

Scripps Gerontology Center

Scripps Gerontology Center Publications

Miami University

Year 2004

Profile & projections of the 60+
population : Hamilton County, Ohio

Shahla Mehdizadeh
Miami University, commons@lib.muohio.edu

O
H
I
O

L
O
N
G

T
E
R
M

C
A
R
E

R
E
S
E
A
R
C
H

P
R
O
J
E
C
T



PROFILE & PROJECTIONS OF THE 60+ POPULATION

HAMILTON COUNTY
OHIO

PROJECT TEAM:

Shahla A. Mehdizadeh, Ph.D.
Principal Investigator

Disability Projections
Data Analysis

Sarah Poff Roman, MGS
Primary Author
Report Design/Layout

Valerie Wellin
Data Management
Graphic Design
Online Project Management

P. Neal Ritchey, Ph.D.
*Department of Sociology
University of Cincinnati*

Population Projections

Suzanne Kunkel, Ph.D.
Project Consultant



MIAMI
UNIVERSITY
OXFORD OHIO

Acknowledgments

The authors would like to thank Arlene Nichol and Lisa Grant for their assistance in preparing tables, and Mary Vadakkan for verifying the many facts and figures presented in this report.

We also would like to express our gratitude to Robert Applebaum, William Ciferri, and Jane Straker for their comments on earlier versions of this report.

This research was funded as part of a grant from the Ohio General Assembly, through the Ohio Board of Regents to the Ohio Long-Term Care Research Project.

All county reports as well as a state report are downloadable at:
<http://www.scripps.muohio.edu/scripps/research/countyreports.html>

FAST FACTS

ABOUT

Hamilton County

and its 60+ Population



WWW.SCRIPPS.MUOHIO.EDU

- Almost 20% of Hamilton County's population is age 60+ (or 145,000 individuals)
- By 2020, there will be 175,000 individuals age 60+ in Hamilton County (This is a 20% increase in the 60+ population)
- Three in 4 individuals age 85+ are female
- Disability increases with age: Only 3% of 60-69 year olds have a severe disability, compared to 45% of those 90+
- Over one third of individuals age 60+ have at least one disability
- By 2020, almost 14,000 individuals age 60+ with a severe disability will reside in Hamilton County
- Almost 15% of the age 60+ population live in poverty
- Almost 2 in 10 individuals age 60+ are racial or ethnic minorities
- Of men age 60+, 75% are married, compared to only 40% of women
- Nearly 7 in 10 individuals age 60+ have 12 or fewer years of education
- Of women age 60+, 45% live alone, compared to 25% of men



396 UPHAM HALL
MIAMI UNIVERSITY
OXFORD, OH 45056
PHONE: (513) 529-2914



MIAMI
UNIVERSITY
OXFORD OHIO



Preface

During the next 20 years, the national population, as well as the population in Ohio, will grow older. In anticipation of this impending change, we have created this series of reports to help Ohio area agencies on aging, service providers, and other organizations that are not directly involved in aging services to better plan for the needs of the aging population.

The purpose of these reports is to present the unique profile of the **older population (60+)** in each of Ohio's 88 counties and to project the number of older people and the prevalence of disability among this population. Trends and projections are provided for ages 60 and above, because this is the eligibility age for some state and local home care programs. Specific topics explored include disability, poverty, marital status, living alone, and educational attainment among the older population. Throughout the reports, trends are compared according to gender and age group for each county. To provide a better understanding of the county's standing in relation to the rest of the state, population characteristics from each county are compared with corresponding measures of Ohio's older population. In order to provide insight into the direction the county is moving some population trends are also presented.

In preparing this report, we used data from the Census short form, which is available for all residents within each county, and the Census long-form, which is available for a representative sample of county residents. The actual Census count from the Census short-form and the weighted sample counts from the long-form may be slightly different. To preserve privacy and confidentiality of the respondents, the census long-form data is available for geographic units with a minimum population of 100,000. In some cases a large county encompasses several such geographic units while in other cases a few neighboring counties are bundled together to form a geographic unit with 100,000 population. In large counties, the data for education, poverty threshold, living arrangement, marital status and disability rates are for the county alone, while smaller neighboring counties will show identical data, for the above indicators of need for assistance, for the bundled counties. If the data are aggregated for several counties the counties in the collection will be listed in the preface.

Sources used to create all tables and figures are specified.



PROFILE & PROJECTIONS OF THE 60+ POPULATION: HAMILTON COUNTY, OHIO

Background

This report illustrates the demographic changes that occurred in Hamilton County between 1990 and 2000, and presents projections of the older population and the number of older adults with disabilities based on these trends. The report also covers other population characteristics that have been shown to be associated with the need for long-term care services among older adults, such as the prevalence of poverty, disability, living alone, lack of education, and being unmarried. County-level data are compared to data on Ohio as a whole in order to show differences or similarities in population characteristics. By examining both demographic patterns and informed projections, counties will be better prepared to address the needs of their aging and disabled populations.

County Overview

Hamilton County is located in the southwest corner of Ohio, encompassing the city of Cincinnati. It is the third largest county in Ohio, with a population of 845,303. Hamilton County is almost completely urban, with 2.4% of the population living in rural areas in 2000, compared to 3.2% in 1990. This represents a decrease of 25.9% in rural population over the ten-year period. With 145,455 individuals age 60 and over, Hamilton County has the second largest 60+ population in the state, yet it ranks 54th in proportion of total population that is 60+ (out of 88 counties in Ohio). As shown in the Summary Table, the 60+ population represents 17.2% of the total population in Hamilton County.

**Summary Table
Hamilton County, 2000**

Total Population Age 60+	145,455
% Population Age 60+	17.2
Population Age 40+	363,332
% Population Age 40+	43.0
% Population 60+ at or Below Poverty Level	13.1
Total Population Age 60+ with Self-Care Disabilities	19,106
% Population Age 60+ with at Least one Physical, Mental, Sensory or Self-Care Disability	34.6
% Population 60+ who are White	81.4
% Population Age 60+ who are Married	53.7
% Population Age 60+ who are Living Alone	36.6
% Population Age 60+ who Have Less Than a High School Diploma	34.0

In some instances in this report, data is presented for the population age 40+. This cohort is important to consider when developing projections, because the population age 40+ in 2000 will be age 60+ in 2020. The population that is currently 40+ is also significant because it contains the baby boom generation. As shown in the summary table, 43% of the population in Hamilton County is currently over the age of 40.

In the remainder of this report, we explore variables (touched on in the Summary Table) that are related to long-term care needs. Factors related to one’s need for long-term care include disability, income, race and ethnicity, marital and educational status, and living arrangements. The following sections provide detailed analyses of these risk factors according to gender, age group, county/state standing, and ten-year trends.

Population Profile

The total population of Hamilton County decreased by 2.4% between 1990 (866,228 residents) and 2000 (845,303 residents). In contrast, the entire population of Ohio increased 4.7% in the same time. In 2000, 17.2% of the county population was 60+. Table 1 provides a detailed breakdown of the older population in Hamilton County in 2000 by age group and gender.

Table 1
Population Age 60+, by Gender and Age Group
Hamilton County, 2000

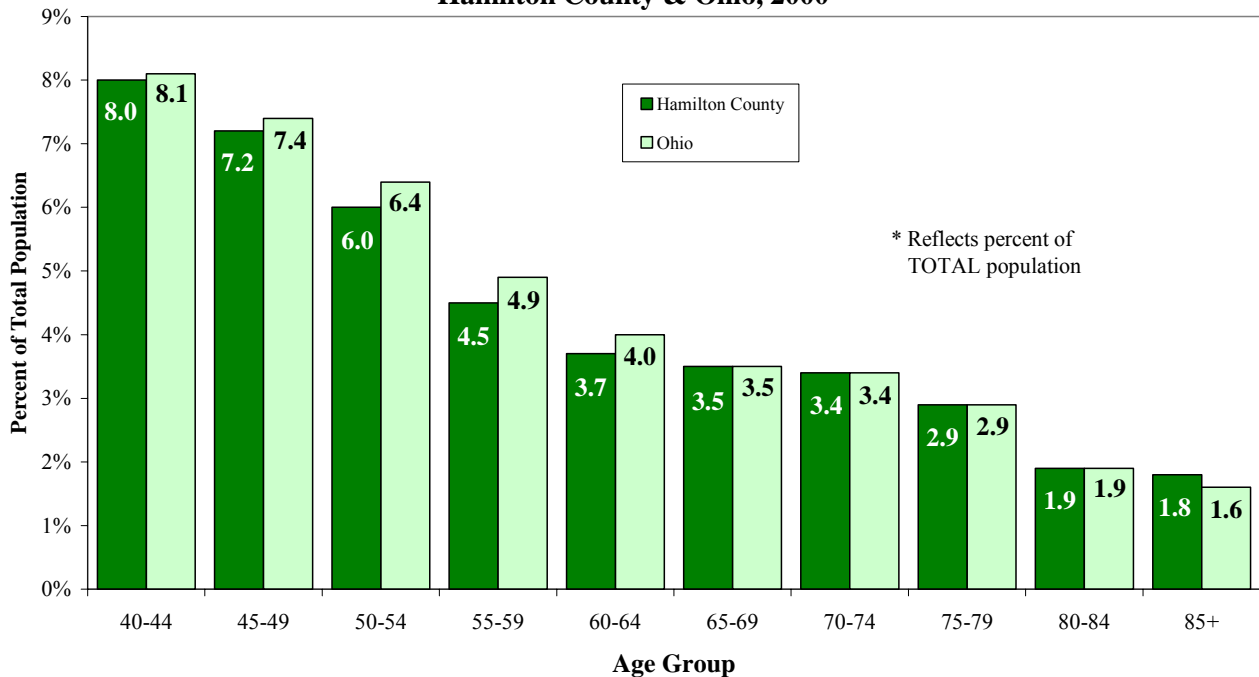
Age Group	Men		Women		Total
	Number	Percent	Number	Percent	
60-64	14,213	45.0%	17,344	55.0%	31,557
65-69	12,978	43.7%	16,707	56.3%	29,685
70-74	11,981	41.9%	16,636	58.1%	28,617
75-79	9,298	38.2%	15,027	61.8%	24,325
80-84	5,545	34.4%	10,592	65.6%	16,137
85-89	2,653	27.2%	7,098	72.8%	9,751
90-94	973	23.9%	3,106	76.1%	4,079
95+	244	18.7%	1,060	81.3%	1,304
Total County	57,885	39.8%	87,570	60.2%	145,455
Ohio 60+	823,200	41.9%	1,140,289	58.1%	1,963,489

