COMMON BELIEFS ABOUT THE RURAL ELDERLY: MYTH OR FACT?

A STAFF REPORT

TO THE

SPECIAL COMMITTEE ON AGING UNITED STATES SENATE



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PREFACE

Although policymakers rely on statistics in forming their legislative agendas, it is often difficult to translate detailed, sometimes contradictory national statistics into focused knowledge which is relevant for public policymaking.

Last year the Special Committee on Aging met with the Federal Interagency Forum on Aging Related Statistics to discuss how best to address this dilemma. The result was a report which focuses on some of the most disadvantaged of our elderly population, the rural elderly. This report identifies common beliefs about rural persons aged 65 and over, and provides accompanying statistical information to refute or confirm these beliefs. This synthesis of data translates detailed statistics into useable knowledge which the Committee hopes will help policymakers interested in aging issues to form their legislative agendas.

The Committee wishes to recognize the contributions of the Federal Interagency Forum on Aging Related Statistics for the production of this report, and in particular the Forum's work group on older Americans in rural areas (See Appendix I), and the work group Chairman, Joan Van Nostrand. The Committee also wishes to recognize the contributions of Committee staff, including Porter Mittelman, Bonnie Hogue, Anna Kindermann, and Holly Bode.

> DAVID PRYOR, Chairman.

(V)

COMMON BELIEFS ABOUT OLDER AMERICANS IN RURAL AREAS: MYTH OR FACT?

A. CONCEPTS OF RURAL

A commonly held belief is that it is easy to measure the elderly population living in small towns and rural areas outside large cities. In fact, there is some debate over the concept of "rural" or the appropriate way to measure rural populations.

The Census Bureau and the Office of Management and Budget (OMB) define "rural" differently. According to the Census Bureau, "rural" is defined as territory outside places of 2,500 or more inhabitants, or outside an urbanized area. An urbanized area comprises one or more places and the adjacent densely settled surrounding territory that together have a minimum of 50,000 persons. OMB defines "nonmetro" areas as those outside a metro area. A metro area is a county or group of counties containing a place or urbanized area of 50,000 or more and a total population of 100,000 or more, including adjacent counties which have a high degree of economic and social integration with the central county.

The overlap of concepts of rural and nonmetro is less than one might expect. For example, while approximately two-thirds of the nonmetro population is rural, only 16 percent of the metro population is rural (see Chart 0.0). Examples of nonmetro areas near Washington, D.C., include Winchester, Virginia; Cumberland and Salisbury in Maryland; and Martinsburg, West Virginia.

The nonmetro/metro designation is mainly used in this briefing for pragmatic reasons. Most data presented are from existing national surveys of a general-purpose nature which collect data at the county level, allowing a nonmetro/metro designation to be made. Thus, it should be remembered that the use of this designation does not imply that it is the "best."

One of the most prominent characteristics of rural America is its social and economic diversity. Due to the availability of data, however, the information presented here examines differences in a summary fashion by using the nonmetro/metro dichotomy. It is important to remember the diversity of rural America that exists behind these summary figures.

For additional information regarding the metro/nonmetro distinction, refer to Charts 0.1-0.5.

B. POPULATION

It is commonly believed that elderly individuals and children comprise higher proportions of the nonmetro population than metro population, and that the proportion of elderly persons is higher in the nonmetro South than in other regions. Data reveal that elderly persons and children are proportionally more concentrated in nonmetro areas (See Chart 1.1). According to the 1990 Census, the elderly represented about 15 percent of the nonmetro population, but only 12 percent of the metro population. The proportion of elderly persons in the South, however, is not greater than in other regions (See Chart 1.2).

The 1990 Census indicates that 8.2 million elderly persons live in nonmetro areas (or 26 percent) compared with 23 million elderly residing in metro areas (See Chart 1.0). Slightly greater proportions of nonmetro elders are 75 years of age and older than elderly individuals residing in metro areas. Approximately 73 percent of males between 65 and 69 years of age are veterans, as are 46 percent of males between 70 and 74, and 21 percent of males age 75 and older (See Charts 1.3 and 1.4).

C. MINORITY POPULATION

It is commonly believed that a lower proportion of minority elderly resides in nonmetro areas than in metro areas and that minorities in nonmetro areas are more impoverished than their metro counterparts. The data support these beliefs.

In 1990 approximately one-fourth of the elderly population lived in nonmetro areas. The distribution of various race and ethnic groups, however, varied widely. For example, Asian and Pacific Islanders and Hispanics (of any race) were particularly concentrated in metro areas, whereas over half of American Indians, Eskimos, and Aleuts lived in nonmetro areas (See Chart 2.1).

Approximately 656,000 elderly persons of races other than white lived in nonmetro areas in 1990, compared with about 2.7 million residing in metro areas. Among the races other than white in nonmetro areas, over a half million were African Americans, Caribbeans of African decent and black Africans¹ (about 525,000 persons); 61,000 were American Indians, Eskimos, or Aleuts; 33,000 were Asian and Pacific Islanders; and 38,000 were persons of other races. In addition, approximately 132,000 elderly Hispanics (of any race) resided in nonmetro areas (See Chart 2.1).

Like the elderly population of all races, African American, Caribbeans of African decent and black African¹ elderly in nonmetro areas are more likely to be poor than those in metro areas. In 1990, nearly half of elderly African American, Caribbeans of African decent and black African¹ men (45 percent) and women (48 percent) had incomes below the poverty level (See Chart 2.3).

D. INCOME, POVERTY, AND EDUCATION

It is commonly believed that nonmetro elderly persons are more impoverished than their metro counterparts. In 1987, half of the nonmetro elderly population were in families that were poor or had incomes within 200 percent of the poverty line, as compared with 37 percent of their metro counterparts (See Chart 3.1). Only 18 percent of nonmetro elderly persons had high family incomes (greater than 400 percent of the poverty line), compared with 27 percent of the metro elderly population.

¹ The reported Census data includes statistics on these populations.

Among elderly veterans in 1986, 70 percent of those residing in rural areas had family incomes of less than \$20,000 in contrast to 59 percent of urban residents (See Chart 3.2).

In addition, monthly Social Security benefits in 1990 averaged \$60 lower (or \$539) for beneficiaries age 65 or older in nonmetro areas than for their metro counterparts (\$599). Benefits for men in nonmetro areas averaged \$637 while benefits for their metro counterparts averaged \$711. Benefits for women averaged \$470 for nonmetro residents compared with \$526 for metro residents (See Chart 3.3).

With respect to educational attainment of persons age 65 or older, the data reveal that the percentage who completed high school did not differ very much by metro versus nonmetro residence. More than one-third of the nonmetro elderly, however, completed less than 9 years of school as compared with approximately one-fourth of their metro counterparts. About 12 percent of metro elderly completed 4 or more years of college compared with 7 percent of nonmetro residents (See Chart 3.7).

E. HOUSING

It is commonly believed that housing for nonmetro elderly persons is lower in value and in worse condition than that for the metro elderly. In fact, nonmetro elderly individuals are more likely to own their homes than elderly persons living in metro areas, as well as to own their homes free and clear, without a mortgage. When they do own homes, nonmetro elderly persons own homes of lower value which tend to be in poorer physical condition than homes of their metro counterparts (See Chart 4.1-4.5).

F. Social Networks

Many believe that nonmetro elderly persons benefit from a closely knit community, have a better social support network, and are more involved in church than their metro counterparts. While there is little evidence that the nonmetro elderly have a more closely knit community than their metro counterparts, their social support network may be a little larger.

Approximately two-thirds of elderly persons; both nonmetro and metro residents, live in family settings while one-third live alone (See Chart 5.1). One-half of both groups participate in outside activities weekly, although nonmetro elderly persons are more likely to attend weekly religious services (See Chart 5.2).

While three-fourths of both metro and nonmetro elderly individuals have a social network of friends and family to talk with or call on for help, nonmetro elders have a larger network of friends (See Charts 5.3, 5.4, 5.5).

Comparable percentages of rural and urban elderly veterans receive assistance in basic activities of daily living from family and friends; however more urban elderly veterans receive this assistance from professional caregivers (See Chart 5.6).

G. Access

It is commonly believed that elderly individuals living in nonmetro areas have limited access to doctors, hospitals, or advanced medical services. The nonmetro elderly do in fact run up against a variety of barriers to accessing needed health care services. For example, there is a paucity of specialized services in nonmetro areas. To exacerbate the problem, it may be difficult for nonmetro elders to find transportation to facilities that provide these services. For specialized medical care and technology-intensive inpatient procedures, nonmetro elders must first travel to metro areas or nonmetro referral centers (See Chart 6.9).

In nonmetro areas which have a shortage of physicians and other primary care providers (See Charts 6.1, 6.2, 6.3, 6.4), elderly individuals may have to travel considerable distances for their primary care (See Chart 6.6). Once nonmetro elders are able to overcome the transportation barriers, they often encounter longer waiting times at their accustomed sites of care.

