USER DOCUMENTATION

FOR THE

AREA RESOURCE FILE (ARF)

February 2003 Release

National Center for Health Workforce Analysis
Bureau of Health Professions
Health Resources and Services Administration
Department of Health and Human Services
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I. DATA ELEMENT DESCRIPTIONS AND REFERENCES

A. CODES AND CLASSIFICATIONS

A-1) Header for ARF

The 45-character header for ARF was placed 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. The file length equals the length of the file without the 45-byte header. Therefore the actual record length is the file length plus 45 bytes.

Note that beginning with the February 2001 version of the ARF, 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 (positions 12-16) of the header. This field should be used when matching with previous versions of the ARF.

Additionally, beginning with the February 2001 updates to the ARF, to the extent data were available for U.S. possessions and territories they are included on the file. Any sources having territory data available are noted in applicable User Documentation references.

A-2) State and County Codes

FIPS State Code:

This code was established by National Bureau of Standards, 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.

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

<table>
<thead>
<tr>
<th>FIPS CODE</th>
<th>ABBREVIATION</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>AL</td>
<td>Alabama</td>
</tr>
<tr>
<td>02</td>
<td>AK</td>
<td>Alaska</td>
</tr>
<tr>
<td>04</td>
<td>AZ</td>
<td>Arizona</td>
</tr>
<tr>
<td>05</td>
<td>AR</td>
<td>Arkansas</td>
</tr>
<tr>
<td>06</td>
<td>CA</td>
<td>California</td>
</tr>
<tr>
<td></td>
<td>State Abbreviation</td>
<td>State Name</td>
</tr>
<tr>
<td>---</td>
<td>-------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>08</td>
<td>CO</td>
<td>Colorado</td>
</tr>
<tr>
<td>09</td>
<td>CT</td>
<td>Connecticut</td>
</tr>
<tr>
<td>10</td>
<td>DE</td>
<td>Delaware</td>
</tr>
<tr>
<td>11</td>
<td>DC</td>
<td>District of Columbia</td>
</tr>
<tr>
<td>12</td>
<td>FL</td>
<td>Florida</td>
</tr>
<tr>
<td>13</td>
<td>GA</td>
<td>Georgia</td>
</tr>
<tr>
<td>15</td>
<td>HI</td>
<td>Hawaii</td>
</tr>
<tr>
<td>16</td>
<td>ID</td>
<td>Idaho</td>
</tr>
<tr>
<td>17</td>
<td>IL</td>
<td>Illinois</td>
</tr>
<tr>
<td>18</td>
<td>IN</td>
<td>Indiana</td>
</tr>
<tr>
<td>19</td>
<td>IA</td>
<td>Iowa</td>
</tr>
<tr>
<td>20</td>
<td>KS</td>
<td>Kansas</td>
</tr>
<tr>
<td>21</td>
<td>KY</td>
<td>Kentucky</td>
</tr>
<tr>
<td>22</td>
<td>LA</td>
<td>Louisiana</td>
</tr>
<tr>
<td>23</td>
<td>ME</td>
<td>Maine</td>
</tr>
<tr>
<td>24</td>
<td>MD</td>
<td>Maryland</td>
</tr>
<tr>
<td>25</td>
<td>MA</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>26</td>
<td>MI</td>
<td>Michigan</td>
</tr>
<tr>
<td>27</td>
<td>MN</td>
<td>Minnesota</td>
</tr>
<tr>
<td>28</td>
<td>MS</td>
<td>Mississippi</td>
</tr>
<tr>
<td>29</td>
<td>MO</td>
<td>Missouri</td>
</tr>
<tr>
<td>30</td>
<td>MT</td>
<td>Montana</td>
</tr>
<tr>
<td>31</td>
<td>NE</td>
<td>Nebraska</td>
</tr>
<tr>
<td>32</td>
<td>NV</td>
<td>Nevada</td>
</tr>
<tr>
<td>33</td>
<td>NH</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>34</td>
<td>NJ</td>
<td>New Jersey</td>
</tr>
<tr>
<td>35</td>
<td>NM</td>
<td>New Mexico</td>
</tr>
<tr>
<td>36</td>
<td>NY</td>
<td>New York</td>
</tr>
<tr>
<td>37</td>
<td>NC</td>
<td>North Carolina</td>
</tr>
<tr>
<td>38</td>
<td>ND</td>
<td>North Dakota</td>
</tr>
<tr>
<td>39</td>
<td>OH</td>
<td>Ohio</td>
</tr>
<tr>
<td>40</td>
<td>OK</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>41</td>
<td>OR</td>
<td>Oregon</td>
</tr>
<tr>
<td>42</td>
<td>PA</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>44</td>
<td>RI</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>45</td>
<td>SC</td>
<td>South Carolina</td>
</tr>
<tr>
<td>46</td>
<td>SD</td>
<td>South Dakota</td>
</tr>
<tr>
<td>47</td>
<td>TN</td>
<td>Tennessee</td>
</tr>
<tr>
<td>48</td>
<td>TX</td>
<td>Texas</td>
</tr>
<tr>
<td>49</td>
<td>UT</td>
<td>Utah</td>
</tr>
<tr>
<td>50</td>
<td>VT</td>
<td>Vermont</td>
</tr>
<tr>
<td>51</td>
<td>VA</td>
<td>Virginia</td>
</tr>
<tr>
<td>53</td>
<td>WA</td>
<td>Washington</td>
</tr>
<tr>
<td>54</td>
<td>WV</td>
<td>West Virginia</td>
</tr>
</tbody>
</table>
Additionally, for data variables added to the February 2001 and later versions of the ARF, the following codes are included for sources where available:

<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td>GU</td>
<td>Guam</td>
</tr>
<tr>
<td>72</td>
<td>PR</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>78</td>
<td>VI</td>
<td>Virgin Islands</td>
</tr>
</tbody>
</table>

Modified FIPS County Codes:

The **FIPS County Codes** were established by National Bureau of Standards, 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 all revisions through July 1999. The basic structure of the codes is sequential, ascending, three-digit odd numbers.

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

1) The County Code of 001 has been entered for Alaska and includes data for the entire state of Alaska for data prior to 1992. Except where noted, data for 1992 and later are zero filled on this record since the detailed records are broken out on the file.

2) Most independent cities were included in their original counties because much of the data on the file previously was only available for counties and could not be separated into county and independent city segments.

On earlier versions of the ARF, the following were carried as independent cities but were recoded in the ARF modified FIPS as noted (therefore when merging data from the new release and old versions, the Secondary Entity field should be used to match records):

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>STATE</th>
<th>ARF MODIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore City</td>
<td>Maryland</td>
<td>007 000 510</td>
</tr>
<tr>
<td>St. Louis City</td>
<td>Missouri</td>
<td>191 000 510</td>
</tr>
<tr>
<td>Carson City</td>
<td>Nevada</td>
<td>025 000 510</td>
</tr>
</tbody>
</table>
The following cities were previously combined into their original counties. Therefore, all the data for the city on earlier versions of the ARF and for data prior to 1992 are included in the original county (e.g., the independent city of Bristol, Va., is added into Washington county.)

<table>
<thead>
<tr>
<th>CITY</th>
<th>STATE</th>
<th>ORIGINAL COUNTIES</th>
<th>ARF ORIGINAL MODIFIED</th>
<th>FIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalawao County</td>
<td>Hawaii</td>
<td>Maui</td>
<td>009</td>
<td>005</td>
</tr>
<tr>
<td>Bedford</td>
<td>Virginia</td>
<td>Bedford</td>
<td>019</td>
<td>515</td>
</tr>
<tr>
<td>Bristol</td>
<td>Virginia</td>
<td>Washington</td>
<td>191</td>
<td>520</td>
</tr>
<tr>
<td>Buena Vista</td>
<td>Virginia</td>
<td>Rockbridge</td>
<td>163</td>
<td>530</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>Virginia</td>
<td>Albemarle</td>
<td>003</td>
<td>540</td>
</tr>
<tr>
<td>Clifton Forge*</td>
<td>Virginia</td>
<td>Alleghany</td>
<td>005</td>
<td>560</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>Virginia</td>
<td>Chesterfield</td>
<td>041</td>
<td>570</td>
</tr>
<tr>
<td>Covington</td>
<td>Virginia</td>
<td>Alleghany</td>
<td>005</td>
<td>580</td>
</tr>
<tr>
<td>Danville</td>
<td>Virginia</td>
<td>Pittsylvania</td>
<td>143</td>
<td>590</td>
</tr>
<tr>
<td>Emporia</td>
<td>Virginia</td>
<td>Greensville</td>
<td>081</td>
<td>595</td>
</tr>
<tr>
<td>Fairfax</td>
<td>Virginia</td>
<td>Fairfax</td>
<td>059</td>
<td>600</td>
</tr>
<tr>
<td>Falls Church</td>
<td>Virginia</td>
<td>Fairfax</td>
<td>059</td>
<td>610</td>
</tr>
<tr>
<td>Franklin</td>
<td>Virginia</td>
<td>Southampton</td>
<td>175</td>
<td>620</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>Virginia</td>
<td>Spotsylvania</td>
<td>177</td>
<td>630</td>
</tr>
<tr>
<td>Galax</td>
<td>Virginia</td>
<td>Grayson</td>
<td>077</td>
<td>640</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>Virginia</td>
<td>Rockingham</td>
<td>165</td>
<td>660</td>
</tr>
<tr>
<td>Hopewell</td>
<td>Virginia</td>
<td>Prince George</td>
<td>149</td>
<td>670</td>
</tr>
<tr>
<td>Lexington</td>
<td>Virginia</td>
<td>Rockbridge</td>
<td>163</td>
<td>678</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>Virginia</td>
<td>Campbell</td>
<td>031</td>
<td>680</td>
</tr>
<tr>
<td>Manassas</td>
<td>Virginia</td>
<td>Prince William</td>
<td>153</td>
<td>683</td>
</tr>
<tr>
<td>Manassas Park</td>
<td>Virginia</td>
<td>Prince William</td>
<td>153</td>
<td>685</td>
</tr>
<tr>
<td>Martinsville</td>
<td>Virginia</td>
<td>Henry</td>
<td>089</td>
<td>690</td>
</tr>
<tr>
<td>Norfolk</td>
<td>Virginia</td>
<td>Norfolk</td>
<td>129**</td>
<td>710</td>
</tr>
<tr>
<td>Norton</td>
<td>Virginia</td>
<td>Wise</td>
<td>195</td>
<td>720</td>
</tr>
<tr>
<td>Petersburg</td>
<td>Virginia</td>
<td>Dinwiddie</td>
<td>053</td>
<td>730</td>
</tr>
<tr>
<td>Poquoson</td>
<td>Virginia</td>
<td>York</td>
<td>199</td>
<td>735</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>Virginia</td>
<td>Norfolk</td>
<td>129**</td>
<td>740</td>
</tr>
<tr>
<td>Radford</td>
<td>Virginia</td>
<td>Montgomery</td>
<td>121</td>
<td>750</td>
</tr>
<tr>
<td>Richmond</td>
<td>Virginia</td>
<td>Henrico</td>
<td>087</td>
<td>760</td>
</tr>
<tr>
<td>Roanoke</td>
<td>Virginia</td>
<td>Roanoke</td>
<td>161</td>
<td>770</td>
</tr>
<tr>
<td>Salem</td>
<td>Virginia</td>
<td>Roanoke</td>
<td>161</td>
<td>775</td>
</tr>
<tr>
<td>South Boston***</td>
<td>Virginia</td>
<td>Halifax</td>
<td>083</td>
<td>780</td>
</tr>
<tr>
<td>Staunton</td>
<td>Virginia</td>
<td>Augusta</td>
<td>015</td>
<td>790</td>
</tr>
<tr>
<td>Suffolk</td>
<td>Virginia</td>
<td>Suffolk City</td>
<td>123****</td>
<td>800</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>Virginia</td>
<td>Augusta</td>
<td>015</td>
<td>820</td>
</tr>
<tr>
<td>Williamsburg</td>
<td>Virginia</td>
<td>James City</td>
<td>095</td>
<td>830</td>
</tr>
</tbody>
</table>
Winchester Virginia Frederick 069 840

Note:
* Clifton Forge is no longer an independent city as of July 2001.
** FIPS does not have a code for Norfolk since it is no longer a county. The ARF designation of Norfolk city (FIPS Code 51710) includes the independent cities of Norfolk and Portsmouth, Virginia for data prior to 1992. 1992 and later data are contained in the independent cities of Norfolk (51710) and Portsmouth (51740).
*** South Boston is no longer an independent city as of June 1995.
**** Nansemond county became Nansemond city December 15, 1973. Nansemond city became a part of the city of Suffolk December 15, 1979. On ARF versions prior to the 2001 release, Suffolk independent city was recoded into ARF modified FIPS 51123. Beginning with the 2001 ARF, the Suffolk independent city code is now the standard FIPS code of 51800.

The following Virginia independent cities have been carried as separate entities on the ARF since November 1984:

<table>
<thead>
<tr>
<th>CITY</th>
<th>FORMER COUNTY ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NEW MOD FIPS CODE)</td>
<td>(OLD MOD FIPS CODE)</td>
</tr>
<tr>
<td>Alexandria (51510)</td>
<td>Arlington (51013)</td>
</tr>
<tr>
<td>Chesapeake (51550)</td>
<td>Norfolk (51129)</td>
</tr>
<tr>
<td>Hampton (51650)</td>
<td>Hampton/Newport News City (51084)</td>
</tr>
<tr>
<td>Newport News (51700)</td>
<td>Hampton/Newport News City (51084)</td>
</tr>
<tr>
<td>Virginia Beach (51810)</td>
<td>Norfolk (51129)</td>
</tr>
</tbody>
</table>

To the extent possible, historical data on ARF at the time of the change were modified to separate data for these independent cities from data for their former counties. Where independent city data could not be broken out from county data, this fact has been noted in the sections of this User Documentation which describe the individual data elements and/or sources. Where this has occurred, the data are reported on ARF in the original county (or for Hampton/Newport News Cities, in Newport News-51650) and the city is zero-filled.

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

1) In November 2001, Broomfield, Colorado (08014) was formed from parts of Adams (08001), Boulder (08013), Jefferson (08059) and Weld (08123) counties. The boundaries of Broomfield County reflect the boundaries of Broomfield city legally in effect on November 15, 2001. This code was added to the 2003 release of the ARF, and to the extent source data report data for Broomfield, they are reported on the ARF. This change should be taken into
consideration when comparing with historic data.

2) Effective July 2001, the independent city of Clifton Forge, Virginia (51560) reverted to town status. Clifton Forge, Virginia became an incorporated place within Alleghany County (51005). On the ARF, Clifton Forge, Virginia will be included in Alleghany County for any 2002 or later source data.

3) Effective July 1999, Yellowstone National Park (30113) is legally part of Gallatin County and Park County in Montana. Source data on the ARF either report Yellowstone National Park separately or as a part of Park County. Therefore, as of the February 2000 ARF release, Yellowstone National Park data are combined with Park County (30067) Montana. Any exceptions are noted in this User Documentation.

4) Effective July 1999, NIST revised the Dade County, Florida FIPS code from 12025 to 12086 to keep the new official name Miami-Dade County in alphanumeric sequence. This code has been revised on the February 2000 ARF and should be taken into consideration when comparing with historic files.

5) In January 1983, LaPaz County, Arizona (04012) was formed from the northern portion of Yuma County, Arizona (04027), which still exists with reduced boundaries. As of February 1995, LaPaz County and Yuma County are carried as separate records on the ARF. The new LaPaz County (04012) record should be combined with Yuma County (04027) when comparing data with historic files for consistency.

6) In June 1981, Cibola County, New Mexico (35006) was formed from portions of Valencia County, New Mexico (35061), which still exists with reduced boundaries. As of February 1995, Cibola County and Valencia County are carried as separate records on the ARF. The new Cibola County (35006) record should be combined with Valencia County (35061) when comparing data with historic files for consistency.

7) In September 1979, Ste. Genevieve, Missouri (29193) was renumbered so that the county falls in alphabetical order. The FIPS State and County Code is now 29186.

8) In September 1979, Washabaugh County, South Dakota (46131) merged with Jackson County, South Dakota (46071). The merged entity retains the name of Jackson and the code of 46071. On ARF, historical data for Washabaugh County have been combined with Jackson County.

9) Yellowstone National Park (Part), Wyoming (56047) was dropped as an entity.
The county was dropped from ARF, and all non-zero fields were weighted by population and split between Park County, Wyoming (56029), and Teton County, Wyoming (56039).

10) In June 1970, Ormsby County was incorporated as the independent city of Carson City, Nevada. Carson City is carried as 32510 on the ARF.

Note: Effective with the February 2001 release of the ARF, boroughs and census areas of Alaska are broken out rather than aggregated to the state level. Some historic source data were not reported in the currently defined FIPS areas. These areas have been separated into multiple areas. In these instances they are reported on the ARF in the area of greater population and noted in the appropriate reference in this user documentation. These differences are as follows:

1) In 6/86, Kobuk, AK (02140) became Northwest Arctic (02188); data on the ARF are included in Northwest Arctic.
2) In 1/90, Aleutians, AK (02010) separated into Aleutians West, AK (02016) and Aleutians East (02013); data on the ARF are included in Aleutians West.
3) In 2/92, Skagway-Yakutat-Angoon, AK (02231) separated into Skagway-Hoonah-Angoon (02232) and Yakutat (02282); data on the ARF are included in Skagway-Hoonah-Angoon.

A-3) Census County Group Codes

The Census County Group Codes are groups of counties smaller than a state, but larger than a county, which are geographically adjacent and have similar characteristics. There are 410 County Group Codes. These codes were extracted from the 1970 County Group Reference File obtained from the Bureau of the Census.

Note: Data are not available for:
06039 - Madera, California

A-4) County Typology Codes

The 1989 County Typology Codes are from Economic Research Service (ERS), U.S. Department of Agriculture. The 1989 classification system is based on counties designated as nonmetropolitan in 1993 (based on population and commuting data from the 1990 Census). The typology includes six mutually exclusive economic types: five types (farming, mining, manufacturing, government and services) reflect dependence on particular economic specializations; a sixth type, termed nonspecialized, contains those counties not classified as having any of the five economic specializations. The classification scheme also identifies five overlapping rural policy-relevant types: retirement-destination, Federal lands, persistent poverty, commuting and transfers-dependent. Codes for each of these variables are defined as:
**CODE** | **DESCRIPTION**
--- | ---
00 | Nonmetro other county
01 | Nonmetro farming county
08 | Metro county
99 | Missing value

**Economic Types:**

*Farming-dependent:* Farming contributed a weighted annual average of 20 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

*Mining-dependent:* Mining contributed a weighted annual average of 15 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

*Manufacturing-dependent:* Manufacturing contributed a weighted annual average of 30 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

*Government-dependent:* Government activities contributed a weighted annual average of 25 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

*Services-dependent:* Service activities (private and personal services, agricultural services, wholesale and retail trade, finance and insurance, transportation and public utilities) contributed a weighted annual average of 50 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

*Nonspecialized:* Counties not classified as a specialized economic type over the 3 years from 1987 to 1989.

**Policy Types:**

*Retirement-destination:* The population aged 60 years and over in 1990 increased by 15 percent or more during 1980-90 through inmovement of people.

*Federal lands:* Federally owned lands made up 30 percent or more of a county's land area in the year 1987.

*Commuting:* Workers aged 16 years and over commuting to jobs outside their county of residence were 40 percent or more of all the county's workers in 1990.

*Persistent poverty:* Persons with poverty-level income in the preceding year were 20 percent or more of total population in each of 4 years: 1960, 1970, 1980, and 1990.

*Transfers-dependent:* Income from transfer payments (Federal, state, and local) contributed
a weighted annual average of 25 percent or more of total personal income over the 3 years from 1987 to 1989.

Note:  1) Labor and proprietor income data are revised estimates released by the Bureau of Economic Analysis in 1990.
2) For 1989 data, Alaska was carried as a statewide record (02001) on the ARF, therefore these codes were given a missing value code (99). No data prior to 1992 were updated when Alaska boroughs and census areas were broken out; therefore these codes were not updated on the broken out Alaska records.
3) The typology codes for Virginia counties which include independent cities are based on the characteristics of the county plus each city (or cities) combined with that county. The following note any exceptions to standard combinations:
   - The code for Carroll County, Virginia (51035) includes characteristics from the Virginia city of Galax which is normally included in Grayson County (51077).
   - Arlington County, Virginia (51013) and Alexandria City (51510) have the same code reflecting the combined characteristics of Arlington - Alexandria.
   - Chesapeake City, Virginia (51550) and Norfolk/Portsmouth Cities (51710) have the same code reflecting the combined characteristics of Chesapeake - Norfolk - Portsmouth.
   - York County, Virginia (51199-which also includes Poquoson), Hampton City (51650) and Newport News City (51700) have the same code reflecting the combined characteristics of York-Poquoson-Hampton-Newport News.
   As with Alaska boroughs and census areas, these codes were not updated on the newly broken out Virginia independent city records.
4) Data for Menominee County, Wisconsin (55078) were combined with Shawano County, Wisconsin (55115) on the source data. Therefore, they have the same code on the ARF reflecting the combined characteristics of Menominee-Shawano.
5) These codes were not updated for the newly added US territories of Guam, Puerto Rico and Virgin Islands.

A-5) MSA, PMSA and CMSA Codes, Names and Levels

The Metropolitan Areas (MAs) were announced by the Office of Management and Budget in OMB Bulletin No. 99-04 to be effective June 30, 1999. They are a revision of the MA standards published on March 30, 1990 and the demographic data drawn from the 1990 Decennial Census.

The previous term Standard Metropolitan Statistical Area (SMSA) was changed to describe two metropolitan areas, Metropolitan Statistical Area (MSA) and Primary Metropolitan Statistical Area (PMSA). The current standards provide that each newly qualifying MSA must include at least: one city with 50,000 or more inhabitants, or a Census Bureau-defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000 (75,000 in New England).

Under the standards, the county (or counties) that contains the largest city becomes the
"central county" (counties), along with any adjacent counties that have at least 50 percent of their population in the urbanized area surrounding the largest city. Additional "outlying counties" are included in the MSA if they meet specified requirements of commuting to the central counties and other selected requirements of metropolitan character (such as population density and percent urban). In New England, the MSAs are defined in terms of cities and towns rather than counties.

An area that meets these requirements for recognition as an MSA and also has a population of one million or more may be recognized as a CMSA if: separate component areas can be identified within the entire area by meeting statistical criteria specified in the standards, and local opinion indicates there is support for the component areas.

If recognized, the component areas are designated PMSAs, and the entire area becomes a CMSA. PMSAs, like the CMSAs that contain them, are composed of entire counties, except in New England where they are composed of cities and towns. If no PMSAs are recognized, the entire area is designated as an MSA.

On the ARF, the fields for MSA code and PMSA code were combined into one field, MSA/PMSA Codes, as were MSA names and PMSA names combined to form MSA/PMSA Names. The MSA/PMSA and CMSA names have been abbreviated so as not to exceed 35 characters.

