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U. S. DEPARTMENT OF COMMERCE  
Sinclair Weeks, Secretary

BUREAU OF THE CENSUS  
Robert W. Burgess, Director (From Feb. 5, 1953)  
Roy V. Peel, Director (To Feb. 4, 1953)

# Census of Housing: 1950

*(taken as part of the Seventeenth Decennial Census  
of the United States)*

## Volume III FARM HOUSING CHARACTERISTICS

UNITED STATES  
AND  
ECONOMIC SUBREGIONS

LLOYD L. LEE

Prepared under the supervision of  
HOWARD G. BRUNSMAN  
Chief, Population and Housing Division

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UNITED STATES GOVERNMENT PRINTING OFFICE  
Washington : 1953



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## PREFACE

This volume presents statistics on housing and household characteristics of rural-farm occupied dwelling units for the United States and for each of the 119 economic subregions. The statistics for the United States are summarizations of the figures for the economic subregions. The data are based on tabulations from the 1950 Censuses of Housing and Population, taken as of April 1, 1950. Authorization for the 1950 Census of Housing as part of the decennial census was provided by the Housing Act of 1949. This act, which was approved July 15, 1949, provided that "The Director of the Census is authorized and directed to take a census of housing in each State, the District of Columbia, Hawaii, Puerto Rico, the Virgin Islands, and Alaska, in the year 1950 and decennially thereafter in conjunction with, at the same time, and as a part of the population inquiry of the decennial census in order to provide information concerning the number, characteristics (including utilities and equipment), and geographical distribution of dwelling units in the United States. The Director of the Census is authorized to collect such supplementary statistics (either in advance of or after the taking of such census) as are necessary to the completion thereof."

The materials and statistics in this volume were prepared under the direction of Howard G. Brunzman, Chief, Population and Housing Division, and Wayne F. Daugherty, Assistant Chief for Housing. Edwin D. Goldfield assisted in coordinating the census programs. J. Hugh Rose supervised the development of the volume, assisted by V. Rebecca Finkelstein, Gene P. King, and Beulah Washabaugh.

The compilation of the statistics was under the direction of Robert B. Voight and supervised by Morton A. Meyer and Milton D. Lieberman, assisted by Sigmund Schor, Ruth T. Stanton, and Sidney Forman. Sampling procedures were under the supervision of Joseph Steinberg, assisted by Joseph Waksberg and Albert Mindlin. The technical editorial work was under the supervision of Mildred M. Russell, assisted by Dorothy M. Belzer.

The collection of the information on which these statistics are based was under the direction of Lowell T. Galt, then Chief, Field Division. The organization and operation of the field service were under the supervision of John M. Bell, Assistant Chief for Operations, assisted by Charles F. Haas. The planning and procedures of the field program were under the supervision of Jack B. Robertson, then Assistant Chief for Programs, assisted by Leon S. Geoffrey and Harold Nisselson. Training materials, including visual aids, were prepared under the supervision of James G. Stockard, assisted by Elizabeth T. Gardiner.

Tabulations were under the direction of C. F. Van Aken, Chief, Machine Tabulation Division, assisted by Betty S. Mitchell and Maurice C. Fletcher. The geographic work was under the direction of Clarence E. Batschelet, Chief, Geography Division. Robert H. Brooks of the Administrative Service Division was responsible for the printing arrangements. Other members of the staff have made significant contributions to the conduct of the housing census and to the materials presented in this volume. The research and procedures for the delimitation of the economic subregions were supervised by Donald J. Bogue while on loan to the Bureau of the Census from the Scripps Foundation for Research in Population Problems.

The Technical Advisory Committee on Housing Statistics advised the Bureau on the selection of subjects, concepts, and definitions to be used in the housing census. The Bureau staff called upon members of the committee for advice throughout all the stages of planning, and their counsel and guidance have been invaluable in developing the census program. Those who served on the committee were: Ernest M. Fisher, Chairman, E. Everett Ashley, III, L. Durward Badgley, Lawrence N. Bloomberg, Roy J. Burroughs, Malcolm B. Catlin, Miles Colean, Donald R. G. Cowan, F. Stuart Fitzpatrick, Leo Goodman, Shirley K. Hart, Lyman Hill, Ethel D. Hoover, Paul F. Krueger, Richard U. Ratcliff, Bert Seidman, Allan F. Thornton, Allan A. Twichell, Warren J. Vinton, and Max S. Wehry.

In addition to those of the present staff, important contributions to the general planning of the 1950 Census were made by the late J. C. Capt, Director of the Census until his retirement on August 17, 1949, and Dr. Philip M. Hauser, Acting Director until March 9, 1950.

December 1952.

## U. S. CENSUS OF HOUSING: 1950

### Volume

- I General Characteristics (comprising Series H-A bulletins)
- II Nonfarm Housing Characteristics (comprising Series H-B bulletins)
- III Farm Housing Characteristics
- IV Residential Financing
- V Block Statistics (comprising Series H-E bulletins)  
Housing statistics for census tracts are included in the Population Series P-D bulletins.

## U. S. CENSUS OF POPULATION: 1950

### Volume

- I Number of Inhabitants (comprising Series P-A bulletins)
- II Characteristics of the Population (comprising Series P-A, P-B, and P-C bulletins)
- III Census Tract Statistics (comprising Series P-D bulletins)
- IV Special Reports (comprising Series P-E bulletins): Employment Characteristics, Occupational and Industrial Characteristics, Characteristics of Families, Marital Status, Institutional Population, Nativity and Parentage, Nonwhite Population by Race, Persons of Spanish Surname, Puerto Ricans in Continental United States, State of Birth, Mobility of the Population, Characteristics by Size of Place, Education, Fertility.

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Table 1.--Number of rooms in owner-, renter-, and rent-free-occupied dwelling units: 1950.

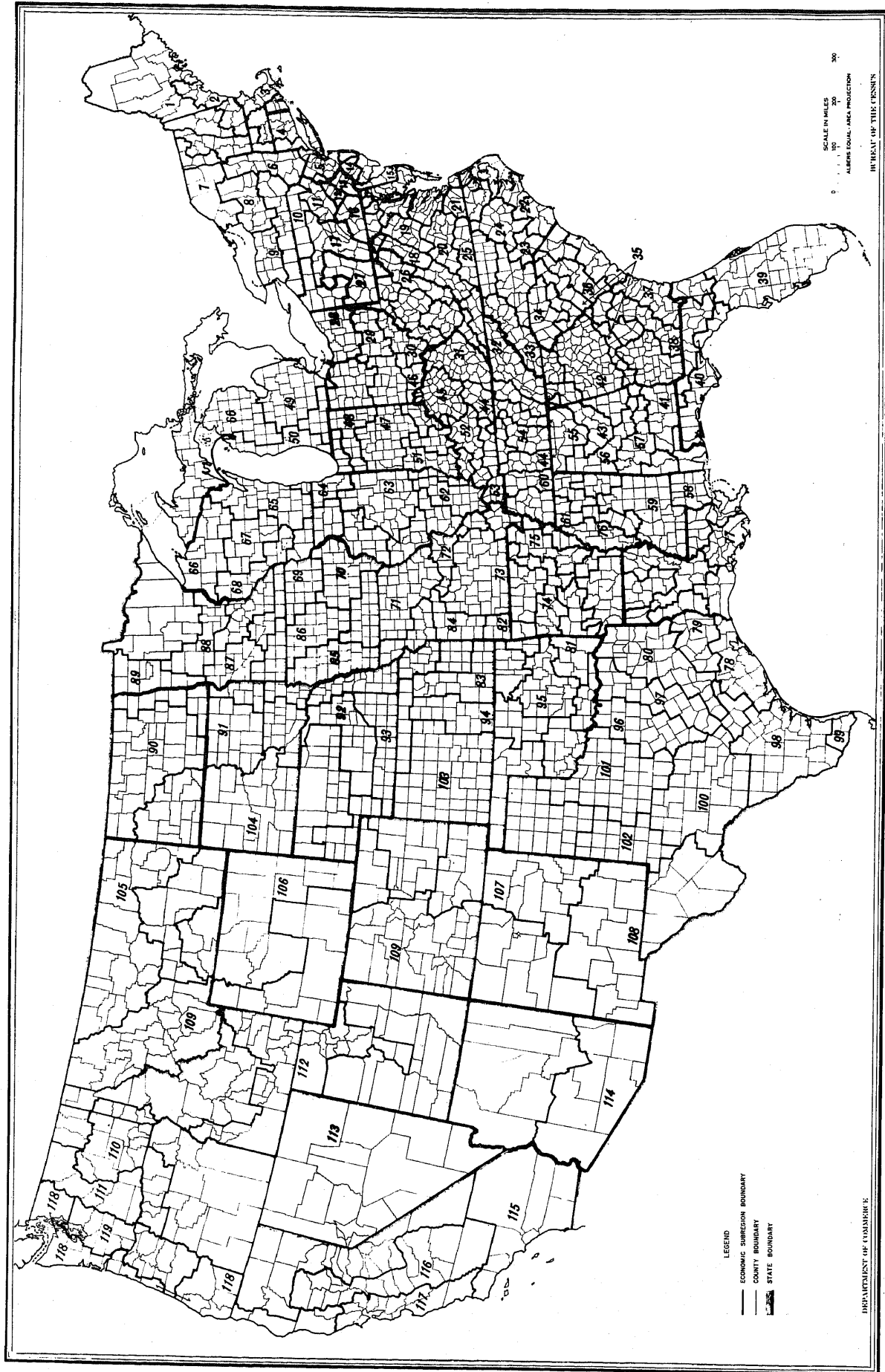
Table 2.--Condition and plumbing facilities for occupied dwelling units: 1950.

Table 3.--Number of rooms in nonwhite owner-, renter-, and rent-free-occupied dwelling units: 1950.

Table 4.--Condition and plumbing facilities for nonwhite-occupied dwelling units: 1950.

The numbers of the economic subregions for which tables 3 and 4 are presented are: 15, 19, 20, 21, 22, 23, 24, 25, 34, 35, 36, 37, 38, 41, 42, 43, 53, 54, 55, 56, 57, 58, 59, 60, 61, 75, 76, 77, 78, 79, 80, 95, 97, 109, 113, and 116.