A five-state study of nonmetro versus metro hospital access for Medicare beneficiaries found that while nonmetro elders have a 14 percent higher rate of hospital admissions (See Chart 6.9), they are not hindered from receiving inpatient hospital care. Medicare enrollees in nonmetro areas had a lower rate of days of care (See Chart 6.5). Similar percentages of rural and urban elderly veterans used inpatient as well as outpatient health services in 1987 (See Charts 6.7, 6.8).

H. HEALTH

Although it is often believed that nonmetro elders are healthier and have a more active lifestyle, but tend not to take preventive health care measures, the data reveal that they are not healthier and not more active than their metro counterparts. In fact, a larger percentage of elderly persons in nonmetro areas assess their health as fair or poor (See Charts 7.1, 7.2).

There is no metro/nonmetro distinction made with respect to percentages of elderly who limit their activities due to illness (See Charts 7.3, 7.4), have high blood pressure or are overweight (See Chart 7.6). In addition, there are few differences in health behaviors of nonmetro elderly persons. For example, there is no disparity between percentages of nonmetro and metro elderly persons who smoke heavily (See Chart 7.9), drink heavily (See Chart 7.10), or eat healthful diets (See Chart 7.16).

In contrast, elderly women in nonmetro areas have higher blood pressure and are more vulnerable to dying from breast cancer because a significantly lower percentage had a clinical screening or mammogram than their metro counterparts (See Charts 7.5, 7.13, 7.14, 7.15).

The data also reveal that differences by area were not significant for the percent of minority elderly with fair or poor health or with limited activity days. True differences, however, may be masked by the small size of survey samples of minorities in nonmetro areas (See Charts 7.2 and 7.4).

I. LONG-TERM CARE

There is a common perception that nonmetro elderly individuals have a greater need for, but lower utilization of long-term care services than their metro counterparts. This perception is partially supported by data from the National Center for Health Statistics (NCHS) and the Agency for Health Care Policy and Research (AHCPR). Indicators of the need for long-term care are often measured by limitations in activities of daily living (or ADLs, such as walking, transferring in and out of bed, bathing, and dressing) and instrumental activities of daily living (or IADLs, such as cooking, housekeeping, and shopping). While there is no significant difference among metro and nonmetro elderly persons' limitations in ADLs and IADLs (See Chart 9.1), for those who have at least one of these types of difficulties, a smaller proportion of the nonmetro elderly use home health care services (See Chart 9.2).

J. HEALTH INSURANCE, EXPENDITURES, AND BENEFIT USE

It is commonly believed that nonmetro elderly persons have lower health care expenses than their metro counterparts, and that they have adequate health insurance coverage. Nonmetro elderly individuals do in fact have lower average medical expenses than their urban counterparts, but the use of health insurance benefits is similar in both groups (See Chart 10.1). Nonmetro elderly individuals with no ADL limitations show no difference from those in metro areas with respect to their source of payment for health care services (See Chart 10.3). As elderly persons become more ADL impaired, however, there are differences in sources of payment between metro and nonmetro elderly individuals. On average, Medicare pays a higher proportion of the expenses for metro elderly persons with ADL limitations and Medicaid pays a higher proportion for nonmetro elderly persons with ADL limitations (See Chart 10.3). Comparable percentages of rural and urban elderly veterans received Medicaid as well as VA health benefits for low-income veterans in 1987 (See Chart 10.4).

APPENDIX I: FORUM WORK GROUP ON OLDER AMERICANS IN RURAL AREAS

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APPENDIX II: DEFINITIONS

RURAL VERSUS NONMETRO

Alternative Concepts and Definitions: There is some debate over the appropriate measurement of the population living in small towns and the countryside outside large cities. Both rural and nonmetropolitan (nonmetro) are defined by default—rural being anything "not urban" and nonmetro being anything "not metropolitan (metro)."

Rural: According to the Census Bureau, "rural" is defined as territory outside places of 2,500 or more inhabitants, or outside an urbanized area. An urbanized area comprises one or more places and the adjacent densely settled surrounding territory that together have a minimum of 50,000 persons.

Nonmetro: The Office of Management and Budget's definition of non-metro refers to counties outside a metro area. A metro area is a county (or counties) containing a place or urbanized area of 50,000 or more, and a total population of 100,000 or more, including adjacent counties which have a high degree of economic and social integration with the central county. (In New England, the town as opposed to the county—is the basic building block.)

The essential difference between the two concepts is that rural refers to low residential density and size, and nonmetro refers to counties lying outside metro areas. This definition of rural does not imply farm residence or a sparsely settled area, since a small city is defined as rural as long as it is outside an urbanized area and has fewer than 2,500 inhabitants.

Population Distribution: The 1990 Census identified 8.2 million elderly persons (or 26 percent) living in nonmetro areas and 23 million elderly in metro areas. In 1989, 54.6 million (22 percent) of the U.S. population of all ages was nonmetro and 66.2 million (27 percent) was rural. Although the percentages do not differ greatly, the overlap of rural and nonmetro population is less than might be expected. Just over half (54 percent) of the rural population live in nonmetro areas, while the rest live within metro boundaries. About two-thirds (65.5 percent) of the nonmetro population is rural. In contrast, only 16 percent of the metro population is rural. Persons living in the rural fringes within metro areas have a different level of access to the metro economy and services than do those living in rural territory outside metro areas.

Social and Economic Diversity: Probably the most prominent single characteristic of rural America is its social and economic diversity. The Economic Research Service of the Department of Agriculture has identified seven distinct types of rural counties according to their major economic base, presence of federally owned land, or population characteristics:

(1) counties depending heavily on farming;

(2) counties depending heavily on manufacturing;

(3) mining counties with economies based principally on natural resources;

(4) counties specializing in government functions;

(5) persistent low-income or poverty counties;

(6) Federal land counties; and

(7) retirement counties.

The South contains the largest share of both nonmetro counties (1,061 counties or 44 percent of the total) and population (23.5 million or 44 percent). However, the greatest share of nonmetro territory is in the Midwest and Western regions.

Use of Nonmetro/Metro Designation: The nonmetro/metro designation is mainly used in this briefing for pragmatic reasons. Most data presented are from existing national surveys of a general-purpose nature, and not from special studies of the rural population. These existing national surveys generally collect data at the county level, allowing a nonmetro/metro designation to be made. Hence, use of this designation does not imply it is the "best". However, a substantial proportion of rural persons live in metro areas. This limits the utility of the rural designation for studying the hinterland population.

Other reasons for use of the nonmetro designation in this briefing are: (1) nonmetro boundaries are drawn beyond the primary commuting field of a metro area; (2) many agencies use alternate definitions of rural, increasing chances of confusion with Census Bureau-defined rural statistics; and (3) most data available in the years between the decennial census are collected and disseminated at the county level—designated as either metro or nonmetro. This facilitates the annual monitoring of conditions in nonmetro counties.

Elderly: Persons aged 65 years and older.

APPENDIX III: DESCRIPTIONS OF DATA SOURCES

American Housing Survey: The American Housing Survey (AHS) is a biennial national survey of the Nation's housing. There are also individual surveys of 44 large metropolitan areas over a 4-year period. The surveys are longitudinal, and provide information on size, composition, and financial characteristics of the housing inventory, characteristics of its occupants, changes in the inventory resulting from new construction and from losses, indicators of housing and neighborhood quality, and characteristics and dynamics of urban housing markets. The national survey, conducted in odd-numbered years starting in 1981, but annual prior to that going back to 1973, also provides data for the four Census regions. The surveys are conducted by the Bureau of the Census acting as collecting agent for the Department of Housing and Urban Development.

The current basic sample of housing units, first interviewed in 1985, was drawn from the 1980 Census with a sampling rate of 1 in 2,148. It was augmented to correct for undercoverage by several additional methods, including a sample of building permits for new construction completed since the 1980 Census, a sample of living quarters that were not housing units to identify units that were converted to housing units since the Census, and a sample of nonpermit-issuing land areas (primarily rural) to discover and incorporate other new construction and other additions to the housing stock. Similar methods are used to update the sample for each subsequent survey.

The sample is located in 170 self-representing sampling areas and 224 other sampling areas representing all remaining areas of the 50 States and the District of Columbia. The areas are located in all States and the District of Columbia. The basic sample of about 50,000 housing units is expanded in alternate years by units in "neighbor clusters" around selected sampled units or by added units in rural areas.

A full explanation is included in each AHS publication, e.g., U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, "Current Housing Report H150/89, American Housing Survey for the United States in 1989," Appendix B, Source and Accuracy of the Estimates.

Census of Population: The census of population has been taken in the United States every 10 years since 1790. In the 1990 Census, data were collected on sex, race, age, marital status, and certain housing characteristics from 100 percent of the enumerated population. More detailed information such as income, education, occupation, industry, and an extended set of housing characteristics were collected from a one-in-six sample. The sample was applied by size of place of residence. The more detailed information was collected from 50 percent of households in places of less than 2,500 population, 1 out of 6 households in places of 2,500 or more population, and 1 out of 8 households in census tracts and block numbering areas having more than 2,000 housing units.

