poverty-guidelines>. The 2016 Federal Poverty Guidelines, which are used for 2017 coverage, can be accessed at <https://aspe.hhs.gov/computations-2016-poverty-guidelines>. The 2015 Federal Poverty Guidelines, which are used for 2016 coverage, can be accessed at <http://aspe.hhs.gov/2015-poverty-guidelines>. The 2014 Federal Poverty Guidelines, which are used for 2015 coverage, can be accessed at <http://aspe.hhs.gov/2014-poverty-guidelines>.
14. In 2022 Maine transitioned from an SBM-FP using the HC.gov platform in PY 2021 to an SBM using its own eligibility and enrollment platform in 2022. As a result, Maine’s 2022 data may not be directly comparable to past plan years.
15. Bedford City, VA (51515) changed from independent city to town status July 1, 2013. It has been added to Bedford County, VA (51019). Bedford City data, which was carried separately on the 2015 through 2018 source files, has been combined with Bedford County on the AHRF. Bedford City is carried as missing.
16. Shannon County, SD (46113) was changed to Oglala Lakota County, SD (46102) May 1, 2015. Only Oglala Lakota is carried on the AHRF. The 2017 source file carries both counties. The counties are combined and carried in Oglala Lakota on the AHRF. The following was reported on the source file:

Oglala Lakota Shannon

Marketplace Enrollees 56 147

Marketplace Enrollees <18 \* \*

Marketplace Enrollees 18-25 \* 13

Marketplace Enrollees 26-34 \* 18

Marketplace Enrollees 35-44 13 30

Marketplace Enrollees 45-54 13 36

Marketplace Enrollees 55-64 12 36

Marketplace Enrollees 65+ 0 \*

Marketplace Enrollees, New Enr 31 \*

Marketplace Enrollees, Active Enr 25 \*

Marketplace Enrollees, Auto Enrl 0 141

Household Inc 100-150% of FPL \* 27

Household Inc >150-200% of FPL 16 38

Household Inc >200-250% of FPL \* 22

Household Inc >250-300% of FPL \* 19

Household Inc >300-400% of FPL \* 12

Household Income, Other \* 29

\* Suppressed data

### F-18) Disability Data

The **2016-2020 and 2017-2021 Disability by Age, Employment Status and Veteran Status** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent fields have one decimal place.

*Note:*

1. Under the conceptual framework of disability described by the Institute of Medicine (IOM) and the International Classification of Functioning, Disability, and Health (ICF), disability is defined as the product of interactions among individual’s bodies; their physical, emotional, and mental health; and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community. For example, disability may exist where a child has difficulty learning because the school cannot accommodate the child’s deafness.
2. In an attempt to capture a variety of characteristics that encompass the definition of disability, the ACS identifies serious difficulty with four basic areas of functioning - hearing, vision, cognition, and ambulation. These functional limitations are supplemented by questions about difficulties with the selected activities from the Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales, namely difficulty bathing and dressing, and difficulty performing errands such as shopping. Overall, the ACS attempts to capture six aspects of disability, which can be used together to create an overall disability measure, or independently to identify populations with specific disability types.
3. Veterans are men and women who have served (even for a short time), but are not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or Coast Guard, or who served in the U.S. Merchant Marine during World War II. People who served in the National Guard or Reserves are classified as veterans only if they were ever called or ordered to active duty, not counting the initial training or yearly summer camps. All other civilians are classified as nonveterans. While it is possible for 17 year olds to be veterans of the Armed Forces, ACS data products are restricted to the population 18 years and older.
4. Disability by age fields are for the civilian noninstitutionalized population. Disability by employment status fields are for the civilian noninstitutionalized population 18 to 64 years. Disability by veteran status fields are for the civilian population 18 years and over for whom poverty status is determined.
5. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

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### F-19) Food Stamp/SNAP Recipient Estimates

**The 2019 and 2020 Food Stamp Recipient/SNAP Estimates** are from the County Level Food Stamp Recipient File from the U.S. Census Bureau. Supplemental Nutrition Assistance Program (SNAP) is the new name for the federal Food Stamp Program, as of October 1, 2008.

*Note:*

1. Number of people participating in the food state program was obtained from the United States Department of Agriculture, Food and Nutrition Service (USDA/FNS) where available. For states not reported by USDA/FNS, counts are obtained directly from individual state offices.
2. In most states, counts of participants were used for the month of July in the estimation process. However, in a few cases states were able to provide data only for other reference periods.
3. The Food Stamp/SNAP Program is a low-income assistance program that is uniform in its eligibility requirements and benefit levels across states (except Alaska and Hawaii). While the definitions of income, household composition and the resource income cutoffs are different from those used in the official measure of poverty, a household’s eligibility for the program is determined by a standard that is tied to the poverty level.