Source: U.S. Census Bureau, 2000 Census of Population: Table P12. SEX BY AGE [49] -
Universe: Total Population

Gender Distribution - The gender distribution of the older population in Hamilton County is similar to that of the state of Ohio. Of the entire county population age 60+, women comprise 60.2% (compared to 58.1% in the state). As shown in Table 1, women outnumber men at all ages over 60; a disparity that increases with each advancing age group. Of particular interest is the gender ratio among the oldest age group. Of the population over the age of 84 in Hamilton County, 74.4% are women. The higher proportion of women among the oldest age group suggests that the population potentially eligible for, and in need of, long-term care services is largely female.

Growth in the Older Population - As shown in Figure 1 (and Table 1a in the Appendix), there are only slight differences in the population distribution across age groups in the county compared to the state. Although the majority of Ohioans are under the age of 60, the proportion of older adults in Hamilton County (and Ohio) will grow substantially over the next several decades. This growth in the older population is largely a result of the aging baby boomers. Currently ranging from 40 to 59 years of age, this cohort will dramatically impact the age distribution of the older population as they age. The influence of the baby boomers on both county and state populations is evident in Figure 1.

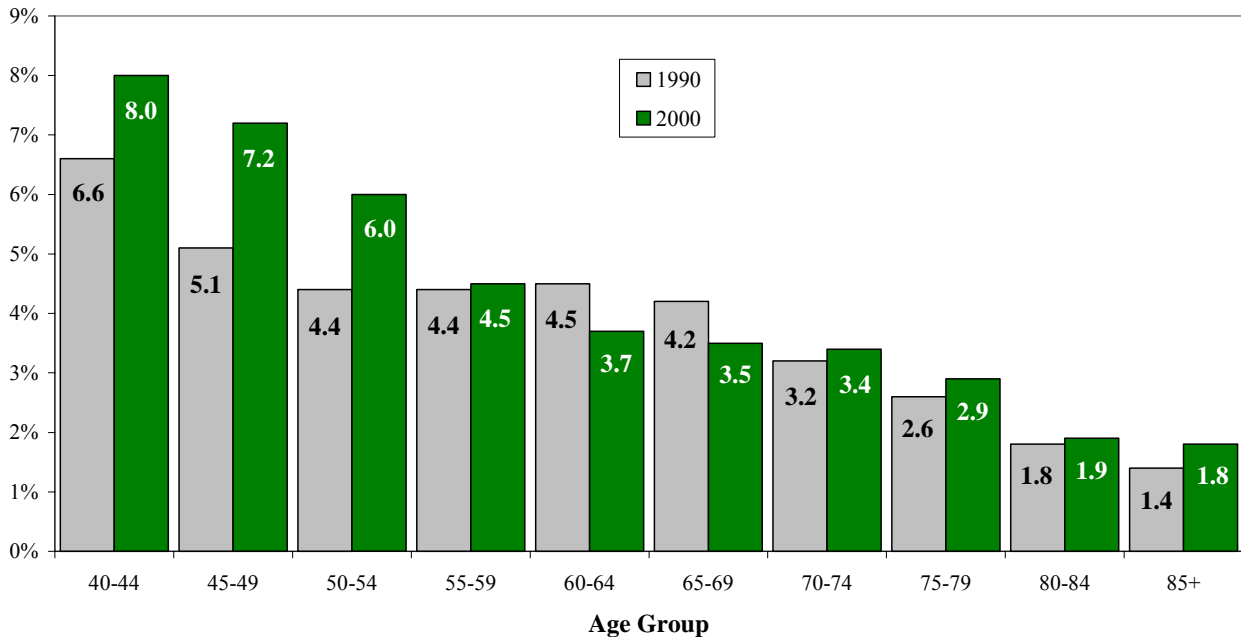
Figure 1
Population Distribution* by Age Group (40-85+)
Hamilton County & Ohio, 2000



Source: U.S. Census Bureau, 2000 Census of Population: P12. SEX BY AGE [49].

The impact of the baby boomers on the age distribution of the 40+ population is also evident when population data from 2000 are compared to data from 1990. As shown in Figure 2 (and Table 2a in the Appendix), 25.7% of the county population was age 40-59 in 2000, compared to 20.5% in 1990. Also noteworthy is the increase in the population over the age of 85. In Hamilton County, this age group comprised 1.8% of the population in 2000 compared to 1.4% in 1990 (a 28.6% increase in the 85+ population). In Ohio, 1.6% of the population was over the age of 85, compared to 1.3% in 1990 (a 22.8% increase in the 85+ population).

Figure 2
Population Distribution by Age Group (40-85+)
Hamilton County, 1990 & 2000



Source: U.S. Census Bureau, 1990 Summary Tape File 1 (STF 1) P011 & 2000 Census of Population:

Another indication that the population in Hamilton County is aging is the increase in median age¹. Between 1990 and 2000, median age increased from 32 years (1990) to 36 years (2000). This increase closely reflects that of the state, where the median age rose from 33 to 36 years in the same period. An increase in median age suggests that the proportion of older adults in Hamilton County is growing. As these segments of the county population reach advanced age, the need for long-term care services may increase.

¹ The **median age** of a population is that age that divides a population into two groups of the same size, such that half the total population is younger, and the other half is older.

Population Projections

This section of the report focuses on the expected growth of the overall older population, and on the growth of the older population who will experience some limitation in their ability to perform basic *activities of daily living* (ADLs) such as bathing, dressing, and preparing meals.

To project the size of the population age 60 and older for the years 2005 to 2020, we began with the population (already born) that has reached at least the age of 40. Using the *cohort component* methodology of population projection (Shryock & Siegel, 1996), we made the following assumptions about both survival and migration rates:

Survival Rate: Ohio's survival rates are based on national projected survival rates. These rates include improvements in national mortality rates, while maintaining deviation from the national rates observed in Ohio in the 2000 Vital Statistics.

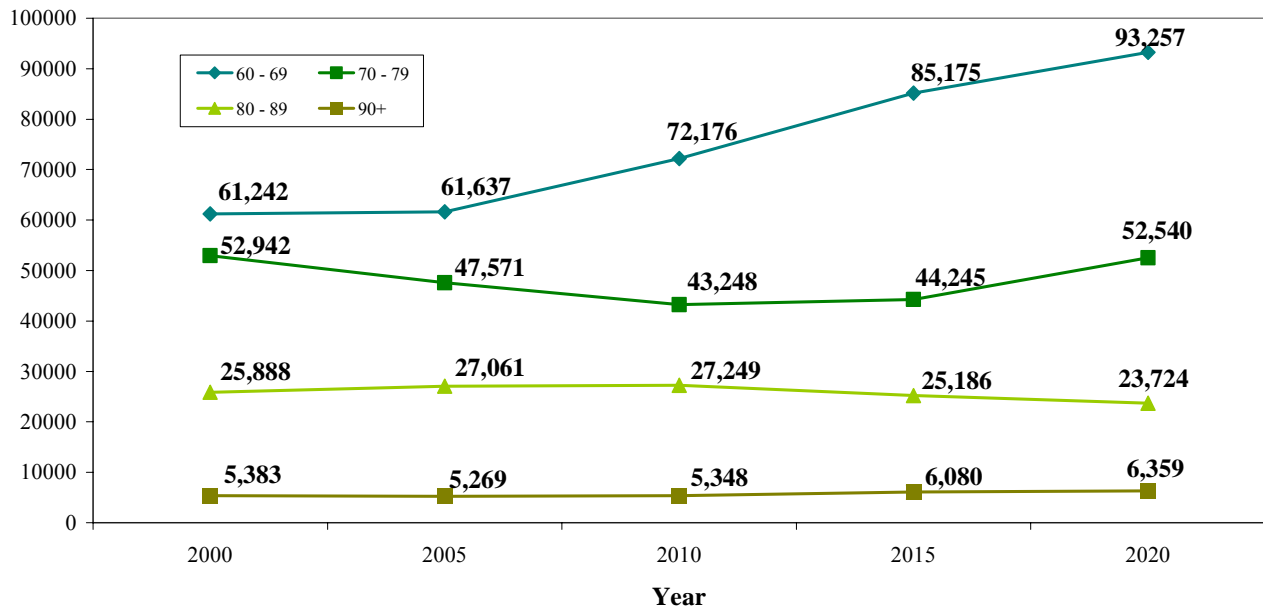
Migration Rate: The 10-year net migration rates were estimated using age-sex counts of each county's population in the 1990 and 2000 Censuses adjusted for the deaths occurring to the age-sex group from April 1, 1990 through March 31, 2000. Of course, in calculating the deaths occurring to an age group, adjustment was made for the group's aging during the decade. The age-sex specific rates of net migration for each county during 1995-2000 are assumed to hold for that county during the period 2000-2005 and 2005-2020. For a more detailed explanation of the procedures used for determining survival or migration rates see the Methodology section.