For more information on the 1990 Census, see: U.S. Bureau of the Census, "1990 Census of Population and Housing Tabulation and Publication Program" (Washington, D.C.: U.S. Government Printing Office, 1989).

Current Population Survey: The Current Population Survey (CPS) is a household sample survey of the civilian noninstitutionalized population conducted monthly by the U.S. Bureau of the Census to provide estimates of employment, unemployment, and other characteristics of the general labor force, the population as a whole, and various other subgroups of the population.

A list of housing units from the 1980 Census, supplemented by newly constructed units and households known to be missed in the 1980 Census, provides the sampling frame in most areas for the present CPS. In some rural locations, current household listings of selected land areas serve as the frame.

The present CPS sample is located in 729 sample areas, with coverage in every State and the District of Columbia. In an average month during 1989, the number of housing units or living quarters eligible for the national sample was about 70,000, of which about 57,000 were interviewed households, and 2,000 were households at which the members were not available for interview. About 11,000 households were visited but were not eligible for interview.

The estimation procedure used involves inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment.

For more information, see: U.S. Bureau of the Census, "The Current Population Survey, Design and Methodology," Technical Paper 40 (Washington, D.C.: U.S. Government Printing Office, January 1978).

National Health Interview Survey: The National Health Interview Survey (NHIS) is a continuing nationwide sample survey in which data are collected through personal household interviews. Information is obtained on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, utilization of health resources, and other health topics. The household questionnaire is reviewed each year, with special health topics being added or deleted. For more health topics, data are collected over an entire calendar year.

The sample plan of the NHIS follows a multistage probability design that produces data about the noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target population and the weekly samples are additive over time. The response rate for the survey has been between 95 and 98 percent over the years.

The sample was designed so that a typical NHIS sample for the data collection years 1985–94 will consist of approximately 7,500 segments containing about 59,000 assigned housing units. Of these

households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000 occupied households will yield a probability sample of about 127,000 persons. In 1988, there was a sample of about 122,000 persons and in 1989, a sample of about 117,000 persons.

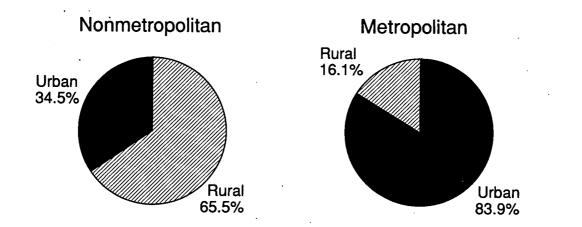
National Medical Expenditure Survey: The 1987 National Medical Expenditure Survey (NMES II) provides measures of health status and estimates of insurance coverage and the use of services, expenditures, and sources of payment for the period from January 1 to December 31, 1987, for the civilian, noninstitutionalized population of the United States in the Household Survey and for the population resident in or admitted to nursing homes and facilities for the mentally retarded in the Institutional Population Component. The NMES is a research project of the Center for General Health Services Intramural Research in the Agency for Health Care Policy and Research.

The NMES II Household Survey sample is a national stratified multistage area probability sample of about 35,000 individuals in approximately 14,000 households. The design provided oversampling of population groups of special policy interest: African Americans, Hispanics, the poor and the near poor, the elderly, and persons with functional limitations. Each family in this survey was interviewed four times over a period of 16 months with baseline data on household composition, employment and insurance being updated at each interiew, and information being obtained on illnesses, use of health service, and health expenditures for each family member.

Social Security and Supplemental Security Income Data: Social Security data are derived on a 100-percent basis from the Social Security Administration's Master Beneficiary Record (MBR) as of December 1990. The MBR contains information needed to administer the Social Security benefit program and limited demographic data on beneficiaries. Metro/nonmetro data are based on county codes in MBR. Since Metro Statistical Areas in New England are defined by cities and towns which are not coded in the MBR, Social Security data are compiled for New England County Metro Areas (NECMAS). Data on Supplemental Security Income beneficiaries are derived in a similar way from the Supplemental Security Record (SSR).

Survey of Veterans: The 1987 Survey of Veterans was conducted for the Department of Veterans Affairs by the U.S. Bureau of the Census. It contained an area-probability sample covering the entire United States, weighted to agree with Census Bureau estimates of the U.S. population by age, sex, and race. The sample was based on veterans who were in outgoing rotation panels of Current Population Surveys (CPS) conducted by the Census Bureau. The sample is representative of veterans living in private households in the United States at the time they were rotated out of the CPS sample. Not included are veterans in long-term hospitals or other institutional settings which include college dormitories, correctional facilities, nursing homes, and other nonhousehold living arrangements. Nor did the sample include persons not regularly attached to a household, such as homeless persons or others whose household affiliation is temporary or transitory. For this survey, proxy answers were not accepted; that is, if the veteran was not available for interview, other members of the veteran's household were not asked to report information about the veteran. Interviews were completed on 9,442 veterans (97.8 percent of the total 11,439 cases assigned). These completed interviews included 2,122 veterans aged 65 years or over. The weighted sample total number of veterans was 26,143,086. The weighted sample number of veterans aged 65 and over was 5,889,671.

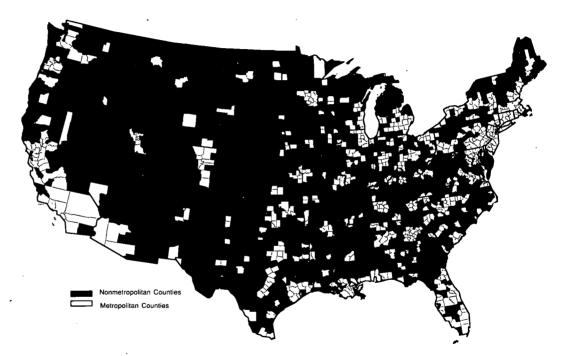
Concepts of Rural: Proportion of rural-urban population by nonmetropolitan-metropolitan status, 1989*



* Civilian noninstitutional population; rural-urban as defined for the 1980 Census

SOURCE: USDA, Economic Research Service Current Population Survey (annual averages), Bureau of the Census APPENDIX IV: CHARTS 0.0-10.4

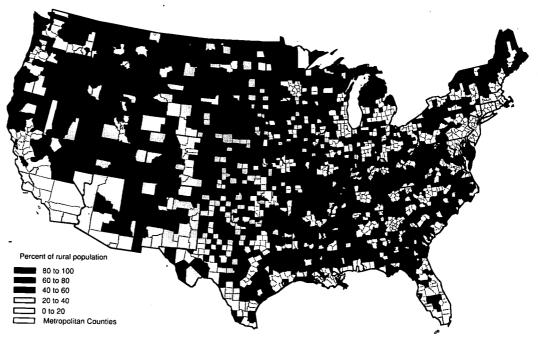
Concepts of rural: Nonmetropolitan counties, 1990



SOURCE: Health Resources and Services Administration, Area Resource File

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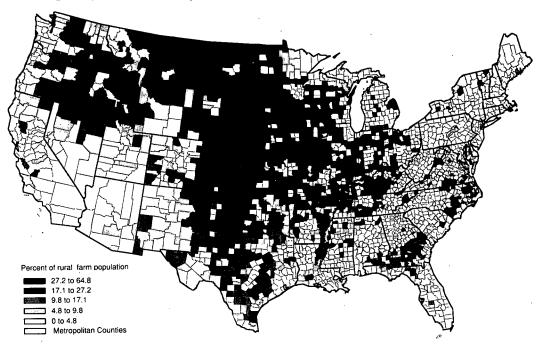
Concepts of rural: Percentage of population classified as rural by nonmetropolitan counties, 1980



SOURCE: Health Resources and Services Administration, Area Resource File

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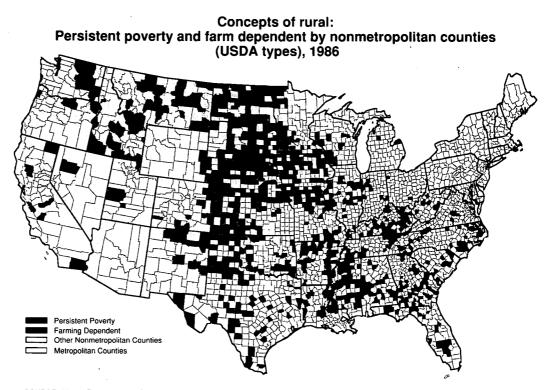
Concepts of rural: Percentage of population classified as rural farm by nonmetropolitan counties, 1980