In order to use county figures for New England in the same manner as other parts of the country with respect to MSA/PMSA's, ARF has used the New England Metropolitan State Economic Areas or population of the towns to resolve problems of MSA/PMSA's with partial counties or counties which cross MSA/PMSA's. With this resolution, several MSA/PMSA's have been redefined and several are not present on ARF as follows:

**1120 Boston, MA-NH PMSA**
- Bristol County, MA (25005) - Included in MSA/PMSA 6480 on the ARF
- Essex County, MA (25009)
- Middlesex County, MA (25017)
- Norfolk County, MA (25021)
- Plymouth County, MA (25023)
- Suffolk County, MA (25025)
- Worcester County, MA (25027) - Included in MSA/PMSA 9240 on the ARF
- Rockingham County, NH (33015)

**1160 Bridgeport, CT PMSA**
- Fairfield County (09001)
- New Haven County (09009) - Included in MSA/PMSA 5480 on the ARF

**1200 Brockton, MA PMSA (Not Present on the ARF)**
- Bristol County (25005) - Included in MSA/PMSA 6480 on the ARF
Norfolk County (25021) - Included in MSA/PMSA 1120 on the ARF
Plymouth County (25023) - Included in MSA/PMSA 1120 on the ARF

**1930 Danbury, CT PMSA (Not Present on the ARF)**
Fairfield County (09001) - Included in MSA/PMSA 1160 on the ARF
Litchfield County (09005) - Included in MSA/PMSA 3280 on the ARF

**2600 Fitchburg-Leominster, MA PMSA (Not Present on the ARF)**
Middlesex County (25017) - Included in MSA/PMSA 1120 on the ARF
Worcester County (25027) - Included in MSA/PMSA 9240 on the ARF

**3280 Hartford, CT MSA**
Hartford County (09003)
Litchfield County (09005)
Middlesex County (09007)
New London County (09011) - Included in MSA/PMSA 5520 on the ARF
Tolland County (09013)
Windham County (09015)

**4160 Lawrence, MA-NH PMSA (Not Present on the ARF)**
Essex County, MA (25009) - Included in MSA/PMSA 1120 on the ARF
Rockingham County, NH (33015) - Included in MSA/PMSA 1120 on the ARF

**4560 Lowell, MA-NH PMSA (Not Present on the ARF)**
Middlesex County, MA (25017) - Included in MSA/PMSA 1120 on the ARF
Hillsborough County, NH (33011) - Included in MSA/PMSA 5350 on the ARF

**4760 Manchester, NH PMSA**
Hillsborough County (33011) - Included in MSA/PMSA 5350 on the ARF
Merrimack County (33013)
Rockingham County (33015) - Included in MSA/PMSA 1120 on the ARF

**5400 New Bedford, MA PMSA (Not Present on the ARF)**
Bristol County (25005) - Included in MSA/PMSA 6480 on the ARF
Plymouth County (25023) - Included in MSA/PMSA 1120 on the ARF

**5480 New Haven-Meriden, CT PMSA**
Middlesex County (09007) - Included in MSA/PMSA 3280 on the ARF
New Haven County (09009)

**5520 New London-Norwich, CT-RI MSA**
Middlesex County, CT (09007) - Included in MSA/PMSA 3280 on the ARF
New London County, CT (09011)
Windham County, CT (09015) - Included in MSA/PMSA 3280 on the ARF
Washington County, RI (44009) - Included in MSA/PMSA 6480 on the ARF

6400 Portland, ME MSA
  Cumberland County (23005)
  York County (23031) - Included in MSA/PMSA 6450 on the ARF

6450 Portsmouth-Rochester, NH-ME PMSA
  Rockingham County, NH (33015) - Included in MSA/PMSA 1120 on the ARF
  Strafford County, NH (33017)
  York County, ME (23031)

8040 Stamford-Norwalk, CT PMSA (Not Present on the ARF)
  Fairfield County (09001) - Included in MSA/PMSA 1160 on the ARF

8880 Waterbury, CT PMSA (Not Present on the ARF)
  Litchfield County (09005) - Included in MSA/PMSA 3280 on the ARF
  New Haven County (09009) - Included in MSA/PMSA 5480 on the ARF

9240 Worcester, MA-CT PMSA
  Hampden County, MA (25013) - Included in MSA/PMSA 8000 on the ARF
  Worcester County, MA (25027)
  Windham County, CT (09015) - Included in MSA/PMSA 3280 on the ARF

MSA’s and PMSA’s are categorized by their 1990 population as follows:

1 = Level A = Areas of 1 million or more
2 = Level B = Areas of 250,000 to 999,999
3 = Level C = Areas of 100,000 to 249,999
4 = Level D = Areas of less than 100,000

A-6) Rural/Urban Continuum Codes

The 1995 Rural/Urban Continuum Codes are from Rural-Urban Continuum Codes for Metro and Nonmetro Counties, Department of Agriculture. The codes form a classification scheme that distinguishes metropolitan counties by size and nonmetropolitan counties by degree of urbanization or proximity to metropolitan areas. All U.S. counties and county equivalents are grouped according to the official metropolitan status announced by the Office of Management and Budget in June 1993, when the current population and commuting criteria were first applied to results of the 1990 Census of Population. The 1995 codes are a revised version of the 1993 Rural/Urban Continuum Codes and are defined as follows:

<table>
<thead>
<tr>
<th>CODE</th>
<th>METROPOLITAN COUNTIES (0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Level A = Areas of 1 million or more</td>
</tr>
<tr>
<td>2</td>
<td>Level B = Areas of 250,000 to 999,999</td>
</tr>
<tr>
<td>3</td>
<td>Level C = Areas of 100,000 to 249,999</td>
</tr>
<tr>
<td>4</td>
<td>Level D = Areas of less than 100,000</td>
</tr>
</tbody>
</table>
Central counties of metropolitan areas of 1 million population or more
Fringe counties of metropolitan areas of 1 million population or more
Counties in metropolitan areas of 250,000 - 1,000,000 population
Counties in metropolitan areas of less than 250,000 population

**NONMETROPOLITAN COUNTIES (4-9)**

Urban population of 20,000 or more, adjacent to a metropolitan area
Urban population of 20,000 or more, not adjacent to a metropolitan area
Urban population of 2,500-19,999, adjacent to a metropolitan area
Urban population of 2,500-19,999, not adjacent to a metropolitan area
Completely rural (no places with a population of 2,500 or more) adjacent to a metropolitan area
Completely rural (no places with a population of 2,500 or more) not adjacent to a metropolitan area

99 Missing Value

**Note:**

1) Adjacent = Counties physically adjacent to one or more MSA's and having at least 2 percent of the employed labor force in the nonmetropolitan county commuting to central metropolitan counties.
2) The rural/urban code for Virginia counties which include independent cities are based on the characteristics of the county plus each city (or cities) combined with that county. Therefore on the ARF, these codes have been assigned to both the county and any independent city, which was formerly a part of that county. Additionally the source file has combined some counties with similar characteristics. The list below identifies the codes carried on the ARF for those areas not on the source file:

<table>
<thead>
<tr>
<th>FIPS CODES AND NAMES OF COUNTIES/CITIES ON THE ARF:</th>
<th>ASSIGNED RURAL/URBAN CODE OF COUNTIES THEY WERE COMBINED WITH ON THE FILE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td></td>
</tr>
<tr>
<td>02013 Aleutians East</td>
<td>02010 Aleutians Islands</td>
</tr>
<tr>
<td>02016 Aleutians West</td>
<td>02010 Aleutians Islands</td>
</tr>
<tr>
<td>02060 Bristol Bay</td>
<td>02010 Aleutians Islands</td>
</tr>
<tr>
<td>02070 Dillingham</td>
<td>02010 Aleutians Islands</td>
</tr>
<tr>
<td>02185 North Slope Borough</td>
<td>02050 Bethel Census Area</td>
</tr>
<tr>
<td>02188 Northwest Artic Borough</td>
<td>02050 Bethel Census Area</td>
</tr>
<tr>
<td>02201 Pr of Wales-Outer Ketchikan</td>
<td>02130 Ketchikan Gateway Borough</td>
</tr>
<tr>
<td>02220 Sitka Borough</td>
<td>02100 Haines Borough</td>
</tr>
<tr>
<td>02240 S.E. Fairbanks Census Area</td>
<td>02090 Fairbanks North Star Borough</td>
</tr>
<tr>
<td>02282 Yukutat</td>
<td>02100 Haines Borough</td>
</tr>
<tr>
<td>02290 Yukon-Koyukuk Census Area</td>
<td>02050 Bethel Census Area</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Virginia</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>15005 Kalawao</td>
<td>15009 Maui</td>
</tr>
</tbody>
</table>

### Virginia

<table>
<thead>
<tr>
<th>Code</th>
<th>City Name</th>
<th>Code</th>
<th>City Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>51510</td>
<td>Alexandria</td>
<td>51013</td>
<td>Arlington</td>
</tr>
<tr>
<td>51515</td>
<td>Bedford city</td>
<td>51019</td>
<td>Bedford county</td>
</tr>
<tr>
<td>51520</td>
<td>Bristol</td>
<td>51191</td>
<td>Washington</td>
</tr>
<tr>
<td>51530</td>
<td>Buena Vista</td>
<td>51163</td>
<td>Rockbridge</td>
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<td>Charlottesville</td>
<td>51003</td>
<td>Albemarle</td>
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<td>Clifton Forge</td>
<td>51005</td>
<td>Alleghany</td>
</tr>
<tr>
<td>51570</td>
<td>Colonial Heights</td>
<td>51041</td>
<td>Chesterfield</td>
</tr>
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<td>51580</td>
<td>Covington</td>
<td>51005</td>
<td>Alleghany</td>
</tr>
<tr>
<td>51590</td>
<td>Danville</td>
<td>51143</td>
<td>Pittsylvania</td>
</tr>
<tr>
<td>51595</td>
<td>Emporia</td>
<td>51081</td>
<td>Greensville</td>
</tr>
<tr>
<td>51600</td>
<td>Fairfax</td>
<td>51059</td>
<td>Fairfax</td>
</tr>
<tr>
<td>51610</td>
<td>Falls Church</td>
<td>51059</td>
<td>Fairfax</td>
</tr>
<tr>
<td>51620</td>
<td>Franklin</td>
<td>51175</td>
<td>Southhampton</td>
</tr>
<tr>
<td>51630</td>
<td>Fredricksburg</td>
<td>51177</td>
<td>Spotsylvania</td>
</tr>
<tr>
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<td>Galax</td>
<td>51035</td>
<td>Carroll</td>
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<tr>
<td>51650</td>
<td>Hampton</td>
<td>51199</td>
<td>York</td>
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<td>51660</td>
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<td>Rockingham</td>
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<td>Hopewell</td>
<td>51149</td>
<td>Prince George</td>
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<td>51678</td>
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<td>Campbell</td>
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<td>51683</td>
<td>Manassas</td>
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<td>Prince William</td>
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<td>Manassas Park</td>
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<td>Prince William</td>
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<td>Martinsville</td>
<td>51089</td>
<td>Henry</td>
</tr>
<tr>
<td>51700</td>
<td>Newport News</td>
<td>51199</td>
<td>York</td>
</tr>
<tr>
<td>51710</td>
<td>Norfolk</td>
<td>51550</td>
<td>Chesapeake</td>
</tr>
<tr>
<td>51720</td>
<td>Norton</td>
<td>51195</td>
<td>Wise</td>
</tr>
<tr>
<td>51730</td>
<td>Petersburg</td>
<td>51053</td>
<td>Dinwiddie</td>
</tr>
<tr>
<td>51735</td>
<td>Poquoson</td>
<td>51199</td>
<td>York</td>
</tr>
<tr>
<td>51740</td>
<td>Portsmouth</td>
<td>51550</td>
<td>Chesapeake</td>
</tr>
<tr>
<td>51750</td>
<td>Radford</td>
<td>51121</td>
<td>Montgomery</td>
</tr>
<tr>
<td>51760</td>
<td>Richmond</td>
<td>51087</td>
<td>Henrico</td>
</tr>
<tr>
<td>51770</td>
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<td>Roanoke</td>
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<td>51790</td>
<td>Staunton</td>
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<td>Augusta</td>
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<td>51820</td>
<td>Waynesboro</td>
<td>51015</td>
<td>Augusta</td>
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<tr>
<td>51830</td>
<td>Williamsburg</td>
<td>51095</td>
<td>James City (county)</td>
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<tr>
<td>51840</td>
<td>Winchester</td>
<td>51069</td>
<td>Fredrick</td>
</tr>
</tbody>
</table>

### Wisconsin

<table>
<thead>
<tr>
<th>Code</th>
<th>City Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>55078</td>
<td>Menominee</td>
</tr>
<tr>
<td>55115</td>
<td>Shawano</td>
</tr>
</tbody>
</table>
A-7) Urban Influence Codes

The 1993 Urban Influence Codes are from A County-Level Measure of Urban Influence, Population, Labor and Income Branch, Rural Economy Division, U.S. Department of Agriculture's Economic Research Service (ERS). The Urban Influence codes classify all U.S. counties into 9 categories based on the size of the MSA, in the case of metro counties, and adjacency to MSAs and size of largest city in the case of nonmetro counties. The codes complement the 1993 ERS Rural/Urban Continuum Codes and were revised December 1996.

**METRO**
- 01 Large - Central and fringe counties of metro areas of 1 million population or more
- 02 Small - Counties in metro areas of fewer than 1 million population

**NONMETRO**
- 03 Adjacent to a large metro area with a city of 10,000 or more
- 04 Adjacent to a large metro area without a city of at least 10,000
- 05 Adjacent to a small metro area with a city of 10,000 or more
- 06 Adjacent to a small metro area without a city of at least 10,000
- 07 Not adjacent to a metro area and with a city of 10,000 or more
- 08 Not adjacent to a metro area and with a city of 2,500 to 9,999 population
- 09 Not adjacent to a metro area and with no city or a city with a population less than 2,500
- 99 Missing Value

**Note:**
1) Adjacent = Counties physically adjacent to one or more MSA's and having at least 2 percent of the employed labor force in the county commuting to central metropolitan counties. The metro-nonmetro definition is based on Office of Management and Budget definition as of June 1, 1993.
2) Denali, Alaska (02068) was assigned a missing code of 99 on the ARF since no Code was available in the source. The source file area Skagway-Yakutat-Angoon, AK (02231) no longer exists; this code was assigned to Skagway-Hoonah-Angoon, AK (02232) and Yakutat, AK (02282) on the ARF.
3) The Urban Influence code for Virginia counties that include independent cities are based on the characteristics of the county plus each city (or cities) combined with that county.

<table>
<thead>
<tr>
<th>FIPS CODES AND NAMES OF COUNTIES/CITIES ON THE ARF:</th>
<th>ASSIGNED RURAL/URBAN CODE OF COUNTIES THEY WERE COMBINED WITH ON THE FILE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td></td>
</tr>
<tr>
<td>02013 Aleutians East 02010 Aleutian Islands</td>
<td></td>
</tr>
<tr>
<td>02016 Aleutians West 02010 Aleutian Islands</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Area Name</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>02060</td>
<td>Bristol Bay</td>
</tr>
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<td>02070</td>
<td>Dillingham</td>
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<tr>
<td>02185</td>
<td>North Slope Borough</td>
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<td>02188</td>
<td>Northwest Arctic Borough</td>
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<tr>
<td>02201</td>
<td>Pr of Wales-Outer Ketchikan</td>
</tr>
<tr>
<td>02220</td>
<td>Sitka Borough</td>
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<tr>
<td>02240</td>
<td>S.E. Fairbanks Census Area</td>
</tr>
<tr>
<td>02282</td>
<td>Yukutat</td>
</tr>
<tr>
<td>02290</td>
<td>Yukon-Koyukuk Census Area</td>
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<td><strong>Hawaii</strong></td>
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<td>Kalawao</td>
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<td><strong>Virginia</strong></td>
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<td>Emporia</td>
</tr>
<tr>
<td>51600</td>
<td>Fairfax</td>
</tr>
<tr>
<td>51610</td>
<td>Falls Church</td>
</tr>
<tr>
<td>51620</td>
<td>Franklin</td>
</tr>
<tr>
<td>51630</td>
<td>Fredricksburg</td>
</tr>
<tr>
<td>51640</td>
<td>Galax</td>
</tr>
<tr>
<td>51650</td>
<td>Hampton</td>
</tr>
<tr>
<td>51660</td>
<td>Harrisonburg</td>
</tr>
<tr>
<td>51670</td>
<td>Hopewell</td>
</tr>
<tr>
<td>51678</td>
<td>Lexington</td>
</tr>
<tr>
<td>51680</td>
<td>Lynchburg</td>
</tr>
<tr>
<td>51683</td>
<td>Manassas</td>
</tr>
<tr>
<td>51685</td>
<td>Manassas Park</td>
</tr>
<tr>
<td>51690</td>
<td>Martinsville</td>
</tr>
<tr>
<td>51700</td>
<td>Newport News</td>
</tr>
<tr>
<td>51710</td>
<td>Norfolk</td>
</tr>
<tr>
<td>51720</td>
<td>Norton</td>
</tr>
<tr>
<td>51730</td>
<td>Petersburg</td>
</tr>
<tr>
<td>51735</td>
<td>Poquoson</td>
</tr>
<tr>
<td>51740</td>
<td>Portsmouth</td>
</tr>
<tr>
<td>51750</td>
<td>Radford</td>
</tr>
<tr>
<td>Code</td>
<td>Economic Area</td>
</tr>
<tr>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>1</td>
<td>A CEA's nodal county within an MSA or NECMA</td>
</tr>
<tr>
<td>3</td>
<td>A CEA's nonmetropolitan node</td>
</tr>
</tbody>
</table>

**Wisconsin**

- 55078 Menominee
- 55115 Shawano

---

**A-8) BEA Economic Area Codes and Names, Component Economic Area Codes and Area Type Codes**

The 1994 BEA Economic Area Codes and Names, Component Economic Area (CEA) Codes and Names and Area Type Codes are from the *Detailed Code File for Definitions of BEA Component Economic Areas and the Final Redefinitions of the BEA Economic Areas* issued by the Bureau of Economic Analysis, U.S. Department of Commerce. BEA Economic Areas, originally called OBE Economic Areas, were first delineated in 1969. The Economic Area and CEA Area Names reflect the metropolitan area names used in OMB announcements and the nonmetropolitan area names are usually the largest cities within the associated CEA’s. Economic areas including a Consolidated Metropolitan Statistical Area (CMSA) are always named for the CMSA.

There are 172 Economic Areas. The Economic Area Code was assigned after the areas were defined, beginning with 1 in northern Maine, continuing south to Florida, then north to the Great Lakes, continuing in a serpentine pattern to the west coast, and ending with Alaska and Hawaii.

There are 348 CEAs. The CEA code generally is the FIPS code for the metropolitan area serving as the CEA’s node (area). Codes for the 38 nonmetropolitan nodes were assigned and are distinguished by having '95' in the first two positions.

The first position of the Area Type Code is the initial assignment status of the county in the economic area redefinition process and is defined below; the second position is '0' if the initial assignment was not changed, it is '1' in cases where the assignment was changed during the analytical refinement processes, and it is '2' for the two cases where the CEA assignments of counties were changed following public comment on their preliminary assignments. Initial assignment status codes are:

<table>
<thead>
<tr>
<th>CODE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A CEA’s nodal county within an MSA or NECMA</td>
</tr>
<tr>
<td>2</td>
<td>A CEA's nodal county within a PMSA</td>
</tr>
<tr>
<td>3</td>
<td>A CEA's nonmetropolitan node</td>
</tr>
</tbody>
</table>
Part of the Main Labor Hinterlands for a CEA node
Part of the Newspaper-Readership Hinterlands for a CEA node
Part of the Secondary Labor Hinterlands for a CEA node
One of 68 counties requiring special assignment processes

Hinterland assignments are made only if a candidate county is contiguous to at least one county already assigned to a CEA. Subject to that constraint: The main labor hinterlands are nonnodal counties whose main commuting flow is (1) directly to a CEA node, or (2) to another nonnodal county whose main flow is directly to a CEA node, or (3) to another nonnodal county whose main flow is to another nonnodal county whose main flow is directly to a CEA node. Newspaper-readership hinterlands are nonnodal counties, not in the main labor hinterlands, whose main source of newspapers is within a CEA node or the main labor hinterlands. Secondary labor hinterlands are counties that require the newspaper-readership hinterlands in order to establish contiguity or a main commuting flow to a county in one of the emerging CEA's.

Note:
1) The BEA names have been abbreviated so as not to exceed 35 characters. The complete name for the BEA Economic Area Code 3 and CEA Code 1123 is Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH-RI-VT. The complete name for the CEA Code 5483 is New Haven-Bridgeport-Stamford-Danbury- Waterbury, CT. The complete name for the CEA Code 7460 is San Luis Obispo-Atascadero-Paso Robles, CA.
2) Lamar (28073) and Forrest (28035) counties in Mississippi were declared in late 1994 by OMB to constitute the new Hattiesburg MSA. County codes for these counties do not reflect this change. They would each be given an assignment code of 10 to reflect their current status. This change did not affect the development of the Hattiesburg Component Economic Area.
3) Denali, AK (02068) was not available on the source file. It was assigned the statewide value of 171 for Economic Area Code and Anchorage, AK for the Economic Area name. It was assigned a missing value code of 99 for the Area Type Code and 9999 for the Component Economic Area Code.
4) Codes and names for Skagway-Yakutat-Angoon, AK (02231) on the source file were assigned to Skagway-Hoonah-Angoon, AK (02232) and Yakutat, AK (02282).

A-9) Federal Region Code and Census Region and Division Codes and Names

These 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:

<table>
<thead>
<tr>
<th>CODE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Boston R.O. (Maine, Vermont, Mass., Conn., R.I., N.H.)</td>
</tr>
<tr>
<td>02</td>
<td>New York R.O. (N.Y., N.J., Puerto Rico, Virgin Islands)</td>
</tr>
<tr>
<td>03</td>
<td>Philadelphia R.O. (Penn., Del., D.C., Maryland, Va., W. Va.)</td>
</tr>
<tr>
<td>04</td>
<td>Atlanta R.O. (Ala., Fla., Georgia, Ky., Miss., N.C., S.C., Tenn.)</td>
</tr>
</tbody>
</table>
The Census Region Codes and Names and Census Division Codes and Names were taken from the NCHWA HSA ACCESS System. The codes and names are as follows:

<table>
<thead>
<tr>
<th>ACCESS SYSTEM CODES</th>
<th>NAME</th>
<th>STATES INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td>Division</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Northeast</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>New England</td>
<td>Maine, Vermont, Massachusetts, New Hampshire, Connecticut, Rhode Island</td>
</tr>
<tr>
<td>2</td>
<td>Middle Atlantic</td>
<td>New York, New Jersey, Pennsylvania</td>
</tr>
<tr>
<td>2</td>
<td>Midwest</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>East North Central</td>
<td>Ohio, Michigan, Indiana, Illinois, Wisconsin</td>
</tr>
<tr>
<td>4</td>
<td>West North Central</td>
<td>Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, North Dakota</td>
</tr>
<tr>
<td>3</td>
<td>South</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>South Atlantic</td>
<td>Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida</td>
</tr>
<tr>
<td>6</td>
<td>East South Central</td>
<td>Kentucky, Tennessee, Mississippi, Alabama</td>
</tr>
<tr>
<td>7</td>
<td>West South Central</td>
<td>Arkansas, Louisiana, Texas, Oklahoma</td>
</tr>
<tr>
<td>4</td>
<td>West</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mountain</td>
<td>Montana, Wyoming, Colorado,</td>
</tr>
</tbody>
</table>
New Mexico, Arizona, Utah, Idaho, Nevada

9 Pacific Washington, Oregon, California, Alaska, Hawaii

A-10) Professional Standards Review Organization (PSRO) Codes

NCHWA assigned a four-digit numerical code to each proposed PSRO area as designated by the Secretary of DHHS. These areas were delineated for the purpose of defining geographical areas over which each PSRO, whose function is to monitor the quality of health care, will have jurisdiction. The PSRO areas presently on ARF are those as listed in the Federal Register dated March 18, 1974, with a few exceptions for those PSRO's which are comprised of parts of counties. The ARF reflects all PSRO updates through July, 1979.

Note: 1) Since the county is the base unit on ARF, NCHWA made exceptions to the PSRO defined for parts of Southern California -- Los Angeles County, CA (06037) is defined as a single PSRO.
2) In Massachusetts, PSRO's are defined by township rather than by county. On ARF, the county has been assigned the PSRO Code corresponding to the townships within the county which have the greatest total population.
3) In Montana, the PSRO code for Park County (30067) does not include Yellowstone National Park (30113).

A-11) Veterans Administration Codes

1988 and 1978 Veterans Administration (VA) Codes were obtained from the Veterans Administration. The codes include VA Primary Service Area Code, VA Medical District Code, and VA Medical Region Code. The VA Medical Region Code is defined as follows:

1 = North-Eastern
2 = Mid-Atlantic
3 = South-Eastern
4 = Great Lakes
5 = Mid-Western
6 = Western
7 = South-Western

Note: 1) The independent cities have been recoded in their county of origin. As a result, the following Virginia independent cities have been affected for Primary Service Area Code and Medical District Code:

<table>
<thead>
<tr>
<th>FIPS</th>
<th>VA SOURCE CODE</th>
<th>ARF CODE</th>
</tr>
</thead>
</table>
Primary Service Area Code | 51590 | 558 | 658 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51640</td>
<td>658</td>
<td>621</td>
</tr>
<tr>
<td></td>
<td>51678</td>
<td>652</td>
<td>658</td>
</tr>
<tr>
<td></td>
<td>51780</td>
<td>558</td>
<td>652</td>
</tr>
</tbody>
</table>

Medical District Code | 51590 | 08 | 07 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51640</td>
<td>07</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td>51780</td>
<td>08</td>
<td>07</td>
</tr>
</tbody>
</table>

2) Primary Service Area Code data for Park County, MT (30067) do not include Yellowstone National Park (30113).

The 1978, 1990 and 1995-2000 Veteran Population data are also carried on the file; refer to Section F-21 below.

**A-12) 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 as of the year 2000. 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 zero-filled. Thus, if a county has three counties contiguous to it, the fields for Contiguous Counties # 4-14 will be zero-filled.