### F-20) Social Security Program

The **2016-2020 and 2017-2021 Households with Social Security Income** data are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. Social Security income includes Social Security and U.S. Railroad Retirement pensions and survivor benefits, permanent disability insurance payments made by the Social Security Administration prior to deductions for medical insurance, and railroad retirement insurance checks from the U.S. government. Medicare reimbursements are not included. For more information regarding definitions, user updates, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:* Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F-21) Supplemental Security Income Program Recipients

The **2016-2020 and 2017-2021 Households with Supplemental Security Income (SSI) and Households with Public Assistance Income** are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. Supplemental Security Income (SSI) is a nationwide U.S. assistance program administered by the Social Security Administration that guarantees a minimum level of income for needy aged, blind, or disabled individuals. Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income or noncash benefits such as Food Stamps. The terms “public assistance income” and “cash public assistance” are used interchangeably on the source file. For more information regarding definitions, user updates, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File, U.S. Census Bureau.
2. The Puerto Rico Community Survey questionnaire asks about the receipt of SSI; however, SSI is not a federally-administered program in Puerto Rico. Therefore, it is probably not being interpreted by most respondents in the same manner as SSI in the United States. The only way a resident of Puerto Rico could have appropriately reported SSI would have been if they lived in the United States at any time during the past 12-month reference period and received SSI.

### F-22) 5-Year Infant Mortality Rates

*2016-2020 and 2017-2021 Infant Mortality Rate Data:*

The **2016-2020 and 2017-2021 5-Year Infant Mortality Rate** data are calculated fields using existing data from the National Center for Health Statistics Detail Mortality and Natality data files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Beginning with the 2008-2012 rates, data for any counties having fewer than 10 infant deaths per year are suppressed. The rate is per 1000 births and one decimal is carried. Rates were calculated according to the following formula:

5‑Year Infant Mortality Rate = (5‑Yr Infant Deaths < 1 Year \* 1000) / 5‑Yr Live Births

*Note:*

1. Note that for counties with low populations, a small number of infant deaths and/or births may yield rates that are extremely high.
2. Data are reported for Puerto Rico and Guam.

### F-23) Mortality Data

*2020 and 2021 COVID-19 Deaths:*

The **2020 and 2021 number of COVID-19 deaths** are calculated from the National Center for Health Statistics *2020 Mortality Detail Data Files,* as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program (see <http://www.cdc.gov/nchs/deaths.htm>). NCHS restrictions prohibit release of any subnational data with fewer than 10 occurrences. Therefore, data for any counties having fewer than 10 occurrences are suppressed. COVID-19 deaths are defined as those deaths where primary cause of death is reported as COVID-19 (ICD 10 code U07.1). The number of deaths for a county is based on the place of residence; non‑residents of the U.S. are excluded.

*Note:* Data are reported on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

*2018-2020 and 2019-2021 Mortality Average Data:*

The **2018-2020 and 2019-2021 Mortality Average Data** are calculated fields using the National Center for Health Statistics *2018, 2019, and 2020 and the 2019, 2020, and 2021 Mortality Detail Data Files,* as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program (see <http://www.cdc.gov/nchs/deaths.htm>). Averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data. For data through 2006, these restrictions prohibited releasing county‑level information where there are fewer than three occurrences. Rather than suppress data for certain counties, averages were calculated. For 2007 and later, NCHS restrictions prohibit release of any subnational data with fewer than 10 occurrences, including data averaged across years. Therefore, beginning with the 2005-2007, 3-year averages carried on the AHRF, data for any counties having fewer than 10 occurrences are suppressed.

The number of deaths for a county is based on the place of residence; non‑residents of the U.S. are excluded. Averages were calculated according to the following formula:

3‑Year Mortality Average = (2019 Deaths + 2020 Deaths + 2021 Deaths)/3

*Note:*

1. For data through 1998, the **Number of Deaths by Cause** fields are calculated using the *Ninth Revision of the International Classification of Diseases* (ICD-9) adapted for use by the Division of Vital Statistics, NCHS. Beginning with 1999 data, **Number of Deaths by Cause** are reported by NCHS according to the *Tenth Revision of the International Classification of Diseases* (ICD-10). The change in classification of diseases from ICD-9 to ICD-10 results both in substantial discontinuities for some causes of death prior to 1999 compared to earlier years as well as in the ranking of the leading causes of death; as such, there are comparability issues that the user must take into consideration when comparing to data prior to 1999. Reference is made to <http://www.cdc.gov/nchs/deaths.htm> for a detailed comparison of the two coding schemes. The following lists categories included in each field with corresponding ICD-9 and ICD-10 codes:

ICD-9 ICD-10

• Infectious and Parasitic Diseases A00-B99, U07.1

- Tuberculosis 010-018 A16-A19

- Syphilis 090-097 A50-A53

- COVID-19 NA U07.1

- Residual of infectious and

parasitic diseases 001-009, 020-041, A00-A09, A20-A49,

042-044, 045-088, A54-B99

098-139

• Malignant Neoplasms C00-C97

- Malignant neoplasms of

digestive organs and peritoneum 150-159 C15-C26

- Malignant neoplasms of

respiratory and intrathoracic organs 160-165 C30-C39

- Malignant neoplasms of breast 174-175 C50

- Malignant neoplasms of genital organs 179-187 C51-C63

- Malignant neoplasms of urinary organs 188-189 C64-C68

- Leukemia 204-208 C91-C95

- Other malignant neoplasms 140-149, 170-173 C00-C14, C40-C49,

190-203 C69-C-90, C96-C97

• Cerebrovascular Diseases 430-438 I60-I69

Prior to 1992-94 included in 436-438

Other Cardiovascular Diseases

• Ischemic Heart Disease 410-414 I20-I25

• Other Cardiovascular Diseases

* Rheumatic fever and

rheumatic heart disease 390-398 I00-I09

- Hypertensive heart disease

with or without renal disease 402, 404 I11, I13

- Other heart diseases 415-429.2 I26-I51

* Hypertension with

or without renal disease

(beginning w/ 2006 data) 401,403 I10,I12, I15

- Atherosclerosis 440 I70

* Other diseases of arteries,

arterioles and capillaries 441-448 I71-I78

• Influenza and Pneumonia 480-487 J10-J18

• Chronic Obstructive Pulmonary Diseases

(now called Chronic lower

respiratory diseases)

* Chronic obstructive pulmonary diseases

and allied conditions 490-496 J40-J47

• Chronic Liver Disease and Cirrhosis 571 K70, K73-K74

• Motor Vehicle Accidents E810-E825 V02-V04

V09.0, V09.2

V12-V14

V19.0-V19.2

V19.4-V19.6

V20-V79

V80.3-V80.5

V81.0-V81.1

V82.0-V82.1

V83-V86

V87.0-V87.8

V88.0-V88.8

V89.0; V89.2

• Suicide E950-E959 X60-X84, Y87.0, with

Prior to 1992-94 included in

Other External Causes U03 (beginning with 99/01 data).

• Homicide and Legal Intervention E960-E978

- Homicide E960-E969 X85-Y09, Y87.1, with

U01, U02 (beginning with

99/01data)

- Légal Intervention E970-E978 Y35, Y89.0

(Prior to 1992-94 included in

Other External Causes)

• Other External Causes E800-E807

- All other accidents and adverse effects E826-E949, V01-X59, Y85-Y86

minus motor vehicle accidents. E826-E949

- All other externat causes E980-E999 Y10-Y34, Y87.2

Y89.9; Y36, Y89.1;

Y-40-Y-84, Y88

• Diabetes 250 E10-E14

Prior to 1992-94 included in

Deaths from Other Causes

• Deaths from Other Causes

- All causes not reported above

1. Human Immunodeficiency Virus (HIV:ICD-9 042-044 and ICD-10 B20-B24) infection is also included in Infectious and Parasitic Diseases.
2. Hispanic Origin may be of any race and is included in counts by White, Black and Other.
3. Guam and Puerto Rico data are carried for all years.

### F-24) Total Deaths

The field **Total Deaths** comes from the U.S. Census Bureau. It is the total number of deaths based on place of residence (not occurrence), as estimated using reports from the Census Bureau’s Federal-State Cooperative Program for Population Estimates (FSCPE) and the National Center for Health Statistics. The source for each year of data is noted below:

**YEAR OF SOURCE FILE**

**DATA**

2021 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2020 to July 1, 2022.

2020 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2010 to July 1, 2021.

*Note:*

1. Beginning with the 2021 source file, the Census Bureau began using Connecticut’s nine planning regions replacing the eight counties which ceased to function as governmental and administrative entities in 1960. Below are the population estimates for the nine planning regions. On the AHRF, the eight Connecticut counties are carried as missing.

**Region** **2021 Total Deaths**

Capitol Planning Region 9,640

Greater Bridgeport Planning Region 2,629

Lower Connecticut River Valley Planning Region 1,811

Naugatuck Valley Planning Region 4,536

Northeastern Connecticut Planning Region 1,033

Northwest Hills Planning Region 1,257

South Central Connecticut Planning Region 5,868

Southeastern Connecticut Planning Region 2,986

Western Connecticut Planning Region 5,142

### F-25) Natality Data

*2018-2020 and 2019-2021 Natality Average Data:*

The **2018-2020 and 2019-2021****Natality Average** data are calculated fields using the National Center for Health Statistics *2018, 2019, and 2020 and the 2019, 2020, and 2021 Natality Detail Data Files,* as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program (see <http://www.cdc.gov/nchs/births.htm>). These files contain information for live births only and do not include data on stillborns. The number of births averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data. NCHS restrictions prohibit release of any subnational data with fewer than 10 occurrences, including data averaged across years. Therefore, 3-year averages carried on the AHRF, data for any counties having fewer than 10 occurrences are suppressed.