SOURCE: Health Resources and Services Administration, Area Resource File

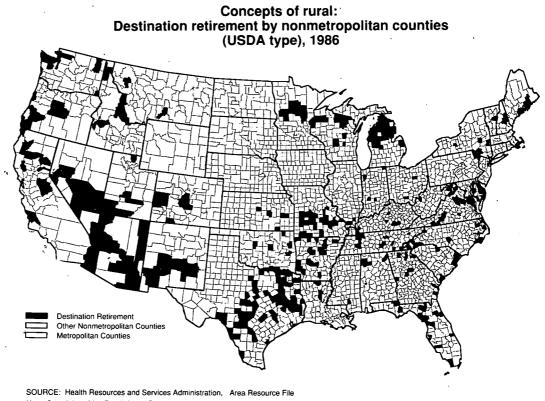
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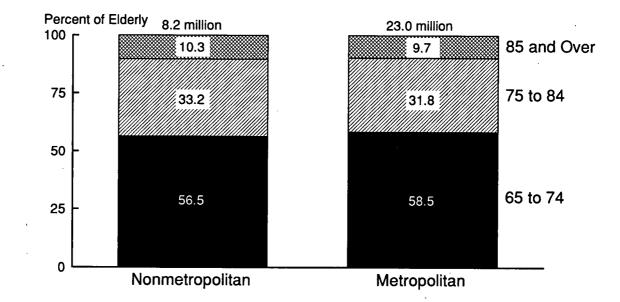
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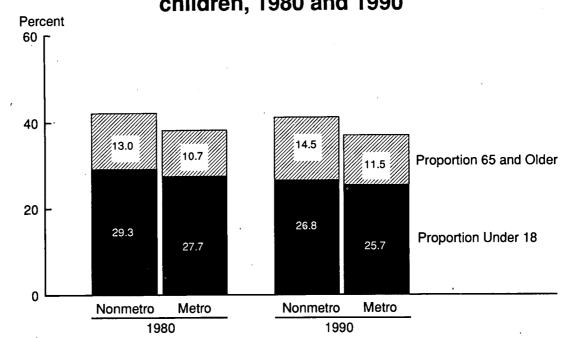
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Population: Age distribution of the elderly, 1990

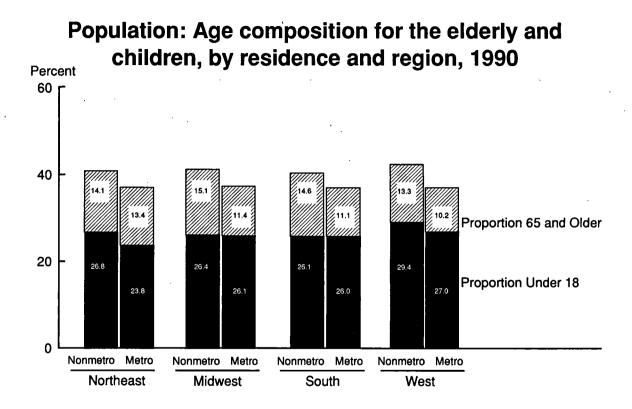




Population: Age composition for the elderly and children, 1980 and 1990

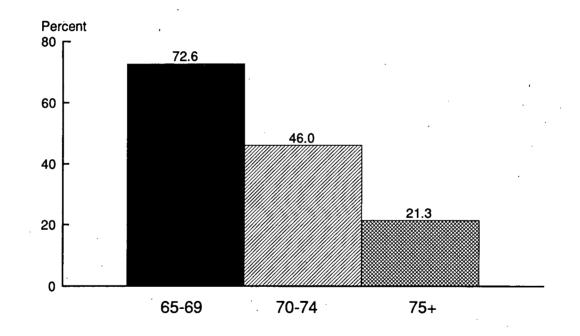


1980 data-- 1980 Census of Population, General Population Characteristics, U.S. Summary; and 1990 data-- Public Use File of the Current Population Survey: March 1990.



SOURCE: USDA Economic Research Service Public Use File of the Current Population Survey: March 1990.

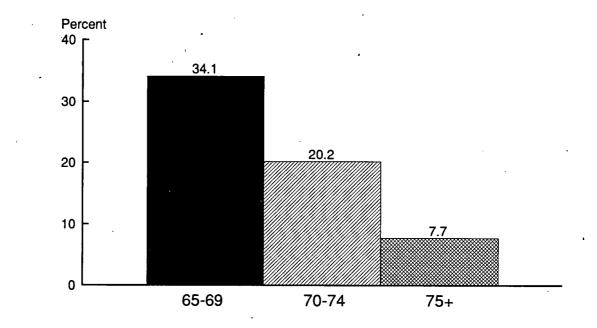
Population: Percent of elderly males who are veterans by age, 1987



SOURCE: Dept. of Veterans Affairs, Survey of Veterans. 1987

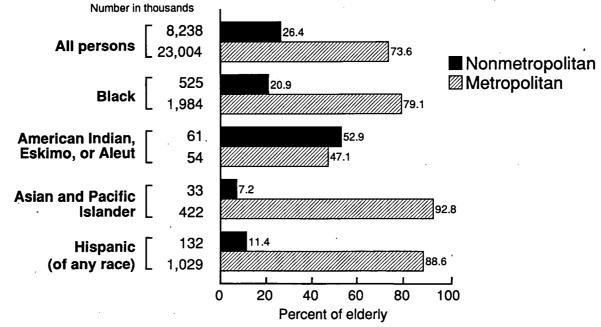
1.3

Population: Percent of elderly who are veterans by age, 1987



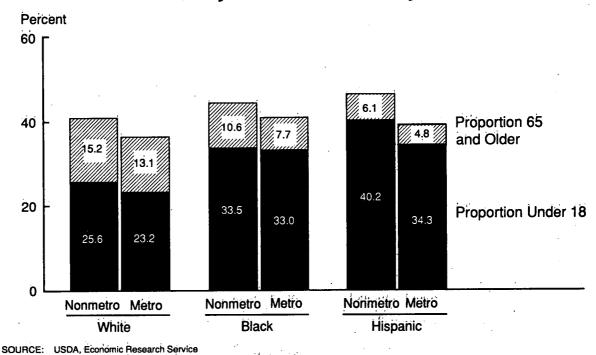
SOURCE: Dept. of Veterans Affairs, Survey of Veterans, 1987

Minorities: Percent of elderly persons by race and Hispanic origin, 1990



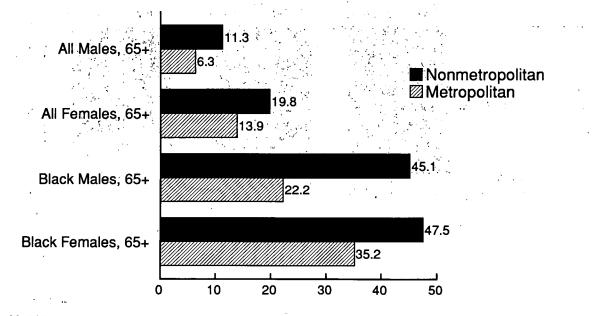
SOURCE: Bureau of the Census, 1990 Census of Population

Minorities: Age composition for elderly and children by race and ethnicity, 1990



Public Use File of the Current Population Survey: March 1990.

Minorities: Percent of elderly persons below the poverty level by race and sex, 1990

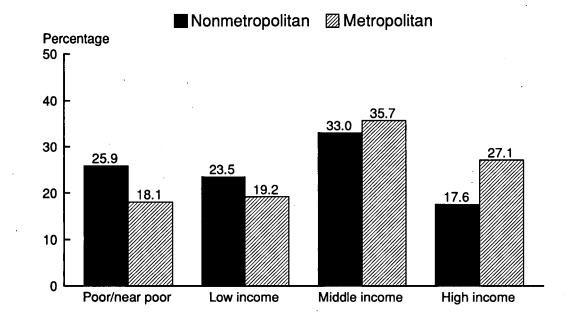


SOURCE: Bureau of the Census, "Poverty in the United States: 1990" Current Population Reports, Series P-60, No. 175.

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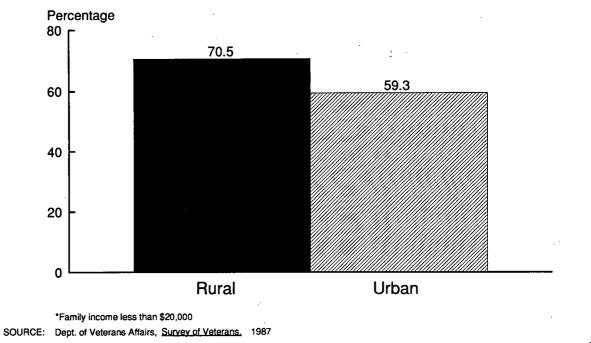
2.3

Income: Income level for the elderly, 1987

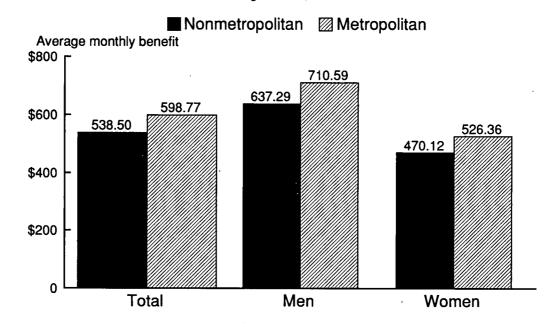


SOURCE: Agency for Health Care Policy and Research. National Medical Expenditure Survey - Household Survey, 1987.