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:

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CONTIGUOUS TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii (15001)</td>
<td>Maui (15009)</td>
</tr>
<tr>
<td>Honolulu (15003)</td>
<td>Kauai (15007)</td>
</tr>
<tr>
<td></td>
<td>Maui (15009)</td>
</tr>
<tr>
<td>Kauai (15007)</td>
<td>Honolulu (15003)</td>
</tr>
<tr>
<td>Maui (15009)</td>
<td>Hawaii (15001)</td>
</tr>
</tbody>
</table>
Honolulu (15003)

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

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CONTIGUOUS TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronx, N.Y. (36005)</td>
<td>Bergen, N.J. (34003)</td>
</tr>
<tr>
<td></td>
<td>New York, N.Y. (36061)</td>
</tr>
<tr>
<td></td>
<td>Queens, N.Y. (36081)</td>
</tr>
<tr>
<td></td>
<td>Westchester, N.Y. (36119)</td>
</tr>
<tr>
<td>Kings, N.Y. (36047)</td>
<td>New York, N.Y. (36061)</td>
</tr>
<tr>
<td></td>
<td>Queens, N.Y. (36081)</td>
</tr>
<tr>
<td></td>
<td>Richmond, N.Y. (36085)</td>
</tr>
<tr>
<td>New York, N.Y. (36061)</td>
<td>Bronx, N.Y. (36005)</td>
</tr>
<tr>
<td></td>
<td>Kings, N.Y. (36047)</td>
</tr>
<tr>
<td></td>
<td>Queens, N.Y. (36081)</td>
</tr>
<tr>
<td>Queens, N.Y. (36081)</td>
<td>Richmond, N.Y. (36085)</td>
</tr>
<tr>
<td>Richmond, N.Y. (36085)</td>
<td>Essex, N.J. (34013)</td>
</tr>
<tr>
<td></td>
<td>Hudson, N.J. (34017)</td>
</tr>
<tr>
<td></td>
<td>Middlesex, N.J. (34023)</td>
</tr>
<tr>
<td></td>
<td>Union, N.J. (34039)</td>
</tr>
<tr>
<td></td>
<td>Kings, N.Y. (36047)</td>
</tr>
<tr>
<td></td>
<td>New York, N.Y. (36061)</td>
</tr>
</tbody>
</table>

A-13) Health Service Area Codes

Health Service Area Codes were obtained from the National Center for Health Statistics. The specific source reference is Vital and Health Statistics - Health Service Areas for the United States, Makuc DM, Haglund B, Ingram DD, Kleinman JC, Feldman JJ, November 1991. A health service area is defined as one or more counties that are relatively self-contained with respect to the provision of routine hospital care. Service areas that include more than one county are characterized by travel between the counties for routine hospital care.
A-14) Area Health Education Center (AHEC) Codes and Names

Area Health Education Centers (AHEC's) are independent, non-profit organizations which link the academic resources of university health care centers with community-based health service delivery systems in medically underserved areas. Primarily funded by cooperative agreements awarded by the Bureau of Health Professions/HRSA under Section 781 of the Public Health Service Act, AHEC's determine the manpower and resource needs of scarcity areas, and coordinate the activities of health profession students who are provided by cooperating medical and osteopathic schools and universities. (These students serve 10% of their clinical training at AHEC sites in underserved areas, thereby redistributing health personnel to areas of need and increasing the services provided to the community.) The individual activities and programs administered by the regional AHEC projects are determined by the needs and problems of the localities they serve.

The 1998 Area Health Education Center data were defined from a list of AHEC's developed by the Division of Medicine, Bureau of Health Professions. The codes are four digits; the first two digits are the FIPS State Code, the second two digits indicate the number of the center within the state.

The AHEC Program Year of Initiation is the calendar year in which the program was first funded. The AHEC Center Year of Initiation is the calendar year in which the center was first funded (planning year included).

Note: 1) Los Angeles County, California (06037) is in three AHEC's: Central, Drew and Los Angeles Basin. On the ARF, Central is the AHEC carried for Los Angeles. The Drew and Los Angeles Basin AHEC's consist of only Los Angeles county, therefore these AHEC's are not present on the ARF.

2) Bronx County, New York (36005) is in two AHEC's: North Bronx and South Bronx. On the ARF, South Bronx is the AHEC carried for Bronx. The North Bronx AHEC consists of only Bronx county, therefore this AHEC is not present on the ARF.

3) Alaska AHEC’s are not available at the census/borough level.

A-15) HPSA Codes

The 1998, 2000-2002 Health Professional Shortage Area (HPSA) codes for Primary Medical Care, Dentists and Mental Health Professionals are from the Bureau of Primary Health Care (BPHC), DHHS. HPSA data for Primary Care, Dentists, and Mental Health Professionals are defined as follows:

1) Primary Care Practitioners include non-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:

A. The area is a rational area for the delivery of primary medical services.
B. One of the following conditions prevails within the area:

1. The area has a population to full-time-equivalent primary care physician ratio of at least 3,500:1.
2. 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.
C. Primary medical care professionals 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 BPHC website: [http://bhpr.hrsa.gov/Shortage/hpsacritPCM.htm](http://bhpr.hrsa.gov/Shortage/hpsacritPCM.htm).

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 dental professional shortage area if the following three criteria are met:

A. The area is a rational area for the delivery of dental services.
B. 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 professionals 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 BPHC website: [http://bhpr.hrsa.gov/Shortage/hpsacritDental.htm](http://bhpr.hrsa.gov/Shortage/hpsacritDental.htm).

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. To be designated as having a shortage of mental health professionals a geographic area must meet the following 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. Professionals include those psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists who meet the definitions set forth in the ruling. Refer to the
Federal Register publication for more information.

A. The area is a rational area for the delivery of mental health services.

B. 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;

C. Mental health professionals in contiguous areas are overutilized, 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 BPHC website: [http://bhpr.hrsa.gov/Shortage/hpsacritmental.htm](http://bhpr.hrsa.gov/Shortage/hpsacritmental.htm).

**Note:** The 1998 Mental Health HPSA code for Halifax, VA (51083) on the ARF is coded as partial, which reflects the combination of a whole HPSA for Halifax and no HPSA for South Boston, of which Halifax is comprised.

4) Since April 1980, HPSA data classify counties as follows:
   0 = None of the county designated as a shortage area;
   1 = The whole county was designated as a shortage area;
   2 = One or more parts of the county was designated as a shortage area.

**Note:** 2000 and later HPSAs are provided on the ARF for the US territories of Guam, Puerto Rico and Virgin Islands. 1998 HPSAs are not updated for the territories.

**A-16) SSA Beneficiary State and County Codes**

The Social Security Administration's (SSA) Office of Research, Evaluation and Statistics (ORES) **Beneficiary State and County Codes** are used for beneficiary record coding, including the Supplemental Security Income (SSI) program. The code consists of a two-byte
state and three-byte county code.

**Note:**
1) The SSA code system provides a "Statewide" code designation (XX999) for all states. On the Alaska statewide record on the ARF, it is assigned this code (02999). Otherwise, the "Statewide" codes are not carried on the ARF.
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 for Park County, Montana (30067) do not include Yellowstone National Park (30113).

**B. HEALTH PROFESSIONS**

**B-1) Physicians**

*M.D. Physicians:*


**Note:**
1) **Major Professional Activity** classifications are reported by the physician in the Census of Physicians’ Practice Arrangements questionnaire. Total Patient Care includes Office Based (includes Locum Tenens in 1997), Hospital Residents, Clinical Fellows (1986-January 1994) and Hospital Based Full-Time (FT) Staff. Total Hospital Based includes Hospital Residents, Clinical Fellows (1986-January 1994) and Hospital Based FT Staff. Other Professional Activity includes Administration, Medical Teaching, Research and Other.
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. 1997 Locum Tenens, which are reported separately in the *Physician Characteristics and Distribution in the U.S.*, are also included.
3) **Hospital Based Practice** includes physicians employed under contract with hospitals to provide direct patient care.
4) **Residents** (all years) includes 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. Beginning with the December 31, 1994 data, also includes clinical fellows in advanced training in the clinical divisions of medicine, surgery, and other specialty fields preparing for practice in a given specialty. These physicians are engaged primarily in patient care. In the 1986 through January 1, 1994 data, Clinical Fellows was carried as a separate category. As a result of this change there are a larger number of Residents as compared to earlier years and Residents fields were assigned new Field numbers.

5) **Clinical Fellows** includes physicians in an educational training program distinct from an accredited residency program. Clinical Fellows are engaged primarily in patient care. In the 1986 and later data, the category of Clinical Fellows was added to the Hospital Based Practice group and the Total Patient Care group. Beginning with the December 31, 1994 data, Clinical Fellows were combined with Residents. Prior to 1986, Clinical Fellows were included in the Research category. As a result of this change, there are fewer physicians in Research and a larger number in Hospital Based and Total Patient Care for 1986 and later, compared to earlier years.

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 (whether funded or unfunded) performed to develop new medical knowledge, potentially leading to publication. 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 other organization.

9) **Other Activity** includes physicians employed by insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, grants, foreign countries, etc.

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 twenty 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** is determined, like major professional activity, by the physician from a list of codes included in the physician on the Physicians' Practice Arrangements questionnaire.

14) The following subspecialties are included in **Total General Practice:**
   - General Practice
   - Family Practice, General (Family Practice prior to 1993)
   - Family Practice Subspecialties (beginning in 1993)

15) 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

16) 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

17) The following subspecialties are included in **Other Specialties Total:**
- Aerospace Medicine
- Anesthesiology
- Child 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 (included in General Preventive Medicine in 1999)
- Radiology
- Radiation Oncology (Therapeutic Radiology prior to 1986)
- Transplantation Surgery (part of Surgical Specialties in 2000)
- Vascular Medicine (part of Medical Specialties in 2000)
- Other Specialties
- Unspecified

18) The subspecialty **Nuclear Medicine** was broken out of Radiology in 1981.
19) The subspecialty **Emergency Medicine** was broken out of Other Specialty in 1981.
20) The subspecialty **Therapeutic Radiology** was changed to Radiation Oncology in the 1986 and later data. The data are the same.
21) In 1986, **Internal Medicine** was broken into **General Internal Medicine** and **Internal Medicine Subspecialties.** The following are included in 1995 **Internal Medicine**...
**Medicine Subspecialties:**
- Diabetes
- Endocrinology, Diabetes & Metabolism
- Hematology (Internal Medicine)
- Hepatology
- Hematology/Oncology
- Cardiac Electrophysiology
- Infectious Diseases
- Clinical & Laboratory Immunology (Internal Medicine)
- Geriatrics Medicine (Internal Medicine)
- Sports Medicine (Internal Medicine)
- Nephrology
- Nutrition
- Medical Oncology
- Rheumatology

The following are included in 2000 and 2001 **Internal Medicine Subspecialties:**
- Adolescent Medicine
- Critical Care Medicine (Internal Medicine)
- Diabetes
- Endocrinology, Diabetes & Metabolism
- Hematology (Internal Medicine)
- Hepatology
- Hematology/Oncology
- Hospitalist
- Cardiac Electrophysiology
- Infectious Diseases
- Internal Medicine Family Practice
- Internal Medicine Preventive Medicine
- Clinical & Laboratory Immunology (Internal Medicine)
- Intervention Cardiology
- Internal Medicine (Psychiatry)
- Geriatric Medicine
- Sports Medicine (Internal Medicine)
- Physical Medicine and Rehabilitation (Internal Medicine)
- Nephrology
- Nutrition
- Medical Oncology
- Pulmonary Critical Care Medicine (in 2000)
- Rheumatology
- Internal Medicine (Neurology)

22) In 1990, **Pediatrics** was broken into **General Pediatrics** and **Pediatric Subspecialties**. The following are included in 1995 **Pediatric Subspecialties:**
- Adolescent Medicine
- Pediatric Critical Care Medicine
- Neonatal-Perinatal Medicine
- Pediatric Allergy
- Pediatric Endocrinology
- Pediatric Infectious Disease
Pediatric Pulmonology
Medical Toxicology (Pediatrics)
Pediatric Emergency Medicine
Pediatric Gastroenterology
Pediatric Hematology/Oncology
Clinical & Laboratory Immunology (Pediatrics)
Pediatric Nephrology
Pediatric Rheumatology
Sports Medicine (Pediatrics)

The following are included in 2000 and 2001 Pediatric Subspecialties:
Adolescent Medicine
Pediatric Critical Care Medicine
Pediatric Psychiatry Developmental-Behavioral Pediatrics
Internal Medicine/Pediatrics
Neonatal-Perinatal Medicine
Pediatric Anesthesiology
Pediatric Allergy
Pediatric Endocrinology
Pediatric Infectious Disease
Pediatric Pulmonology
Medical Toxicology (Pediatrics)
Pediatric Emergency Medicine (Pediatrics)
Pediatric Gastroenterology
Pediatric Hematology/Oncology
Pediatrics/Medical Genetics (in 2001)
Pain Management/Physical Medicine and Rehabilitation (in 2001)
Clinical & Laboratory Immunology (Pediatrics)
Pediatric Nephrology
Pediatrics/Physical Medicine and Rehabilitation (in 2001)
Pediatric Rheumatology
Pediatric Rehabilitation Medicine (in 2001)
Sports Medicine (Pediatrics)

23) In 1990, Obstetrics and Gynecology was broken into General Obstetrics and Gynecology, and Obstetrics and Gynecology Subspecialties. The following are included in 1995, 2000 and 2001 Obstetrics and Gynecology Subspecialties:
Gynecological Oncology
Gynecology
Maternal and Fetal Medicine
Obstetrics
Critical Care Medicine (Obstetrics and Gynecology)
Reproductive Endocrinology

24) In 1993, Family Practice was broken into General Family Practice and Family Practice Subspecialties. The following are included in 1995 Family Practice Subspecialties:
Geriatric Medicine (Family Practice)
Sports Medicine (Family Practice)
The following are included in 2000 Family Practice Subspecialties:
Geriatric Medicine (Family Practice)
Family Practice/ Psychiatry
Sports Medicine (Family Practice)
Internal Medicine/Family Practice
Psychiatry (Family Practice)

25) In 1999 only, the specialty Public Health was included in General Preventive Medicine.

26) 1995 and 1999 Primary Care is defined as Office Based MDs for General Practice, General Family Practice, General Internal Medicine and General Pediatrics. This definition is different than past years, therefore it will not be comparable with prior years.

27) The following are the definitions of Country and State locations of Medical Graduates:

<table>
<thead>
<tr>
<th>Location</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>In US</td>
<td>US Graduate</td>
</tr>
<tr>
<td>In State</td>
<td>Same state of school and practice</td>
</tr>
<tr>
<td>Contiguous State</td>
<td>Contiguous states of school and practice</td>
</tr>
<tr>
<td>Other State</td>
<td>States of school and practice are not same or contiguous</td>
</tr>
<tr>
<td>Canada</td>
<td>Graduate of Canadian school</td>
</tr>
<tr>
<td>International</td>
<td>International medical graduate (formerly Foreign medical graduates)</td>
</tr>
</tbody>
</table>

28) Beginning with the 1999 AMA information, data are carried on the ARF for the following US territories: Puerto Rico and the Virgin Islands. The 2001 data also include Guam.

The 1995, 2000 and 2001 AMA Federal M.D. Specialty data were obtained from the 1995, 2000 and 2001 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) 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. Beginning with the 1993 data, there have been no Office Based Federal M.D.s reported.

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. Also includes clinical fellows in advanced training in the clinical divisions of medicine, surgery, and other specialty field preparing for practice in a given specialty. These physicians are engaged primarily in patient care. Clinical Fellows were combined with Residents on the ARF for the 1990 data. Beginning with the December 31, 1994 data, the AMA started reporting Clinical Fellows as part of the Residents category.
5) **Hospital Based Staff** includes physicians employed under contract with hospitals to provide direct patient care.

6) **Other Professional Activity** includes Administration, Medical Teaching, Research, and Other. See above notes for AMA Non-Federal M.D. data definitions.

7) Physicians fields contain only active physicians with classified activity unless specifically stated that inactive and/or not classified are included.

8) 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.

9) The following subspecialties are included in **Total General Practice**: General Practice Family Practice, General (Family Practice prior to 1993) Family Practice Subspecialties (beginning in 1993)

10) In 1990, **Obstetrics and Gynecology** was broken into **Obstetrics and Gynecology**, and **Obstetrics and Gynecology Subspecialties**. In 1995 and 2000, the following are included in **Obstetrics and Gynecology Subspecialties**:

    - Gynecological Oncology
    - Gynecology
    - Maternal and Fetal Medicine
    - Obstetrics
    - Critical Care Medicine (Obstetrics and Gynecology)
    - Reproductive Endocrinology

11) 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

12) The following subspecialties are included in **Other Surgical Subspecialties**:

    - Colon & Rectal Surgery
    - Neurological Surgery
    - Ophthalmology
    - Orthopedic Surgery
    - Otolaryngology
    - Plastic Surgery
    - Thoracic Surgery
    - Urological Surgery

13) 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
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

14) Beginning with the 1999 AMA information, data are carried on the ARF for the following US territories: Puerto Rico and the Virgin Islands. The 2001 data also include Guam.

1970-1983, 1985 and 1986 Non-Federal M.D.'s were obtained from Physician Characteristics and Distribution in the U.S., published by the Center for Health Services Research and Development of the American Medical Association in each respective year.

The 1975 AMA M.D. data were obtained from the Physician Specialty File which is the result of processing the 1975 AMA Biographic Data Tapes.

Estimates for 1940, 1950, and 1960 Total Active Non-Federal M.D.'s come from AMA punch cards. AMA estimates were used rather than Census estimates because Census estimates occasionally included interns and residents as well as chiropractors, dentists, and veterinarians in the physician counts when enumerators failed to properly differentiate the response of "doctor". 1960 data for Alaska (02001), and New York City Counties (FIPS 36005 Bronx, 36047 Kings, 36061 New York, 36081 Queens, 36085 Richmond) were taken from the Health Manpower Source Book, Section 10, DHHS, Public Health Service Pub. No. 263.

Note: 1) 1940 and 1950 M.D.'s are not available for Alaska (02001), Weston County, Wyoming (56045), or any of the Hawaii counties (Hawaii (15001), Honolulu (15003), Kauai (15007), Maui (15009)).
2) 1960 data for Alaska, Hawaii, and the New York City counties of Bronx, Kings, New York, Queens, and Richmond are as of the middle of the calendar year 1959.
3) 1960 data for the state of Hawaii are not broken out by county; they are all contained in Honolulu (FIPS 15003); the other Hawaii counties (FIPS 15001 Hawaii, 15007 Kauai, 15009 Maui) are zero-filled.
4) The 1960 data for Bronx, N.Y. (FIPS 36005) are included in New York County (FIPS 36061); Bronx, N.Y. is zero-filled.
5) 1960 M.D.'s in Alaska and Hawaii include all Non-Federal M.D.'s. Active Non-Federal M.D.'s are not available for these states for 1960.
6) 1960 M.D.'s are not available for Weston County, Wyoming (FIPS 56045).
7) Total Active Non-Federal M.D.’s for St Louis City (FIPS 29510) for 1960 are from *Health Manpower Source Book, Section 10, Physicians’ Age, Type of Practice, and Location*, DHEW, Public Health Service, Table A, 1959.

8) 1940, 1950 and 1960 data for the independent cities of Hampton and Newport News, Virginia are included in York County (51199). Hampton (51650) and Newport News (51700) are zero-filled for these fields.

9) 1940, 1950 and 1960 data for the independent city of Galax, Virginia are included in Carroll County (51035), rather than Grayson County (51077).

10) 1940, 1950 and 1960 data for Charles City County, Virginia (51036) are not reported.

11) Data could not be obtained to break out 1940, 1950 and 1960 Total Active Non-Federal M.D.’s for the Virginia independent cities of Alexandria, Chesapeake and Virginia Beach from their former counties.

**M.D. and D.O. Physicians:**

The field **1990 M.D. and D.O. Physicians** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field **1980 M.D. and D.O. Physicians** was obtained from the *1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

*Note:* Data for the following entity was not available from the source file: Suffolk City, Virginia (51800).

**D.O. Physicians:**

The **2001 D.O. data** from the American Medical Association Physician Masterfiles (copyright) are carried for Total and Total Active, Federal and Non-Federal.

*Note:* Data are included for Guam, Puerto Rico and the U.S. Virgin Islands.

The **2001 D.O. data** are from the American Osteopathic Association. Data are available by specialty, practice type, gender, board certification, primary care status and age for non-Federal D.O.’s. Total Active non-Federal and Federal D.O.’s is also carried.

*Note:* 1) Fields contain only active physicians unless specifically stated that inactive are included.

2) Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the
US Postal Service. Invalid ZIP codes were resolved manually. Five records were missing ZIP codes therefore they could not be assigned a FIPs code and are not carried on the ARF.

3) Data are included for Guam and the US Virgin Islands.

The 1998 D.O. data are from the American Osteopathic Association. Data are available by specialty, by practice type, by gender, board certification, primary care status and by age for all non-Federal D.O.'s. Inactive D.O.'s are not included. The Intern/Resident field includes all D.O.'s in a training program such as an internship, residency, preceptorship, subspecialty training, or fellowship. In 1998, there were no D.O.'s reported for 1011 counties.

The 1995 D.O. data are from the American Osteopathic Association. These data include D.O.'s by Specialty and by Active or Intern/Resident status for Federal and Non-Federal. In 1995, there were no D.O.'s reported for 1280 counties.

Note: 1) Interns/Residents fields include osteopathic and allopathic.
2) Twelve D.O.s who stated their specialty as General Practice were included in Family Practice on the source data.

The 1990 D.O. data are from the American Osteopathic Association. These data include Total Active D.O.'s and D.O.'s by Specialty and Gender for Federal and Non-Federal. In 1995, there were no D.O.'s reported for 1538 counties. Non Primary Care D.O. data include all specialties except General Practice, General Internal Medicine, Obstetrics and Gynecology and Pediatrics.

The 1989 D.O. data are from the 1987 American Osteopathic Microdata Tape. These data include Total Active Federal and Non-Federal D.O.'s, Total Active Federal D.O.'s, and Total Active Non-Federal D.O.'s. In 1989, there were no D.O.'s reported for 1358 counties. Non Primary Care D.O. data include all specialties except General Practice, General Internal Medicine, Obstetrics and Gynecology and Pediatrics.

Data for 1981 Non-Federal D.O.'s are from the 1981 American Osteopathic Association Microdata Tape. These data include Total Non-Federal D.O.'s, Total Active Non-Federal D.O.'s, Non-Federal D.O.'s by Major Professional Activity (including Inactive and Not Classified), and Non-Federal Office Based D.O.'s by Specialty. In 1981, there were no D.O.'s reported for 1593 counties.

Data for 1978 and 1976 Active Non-Federal D.O.'s in Primary Care Specialties are from the Bureau of Community Health Services D.O. County-Level Tapes. Primary care specialties include General Practice, Internal Medicine, Pediatrics and Ob/Gyn.

Note: 1) The 1976 data were updated to include Total Active Non-Federal D.O.'s and Active Non-Federal D.O.'s in Patient Care.
2) Two invalid FIPS County Codes which were previously miscoded into non-existent counties in the 1976 data were adjusted. The affected counties are Linden, NJ (FIPS 34039) erroneously coded as 34049; and Woodland, CA (FIPS 06113) erroneously coded as 06119.
3) 1976 data are not available for Virginia independent cities. Refer to A-2.

Data on the **1974 and 1971 Total Active Non-Federal D.O.'s** are from the 1974 and 1971, respectively, *American Osteopathic Association Tapes*.

*Note:* 1) All D.O. totals include respondents to the survey only.
2) Data are not available for Virginia independent cities. Refer to A-2.

**B-2) Dentists and Dental Hygienists**

*Dentists:*

The **1998 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 Survey Center, American Dental Association *1998 Distribution of Dentists in the United States by Region and State* (Copyright). Dentists by age, by specialty and by gender are those non-federal dentists in private practice and include both full time and part time dentists.