# ECONOMIC SUBREGIONS OF THE UNITED STATES: 1950



## COUNTIES IN ECONOMIC SUBREGIONS

- 1 MAINE: Aroostook, Franklin, Hancock, Knox, Lincoln, Oxford, Penobscot, Piscataquis, Somerset, Waldo, Washington.  
NEW HAMPSHIRE: Belknap, Carroll, Coös, Grafton, Sullivan.  
VERMONT: Bennington, Caledonia, Essex, Lamoille, Orange, Rutland, Washington, Windham, Windsor.
- 2 MAINE: Androscoggin, Cumberland, Kennebec, Sagadahoc, York.  
MASSACHUSETTS: Berkshire, Franklin.  
NEW HAMPSHIRE: Cheshire, Hillsborough, Merrimack, Rockingham, Strafford.
- 3 MASSACHUSETTS: Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk.  
RHODE ISLAND: Bristol, Kent, Newport, Providence, Washington.
- 4 CONNECTICUT: Hartford, Middlesex, New Haven, New London, Tolland, Windham.  
MASSACHUSETTS: Hampden, Hampshire, Worcester.
- 5 CONNECTICUT: Fairfield, Litchfield.  
NEW JERSEY: Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union.  
NEW YORK: Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester.
- 6 NEW YORK: Albany, Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Saratoga, Schenectady, Sullivan, Ulster, Warren, Washington.
- 7 NEW YORK: Clinton, Essex, Franklin, Jefferson, Lewis, St. Lawrence.  
VERMONT: Addison, Chittenden, Franklin, Grand Isle, Orleans.
- 8 NEW YORK: Cayuga, Cortland, Fulton, Hamilton, Herkimer, Madison, Montgomery, Oneida, Onondaga, Oswego.
- 9 NEW YORK: Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates.
- 10 NEW YORK: Allegany, Broome, Cattaraugus, Chautauqua, Chemung, Chenango, Delaware, Otsego, Schoharie, Schuyler, Steuben, Tioga, Tompkins.  
PENNSYLVANIA: Bradford, Potter, Susquehanna, Tioga, Wayne, Wyoming.
- 11 PENNSYLVANIA: Carbon, Columbia, Lackawanna, Luzerne, Monroe, Montour, Northumberland, Pike, Schuylkill.
- 12 NEW JERSEY: Warren.  
PENNSYLVANIA: Berks, Lehigh, Northampton.
- 13 PENNSYLVANIA: Bucks, Chester, Delaware, Montgomery, Philadelphia.
- 14 NEW JERSEY: Burlington, Camden, Gloucester.
- 15 DELAWARE: Kent, Sussex, New Castle.  
MARYLAND: Caroline, Cecil, Dorchester, Kent, Queen Annes, Somerset, Talbot, Wicomico, Worcester.  
NEW JERSEY: Atlantic, Cape May, Cumberland, Ocean, Salem.  
VIRGINIA: Accomack, Caroline, Charles City, Elizabeth City, Essex, Gloucester, Hanover, James City, King and Queen, King George, King William, Lancaster, Mathews, Middlesex, New Kent, Norfolk, Northampton, Northumberland, Princess Anne, Richmond, Warwick, Westmoreland, York.
- 16 MARYLAND: Carroll, Frederick, Harford, Howard, Washington.  
PENNSYLVANIA: Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, York.
- 17 PENNSYLVANIA: Bedford, Blair, Cameron, Centre, Clinton, Elk, Forest, Fulton, Huntingdon, Juniata, Lycoming, Mifflin, Perry, Snyder, Sullivan, Union.
- 18 VIRGINIA: Augusta, Clarke, Frederick, Page, Rockingham, Shenandoah, Warren.  
WEST VIRGINIA: Berkeley, Jefferson, Morgan.
- 19 DISTRICT OF COLUMBIA: District of Columbia.  
MARYLAND: Anne Arundel, Baltimore, Calvert, Charles, Montgomery, Prince Georges, St. Marys.  
VIRGINIA: Albemarle, Arlington, Culpeper, Fairfax, Fauquier, Greene, Loudoun, Madison, Orange, Prince William, Rappahannock, Spotsylvania, Stafford.
- 20 VIRGINIA: Amelia, Amherst, Appomattox, Bedford, Buckingham, Campbell, Chesterfield, Cumberland, Dinwiddie, Fluvanna, Goochland, Henrico, Louisa, Nelson, Nottoway, Powhatan, Prince Edward.
- 21 NORTH CAROLINA: Bertie, Chowan, Gates, Halifax, Hertford, Martin, Northampton, Perquimans, Washington.  
VIRGINIA: Greensville, Isle of Wight, Nansemond, Prince George, Southampton, Surry, Sussex.
- 22 NORTH CAROLINA: Beaufort, Bladen, Brunswick, Camden, Carteret, Columbus, Craven, Currituck, Dare, Duplin, Hyde, Jones, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Tyrrell.
- 23 NORTH CAROLINA: Cumberland, Hoke, Moore, Richmond, Robeson, Scotland.  
SOUTH CAROLINA: Dillon, Florence, Horry, Marion, Williamsburg.
- 24 NORTH CAROLINA: Edgecombe, Franklin, Greene, Harnett, Johnston, Lee, Lenoir, Nash, Pitt, Sampson, Wake, Warren, Wayne, Wilson.
- 25 NORTH CAROLINA: Alamance, Caswell, Durham, Forsyth, Granville, Guilford, Orange, Person, Rockingham, Stokes, Surry, Vance, Yadkin.  
VIRGINIA: Brunswick, Charlotte, Franklin, Halifax, Henry, Lunenburg, Mecklenburg, Patrick, Pittsylvania.
- 26 VIRGINIA: Alleghany, Bath, Botetourt, Craig, Floyd, Giles, Highland, Montgomery, Pulaski, Roanoke, Rockbridge.  
WEST VIRGINIA: Grant, Greenbrier, Hampshire, Hardy, Mineral, Monroe, Pendleton, Pocahontas, Randolph, Summers, Tucker.
- 27 MARYLAND: Allegany, Garrett.  
PENNSYLVANIA: Allegheny, Beaver, Cambria, Clarion, Clearfield, Fayette, Greene, Indiana, Jefferson, Somerset, Washington, Westmoreland.  
WEST VIRGINIA: Barbour, Harrison, Marion, Monongalia, Preston, Taylor.
- 28 OHIO: Ashland, Ashtabula, Columbiana, Cuyahoga, Erie, Geauga, Holmes, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, Trumbull, Wayne.  
PENNSYLVANIA: Armstrong, Butler, Crawford, Erie, Lawrence, McKean, Mercer, Venango, Warren.
- 29 OHIO: Belmont, Carroll, Coshocton, Fairfield, Guernsey, Harrison, Jefferson, Knox, Licking, Morrow, Muskingum, Perry, Tuscarawas.  
WEST VIRGINIA: Brooke, Hancock, Marshall, Ohio, Pleasants, Tyler, Wetzel, Wood.

- 30 KENTUCKY: Boyd.  
OHIO: Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Monroe, Morgan, Noble, Pike, Scioto, Vinton, Washington.  
WEST VIRGINIA: Braxton, Cabell, Calhoun, Clay, Doddridge, Gilmer, Jackson, Lewis, Lincoln, Mason, Nicholas, Putnam, Ritchie, Roane, Upshur, Wayne, Webster, Wirt.
- 31 KENTUCKY: Bell, Breathitt, Carter, Clay, Elliott, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Magoffin, Martin, McCreary, Menifee, Morgan, Owsley, Perry, Pike, Powell, Rowan, Whitley, Wolfe.  
TENNESSEE: Bledsoe, Cumberland, Fentress, Grundy, Marion, Morgan, Scott, Sequatchie, Van Buren.  
VIRGINIA: Buchanan, Dickenson, Lee, Tazewell, Wise.  
WEST VIRGINIA: Boone, Fayette, Kanawha, Logan, McDowell, Mercer, Mingo, Raleigh, Wyoming.
- 32 GEORGIA: Walker.  
TENNESSEE: Anderson, Blount, Bradley, Campbell, Carter, Claiborne, Cocke, Grainger, Greene, Hamblen, Hamilton, Hancock, Hawkins, Jefferson, Johnson, Knox, Loudon, McMinn, Meigs, Monroe, Polk, Rhea, Roane, Sevier, Sullivan, Unicoi, Union, Washington.  
VIRGINIA: Bland, Carroll, Grayson, Russell, Scott, Smyth, Washington, Wythe.
- 33 GEORGIA: Dawson, Fannin, Gilmer, Habersham, Lumpkin, Pickens, Rabun, Towns, Union, White.  
NORTH CAROLINA: Alexander, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Swain, Transylvania, Watauga, Wilkes, Yancey.
- 34 NORTH CAROLINA: Anson, Cabarrus, Catawba, Chatham, Cleveland, Davidson, Davie, Gaston, Iredell, Lincoln, Mecklenburg, Montgomery, Polk, Randolph, Rowan,utherford, Stanly, Union.  
SOUTH CAROLINA: Anderson, Cherokee, Chester, Greenville, Greenwood, Lancaster, Laurens, Oconee, Pickens, Spartanburg, Union, York.
- 35 ALABAMA: Russell.  
GEORGIA: Bibb, Chattahoochee, Crawford, Glascock, Marion, Muscogee, Richmond, Taylor, Twiggs, Washington, Wilkinson.  
SOUTH CAROLINA: Aiken, Chesterfield, Kershaw, Lexington, Richland.
- 36 GEORGIA: Bleckley, Burke, Dodge, Jefferson, Jenkins, Johnson, Laurens, Screven, Telfair, Treutlen, Wheeler.  
SOUTH CAROLINA: Allendale, Bamberg, Barnwell, Calhoun, Clarendon, Darlington, Hampton, Lee, Marlboro, Orangeburg, Sumter.
- 37 GEORGIA: Brantley, Bryan, Camden, Charlton, Chatham, Clinch, Echols, Effingham, Glynn, Liberty, Long, McIntosh, Pierce, Ware, Wayne.  
SOUTH CAROLINA: Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Jasper.
- 38 FLORIDA: Alachua, Baker, Columbia, Gadsden, Gilchrist, Hamilton, Holmes, Jackson, Jefferson, Lafayette, Leon, Madison, Suwannee, Union.  
GEORGIA: Appling, Atkinson, Bacon, Berrien, Brooks, Bulloch, Candler, Coffee, Colquitt, Cook, Emanuel, Evans, Jeff Davis, Lanier, Lowndes, Montgomery, Tattnell, Thomas, Toombs.
- 39 FLORIDA: Brevard, Broward, Charlotte, Citrus, Collier, Dade, De Soto, Flagler, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Indian River, Lake, Lee, Manatee, Marion, Martin, Monroe, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, St. Lucie, Sarasota, Seminole, Sumter, Volusia.
- 40 FLORIDA: Bay, Bradford, Calhoun, Clay, Dixie, Duval, Escambia, Franklin, Gulf, Levy, Liberty, Nassau, Okaloosa, Putnam, St. Johns, Santa Rosa, Taylor, Wakulla, Walton, Washington.
- 41 ALABAMA: Barbour, Butler, Coffee, Conecuh, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Monroe, Pike.  
GEORGIA: Baker, Ben Hill, Calhoun, Clay, Crisp, Decatur, Dooly, Dougherty, Early, Grady, Houston, Irwin, Lee, Macon, Miller, Mitchell, Peach, Pulaski, Quitman, Randolph, Schley, Seminole, Stewart, Sumter, Terrell, Tift, Turner, Webster, Wilcox, Worth.
- 42 ALABAMA: Chambers, Clay, Cleburne, Coosa, Lee, Randolph, Tallapoosa.  
GEORGIA: Baldwin, Banks, Barrow, Butts, Carroll, Cherokee, Clarke, Clayton, Cobb, Columbia, Coweta, De Kalb, Douglas, Elbert, Fayette, Forsyth, Franklin, Fulton, Greene, Gwinnett, Hall, Hancock, Haralson, Harris, Hart, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lincoln, Madison, McDuffie, Meriwether, Monroe, Morgan, Newton, Oconee, Oglethorpe, Paulding, Pike, Putnam, Rockdale, Spalding, Stephens, Talbot, Taliaferro, Troup, Upson, Walton, Warren, Wilkes.  
SOUTH CAROLINA: Abbeville, Edgefield, Fairfield, McCormick, Newberry, Saluda.
- 43 ALABAMA: Calhoun, Cherokee, Etowah, Jefferson, St. Clair, Shelby, Talladega, Walker.  
GEORGIA: Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, Polk, Whitfield.
- 44 KENTUCKY: Adair, Allen, Casey, Clinton, Cumberland, Lincoln, Metcalfe, Monroe, Pulaski, Rockcastle, Russell, Wayne.  
TENNESSEE: Cannon, Clay, Coffee, De Kalb, Dickson, Franklin, Hickman, Houston, Humphreys, Jackson, Lawrence, Lewis, Macon, Overton, Perry, Pickett, Putnam, Stewart, Warren, Wayne, White.
- 45 KENTUCKY: Anderson, Bath, Boone, Bourbon, Boyle, Bracken, Carroll, Clark, Fayette, Fleming, Franklin, Gallatin, Garrard, Grant, Harrison, Henry, Jessamine, Madison, Marion, Mason, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Pendleton, Robertson, Scott, Shelby, Spencer, Trimble, Washington, Woodford.
- 46 INDIANA: Clark, Dearborn, Floyd, Franklin, Jackson, Jefferson, Jennings, Ohio, Ripley, Scott, Switzerland.  
KENTUCKY: Campbell, Jefferson, Kenton.  
OHIO: Adams, Brown, Clermont, Hamilton, Highland, Ross.
- 47 INDIANA: Bartholomew, Benton, Boone, Carroll, Cass, Clinton, Decatur, Delaware, Fayette, Fountain, Grant, Hamilton, Hancock, Hendricks, Henry, Howard, Johnson, Madison, Marion, Miami, Montgomery, Parke, Putnam, Randolph, Rush, Shelby, Tippecanoe, Tipton, Union, Vermillion, Wabash, Warren, Wayne, White.  
OHIO: Butler, Champaign, Clark, Clinton, Darke, Delaware, Fayette, Franklin, Greene, Madison, Miami, Montgomery, Pickaway, Preble, Shelby, Warren.
- 48 INDIANA: Adams, Allen, Blackford, De Kalb, Fulton, Huntington, Jasper, Jay, Kosciusko, Lagrange, Marshall, Newton, Noble, Pulaski, Starke, Steuben, Wells, Whitley.  
MICHIGAN: Barry, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, Lenawee, St. Joseph.  
OHIO: Allen, Auglaize, Crawford, Defiance, Fulton, Hancock, Hardin, Henry, Logan, Marion, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Union, Van Wert, Williams, Wood, Wyandot.
- 49 MICHIGAN: Bay, Clinton, Eaton, Genesee, Gratiot, Huron, Ingham, Ionia, Isabella, Jackson, Lapeer, Livingston, Macomb, Midland, Monroe, Montcalm, Oakland, St. Clair, Saginaw, Sanilac, Shiawassee, Tuscola, Washtenaw, Wayne.  
OHIO: Lucas.
- 50 MICHIGAN: Allegan, Benzie, Berrien, Grand Traverse, Kent, Leelanau, Manistee, Mason, Muskegon, Oceana, Ottawa, Van Buren.
- 51 ILLINOIS: Clark, Crawford, Edwards, Gallatin, Lawrence, Wabash, White.  
INDIANA: Clay, Daviess, Gibson, Greene, Knox, Morgan, Owen, Pike, Posey, Spencer, Sullivan, Vanderburgh, Vigo, Warrick.  
KENTUCKY: Daviess, Henderson, McLean, Union, Webster.