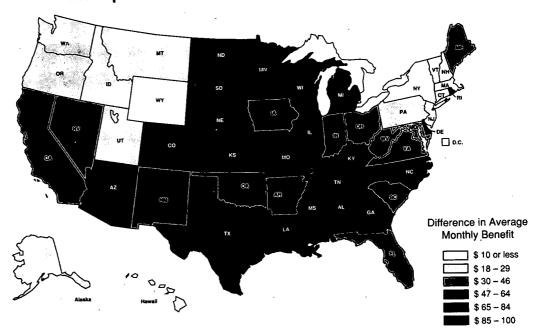
Income: Elderly veterans with low income*, 1986



Income: Average Social Security benefit for elderly beneficiaries by sex, December 1990



SOURCE: Social Security Administration, Office of Research and Statistics 100 percent data from administrative records, December, 1990

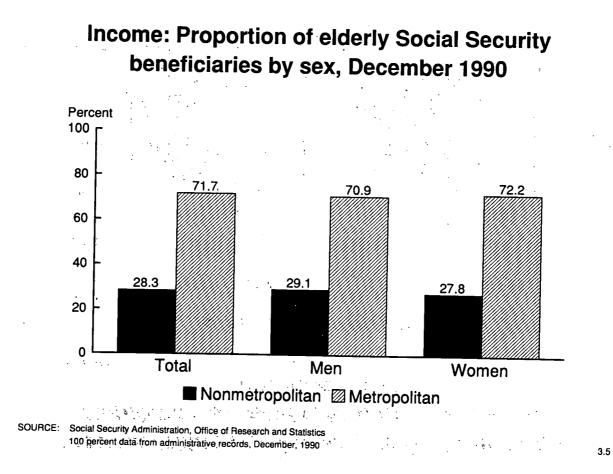


Income: Differences in average monthly Social Security benefits, metropolitan minus nonmetropolitan, December 1990

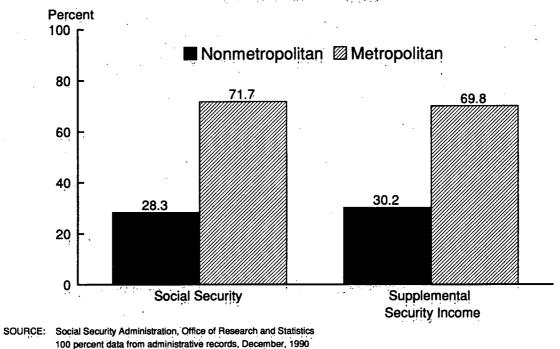
SOURCE: Office of Research Statistics, Social Security Administration, 100 percent data from administrative records, December, 1990

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3.4

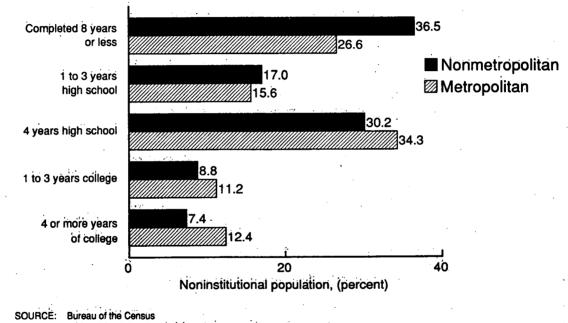


Income: Proportion of elderly Social Security and Supplemental Security Income beneficiaries, December 1990



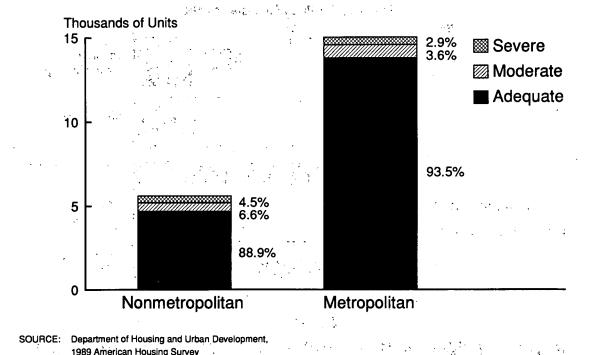
3.6

Education: Educational attainment of elderly persons, 1989



"Educational Attainment in the United States: March 1989 and 1988," Current Population Reports, Series P-20, No. 451.

Housing: Physical structure problems of elderly households, 1989 Charles and the state of the second

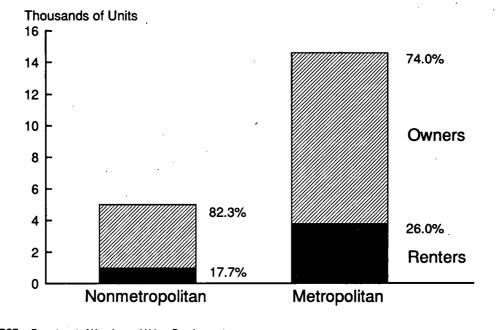


1989 American Housing Survey

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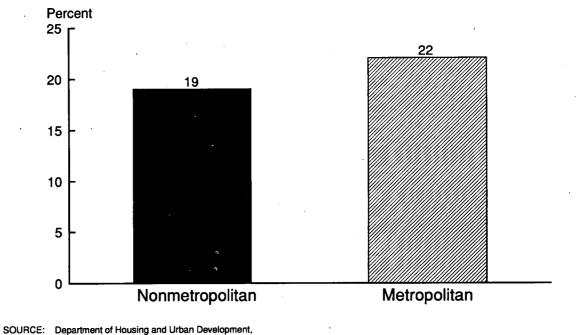
4.1

Housing: Homeownership rate for the elderly, 1989



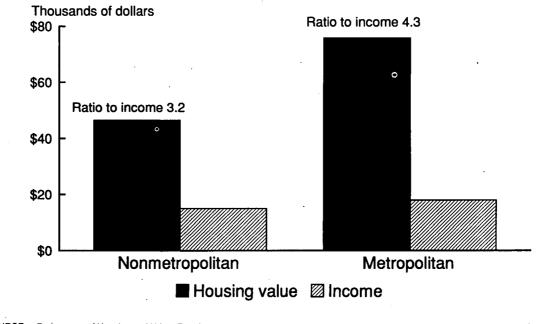
SOURCE: Department of Housing and Urban Development, 1989 American Housing Survey

Housing: Housing costs as a percent of income for all elderly households, 1989



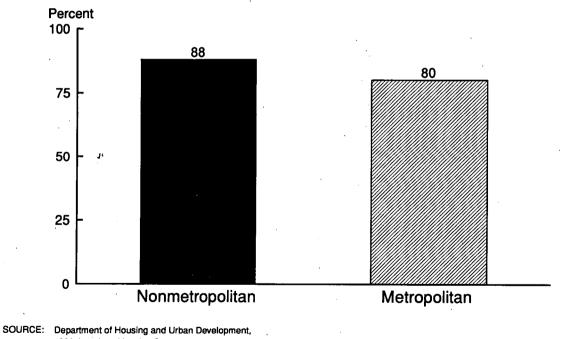
1989 American Housing Survey

Housing: Median value and ratio of owned house value to current income for the elderly, 1989



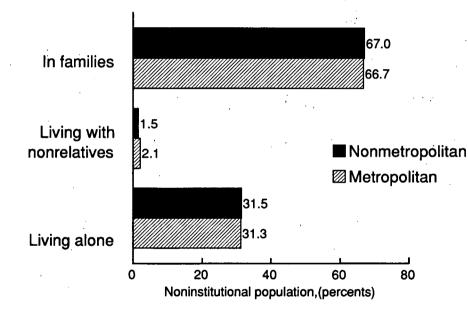
SOURCE: Department of Housing and Urban Development, 1989 American Housing Survey

Housing: Percent of owned houses owned free and clear (non-mortgaged) for the elderly, 1989



1989 American Housing Survey

Social networks: Living arrangements of elderly persons, 1990

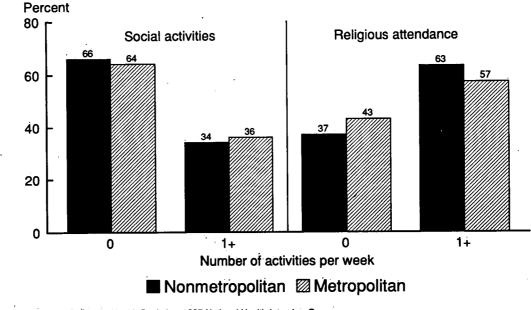




Bureau of the Census, 1990 Current Population Survey, unpublished tabulations.

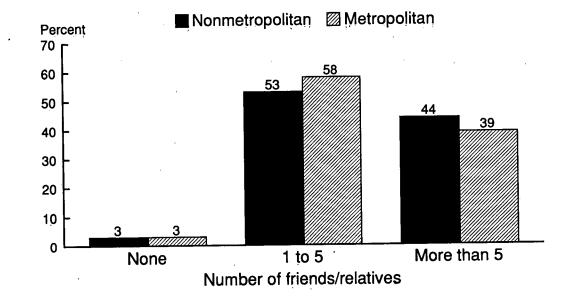
NOTE: For information about sampling error, see "Marital Status and Living Arrangements: March 1990," <u>Current Population Reports.</u> Series P-20, No. 450, Appendix B.