*Note:* 1) County location could not be determined for the following number of dentists:

<table>
<thead>
<tr>
<th>Total Dentists</th>
<th>Non-Federal Dentists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown County</td>
<td>Unknown County</td>
</tr>
<tr>
<td>Alabama</td>
<td>97</td>
</tr>
<tr>
<td>Alaska</td>
<td>7</td>
</tr>
<tr>
<td>Arizona</td>
<td>110</td>
</tr>
<tr>
<td>Arkansas</td>
<td>41</td>
</tr>
<tr>
<td>California</td>
<td>1032</td>
</tr>
<tr>
<td>Colorado</td>
<td>91</td>
</tr>
<tr>
<td>Connecticut</td>
<td>72</td>
</tr>
<tr>
<td>Delaware</td>
<td>16</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>25</td>
</tr>
<tr>
<td>Florida</td>
<td>255</td>
</tr>
<tr>
<td>Georgia</td>
<td>131</td>
</tr>
<tr>
<td>Hawaii</td>
<td>26</td>
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<tr>
<td>Idaho</td>
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<td>Illinois</td>
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</tr>
<tr>
<td>Maine</td>
<td>11</td>
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<td>Maryland</td>
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</tr>
</tbody>
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36
<table>
<thead>
<tr>
<th>State</th>
<th>1995 Total</th>
<th>1991 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>235</td>
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<td>Missouri</td>
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</tr>
<tr>
<td>Montana</td>
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<tr>
<td>Nebraska</td>
<td>54</td>
<td>51</td>
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<tr>
<td>Nevada</td>
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<td>23</td>
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<tr>
<td>New Hampshire</td>
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<td>New Jersey</td>
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<td>North Carolina</td>
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</tr>
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<tr>
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</tr>
<tr>
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<td>7</td>
<td>7</td>
</tr>
<tr>
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<td>173</td>
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<td>Wyoming</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Unknown State/County</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

2) 1998 dental source data contains data for Aleutians Island, AK (02010), which was broken into Aleutians East (02013) and Aleutians West (02016). These data are included in Aleutians West on the ARF because this area has a greater population.

The **1995 Total Professionally Active Dentists, Total Private Practice Non-Federal Dentists, Total Dentists by Age, Total Practicing (Full-Time and Part-Time) Dentists, Dentists by Gender, Dentists by Specialty and 1991 Total Professionally Active Dentists and Total Private Practice Non-Federal** are taken from the *American Dental Association 1995 State and County Demographic Reports* (Copyright). The data provided in the reports are derived from the 1993-1995 Census of Dentists and are estimates based on a 91 percent response.

*Note:* 1) **Total Professionally Active** include dentists whose primary or secondary occupation is dental related. This includes the fields Total Full-time and Total Part-time Private Practice, Graduate Students, State and Local Government, Armed Forces and Other Federal Service, and Hospital Staff/Other Organization, as well as other data by
occupation types not carried on the ARF.

2) **Total Private Practice Dentists** include those engaged in private practice as either a primary or secondary occupation.

3) **Full-time Private Practice** and **Part-time Private Practice** include only dentists who indicated they were in private practice as a primary occupation.

4) The sum of **Dentists, Private Practice, General Practice + Pediatrics** and **Dentists, Private Practice, Other Specialties** and the sum of the fields **Private Practice Dentists by Age Categories** are one less than the field **Total Private Practice** in Jefferson County, Louisiana (22051).

5) The sum of the fields **Private Practice Dentists by Gender** is three less than the field **Total Private Practice** in Columbia County, New York (36021).


7) The fields **1991 Total Professionally Active Dentists** and **1991 Total Private Practice Dentists** were calculated using data provided by the source.

The field **1990 Dentists** was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The **1987 Total Active Non-Federal Dentists, Total Dentists by Age, Total Practicing (Full-Time and Part-Time) Dentists; Dental Graduates, Interns and Residents, and Total Dentists by (Govt, Hosp, Other Organization) category** are taken from the American Dental Association Dental Tape provided by the Division of Associated and Dental Health Professions, Bureau of Health Professions.

The **1981 Total Active Non-Federal Dentists; Total Dentists by Age; Total Practicing (Full-Time and Part-Time) Dentists; Dental Interns and Residents; and Total Dentists by (Govt, Hosp, Other Organization) category** are taken from the American Dental Association Dental Tape provided by the Division of Dentistry, Bureau of Health Professions.

The field **1980 Dentists** was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

**Note:** Data for the following entity was not available from the source file:
Suffolk City, Virginia (51800)

The **1976 Total Active Non-Federal Dentists, Total Patient Care Dentists, and Total Practicing (Full-Time and Part-Time) Dentists** are taken from the American Dental
Note: 1) 226 counties were not updated with the Active Non-Federal Dentists as none were reported for them.
2) Data are not available for Virginia independent cities. Refer to A-2.

The 1974 and 1972 Licensed Dentists are taken from the Dental Register, the Division of Dentistry, Bureau of Health Professions.

Note: 1) In 1974, there are no data available for:
   Pennsylvania (FIPS State Code 42)
2) In 1974, Total Instate Dentists for California are reported as 14,254. The county totals equal 14,253.
3) In 1974, Chicago dentists were included in DuPage, Illinois (17043) in the Dental Register.

Licensed Dentists for 1971 are from the Dental Register of the State Licensing Boards for all States except Pennsylvania and Indiana -- dentist data for Pennsylvania are for the year 1968; and for Indiana are for the year 1969.

Note: Data are not available for Virginia independent cities. Refer to A-2.

Dental Hygienists:

The field 1990 Dental Hygienists was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field 1980 Dental Hygienists was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

Note: Data for the following entity was not available from the source file:
    Suffolk City, Virginia (51800)

The 1974 Licensed Dental Hygienists are from the National Center of Health Statistics supported by the Division of Dentistry, Bureau of Health Manpower.

Note: There are no data available for:
    Pennsylvania (FIPS State Code 42)
The 1972 Licensed Dental Hygienists are listed in the Number Licensed Hygienists, Located Instate, By County Location: Dec. 31, 1972 from the Census Bureau supported by the Division of Dentistry, Bureau of Health Manpower.

Note: There are no data available for the following counties:
Menominee, Wisconsin (55078)

B-3) Optometrists

The field 1990 Optometrists was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field 1980 Optometrists was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

Note: Data for the following entity was not available from the source file:
Suffolk City, Virginia (51800)

The 1979 through 1981 Total Active (Federal and Non-Federal) and Active Non-Federal Optometrists data have been calculated as follows:

1979 Total Active Optometrists is equal to the number of 1978 Total Active Optometrists plus the number of 1979 Total Active Optometrist Graduates.

1980 Total Active Optometrists is equal to the number of 1978 Total Active Optometrists plus the number of 1979 and 1980 Total Active Optometrist Graduates.

1981 Total Active Optometrists is equal to the number of 1978 Total Active Optometrists plus the number of 1979, 1980 and 1981 Total Active Optometrist Graduates.

Active Non-Federal Optometrists have been calculated in the same way. The 1978 values were taken from the National Center for Health Statistics 1978 National Inventory of Optometrists Tape described below. The 1979-1981 graduate figures were extracted from the 1983 Association of Schools and Colleges of Optometry Survey of Recent Graduates of Optometry Schools Tape. Optometrists reporting foreign or military (APO/FPO) addresses
have been excluded from the file.

The **1978 Total Active (Federal and Non-Federal) and Active Non-Federal Optometrists** are extracted from the National Center for Health Statistics *1978 National Inventory of Optometrists Tape*.

Out of the Total Optometrist count of 24,336, 413 had invalid FIPS Codes and could not be processed. The tape included information for 2,904 Optometrists obtained from the *1978 Blue Book of Optometrists*. The activity status could not be determined for these Optometrists; therefore, they are not included in the ARF counts. In addition, 1,262 responded with an activity code of "No" and 144 had an activity code of "Not Available".

*Note:* An Optometrist is defined as "Active" if the Activity Status Code on the source file indicates Active (1).

The **1972 Active Non-Federal Optometrists (Weighted)** are from the *1972-73 Inventory of Optometrists* conducted by the American Optometric Association and supported by the Bureau of Health Manpower.

*Note:* 1) There are actually eight fewer records on the original input file than the documentation states (19,638 as opposed to 19,646).  
2) On the enhanced file, 54 optometrists have been left out of the counts since they did not report their county of practice.

Data on the characteristics of **1968 Active Optometrists**, which are stored on the file but not tabulated, are from the *1968 Vision and Eye Care Manpower Survey of Optometrists*.

*Note:* Data are not available for Virginia independent cities. Refer to A-2.

**B-4) Pharmacists**

The field **1990 Pharmacists** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field **1980 Pharmacists** was obtained from the *1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.
Note: Data for the following entity was not available from the source file: Suffolk City, Virginia (51800)

The 1980 Total Pharmacists and Active Pharmacists were extracted from the NCHS 1980 Pharmacy Manpower Information Project Tape.

Note: Out of the Total Pharmacists count of 160,664, 55,688 could not be processed due to invalid FIPS Codes; of these, only 5,488 were Active Pharmacists. 104,406 Total Pharmacists and 104,125 Active Pharmacists were included on the file.

The 1973-74 Active Pharmacists are from the 1973-74 Inventory of Pharmacists, American Association of Colleges of Pharmacy and supported by the Bureau of Health Manpower.

Note: Many counties have zeroes for Active Pharmacists for 1973-74, and it is not sure whether the data are missing or that zero is the actual number of Active Pharmacists.

Data on the number of 1966 Active Pharmacists are from a survey conducted by the National Association of Boards of Pharmacy, in cooperation with the National Center for Health Statistics. This was a questionnaire sent with a licensing renewal form to each pharmacist at the appropriate renewal time. State data on pharmacists are available in Pharmacy Manpower U.S., 1966.

Note: 1) There are no data available for the following counties:
   Hawaii, Hawaii (15001)
   Honolulu, Hawaii (15003)
   Kauai, Hawaii (15007)
   Maui, Hawaii (15009)
   Menominee, Wisconsin (55078)
   Weston, Wyoming (56045)

2) Data are not available for Virginia independent cities. Refer to A-2.

B-5) Podiatrists

The field 1990 Podiatrists was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field 1980 Podiatrists was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor
force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

Note: Data for the following entity was not available from the source file:
Suffolk City, Virginia (51800)

The 1980 Podiatrists by Age data are from the American Podiatry Association (APA Data Tape). The podiatrists are those who applied for membership in the APA. The counts of Podiatrists (Total and by Age) include federal and non-federal; active and inactive; part-time and retired podiatrists. 337 podiatrists are not included in the counts on ARF because of unknown county codes.

Note: Data are not available for Virginia independent cities. Refer to A-2.

The 1974 Total Active Podiatrists (Weighted) are from the Podiatrists Tape created by the National Center for Health Statistics. Podiatrist counts include federal and non-federal podiatrists.

Note: In 1974, the following counties have weighting factors less than 1.03 (lowest range per documentation):

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<tr>
<th>County Code</th>
<th>Weight</th>
</tr>
</thead>
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<tr>
<td>38015</td>
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<tr>
<td>46135</td>
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</tr>
</tbody>
</table>
Data on the number of 1968 **Total Active Podiatrists** is from unpublished State Licensing lists provided by the American Podiatry Association.

**Note:** Data are not available for Virginia independent cities. Refer to A-2.

### B-6) Veterinarians

The field **1990 Veterinarians** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field **1980 Veterinarians** was obtained from the *1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

**Note:** Data for the following entity was not available from the source file: Suffolk City, Virginia (51800)

### B-7) Nurses

**Nurse Practitioners:**

**2001 Nurse Practitioner** data are from the *2001 American Academy of Nurse Practitioners Survey*. Statistics provided are for the total number of nurse practitioners within the county. Surveys were provided to the 74,063 nurse practitioners for whom the state boards of nursing provided valid addresses. Of the 74,063 surveyed, 35,048 did not respond. The number of practitioners on the ARF includes non-respondents as well as respondents.

**Note:**

1) For those practitioners not having a valid FIPS county code, location was determined using a zip code to FIPS county code conversion. Where a valid zip code was not available, address was used to determine county of location. Records not having a FIPS county code, a valid zip code or a valid city and state address are not included on the file.

2) Data are included for Puerto Rico and the US Virgin Islands.

**R.N.'s:**
The field **1990 Registered Nurses** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field **1980 Registered Nurses** was obtained from the *1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

*Note:* Data for the following entity was not available from the source file:

Suffolk City, Virginia (51800)

Data on the **1977 Total Estimated Employed R.N.'s, Full-Time Estimated Employed R.N.'s, and Part-Time Estimated Employed R.N.'s** are from the *1977 American Nurses Association Inventory of Registered Nurses Data Tape* of revised estimates. These data have been adjusted by the ANA for non-response.

The data were calculated as follows:

1) **Total Estimated Employed R.N.'s** are taken from the column titled "Estimated Employed R.N.'s".

2) **Full-Time Estimated R.N.'s** = The Sum of (Full-Time R.N.'s * Weight), where
   
   Weight = The Sum of the Estimated Employed R.N.'s /The Sum of the Total Employed R.N.'s.
   
   The sums apply to all components included in the county.

3) **Part-Time Estimated R.N.'s** = The Sum of (Part-Time R.N.'s * Weight), where the Weight and Sums are defined as in 2) above.

The data for Virginia are defined as the summing of Virginia independent cities data and their respective county data, except the independent cities of Alexandria, Chesapeake, Hampton, Newport News and Virginia Beach, Virginia which are maintained separately on ARF as county equivalents.

Data on the number of **1972 Active Registered Nurses (Total Employed in Nursing)** are from the *1972 American Nurses Association Tape*.

*Note:* Data are not available for Virginia independent cities. Refer to A-2.
Data on the number of 1972 Employed Registered Nurses are from the 1972 American Nurses Association Inventory of Registered Nurses publication. The number of Employed R.N.'s is that number which the Division of Nursing reported as "Estimated Employed R.N.'s" after adjustment for non-response.

Note: Data could not be obtained to separate the independent city of Alexandria, Virginia (51510) from its former county, Arlington, Virginia (51013). Therefore, on ARF, 1972 Estimated R.N.'s for both Alexandria City and Arlington County are reported in 51013, and 51510 is zero-filled.

Data on the number of 1966 Registered Nurses are on the file, but are not used in tabulations. They are from the 1966 Inventory of Registered Nurses conducted by the American Nurses Association.

Note: Data are not available for Virginia independent cities. Refer to A-2.

L.P.N.'s:

The field 1990 Licensed Practical Nurses was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The field 1980 Licensed Practical Nurses was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

Note: Data for the following entity was not available from the source file: Suffolk City, Virginia (51800)

Data on the number of 1974 Total Licensed Practical Nurses and Employed Licensed Practical Nurses are from the 1974 American Nurses Association Inventory of Licensed Practical Nurses publication. The number of Employed L.P.N.'s is that number which the Division of Nursing reported as "Estimated Employed L.P.N.'s" after adjustment for non-response.

Note: This publication reports that the number of Employed L.P.N.'s is greater than the number of Total L.P.N.'s for Los Angeles, CA (FIPS Code 06037).

Data on the number of 1967 Licensed Practical Nurses are from the 1967 Inventory of Licensed Practical Nurses conducted by the American Nurses Association.
Note: Data are not available for Virginia independent cities. Refer to A-2.

B-8) Physician Assistants

The 2001 Physician Assistant data were obtained from the American Academy of Physician Assistants (AAPA). All data are projections.

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 manually when possible. The AAPA estimated there were 42,708 individuals believed to be in clinical practice in 2001 plus 10,930 not in practice. Of these, county location could not be identified for 758 and 7 are in US Possessions not carried on the ARF.

2) Total Physicians Assistants and Physician Assistants by Gender include non-practicing Physicians Assistants.

3) Data are carried on the ARF for the following US territories: Guam, Puerto Rico and the Virgin Islands.

The fields 1999 Physician Assistants; 1999 Physician Assistants, Female; and 1999 Physician Assistants, Male were obtained from data provided by the American Academy of Physician Assistants (AAPA). Of the 28,433 identified, approximately 269 could not be identified by gender. All data are projections.

The fields 1998 Physician Assistants; 1998 Physician Assistants, Female; and 1998 Physician Assistants, Male were obtained from data provided by the American Academy of Physician Assistants (AAPA). The AAPA estimated that there were 31,301 individuals believed to be in clinical practice in 1998, but only 26,233 were able to be identified by county location. Therefore, in using the data contained on the Area Resource File it should be noted that there is a 16% undercounting of Physician Assistants. Additionally, of the 26,233 identified, approximately 203 could not be identified by gender. All data are projections.

The field 1990 Physician Assistants was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

The number of 1981 Total Physician Assistants was taken from the June 1983 American Academy of Physician Assistants File.

Note: 1) Four records on the source file did not have valid county codes; these counts are not
2) Where business zip code was not available, home zip code was used when available. Of the 11,399 records on the source file, 7133 had blank business zip codes; 4252 of these had a home zip code available. 1691 of the 10,406 records counted are believed to have out-of-date addresses, but have been included as the best available information.

3) Physician Assistants were reported in 1508 counties.

The field 1980 Physicians Assistants was obtained from the 1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

Note: Data for the following entity was not available from the source file: Suffolk City, Virginia (51800)

The number of 1980 Non-Federal Certified Physician Assistants was taken from the Physician Assistant File obtained from the National Center For Health Services Research.

Note: 1) 488 records on the source file did not have county codes; these counts are not included on ARF.

3) Physician Assistants were reported in 1354 counties.

B-9) Chiropractors

2001 Chiropractors were prepared by the Palmer Center for Chiropractic Research under contract to NCHWA. Data were obtained from the state boards or state chiropractic associations, and were supplemented with proprietary mailing lists when data were missing. The data have had within-state and across-state duplicates removed.

Note: Data were provided at the modified FIPS county level; therefore there is a single figure for the state of Alaska, and independent cities are combined into their original counties as documented in Section A-2, modified FIPS county codes.

B-10) Occupational Therapists

The field 1990 Occupational Therapists was obtained from the 1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.
The number of **1982 Total Occupational Therapists** is taken from the *1982 American Occupational Therapy Association Membership Tape*. Occupational Therapists reporting foreign or military (APO/FPO) addresses have been excluded from the file.

The field **1980 Occupational Therapists** was obtained from the *1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.

*Note:* Data for the following entity was not available from the source file:
Suffolk City, Virginia (51800)

**B-11) Psychology and Social Work Teachers**

The fields **1990 Psychology** and **Social Work Teachers** were obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

**B-12) Psychologists**

The field **1990 Psychologists** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

**B-13) Sociologists**

The field **1990 Sociologists** was obtained from the *1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File* which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.
B-14) Social Workers

The field **1990 Social Workers** was obtained from the **1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File** which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count. Refer to the Decennial Census Occupation Data notes for additional information.

B-15) Decennial Census Occupation Data

The **1990 Decennial Census** health-related occupation data come from the **1990 Census of Population and Housing: Equal Employment Opportunity (EEO) File** which provides counts of the civilian labor force by detailed occupation. The data are based on the 1990 census sample (approximately one out of every six housing units and persons in group quarters), and are estimates of the actual figures that would have been obtained from a complete count.

**Note:**

1) The data on labor force status were related to the reference week, the calendar week preceding the date on which respondents completed their questionnaires or were interviewed by enumerators. This week is not the same for all respondents since the enumeration was not completed in one week.

2) Civilian Labor Force consists of persons classified as employed or unemployed in accordance with the criteria described below.

3) Employed is defined as all civilians 16 years old and over who were either (1) "at work" - 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" - 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 persons whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are persons on active duty in the United States Armed Forces.

4) Unemployed is defined as all civilians 16 years old and over who were (1) neither "at work" nor "with a job but not at work" during the reference week, and were (2) looking for work during the last 4 weeks, and were (3) available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week and were waiting to be called back to a job from which they had been laid off.

The **1980 Decennial Census** health-related occupation data come from the **1980 Census of Population and Housing: Equal Employment Opportunity (EEO) Special File** which provides counts of the civilian labor force by detailed occupation. The data are based on the 1980 census sample (approximately 19-percent of the nation's housing units and persons in group quarters), and are estimates of the actual figures that would have resulted from a complete count.
Note: Data for the following entity was not available from the source file:
Suffolk City, Virginia (51800)

B-16) National Health Service Corps (NHSC) Sites

The National Health Service Corps (NHSC) Sites data for 1986 including: Number of Staffed Rural Sites; Number of Staffed Urban Sites; Number of Approved but Unstaffed Sites; Number of Terminated Sites; and the Current Staff Level for M.D.'s, Physician Extenders (Nurse Practitioners, Physician Assistants, and Midwives), R.N.'s, D.D.S.'s, and Other Personnel, were obtained from the 1986 NHSC Site Tapes, respectively.

There were 1567 counties updated for the 1986 NHSC data.

C. HEALTH FACILITIES

1980, 1985, and 1990-2001 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 Hospital Facilities Tapes. Some of these data have been published in the AHA Guide to the Health Care Field. Copies of the questionnaires used are published in the AHA Guide to the Health Care Field.

The reliability of the data is only as good as the hospitals' responses to the AHA Hospital Surveys for the respective years. For hospitals not responding to the survey, AHA reports previously-reported data for approximately 50 general data fields. These include: hospital ID, type of control, service type, name and address, length of stay, total beds, number of bassinets and all of the accreditation and affiliation codes. These data are carried on the Facility-Level Hospital File as reported by the AHA. In 2001, AHA reported data for 5,939 U.S. and 62 hospitals in U.S. territories. Of these 6,001 total hospitals, 1,230 failed to respond, and AHA provided previously-reported data for the fields described above.

For hospitals that did respond to the survey, but did not respond to particular fields, the AHA has estimated the data for some of these fields. Refer to the AHA file documentation for identification of the specific fields.

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) Beginning with 1998 AHA hospital information, data are carried on the ARF for the following U.S. territories: Puerto Rico, Guam and, the Virgin Islands.
2) For 1994-2000 and prior to 1983, **beds by hospital type** fields were calculated using the AHA hospital tape variable "Beds Set Up and Staffed at End of Reporting Period". For 1983-1993, the same fields were taken from the AHA hospital tape variable "Statistical Beds". The variable "Statistical Beds" was derived by adding the total number of beds available each day during the hospital's reporting period and dividing this figure by the total number of days in this reporting period. These changes were used to agree with the procedure AHA uses for its published figures.

3) **Neonatal Intensive Care** and **Neonatal Intermediate Care Beds** are excluded from Bassinets Set Up and Staffed.

4) **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.

5) The survey reports some hospitals in Baltimore, MD, St. Louis, MO and Fairfax, VA cities as being in Baltimore, St. Louis and Fairfax counties, respectively. The county codes for these hospitals have been changed on the hospital files and all fields re-aggregated for ARF for these six counties: Baltimore, Maryland (24005); Baltimore City, Maryland (24510); St. Louis, Missouri (29189); St. Louis City, Missouri (29510); Fairfax, VA (51059); Fairfax City, VA (51600).

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).

1980, 1985, 1990, 1995, 2000 and 2001 Short Term Community Hospitals are those coded as follows:

Yr. of Current Data = Current year, eg., '2001';
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):

Beginning with the 1994 data, 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.

Prior to the 1994 data, Length of Stay was defined as the following:

If separate short-term and long-term units were reported and short-term admissions were greater than long-term admissions, then LOS was coded as 1 (short term); if long-term admissions were greater than short-term admissions, then LOS was coded as 2 (long term).

If separate units were not reported and the ratio of discharge days to discharges was less than 30, then LOS was coded as 1 (short term); if the ratio of discharge days to discharges was 30 or greater, then LOS was coded as 2 (long term).

If separate units, discharges and discharge days were not reported and the ratio of inpatient days to admissions is less than 30, then LOS was coded as 1 (short term); if the ratio of inpatient days to admissions is 30 or greater, then LOS was coded as 2 (long term).

**Short Term General Osteopathic Hospitals:**

**1990, 1995, 2000 and 2001 Short Term AOHA Hospitals** were obtained from the 1990, 1995, 2000 and 2001 AHA Hospital Files and are defined as follows: Length of Stay = '1', General Service Code = '10', and Registered Osteopathic Hospital = '1'.

**1980 and 1985 AOHA Hospital** data have been added to ARF based on the following criteria: All osteopathic hospitals published in the AOHA Directories for 1980 and 1985 with more than six beds were matched to the Hospital Tapes from the American Hospital Association. Those osteopathic hospitals which were defined by AHA and NCHS as being short term (code 1) and general (code 10) were added to ARF for these years.

**Note:** 1) Hospitals which are reported in the AOHA Directory but are reported as closed on the AHA Hospital tape for the same year are not included in the ARF AOHA Hospital figures. 2) Two hospitals were reported in the AOHA Directories for 1985 that had no match on the AHA Hospital tape. Therefore, these facilities are not reported in the AOHA Hospital figures.

**Veterans Administration Hospitals:**

**2001 Veterans Administration Hospitals** are those coded as follows by the American Hospital Association: Hospital Control = '45'.