- 52 INDIANA: Brown, Crawford, Dubois, Harrison, Lawrence, Martin, Monroe, Orange, Perry, Washington.  
KENTUCKY: Breckinridge, Bullitt, Butler, Caldwell, Crittenden, Edmonson, Grayson, Green, Hancock, Hardin, Hart, Hopkins, Larue, Livingston, Lyon, Meade, Muhlenberg, Ohio, Taylor.
- 53 KENTUCKY: Ballard, Barren, Calloway, Carlisle, Christian, Fulton, Graves, Hickman, Logan, Marshall, McCracken, Simpson, Todd, Trigg, Warren.  
TENNESSEE: Cheatham, Montgomery, Robertson, Sumner.
- 54 TENNESSEE: Bedford, Davidson, Giles, Lincoln, Marshall, Maury, Moore, Rutherford, Smith, Trousdale, Williamson, Wilson.
- 55 ALABAMA: Blount, Colbert, Cullman, De Kalb, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marshall, Morgan.
- 56 ALABAMA: Autauga, Bibb, Chilton, Elmore, Fayette, Franklin, Lamar, Macon, Marion, Pickens, Tuscaloosa, Winston.
- 57 ALABAMA: Bullock, Dallas, Greene, Hale, Lowndes, Marengo, Montgomery, Perry, Sumter, Wilcox.  
MISSISSIPPI: Chickasaw, Clay, Lee, Lowndes, Monroe, Noxubee, Oktibbeha.
- 58 ALABAMA: Baldwin, Escambia, Mobile.  
LOUISIANA: East Baton Rouge, East Feliciana, Jefferson, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. Helena, St. Tammany, Tangipahoa, Washington, West Feliciana.  
MISSISSIPPI: Forrest, George, Greene, Hancock, Harrison, Jackson, Lamar, Pearl River, Perry, Stone.
- 59 ALABAMA: Choctaw, Clarke, Washington.  
MISSISSIPPI: Adams, Amite, Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Hinds, Jasper, Jefferson, Jefferson Davis, Jones, Kemper, Lauderdale, Lawrence, Leake, Lincoln, Marion, Montgomery, Neshoba, Newton, Pike, Rankin, Scott, Simpson, Smith, Walthall, Warren, Wayne, Webster, Wilkinson, Winston.
- 60 MISSISSIPPI: Alcorn, Calhoun, Itawamba, Lafayette, Pontotoc, Prentiss, Tippah, Tishomingo, Union.  
TENNESSEE: Benton, Carroll, Chester, Decatur, Hardin, Henderson, Henry, McNairy, Weakley.
- 61 MISSISSIPPI: Benton, Carroll, De Soto, Grenada, Holmes, Madison, Marshall, Panola, Tate, Yalobusha, Yazoo.  
TENNESSEE: Crockett, Dyer, Fayette, Gibson, Hardeman, Haywood, Lake, Lauderdale, Madison, Obion, Shelby, Tipton.
- 62 ILLINOIS: Alexander, Clay, Cumberland, Franklin, Hamilton, Hardin, Jackson, Jasper, Jefferson, Johnson, Marion, Massac, Perry, Pope, Pulaski, Richland, Saline, Union, Wayne, Williamson.
- 63 ILLINOIS: Cass, Champaign, Christian, Coles, DeWitt, Douglas, Edgar, Ford, Grundy, Iroquois, Kankakee, Kendall, La Salle, Livingston, Logan, Macon, Mason, McLean, Menard, Moultrie, Peoria, Piatt, Sangamon, Shelby, Tazewell, Vermilion, Woodford.
- 64 ILLINOIS: Boone, Cook, DuPage, Kane, Lake, McHenry, Will.  
INDIANA: Elkhart, Lake, LaPorte, Porter, St. Joseph.  
WISCONSIN: Kenosha, Milwaukee, Racine.
- 65 WISCONSIN: Brown, Calumet, Columbia, Dane, Dodge, Door, Fond du Lac, Green Lake, Jefferson, Kewaunee, Manitowoc, Marinette, Oconto, Outagamie, Ozaukee, Rock, Shawano, Sheboygan, Walworth, Washington, Waukesha, Waupaca, Winnebago.
- 66 MICHIGAN: Alcona, Alger, Alpena, Antrim, Arenac, Baraga, Charlevoix, Cheboygan, Chippewa, Clare, Crawford, Delta, Dickinson, Emmet, Gladwin, Gogebic, Houghton, Iosco, Iron, Kalkaska, Keweenaw, Lake, Luce, Mackinac, Marquette, Mecosta, Menominee, Missaukee, Montmorency, Newaygo, Ogemaw, Ontonagon, Osceola, Oscoda, Otsego, Presque Isle, Roscommon, Schoolcraft, Wexford.
- MINNESOTA: Aitkin, Beltrami, Carlton, Cass, Clearwater, Cook, Crow Wing, Hubbard, Itasca, Koochiching, Lake, Lake of the Woods, St. Louis.
- WISCONSIN: Ashland, Bayfield, Burnett, Douglas, Florence, Forest, Iron, Langlade, Lincoln, Oneida, Price, Rusk, Sawyer, Vilas, Washburn.
- 67 WISCONSIN: Adams, Chippewa, Clark, Eau Claire, Jackson, Juneau, Marathon, Marquette, Portage, Taylor, Waushara, Wood.
- 68 MINNESOTA: Anoka, Carver, Dakota, Dodge, Goodhue, Hennepin, McLeod, Meeker, Olmsted, Ramsey, Rice, Scott, Stearns, Steele, Wabasha, Washington, Winona, Wright.  
WISCONSIN: Barron, Buffalo, Dunn, La Crosse, Monroe, Pepin, Pierce, Polk, Richland, St. Croix, Sauk, Trempealeau, Vernon.
- 69 ILLINOIS: Carroll, De Kalb, Jo Daviess, Lee, Ogle, Stephenson, Whiteside, Winnebago.  
IOWA: Allamakee, Black Hawk, Bremer, Buchanan, Butler, Cerro Gordo, Chickasaw, Clayton, Delaware, Fayette, Floyd, Howard, Mitchell, Winnebago, Winneshiek, Worth.  
MINNESOTA: Blue Earth, Brown, Fillmore, Freeborn, Houston, Le Sueur, Mower, Nicollet, Sibley, Waseca.  
WISCONSIN: Crawford, Grant, Green, Iowa, Lafayette.
- 70 ILLINOIS: Bureau, Fulton, Hancock, Henderson, Henry, Knox, Marshall, McDonough, Mercer, Putnam, Rock Island, Stark, Warren.  
IOWA: Benton, Cedar, Clinton, Des Moines, Dubuque, Grundy, Henry, Iowa, Jackson, Jasper, Johnson, Jones, Keokuk, Lee, Linn, Louisa, Mahaska, Marshall, Muscatine, Poweshiek, Scott, Tama, Washington.
- 71 ILLINOIS: Adams, Brown, Calhoun, Greene, Jersey, Macoupin, Montgomery, Morgan, Pike, Schuyler, Scott.  
IOWA: Adair, Adams, Appanoose, Clarke, Davis, Decatur, Guthrie, Jefferson, Lucas, Madison, Marion, Monroe, Ringgold, Taylor, Union, Van Buren, Wapello, Warren, Wayne.  
MISSOURI: Adair, Audrain, Boone, Caldwell, Callaway, Chariton, Clark, Daviess, De Kalb, Gentry, Grundy, Harrison, Howard, Knox, Lewis, Lincoln, Linn, Livingston, Macon, Marion, Mercer, Monroe, Montgomery, Pike, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby, Sullivan, Worth.
- 72 ILLINOIS: Bond, Clinton, Effingham, Fayette, Madison, Monroe, Randolph, St. Clair, Washington.  
MISSOURI: Bollinger, Cape Girardeau, Cole, Franklin, Gasconade, Jefferson, Moniteau, Osage, Perry, St. Charles, St. Louis, Ste. Genevieve, Warren.
- 73 ARKANSAS: Baxter, Boone, Carroll, Cleburne, Fulton, Izard, Madison, Marion, Newton, Searcy, Stone, Van Buren.  
MISSOURI: Benton, Camden, Carter, Christian, Crawford, Dallas, Dent, Douglas, Greene, Hickory, Howell, Iron, Laclede, Madison, Maries, Miller, Morgan, Oregon, Ozark, Phelps, Polk, Pulaski, Reynolds, Ripley, St. Francois, Shannon, Stone, Taney, Texas, Washington, Wayne, Webster, Wright.
- 74 ARKANSAS: Conway, Crawford, Faulkner, Franklin, Independence, Johnson, Logan, Pope, Pulaski, Randolph, Sebastian, Sharp, White, Yell.
- 75 ARKANSAS: Arkansas, Clay, Craighead, Cross, Greene, Jackson, Lawrence, Lonoke, Monroe, Poinsett, Prairie, Woodruff.
- 76 ARKANSAS: Chicot, Crittenden, Desha, Jefferson, Lee, Lincoln, Mississippi, Phillips, St. Francis.  
LOUISIANA: Avoyelles, Bossier, Caddo, Catahoula, Concordia, East Carroll, Evangeline, Franklin, Lafayette, Madison, Morehouse, Natchitoches, Ouachita, Pointe Coupee, Rapides, Red River, Richland, St. Landry, Tensas, West Carroll.  
MISSISSIPPI: Bolivar, Coahoma, Humphreys, Issaquena, Leflore, Quitman, Sharkey, Sunflower, Tallahatchie, Tunica, Washington.  
MISSOURI: Butler, Dunklin, Mississippi, New Madrid, Pemiscot, Scott, Stoddard.