A beneficial feature of these population projections is the detailed presentation of the 85-89, 90-94, and 95+ age groups (when possible) for the following reasons:

- 1.) The high rate of growth of the population 85 years and over;
- 2.) Rates of disability vary considerably among these age groups;
- 3.) The Federal Interagency Forum on Aging-Related Statistics now recommends that data be presented for ages 85-89, 90-94, and 95+ (<http://www.agingstats.gov/chartbook2000/dataneeds.html>).

The number of Hamilton County residents age 60 and over is expected to increase from a total of 145,455 in 2000 to a projected 175,880 in 2020. As Figure 3 (and Table 3a in the Appendix) illustrates, the greatest increase is expected among the 60-69 year age group (those currently age 40-49). In 2000, there were 61,242 older adults age 60-69 in Hamilton County. By the year 2020, when the bulk of the baby boomers move into this age group, it is expected that there will be approximately 93,000 individuals age 60-69 in Hamilton County. This projection suggests a 52.3% increase in the County population in this age group. The 90+ age group is also expected to increase, from 5,383 in 2000, to 6,359 in 2020 (an increase of 18.1%).

Figure 3
Projections of Population Age 60+, by Year* and by Age Group,
Hamilton County



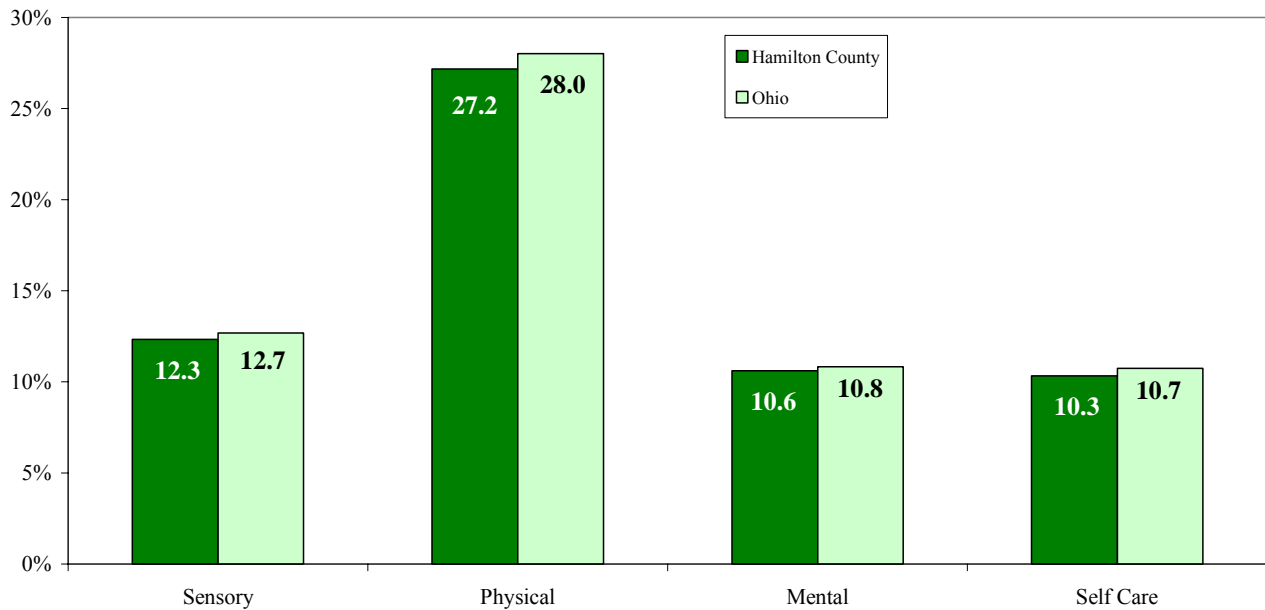
Source: Author's Projections

*Year 2000 data are actual population counts.

Prevalence of Disability among the 60+ Population

The rate of disability among the 60+ population in Hamilton County closely mirrors the state of Ohio. In 2000, the most common type of disability reported was physical, followed by sensory, mental, and self-care impairments, respectively (see Figure 4 and Table 4a in the Appendix). According to the Census, a physical impairment is defined as a long-lasting condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting or carrying. Sensory impairments include blindness, deafness, or any severe and long-lasting vision or hearing impairment. Mental health impairment is defined as having difficulty learning, remembering or concentrating because of a physical, mental, or emotional condition that lasts 6 months or more. Self-care impairments include difficulty dressing, bathing, or getting around the house as a result of a long-lasting condition (6 months or more). It should be noted that these categories are not mutually exclusive. Respondents could have multiple impairments, which may span more than one disability category. In 2000, 34.6% of the 60+ population in Hamilton County had at least one disability.

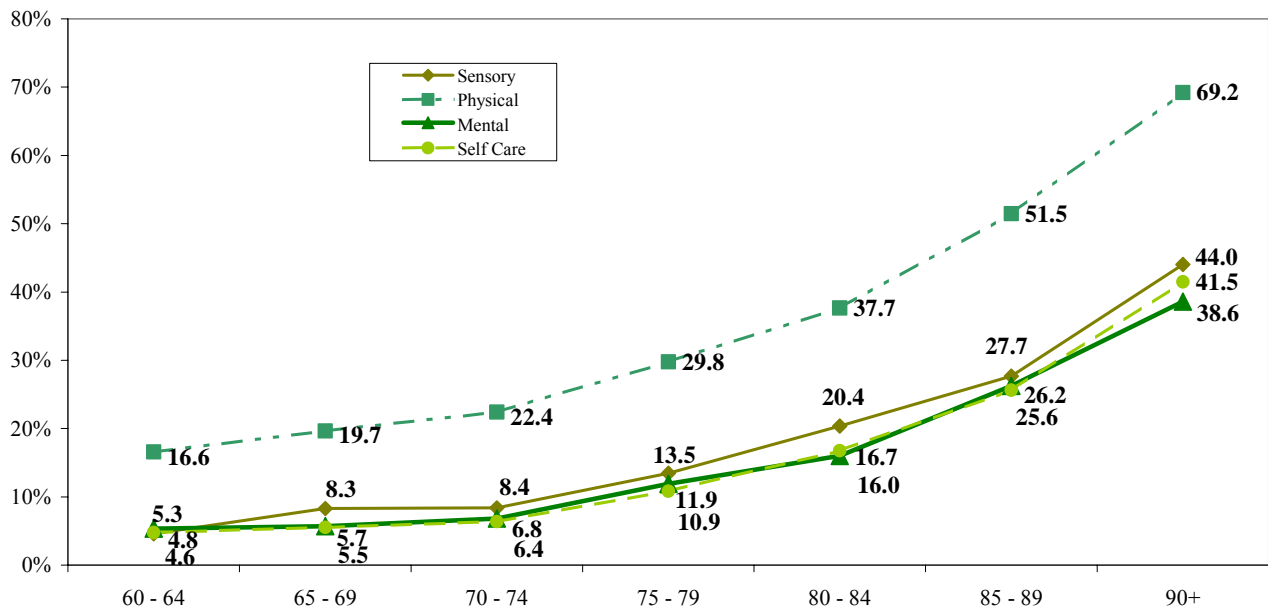
Figure 4
Proportion of Population Age 60+, with Sensory, Physical, Mental and Self-Care Disabilities, Hamilton County & Ohio, 2000



Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

As illustrated in Figure 5 (and Table 5a in the Appendix), the percentage of individuals reporting sensory, physical, mental and self-care disabilities in Hamilton County steadily increases with age, not surprisingly, with the oldest age group reporting the highest levels in all four types of disability. For example, the proportion of people with physical disabilities increases from 16.6% of the population age 60-64, to 69.2% of the population age 90+.