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

The number of short term general hospitals or hospital subsidiaries which report that they
provide certain inpatient and outpatient services was extracted from the 2001 AHA Hospital File. 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

1991, 1996, 2000 and 2001 Full-Time Equivalent Personnel and number of Personnel by Occupational Category and Type of Hospital were extracted from the 1991, 1996, 2000 and 2001 AHA Hospital Files, 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 as of September 30, even if the facility's reporting period ended on a different date. 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) 1996, 2000 and 2001 # 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.N.s, Medical and Dental Residents/Interns, Other Trainees and the AHA category Other Personnel. 1986 and 1991 #FTE Total Facility Personnel includes Physicians and Dentists, R.N.s, L.P.N.s and L.V.N.s, Medical and Dental Residents/Interns, Other Trainees and the AHA category Other Hospital Personnel.

5) # FTE Other Trainees includes all trainees except Medical and Dental Residents/Interns.

6) 1991 # FTE Other Hospital Personnel for Short Term General Hospitals and for Short Term Non-General and Long Term Hospitals includes Medical and Dental Residents/Interns, and the AHA category Other Hospital Personnel.

7) 2001 # 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.

C-4) Nursing Homes

The 1991 Nursing Home and Board and Care Home data are from the 1991 National Health Provider Inventory (NHPI). The NHPI was conducted by the National Center for Health Statistics (NCHS) in cooperation with the Bureau of the Census. Data contained on the ARF for Nursing and Board and Care Homes are number of facilities, number of beds, and number of residents. These data are broken out by ownership class, hospital based and total certified. The number of Nursing and Board and Care homes with certified Medicare or Medicaid beds, number of residents in these facilities and by ownership class are also carried. Two fields are being carried which exclude Board and Care homes: number of Nursing Homes
and number of Nursing Home beds.

Ownership Classes:
1. Profit (code 1)
2. Non-Profit (code 2)
3. Government (codes 3-5)

Note: 1) A Nursing Home is a facility having three beds or more, and is either licensed as a Nursing Home, certified as a nursing facility under Medicare or Medicaid, identified as a nursing care unit of a retirement center or determined to provide nursing or medical care.

2) A Board and Care home (formerly called residential care home) is a generic term used in the NHPI to describe a residential setting that provides either routine general protective oversight, or assistance with activities necessary for independent living, to mentally or physically limited persons. Any such facility that was licensed or certified was eligible for inclusion in the inventory.

3) Facilities for the mentally retarded, including Intermediate Care Facilities for the Mentally Retarded (ICF-MR), were excluded for all fields on the ARF except for 24 facilities which were primarily a nursing home and happened to be certified as an ICF-MR.

4) Many facilities were found to have invalid or incorrect FIPS codes. They were resolved using the address and zip code. The FIPS code adjustment resulted in nine facilities being coded into a different state. Five facilities were changed from Rhode Island to Illinois, three facilities were changed from South Carolina to Michigan and one facility was changed from Minnesota to Missouri.

5) The NHPI contained 8,578 nonreporting Board and Care homes that were excluded from follow-up and 262 facilities who refused to participate in the survey. These facilities had no FIPS codes or addresses to determine a FIPS code, therefore they were not updated to the ARF.

6) Occupancy rate can be determined by dividing the number of residents by the total number of beds. Variations in reporting among facilities can produce an occupancy that is greater than 100% for a county.

7) Edits were performed by NCHS on total beds and total residents. Whenever these fields were blank, data from other fields were examined and used to replace these missing values.

The 1986 Nursing Home and Board and Care Home data are from the 1986 Inventory of Long-term Care Places obtained from the National Center for Health Statistics (NCHS). Data contained on the ARF are number of facilities, number of beds, and number of residents. These data are broken out by ownership class, hospital based and total. The following fields are also carried: number of Medicare-certified skilled beds, number of Medicaid-certified skilled beds, number of Medicaid-certified intermediate beds, the number of nursing homes containing each of these types of beds and total number of residents in nursing homes that have these types of beds.

Ownership Classes:
1. Profit (code 1)
2. Non-Profit (code 2)
3. Government (codes 3-4)

Note:
1) **Board and Care Homes** (also known as residential care facilities) cannot be excluded from the data. As a result, the 1986 data may not be comparable to earlier years of data.
2) Data include the following facilities: skilled nursing facilities (SNF's), intermediate care facilities (ICF's), licensed but uncertified nursing homes, and board and care homes (e.g., homes for the aged, personal care homes).
3) Edits were conducted by NCHS to correct inconsistencies between data items. For missing items, every attempt was made to impute data from existing information, but when this was not possible, 1982 data was substituted when it was available.
4) Many nursing homes had incorrect FIPS Codes. They were resolved using the address and zip code.
5) Inconsistencies between the technical documentation and the raw data were clarified after consulting with NCHS. Fields requiring adjustments include: the identification number, type of facility, type of ownership and hospital-based nursing home.
6) **Occupancy rate** can be determined by dividing the number of residents by the total number of beds. Variations in reporting among nursing homes can produce an occupancy rate that is greater than 100% for a county.

The **1982 Nursing Home data** are from the **1982 National Master Facility Inventory (NMFI) Nursing Homes and Residential Care Homes Tape** obtained from the National Center for Health Statistics (NCHS). Data contained on the ARF are number of facilities.

Note:
1) **Residential and Family Care Homes** were excluded from the data.
2) Many nursing homes had incorrect FIPS Codes. They were resolved using the address and zip code.
3) The following imputations were made to the data by NCHS:
   a) 1980 data were used for approximately 500 nursing homes in New York.
   b) Some states issue a nursing home license and a residential license for the same facility. Whenever this occurred, it created duplicate homes but not duplicate beds. Every effort was made to unduplicate the homes in such situations.
   c) Hospital based nursing homes were obtained from the Health Care Financing Administration. The data from these facilities were imputed.

The **1978 and 1976 Nursing Home data** are from the edited Nursing Home File which is based on the 1978 and 1976 MFI data respectively. The **1980, 1973 and 1971 Nursing and Personal Care Home data** are from 1980, 1973 and 1971 Master Facility Inventory (MFI) Nursing Home and Other Health Facilities tapes obtained from the National Center for Health Statistics. Data contained on ARF are number of facilities.

For 1978, the **National Master Facility Inventory** tape only carried nursing homes. The facilities selected for inclusion on ARF are "Nursing or personal care homes" (Codes '31'-'35' in 1976 and 1978; Codes '01'-'06' in 1973; '01'-'09' in 1971).
Note: 1) 1980 source data does not include hospital based nursing homes.
2) Residential Care Homes were excluded from the 1980 data on the ARF.
3) For 1978, due to low response rates to the MFI survey, the MFI tape used the 1976 names, addresses and data for the following states:
   California
   District of Columbia
   New York
   North Carolina
4) In the 1978 source data, one nursing home in Arizona was assigned an invalid FIPS Code of 04014. It was not added to the ARF, because its actual county could not determined from the data available.
5) The following counties each had one facility assigned an invalid FIPS codes. The proper FIPS Codes were assigned using the source address field to verify location.
   27073 - Lac Qui Parle, Minnesota
   48325 - Medina, Texas
   48375 - Potter, Texas
   51153 - Prince William, Virginia
   54107 - Wood, West Virginia

C-5) Provider of Services

The 1994 and 1999 through 2001 Provider of Services data are from the Centers for Medicare and Medicaid Services’ (formerly Health Care Financing Administration) Online Survey and Certification Reporting System (OSCAR) database. The data carried on the ARF include the number of active Medicare-certified providers for the following types of facilities:

<table>
<thead>
<tr>
<th>HCFA PROVIDER TYPE</th>
<th>CATEGORY OF PROVIDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled Nursing Facilities (SNF), including:</td>
<td></td>
</tr>
<tr>
<td>- SNF/NF, Dually Certified</td>
<td>Category 02</td>
</tr>
<tr>
<td>- SNF/NF, Distinct Part</td>
<td>Category 03</td>
</tr>
<tr>
<td>- SNF</td>
<td>Category 04</td>
</tr>
<tr>
<td>Home Health Agencies</td>
<td>Category 05</td>
</tr>
<tr>
<td>Nursing Facilities</td>
<td>Category 10</td>
</tr>
<tr>
<td>Rural Health Clinics</td>
<td>Category 12</td>
</tr>
<tr>
<td>Ambulatory Surgical Centers</td>
<td>Category 15</td>
</tr>
<tr>
<td>Hospices</td>
<td>Category 16</td>
</tr>
<tr>
<td>Community Mental Health Centers</td>
<td>Category 19</td>
</tr>
<tr>
<td>Screening Mammography (1994 only)</td>
<td>Category 20</td>
</tr>
<tr>
<td>Federally Qualified Health Centers (1999-2001)</td>
<td>Category 21</td>
</tr>
</tbody>
</table>

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 ARF.
2) Beginning with 1999 provider information, the HCFA provider data on the ARF
includes data for Puerto Rico, Guam, and the Virgin Islands.

3) Data for mammography centers are no longer collected by HCFA since the centers are not certified; therefore these data are not available for 1999 and later.

C-6) Health Maintenance Organizations

Number of 1998 HMOs in the County and 1998 HMO Enrollment in the County, total and by model type and federal status are from the InterStudy County Surveyor Database, Version 8.2 (Copyright), as of January 1, 1998.

Note:
1) Number of HMOs in the County, including by model type and federal status, include an HMO if there is any enrollment population for that HMO in the county. Therefore, one HMO could be counted several times if that plan serves people in several counties. These counts cannot be summed to higher geographic levels for this reason.

2) HMO enrollment figures pertain to only the enrolled population within the county and can therefore be aggregated to higher geographic levels. InterStudy collected county enrollment information from roughly half of the HMOs in the country. Most of the remaining HMOs provided enrollment by metro area. The metro area enrollments were allocated to the counties in the MSA according to the relative sizes of their population. The residual enrollment not included in a metro area was assigned to the rural counties in the HMOs’ service area according to the relative sizes of their population. HMOs were not able to account for all their enrollment at the county level. The County Surveyor database accounts for slightly more than 97 percent of the total HMO enrollment in the country.

3) Number of HMOs and Enrollment are reported for Traditional, IPA, Network and Mixed model types. These are defined as follows:

- Traditional includes staff and group model types. The staff model includes HMOs that deliver health services through a physician group that is employed by the HMO. The group model includes HMOs that contract with one independent group practice to provide health services.
- The IPA model includes HMOs that contract directly with the physicians in independent practices; and/or contract with one or more associations of physicians in independent practice; and/or contract with one or more multi-specialty group practices, but are predominantly organized around solo/single specialty practices.
- The Network model includes HMOs that contract with two or more independent group practices, possibly including a staff group, to provide health services. While a network may contain a few solo practices, it is predominantly organized around groups.
- Mixed model types include any HMO using a combination of the model types listed above.

4) There are five HMOs, located in 36 counties, with an unknown model type. The data for these HMOs are included in the Total HMO fields. Therefore, the sum of
data by model type does not equal the total fields for these counties.

5) HMO Penetration Rate in the County is total HMO enrollment divided by total population in the county. InterStudy used total population as of July, 1997 in this calculation. This field has an implied decimal point (.0001).

6) For those instances where an HMO did not respond to the questionnaire, Interstudy used state-supplied information, Blue Cross/Blue Shield Association data, or the most current available data from a prior directory.

The 1976-2001 Number of HMO's were obtained from the National HMO Censuses of Prepaid Plans conducted by the Office of Health Maintenance Organizations, Public Health Service, in each of the years 1976-1980; from the National HMO Censuses (Copyright) conducted by InterStudy in 1981-1986; from InterStudy Edge (Copyright) conducted by InterStudy in 1987-1990, from the InterStudy Competitive Edge (Copyright) conducted by InterStudy in 1991 and from the InterStudy Competitive Edge HMO Directory (Copyright) conducted by InterStudy in 1992-2001. In 1989 through 2001, the censuses were as of July 1 of the respective year. In 1976, 1980-1984, 1986 and 1988, censuses were as of June. In 1987, censuses were as of March. In 1977 and 1978, the censuses were as of August; and in 1979 and 1985, the censuses used were as of December. The 1976 and 1979 Federally Qualified HMO's were obtained from the Office of Health Maintenance Organizations.

Note: 1) Number of HMO's are reported by the location of the headquarters. Each plan is counted only once in the county location of its headquarters. This field can therefore be summed to higher geographic levels to determine total HMO plans.

2) Headquarters may be located in a county where there are no enrollees. For example, in 1997, Prudential HealthCare HMO-Connecticut is headquartered in Sufferin, New York. Therefore, on the ARF this HMO is included in Rockland County, New York (36087) even though its members reside in Connecticut. These counts are provided primarily as an unduplicated count of the number of HMO plans for use in aggregating to higher geographic levels.

3) 1999 and later data include HMO’s located in U.S. possessions. HMO’s are located in Guam and in Puerto Rico.

4) Beginning in 1991, InterStudy provided HMO addresses and reported the HMO's alphabetically within state. Prior to 1991 InterStudy provided no addresses and reported HMO's within the appropriate metropolitan area. Because of this change in method of reporting, several HMO's on the ARF will appear to have changed counties between 1991 and prior years when in fact they have not. In 1991 all HMO's were coded into the county where the reported address was. Thus, while comparing 1991 with historic data on a county basis will result in differences approximately 10 percent of the time, the locations are similar enough that metropolitan areas should be consistent across time.

D. UTILIZATION

All Hospital Utilization data are from the AHA Annual Survey of Hospitals (Copyright)
reporting for 12-month periods in 1980, 1985 and 1990-2001. These data have been extracted from an AHA Hospital Tape, 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:

**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**


*Note:* Neonatal Intensive Care and Neonatal Intermediate Care Inpatient Days are excluded from Newborn Days.

*Total Inpatient Days for short term general osteopathic hospitals* are available for 1980 and 1985 from the Hospital File for hospitals which have been identified as osteopathic in the *American Osteopathic Hospital Association Directory* for the appropriate year.

**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 are available for 1980, 1985, and 1990-2001. Total Outpatient Visits in Veterans hospitals are available for 2001.

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

*1980, 1985, 1990, 1995, 2000 and 2001 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 available for Veterans hospitals which were open in 2001. Number of Operating Rooms are available for short term general hospitals and short term non-
Note: The 2000 Number of Operating Rooms appeared to be invalid on the 2000 AHA Hospital File for facilities in these counties: St. John Sapulpa in Creek, Oklahoma (40037) reported having 127 operating rooms and Midwest Regional Medical Center in Oklahoma, Oklahoma (40109) reported having 4,460 operating rooms. Because these numbers were out of line with 1999 and earlier data, the 1999 reported figures were used for 2000.

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 are recorded for the years 1990, 1995, 2000 and 2001; and for Veterans Hospitals for 2001.

E-2) Medicare Managed Care Market Penetration

The 1997 through 2002 Number of Medicare Eligibles (Beneficiaries), Number of Managed Care Enrollees, and Percent Managed Care Penetration are from the Medicare Managed Care Market Penetration for All Medicare Plan Contractors Data Files, December 1997, December 1998, December 1999, December 2000, December 2001 and December 2002 respectively, Centers for Medicare and Medicaid Service (CMS) [formerly Health Care Financing Administration (HCFA), 1997-2000].

Note: 1) The December 1997, and 2000-2002 files use both December eligibles and December enrollees whereas the December 1998 and December 1999 files used December eligibles and January enrollees.

2) The 1997-1999 source data files have two records for Los Angeles County, California (06037). Los Angeles County was recalculated by summing these records.

3) The 1997-1999, 2001 and 2002 source data files carry Washabaugh County, South Dakota separately from Jackson County, South Dakota. On the ARF, these counties are combined (refer to section A-2). Therefore, data for Jackson County, South Dakota was recalculated by summing the data for these records.

4) Beginning with the 1999 managed care information, data are available on the ARF for Puerto Rico as well as US counties. The 2001 and 2002 data include the Virgin Islands.

5) The 2001 and 2002 CMS/HCFA area names on the source file for Alaska were not always FIPS boroughs or census area. Data have been put in the following FIPS areas as noted:
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<thead>
<tr>
<th>HCFA NAME:</th>
<th>FIPS CENSUS AREA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aleutians East</td>
<td>Aleutians East</td>
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<td>Anchorage</td>
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<td>Bethel</td>
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<td>Kushkokwin</td>
<td>Bethel</td>
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<td>Bristol Bay (Borough 2001)</td>
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<td>Dillingham (Bristol Bay 2001)</td>
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<td>Fairbanks North Star</td>
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<td>Sitka</td>
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<td>Skagway-Hoonah-Angoon</td>
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<td>Skagway-Hoonah-Angoon</td>
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<td>Cordova-McCarthy</td>
<td>Valdez-Cordova</td>
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<td>Valdez-Chitna-Whitier (2002)</td>
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<tr>
<td>Yukon Koyukuk</td>
<td>Yukon Koyukuk</td>
</tr>
</tbody>
</table>

### E-3) Medicare Adjusted Average Per Capita Cost (AAPCC)

The 1997 through 2002 Medicare Part A Aged Payment Rate, Medicare Part B Aged Payment Rate, and Part A and B Aged Payment Rate were obtained from the Centers for Medicare and Medicaid Service’s (formerly Health Care Financing Administration, 1997-2000) Adjusted Average Per Capita Cost (AAPCC) File. The AAPCC is a prospective estimate.
of Medicare cost levels by demographic category, in the fee-for-service sector of the geographic area. Part A payment rates are for hospital insurance for persons 65 and older. Part B payment rates are for supplementary medical insurance for persons 65 and older. The Part A and B rates are the sum of the Part A and Part B rates.

The AAPCC methodology adjusts for age, sex, Medicaid status, working status, and institutional status of the Medicare beneficiaries in a given county. Also below are the tables containing the demographic cost factors used in this adjustment. Each factor relates the Medicare cost for a person in that demographic cell to the cost for the average Medicare beneficiary (Factor = 1.00).

To calculate the actual per capita rates of payment, the AAPCC rates must be multiplied by the demographic cost factors. The calculation of this monthly payment must be computed separately for Part A and Part B using the following steps:

1. Using the State and County of residence, select the appropriate standardized per capita rate.

2. Using the tables (listed below) of the demographic cost factors with the proper Part (A or B) and age group, select the appropriate factor for the specific sex (male or female) and status (Institutionalized, Medicaid, Medicare, and Working Aged).

3. Multiply the rate (Step 1) by the factor (Step 2) to calculate the monthly payment.

### 1997-2002 DEMOGRAPHIC COST FACTORS FOR THE AGED

**PART A - Hospital Insurance**

<table>
<thead>
<tr>
<th>MALE:</th>
<th>Institutional</th>
<th>Non-Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>Non-Medicaid</td>
<td>Working Aged</td>
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<tr>
<td>85 &amp; Over</td>
<td>2.25</td>
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<td>80 - 84</td>
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<td>75 - 79</td>
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<table>
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<th>Non-Institutional</th>
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</tr>
<tr>
<td>75 - 79</td>
<td>2.10</td>
<td>1.45</td>
</tr>
<tr>
<td>70 - 74</td>
<td>1.80</td>
<td>1.05</td>
</tr>
<tr>
<td>65 - 69</td>
<td>1.45</td>
<td>.80</td>
</tr>
</tbody>
</table>
PART B - Supplementary Medical Insurance

<table>
<thead>
<tr>
<th>MALE:</th>
<th>Institutional</th>
<th>Non-Institutional</th>
<th></th>
<th>Working</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medicaid</td>
<td>Non-Medicaid</td>
<td>Aged</td>
<td></td>
</tr>
<tr>
<td>85 &amp; Over</td>
<td>1.95</td>
<td>1.70</td>
<td>1.15</td>
<td>1.00</td>
</tr>
<tr>
<td>80 - 84</td>
<td>1.95</td>
<td>1.70</td>
<td>1.15</td>
<td>.90</td>
</tr>
<tr>
<td>75 - 79</td>
<td>1.95</td>
<td>1.55</td>
<td>1.10</td>
<td>.80</td>
</tr>
<tr>
<td>70 - 74</td>
<td>1.80</td>
<td>1.35</td>
<td>0.95</td>
<td>.65</td>
</tr>
<tr>
<td>65 - 69</td>
<td>1.60</td>
<td>1.10</td>
<td>.80</td>
<td>.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEMALE:</th>
<th>Medicaid</th>
<th>Non-Medicaid</th>
<th>Aged</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 &amp; Over</td>
<td>1.65</td>
<td>1.25</td>
<td>1.00</td>
</tr>
<tr>
<td>80 - 84</td>
<td>1.65</td>
<td>1.25</td>
<td>.95</td>
</tr>
<tr>
<td>75 - 79</td>
<td>1.65</td>
<td>1.25</td>
<td>.95</td>
</tr>
<tr>
<td>70 - 74</td>
<td>1.65</td>
<td>1.15</td>
<td>.85</td>
</tr>
<tr>
<td>65 - 69</td>
<td>1.50</td>
<td>1.05</td>
<td>.70</td>
</tr>
</tbody>
</table>

Note 1) The 1997-1999, 2001 and 2002 source data files carry data for Washabaugh County, South Dakota. This county merged with Jackson County, South Dakota (46071) in September 1979. The following is a list of the Medicare Aged Payment rates for Washabaugh County:

<table>
<thead>
<tr>
<th>Year of data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$273.55</td>
<td>$226.82</td>
<td>$500.37</td>
</tr>
<tr>
<td>2001</td>
<td>$276.41</td>
<td>$203.59</td>
<td>$475.00</td>
</tr>
<tr>
<td>1999</td>
<td>$232.25</td>
<td>$177.58</td>
<td>$409.83</td>
</tr>
<tr>
<td>1998</td>
<td>$210.84</td>
<td>$156.16</td>
<td>$367.00</td>
</tr>
<tr>
<td>1997</td>
<td>$239.07</td>
<td>$109.29</td>
<td>$348.36</td>
</tr>
</tbody>
</table>

Note 2) The reported CMS/HCFA Medicare area names for Alaska were not always FIPS boroughs or census areas. Data have been put in the following FIPS areas as noted:

<table>
<thead>
<tr>
<th>MEDICARE NAME:</th>
<th>FIPS CENSUS AREA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluetian</td>
<td>Aleutians West (02016)</td>
</tr>
<tr>
<td>Angoon</td>
<td>Skagway-Hoonah-Angoon (02232)</td>
</tr>
</tbody>
</table>
3) The 2001 and 2002 source files report data for Seward, Alaska, which is not carried on the ARF. The following is the Medicare Aged Payment rates for Seward. (SSA Code 2210):

<table>
<thead>
<tr>
<th>Year of Data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$319.47</td>
<td>$264.89</td>
<td>$584.36</td>
</tr>
<tr>
<td>2001</td>
<td>$327.36</td>
<td>$245.54</td>
<td>$572.90</td>
</tr>
</tbody>
</table>

4) The 2001 and 2002 source files report data for Outer Ketchikan, Alaska and Prince Wales Ketchikan, Alaska which are carried combined on the ARF as FIPS 02201. The data for Prince Wales Ketchikan (SSA code 2200) is carried on the ARF. The following is the Medicare Aged Payment rates for Outer Ketchikan (SSA Code 2190):

<table>
<thead>
<tr>
<th>Year of Data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$273.55</td>
<td>$226.82</td>
<td>$500.37</td>
</tr>
<tr>
<td>2001</td>
<td>$271.41</td>
<td>$203.59</td>
<td>$475.00</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year of Data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$285.25</td>
<td>$236.51</td>
<td>$521.76</td>
</tr>
<tr>
<td>2001</td>
<td>$292.29</td>
<td>$219.24</td>
<td>$511.53</td>
</tr>
</tbody>
</table>

6) The 2001 and 2002 source files report data for Cordova-McCarthy, Alaska and Valdz-Chitna-Whitier-Cordova, Alaska. The data for Valdz-Chitna-Whitier (SSA code 2260) is carried on the ARF in FIPS code 02261. The following is the Medicare Aged Payment Rates for Cordova-McCarthy:

<table>
<thead>
<tr>
<th>Year of Data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$313.96</td>
<td>$260.32</td>
<td>$574.28</td>
</tr>
<tr>
<td>2001</td>
<td>$321.71</td>
<td>$241.31</td>
<td>$563.02</td>
</tr>
</tbody>
</table>
7) The 2001 and 2002 source files report data for Upper Yukon, Alaska and Yukon Koyukuk, Alaska. The data for Yukon Koyukuk (SSA code 2290) is carried on the ARF in FIPS code 02290. The following is the Medicare Aged Payment Rates for Upper Yukon (SSA Code 2250):

<table>
<thead>
<tr>
<th>Year of Data</th>
<th>Part A</th>
<th>Part B</th>
<th>Part A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$329.23</td>
<td>$272.99</td>
<td>$602.22</td>
</tr>
<tr>
<td>2001</td>
<td>$337.36</td>
<td>$253.05</td>
<td>$590.41</td>
</tr>
</tbody>
</table>

E-4) Medicare Expenditure and Enrollment Data

The 2001 Medicare Enrollment data are from Medicare County Enrollment as of July 1, 2001 Aged and Disabled 3/2002 Update, Centers for Medicare and Medicaid Services (CMS).