## FARM HOUSING CHARACTERISTICS

- 77 LOUISIANA: Ascension, Assumption, Iberia, Iberville, Lafourche, St. James, St. John the Baptist, St. Martin, St. Mary, Terrebonne, West Baton Rouge.
- 78 LOUISIANA: Acadia, Allen, Calcasieu, Cameron, Jefferson Davis, Vermilion.  
TEXAS: Austin, Brazoria, Calhoun, Chambers, Colorado, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller, Wharton.
- 79 LOUISIANA: Beauregard, De Soto, Sabine, Vernon.  
TEXAS: Angelina, Hardin, Jasper, Montgomery, Newton, Polk, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker.
- 80 ARKANSAS: Ashley, Bradley, Calhoun, Clark, Cleveland, Columbia, Dallas, Drew, Grant, Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Ouachita, Union.  
LOUISIANA: Bienville, Caldwell, Claiborne, Grant, Jackson, La Salle, Lincoln, Union, Webster, Winn.  
TEXAS: Anderson, Bastrop, Bowie, Brazos, Burleson, Camp, Cass, Cherokee, Franklin, Freestone, Gregg, Grimes, Harrison, Henderson, Hopkins, Houston, Lee, Leon, Madison, Marion, Morris, Nacogdoches, Panola, Rains, Red River, Robertson, Rusk, Shelby, Smith, Titus, Upshur, Van Zandt, Wood.
- 81 ARKANSAS: Garland, Hot Spring, Montgomery, Perry, Pike, Polk, Saline, Scott, Sevier.  
OKLAHOMA: Atoka, Latimer, Le Flore, McCurtain, Pittsburg, Pushmataha.
- 82 ARKANSAS: Benton, Washington.  
MISSOURI: Barry, Jasper, Lawrence, McDonald, Newton.  
OKLAHOMA: Adair, Cherokee, Delaware.
- 83 KANSAS: Butler, Chase, Chautauqua, Cherokee, Cowley, Crawford, Elk, Geary, Greenwood, Labette, Lyon, Montgomery, Morris, Neosho, Pottawatomie, Riley, Wabaunsee, Wilson.  
OKLAHOMA: Craig, Mayes, Nowata, Osage, Ottawa, Rogers, Tulsa, Washington.
- 84 KANSAS: Allen, Anderson, Bourbon, Coffey, Franklin, Linn, Miami, Osage, Woodson.  
MISSOURI: Barton, Bates, Cass, Cedar, Cooper, Dade, Henry, Johnson, Pettis, St. Clair, Vernon.
- 85 IOWA: Audubon, Buena Vista, Carroll, Cass, Cherokee, Crawford, Fremont, Harrison, Ida, Lyon, Mills, Monona, Montgomery, O'Brien, Page, Plymouth, Pottawattamie, Sac, Shelby, Sioux, Woodbury.  
KANSAS: Atchison, Brown, Doniphan, Douglas, Jackson, Jefferson, Johnson, Leavenworth, Nemaha, Shawnee, Wyandotte.  
MISSOURI: Andrew, Atchison, Buchanan, Carroll, Clay, Clinton, Holt, Jackson, Lafayette, Nodaway, Platte, Ray, Saline.  
NEBRASKA: Burt, Cass, Cedar, Cuming, Dakota, Dixon, Dodge, Douglas, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, Thurston, Washington, Wayne.  
SOUTH DAKOTA: Clay, Lake, Lincoln, Minnehaha, Moody, Turner, Union, Yankton.
- 86 IOWA: Boone, Calhoun, Clay, Dallas, Dickinson, Emmet, Franklin, Greene, Hamilton, Hancock, Hardin, Humboldt, Kossuth, Osceola, Palo Alto, Pocahontas, Polk, Story, Webster, Wright.  
MINNESOTA: Cottonwood, Faribault, Jackson, Lincoln, Lyon, Martin, Murray, Nobles, Pipestone, Rock, Watonwan.
- 87 MINNESOTA: Big Stone, Chippewa, Grant, Kandiyohi, Lac qui Parle, Pope, Redwood, Renville, Stevens, Swift, Traverse, Yellow Medicine.  
SOUTH DAKOTA: Brookings, Codrington, Deuel, Grant, Hamlin, Kingsbury, Roberts.
- 88 MINNESOTA: Becker, Benton, Chisago, Douglas, Isanti, Kanabec, Mahnomen, Mille Lacs, Morrison, Otter Tail, Pine, Sherburne, Todd, Wadena.
- 89 MINNESOTA: Clay, Kittson, Marshall, Norman, Pennington, Polk, Red Lake, Roseau, Wilkin.  
NORTH DAKOTA: Cass, Grand Forks, Pembina, Traill, Walsh.
- 90 NORTH DAKOTA: Barnes, Benson, Bottineau, Burke, Burleigh, Cavalier, Divide, Eddy, Emmons, Foster, Griggs, Kidder, La Moure, Logan, McHenry, McIntosh, McLean, Mountrail, Nelson, Pierce, Ramsey, Renville, Rolette, Sheridan, Steele, Stutsman, Towner, Ward, Wells, Williams.
- 91 NORTH DAKOTA: Dickey, Ransom, Richland, Sargent.  
SOUTH DAKOTA: Beadle, Brown, Campbell, Clark, Day, Edmunds, Faulk, Hand, Hughes, Hyde, Marshall, McPherson, Potter, Spink, Sully, Walworth.
- 92 NEBRASKA: Antelope, Boone, Boyd, Buffalo, Colfax, Custer, Dawson, Greeley, Hall, Howard, Knox, Lincoln, Madison, Merrick, Nance, Pierce, Platte, Sherman, Stanton, Valley.  
SOUTH DAKOTA: Aurora, Bon Homme, Brule, Buffalo, Charles Mix, Davison, Douglas, Gregory, Hanson, Hutchinson, Jerauld, McCook, Miner, Sanborn, Tripp.
- 93 KANSAS: Jewell, Marshall, Norton, Phillips, Republic, Smith, Washington.  
NEBRASKA: Adams, Butler, Clay, Dundy, Fillmore, Franklin, Frontier, Furnas, Gosper, Hamilton, Harlan, Hayes, Hitchcock, Jefferson, Kearney, Nuckolls, Phelps, Polk, Red Willow, Saline, Seward, Thayer, Webster, York.
- 94 KANSAS: Clay, Cloud, Dickinson, Harper, Harvey, Kingman, Marion, McPherson, Ottawa, Reno, Rice, Saline, Sedgwick, Sumner.  
OKLAHOMA: Alfalfa, Blaine, Canadian, Garfield, Grant, Kay, Kingfisher, Major, Noble.
- 95 OKLAHOMA: Cleveland, Coal, Creek, Garvin, Haskell, Hughes, Lincoln, Logan, McClain, McIntosh, Muskogee, Okfuskee, Oklahoma, Okmulgee, Pawnee, Payne, Pontotoc, Pottawatomie, Seminole, Sequoyah, Wagoner.
- 96 OKLAHOMA: Bryan, Carter, Choctaw, Jefferson, Johnston, Love, Marshall, Murray, Stephens.  
TEXAS: Bosque, Burnet, Comanche, Cooke, Coryell, Denton, Eastland, Erath, Hamilton, Hood, Jack, Johnson, Lampasas, Mills, Montague, Palo Pinto, Parker, Somervell, Tarrant, Wise.
- 97 TEXAS: Bell, Caldwell, Collin, Dallas, Delta, Ellis, Falls, Fannin, Fayette, Gonzales, Grayson, Guadalupe, Hill, Hunt, Kaufman, Lamar, Lavaca, Limestone, McLennan, Milam, Navarro, Rockwall, Travis, Washington, Williamson.
- 98 TEXAS: Aransas, Atascosa, Bee, Bexar, Brooks, De Witt, Dimmit, Duval, Frio, Goliad, Jim Hogg, Jim Wells, Karnes, Kenedy, Kleberg, La Salle, Live Oak, Maverick, McMullen, Nueces, Refugio, San Patricio, Starr, Webb, Wilson, Zapata, Zavala.
- 99 TEXAS: Cameron, Hidalgo, Willacy.
- 100 TEXAS: Bandera, Blarso, Coke, Comal, Concho, Crockett, Edwards, Gillespie, Glasscock, Hays, Irion, Kendall, Kerr, Kimble, Kinney, Llano, Mason, McCulloch, Medina, Menard, Reagan, Real, San Saba, Schleicher, Sterling, Sutton, Terrell, Tom Green, Upton, Uvalde, Val Verde.
- 101 OKLAHOMA: Beckham, Caddo, Comanche, Cotton, Grady, Greer, Harmon, Jackson, Kiowa, Tillman, Washita.  
TEXAS: Archer, Baylor, Borden, Brown, Callahan, Childress, Clay, Coleman, Collingsworth, Cottle, Dickens, Donley, Fisher, Foard, Garza, Hall, Hardeman, Haskell, Jones, Kent, King, Knox, Mitchell, Motley, Nolan, Runnels, Scurry, Shackelford, Stephens, Stonewall, Taylor, Throckmorton, Wheeler, Wichita, Wilbarger, Young.
- 102 TEXAS: Andrews, Bailey, Cochran, Crane, Crosby, Dawson, Ector, Gaines, Hockley, Howard, Lamb, Lubbock, Lynn, Martin, Midland, Terry, Winkler, Yoakum.
- 103 COLORADO: Adams, Arapahoe, Cheyenne, Denver, Douglas, Elbert, El Paso, Jefferson, Kiowa, Kit Carson, Lincoln, Phillips, Washington, Yuma.  
KANSAS: Barber, Barton, Cheyenne, Clark, Comanche, Decatur, Edwards, Ellis, Ellsworth, Finney, Ford, Gove, Graham, Grant, Gray, Greeley, Hamilton, Haskell, Hodgeman, Kearny, Kiowa, Lane, Lincoln, Logan, Meade, Mitchell, Morton, Ness, Osborne, Pawnee, Pratt, Rawlins, Rooks, Rush, Russell, Scott, Seward, Sheridan, Sherman, Stafford, Stanton, Stevens, Thomas, Trego, Wallace, Wichita.