Social networks: Social activities and religious attendance of the elderly, 1987



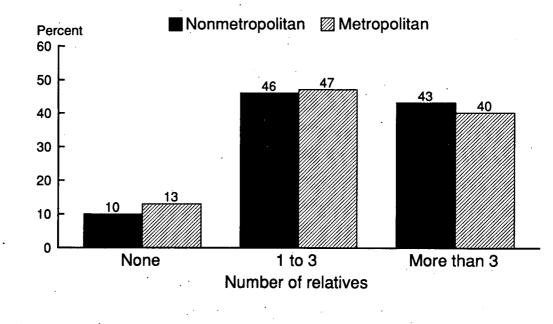
SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

Social networks: Friends/relatives the elderly talked with in past month, 1987



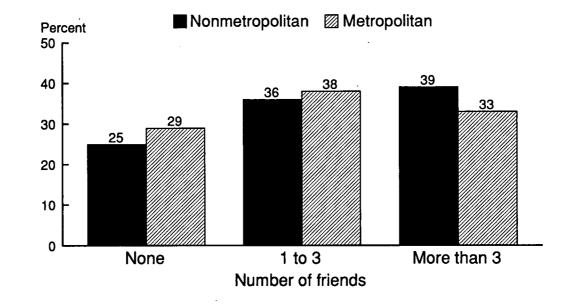
SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

Social networks: Relatives the elderly can call for help, 1987



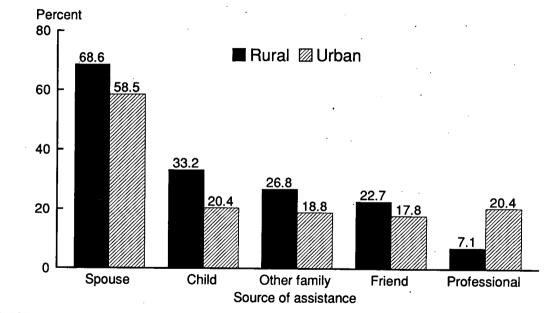
SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

Social networks: Friends the elderly can call for help, 1987



SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

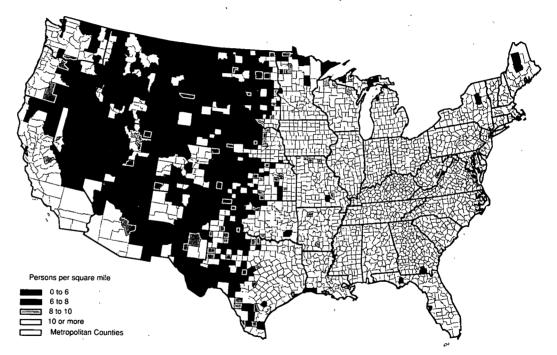
Social networks: Source of assistance for elderly veterans receiving ADL*/IADL** aid, 1987





- * Includes eating, dressing, toileting, bathing, transferring
- ** Includes meal preparation, getting around community, shopping, managing money, using telephone, light housework

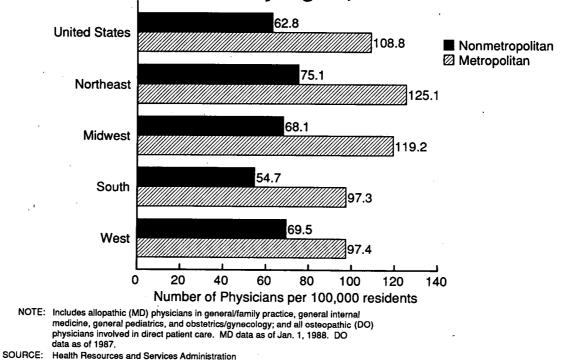
Access: Frontier counties, 1990



SOURCE: Health Resources and Services Administration, Area Resource File

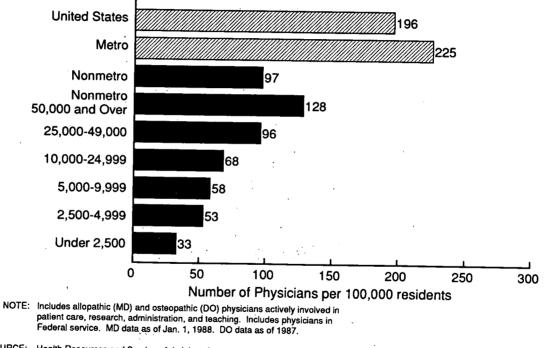
Note: Copyright, 1991, Rural Health Research Program, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, reprinted with permission.

Access: Primary care physicians per 100,000 residents by region, 1987-88



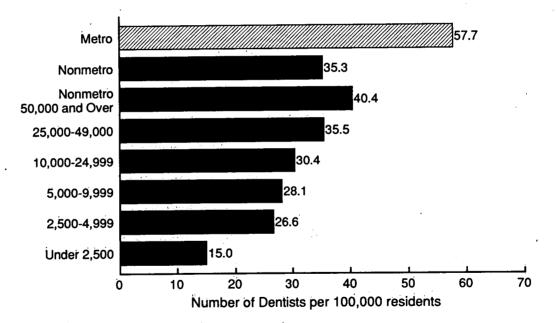
Area Resource File

Access: Professionally active physicians per 100,000 residents by type of county and population size, 1987-88



SOURCE: Health Resources and Services Administration Area Resource File

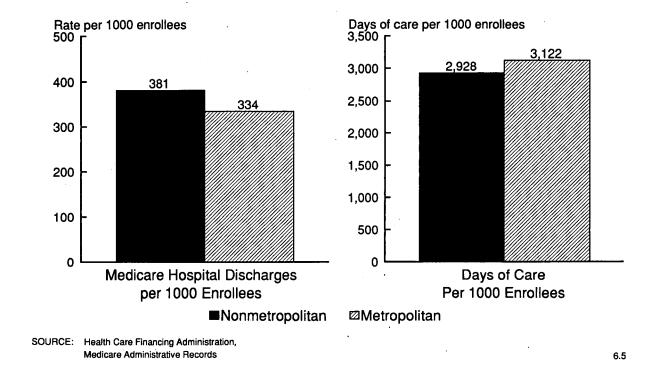
Access: Number of Dentists per 100,000 residents by type of county, 1987



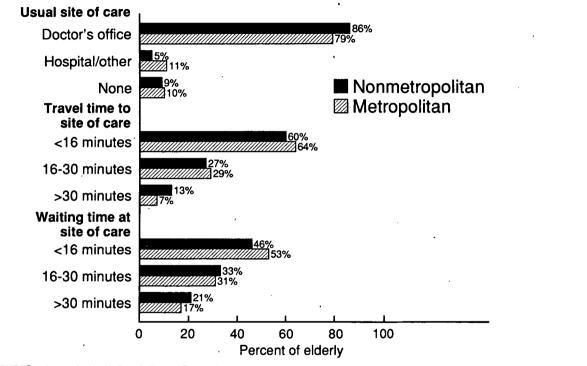
NOTE: Includes both full-time and part-time dentists

SOURCE: Health Resources and Services Administration Area Resource File ଞ

Access: Rate of Medicare hospital discharges and days of care per 1000 enrollees, 1989



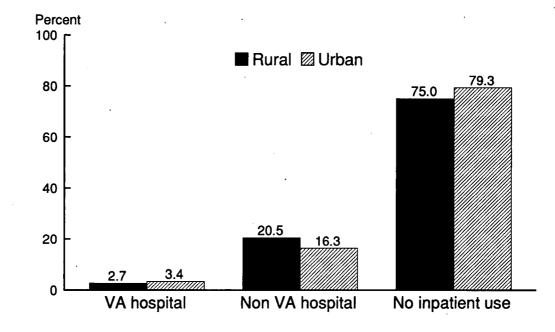
Access: Access to care for the elderly, 1987



SOURCE: Agency for Health Care Policy and Research,

National Medical Expenditure Survey - Household Survey, 1987.