The 2000 Medicare Enrollment data are from Medicare County Enrollment as of July 1, 2000 Aged and Disabled 3/2001 Update, Centers for Medicare and Medicaid Services (CMS).

The 1999 Medicare Enrollment data are from Medicare County Enrollment as of July 1, 1999 Aged and Disabled 3/2000 Update, Health Care Financing Administration (HCFA).

The 1998 Medicare Enrollment data are from Medicare County Enrollment as of July 1, 1998 Aged and Disabled 3/99 Update, Health Care Financing Administration (HCFA).

Note: 1) 1998-2001 data have been screened and suppressed by CMS to protect the privacy of beneficiaries. These instances are represented as zero on the data file for these variables.

2) On the source 1998-2001 data, each state included a data record for county unknown, which was not included on the ARF.

3) The reported CMS/HCFA Medicare area names for Alaska were not always FIPS boroughs or census areas. Data have been put in the following FIPS areas as noted:

<table>
<thead>
<tr>
<th>MEDICARE NAME:</th>
<th>FIPS CENSUS AREA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluetian</td>
<td>Aleutians West (02016)</td>
</tr>
<tr>
<td>Angoon</td>
<td>Skagway-Hoonah-Angoon (02232)</td>
</tr>
<tr>
<td>Barrow-North Slope</td>
<td>North Slope (02185)</td>
</tr>
<tr>
<td>Bristol Bay Borough</td>
<td>Bristol Bay (02060)</td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>Dillingham (02070)</td>
</tr>
<tr>
<td>Cordova-McCarthy</td>
<td>Valdez-Cordova (02261)</td>
</tr>
<tr>
<td>Fairbanks</td>
<td>Fairbanks Northstar (02090)</td>
</tr>
<tr>
<td>Kenai-Cook Inlet</td>
<td>Kenai Peninsula (02122)</td>
</tr>
<tr>
<td>Ketchikan</td>
<td>Ketchikan Gateway (02130)</td>
</tr>
<tr>
<td>Kobuk</td>
<td>Northwest Arctic (02188)</td>
</tr>
<tr>
<td>Kodiak</td>
<td>Kodiak Island (02150)</td>
</tr>
<tr>
<td>Kuskokwin</td>
<td>Bethel (02050)</td>
</tr>
</tbody>
</table>
Matanuska                      Matanuska-Susitna            (02170)
Seward                          Kenai Peninsula              (02122)
Skagway-Yakutat                 Skagway-Hoonah-Angoon(02232)
Upper Yukon                     Yukon-Koyukuk                  (02290)
Valdez-Chitina-Whitier          Valdez-Cordova                 (02261)

4) 1999 and 2001 Medicare Enrollment data are included on the ARF for Guam, Puerto Rico and the Virgin Islands. 2000 Medicare Enrollment data include Puerto Rico and the Virgin Islands. In the Virgin Islands, St. Thomas and St. John are reported combined. On the ARF, the data are carried in St. Thomas (78030), and St. John (78020) will be zero filled.

F. POPULATION

Note: For 1980, 1990 and 2000 Census Data, data from the Census STF1A/SF1A are 100% response data, data from the Census STF3A/SF3A are weighted from the sample data.

F-1) Population Counts and Number of Families and Households

2000 Census Population Counts:

2000 Census population by race/ethnicity are from the US Bureau of Census, www.census.gov, using American Fact Finder feature to download table GCT-PL Race and Hispanic or Latino: 2000. The race categories for Census 2000 are defined as follows:

White - persons having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Black or African American - persons having origins in any of the Black racial groups in Africa.

American Indian and Alaska Native - persons having origins in any of the peoples of North and South America (including Central America) and maintain tribal affiliation or community attachment.

Asian – persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.

Native Hawaiian and other Pacific Islander – persons having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
Some Other Race (one race) – persons of one race who were unable to identify with the five races mentioned above.

Two or More Races – persons having origins in more than one race as defined above.

When comparing 2000 Census data to prior years, it is important to note that the questionnaire for Census 2000 was revised to permit reporting of more than one race. Approximately 2.4 percent of the total population reported being two or more races. For further information regarding differences between the 2000 Census and earlier ones, refer to the census website www.census.gov.

The federal government considers race and Hispanic origin to be two separate and distinct concepts. Persons of Hispanic origin can be of any race.

Note:
1) Data are included on the ARF for Puerto Rico for the 2000 Census population.
2) 2000 Census Population data included on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. Data for American Indian and Alaska Native, which are not reported separately, are included in the Some Other Race field.
3) 2000 Census Population data included on the ARF for the US Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census of Population. Data for American Indian and Alaska Native; Asian; and Native Hawaiian and Other Pacific Islander, which are not reported separately, are included in the Some Other Race field.

2000 Census Population Counts:

2000 Census age, race and gender data are from the 2000 Census of Population and Housing: Summary File 1A (SF1A). 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 ARF for Puerto Rico.
2) Data on the ARF for the Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. Data for American Indian and Alaska Native; Asian; and Native Hawaiian and Other Pacific Islander, which are not reported separately, are included in the Some Other Population fields.
3) Data on the ARF for Guam are from the from Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. Population data for Guam are not available by race.
2000 Census population by detailed race/ethnicity are from the 2000 Census of Population and Housing: Summary File 1A (SF1A).

Note:  
1) American Indian and Alaska Native include total tribes tallied for people with one tribe only and people with no tribe reported.  
2) Asian categories include people with one Asian category only and people with no specific Asian category reported.  
3) Native Hawaiian and Other Pacific Islander categories include people with one Native Hawaiian and Other Pacific Islander category only and people with no specific Native Hawaiian and Other Pacific Islander category reported.  
4) Hispanic or Latino fields are by specific origin. 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 their arrival in the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race.  
5) Data are included on the ARF for Puerto Rico.  
6) Data are included on the ARF for Guam from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. The following Native Hawaiian and Pacific Islander categories are carried: Micronesian-Guamanian/Chamorro, Micronesian-Other Population and Other Unspecified Population. Other Unspecified Population includes all the other Native Hawaiian and Pacific Islander categories not listed above. On the ARF, the following Asian categories are carried: Chinese (includes Taiwanese), Filipino, Japanese, Korean and Other Unspecified. Other Unspecified Population includes all the other Asian categories not listed above.  
7) Data are included on the ARF for the US Virgin Islands in the following Hispanic/Latino origins: Mexican, Puerto Rican, Cuban and other Hispanic. Dominican Republican, Central American and South American are included in Other Hispanic Population. These data are from the U.S. Virgin Islands Summary File: 2000 Census of Population and Housing, US Census Bureau.

1990 Census Population Counts:  

1990 Census age, race, and gender data are from the 1990 Census of Population and Housing: Summary Tape File 1A (STF1A), or Summary Tape File 3A (STF3A). Individuals of Hispanic Origin are included in the counts by race (White, Black, American Indian/Eskimo/Aleut, Asian/Pacific Islander, and Other). Therefore when calculating a total, Hispanic Origin should not be included in the calculation. Hispanic Origin individuals are shown by total as well as by race and origin. Non-White data includes Black data.

1980 Census Population Counts:  

1980 Census population is from the 1980 Census of Population and Housing: Summary Tape File 1A (STF1A).

1970 Census Population Counts:  

1970 Census population is from the 1970 Census Population Tape (known as the BHME
Note: Data are not available for Virginia independent cities. Refer to A-2.

1980 Population for Special Age Groups:

1980 Persons Aged 18 Years and Older and Aged 65 Years and Older are from the 1983 County and City Data Book File, U.S. Bureau of the Census.

1990-2000 Total Persons/Quasi-Individuals:

All Persons/Quasi-Individual estimates come from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. 1993 through 2000 are from the Regional Economic Information System (REIS) CD-ROM, and earlier years are from the Local Area Personal Income (LAPI) tapes as noted below:

<table>
<thead>
<tr>
<th>YEAR OF DATA</th>
<th>SOURCE FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1969-99 REIS CD-ROM</td>
</tr>
<tr>
<td>1998</td>
<td>1969-98 REIS CD-ROM</td>
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<tr>
<td>1997</td>
<td>1969-97 REIS CD-ROM</td>
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<td>1996</td>
<td>1969-96 REIS CD-ROM</td>
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<td>1995</td>
<td>1969-95 REIS CD-ROM</td>
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<tr>
<td>1994</td>
<td>1969-94 REIS CD-ROM</td>
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<tr>
<td>1993</td>
<td>1969-93 REIS CD-ROM</td>
</tr>
<tr>
<td>1992</td>
<td>1969-92 LAPI Tape</td>
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<tr>
<td>1991</td>
<td>1969-91 LAPI Tape</td>
</tr>
<tr>
<td>1990</td>
<td>1969-90 LAPI Tape</td>
</tr>
</tbody>
</table>

Persons are defined as individuals, nonprofit institutions serving individuals, private noninsured welfare funds, and private trust funds. The last three are referred to as "quasi-individuals" and make up only a small part of the total number of persons. These quasi-individuals are nonprofit in character and are distinguishable from business enterprises in that they are organizations that either function to serve individuals directly or are established on their behalf. Nonprofit institutions include religious organizations, social and athletic clubs, labor organizations, and other private nonprofit agencies that furnish services to individuals. Private noninsured welfare funds include funds providing group health insurance, group life insurance, workers' compensation, and supplemental unemployment benefits. Examples of private trust funds are a decedent's estate, a trust fund for minors, and a public official's blind trust.

Note: 1) Beginning with 1995, Total Persons/Quasi-Individuals data for Menominee County,
Wisconsin (55078) and Shawano County, Wisconsin (55115) are carried separately on the source data. 1980, 1985 and 1990-1994 Total Persons/Quasi-Individuals data for these counties are included in Shawano County (55115) in the source data, and the fields for Menominee County have been zero-filled.

2) 1990-2000 Total Persons/Quasi-Individuals 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) 1990-2000 Total Persons/Quasi-Individuals 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 1992-2000 source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

<table>
<thead>
<tr>
<th>SOURCE FILE AREA</th>
<th>COMBINED WITH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hawaii</strong></td>
<td></td>
</tr>
<tr>
<td>Kalawao County (15005)</td>
<td>Maui (15009)</td>
</tr>
<tr>
<td><strong>Virginia</strong></td>
<td></td>
</tr>
<tr>
<td>Bedford City (51515)</td>
<td>Bedford (51019)</td>
</tr>
<tr>
<td>Bristol (51520)</td>
<td>Washington (51191)</td>
</tr>
<tr>
<td>Buena Vista (51530)</td>
<td>Rockbridge (51163)</td>
</tr>
<tr>
<td>Charlottesville (51540)</td>
<td>Albemarle (51003)</td>
</tr>
<tr>
<td>Clifton Forge (51560)</td>
<td>Alleghany (51005)</td>
</tr>
<tr>
<td>Colonial Heights (51570)</td>
<td>Chesterfield (51041)</td>
</tr>
<tr>
<td>Covington (51580)</td>
<td>Alleghany (51005)</td>
</tr>
<tr>
<td>Danville (51590)</td>
<td>Pittsylvania (51143)</td>
</tr>
<tr>
<td>Emporia (51595)</td>
<td>Greensville (51081)</td>
</tr>
<tr>
<td>Fairfax City (51600)</td>
<td>Fairfax (51059)</td>
</tr>
<tr>
<td>Falls Church (51610)</td>
<td>Fairfax (51059)</td>
</tr>
<tr>
<td>Franklin (51620)</td>
<td>Southampton (51175)</td>
</tr>
<tr>
<td>Fredricksburg (51630)</td>
<td>Spotsylvania (51177)</td>
</tr>
<tr>
<td>Galax (51640)</td>
<td>Carroll (51035)</td>
</tr>
<tr>
<td>Harrisonburg (51660)</td>
<td>Rockingham (51165)</td>
</tr>
<tr>
<td>Hopewell (51670)</td>
<td>Prince George (51149)</td>
</tr>
<tr>
<td>Lexington (51678)</td>
<td>Rockbridge (51163)</td>
</tr>
<tr>
<td>Lynchburg (51680)</td>
<td>Campbell (51031)</td>
</tr>
<tr>
<td>Manassas (51683)</td>
<td>Prince William (51153)</td>
</tr>
<tr>
<td>Manassas Park (51685)</td>
<td>Prince William (51153)</td>
</tr>
<tr>
<td>Martinsville (51690)</td>
<td>Henry (51089)</td>
</tr>
<tr>
<td>Norton (51720)</td>
<td>Wise (51195)</td>
</tr>
<tr>
<td>Petersburg (51730)</td>
<td>Dinwiddie (51053)</td>
</tr>
<tr>
<td>Poquoson (51735)</td>
<td>York (51199)</td>
</tr>
<tr>
<td>Radford (51750)</td>
<td>Montgomery (51121)</td>
</tr>
<tr>
<td>Salem (51775)</td>
<td>Roanoke (51161)</td>
</tr>
<tr>
<td>South Boston (51780)</td>
<td>Halifax (51083)</td>
</tr>
<tr>
<td>Staunton (51790)</td>
<td>Augusta (51015)</td>
</tr>
<tr>
<td>Waynesboro (51820)</td>
<td>Augusta (51015)</td>
</tr>
</tbody>
</table>
Williamsburg (51830)     James City (51095)
Winchester (51840)     Frederick (51069)

2000 Median Age:

2000 Median Age by race and gender are from the 2000 Census of Population and
Housing: Summary File 1A (SF1A). These fields have one implied decimal point. Refer to F-
1 2000 Census Population Counts for definition of race/ethnicity.

Note: 1) Data are included on the ARF for Puerto Rico.
2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census of
Population and Housing, U.S. Census Bureau. Median age by gender data are
included. Data by race are not reported.
3) Data on the ARF for Virgin Islands are from the U.S. Virgin Islands Summary File:
2000 Census of Population and Housing, U.S. Census Bureau. Median age by
gender data are included for following races: White, Black, Some Other Races Alone,
Hispanic Origin and White Non-Hispanic.

Rural Farm Population:

2000 Rural Farm and Nonfarm Population data are from the 2000 Census of Population
and Housing: Summary File 3A (SF3A). 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. The data on farm population were
obtained from a sample of the population as part of the 2000 Census of Population and
Housing, conducted by the Bureau of the Census. The farm population consists of people in
households living in farm residences. Some people who are counted on a property classified as a
farm (including, in some cases, farm workers) are excluded from the farm population. An occupied
one-family house or mobile home is classified as a farm residence if: (1) the housing unit is
located on a property of 1 acre or more, and (2) at least $1,000 worth of agricultural products
were sold from the property (or yard in the case of a tenants household) in 1999. Group
quarters and housing units that are in multi-unit buildings or vacant are not included as farm
residences.

Note: Data are included on the ARF for Puerto Rico

1990 Farm Population data are from the County and City Data Book, 1994, CD-ROM, a
statistical abstract supplement published by the Bureau of the Census, U.S. Department of
Commerce. The data on farm population were obtained from a sample of the population as part of
the 1990 Census of Population and Housing, conducted by the Bureau of the Census. Farm
population covers all persons in households living in farm residences as of April 1, 1990. An
occupied one-family house or mobile home is classified as a farm residence if: (1) the housing
unit is located on a property of 1 acre or more, and (2) at least $1,000 worth of agricultural
products were sold from the property (or yard in the case of a tenants household) in 1989. Group
quarters and housing units that are in multi-unit buildings or vacant are not included as
farm residences.

**1980 Rural Farm Population** is from the 1983 County and City Data Book File. Farm population covers all persons living in rural areas on farms as of April 1, 1980.

**Marriages and Divorces:**

2000 Percent Females Divorced and Numbered Divorced Females fields are from the 2000 Census of Population and Housing Summary File 3A (SF3A), U.S. Census Bureau. Data on marital status are tabulated only for persons 15 years old and over.

*Note:* 1) Data are included on the ARF for Puerto Rico.
2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau.

1990 Percent Females Divorced and Numbered Divorced Females fields are from the 1990 Census of Population and Housing, STF3A. Data on marital status are tabulated only for persons 15 years old and over.

1980 Percent Females Divorced and Numbered Divorced Females fields are from the 1980 Census of Population and Housing, STF3A. Data on marital status are tabulated only for persons 15 years old and over.

*Note:* Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

**Population for Foreign and Urban Populations:**

2000 Census Urban Population Counts are from the 2000 Census of Population and Housing: Summary File 3A (SF3A), U.S. Census Bureau. The Census Bureau defines as "urban" all territory, population and housing units located within urbanized areas (UAs) and urban clusters (UCs). An urbanized area consists of densely settled 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. 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 ARF for Puerto Rico.
2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau.
3) Data on the ARF for the Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census of Population and Housing, U.S. Census Bureau.

1990 Census Urban Population Counts are from the 1990 Census of Population and Housing, STF3A. The Census Bureau defines "urban" as consisting of territory, persons, and
housing units in: 1) Places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the six New England States, New York and Wisconsin), but excluding the rural portions of "extended cities," 2) Census designated places of 2,500 or more persons; 3) Other territory, incorporated or unincorporated, included in urbanized areas.

1980 Census Urban Population Counts are from the 1980 Census of Population and Housing, STF3A. As defined by the Census Bureau, the urban population comprises all persons living in urbanized areas which is a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). Also included are persons living in places of 2,500 or more inhabitants outside urbanized areas.

2000 Foreign Born Population data are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.


Note: The calculation for 1990 Foreign Born Population is:

\[(1990 \text{ Census Population} \times 1990 \% \text{ Foreign Born Population})/100\]  

Non-English Speaking Persons:

2000 Non-English Speaking Persons by age data are from the Census of Population and Housing Summary File 3A (SF3A), U.S. Virgin Islands Summary File, Guam Summary File 2000, U.S. Census Bureau. 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, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.

Note: 1) Data are included on the ARF for Puerto Rico.

2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. These fields include data for persons who reported they spoke a language other than English and indicated they speak that language "more often than English" or "do not speak English".

3) Data on the ARF for the Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census of Population and Housing, U.S. Census Bureau.

1990 Non-English Speaking Persons by age data are from the 1990 Census of Population and Housing, STF3A. These fields include persons who reported they spoke a language other than English and indicated their ability to speak English "not well" or "not at all."
Number of Families and Households:

2000 Family, Household, and Group Quarters data are from the 2000 Census of Population and Housing, SF1A.

Note: 1) 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 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. Refer to F-23 for a detailed definition of households.

2) Average family size is calculated by dividing the number of people in families by the total number of families. This field has one implied decimal place.

3) Average household size is obtained by dividing the number of people in households by the number of households (or householders). This field has two implied decimal points.

4) All people not living in housing units are classified by the Census Bureau as living in group quarters. Two general categories of people in group quarters are recognized, institutionalized population and noninstitutionalized population.

5) Institutionalized population includes people under formally authorized, supervised care or custody in institutions at the time of enumeration. The following population fields carried on the ARF are in this category: Correctional Institutions; Nursing Homes; Hospitals/Wards, hospices and schools for the handicapped; Mental (Psychiatric) Hospitals or Wards; and Juvenile Institutions.

6) Noninstitutionalized population includes people who live in group quarters other than institutions. This includes staff residing in military and nonmilitary group quarters on institutional grounds who provide formally authorized, supervised care or custody for the institutionalized population. The following population fields carried on the ARF are in this category: Noninstitutional Group Homes and Group Homes.

7) An unmarried-partner household is a household other than a ‘married-couple household’ that includes a householder and an ‘unmarried partner’. 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.

8) Data are included on the ARF for Puerto Rico.

9) Data on the ARF for Guam are from the Guam Summary File: 2000, U.S. Census Bureau. Data by race were not available.

10) Data on the ARF for Virgin Islands are from the U.S. Virgin Islands Summary File: 2000, U.S. Census Bureau. Numbers of Households data by race are included for following races: White, Black, Some Other Races Alone, Hispanic Origin and White Non-Hispanic. Other family and household related fields with by race data are not available.

1990 Family, Household, and Group Quarters data are from the 1990 Census of Population and Housing, STF1A. Traditional Families are defined to include total households with a married couple with or without children. Single Parent Households are defined to include male and female householders with related children.
1980 Number of Married-Couple Families is from the 1983 County and City Data Book File.

1980 Number of Households, Number of Persons in Households, and Number of Persons in Group Quarters data are from 1980 Census of Population, Supplementary Reports: Population and Households by States and Counties: 1980, PC 80-S1-2, U.S. Department of Commerce, Bureau of the Census.

1980 Family and Other Household data are from the 1980 Census of Population and Housing, STF3A.

1960 Population Counts:

1960 Census Population counts are published in Census of Population 1960, the Eighteenth Decennial Census of the United States.

Note: 1) 1960 Census Population for the independent cities of Hampton and Newport News, Virginia are included in York County (51199). Hampton (51650) and Newport News (51700) are zero-filled for this field.
2) 1960 Census Population for the independent city of Galax, Virginia is included in Carroll County (51035), rather than Grayson County (51077).
3) 1960 Census Population for Charles City County, Virginia (51036) is not reported.
4) Data could not be obtained to break out 1960 Census Population for the Virginia independent cities of Alexandria, Chesapeake and Virginia Beach from their former counties.
5) The reported figures were changed to hundreds for consistency on the ARF in 9/90.

1950 Population Counts:

1950 Census Population counts are published in 1950 Census of Population, Volume I, Number of Inhabitants.

Note: 1) 1950 Census Population for the independent cities of Hampton and Newport News, Virginia are included in York County (51199). Hampton (51650) and Newport News (51700) are zero-filled for this field.
2) 1950 Census Population for the independent city of Galax, Virginia is included in Carroll County (51035), rather than Grayson County (51077).
3) 1950 Census Population for Charles City County, Virginia (51036) is not reported.
4) Data could not be obtained to break out 1950 Census Population for the Virginia independent cities of Alexandria, Chesapeake and Virginia Beach from their former counties.
5) The reported figures were changed to hundreds for consistency on the ARF in 9/90.

1940 Census Population Counts:

1940 Census Population counts are published in Sixteenth Census of the U.S. 1940,
Population Volume I, Number of Inhabitants.

Note:  
1) 1940 Census Population for the independent cities of Hampton and Newport News, Virginia are included in York County (51199). Hampton (51650) and Newport News (51700) are zero-filled for this field.  
2) 1940 Census Population for the independent city of Galax, Virginia is included in Carroll County (51035), rather than Grayson County (51077).  
3) 1940 Census Population for Charles City County, Virginia (51036) is not reported.  
4) Data could not be obtained to break out 1940 Census Population for the Virginia independent cities of Alexandria, Chesapeake and Virginia Beach from their former counties.  
5) The reported figures were changed to hundreds for consistency on the ARF in 9/90.  

F-2) Population Percents  

2000 Population Percents:  

2000 Percent Population by Race or National Origin were calculated from the 2000 Census of Population and Housing Summary File 1A (SF1A). These fields have an implied decimal place. Refer to F-1 for definitions of race/ethnicity.  

Note:  
1) Data are included on the ARF for Puerto Rico.  
2) Data included on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. Data for the American Indian and Alaska Native, which is not reported separately, are included in the Percent Some Other Population field.  
3) Data included on the ARF for the US Virgin Islands are from the Virgin Islands Summary File 2000, U.S. Census Bureau. Data for the American Indian and Alaska Native; Asian; and Native Hawaiian and Other Pacific Islander, which are not reported separately, are included in the Percent Some Other Population field.  

1990 Population Percents and Percent Urban Population:  

1990 Percent Population by Race or National Origin were calculated from the 1990 Census of Population and Housing: Summary Tape File 1A (STF1A). 1990 Percent Urban Population was calculated from the 1990 Census of Population of Housing, STF3A. See Population for Foreign and Urban Population for the definition of urban.  

Note: Data for Park County, MT (30067) do not include Yellowstone National Park (30113).  

1980 Population Percents:  

1980 Percent Population by Race or National Origin, and 1980 Percent Urban Population were calculated from the 1980 Census of Population and Housing, STF3A.
**Note:** Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

**1990 Percent Foreign Born Population:**

**1990 Percent Foreign Born Population** data are from the *County and City Data Book, 1994, CD-ROM*, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained as part of the 1990 decennial census. Foreign born includes persons born outside the United States, Puerto Rico, or an outlying area of the United States. The small number of persons who were born in a foreign country but have at least one American parent are not included in this category. Persons not reporting place of birth were assigned the birthplace of another family member or were allocated the response of another person with similar characteristics. Percent Foreign Born Population has one implied decimal place.