- OKLAHOMA: Beaver, Cimarron, Custer, Dewey, Ellis, Harper, Roger Mills, Texas, Woods, Woodward.
- TEXAS: Armstrong, Briscoe, Carson, Castro, Dallam, Deaf Smith, Floyd, Gray, Hale, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Farmer, Potter, Randall, Roberts, Sherman, Swisher.
- 104 MONTANA: Carter, Custer, Garfield, Golden Valley, Musselshell, Petroleum, Powder River, Rosebud, Sweet Grass, Treasure, Wheatland.
- NEBRASKA: Arthur, Blaine, Brown, Cherry, Dawes, Garden, Garfield, Grant, Holt, Hooker, Keya Paha, Logan, Loup, McPherson, Rock, Sheridan, Sioux, Thomas, Wheeler.
- SOUTH DAKOTA: Armstrong, Bennett, Butte, Corson, Custer, Dewey, Fall River, Haakon, Harding, Jackson, Jones, Lawrence, Lyman, Meade, Mellette, Pennington, Perkins, Shannon, Stanley, Todd, Washabaugh, Ziebach.
- 105 MONTANA: Blaine, Cascade, Chouteau, Daniels, Dawson, Fallon, Fergus, Glacier, Hill, Judith Basin, Liberty, McCone, Phillips, Pondera, Prairie, Richland, Roosevelt, Sheridan, Teton, Toole, Valley, Wibaux.
- NORTH DAKOTA: Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, McKenzie, Mercer, Morton, Oliver, Sioux, Slope, Stark.
- 106 COLORADO: Boulder, Larimer, Logan, Morgan, Sedgwick, Weld.
- MONTANA: Big Horn, Carbon, Stillwater, Yellowstone.
- NEBRASKA: Banner, Box Butte, Chase, Cheyenne, Deuel, Keith, Kimball, Morrill, Perkins, Scotts Bluff.
- WYOMING: Big Horn, Campbell, Converse, Crook, Fremont, Goshen, Hot Springs, Johnson, Laramie, Niobrara, Park, Platte, Sheridan, Washakie, Weston.
- 107 COLORADO: Baca, Bent, Crowley, Custer, Fremont, Huerfano, Las Animas, Otero, Prowers, Pueblo.
- NEW MEXICO: Colfax, Curry, De Baca, Guadalupe, Harding, Mora, Quay, Roosevelt, San Miguel, Tarrant, Union.
- 108 NEW MEXICO: Chaves, Dona Ana, Eddy, Grant, Hidalgo, Lea, Lincoln, Luna, Otero, Sierra, Socorro.
- TEXAS: Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Ward.
- 109 COLORADO: Alamosa, Archuleta, Chaffee, Clear Creek, Conejos, Costilla, Delta, Dolores, Eagle, Garfield, Gilpin, Grand, Gunnison, Hinsdale, Jackson, Lake, La Plata, Mesa, Mineral, Moffat, Montezuma, Montrose, Ouray, Park, Pitkin, Rio Blanco, Rio Grande, Routt, Saguache, San Juan, San Miguel, Summit, Teller.
- IDAHO: Adams, Blaine, Boise, Bonner, Boundary, Butte, Camas, Clark, Clearwater, Custer, Elmore, Idaho, Lemhi, Shoshone, Valley.
- MONTANA: Beaverhead, Broadwater, Deer Lodge, Flathead, Gallatin, Granite, Jefferson, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Powell, Ravalli, Sanders, Silver Bow, Yellowstone National Park (part).
- NEW MEXICO: Bernalillo, Catron, Los Alamos, McKinley, Rio Arriba, Sandoval, San Juan, Santa Fe, Taos, Valencia.
- WASHINGTON: Ferry, Pend Oreille, Stevens.
- WYOMING: Albany, Carbon, Lincoln, Natrona, Sublette, Sweetwater, Teton, Uinta, Yellowstone National Park (part).
- 110 IDAHO: Benewah, Kootenai, Latah, Lewis, Nez Perce.
- OREGON: Gilliam, Morrow, Sherman, Umatilla, Wasco.
- WASHINGTON: Adams, Asotin, Columbia, Douglas, Franklin, Garfield, Grant, Lincoln, Spokane, Walla Walla, Whitman.
- 111 WASHINGTON: Benton, Chelan, Kittitas, Klickitat, Okanogan, Yakima.
- 112 IDAHO: Ada, Bannock, Bear Lake, Bingham, Bonneville, Canyon, Caribou, Cassia, Franklin, Fremont, Gem, Gooding, Jefferson, Jerome, Lincoln, Madison, Minidoka, Oneida, Owyhee, Payette, Power, Teton, Twin Falls, Washington, Yellowstone National Park (part).
- UTAH: Box Elder, Cache, Davis, Morgan, Rich, Salt Lake, Sanpete, Sevier, Summit, Utah, Wasatch, Weber.
- 113 ARIZONA: Apache, Coconino, Gila, Mohave, Navajo, Yavapai.
- CALIFORNIA: Alpine, Amador, Calaveras, El Dorado, Inyo, Lassen, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Trinity, Tuolumne.
- NEVADA: Churchill, Clark, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Ormsby, Pershing, Storey, Washoe, White Pine.
- OREGON: Baker, Crook, Deschutes, Grant, Harney, Jefferson, Klamath, Lake, Malheur, Union, Wallowa, Wheeler.
- UTAH: Beaver, Carbon, Daggett, Duchesne, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Piute, San Juan, Tooele, Uintah, Washington, Wayne.
- 114 ARIZONA: Cochise, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yuma.
- 115 CALIFORNIA: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura.
- 116 CALIFORNIA: Butte, Colusa, Fresno, Glenn, Kern, Kings, Madera, Merced, Sacramento, San Joaquin, Stanislaus, Sutter, Tehama, Tulare, Yolo, Yuba.
- 117 CALIFORNIA: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma.
- 118 CALIFORNIA: Del Norte, Humboldt, Lake, Mendocino.
- OREGON: Clatsop, Columbia, Coos, Curry, Douglas, Jackson, Josephine, Lincoln, Tillamook.
- WASHINGTON: Clallam, Grays Harbor, Island, Jefferson, Mason, Pacific, San Juan, Skagit, Snohomish, Wahkiakum, Whatcom.
- 119 OREGON: Benton, Clackamas, Hood River, Lane, Linn, Marion, Multnomah, Polk, Washington, Yamhill.
- WASHINGTON: Clark, Cowlitz, King, Kitsap, Lewis, Pierce, Skamania, Thurston.

# Farm Housing Characteristics

## GENERAL

### CONTENT

This volume presents statistics on the characteristics of occupied rural-farm housing. These statistics are based on information collected in the Censuses of Housing and Population, taken as of April 1, 1950. No statistics are provided in this report for urban farm or vacant farm dwelling units.

Data are presented in the form of cross-classifications in order to provide the user with the analytical relationships of the various housing and household characteristics of occupied rural-farm housing. The statistics used in these tables are based on information from a sample of rural-farm occupied dwelling units. Most of the subjects are presented separately for owner-occupied and renter-occupied dwelling units, with the renter-occupied units being divided for part of the subjects into two groups: those for which rent was paid and those which were occupied rent-free. The subjects are cross-classified in two basic tabulations:

- |                                   |   |
|-----------------------------------|---|
| 1. Number of rooms by--           | 2. Condition and plumbing facilities by-- |
| Year built                        | Number of rooms by year built             |
| Condition and plumbing facilities | Electric lighting                         |
| Heating fuel                      | Heating equipment                         |
| Cooking fuel                      | Type of household                         |
| Number of persons                 | Income in 1949                            |
| Persons per room                  |   |
| Sex and age of head               |   |

These statistics are presented for each of the 119 economic subregions of the United States and for the United States total. As indicated in the section on definitions, these subregions may cross State boundaries. Therefore, no totals for States or geographic divisions are possible.

The detailed cross-classifications for all areas are presented in tables 1 and 2. For the 36 economic subregions containing 15,000 nonwhite inhabitants or more and for the United States, tables 3 and 4 present fewer subjects and less detailed data than the corresponding tables 1 and 2.

### IDENTIFICATION OF ECONOMIC SUBREGIONS

The economic subregions are identified in the tables only by number. A list of the counties in each economic subregion is given on pp. VII to XI, and a map on p. VI. The list, numerically arranged, provides the names of the counties by States for each subregion. The map gives the numbers of the subregions, their boundaries, and the boundaries of the counties included.

### COMPARABILITY WITH 1940 CENSUS OF HOUSING

In general, the scope of the subject matter covered in the 1950 Census of Housing with respect to rural-farm housing is the same as in the 1940 Census. A few items, however, were not enumerated both times. In particular, television and kitchen sink were enumerated in 1950 but not in 1940, and conversion, exterior material, rent, and value were obtained in 1940 but not in 1950.

There have been several changes in concepts and definitions from 1940. For example, the concept of dilapidation was substituted in 1950 as an improvement over the concept of needing major repairs in 1940. Departures from the 1940 concepts and procedures were adopted after consultation with users of housing census data in order to increase the usefulness of the statistics even though it was recognized that comparability might be adversely affected in some cases. These changes are described in detail in the section, "Definitions and explanations."

Very few of the subjects which were cross-classified are the same for both years. Because of differences in the areas for which data are published and differences in definitions and methods, the cross-classifications in this volume and those in 1940 generally cannot be compared.

### HOUSING REPORTS

The principal findings of the 1950 Census of Housing are published in five volumes:

Volume I, General Characteristics, is the basic publication. This volume contains data on practically all items enumerated in the census, presented as a separate chapter for the United States, each State and the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands of the United States. In the State chapters, statistics are presented for the State by residence (urban, rural nonfarm, and rural farm), standard metropolitan areas, urbanized areas, counties, urban places, places of 1,000 to 2,500 inhabitants, and rural-nonfarm and rural-farm portions of counties. The United States Summary presents data for the United States, regions and geographic divisions, as well as summaries of the statistics for the States and the District of Columbia, standard metropolitan areas, cities of 100,000 inhabitants or more, and urbanized areas; the statistics are summarizations or compilations of data from the individual State chapters. Each of the chapters is available as a separate bulletin, Series H-A, "General Characteristics."

Volume II, Nonfarm Housing Characteristics, presents analytical data on housing and household characteristics for occupied dwelling units in the nonfarm segment of the dwelling unit inventory. The data generally are cross-tabulations of housing characteristics, such as contract rent or value by condition of the dwelling unit and by type of structure. In addition, the volume presents tabulations of housing characteristics in relation to characteristics of occupants, such as income, and sex and age of the household head. Statistics are presented as a separate chapter for the United States, for each of the 9 geographic divisions, and for each of the 152 standard metropolitan areas of 100,000 inhabitants or more in the United States. Data for the 106 cities of 100,000 inhabitants or more are included in the chapter for the standard metropolitan area in which the city is located. Each of the chapters is available as a separate bulletin, Series H-B, "Nonfarm Housing Characteristics."

Volume III, Farm Housing Characteristics, contains analytical data for rural-farm occupied dwelling units.

Volume IV, Residential Financing, presents statistics relating to the characteristics of the financing of residential nonfarm properties. Data are presented in terms of mortgaged properties, first and junior mortgages, and outstanding mortgage debt for both owner-occupied and rental properties. Items presented include: type of mortgage holder, characteristics of first and junior mortgages, purpose of financing and refinancing, characteristics of the owner-occupant and his household, and the physical and financial characteristics of the property. These statistics are provided for the United States, for each of the 4 regions, and for each of the 25 largest standard metropolitan areas according to the 1940 population.

Volume V, Block Statistics, comprises the Block Statistics bulletins (Series H-E). Separate bulletins were issued for the 209 cities in the United States which had 50,000 inhabitants or more in 1940, or in a subsequent special census prior to 1950. These bulletins will not be assembled into a bound volume. Each report presents for the city, by blocks, tabulations of dwelling units for the following subjects: occupancy and tenure, condition and plumbing facilities, persons per room, color of occupants, average contract monthly rent of renter-occupied

and selected vacant units, and the average value of 1-dwelling-unit owner-occupied and selected vacant structures. Statistics are summarized for census tracts or--in the absence of tracts--for wards. These bulletins contain the only statistics for wards that will be published from the 1950 Census of Housing.

Detailed housing data, as well as population data, for each of the census tracts in tracted areas are contained in Volume III of the Population reports, comprising the Census Tract bulletins (Series P-D). These bulletins will not be assembled into a bound volume. The housing subjects presented include: occupancy and tenure, color of occupants, type of structure, condition and plumbing facilities, year built, number of persons, persons per room, heating fuel, refrigeration equipment, television, contract monthly rent of renter-occupied and selected vacant units, and value of 1-dwelling-unit owner-occupied and selected vacant structures.

## POPULATION REPORTS

The major portion of the information compiled from the Census of Population of 1950 is contained in Volume II, Characteristics of the Population. Reports for each State are bound as a part with three chapters: "Number of Inhabitants," "General Characteristics," and "Detailed Characteristics." Each of the chapters is available as a separate bulletin.

## AVAILABILITY OF UNPUBLISHED DATA

In general, all the items that have been tabulated for farm housing are included in this volume. Statistics for housing occupied by nonwhite households, however, have been tabulated, but not published, in the same detail as presented in tables 1 and 2 for all economic subregions. In many subregions the number of nonwhite households is too small to provide significant information, even in the abbreviated form used in tables 3 and 4. In addition to the unpublished detail for dwelling units occupied by nonwhite households, additional data for heating fuel, kitchen sink, and persons per room have been tabulated but not published.

An estimate of the cost of providing unpublished data will be made upon request to the Director, Bureau of the Census, Washington 25, D. C.

## DEFINITIONS AND EXPLANATIONS

### FARM RESIDENCE

Rural-farm occupied dwelling units, as defined for this volume, include only those occupied units which are located on farms in rural areas. The statistics for the few farms in urban areas are included in Volume II but are not shown separately. Only about 1.6 percent of total occupied farm dwelling units in the United States are located in urban areas.

In rural areas, the determination of farm residence was made on the basis of the respondent's answer to the question, "Is this house on a farm (or ranch)?" A dwelling unit located on land considered farm land by the respondent, but for which the occupants paid

cash rent for the house and yard only, is classified as nonfarm, regardless of the answer to the above question. Similarly, dwelling units in institutions, summer camps, motels, and tourist courts always are classified as nonfarm residences.

Farm residence is therefore determined without regard to the occupation of the members of the household. The classification depends upon the respondent's conception of what is meant by the word "farm," and consequently reflects local usage rather than the uniform application of an objective definition. For this reason, there is considerable variability of response among families living in areas where farm operation is part time or incidental to other activities.

In the 1950 Census of Housing, as in 1940 and earlier, farm housing was defined to include all housing on farms. In censuses prior to 1950, however, there was no specific exclusion of dwelling units for which cash rent was paid for the house and yard only, nor of institutions, summer camps, and tourist courts. Moreover, in the 1950 Census, but not in earlier censuses, the enumerators in rural areas were specifically instructed to base the farm-nonfarm classification on the respondent's answer to the question, "Is this house on a farm?" For the United States as a whole, there is evidence from the Bureau of the Census Current Population Survey that the farm population in 1950 would have been somewhat larger and, of course, would have resulted in a larger number of farm dwelling units, had the 1940 procedure been used. However, the change in procedure accounts for only a small part of the indicated decline in the total amount of farm housing over the decade.