The number of births for a county is based on place of residence of the mother; non‑residents of the U.S. are excluded. Averages were calculated according to the following formula:

3‑Year Natality Average = (2019 Births + 2020 Births + 2021 Births)/3

*Note:*

1. Hispanic origin may be of any race and are included in counts by race for white, black and other.
2. Data by Hispanic Origin are available for Puerto Rico beginning in 2016-2018.
3. A birthweight less than 2,500 grams (5 pounds, 8 ounces) is considered as low birthweight. Babies weighing less than 1,500 grams (3 pounds, 5 ounces) at birth are considered very low birthweight. Birth is considered preterm if delivered less than 37 weeks of gestation (Last Menstrual Period (LMP) based on gestational age).
4. Beginning with the 2017 source data, NCHS cannot release county level data on the marital status of the mother for births occurring in or to residents of California due to state statutory restrictions. Therefore, on the AHRF, Births to Unmarried Mother is carried as a missing value for all counties in California.
5. Data are available for Puerto Rico and Guam.

### F-26) Births in Hospitals

**2020 and 2021 Births in Hospitals** in short term general hospitals are from the *AHA Annual Survey of Hospitals*. (Copyright.)

*Note:*

1. Births are the total number of infants born in the hospital during the reporting period. Births do not include infants transferred from other institutions, and are excluded from admissions and discharge figures. Births exclude Fetal Deaths.
2. Data are included on the AHRF for Guam, Puerto Rico and the US Virgin Islands.

### F-27) Total Births

The field **Total Births** comes from the U.S. Census Bureau. It is the total number of live births based on place of residence (not occurrence), as estimated using reports from the Census Bureau’s Federal-State Cooperative Program for Population Estimates (FSCPE) and the National Center for Health Statistics. The source for each year of data is noted below:

**YEAR OF SOURCE FILE**

**DATA**

2021 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2020 to July 1, 2022.

2020 Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2010 to July 1, 2021.

*Note:*

1. Beginning with the 2021 source file, the Census Bureau began using Connecticut’s nine planning regions replacing the eight counties which ceased to function as governmental and administrative entities in 1960. Below are the population estimates for the nine planning regions. On the AHRF, the eight Connecticut counties are carried as missing.

**Region** **2021 Total Births**

Capitol Planning Region 9,693

Greater Bridgeport Planning Region 3,438

Lower Connecticut River Valley Planning Region 1,460

Naugatuck Valley Planning Region 4,487

Northeastern Connecticut Planning Region 870

Northwest Hills Planning Region 926

South Central Connecticut Planning Region 5,813

Southeastern Connecticut Planning Region 2,660

Western Connecticut Planning Region 6,471

### F-28) Education

The **2016-2020 and 2017-2021 Persons age 25 years or more and persons aged 25 years or more with less than a high school diploma, with high school diploma or more and with four years of college or more** are from the 2016-2020 and 2017-2021American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent fields have one decimal.

*Note:*

1. Less than a High School Diploma fields include response categories “no schooling completed” and “12th grade, no diploma.”
2. High School Graduated or More fields include people whose highest degree was a high school diploma or its equivalent, people who attended college but did not receive a degree, and people who received an associate’s, bachelor’s, master’s, or professional or doctorate degree. People who reported completing the 12th grade but not receiving a diploma are not included.
3. Veterans are men and women who have served (even for a short time), but are not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or Coast Guard, or who served in the U.S. Merchant Marine during World War II. People who served in the National Guard or Reserves are classified as veterans only if they were ever called or ordered to active duty, not counting the 4-6 months for initial training or yearly summer camps. All other civilians are classified as nonveterans.
4. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021 Puerto Rico Community Survey Summary File, U.S. Census Bureau.

### F-29) Census Housing Data

*2020 Census Housing Statistics:*

The **2020 Housing Units and Occupied Housing Units** are from the *2020 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* **2020 Vacant Housing Units, Percent and Number of Owner-Occupied Housing Units** are from the *2020 Census Demographic and Housing Characteristics File (DHC), U.S. Census Bureau*.