**Note:** 1) Percent Foreign Born Population rounds to less than half of the unit of measure shown in the following counties:
- 01131 - Wilcox, Alabama
- 13271 - Telfair, Georgia
- 20123 - Mitchell, Kansas
- 21159 - Martin, Kentucky
- 21181 - Nicolas, Kentucky
- 21231 - Wayne, Kentucky
- 22025 - Catahoula, Louisiana
- 28019 - Choctaw, Mississippi
- 28143 - Tunica, Mississippi
- 29173 - Ralls, Missouri
- 39163 - Vinton, Ohio
- 47175 - Van Buren, Tennessee

2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

**F-3) Population Estimates**

The **2002 Population Estimates** and **2002 Population 65+** are from the 7/1/2002 County Estimate File for P2K Internet Display from the U.S. Bureau of the Census.


The **2001 Population Estimates** and **2001 Population 65+** are from the 7/1/2001 County Estimate File for P2K Internet Display from the U.S. Bureau of the Census.

The **1999 Population Estimates** and **1999 Population 65+** are from *County Population Estimates and Demographic Components of Population Change: Annual Time*
Series, July 1, 1990 to July 1, 1999 from the U.S. Bureau of the Census. 1999 Population Estimates for the Municipios of Puerto Rico are included from (PR-99-1) 


Note: Effective July 1, 1997, the entire city of Takoma Park has been included in Montgomery County, MD (24031). Prior to July 1, 1997, part of Takoma Park city had been included in Prince George's County, MD (24033).


Note: 1) Total White population can be calculated by adding White Non-Hispanic and White Hispanic.

2) Individuals of Hispanic Origin are included in the counts by race for Black; American Indian/Eskimo/Aleut and Asian/Pacific Islander. Therefore when calculating total population, Hispanic Origin should not be included in the calculation.

Census. The data are as of July 1 for the respective year.

**1991 and 1992 Population Estimates** are from *Population of States and Counties 1990-1992* from the Bureau of the Census. The data are as of July 1 for the respective year.

*Note:* No data were available for Denali, AK (02068) and for Yakutat, AK (02282).


*Note:* The 1983 and 1984 Population Estimates were not available for the District of Columbia. The Population Estimates from P-25 State Series were used.


*Note:* 1) Muscogee County, Georgia (Modified FIPS Code 13215) consists of consolidated government totals for years 1973-1978.
      2) 1978 data are not available for Virginia independent cities. Refer to A-2.

**1971 and 1972 Population Estimates** are from the *Current Population Reports*, Bureau of the Census, for the respective year.

**F-4) Labor Force**

The **1990-2001 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 **1990-2001 Unemployment Rate** is carried as a percentage with one implied decimal place. Rates for 1990-91 were recalculated for Virginia counties which include independent cities. The following formula was used:

Unemployment Rate = (Number Unemployed / Civilian Labor Force) * 100

*Note:* 1) 1999 through 2001 data are available for Puerto Rico.
      2) No data for Kalawao, HI are reported on the source file for 1992-2001.
      3) The source file Alaska State total for 1994 persons (F0978694) is 6053, but the sum of the counties is 6055; therefore the sum of this field on the ARF will differ from the source file state total by 2.
4) The source file Alaska State total for 1993 persons (F0978693) is 5979, but the sum of
the counties is 5980; therefore the sum of this field on the ARF will differ from the
source file state total by 1.

5) Beginning with the 2001 data, Clifton Forge City, VA (51560) is not reported because
it is no longer an independent city. Data are now included in Allegheny County, VA
(51005).

The **2000 Employment and Labor Force** data are from the *2000 Census of Population
and Housing Demographic Profile: 2000, U.S. Census Bureau and 2000 Census of
Population and Housing: Summary File 3A (SF3A)*. For more information regarding
definitions, user updates, confidence intervals, and standard errors, the Census website
www.census.gov should be referenced.

**Note:**
1) Data are included on the ARF for Puerto Rico.

2) Data on the ARF for Guam are from the *Guam Summary File: 2000 Census of
Population and Housing, U.S. Census Bureau*. Civilian Labor Force, Employed and
Unemployed data not available by race. Work status data (16+ Did Not Work in ’99)
are not available by race. Data on State Government Workers are not available.

3) Data on the ARF for the Virgin Islands are from the *U.S. Virgin Islands Summary
File: 2000 Census of Population and Housing, U.S. Census Bureau*. Data for
American Indian and Alaska Native; Asian; and Native Hawaiian and Other Pacific
Islander, which are not reported separately, are included in the Some Other
Population fields. Civilian Labor Force, Employed and Unemployed data are not
available by race. Data on State Government Workers are not available.

4) The data on labor force status and journey to work were related to the reference
week, the calendar week preceding the date on which the respondents completed their
questionnaires or were interviewed by enumerators. This week is not the same for all
respondents since the enumeration was not completed in one week.

5) Public transportation includes bus or trolley bus, streetcar or trolley car, subway or
elevated, railroad, ferry or taxicab.

6) White collar workers include the following: management, professional, and related
occupations; and sales and office occupations.

7) Civilian Labor Force consists of people classified as Employed and Unemployed.
Employed population consists of: 16+ civilians who worked during the reference week
as a paid employee, or in their own business (profession), farm; or unpaid workers on
a family farm or in a family business (who worked 15+ hours per week); those who
didn’t work during the reference week but who had jobs or businesses from which
they were temporarily absent because of the specific reasons. Those who worked
around their own house, unpaid volunteers for specific organizations, institutionalized
population and people on active duty in the US Armed Forces were excluded from
employed workers. Unemployed are civilians 16+ years old who did not work or did
not have a job during the reference week and either were looking for job during 4 last
weeks and were available to start a job or those who were on temporary layoff from a
job (but informed that they would be recalled to work within the next 6 months or
had been given a date to return to work, and were available to return to work
during the reference week, except for temporary illness).
The 1990 Employment and Labor Force data are from the 1990 Census of Population and Housing, STF3A.

Note: 1) The data on labor force status and journey to work were related to the reference week, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed by enumerators. This week is not the same for all respondents since the enumeration was not completed in one week.

2) Public transportation includes bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, ferry or taxicab.

3) White collar workers include the following: managerial and professional specialty occupations; and technical, sales and administrative support occupations.

4) Persons were identified as having a work disability if they had a health condition that had lasted for 6 or more months and which limited the kind or amount of work they could do at a job or business.

5) Data for Park County, Montana (30067) do not include Yellowstone National Park (30113)

The 1985 Labor Force data are from Labor Force, Employment and Unemployment Estimates for States, Labor Market Areas, Counties and Selected Cities (Supplement No. 2), 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 following 1980 Labor Force data are from the Bureau of Labor Statistics Annual Averages Tapes for 1980:

1. Civilian Labor Force, Persons 16 Years and Older
2. Number Employed, Persons 16 Years and Older
3. Number Unemployed, Persons 16 Years and Older
4. Unemployment Rate, Persons 16 Years and Older

The Unemployment Rate, which is carried as a percentage with one implied decimal place, was recalculated for Virginia counties to include independent cities in the appropriate counties (where necessary), and for Alaska according to the formula:

Unemployment Rate = Number Unemployed / Civilian Labor Force.

Note: The following county had no data reported for the indicated year:
Chavez, New Mexico (35005) 1980

F-5) Per Capita Incomes

1990-2000 Per Capita Income:

All Per Capita Income estimates come from the U.S. Department of Commerce, Bureau of
Economic Analysis (BEA), Regional Economic Measurement Division. 1993 through 2000 are from the Regional Economic Information System (REIS) CD-ROM, and earlier years are from the Local Area Personal Income (LAPI) tapes as noted below:

<table>
<thead>
<tr>
<th>YEAR OF DATA</th>
<th>SOURCE FILE</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>1990</td>
<td>1969-90 LAPI Tape</td>
</tr>
</tbody>
</table>

Per Capita Income is the total personal income of the residents of a given area divided by the resident population of the area. Personal income is the income received by persons from all sources, that is, from participation in production, from both government and business transfer payments, and from government interest. Personal income is the sum of wage and salary disbursements, other labor income, proprietors' income, rental income of persons, personal dividend income, personal interest income, and transfer payments, less personal contributions for social insurance. In computing Per Capita Income, BEA used the Bureau of the Census county population totals as of July 1.

**Note:**

1) Prior to 1992, the Per Capita Income data for Alaska and Virginia counties which include independent cities, have been calculated as a weighted average. The independent cities of Alexandria, Chesapeake, Hampton, Newport News and Virginia Beach, Virginia are maintained separately on ARF as county equivalents.

2) Beginning with 1995, Per Capita Income data for Menominee County, Wisconsin (55078) and Shawano County, Wisconsin (55115) are carried separately on the source data file. 1975-1994 Per Capita Income data for these counties are included in Shawano County on the source data, and the fields for Menominee County have been zero-filled.

3) 1990-2000 Per Capita 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) 1990-2000 Per Capita 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 1992-2000 source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

<table>
<thead>
<tr>
<th>SOURCE FILE AREA</th>
<th>COMBINED WITH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIPS COUNTY</td>
</tr>
</tbody>
</table>

84
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)
Clifton Forge (51560) Alleghany (51005)
Colonial Heights (51570) Chesterfield (51041)
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)
Fredricksburg (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)
South Boston (51780) Halifax (51083)
Staunton (51790) Augusta (51015)
Waynesboro (51820) Augusta (51015)
Williamsburg (51830) James City (51095)
Winchester (51840) Frederick (51069)

F-6) Income

1990-2000 Total Personal Income:

All Total Personal Income estimates comes from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. 1993 through 2000 are from the Regional Economic Information System (REIS) CD-ROM and earlier years are from the Local Area Personal Income (LAPI) tapes as noted below:

<table>
<thead>
<tr>
<th>YEAR OF DATA</th>
<th>SOURCE FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Personal Income** is the income received by persons from all sources, that is, from participation in production, from both government and business transfer payments, and from government interest. Personal income is the sum of wage and salary disbursements, other labor income, proprietors' income, rental income of persons, personal dividend income, personal interest income, and transfer payments, less personal contributions for social insurance.

*Note:*  
1) Beginning with 1995, Total Personal Income data for Menominee County, Wisconsin (55078) and Shawano County, Wisconsin (55115) are carried separately on the source data file. 1975-1994 Total Personal Income for these counties are included in Shawano County on the source data, and the fields for Menominee County have been zero-filled.

2) 1990-2000 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) 1990-2000 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 1992-2000 source data combines several Hawaii and Virginia counties and independent cities. The following lists the county in which each was combined.

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<thead>
<tr>
<th>SOURCE FILE AREA</th>
<th>COMBINED WITH FIPS COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
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<tr>
<td>Kalawao County (15005)</td>
<td>Maui (15009)</td>
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<tr>
<td>Virginia</td>
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</tr>
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<td>Bedford City (51515)</td>
<td>Bedford (51019)</td>
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<td>Bristol (51520)</td>
<td>Washington (51191)</td>
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<td>Rockbridge (51163)</td>
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<tr>
<td>Charlottesville (51540)</td>
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<td>Clifton Forge (51560)</td>
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<td>Danville (51590)</td>
<td>Pittsylvania (51143)</td>
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<tr>
<td>Emporia (51595)</td>
<td>Greensville (51081)</td>
</tr>
</tbody>
</table>
F-7) Persons and Families Below Poverty Level

1999 Persons and Families below Poverty Level data are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. Data by race are from 2000 Census of Population and Housing: Summary File 3A (SF3A., U.S. Virgin Islands Summary File. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.

Note: 1) Poverty is measured by using 48 thresholds that vary by family size and number of children within the family and age of the householder. To determine whether a person is poor, one compares the total income of that person’s family with the threshold appropriate for that family. If the total family income is less than the threshold, then the person is considered poor, together with every member of his or her family. Not every person is included in the poverty universe: institutionalized people, people in military group quarters, people living in college dormitories, and unrelated individuals under 15 years old are considered as neither “poor” or “nonpoor” and are excluded from both the numerator and the denominator when calculating poverty rates. The Office of Management and Budget (OMB) mandates that all federal agencies (including the Census Bureau) use this poverty definition for statistical purposes (OMB Statistical Policy Directive 14, May 1978).
2) Data are included on the ARF for Puerto Rico.
3) Data on the ARF for the Virgin Islands are from U.S. Virgin Islands Summary File:
The 1993, 1995, 1997-1999 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 Bureau of Census' Small Area Income Poverty Estimates (SAIPE) files for the representative years. 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 available for 1997-1999. One implied decimal place is carried for each of these percent fields. The SAIPE are constructed from statistical models based, in part, on summary data from 1993, 1995, 1997-1999 federal income tax returns (respectively), data about participation in the Food Stamp program, and the previous census.

Note: Alaska state records differ from the sum of the county data for the following fields:

<table>
<thead>
<tr>
<th>Source State Total</th>
<th>Sum of Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995 Persons in Poverty</td>
<td>60,735</td>
</tr>
<tr>
<td>1995 Persons Age 0-17 in Poverty</td>
<td>25,270</td>
</tr>
<tr>
<td>1993 Persons Age 0-17 in Poverty</td>
<td>30,628</td>
</tr>
</tbody>
</table>

The 1989 Persons and Families Below Poverty Level data are from the 1990 Census of Population and Housing, STF3A.

Note: 1) A family consists of a household and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption. All persons 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 comprise a group of unrelated persons or one person living alone.

2) Poverty statistics are based on a definition originated by the Social Security Administration in 1964 and subsequently modified by Federal interagency committees in 1969 and 1980 and prescribed by the Office of Management and Budget in Directive 14 as the standard to be used by Federal agencies for statistical purposes. For more information refer to the 1990 Census of Population and Housing Summary Tape File 3 Technical Documentation.

F-8) Median Family Income

1999 Median Family Income data are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.

The 1989 Median Family Income data are taken from the 1990 Census of Population and Housing, STF3A.
Note: 1) When counties and/or cities were combined into one FIPS code, the data from the area with the higher population was used.
2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

The 1979 Median Family Income data are taken from the 1980 Census of Population and Housing, STF3A.

Note: 1) When an independent city has been recoded into its original county on ARF, Median Family Income is estimated from the fields giving families by income ranges on the source file.
2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

F-9) Household Income

The 1999 Median Household Income data are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. as of July 2002. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.


Note: 1993 and 1995 data for Park County, MT (30067) do not include Yellowstone National Park (30113).

1999 Household Income data are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. Data by race categories are from 2000 Census of Population and Housing: Summary File 3A (SF3A). For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website 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) "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) Data are included on the ARF for Puerto Rico.
4) Data on the ARF for the Virgin Islands are from U.S. Virgin Islands Summary File: 2000, U.S. Census Bureau. Data for American Indian and Alaska Native; Asian; and
Native Hawaiian and Other Pacific Islander, which are not reported separately, are included in the Some Other Population fields.

The **1989 Household Income** data are taken from the *1990 Census of Population and Housing, STF3A*. Income of households includes the income of the householder and all other persons 15 years old and over in the household, whether related to the householder or not, received in the calendar year 1989.

*Note:* 1) A household includes all the persons 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 (or if vacant, is intended for occupancy) as a separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from outside of the building or through a common hall.

2) Total income is the algebraic sum of the amounts reported separately for wage or salary income; net nonfarm self-employment income; net farm self-employment income; interest, dividend, or net rental or royalty income; Social Security or railroad retirement income; public assistance or welfare income; retirement or disability income; and all other income.

**1989 Median Household Income** data are from the *County and City Data Book, 1994, CD-ROM*, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained as part of the 1990 decennial census. Median income divides the income distribution into two equal parts, one having incomes above the median and the other having incomes below the median. It is based on the total number of households, including those with no income. Income of households includes the income of the householder and all other persons 15 years and over in the household, whether related to the householder or not.

*Note:* 1) Data could not be weighted for the independent cities that are combined into their original counties. Therefore, Median Household Income data carried on the ARF are for the county only and do not include independent city data. The following is a list of the independent cities and the Median Household Income for those cities as reported on the source data:

<table>
<thead>
<tr>
<th>CITY</th>
<th>FIPS CODE</th>
<th>MEDIAN HOUSEHOLD INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalawao, HI</td>
<td>15005</td>
<td>$10,000</td>
</tr>
<tr>
<td>Bedford, VA</td>
<td>51515</td>
<td>$22,787</td>
</tr>
<tr>
<td>Bristol, VA</td>
<td>51520</td>
<td>$19,226</td>
</tr>
<tr>
<td>Buena Vista, VA</td>
<td>51530</td>
<td>$23,929</td>
</tr>
<tr>
<td>Charlottesville, VA</td>
<td>51540</td>
<td>$24,190</td>
</tr>
<tr>
<td>Clifton Forge, VA</td>
<td>51560</td>
<td>$20,659</td>
</tr>
<tr>
<td>Colonial Heights, VA</td>
<td>51570</td>
<td>$34,472</td>
</tr>
<tr>
<td>Covington, VA</td>
<td>51580</td>
<td>$20,913</td>
</tr>
</tbody>
</table>
Danville, VA  51590  $20,413
Emporia, VA  51595  $21,009
Fairfax, VA  51600  $50,913
Falls Church, VA  51610  $51,011
Franklin, VA  51620  $20,357
Fredericksburg, VA  51630  $26,614
Galax, VA  51640  $20,263
Harrisonburg, VA  51660  $25,312
Hopewell, VA  51670  $26,934
Lexington, VA  51678  $21,361
Lynchburg, VA  51680  $23,726
Manassas, VA  51683  $46,674
Manassas Park, VA  51685  $39,076
Martinsville, VA  51690  $22,446
Norton, VA  51720  $15,460
Petersburg, VA  51730  $21,309
Poquoson, VA  51735  $43,236
Portsmouth, VA*  51740  $24,601
Radford, VA  51750  $19,487
Richmond, VA  51760  $23,551
Roanoke, VA  51770  $22,591
Salem, VA  51775  $29,047
South Boston, VA  51780  $20,401
Staunton, VA  51790  $25,366
Waynesboro, VA  51820  $26,668
Williamsburg, VA  51830  $25,393
Winchester, VA  51840  $26,086

* ARF FIPS Code 51710 includes the independent cities of Norfolk and Portsmouth, Virginia. Median Household Income data carried on the ARF are for Norfolk city only and do not include data for Portsmouth City.

2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

F-10) Social Security Program Beneficiaries

1990 (December) Social Security Program Beneficiaries, Number and Rate are from the County and City Data Book, 1994, CD-ROM, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained from the U.S. Social Security Administration, OASDI Beneficiaries by State and County, December 1990. Social Security Beneficiaries Rate is per 1,000 resident population enumerated as of April 1, 1990 and has one implied decimal place. The old-age, survivors, and disability insurance program (OASDI) provides monthly benefits for retired and disabled workers and their dependents and to survivors of insured workers. To be eligible for benefits, a worker must have had a specified period of employment in which OASDI taxes were paid. A worker becomes eligible for full retirement benefits at age 65, although reduced benefits may be obtained up to 3 years earlier. Survivor benefits are payable to widows, widowers, and other dependents of
deceased insured workers.

**F-11) Supplemental Security Income Program Recipients**

1991 (December) *Supplemental Security Income Program Recipients* data are from the *County and City Data Book, 1994, CD-ROM*, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained from the U.S. Social Security Administration, Supplemental Security Income State and County Data, December 1991.

Under the direction of the Social Security Administration, the Supplemental Security Income (SSI) program provides cash payments in accordance with nationwide eligibility requirements to persons with limited income and resources who are aged, blind, or disabled. Under the SSI program, each person living in his or her own household is provided a cash payment from the Federal Government that is sufficient, when added to the person's countable income (the total gross money income of an individual less certain exclusions), to bring the total monthly income up to a specified level (the Federal benefit rate). If the individual or couple is living in another household, the guaranteed level is reduced by one-third.

The data cover persons with Federal SSI payments and/or federally administered State supplementation. States have the option to supplement the Federal SSI payment for all or selected categories of recipients. The data are for persons with Federal SSI payments only for the following States: NH, CT, IN, IL, MN, MO, ND, NE, VA, NC, SC, KY, AL, OK, ID, WY, CO, NM, AZ, OR, and AK; these States have State-administered supplementation. Data for TX and WV cover Federal SSI payments only; no State supplementary payments are made.

**F-12) 5-Year Infant Mortality Rates**


The *1976-80, 1981-85 through 1984-88 and 1989-93 through 1996-2000 5-Year Infant Mortality Rate* data are calculated fields using existing data on the ARF. (Original Data Sources are: NCHS Natality Tapes and NCHS Mortality Tapes). The rate is per 1000 births and one implied decimal place is carried. Rates were calculated according to the following formula:

\[
\text{5-Year Infant Mortality Rate} = \frac{(5\text{-Yr Infant Deaths} < 1\text{ Year} \times 1000)}{5\text{-Yr Live Births}}
\]

*Note:*

1) Beginning with the 1989-93 data, NCHS changed the method of tabulating live birth by race from race of child to race of mother.

2) Beginning with the 1994 natality and mortality data, LaPaz, AZ (04012) was broken out of Yuma, AZ (04027) by NCHS. However, on the ARF LaPaz data will remain combined with Yuma until five years of data are available.
3) The data for Cibola, NM (35006) are combined with Valencia, NM (35061) in the 1982-86 mortality rate and earlier years. Data for the 1983-87 mortality rate and later years are carried separately.

4) Note that for counties with low populations, a small number of infant deaths and/or births may yield rates that are extremely high.

F-13) Infant Mortality Data

The NCHS Mortality Data were obtained from the National Center for Health Statistics, Scientific and Technical Information Branch. The number of infant deaths extracted for a county are based on place of residence; non-residents of the US are excluded. Averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data. These restrictions prohibit releasing county-level information where there are fewer than three occurrences. Rather than suppress data for certain counties, averages were calculated. One implied decimal place is carried on the Infant Death fields.

Note:
1) 1970 data are not available for Virginia independent cities. Refer to A-2.
2) Beginning with 1997-99 mortality averages, data are reported for Guam, Puerto Rico, and the Virgin Islands.
3) Historic data broken out for Alaska that were coded in the source data as Skagway-Yakutat-Anagoon (02231) which no longer exists were reported on the ARF as Skagway-Hoonan Anagoon (02232). Data reported in Aleutians, AK (02010) which no longer exists are reported on the ARF as Aleutians West (02016). Data reported in Kobuk, AK (02140) which no longer exists are reported on the ARF as Northwest Arctic (02188).

F-14) Mortality Data


The 1988-1990, 1992-1994, and 1998-2000 Mortality Average Data are calculated fields using 1988, 1989 and 1990; 1992, 1993, and 1994; and 1998, 1999, and 2000 Mortality Detail Data Files obtained from the National Center for Health Statistics. Averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data. These restrictions prohibit releasing county-level information where there are fewer than three occurrences. Rather than suppress data for certain counties, averages were calculated. The number of deaths for a county are based on the place of residence; non-residents of the U.S. are excluded. Averages were calculated according to the following formula:

\[ \text{3-Year Mortality Average} = \frac{(1998 \text{ Deaths} + 1999 \text{ Deaths} + 2000 \text{ Deaths})}{3} \]

Note:
1) For data through 1998 (i.e., 1979-1998), 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. Reference is made to [www.cdc.gov/nchs/data/nvsr/nvsr49_02.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr49_02.pdf) 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:

<table>
<thead>
<tr>
<th>Category</th>
<th>ICD-9</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infectious and Parasitic Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tuberculosis</td>
<td>010-018</td>
<td>A16-A19</td>
</tr>
<tr>
<td>- Syphilis</td>
<td>090-097</td>
<td>A50-A53</td>
</tr>
<tr>
<td>- Residual of infectious and parasitic diseases</td>
<td>001-009, 020-041, 042-044, 045-088, 098-139</td>
<td>A00-A09, A20-A49, A54-B99</td>
</tr>
<tr>
<td><strong>Malignant Neoplasms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Malignant neoplasms of digestive organs and peritoneum</td>
<td>150-159</td>
<td>C15-C26</td>
</tr>
<tr>
<td>- Malignant neoplasms of respiratory and intrathoracic organs</td>
<td>160-165</td>
<td>C30-C39</td>
</tr>
<tr>
<td>- Malignant neoplasms of breast</td>
<td>174-175</td>
<td>C50</td>
</tr>
<tr>
<td>- Malignant neoplasms of genital organs</td>
<td>179-187</td>
<td>C51-C63</td>
</tr>
<tr>
<td>- Malignant neoplasms of urinary organs</td>
<td>188-189</td>
<td>C64-C68</td>
</tr>
<tr>
<td>- Leukemia</td>
<td>204-208</td>
<td>C91-C95</td>
</tr>
<tr>
<td>- Other malignant neoplasms</td>
<td>140-149, 170-173, 190-203</td>
<td>C00-C14, C40-C49, C69-C90, C96-C97</td>
</tr>
<tr>
<td><strong>Cerebrovascular Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to 1992-94 included in Other Cardiovascular Diseases</td>
<td>430-438</td>
<td>I60-I69</td>
</tr>
<tr>
<td><strong>Ischemic Heart Disease</strong></td>
<td>410-414</td>
<td>I20-I25</td>
</tr>
<tr>
<td><strong>Other Cardiovascular Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Rheumatic fever and rheumatic heart disease</td>
<td>390-398</td>
<td>I00-I09</td>
</tr>
<tr>
<td>- Hypertensive heart disease with or without renal disease</td>
<td>402, 404</td>
<td>I11, I13</td>
</tr>
<tr>
<td>- Other heart diseases</td>
<td>415-429.2</td>
<td>I26-I51</td>
</tr>
<tr>
<td>- Hypertension with or without renal disease</td>
<td>401,403</td>
<td>I10,I12</td>
</tr>
<tr>
<td>- Atherosclerosis</td>
<td>440</td>
<td>I70</td>
</tr>
<tr>
<td>- Other diseases of arteries, arterioles and capillaries</td>
<td>441-448</td>
<td>I71-I78</td>
</tr>
</tbody>
</table>
• 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
  Prior to 1992-94 included in Other External Causes

• Homicide and Legal Intervention E960-E978 X85-Y09, Y87.1
  - Homicide E960-E969 Y35, Y89.0
  - Legal Intervention E970-E978 (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, suicide, and homicide and legal intervention.
  - All other external 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

2) Human Immunodeficiency Virus (HIV: ICD-9 042-044 and ICD-10 B20-B24) infection is also included in Infectious and Parasitic Diseases.