### ECONOMIC SUBREGIONS

Economic subregions represent a new area concept developed by the Bureau of the Census in cooperation with the Bureau of Agricultural Economics and several State and private organizations. The economic subregions usually are combinations of two or more groups of relatively homogeneous counties. These smaller groups of counties, or State economic areas, are subdivisions of States; but the economic subregions cut across State lines. These subregions preserve to a great extent the homogeneous character of the State economic areas.

The establishment of State economic areas and economic subregions is a result of the demand from users of census and other types of data for the delineation of areas which have greater uniformity in physical, economic, and social characteristics than States. Demographic, climatic, physiographic, and cultural factors, as well as industrial and commercial activities relating to the production and exchange of agricultural and nonagricultural goods, were taken into consideration in establishing the State economic areas and in the combination of these areas into economic subregions.

The economic subregions may be used for a variety of studies in which State data are neither sufficiently refined nor homogeneous and in which the manipulation of county data presents real difficulty. Where no recognition of State boundaries is needed, economic subregions may be adapted to analyses of the geographic distribution of population and housing characteristics within the country as a whole. These economic subregions provide a larger number of areas than is possible with the use of States and permit greater flexibility in showing geographic distributions.

### DWELLING UNIT

In general, a dwelling unit is a group of rooms or a single room occupied or intended for occupancy as separate living quarters by a family or other group of persons living together or by a person living alone.

Ordinarily, a dwelling unit is a house, an apartment, or a flat. A dwelling unit may be located in a structure devoted to business or other nonresidential use, such as quarters in a warehouse where the

watchman lives or a merchant's quarters in back of his shop. Trailers, boats, tents, and railroad cars, when occupied as living quarters, are included in the dwelling unit inventory.

A group of rooms, occupied or intended for occupancy as separate living quarters, is a dwelling unit if it has separate cooking equipment or a separate entrance. A single room, occupied or intended for occupancy as separate living quarters, is a dwelling unit if it has separate cooking equipment or if it constitutes the only living quarters in the structure. Each apartment in a regular apartment house is a dwelling unit even though it may not have separate cooking equipment. Apartments in residential hotels are dwelling units if they have separate cooking equipment or consist of two rooms or more.

The basis for the 1950 definition is the concept of "separateness" and "self-containment," and the criteria include qualifications relating both to physical space and its use by the occupants. There is no problem in identifying as a separate dwelling unit a whole house which is occupied by only one family or a person living alone. Objective criteria were developed for identifying separate quarters in structures occupied by more than one family or other group of persons living together; field tests in such structures disclosed that the one characteristic most often associated with separate living arrangements was the presence of "separate cooking equipment." This criterion, therefore, formed the nucleus for the 1950 definition. The criteria "group of rooms with separate entrance" and "each apartment in a regular apartment house" were added to the definition to bring into the dwelling unit inventory other types of living quarters whose occupants maintained separate living arrangements; even though the occupants shared or lacked cooking equipment, it was felt that their quarters were sufficiently separate and self-contained to be considered separate dwelling units. By these criteria, therefore, individual sleeping rooms were not identified as separate dwelling units.

Living quarters of the following types are not included in the dwelling unit inventory: rooming houses with five lodgers or more, transient accommodations (tourist courts, hotels, etc., predominantly for transients), and barracks for workers (railroad, construction, etc.). Living quarters in institutions (for delinquent or dependent children, for handicapped persons, for the aged, for prisoners, etc.), general hospitals, and military installations are likewise excluded from the dwelling unit inventory except for dwelling units in buildings containing only family quarters for staff members. According to the results of the 1950 Census of Population, about 5,700,000 people, or 3.8 percent of the total population, lived in rooming houses, institutions, transient accommodations, and other quarters not defined as dwelling units.

The count of dwelling units in the 1950 Census may be considered comparable with the count in the 1940 Census, although the dwelling unit definitions differed. The purpose of revising the 1940 definition was to keep the same general concept but make it more objective and thereby yield more uniform results in a large-scale enumeration. In the 1940 Census, a dwelling unit was defined as the living quarters occupied, or intended for occupancy, by one household. A household consisted of a family or other group of persons living together with common

housekeeping arrangements, or a person living entirely alone. The enumerator was not explicitly instructed to define living quarters as dwelling units on the basis of cooking equipment or separate entrance. Further, in 1940, living quarters with five lodgers or more were tabulated as dwelling units, whereas in 1950 such living quarters were not included in the dwelling unit count. Even though some living quarters which were classified as separate dwelling units by one definition would not have been separate dwelling units by the other definition, the over-all effect of the differences is believed to be small for a county, or larger area, particularly for rural-farm housing.

#### OCCUPANCY CHARACTERISTICS

Occupied dwelling units.--A dwelling unit is occupied if a person or group of persons was living in it at the time of enumeration or if the occupants were only temporarily absent, as for example, on vacation. However, a dwelling unit occupied at the time of enumeration by nonresidents is not classified as occupied but as a "nonresident" dwelling unit.

Occupied dwelling units and households.--A household consists of those persons who live in a dwelling unit; by definition, therefore, the count of occupied dwelling units is the same as the count of households. However, there may be small differences between these counts in the Housing and the Population reports because the data were processed independently.

Tenure.--The census enumerator was instructed to classify all occupied dwelling units as "occupied by owner," "occupied by renter," or "occupied rent-free." A dwelling unit was "occupied by owner" if the owner was one of the persons living in the unit, even if the dwelling unit was not fully paid for or had a mortgage on it. If the owner of the unit was a member of the household but was temporarily away from home, as in the case of military service or temporary employment away from home, the unit still was classified as "occupied by owner."

A dwelling unit was classified as "occupied by renter" if any money rent was paid. For renter-occupied units on farms this rent would normally be included as part of the rent paid for the farm. However, if cash rent was paid for the house and yard only, the dwelling unit was classified as nonfarm.

The enumerator was to classify as "occupied rent-free" those units which were not occupied by the owner and for which no money rent payment was made. Such units on farms are usually part of an arrangement whereby services or goods are given in exchange for the rent-free occupancy. For example, a farm worker who received use of a dwelling unit as a part of his salary occupied the unit rent-free. A farmer who is a share tenant (one who pays his rent in kind) or a share cropper (one who is paid in kind for operating the farm) should have been reported as occupying the unit rent-free.

From a comparison of the statistics in this volume with those obtained in the 1950 Census of Agriculture, it is evident that many of the share tenant farmers were reported as renters. Such misinterpretation is more significant in areas where a

single cash crop predominates. Thus the statistics for rent-free units represent only a part of the units that should have been reported as such had the term "occupied by renter" been interpreted to include only units for which cash rent was paid; conversely, the renter group includes a number of units for which no cash rent was paid. As now presented, the rent-free units are primarily units furnished as a perquisite or units occupied by families related to the operator.

In Volumes I, II, and III, the units enumerated as "occupied by owner" are reported as "owner-occupied." In this volume, units enumerated as "occupied by renter" are reported as "renter" and units enumerated as "occupied rent-free" are reported as "rent-free." Both groups are reported as "renter-occupied" in Volumes I and II.

Color of occupants.--Occupied dwelling units are classified by the color of the head of the household according to the definition used in the 1950 Census of Population. The term "color" refers to the division of households into two groups, white and nonwhite. The group designated as "nonwhite" consists of Negroes, Indians, Japanese, Chinese, and other nonwhite races. The head of a household of Mexican ancestry or birth, who is not Indian or of another nonwhite race, was classified as white. A head of mixed white and nonwhite parentage was classified as nonwhite.

Number of persons.--All persons enumerated in the Population Census as members of the household were counted in determining the number of persons who live in the dwelling unit. Lodgers, foster children, wards, and resident employees who share the living quarters of the household head are included in the household in addition to family members.

The median number of persons for occupied dwelling units is the theoretical value which divides the dwelling units equally, one-half having more persons and one-half having fewer persons than the median. In the computation of the median, a continuous distribution was assumed. For example, when the median was in the 3-person group, the lower and upper limits of the group were assumed to be 2.5 and 3.5, respectively.

Persons per room.--The number of persons per room was computed by dividing the number of persons by the number of rooms in the dwelling unit. The ratio was computed separately for each occupied dwelling unit.

#### STRUCTURAL CHARACTERISTICS

Number of rooms.--All rooms which are used, or are suitable for use, as living quarters were counted in determining the number of rooms in the dwelling unit. Included are kitchens, bedrooms, dining rooms, living rooms, and permanently enclosed sunporches of substantial size; finished basement or attic rooms, recreation rooms, or other rooms used or suitable for use as living quarters; and rooms used for office purposes by a person living in the dwelling unit. A kitchenette or "half-room" which is partitioned off from floor to ceiling was counted as a separate room, but a combined kitchenette and dinette separated only by shelves or cabinets was counted as only one room. Not counted as rooms were



bathrooms, strip or pullman kitchens, halls or foyers, alcoves, pantries, laundries, closets or storage space, unused basement or attic rooms not suitable for living quarters, and rooms subleased for office or business purposes by a person or persons not living in the dwelling unit.

Year built.--The year the structure was built refers to the year in which the original construction was completed, not to the year in which any later remodeling, addition, reconstruction, or conversion may have taken place. "Year built" statistics are based on dwelling units classified by the date of the original construction of the structure in which they are located. The figures do not represent the number of dwelling units added to the inventory during a given period. They represent the number of units constructed during a given period plus the number created by conversions in structures originally built during the same period, minus the number destroyed in structures built during the period. Losses occur through demolition, fire, flood, disaster, and conversion to nonresidential use or to fewer dwelling units.

Data on year built are subject to some inaccuracy because of errors of response and nonreporting. In most cases, the information is based not on records but on the respondent's knowledge of the facts and his ability to remember the year of construction.

#### CONDITION AND PLUMBING FACILITIES

Condition and plumbing facilities and kitchen sink as a combined item.--Both the structural condition of a dwelling unit and the type of plumbing facilities are considered measures of the quality of housing. In rural-farm housing the existence of a kitchen sink is also considered a measure of quality. Such comprehensive categories provide a more feasible means of evaluating quality than is possible by the use of the individual items. These items have been combined into categories representing various levels of housing quality, as measured by these characteristics. The last category in both the not dilapidated and dilapidated groups, "No running water, with kitchen sink," implies an additional category, those units having no running water and no kitchen sink. However, the difference between the total number of units having running water and those having kitchen sink includes the relatively small number of units not reporting on kitchen sink. The statistics on the combination of condition and plumbing facilities are limited to dwelling units for which reports were made on all of these items.

In 1940, data for state of repair (condition) and plumbing facilities were presented in combination. Because of differences in the enumeration of condition and water supply, these data are not comparable with the 1950 data.

Condition.--To measure condition, dwelling units were classified as "not dilapidated" or "dilapidated." A dwelling unit was reported as dilapidated when it had serious deficiencies, was rundown or neglected, or was of inadequate original construction, so that it did not provide adequate shelter or protection against the elements or endangered the safety of the occupants. A dwelling unit was reported as dilapidated if, because of either deterioration or inadequate original construc-

tion, it was below the generally accepted minimum standard for housing and should be torn down or extensively repaired or rebuilt.

The enumerator determined the condition of the dwelling unit on the basis of his own observation. He was instructed to appraise the condition of units uniformly, regardless of neighborhood or race of occupant. The enumerator was provided with detailed written instructions and with pictures illustrating the concepts "deterioration" and "inadequate original construction." In addition, a film strip accompanied by a recorded narrative was shown the enumerator. Photographs of houses and parts of houses depicted various levels of deterioration or inadequate construction, while the narrative informed the enumerator as to which were to be classified as "dilapidated" or "not dilapidated."

The types of deficiencies used in determining condition relate to weather tightness, extent of disrepair, hazards to safety, and inadequate or makeshift construction. Deficiencies which could be revealed only by an engineering survey, or such deficiencies as inadequate light or ventilation, or the presence of dampness or infestation, were not included among the criteria for determining condition of a dwelling unit.