*Note:*

1. A housing unit is a living quarter in which the occupant or occupants live separately from any other individuals in the building and have direct access to their living quarters from outside the building or through a common hall. Housing units are usually houses, apartments, mobile homes, groups of rooms, or single rooms occupied that are occupied as separate living quarters. They are residences for single individuals, for groups of individuals, or for families who live together. A single individual or a group living in a housing unit is defined to be a household.
2. A housing unit is classified as occupied if it is the usual place of residence of the individual or group of individuals living in it on Census Day, or if the occupants are only temporarily absent, such as away on vacation, in the hospital for a short stay, or on a business trip, and will be returning. The occupants may be one individual, a single family, two or more families living together, or any other group of related or unrelated individuals who share living arrangements.
3. A housing unit is classified as vacant if no one is living in it on Census Day, unless its occupant or occupants are only temporarily absent; such as away on vacation, in the hospital for a short stay, or on a business trip; and will be returning. Housing units temporarily occupied at the time of enumeration entirely by individuals who have a usual residence elsewhere are classified as vacant.
4. A housing unit is owner-occupied if the owner or co-owner lives in the unit even if it is mortgaged or not fully paid for. The owner or co-owner must live in the unit and usually is Person 1 on the questionnaire.
5. Vacancy status was determined by census enumerators obtaining information from landlords, owners, neighbors, rental agents, and others. Vacant Units are subdivided according to their housing market classification as follows: For Rent; Rented, Not Occupied; For Sale; Sold, Not Occupied, For Seasonal, Recreational, or Occasional Use; For Migrant Workers; and Other Vacant.
6. Data are included on the AHRF for Puerto Rico.
7. Data included on the AHRF for Guam are from the *2020: DECIA Guam Demographic Profile* .
8. Data included on the AHRF for the U.S. Virgin Islands are from the *2020: DECIA US Virgin Islands Demographic Profile*.

*2010 Census Housing Statistics:*

The **2010 Housing Units and Occupied Housing Units** are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* **2010 Vacant Housing Units, Percent and Number of Owner-Occupied Housing Units** are from the *2010 Census of Population and Housing: Summary File 1(SF1).*

*Note:*

1. A housing unit is a living quarter in which the occupant or occupants live separately from any other individuals in the building and have direct access to their living quarters from outside the building or through a common hall. Housing units are usually houses, apartments, mobile homes, groups of rooms, or single rooms occupied as separate living quarters. They are residences for single individuals, for groups of individuals, or for families who live together. A single individual or a group living in a housing unit is defined to be a household.
2. A housing unit is classified as occupied if it is the usual place of residence of the individual or group of individuals living in it on Census Day, or if the occupants are only temporarily absent, such as away on vacation, in the hospital for a short stay, or on a business trip, and will be returning. The occupants may be one individual, a single family, two or more families living together, or any other group of related or unrelated individuals who share living arrangements.
3. A housing unit is classified as vacant if no one is living in it on Census Day, unless its occupant or occupants are only temporarily absent; such as away on vacation, in the hospital for a short stay, or on a business trip; and will be returning. Housing units temporarily occupied at the time of enumeration entirely by individuals who have a usual residence elsewhere are classified as vacant.
4. A housing unit is owner-occupied if the owner or co-owner lives in the unit even if it is mortgaged or not fully paid for. The owner or co-owner must live in the unit and usually is Person 1 on the questionnaire.
5. Vacancy status was determined by census enumerators obtaining information from landlords, owners, neighbors, rental agents, and others. Vacant Units are subdivided according to their housing market classification as follows: For Rent; Rented, Not Occupied; For Sale; Sold, Not Occupied, For Seasonal, Recreational, or Occasional Use; For Migrant Workers; and Other Vacant.
6. Data are included on the AHRF for Puerto Rico.
7. Data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
8. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

**2010 Census Urban and Rural Housing Units** are from the *2010 Census of Population and Housing: Summary File 1 (SF1) Urban/Rural Update, U.S. Census Bureau*. For the 2010 Census, the Census Bureau classified as urban all territory, population, and housing units located within urbanized areas (UAs) and urban clusters (UCs). An urbanized area consists of densely developed territory that contains 50,000 or more people. An urban cluster consists of densely settled territory that has at least 2,500 people but fewer than 50,000 people. Rural consists of all territory, population, and housing units outside of UAs and UCs. Percent Urban Housing Units has one decimal point. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. Data on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
3. Data included on the AHRF for the U.S. Virgin Islands are from the *2010 Census of Population and Housing, U.S. Virgin Islands Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.

**2016-2020 and 2017-2021 Housing** data are from the 2016-2020 and 2017-2021 American Community Survey (ACS) Summary File, U.S. Census Bureau. The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1. For more information regarding definitions, user updates, margins of error, and comparability, the Census website [www.census.gov](http://www.census.gov) should be referenced. Percent fields have one decimal place.