Figure 5
Disability Among Population Age 60+
by Type of Disability, by Age Group,
Hamilton County, 2000



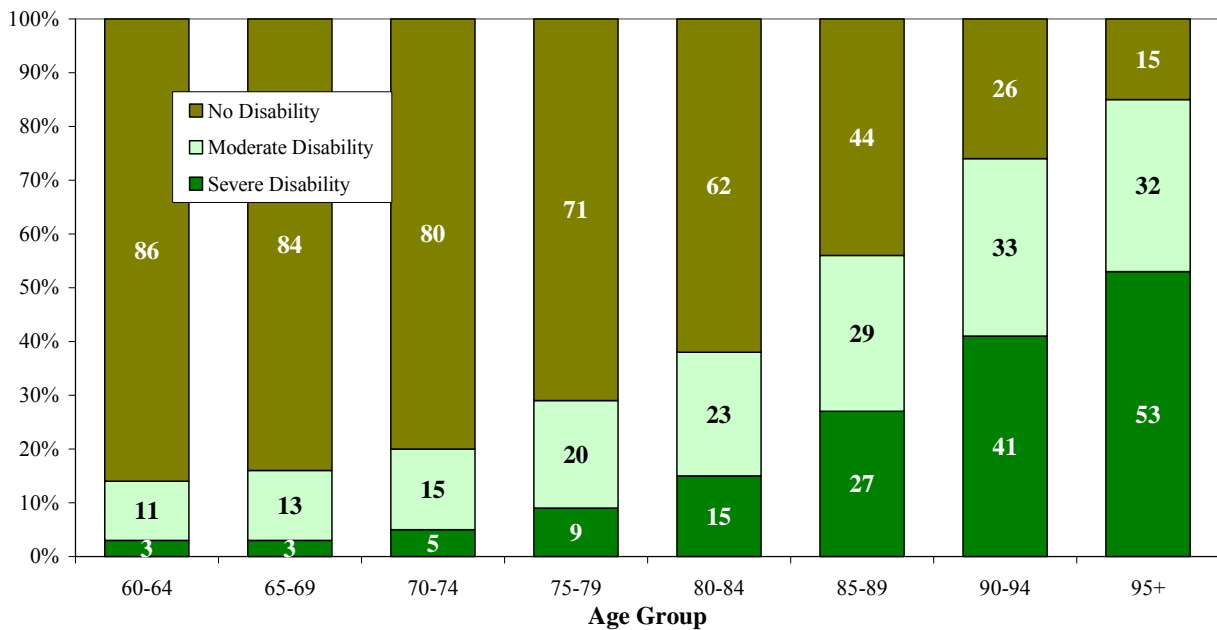
Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Projections of Population with Disability

In this study, disability is defined as a measure of impairment in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). Three levels are assigned to this measure: Severe Disability, Moderate Disability, and Little or No Disability. Individuals are classified as moderately disabled if they received assistance in one of the following ADLs: eating, transferring in or out of bed or chair, getting to the toilet, dressing, bathing, or remaining continent; or in at least one of the following instrumental tasks of daily living: walking, shopping, meal preparation, housekeeping, or using transportation or telephone. Severe disability refers to receiving assistance in at least two of the following ADLs: eating, bathing, transferring in or out of bed or chair, getting to the toilet, dressing, or remaining continent, or to having cognitive impairment. The disability rates by sex and age group are assumed to remain the same from 2000 to 2020 as they were in 1995.

The prevalence of disability increases with age. As Figure 6 (and Table 6a in the Appendix) shows, only 3% of the population age 60-64 have a severe disability, compared to more than half (53%) of the people age 95 and older. Women experience higher rates of severe and moderate disability at every age compared to men of the same age. For more information on the prevalence of disability among men and women by age group, see the Methodology section.

Figure 6
Estimated Percentage Distribution of Total Population
by Disability Status and Age Group, 1995



Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled Population: 2015 to 2050*. Oxford, OH: Scripps Gerontology Center, Miami University.

Since the rate of disability by gender and age group was held constant throughout the timeline (see the Methodology section for a more detailed explanation), any fluctuations in the number of persons with disabilities across time are attributed to projected changes in the number of people in each age-gender group. As was discussed in the population projections section (see Figure 3), increases in the 60+ population are expected in the 60-69 and 90+ age groups, while decreases are expected in the 70-79 and 80-89 age groups. Because the expected increases in some segments of the 60+ population exceed the expected decreases in other segments, the projected number of persons with disabilities is expected to increase from 2000-2020 in Hamilton County (see Table 2 below, and Table 3a in the Appendix). When broken down by age group, projections suggest increases in both moderate and severe disability among the 60-69 and 90+ age groups because of projected increases in these populations. Table 3a in the Appendix provides a breakdown of the projected number of disabled persons for each age group for Hamilton County.

Table 2
Projections of Disability Among Population Age 60+
Hamilton County, 2000*-2020

Year	Total Population	No Disability	Moderate Disability	Severe Disability
2000	145,455	107,447	24,871	13,137
2005	141,538	104,534	24,174	12,830
2010	148,021	110,331	24,721	12,969
2015	160,686	121,273	26,097	13,316
2020	175,880	133,927	28,081	13,872

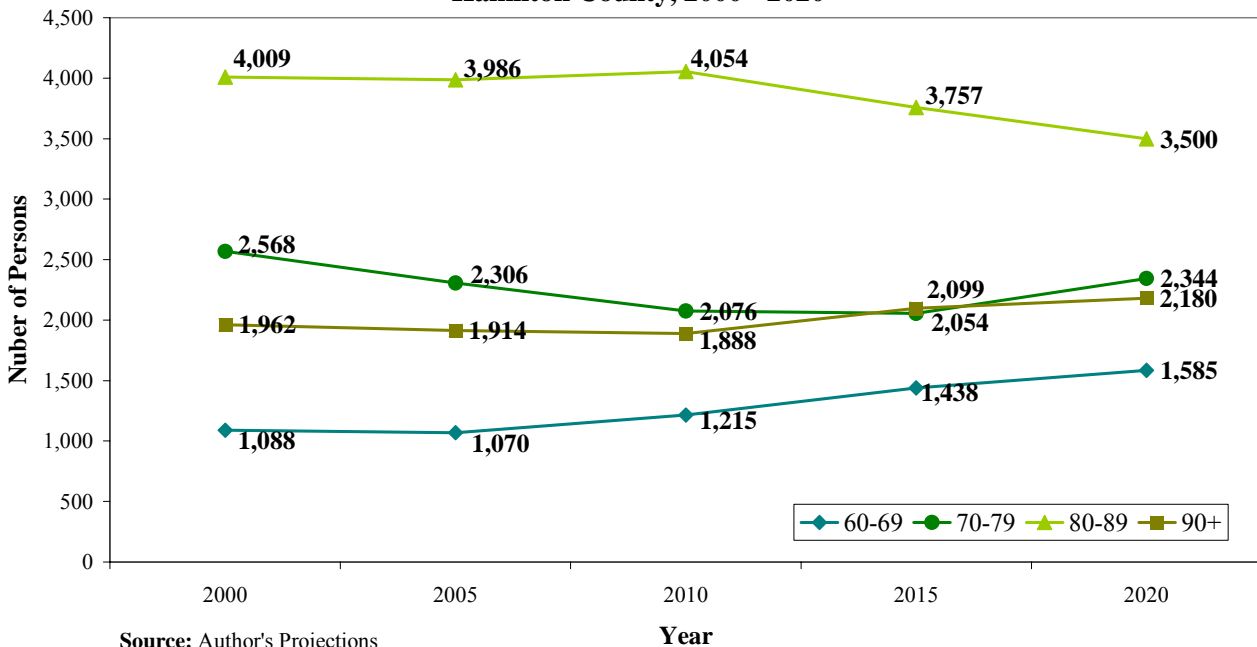
Source: Author's Projections

* Year 2000 data are actual disability counts, years 2005-2020 are projections.

Figures 7 and 8 (and Tables 7a and 8a in the Appendix) show the projected number of disabled women and men (respectively) in Hamilton County according to age group. Because the rates of disability are assumed to be constant over the future time horizon, projected changes in the number of people with disabilities reflect changes in population composition.

With regard to the older female population, 9,627 were severely disabled in 2000, compared to a projected 9,609 in 2020. Changes in the number of disabled older adults are expected only in age groups where population changes are expected. Figure 7 shows that between 2000 and 2020, a decline is expected in the number of severely disabled women age 70-79 and 80-89 (as the total number of women age 70-89 is expected to decrease). An increase in numbers of severely disabled women is expected among the 60-69 and 90+ age groups in Hamilton County, as these populations are expected to increase.

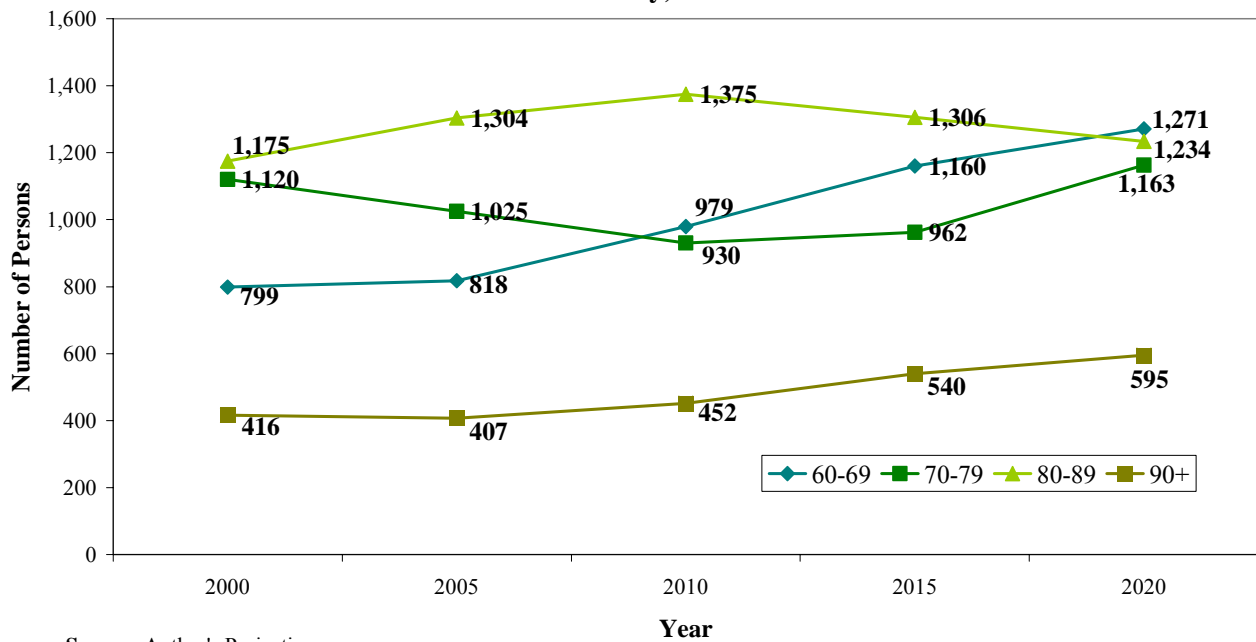
Figure 7
Projections of the Number of Women Age 60+
with Severe Disability, by Age Group,
Hamilton County, 2000*-2020



Source: Author's Projections
 *Year 2000 data are actual disability counts.