Access: Source of inpatient health care used by elderly veterans, 1987

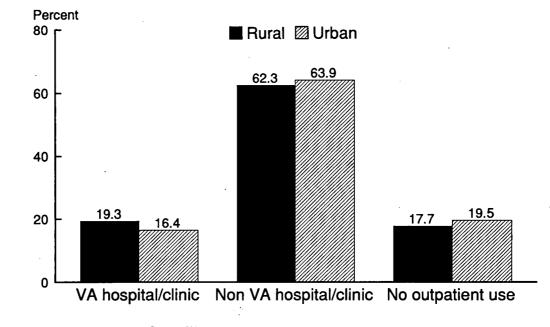


SOURCE: Dept. of Veterans Affairs, Survey of Veterans. 1987

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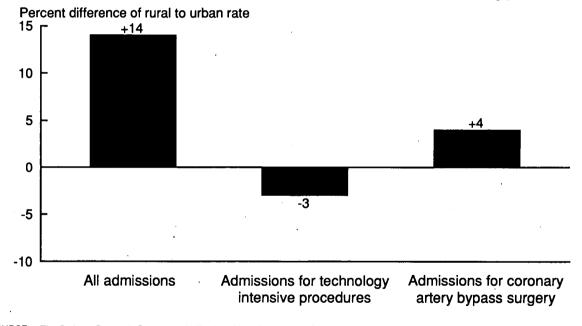
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Access: Source of outpatient health care used by elderly veterans, 1987



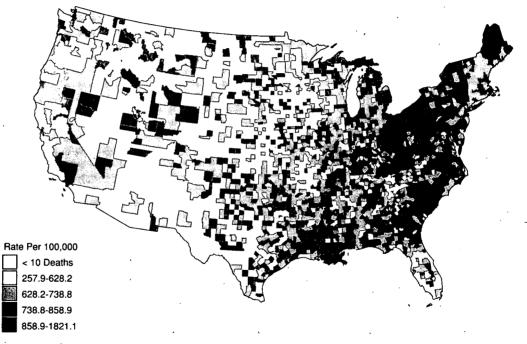
SOURCE: Dept. of Veterans Affairs, Survey of Veterans, 1987

Access: Percent difference in per capita hospital admission rates for Medicare beneficiaries in rural and urban areas, 1988 (5 state study)

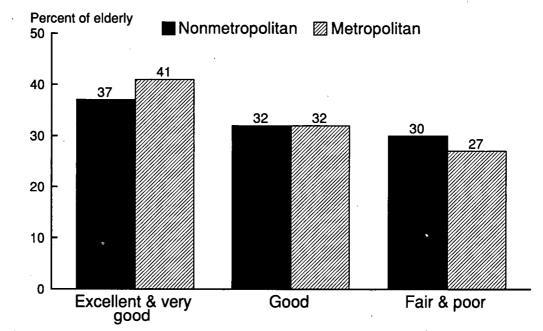


SOURCE: The Codman Research Group, Inc., <u>Utilization of Inpatient Hospital Services by Rural</u> <u>Medicare Beneficiaries</u> ProPAC Extramural Technical Report No. E-91-03, May 1991.

Health Status: Death rates per 100,000 elderly women ages 65-74 for heart disease by county, 1979-87

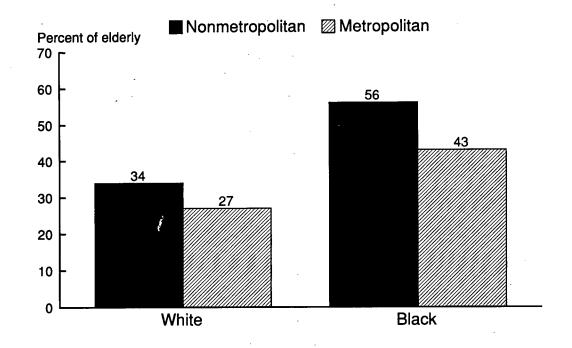


Health status: Respondent assessed health of the elderly, 1990



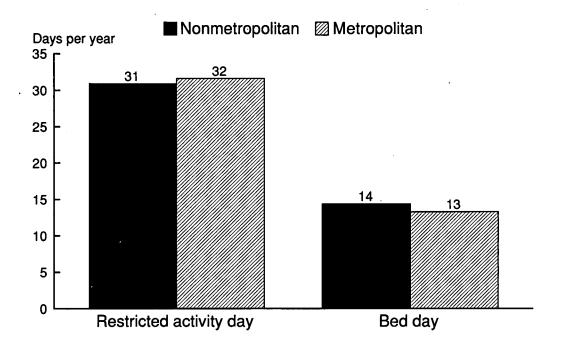
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Minority health: Percent of elderly in fair or poor health by race, 1985-87



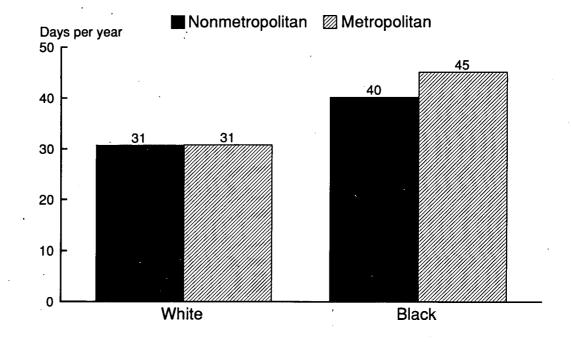
SOURCE: National Center for Health Statistics, 1985-87 National Health Interview Surveys

Health status: Days of restricted activity for the elderly, 1990



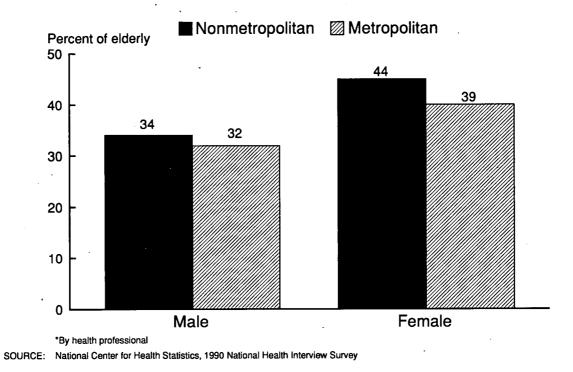
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Minority health: Days of restricted activity for the elderly by race, 1985-87

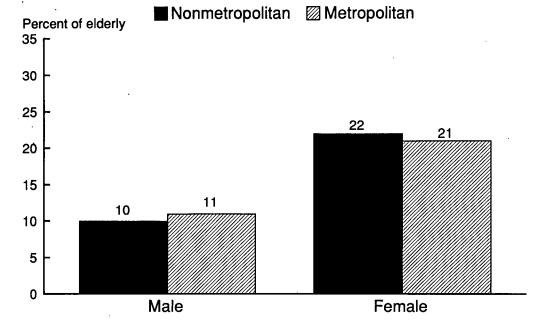


SOURCE: National Center for Health Statistics, 1985-87 National Health Interview Surveys

Health status: Elderly told at least twice* had high blood pressure by sex, 1990



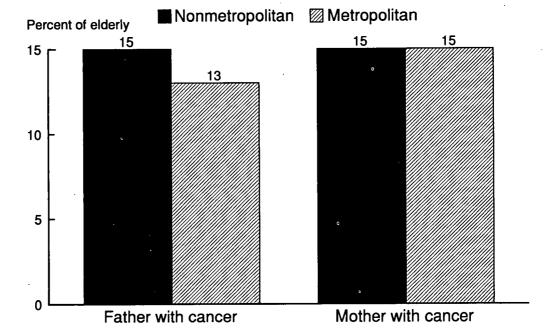
Health status: Overweight elderly who are very overweight*, 1990



*Overweight status is respondent - assessed.

SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

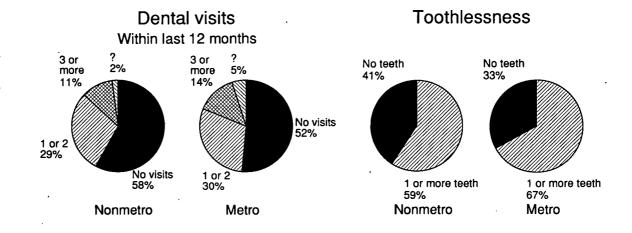
Health status: Elderly whose parents had a history of cancer, 1987

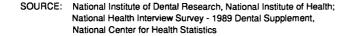


SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

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Health status: Dental care/visits and toothlessness of the elderly, 1989

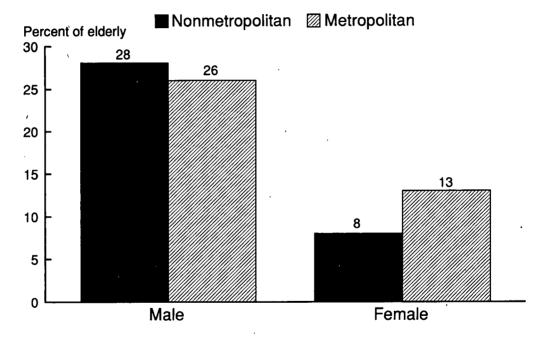




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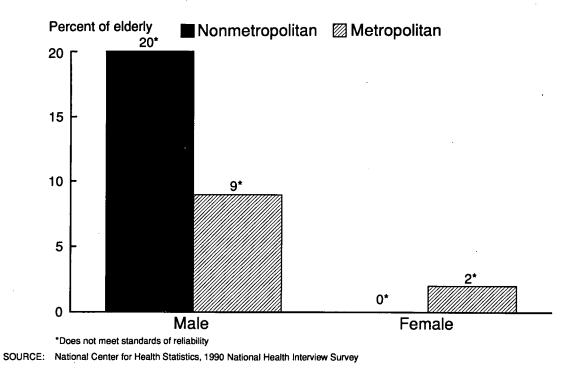
Health behavior: Elderly smokers who smoke heavily* by sex, 1990