*Note:*

1. A housing unit may be a house, an apartment, a mobile home, a group of rooms or a single room that is occupied (or, if vacant, intended for occupancy) as a separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. A housing unit is classified as occupied if it is the current place of residence of the person or group of people living in it at the time of the interview, or if the occupants are only temporarily absent from the residence for two months or less, that is, away on vacation or a business trip.
2. Median Home Value is in dollars for owner-occupied housing units. The median divides the value distribution into two equal parts: one-half of the cases falling below the median value of property (house and lot, mobile home and lot (if lot owned) or condominium unit) and one-half above the median.
3. Median Gross Rent is in dollars for renter-occupied housing units paying cash. Median Gross Rent divides the gross rent distribution into two equal parts: one-half of the cases falling below the median gross rent and one-half above the median.
4. Caution should be used when comparing ACS data on telephone service availability from the year 2021 with pre-2019 ACS data. In general, changes made to the telephone service availability question beginning in 2019 led to an increase of telephone service availability estimates across most geographies when compared to pre-2019 estimates.
5. Data on the AHRF for Puerto Rico are from the 2016-2020 and 2017-2021Puerto Rico Community Survey Summary File (PRCS), U.S. Census Bureau.

*2021 and 2022 Housing Unit Estimates:*

The **Housing Unit Estimates** data are from the U.S. Census Bureau. Housing unit estimates are produced using the components of housing change.

**YEAR OF SOURCE FILES**

**DATA**

2022 Annual Estimates of Housing for the United States, Regions, Divisions, and Counties: April 1, 2020 to July 1, 2022

2021 Annual Estimates of Housing for the United States, Regions, Divisions, and Counties: April 1, 2020 to July 1, 2021

*Note*: A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from the outside of the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants wherever possible. Both occupied and vacant housing units are included in the housing unit inventory, except that recreational vehicles, boats, vans, tents, railroad cars, and the like are included only if they are occupied as someone’s usual place of residence. Vacant mobile homes are included provided they are intended for occupancy on the site where they stand. Vacant mobile homes on dealer’s sales lots, at the factory, or in storage yards are excluded from the housing unit inventory.

### F-30) Veteran Population

**2022 and 2023 Veteran Population Estimates** are from the Veteran Population Projection Model 2020 (VetPop2020) file, Department of Veterans Affairs (VA). VetPop2020, a deterministic actuarial projection model, was developed by the Office of Predictive Analytics to estimate and project the Veteran Population. It is the tenth generation of the Veteran Population Projection Model with improvements in data and model update process. The new model maintains the general approach from the prior model, VetPop2018, and incorporates more recent survey data from the American Community Survey (ACS) (U.S. Census Bureau 2020) and administrative data from the VA and the Department of Defense (DoD). The data are as of September 30 of the respective year. The 2022 and 2023 data carried on the current AHRF, which are from the VetPop2020, have replaced the data carried on prior releases which were from the VetPop2018 file.

*Note:*

1. A Veteran, as defined in the U.S. Code Title 38, is a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable. Active military, naval, or air service includes (1) active duty which represents full-time duty in the Armed Forces, other than active duty for training or (2) any period of active/inactive duty for training which the individual concern was disabled. “Veterans” excludes current service members (i.e., active duty personnel who have not yet separated), those dishonorably discharged, those whose active duty was training only, and those who have previously separated but are on active duty as of the estimation date. For more information go to: <http://www.ssa.gov/OP_Home/comp2/D-USC-38.html>.
2. Male and female population may not equal total population due to rounding.
3. Data are included on the AHRF for Guam.

## G. ENVIRONMENT

### G- 1) Land Area and Density

**2020 Land and Water Area** data are from the *2020 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* Area measurements were reported on the source file as whole square meters. They were converted to square miles by dividing the square meters by 2,589,988. Area is calculated from the specific boundary recorded for each entity in the Census Bureau’s geospacial database. The water area figures include inland, coastal, Great Lakes, and territorial sea water. Inland water consists of any lake, reservoir, pond, or similar body of water that is recorded in the Census Bureau’s geospatial database.

Land and Water area measurements may disagree with the information displayed on Census Bueau maps and the MAF/TIGER Database because, for area measurement purposes, hydrologic features identified as intermittent water, glacier, or swamp are reported as land area. The accuracy of any area measurement data is limited by the accuracy inherent in the location and shape of the various boundary information in the MAF/TIGER Database; the identification, and classification of water bodies coupled with the location and shapes of the shorelines of water bodies in the MAF/TIGER Database; and rounding affecting the last digit in all operations that compute and/or sum the area measurement.

For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*  Data are included on the AHRF for Puerto Rico.

**2010 Land and Water Area** data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* Area measurements were reported on the source file as whole square meters. They were converted to square miles by dividing the square meters by 2,589,988. Area is calculated from the specific boundary recorded for each entity in the Census Bureau’s geographic database. The water area figures include inland, coastal, Great Lakes, and territorial sea water. Inland water consists of any lake, reservoir, pond, or similar body of water that is recorded in the Census Bureau’s geographic database.