The population with severe disabilities in Hamilton County is largely female. In 2000, a total of 3,510 males age 60 and over were severely disabled (compared to 9,627 females). By the year 2020, it is expected that the number of disabled older men will increase to 4,263 (compared to 9,609 older women). Figure 8 shows that the largest increase in the number of severely disabled men is expected among the 60-69 age group. Smaller increases in the number of severely disabled men are expected among the 70-79, 80-89, and 90+ age groups in Hamilton County.

Figure 8
Projections of the Number of Men Age 60+
with Severe Disability, by Age Group,
Hamilton County, 2000*-2020



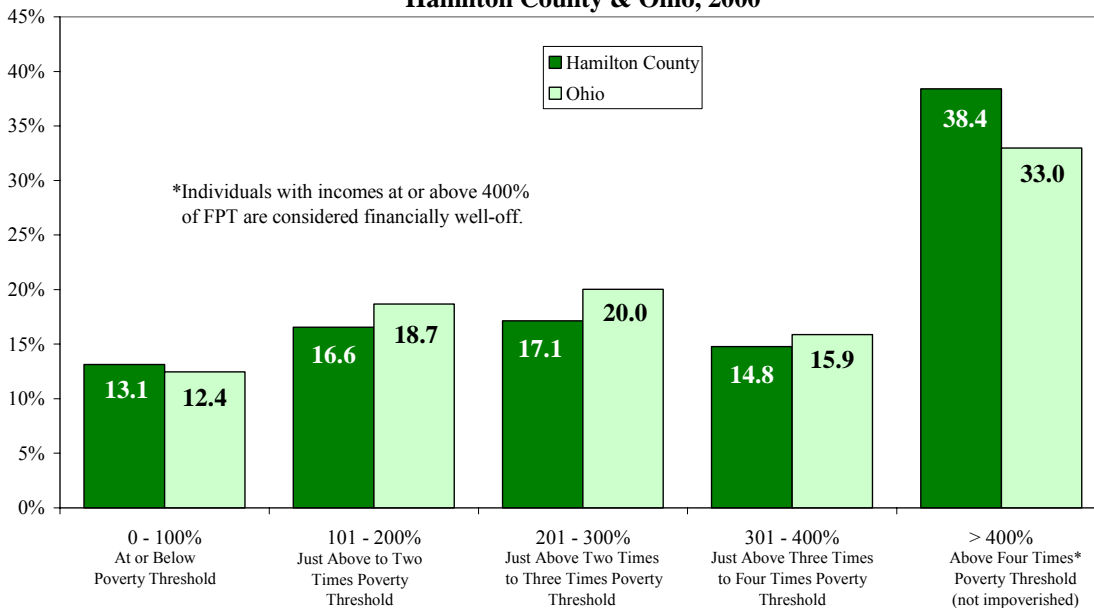
Source: Author's Projections
 *Year 2000 data are actual disability counts.

Population Characteristics that Could Affect Need for Care

Several variables have been found to be related to the prevalence of disability and the need for long-term care services as one ages. These variables include poverty, racial and ethnic background, marital status, living alone, and educational attainment (http://www.aoa.gov/prof/statistics/future_growth/aging21/Program.asp). In the following sections, these issues are explored in the context of the older population in Hamilton County.

Poverty - Standards for gauging poverty levels are set by the Federal Poverty Threshold², which delineates income levels (or thresholds) that vary by family size, age of householder, and number of related children under 18 years of age. Rates of poverty are typically discussed as percentages of the Federal Poverty Threshold (FPT), for which those with incomes below 100% of the FPT are the most impoverished, and those with incomes above 400% of the FPT are the most economically advantaged. In the following discussion, data regarding individuals with incomes greater than 400% of the poverty level are included for comparison, although these individuals are not considered impoverished. As shown in Figure 9 (and Table 9a in the Appendix), a significant number of older adults in Hamilton County are potential candidates for state and federal assistance based on income eligibility. In 2000, 46.8% of the county's 60+ population (or 68,072 individuals) had incomes below 300% of the federal poverty level. Of this population, 13.1% (or 19,055 individuals) were living at or below 100% of the poverty level.

Figure 9
Proportion of Population Age 60+ by Poverty Threshold Ratio,
Hamilton County & Ohio, 2000

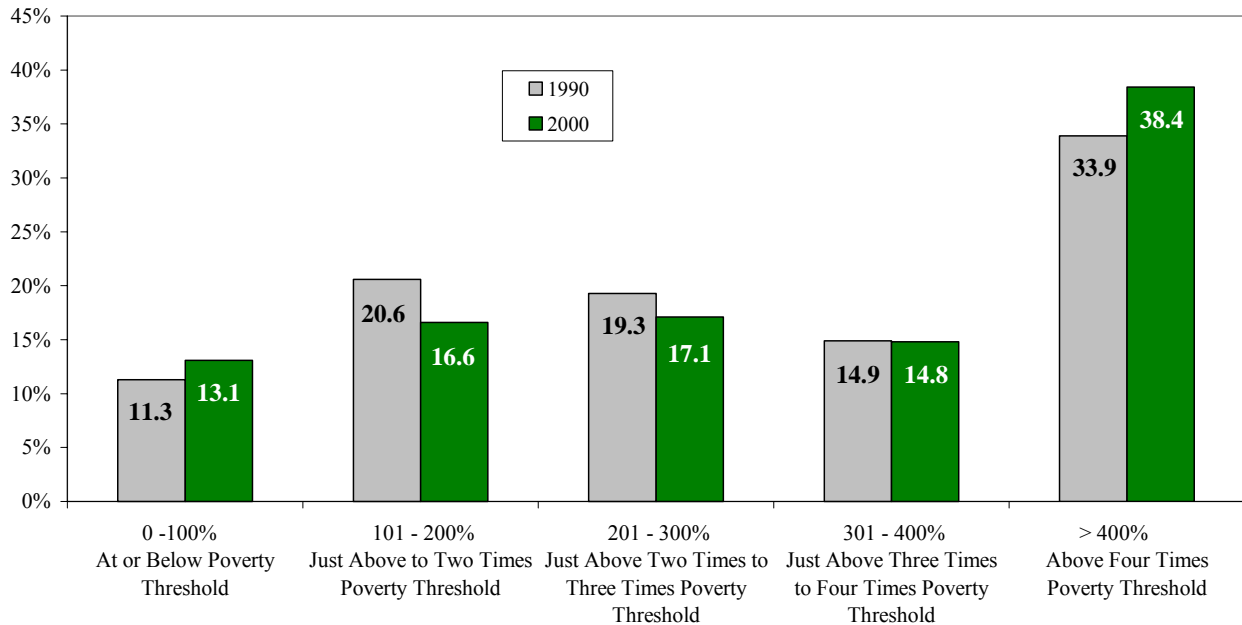


Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent

² **Federal Poverty Threshold** - In 2000, the poverty level was \$8,959 for one person under the age of 65, and \$8,259 for an individual over 65. For two person households, the poverty level was \$11,590 if the householder was under 65 and \$10,419 when the householder was 65+. In 1990, the poverty threshold was \$6,800 (annual income) for one person under the age of 65, and \$6,268 for an individual over 65. For two person households, where the householder was under the age of 65, the poverty threshold was \$8,794, and \$7,905 when the householder was 65+. For more information about poverty thresholds, see: <http://www.census.gov/hhes/poverty/threshld.html>

Compared to 1990, there were a higher percentage of older adults at both ends of the poverty scale in Hamilton County in 2000. The greatest change occurred among the older population with incomes below 100% of the FPT. Figure 10 (and Table 10a in the Appendix) shows that the percent of adults 60+ living below the poverty level increased from 11.3% in 1990 to 13.1% in 2000. At the other end of the scale, the percent of older adults with incomes over 400% of the poverty level (the most economically advantaged) also increased in this period, from 33.9% in 1990, to 38.4% in 2000. A considerable number of people did not complete income related questions properly in the 1990 Census. As a result, the wide gap in the percentage of people at or below poverty from 1990 to 2000 may be partially due to this responding pattern.