3) In 1995, the number of reported deaths occurring in Alaska are in error for some of the selected causes because NCHS did not receive changes resulting from amended records and because of errors in processing the cause of death data. Differences are concentrated among selected causes of death, principally Symptoms, signs and ill-defined conditions (ICD-9 780-799) and External Causes. Motor vehicle accidents are under-reported by 9, Suicides by 13, and Homicides by 1. Refer to the 1995 NCHS Mortality Detailed Data File Documentation for further information.

4) In 1988-1991 for HIV deaths occurring in Georgia in counties where three or fewer residents died, the county code was not reported at the request of the Georgia Department of Human Resources, Division of Public Health. Therefore, the total deaths reported will differ slightly from those reported in the NCHS mortality documentation.

5) Historic data broken out for Alaska that were coded in the source data as Skagway-Yakutat-Angoon (02231) which no longer exists were reported on the ARF as Skagway-Hoonan Angoon (02232). Data reported in Aleutians, AK (02010) which no longer exists are reported on the ARF as Aleutians West (02016). Data reported in Kobuk, AK (02140), which no longer exists, are reported on the ARF as Northwest Arctic (02188).

6) Beginning with 1997-99 mortality averages, data are reported for Guam, Puerto Rico, and the Virgin Islands.


1970, 1975 and 1980-1988 Mortality Data are from the Mortality Data Tape, obtained from the National Center for Health Statistics, Scientific and Technical Information Branch. The number of deaths for a county are based on the place of residence; non-residents of the US are excluded.

Note: 1) 1970 data are not available for Virginia independent cities. Refer to A-2.

2) For cause-of-death data beginning in 1987, NCHS began separately classifying and coding human immunodeficiency virus (HIV) infection. On the ARF, these deaths are included in the category Infectious and Parasitic Diseases. They are also broken out separately on the ARF. Prior to 1987 deaths involving HIV infection were classified into several different categories: All Other Endocrine and Metabolic Diseases and Immunity Disorders, All Other Infectious and Parasitic Diseases, Malignant Neoplasms, and to a number of other causes. In 1987, of the 2,126,342 resident deaths reported in the United States, 13,468 were reported as attributed to HIV infection. Because of the change in reported cause-of-death classifications, the 1987 cause-of-death data are not strictly comparable with data for previous years. Refer to the 1987 NCHS Mortality Detailed Data documentation for additional information.

3) In 1988, for HIV deaths occurring in Georgia in counties where three or fewer such
residents died, the county code was not reported at the request of the Georgia Department of Human Resources, Division of Public Health. Therefore, the total deaths reported will differ slightly from those reported in the NCHS mortality documentation.

4) Mortality data in the ARF through 1978 were classified according to the *Eighth Revision of the International Classification of Diseases*. Beginning in the data year 1979, cause-of-death data were coded using the *Ninth Revision of the International Classification of Diseases* (ICD-9). As such, there are some comparability differences across these years. The more major differences are described in pages 5 through 9 of the NCHS *Monthly Vital Statistics Report*, dated February 29, 1990.

**F-15) Total Deaths**

The field *Total Deaths* comes from the Bureau of Census. According to the Census Bureau Projection Office, data are derived from death certificates and are based on place of residence (not occurrence). The source for each year of data are noted below:

<table>
<thead>
<tr>
<th>YEAR OF DATA</th>
<th>SOURCE FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>County Estimates File for P2K Internet Display 7/1/02.</td>
</tr>
<tr>
<td>2000</td>
<td>County Estimates File for P2K Internet Display 7/1/01.</td>
</tr>
</tbody>
</table>

**F-16) Natality Data**


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. These restrictions prohibit releasing county-level information where there are fewer than three occurrences. Rather than suppress data for certain counties, averages were calculated. The number of births for a county are 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 = (1998 Births + 1999 Births + 2000 Births)/3

Note: 1) Beginning in 1993, NCHS did not report the fields for Race of Child. Race, therefore, was determined using the Race of Mother fields. All natality data prior to the 1991-93 averages were by Race of Child. NCHS determined this as follows: (1) when both parents were of the same race, the child was assigned to that race; (2) when the parents were of different races and one parent was white, the child was assigned to the race of the other parent; (3) when parents were of different races and neither was white, the child was assigned to the race of the father except if either parent was Hawaiian, the child was assigned to Hawaiian; and (4) if race was missing for one parent the child was assigned to the race of the other parent.

With this new classification by race of mother, the number of births classified as white for the 1992-94 and later averages will increase and the number for all other racial groups will decrease. For example, the percent difference in the number of live births by race of mother compared with race of child for 1991 are as follows:

<table>
<thead>
<tr>
<th>Race</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>2.2</td>
</tr>
<tr>
<td>Black</td>
<td>- 6.4</td>
</tr>
<tr>
<td>American Indian</td>
<td>- 20.9</td>
</tr>
<tr>
<td>Chinese</td>
<td>- 5.4</td>
</tr>
<tr>
<td>Japanese</td>
<td>- 15.8</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>- 30.9</td>
</tr>
<tr>
<td>Filipino</td>
<td>- 4.5</td>
</tr>
<tr>
<td>Other Asian or Pacific Islander</td>
<td>- 7.6</td>
</tr>
</tbody>
</table>

This change in classification should be taken into account when analyzing trend data. For more detailed information regarding the rationale for this change refer to the NCHS Detail Natality Data File Documentation.

2) Historic data broken out for Alaska that were coded in the source data as Skagway-Yakutat-Angoon (02231) which no longer exists were reported on the ARF as Skagway-Hoonan Angoon (02232). Data reported in Aleutians, AK (02010) which no longer exists which no longer exists are reported on the ARF as Northwest Artic (02188).

3) Beginning with the 1997-99 data, data are reported for Guam, Puerto Rico, and the Virgin Islands.

1970-1988 Natality Data:

The 1970, 1975, 1980 -1988 Natality Data Tapes were obtained from the National Center
for Health Statistics, Scientific and Technical Information Branch. These tapes contain information for live births only and do not include data on stillborns. The number of births extracted for a county are based on place of residence of the mother; non residents of the U.S. are excluded.

F-17) Births in Hospitals


F-18) Total Births

The field Total Births comes from the Bureau of Census. According to the Census Bureau Projection Office, data are derived from birth certificates and are based on place of residence (not occurrence). The source for each year of data are noted below:

<table>
<thead>
<tr>
<th>YEAR OF DATA</th>
<th>SOURCE FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>County Estimates File for P2K Internet Display 7/1/2002</td>
</tr>
<tr>
<td>2000</td>
<td>County Estimates File for P2K Internet Display 7/1/2001</td>
</tr>
<tr>
<td>1998</td>
<td>County Population Estimates and Demographic Components of Population Change: Annual Time Series, July 1, 1990 to July 1, 1999</td>
</tr>
</tbody>
</table>

F-19) Education

2000 Persons aged 25 years or more and persons aged 25 years or more with less than nine years of school, with high school or more, and with four years of college or more are from the 2000 Census of Population and Housing Demographic Profile: 2000, U.S. Census Bureau. Education data by race are from 2000 Census of Population and
For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.

**Note:**
1) Data are included on the ARF for Puerto Rico.
2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau.
3) Data on the ARF for the Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census of Population and Housing, U.S. Census Bureau. Data for American Indian and Alaska Native; Asian; and Native Hawaiian and Other Pacific Islander, which are not reported separately, are included in the Some Other Population fields.

**1990 persons aged 25 years or more and persons aged 25 years or more with less than nine years of school, with high school or more, and with four years of college or more** are from the 1990 Census of Population and Housing, STF3A.

**Note:**
1) The response categories for persons who have attended college were modified from earlier censuses because there was some ambiguity in interpreting responses in terms of the number of years of college completed. For instance, it was not clear whether "completed the fourth year of college," "completed the senior year of college," and "college graduate" were synonymous. Research conducted shortly before the census suggests that these terms were more distinct in 1990 than in earlier decades, and this change may have threatened the ability to estimate the number of "college graduates" from the number of persons reported as having completed the fourth or a higher year of college. It was even more difficult to make inferences about post-baccalaureate degrees and "Associate" degrees from highest year of college completed. Thus, comparisons of post-secondary educational attainment in this and earlier censuses should be made with great caution.
2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

**1980 persons aged 25 years or more; persons aged 25 yrs or more with less than nine years of school, with high school or more and with four years of college or more** are from the 1980 Census of Population and Housing, STF3A.

**Note:**
1) Fields with persons with high school or more includes persons with any college.
2) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

F-20) Census Housing Data

2000 Census Housing Statistics:
The **2000 Housing data** are from the *2000 Census of Population and Housing SF1A* and from *2000 Census of Population and Housing Summary File 3A (SF3A).*

**Note:**

1) A household includes all of 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 occupied (or, if vacant, intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other person 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 quarters.

2) 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, 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 have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. If that information cannot be obtained, the criteria are applied to the previous occupants.

3) Data are included on the ARF for Puerto Rico.

4) Data on the ARF for Guam are from the *Guam Summary file: 2000 Census of Population and Housing, U.S. Census Bureau* and for the Virgin Islands are from the *Virgin Islands Summary File: 2000 Census of Population and Housing Profile for the U.S. Virgin Islands* for the following fields:
   - Housing Units
   - Number of Occupied Housing units
   - Percent Owner-Occupied Housing Units

5) Occupied Housing Units with Telephone and Occupied Housing Units Lacking Complete Plumbing Facilities data are included on the ARF for Guam from the *Guam Summary File: 2000 Census of Population and Housing, U.S. Census Bureau* and for the U.S. Virgin Islands from the *Virgin Islands Summary File: 2000 Census of Population and Housing Profile for the U.S. Virgin Islands.*

**1990 Census Housing Statistics:**

The **1990 Housing data** are from the *1990 Census of Population and Housing, STF1A or STF3A.*

**Note:**

1) A household includes all the persons 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 (or if vacant, is intended for occupancy) as a separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from outside the building or through a common hall.

2) A housing unit is classified as occupied if it is the usual place of residence of the person or group of persons living in it at the time of enumeration, or if the occupants are only temporarily absent; that is, away on vacation or business.

3) When counties and/or cities were combined into one FIPS code, the data from the
area with the higher population was used for Median Home Value and Median Gross Rent.

4) Data for Park County, Montana (30067) do not include Yellowstone National Park (30113).

1990 Percent of Occupied Housing Units with 1.01 or More Persons per Room is from the County and City Data Book, 1994, CD-ROM, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained as part of the 1990 decennial census. Persons per room is obtained by dividing the number of persons in each occupied housing unit by the number of rooms in the unit. Persons include the householder, occupants related to the householder, and lodgers, roomers, boarders, and anyone else occupying the housing unit. The data represent the percent of occupied housing units having more occupants than separate rooms. This field has one implied decimal place.

Note: Data could not be weighted for the independent cities that are combined into their original counties. Therefore, Percent of Occupied Housing Units with 1.01 or More Persons per Room data carried on the ARF are for the county only and do not include independent city data. The following is a list of the independent cities and the Percent of Occupied Housing Units with 1.01 or More Persons per Room for those cities as reported on the source data:

<table>
<thead>
<tr>
<th>CITY</th>
<th>FIPS CODE</th>
<th>% UNITS W/ 1+ PERSONS PER ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalawao, HI</td>
<td>15005</td>
<td>4.8</td>
</tr>
<tr>
<td>Bedford, VA</td>
<td>51515</td>
<td>1.7</td>
</tr>
<tr>
<td>Bristol, VA</td>
<td>51520</td>
<td>1.2</td>
</tr>
<tr>
<td>Buena Vista, VA</td>
<td>51530</td>
<td>1.8</td>
</tr>
<tr>
<td>Charlottesville, VA</td>
<td>51540</td>
<td>3.0</td>
</tr>
<tr>
<td>Clifton Forge, VA</td>
<td>51560</td>
<td>0.9</td>
</tr>
<tr>
<td>Colonial Heights, VA</td>
<td>51570</td>
<td>0.9</td>
</tr>
<tr>
<td>Covington, VA</td>
<td>51580</td>
<td>1.5</td>
</tr>
<tr>
<td>Danville, VA</td>
<td>51590</td>
<td>2.6</td>
</tr>
<tr>
<td>Emporia, VA</td>
<td>51595</td>
<td>4.4</td>
</tr>
<tr>
<td>Fairfax, VA</td>
<td>51600</td>
<td>3.0</td>
</tr>
<tr>
<td>Falls Church, VA</td>
<td>51610</td>
<td>3.0</td>
</tr>
<tr>
<td>Franklin, VA</td>
<td>51620</td>
<td>2.5</td>
</tr>
<tr>
<td>Fredericksburg, VA</td>
<td>51630</td>
<td>2.7</td>
</tr>
<tr>
<td>Galax, VA</td>
<td>51640</td>
<td>2.0</td>
</tr>
<tr>
<td>Harrisonburg, VA</td>
<td>51660</td>
<td>1.3</td>
</tr>
<tr>
<td>Hopewell, VA</td>
<td>51670</td>
<td>2.7</td>
</tr>
<tr>
<td>Lexington, VA</td>
<td>51678</td>
<td>1.2</td>
</tr>
<tr>
<td>Lynchburg, VA</td>
<td>51680</td>
<td>1.8</td>
</tr>
<tr>
<td>Manassas, VA</td>
<td>51683</td>
<td>3.1</td>
</tr>
<tr>
<td>Manassas Park, VA</td>
<td>51685</td>
<td>4.0</td>
</tr>
<tr>
<td>Martinsville, VA</td>
<td>51690</td>
<td>2.4</td>
</tr>
<tr>
<td>Norton, VA</td>
<td>51720</td>
<td>1.8</td>
</tr>
</tbody>
</table>

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* ARF FIPS Code 51710 includes the independent cities of Norfolk and Portsmouth, Virginia. Percent of Occupied Housing Units with 1.01 or More Persons per Room data carried on the ARF are for Norfolk city only and do not include data for Portsmouth city.

F-21) Veteran Population

2001 Veteran Population as of September 30, 2001 is from the Veterans Administration. These data are adjusted to reflect Census 2000.

Note: 1) The Veterans Administration used a different methodology for providing more detailed gender breakdowns therefore, male and female population will not always equal total population.

2) The only U.S. territory data available were summary data for Puerto Rico, these are not included on the ARF.

2000 Veteran Population as of September 30, 2000 is from the Veterans Administration. These data are projections and do not reflect Census 2000.

Note: 1) The Veterans Administration used a different methodology for providing more detailed gender breakdowns therefore, male and female population will not always equal total population.

2) The only U.S. territory data available were summary data for Puerto Rico, these are not included on the ARF.

1999 Veteran Population as of July 1, 1999 is from Veteran Population Projections by County and Age Groups: July 1999 from the Veterans Administration.

Note: The only U.S. territory data available were summary data for Puerto Rico, so these are not included on the ARF.

1998 Veteran Population as of July 1, 1998 is from Veteran Population Projections by
County and Age Groups: July 1998 from the Veterans Administration.

1997 Veteran Population as of July 1, 1997 is from Veteran Population Projections by County and Age Groups: July 1997 from the Veterans Administration.

1996 Veteran Population as of July 1, 1996 is from Veteran Population Projections by County and Age Groups: July 1996 from the Veterans Administration.

1995 Veteran Population as of July 1, 1995 is from Number of Estimated Veterans by Age, Sex, and County: July 1, 1995 from the Veterans Administration.

1990 Veteran Population as of 3/31/90 was obtained from the Veterans Administration. This data does not reflect 1990 Decennial Census results. They were not available at the time the file was created.

1978 Veteran Population as of 3/31/78 was obtained from the Veterans Administration. The VA Codes are also contained on the ARF; See A-11.

Note: Data are not available for Virginia independent cities. Refer to A-2.

G. ENVIRONMENT

G-1) Land Area and Density

2000 Land and Water Area data are from the Geographic Comparision Table GCT-PH1-R. Population, Housing Units, Area and Density: 2000, Census 2000 Summary File (SF1) 100-Percent Data, U.S. Census Bureau. Area measurements are shown to the nearest square mile. Land area measurements include dry land and land temporarily or partially covered by water. The accuracy of the area measurement is limited by the inaccuracy inherent in the mapping of the various boundary features in the TIGER® file. Land area includes intermittent water and glaciers, which appear on census maps and in the TIGER file as hydrographic features. For more information regarding definitions, user updates, confidence intervals, and standard errors, the Census website www.census.gov should be referenced.

Note: 1) Data are included on the ARF for Puerto Rico.
2) Data on the ARF for Guam are from the Guam Summary File: 2000 Census Population and Housing, U.S. Census Bureau.
3) Data on the ARF for the Virgin Islands are from the U.S. Virgin Islands Summary File: 2000 Census Population and Housing, U.S. Census Bureau.
G-2) Cimatic Data

The Climatic data fields are from the tape developed in support of the investigation into the industrial correlates of environment-related mortality by System Sciences, Inc. The original source for these fields was the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, and Environmental Data Service. All variables except Elevation are means based on the years 1941-70. Counties with more than one weather station include the data for the station closest to the county's population center(s). For those counties not having a weather station, the U.S. Weather Bureau's climate regions were used to extrapolate data from other similar climatic areas. Those variables included are:

- Mean Temperature for January and July
- Mean Precipitation for January and July
- Mean Annual Temperature and Precipitation
- Hours of Sunlight for January and July
- Mean Relative Humidity for January and July
- Elevation

Note:

1) Data were not available for Alaska or Hawaii and these fields are equal to zero.
2) On the source file, New York City was combined into one county; therefore, the following New York City counties have all been assigned these data:
   - Bronx (36005)
   - Kings (36047)
   - New York (36061)
   - Queens (36081)
   - Richmond (36085)
3) On the source file, climatic data for the Virginia independent cities of Alexandria, Chesapeake, Hampton, Newport News and Virginia Beach were combined with data for their original counties. On ARF, these independent cities have each been assigned the same data as their original counties.
4) Data for Park County, MT (30067) do not include Yellowstone National Park (30113).

G-3) Population Per Square Mile

Population per Square Mile and Housing Unit Density per Square Mile are from the Geographic Comparision Table GCT-PH1-R, Population, Housing Units, Area and Density: 2000, Census 2000 Summary File (SF1) 100-Percent Data, U.S. Census Bureau.

G-4) Water Hardness Index
The Water Hardness Index was extracted from the tape developed in support of the investigation into the industrial correlates of environment-related mortality by System Sciences, Inc. The index, describing the hardness of drinking water, was based on the U.S. Department of Labor reports on the hardness of ground and surface water. As defined by System Sciences, Inc., "the measure of water hardness is based on the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate and measured in parts per million". The index values are defined as follows:

<table>
<thead>
<tr>
<th>INDEX VALUE</th>
<th>ESTIMATES OF CALCIUM CARBONATE</th>
<th>PARTS PER MILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 60</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>60-120</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>120-180</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>180-240</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>&gt; 240</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1) Data were not available for Alaska or Hawaii and these fields are equal to zero.
2) On the source file, New York City was combined into one county; therefore, the following New York City counties have all been assigned these data:
   - Bronx (36005)
   - Kings (36047)
   - New York (36061)
   - Queens (36081)
   - Richmond (36085)
3) On the source file, water hardness index data for the Virginia independent cities of Alexandria, Chesapeake, Hampton, Newport News and Virginia Beach were combined with data for their original counties. On ARF, these independent cities have each been assigned the same data as their original counties.

G-5) Farm Data

The 1987 Number of Farms and Land in Farms (Acres) are from the County and City Data Book, 1994, CD-ROM, a statistical abstract supplement published by the Bureau of the Census, U.S. Department of Commerce. Data were obtained as part of the 1987 Census of Agriculture. 1987 Farmlands as a Percent of Total Land was calculated using 1987 Land in Farms and 1990 Land Area from the County and City Data Book, 1994, CD-ROM. The definition of a farm, in use since 1974, covers any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. Farmland refers to all land under control of a farm operator, including land not actually under cultivation or not used for pasture or grazing. Rent-free land is included as part of the farm only if the operator has sole use of it. Land that is used for pasture or grazing on a per-head basis and neither owned nor leased by the farm operator is not included, except for grazing lands that are controlled by grazing associations and leased on a per-acre basis.
Farmland as a Percent of Total Land has one implied decimal place.

Note:  
1) 1987 data for Baltimore City, Maryland, which are normally carried as 24510 on the ARF, have been included in Baltimore County (24005) in the source data.
2) 1987 data for St. Louis City, Missouri, which are normally carried as 29510 on the ARF, have been included in St. Louis County (29189) in the source data.
3) 1987 data for Alexandria City, Virginia, which are normally carried as 51510 on the ARF, have been included in Fairfax County (51059) in the source data.
4) 1987 data for Hampton City, Virginia, which are normally carried as 51650 on the ARF, and Newport News City, Virginia, which are normally carried as 51700 on the ARF, have been included in York County (51199) in the source data.
5) 1987 data for Norfolk City (51710) and Portsmouth City (51740), Virginia have been included in Chesapeake City (51550) in the source data.
6) 1987 Farmland data have been suppressed to avoid disclosure of confidential information in the following counties:
   06075 - San Francisco, California  
   08091 - Ouray, Colorado  
   08111 - San Juan, Colorado  
   12037 - Franklin, Florida  
   12129 - Wakulla, Florida  
   25001 - Barnstable, Massachusetts  
   25025 - Suffolk, Massachusetts  
   26083 - Keweenaw, Michigan  
   26153 - Schoolcraft, Michigan  
   32015 - Lander, Nevada  
   32021 - Mineral, Nevada  
   35001 - Bernalillo, New Mexico  
   35028 - Los Alamos, New Mexico  
   36005 - Bronx, New York  
   36041 - Hamilton, New York  
   37043 - Clay, North Carolina  
   37055 - Dare, North Carolina  
   51013 - Arlington, Virginia  
   51127 - New Kent, Virginia  
   54045 - Logan, West Virginia  
   54059 - Mingo, West Virginia  
   55078 - Menominee, Wisconsin  
   55079 - Milwaukee, Wisconsin
7) The calculation for 1987 Farmlands as a Percent of Total Land is:
   \[(1987 \text{ Land in Farms (Acres)} / (1990 \text{ Land Area (Sq Miles)} \times 640)) \times 100\]
II. TECHNICAL INFORMATION

A. FILE SPECIFICATIONS

The Area Resource File is currently contained on CD-ROM. It can also be provided on 9 track 6250 bpi tape or 3480 cartridge. The file has the following specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Length</td>
<td>31871</td>
</tr>
<tr>
<td>Block Size</td>
<td>31871</td>
</tr>
<tr>
<td>Number of Records</td>
<td>3225</td>
</tr>
</tbody>
</table>

B. MISSING VALUES ON ARF

Missing values are carried on the Area Resource File as zeroes. Specific instances of missing data are shown in the Notes above by field. The user should be aware of missing values when interpreting data.

C. CRITERIA FOR DATA INCLUSION ON THE ARF

The criteria for data to be included on the ARF 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 ARF

The ARF Technical Documentation is another available source of reference to the fields on ARF. The documentation organizes the data items into seven major categories as does this user documentation. Information included in the technical documentation is the field number, columns of location on tape, general field characteristics, source, year of the data, and date the item was put on the file.

B. SAS LAYOUT OF ARF

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