Land and Water area measurements may disagree with the information displayed on Census Bureau maps and the MAF/TIGER database because, for area measurement purposes, hydrologic features identified as intermittent water, glacier, or swamp are reported as land area. The accuracy of any area measurement data is limited by the accuracy inherent in the location and shape of the various boundary information in the MAF/TIGER database; the identification, and classification of water bodies coupled with the location and shapes of the shorelines of water bodies in that database; and rounding affecting the last digit in all operations that compute and/or sum the area measurement.

For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website [www.census.gov](http://www.census.gov) should be referenced.

*Note:*

1. Data are included on the AHRF for Puerto Rico.
2. Data included on the AHRF for Guam are from the *2010 Census of Population and Housing, Guam Summary File*, U.S. Census Bureau using the Bureau’s American FactFinder.
3. Data included on the AHRF for the U.S. Virgin Islands are from the 2010 Census of Population and Housing, U.S. Virgin Islands Summary File, U.S. Census Bureau using the Bureau’s American FactFinder.

### G- 2) Population Per Square Mile

**2020 Population per Square Mile** and **Housing Unit Density per Square Mile** are from the *2020 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* Population per Square Mile and Housing Unit per Square Mile have one decimal place.

*Note:*

1. Population and housing unit density are computed by dividing the total population or number of housing units within a geographic entity by the land area of that entity measured in square miles.
2. Data are included on the AHRF for Puerto Rico.

**2010 Population per Square Mile** and **Housing Unit Density per Square Mile** are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File,* U.S. Census Bureau*.* Population per Square Mile and Housing Unit per Square Mile have one decimal place.

*Note:*

1. Population and housing unit density are computed by dividing the total population or number of housing units within a geographic entity by the land area of that entity measured in square miles.
2. Data are included on the AHRF for Puerto Rico.
3. Data included on the AHRF for Guam are from the 2010 Census of Population and Housing, Guam Summary File, U.S. Census Bureau using the Bureau’s American FactFinder.
4. Data included on the AHRF for the U.S. Virgin Islands are from the 2010 Census of Population and Housing, U.S. Virgin Islands Summary File, U.S. Census Bureau using the Bureau’s American FactFinder.

### G- 3) Air Quality

**2021 and 2022 Air Quality data** are from the Environmental Protection Agency (EPA), Air Data Air Quality Index Report. Air Quality Index (AQI) is an indicator of overall air quality, because it takes into account all of the criteria air pollutants measured within a geographic area. Although AQI includes all available pollutant measurements, many areas have monitoring stations for some, but not all, of the pollutants. For additional information see

<https://www.epa.gov/outdoor-air-quality-data>

*Note:*

1. **Number of Days Air Quality is Measured** is the number of days in the year having an Air Quality Index value. This is the number of days on which measurements from any monitoring site in the county were reported to the Air Quality System (AQS) database.
2. **Number of Days Measured with Air Quality Good** is the number of days in the year having an AQI value 0 through 50.
3. **Percent Good Air Quality Days** is calculated as the Number of Days Measured with Air Quality Good \* 100 / Number of Days Air Quality Measured. Percent Good Air Quality Days has two decimal places.
4. Data are not reported for approximately two thirds of the counties.
5. Data are reported for some counties in Puerto Rico in 2021 and 2022 and the US Virgin Islands in 2021 and 2022.

**2018 and 2019 Annual Average Ambient Concentrations of PM 2.5 in micrograms per cubic meter, based on seasonal averages and daily measurement (monitor and modeled)** data are from the Centers for Disease Control and Prevention, Environmental Public Health Tracking Network. Data are provided by the US Environmental Protection Agency (EPA). Accessed from: <https://ephtracking.cdc.gov/DataExplorer>. These fields have one decimal place.

*Note:*

1. This measure was created using the Downscaler (DS) modeled predictions for counties and days without monitoring and using Air Quality System (AQS) data for counties and days with monitoring data. DS modeled data are generated through statistical fusion of AQS monitor and Community Multiscale Air Quality (CMAQ) model-predicted concentration values.
2. Beginning March 18, 2013, the EPA’s revised annual PM 2.5 standard of 12 micrograms per cubic meter (lowered from 15 micrograms per cubic meter) went into effect.
3. This measure provides a general indication of the overall trend in annual PM 2.5 concentrations; it does not directly reflect personal exposure. The relationship between ambient concentrations and personal exposure is largely unknown, and it varies depending upon pollutant, activity patterns and microenvironments.

**2018 and 2019 Number of Days with Maximum 8-Hour Average Ozone Concentration (monitor and modeled) over the National Ambient Air Quality Standard (NAAQS)** are from the Centers for Disease Control and Prevention, Environmental Public Health Tracking Network. Data are provided by the US Environmental Protection Agency (EPA). Accessed from: <https://ephtracking.cdc.gov/showAirMonModData> .