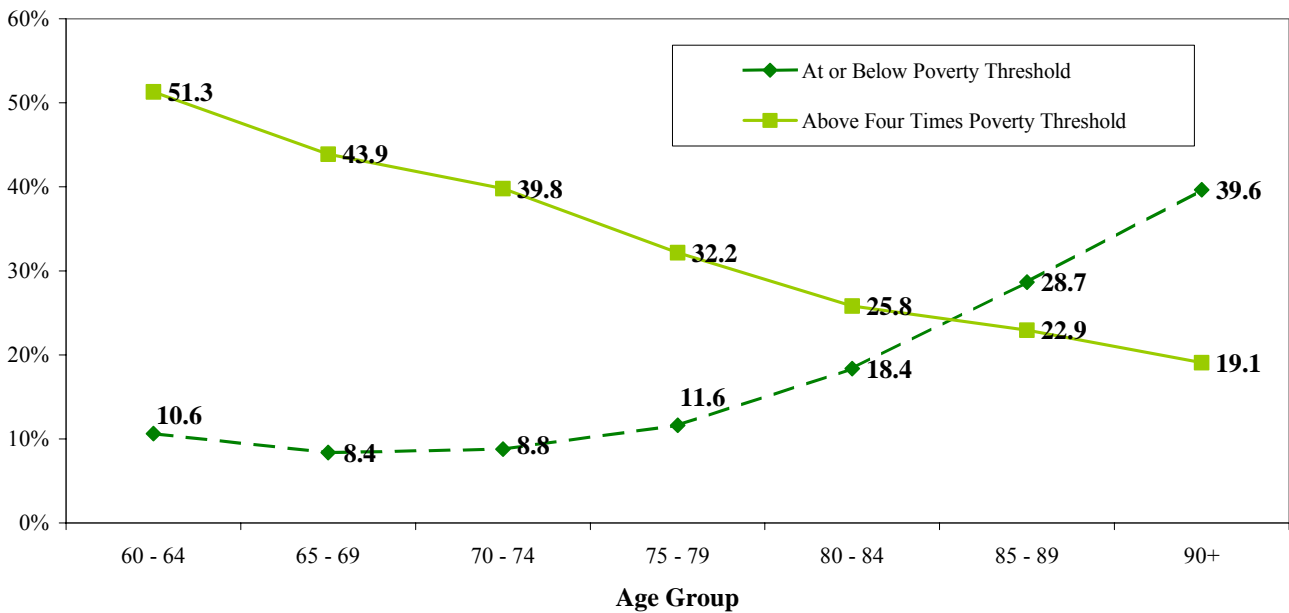
Figure 10
Proportion of Population Age 60+ by Poverty Threshold Ratio,
Hamilton County, 1990 & 2000



Source: U.S. Census Bureau, 1990 and 2000: Public Use Microdata Sample: 5-Percent.

A closer examination of poverty rates in Hamilton County reveals striking trends in relation to age. As shown in Figure 11 (and Table 11a in the Appendix), the percentage of people at or below the poverty level increases dramatically with advancing age. To illustrate, more than one-half (51.3%) of 60-64 year olds reported incomes above four times the poverty threshold (the highest income category), compared to only 19.1% of those in the oldest age group (90+). In contrast, 10.6% of 60-64 year olds fall in the lowest income category, while 39.6% of the 90+ population reported incomes at or below the poverty threshold.

Figure 11
Proportion of 60+ Population in Poverty Compared to Those with Incomes Above Four Times Poverty Threshold, by Age Group, Hamilton County, 2000



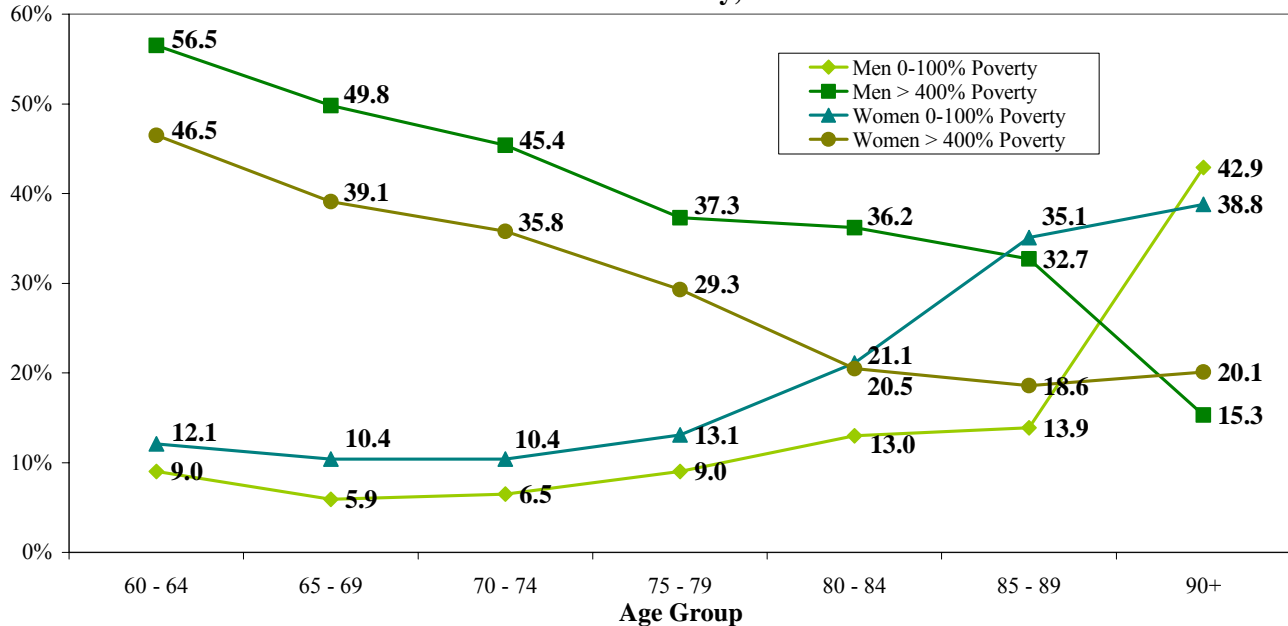
Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Figure 12 (and Table 12a in the Appendix) shows a comparison of the most economically disadvantaged income category ($\leq 100\%$ FPT) and the most economically advantaged income category ($> 400\%$ FPT) by gender and age group. In order to show the contrast between the lowest and the highest income groups, the middle income categories have been intentionally left out.

In 2000, 56.5% of men age 60-64 were in the highest income category, while only 15.3% of men 90+ had this level of income. In contrast, only 9% of men age 60-64 were in the lowest income category, compared to 42.9% of men age 90+. Figure 12 shows that a fairly stable percentage of older men were classified as having incomes at or below 100% of the FPT from ages 60-84, with a sharp increase in the proportion of men in this income category as they approach the 90+ age group. It appears that age 85-89 is a pivotal point for men, where average incomes drop sharply as they near the 90+ age group.

The pattern of income distribution among older women in Hamilton County is similar to that of older men. One important distinction is that there is a higher proportion of women in the lowest income category ($\leq 100\%$ FPT), and a lower proportion of women in the highest income category ($>400\%$ FPT) at all ages, except among the 90+ age group.

Figure 12
Proportion of Population Age 60+, by Poverty
Threshold Ratio*, Age Group, and by Gender,
Hamilton County, 2000



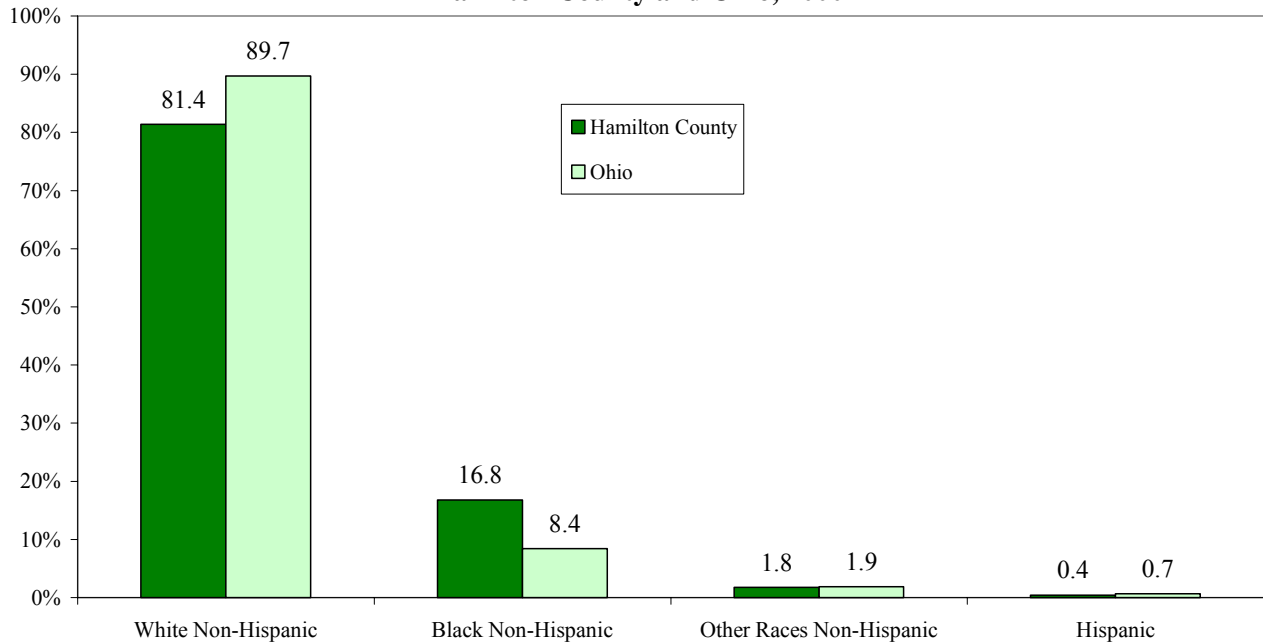
Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent

*Middle income groups have been removed in order to show the contrast between the lowest and highest income groups.

Race and Ethnicity

Hamilton County’s older population is more racially and ethnically diverse than the older population in Ohio as a whole. Figure 13 (and Table 13a in the Appendix) shows that in 2000, 81.4% of the county population (60+) identified themselves as white non-Hispanic, compared to 89.7% of the state population. In the same year, 16.8% of the county population self-identified as black non-Hispanic, compared to 8.4% of the state population.