Specifically, a dwelling unit was to be reported as dilapidated if--

1. It had one or more critical deficiencies, as for example--

a. Holes, open cracks, rotted, loose, or missing materials over a considerable area of the foundation, outside walls, roof, or inside walls, floors, or ceilings.

b. Substantial sagging of floors, walls, or roof.

c. Extensive damage by storm, flood, or fire;

or

2. It had a combination of minor deficiencies which were present in sufficient number and extent to give evidence that the unit did not provide adequate shelter or protection against the elements or was physically unsafe. Examples of these deficiencies are--

a. Holes, open cracks, rotted, loose, or missing materials over a small area.

b. Shaky or unsafe porch, steps, or railings.

c. Broken or missing window panes.

d. Rotted or loose window frames which are no longer rainproof or windproof.

e. Damaged, unsafe, or makeshift chimney.

f. Broken, loose, or missing inside stair treads or risers, balusters, or railings.

g. Deep wear on doorsills, doorframes, outside or inside steps, or floors;

or

3. It was of inadequate original construction. Examples of inadequate original construction are--

a. Makeshift walls.

b. Lack of foundation.

c. Dirt floors.

d. Inadequately converted cellars, garages, barns, and similar places.



Although the enumerator was provided with detailed oral and written instructions and with visual aids, it was not possible to eliminate completely the element of judgment in the enumeration of this item. There is evidence that some enumerators obtained too large or too small a count of dilapidated units. Consequently, data on condition for small areas, which depend on the work of one or two enumerators, are subject to a wider margin of error than is to be expected for larger areas, where the data represent the returns made by several enumerators.

In the 1940 Census, "dilapidation" was not enumerated; the concept "needing major repairs" was used to provide information about the condition of housing. A dwelling unit was classified as "needing major repairs" when parts of the structure such as floors, roof, plaster, walls, or foundation required major repairs or replacements. A repair was "major" when its continued neglect would have seriously impaired the soundness of the structure and created a safety hazard to the residents. The training program for this item in 1940 did not provide any visual aids or detailed oral and written instructions.

The 1940 Census concept of "major repairs" was replaced by the concept of "dilapidation" for the 1950 Census at the recommendation of a Federal interagency committee on housing adequacy. After a lengthy investigation including field tests of several concepts, the committee reported that "major repairs" was not always a reliable index of housing quality. There was evidence that the enumerator tended to use the cost of the repair in judging between major and minor repairs. Further, "major repairs" measures only the condition of the structure, not the structural level nor the ability of the house to provide adequate shelter. For example, a new house, constructed so that it does not provide adequate protection against the elements, might not technically be in need of "major repairs." Likewise, a unit might have a number of minor deficiencies, none of which technically constitutes a "major repair," but which, when combined, indicate that the unit was inadequate. The committee recommended that the level of quality to be measured, fundamentally, was whether or not the dwelling unit was capable of providing adequate shelter or protection against the elements, and sufficient safeguards for the safety of the occupants. The committee concluded that the term "dilapidated" most accurately described the concept it had recommended for measurement.

No reliable data have been obtained to compare the relationship between the "major repairs" category and the "dilapidated" category. However, it is the opinion of a number of qualified housing economists that if the two definitions were applied in the same census, the count of "dilapidated" units would be smaller than the count of units "needing major repairs." The two terms differ significantly, and the 1940 and 1950 results on condition are not comparable.

Plumbing facilities. -- Dwelling units "with private toilet and bath" include those units with both a flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the unit. Those units in which the use of these facilities is shared with occupants of another unit

in the same structure are reported as lacking the facility.

The "with running water" group includes those dwelling units having, inside the structure, piped running water from a pressure or gravity system. The "no running water" group includes dwelling units for which the only source of water supply is a hand pump, a well or stream, or any source other than piped running water inside the structure. Dwelling units in the classification "Dilapidated; with running water, lacking private toilet or bath" include an insignificant number of units which have a private toilet and bath but only cold running water.

A dwelling unit is counted as having hot piped running water whether it is available the year round or only part of the time. For example, hot running water may be available only during the heating season or at various times during the week.

The 1950 data on running water were collected in terms of location inside or outside the structure, whereas the 1940 data distinguished between location inside or outside the dwelling unit. However, the 1950 count of units with "running water inside the structure" is comparable with the 1940 count of units with "running water in dwelling unit" insofar as the number of units with running water outside the unit but inside the structure is small, particularly for rural-farm housing.

#### EQUIPMENT AND FUELS

Electric lighting. -- A dwelling unit is reported as "with electric lights" if it is wired for electric lights, even though service may have been temporarily suspended at the time of enumeration.

Heating equipment. -- Heating equipment represents the equipment available for heating the dwelling unit during the winter months. A usable heating system or furnace was reported, even though it may have been temporarily out of order or not in operation at the time of enumeration.

Central heating equipment comprises the categories "Piped steam or hot water" and "Warm air furnace." Other means of heating, with or without flue, are considered to be noncentral heating.

The number of units with central heating equipment is considerably larger than the number of central heating installations. The majority of multi-unit structures have only one central heating system to service all of the units in the structure.

"Piped steam or hot water" includes radiant, panel, and baseboard heating systems, and radiation. "Warm air furnace" includes piped and pipeless warm air furnaces, as well as floor and wall furnaces. "Noncentral heating, with flue" includes fireplaces and flue-connected heating stoves. A flue is a pipe or enclosed passage, either connected to a chimney or leading directly to the outside of the structure, which carries the smoke or fumes to the outside. All other types of heating equipment such as electric heaters and portable kerosene heaters are included in the category "Noncentral heating, without flue." Stoves and ranges used primarily for cooking were enumerated as heating equipment when they were also the major source of heating.

The 1950 data on heating equipment may be compared with the 1940 data when certain combinations are made. The 1950 category "Warm air furnace" is comparable with the combination of the 1940 groups "Piped warm air system" and "Pipeless warm air furnace." The 1950 classification combining "Noncentral heating, with flue" and "Noncentral heating, without flue" is roughly comparable with "Without central heating" in 1940.

Heating fuel.--Where more than one heating fuel was used in a dwelling unit, the fuel used most for heating was reported. Statistics for heating fuel are presented separately for units with central heating and units with noncentral heating.

The category "Coal" includes coke. "Utility gas" is piped into the dwelling unit from mains from a central system, which is usually owned and operated by a public utility company or by a local government; it may be either manufactured or natural. "Bottled gas," generally known by a trade name, is supplied to the consumer in containers (bottles or tanks) which are replaced or refilled as needed. "Liquid fuel" includes fuel oil, furnace oil, distillate oil, kerosene, coal oil, stove oil, range oil, lamp oil, gasoline, and alcohol.

For the most part, the 1950 data on heating fuel may be compared with the 1940 data when certain combinations are made. The 1950 classification combining "Utility gas" and "Bottled gas" is comparable with the 1940 category "Gas." The 1950 category "Liquid fuel" is roughly comparable with the combination of the 1940 categories "Fuel oil" and "Kerosene or gasoline."

Cooking fuel.--The fuel used most for cooking was reported. Where the fuel used most was not readily ascertainable for combination stoves, the fuel reported was the one appearing first in the listing of fuels on the schedule and in the table. The categories of data on cooking fuel are essentially the same as those on heating fuel, except that utility gas, bottled gas, and electricity are each shown separately. In heating fuel, electricity is included in the category "Other fuel."

For both cooking fuel and heating fuel, the 1950 Census figures represent the number of households using a particular fuel as the principal fuel for cooking or heating. The data, therefore, are not comparable with reports by utility companies on the number of residential customers for that fuel. Generally, utility company data are based on a count of meters or the number of bills rendered. Several households which are served by one meter are counted as one customer by the utility companies but as several dwelling units by the Bureau of the Census. On the other hand, the utility companies report each customer regardless of the amount of fuel used, or its purpose (cooking, heating, or for hot water), while the Bureau reports only the principal fuel used for cooking or heating.

Kitchen sink.--A dwelling unit is reported as "with kitchen sink" if a sink, located within the structure and with a drainpipe leading to the outside, is available for use by the occupants of the unit. The sink need not have running water piped to it.

Usually, the sink is located in the kitchen, but a sink located in a hall, pantry, enclosed porch, or

room adjacent to the kitchen, if used in the washing of dishes or cooking utensils, is considered a "kitchen sink." However, a sink located on an open porch, or a washbowl, basin, or lavatory located in a bathroom or bedroom is not a "kitchen sink."

## HOUSEHOLD CHARACTERISTICS

Household.--A household consists of all persons who occupy a dwelling unit. Included are the related family members and also the unrelated persons, if any, such as lodgers, maids, or hired hands, who share the dwelling unit. A person living alone in a dwelling unit, or a group of unrelated persons sharing a dwelling unit as partners, is considered a household. The data on households in this volume are expressed in terms of occupied dwelling units.

Each household consists of a primary family, or a primary individual, and nonrelatives, if any. Despite minor differences between the criteria used in 1950 and 1940 to identify a household, the number of occupied dwelling units (households) as shown in this volume may be regarded as comparable with the number of "private households" shown in the population reports published by the Bureau of the Census on the basis of the 1940 Census.

Primary family.--A primary family consists of the household head and all persons in the household related to him by blood, marriage, or adoption.

Primary individual.--A household head living alone or with nonrelatives only is a primary individual. He is not regarded as a family. In 1940 the term "family" included both "primary family" and "primary individual."

Head of household.--One person in each household is designated as "head." He is usually the person regarded as the head by the members of the household. Married women are not classified as heads if their husbands were living with them at the time of the census.

Sex and age of head.--The category "Male head, wife present, no nonrelatives" is identical with "Husband-wife families, no nonrelatives" in the tabulations by type of household. A household was included in these two identical classifications if both the husband and wife were reported as members of the household even though one or the other may have been temporarily absent on business or vacation, visiting, in a hospital, etc., at the time of the enumeration. From the viewpoint of housing analysis, this group is the most important since about 80 percent of the occupied dwelling units contain this type of family. The category "Other male head" includes those dwelling units occupied by households with male heads, wife present, with nonrelatives living with them; male heads who are married, but with wife absent because of separation, divorce, or other reasons, where husband and wife maintain separate residences for several months or more; and male heads who are widowed or single. Dwelling units occupied by households with a "female head" comprise all the units in which there are female heads of households regardless of the marital status of the head. The age classification is based on the age of the head as of his last birthday.

Type of household.--Each household in the group "Husband-wife families, no nonrelatives" consists of the head, his wife, and other persons, if any, who are related to him. The classification "Other family groups, no nonrelatives" consists of the head without a spouse, and one or more persons related to the head. A person who occupies a dwelling unit alone constitutes a "1-person household." All households containing one or more nonrelatives are included in the group "Households with nonrelatives."

A nonrelative is a lodger, partner, foster child, ward, resident employee, or other household member who is not related to the head.

Income in 1949.--Income is the sum of all money received by the primary family or primary individual, less losses, from the following sources: wages or salary; net income (or loss) from the operation of a farm, ranch, business, or profession; net income (or loss) from rents, or receipts from roomers or boarders; royalties; interest, dividends, and periodic income from estates and trust funds; pensions; veterans' payments, armed-forces allotments for dependents, and other governmental payments or assistance; and other income such as contributions for support from persons who are not members of the household, alimony, and periodic receipts from insurance policies or annuities. The figures in this volume represent the amount of income received before deductions for personal income taxes, social security, bond purchases, union dues, etc.

Receipts from the following sources were not included as income: money received from the sale of property unless the recipient was engaged in the business of selling such property; the value of income "in kind," such as food produced and consumed in the home, or free living quarters; withdrawals of bank deposits; money borrowed; tax refunds; gifts; and lump-sum inheritances or insurance payments.

Since the unit of tabulation in this volume is an occupied dwelling unit, statistics on family income relate to the income of the primary family occupying that dwelling unit; that is, the sum of the income of the head of the primary family and all persons in the household related to the head; or simply the income of the primary individual where no related persons occupy the unit. Incomes of persons living in the unit but not related to the head of the household are not included in this sum.

Farmers typically receive an important part of their income in the form of goods produced and consumed on the farm rather than in money. Since the value of income "in kind" was not included as income, this factor should be taken into consideration in comparing the income of farm and nonfarm residents.