*Note:*

1. This measure was created using the Downscaler (DS) modeled predictions for counties and days without monitoring and using Air Quality System (AQS) data for counties and days with monitoring data. DS modeled data are generated through statistical fusion of AQS monitor and Community Multiscale Air Quality (CMAQ) model-predicted concentration values.
2. The 8-hour ozone National Ambient Air Quality Standard for the 2013 through 2018 data is 0.070 parts per million (ppm). EPA established this new 8-hour standard for ozone of 0.070 ppm in 2015. The 8-hour ozone National Ambient Air Quality Standard for the 2006 through 2012 data is 0.075 parts per million (ppm). EPA established this new 8-hour standard for ozone of 0.075 ppm in 2008. The previous 8-hour standard was set at 0.08 ppm.
3. The number of high ozone days per year varies, which makes tracking trends over time difficult to analyze or interpret. The variability is largely due to the fact that the number of high ozone days is related to temperature (as a result, there will be more high ozone days in hotter summers); and there are a small number of events (high ozone days) per year, so for statistical reasons, this type of measure may vary. The model predictions are used to fill in air quality estimates in areas and at times without monitoring data. For counties without monitoring data, temporal (seasonal) and spatial (regional) biases in the modeled estimates, can influence the accuracy of the measure.

### G- 4) Ground Contamination

**2022 and 2023 Human Exposure Environmental Indicator site** data are from the US Environmental Protection Agency (EPA). The 2023 data were downloaded 03/22/2023. The 2022 data were downloaded 03/21/2022. The Site-Wide Human Exposure (HE) environmental indicator is designed to document long-term human health protection on a site-wide basis by measuring the incremental progress achieved in controlling unacceptable human exposures at a Superfund site. Superfund is the name given to the environmental program established to address abandoned hazardous waste sites. It is also the name of the fund established by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. This law was enacted in the wake of the discovery of toxic waste dumps such as Love Canal and Times Beach in the 1970s. For details and definitions, see:  <https://www.epa.gov/superfund/superfund-cercla-overview>.

*Note:*

1. A site is under control when assessments for human exposures indicate there are no unacceptable human exposure pathways and the Region has determined the site is under control for current conditions site wide.
2. A site is not under control when contamination has been detected at a site at an unsafe level, and a reasonable expectation exists that people may be exposed to the contamination.
3. A site has insufficient data when responses have not been initiated or response actions have been initiated but have not yet generated reliable information to make an evaluation for this indicator - i.e., there is not sufficient information to determine whether there are any current, complete unacceptable human exposure pathways at the site, therefore no determination is possible.
4. Data are included on the AHRF for Guam, Puerto Rico and US Virgin Islands.

### G- 5) Elevation

**Elevation data** are from a file developed in support of the investigation into the industrial correlates of environment-related mortality by System Sciences, Inc. The original source was the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, and Environmental Data Service.

*Note:*

1. Data were not available for Alaska or Hawaii therefore the field is reported as missing.
2. Data were not available for all Virginia independent cities; in these instances the field has been reported as missing.

# II. TECHNICAL INFORMATION

## A. FILE SPECIFICATIONS

The AHRF is currently available in the following formats: ASCII, CSV, and as a SAS dataset. The ASCII file has the following specifications:

Record Length = 25907

Number of Records = 3231

## B. MISSING VALUES ON AHRF

Beginning with the 2013-2014 AHRF, data that are not reported on original data source files are carried on the AHRF as missing. Prior to the 2013-2014 AHRF, these instances were carried on the AHRF as zero-filled and specific instances of missing data shown in the AHRF User Documentation *Notes*.

## C. CRITERIA FOR DATA INCLUSION ON THE AHRF

The criteria for data to be included on the AHRF are 1) that data be available for all or nearly all counties in the U.S., 2) that it be accurate, or at least generally accurate if no better data exist, 3) that it be current or part of a useful time-series, and 4) that the data be potentially useful for the analysis of health occupation supply and requirements.

# III. DOCUMENTATION

## A. TECHNICAL DOCUMENTATION OF AHRF

The AHRF Technical Documentation is another available source of reference to the fields on AHRF. The documentation organizes the data items into seven major categories as does this user documentation. Information included in the technical documentation is the field name, columns of location on the file, general field characteristics, source, year of the data, and date the item was put on the file. Complete source reference notes in this User Documentation pertaining to a specific data variable can be viewed by clicking on the Source reference for that variable in the Technical Documentation.

## B. SAS LAYOUT OF AHRF

This layout is used in conjunction with the technical documentation. The field's name and format is in reference to the fields on the technical documentation.