Figure 13
Race and Ethnic Distribution Among Population Age 60+,
Hamilton County and Ohio, 2000

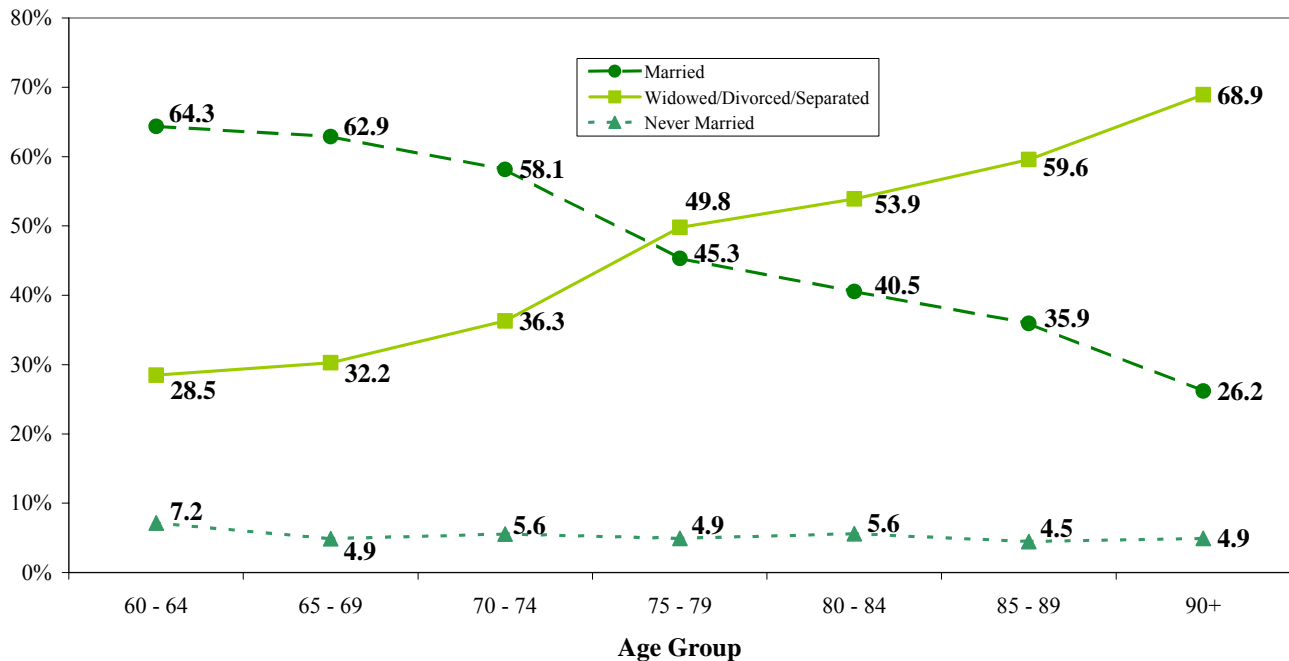


Source: U.S. Census Bureau, 2000 Census of Population: PCT12I, PCT12J, & PCT12H SEX BY AGE

Marital Status

According to Census data, the percentage of married older adults decreases steadily after age 60. As illustrated in Figure 14 (and Table 14a in the Appendix), the majority (64.3%) of 60-64 year olds were married in 2000, while 35.7% were single (defined as widowed, divorced, separated or never married). In contrast to the 60-64 year olds, the marital status of the 90+ population is nearly the inverse. Among this age group, 73.8% were single in 2000, while 26.2% were married.

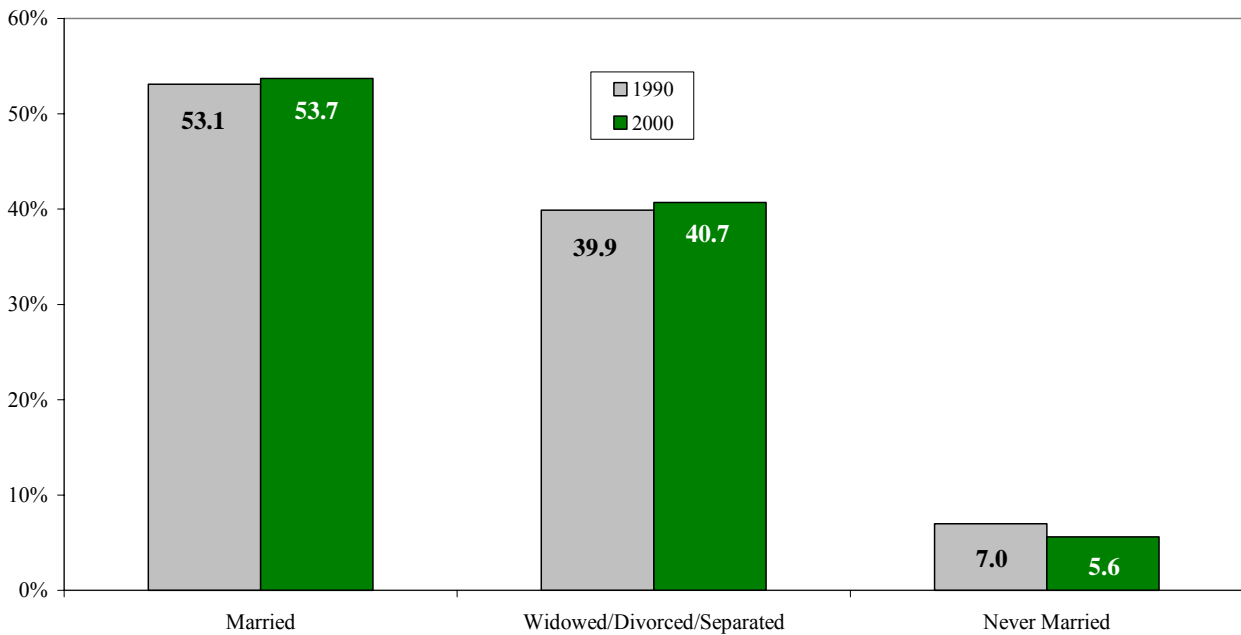
Figure 14
Marital Status of Population Age 60+, by Age Group
Hamilton County, 2000



Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Between 1990 and 2000, the percentage of married older adults (60+) in Hamilton County remained fairly stable. In 2000, 53.7% of older Hamilton County residents were married compared to 53.1% in 1990. Similarly, no major changes occurred among the single population (people who were widowed, divorced, separated, or never married). In 2000, 46.3% of the 60+ population was single, compared to 46.9% in 1990 (see Figure 15 and Table 15a in the Appendix).

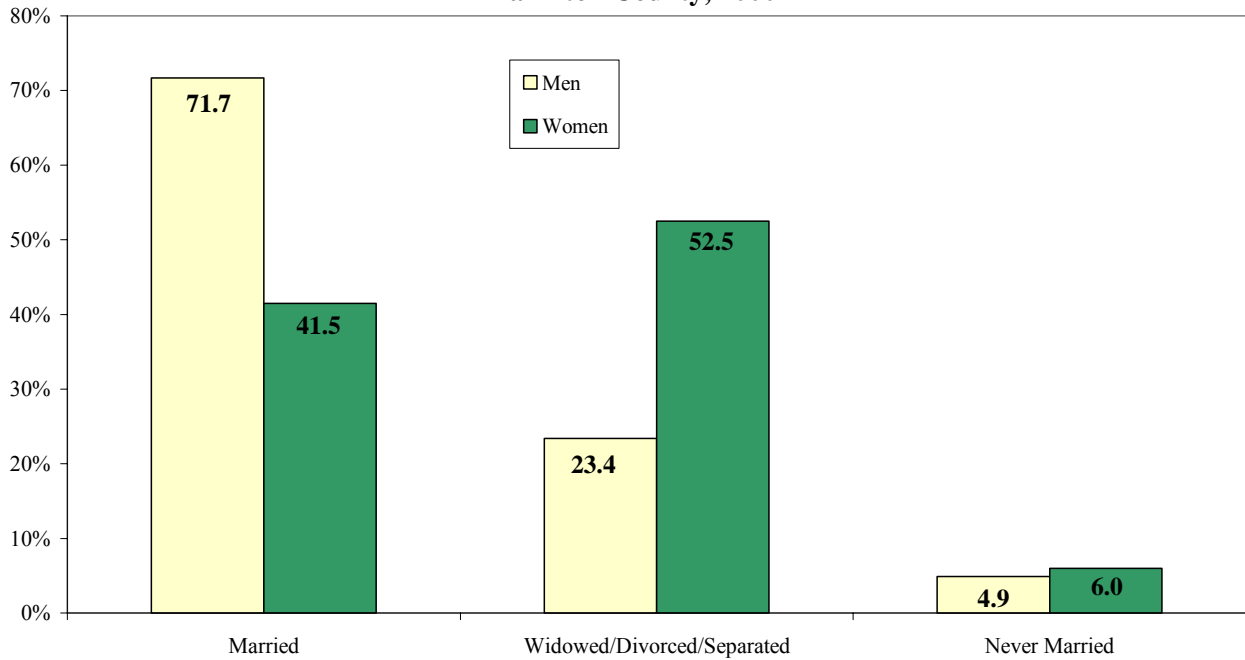
Figure 15
Marital Status Among Population Age 60+,
Hamilton County, 1990 & 2000



Source: U.S. Census Bureau, 1990 and 2000: Public Use Microdata Sample: 5-Percent.