One of the factors which accounts for the higher incomes of urban families and individuals as compared with rural-farm families and individuals is the higher pay-and-price levels of the urban areas. Also, the paid employment of more than one family member is common in families living in urban and rural-nonfarm housing, whereas all members of the rural-farm family may contribute their services to the farm operation without pay, and may not receive cash income from other sources.

The figures in all field surveys of income are subject to errors of response and nonreporting. In most cases the schedule entries for income are based not on records but on memory, usually that of the housewife. The memory factor in data derived from field surveys of income probably produces underestimates, because the tendency is to forget minor or irregular sources of income. Other errors of reporting are due to misrepresentation or misunderstanding of the income questions.

A possible source of understatement in the figures on family income was the assumption that there was no other income in the family when only the head's income was reported. It is estimated that this editing assumption was made for about 5 percent of the families. This procedure was adopted in order to make maximum use of the information obtained. In the large majority of the fully-reported cases, the head's income constituted all or most of the total family income.

The data on family income contained in this volume cannot be compared with data from the 1940 Census. In 1940 information was collected only on the amount of wage and salary income of each private family. If more than \$50, the receipt, but not the amount, of income from other sources was reported.

The income data in this volume also differ from income data in the 1950 reports, Population Volumes II and III, which show distributions of income for families and unrelated individuals. "Families" and "unrelated individuals" as used in those volumes refer to both primary and secondary families and primary and secondary individuals.

## RELIABILITY OF DATA

### CONSISTENCY

Because of the methods by which the data were compiled, cells within a table may not add to the total for a category, and corresponding statistics may not agree precisely from one table to another. The differences generally will be small and should not affect the validity of the cross-classifications. Furthermore, where a column total is relatively small, there may be no figures in the distribution for those characteristics enumerated as housing sample items.

There are variations also between the figures in this report and those for corresponding subjects in Volume I (H-A bulletins). The two sets of data were prepared from separate tabulations and processing differences were not adjusted. Furthermore, the figures in this report were obtained from representative samples of dwelling units and therefore differences from complete counts may be expected because of sampling variability. In Volume I, figures for all subjects except year built and equipment and fuels were obtained from complete counts of dwelling units.

Figures in this report may not be identical with those for corresponding items in Population Volume II. Comparability is limited because of differences in the unit of reporting, the method of tabulating, and sampling.

SAMPLE DESIGN

For most of the statistics a sample of approximately 20 percent of the occupied dwelling units was used. However, information for part of the items is based on reports from about 4 percent of the occupied dwelling units.

The statistics which are based on a 20-percent sample were obtained by tabulating data for all dwelling units for which the head of the household was enumerated on a sample line of the population schedule. A separate line was provided on the population schedule for each person enumerated, with every fifth line designated as a sample line.

Information on year built, electric lighting, kitchen sink, heating equipment, and heating and cooking fuel was requested for about one-fifth of the dwelling units. Consequently, statistics for each of these items are available for only about one-fifth of the 20-percent sample of occupied

dwelling units, or about 4 percent of the total occupied units. In table 4, number of rooms also was tabulated for a 4-percent sample of dwelling units.

Estimates based on the 20-percent sample were obtained by multiplying by five the number of dwelling units in the sample having the specified characteristic. Estimates based on the 4-percent samples were obtained by inflating the sample results by the factors necessary to make the total in each column agree, within rounding error, with the results of the 20-percent sample.

Although the sampling plan used did not automatically insure an exact 20-percent or 4-percent sample of dwelling units, due to the presence of blank or voided lines, special entries, etc., the sampling plan was unbiased and the deviation from 20 percent or 4 percent in any economic sub-region was expected to be quite small. However, biases due to processing errors tended to have a slight downward effect on the size of the sample. A 1½-percent shortage in the number of household heads enumerated on population schedule sample lines for the United States as a whole constituted a further slight bias. These biases have relatively little effect on the distributions, although they result in the number of dwelling units in most categories and areas being slightly understated.

Table A.--STANDARD ERROR OF ESTIMATED NUMBER: 1950  
(Range of 2 chances out of 3)

Estimated number	Standard error of estimate based on 20-percent sample	Standard error of estimate based on 4-percent sample if total number of dwelling units in column is: <sup>1</sup>								
		500	1,000	2,500	5,000	10,000	50,000	100,000	1,000,000	6,000,000
50.....	10	30	30	30	40	40	40	40	40	40
100.....	20	40	50	50	50	50	50	50	50	50
250.....	30	60	70	70	80	80	80	80	80	80
500.....	50	40	80	100	110	110	110	110	110	110
1,000.....	70	...	60	130	140	150	150	150	150	150
2,500.....	100	...	...	100	190	220	240	240	240	240
5,000.....	150	...	...	...	140	260	330	340	350	350
7,500.....	180	...	...	...	...	260	400	410	420	420
10,000.....	210	...	...	...	...	200	450	470	490	490
25,000.....	330	...	...	...	...	...	590	690	760	780
50,000.....	460	...	...	...	...	...	450	840	1,070	1,090
75,000.....	570	...	...	...	...	...	...	820	1,300	1,340
100,000.....	650	...	...	...	...	...	...	630	1,480	1,540
125,000.....	730	...	...	...	...	...	...	...	1,640	1,720
150,000.....	800	...	...	...	...	...	...	...	1,780	1,880
200,000.....	930	...	...	...	...	...	...	...	2,000	2,160
500,000.....	1,460	...	...	...	...	...	...	...	2,650	3,350
1,000,000.....	2,070	...	...	...	...	...	...	...	2,000	4,540
2,500,000.....	3,270	...	...	...	...	...	...	...	...	6,250
5,000,000.....	4,620	...	...	...	...	...	...	...	...	6,060

<sup>1</sup> For estimates based on the 4-percent sample in which the estimate is 50 percent or more of the column total, a closer approximation of the standard error may be obtained by using  $x \sqrt{\frac{24}{x} - \frac{20}{y}}$  where x is the size of the estimate and y is the total number of dwelling units in the column. For example, the approximation provided by the above formula of the standard error of an estimate of 6,000 (x) in a column whose total number of dwelling units is 8,000 (y) is 230.

## SAMPLING VARIABILITY

Since the data are based on samples, they are subject to sampling variability which can be determined from the standard errors shown in tables A and B. These tables do not reflect the effects of the biases mentioned above. Table A presents the approximate standard errors of sample estimates of selected sizes. Table B shows the approximate standard errors of percentages when computed by using data from this report for both numerator and denominator. Linear interpolation will provide reasonably accurate results.

The standard error is a measure of sampling variability. The chances are about 2 out of 3 that the difference due to sampling variability between an estimate and the figure that would have been obtained from a complete count of the dwelling units is less than the standard error. The amount by which the standard error must be multiplied to obtain other odds deemed more appropriate can be found in most statistical textbooks. For example, the chances are about 19 out of 20 that the difference is less than twice the standard error, and 99 out of 100 that it is less than  $2\frac{1}{2}$  times the standard error.

Illustration: Let us assume that, for an economic subregion, table 1 shows that there were an estimated 1,000 rural-farm owner-occupied dwelling units with 5 and 6 rooms containing 3 persons (25 percent of the 4,000 owner-occupied dwelling units with 5 and 6 rooms). The table 1 headnote indicates that this estimate is based on the 20-percent sample. Table A shows that for items based on the 20-percent sample the standard error of an estimate of 1,000 is about 70. Consequently, the chances are about 2 out of 3 that the figure which would have been obtained from a complete count of the owner-occupied dwelling units with 5 and 6 rooms containing 3 persons differs by less than 70 from the sample estimate. It also follows that there is only about 1 chance in 100 that a complete census result would differ by as much as 180, that is, by about  $2\frac{1}{2}$  times the number given in the table. Table B shows (by linear interpolation) that, for items based on the 20-percent sample, the standard error of the 25 percent on a base of 4,000 is about 1.7 percent. To obtain the standard error on year built for the owner-occupied dwelling units with 5 and 6 rooms, which is a 4-percent sample item in table 1, linear interpolation would be used to derive the column for 4,000 in the 4-percent sample section of table A.

The standard errors shown in tables A and B are not directly applicable to differences between two sample estimates. If the difference is one between the total of a group and part of the same group, tables A and B can be used directly with the difference considered as a sample estimate. In other cases, the standard error of a difference will be approximately the square root of the sum of the squares of each standard error considered separately. This formula will represent the actual standard error quite accurately for the difference between estimates of the same characteristic in two different areas or for the difference between separate and uncorrelated characteristics in the same area, although it is only a rough approximation in most other cases.

Some of the tables present estimates of the median number of persons as well as the corresponding distributions. The sampling variability of estimates of medians depends on the distribution upon which the medians are based.<sup>1</sup>

The smaller figures and small differences between figures should be used with particular care because they are subject to larger relative error arising from processing and enumeration bias and larger relative sampling variability. These smaller figures have been included in the tables to permit analysis of broader groups with smaller relative bias and sampling variability.

## RATIO ESTIMATES

It is possible to make an improved estimate of an absolute number (improved in the sense that the standard error is smaller) whenever the class in question forms a part of a larger group for which both a sample estimate and a complete count are available. This alternative estimate is particularly useful when the characteristic being estimated is a substantial part of the larger group; when the proportion is small, the improvement will be relatively minor. The improved estimate (usually referred to as a ratio estimate) may be obtained by multiplying the estimate shown in this report by the ratio of the complete count of the larger group to the sample estimate of this larger group. Complete counts for many of the items can be derived from Volume I of the Housing reports. However, to obtain comparable data for economic subregions from Volume I, data for rural-farm units in the constituent counties must be added together. Ratio estimates may be applied to statistics based either on the 20-percent or on the 4-percent samples. The effect of using ratio estimates of this type is, in general, to reduce the relative sampling variability from that indicated for an estimate of a given size in table A to that shown for the corresponding percentage in table B, or less. Estimates of these types are not published in this report.

<sup>1</sup> The standard error of a median based on the 20-percent sample may be estimated as follows: If the estimated total number reporting the characteristics is  $N$ , compute the number  $N/2 - \sqrt{N}$ . Cumulate the frequencies in the table until the class interval which contains this number is located. By linear interpolation, obtain the value below which  $N/2 - \sqrt{N}$  cases lie. In a similar manner, obtain the value below which  $N/2 + \sqrt{N}$  cases lie. If information on the characteristic had been obtained from a complete count of dwelling units, the chances are about 2 out of 3 that the median would lie between these two values. The chances are about 19 out of 20 that the median would be in the interval computed similarly but using  $N/2 + 2\sqrt{N}$  and about 99 out of 100 that it would be in the interval obtained by using  $N/2 + 2.5\sqrt{N}$ . For a median based on a 4-percent sample, the chances are about 2 out of 3 that it would lie between the two values  $N/2 + 2.4\sqrt{N}$ , and about 19 out of 20 that it would lie between the values  $N/2 + 2(2.4)\sqrt{N}$ .

Table B.--STANDARD ERROR OF ESTIMATED PERCENTAGE: 1950

(Range of 2 chances out of 3)

Estimated percentage	Base of percentage							
	500	1,000	5,000	10,000	50,000	100,000	500,000	6,000,000
Estimates based on 20-percent sample:								
2 or 98.....	1.0	0.9	0.4	0.3	0.1	0.1	0.0	0.0
5 or 95.....	2.0	1.4	0.6	0.4	0.2	0.1	0.1	0.0
10 or 90.....	2.7	2.0	0.9	0.6	0.3	0.2	0.1	0.0
25 or 75.....	4.0	2.8	1.3	0.9	0.4	0.3	0.1	0.0
50.....	4.6	3.3	1.5	1.0	0.5	0.3	0.1	0.0
Estimates based on 4-percent sample:								
2 or 98.....	3.0	2.2	1.0	0.7	0.3	0.2	0.1	0.0
5 or 95.....	4.8	3.4	1.5	1.1	0.5	0.3	0.2	0.0
10 or 90.....	6.6	4.6	2.1	1.5	0.7	0.5	0.2	0.1
25 or 75.....	9.4	6.7	3.0	2.1	0.9	0.7	0.3	0.1
50.....	11.0	7.7	3.5	2.4	1.1	0.8	0.3	0.1