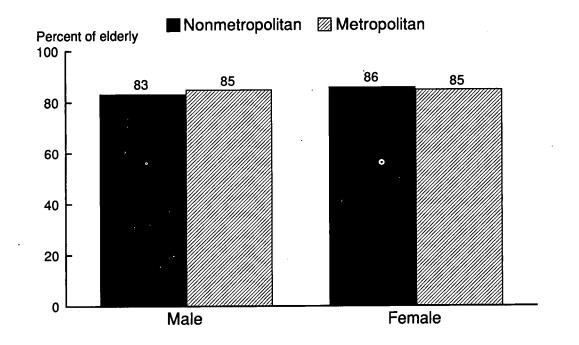
*heavy smoking is defined as at least 25 cigarettes per day

SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Health behavior: Elderly drinkers who are heavy current drinkers by sex, 1990

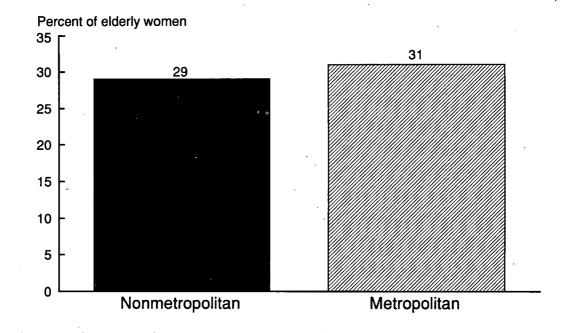


Health promotion: Elderly who had blood pressure check in past year by sex, 1990



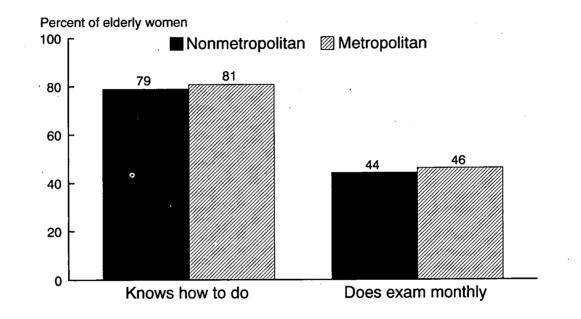
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Health promotion: Elderly women who had pap smear in past year, 1990



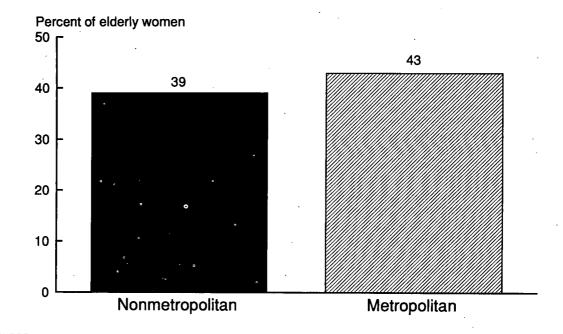
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Health promotion: Breast self exam for elderly women, 1990



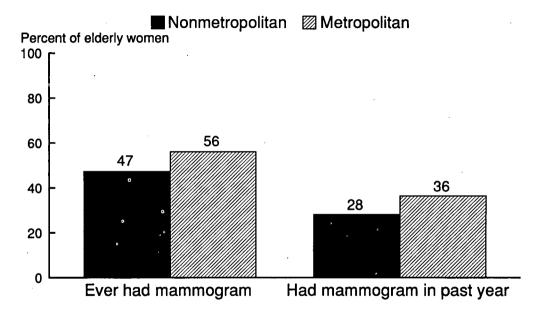
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Health promotion: Breast exam of elderly women by health professional in past year, 1990



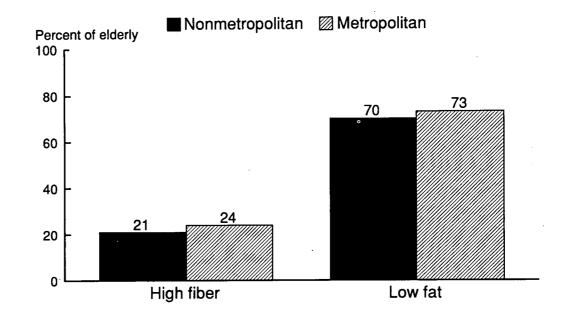
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Health promotion: Receipt of mammogram by elderly women, 1990



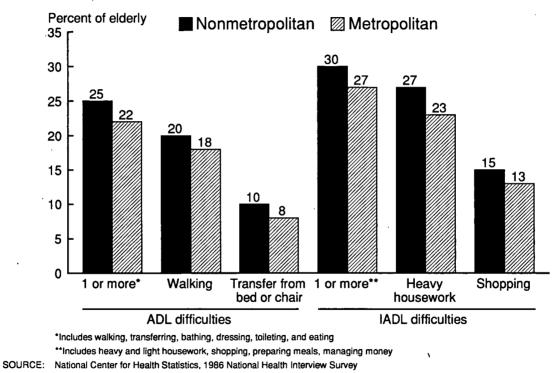
SOURCE: National Center for Health Statistics, 1990 National Health Interview Survey

Nutrition: Fiber and fat in diet for the elderly, 1987

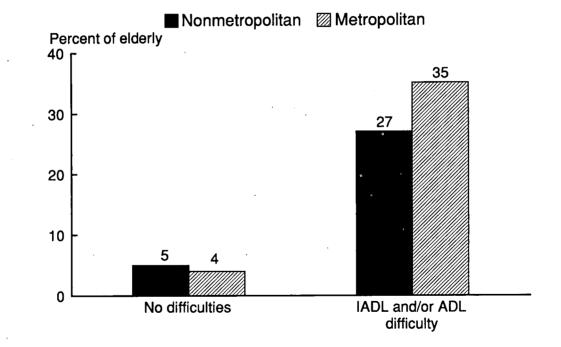


SOURCE: National Center for Health Statistics, 1987 National Health Interview Survey

Long term care: Difficulties of the elderly with ADL's and IADL's, 1986

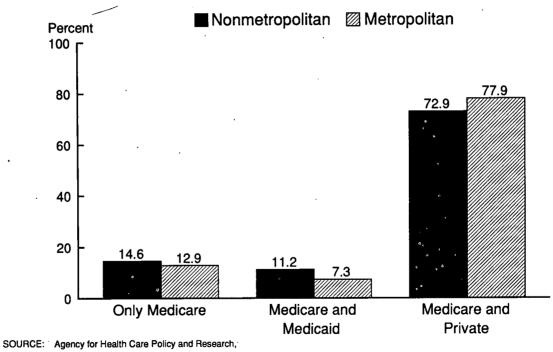


Long term care: Percent of elderly with home health visits by functional status of the user, 1987



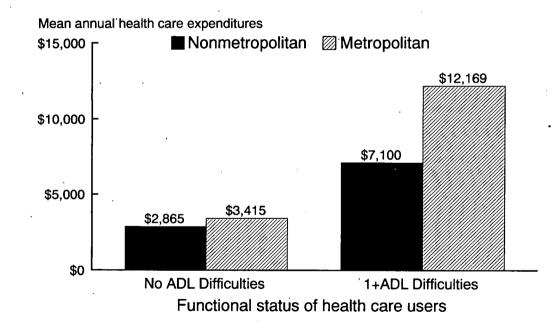
SOURCE: Agency for Health Care Policy and Research, National Medical Expenditure Survey - Household Survey, 1987.

Health insurance: Insurance coverage for the elderly, 1987



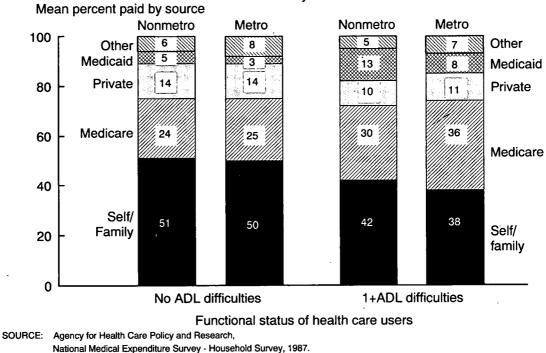
National Medical Expenditure Survey - Houshold Survey, 1987.

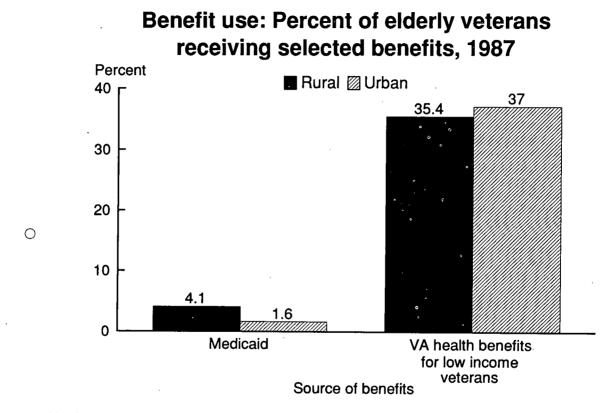
Health expenditures: Total health care expenditures for the elderly by functional status of user, 1987



SOURCE: Agency for Health Care Policy and Research, National Medical Expenditure Survey - Household Survey, 1987.

Health expenditures: Sources of payment of health care expenditures for the elderly by functional status of user, 1987





SOURCE: Dept. of Veterans Affairs, Survey of Veterans. 1987