Women above the age of 60 are more likely to be widowed, divorced, or separated than men. Figure 16 (and Table 16a in the Appendix) shows that 71.7% of men age 60+ in Hamilton County were married in 2000, compared to only 41.5% of women. Because single older adults are more likely than married couples to need outside help or institutional care, the population in Hamilton County that is potentially in need of such assistance is largely female.

Figure 16
Marital Status Among Population Age 60+, by Gender
Hamilton County, 2000



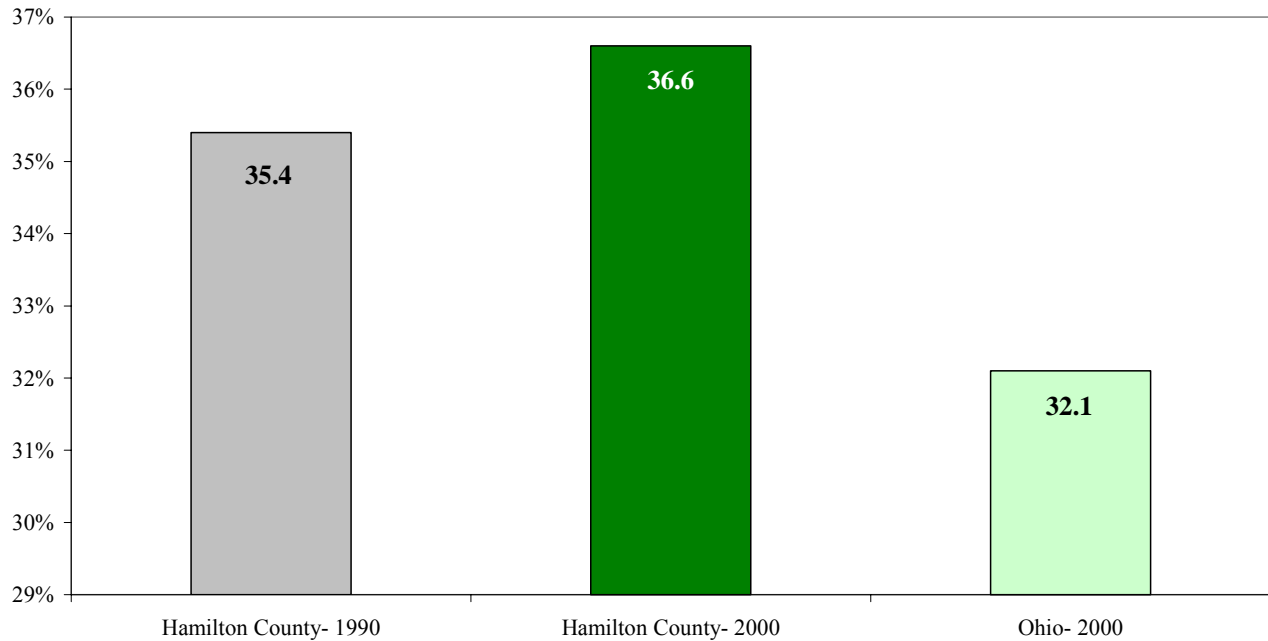
Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Living Alone

Figure 17 (and Table 17a in the Appendix) compares the proportion of Hamilton County and Ohio residents age 60+ who were living alone in 2000, and illustrates the changes that occurred in the county population (60+) living alone between 1990 and 2000.

In 2000, 36.6% of Hamilton County residents age 60+ were living alone, compared to 32.1% of the state population age 60+. The percentage of older adults living alone in Hamilton County has increased since 1990, from 35.4% of the 60+ population to 36.6% in 2000.

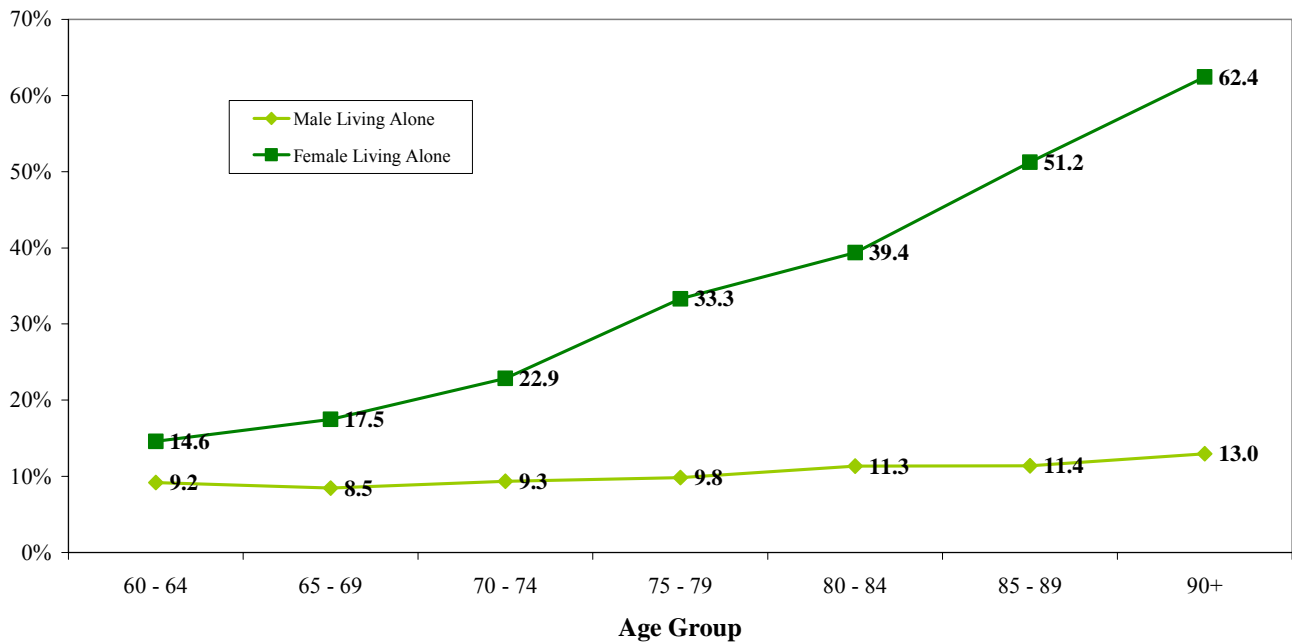
Figure 17
Proportion of Population Age 60+ Living Alone,
Hamilton County, 1990 & 2000, and Ohio, 2000



Source: U.S. Census Bureau, 1990 and 2000: Public Use Microdata Sample: 5-Percent.

Older women are more likely than older men to be living alone in Hamilton County. Figure 18 (and Table 18a in the Appendix) shows that a higher percentage of women than men are living alone at all ages above 60. While the percentage of men living alone increases only slightly with age, the percent of women living alone increases dramatically with age. Among the 60-64 year age group in 2000, 14.6% of women were living alone, compared to 9.2% of men. Among the oldest age group (90+), 62.4% of women were living alone, compared to only 13.0% of their male counterparts.

Figure 18
Proportion of Population Age 60+ Living Alone,
by Gender, and by Age Group,
Hamilton County, 2000

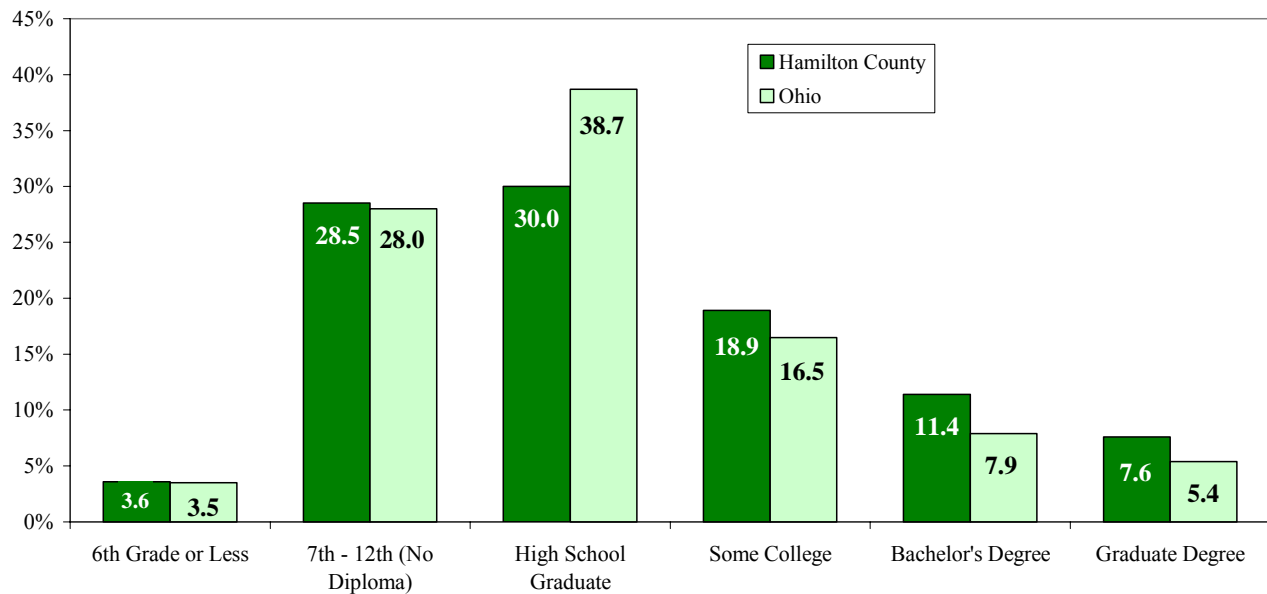


Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Education

Studies suggest that there is a strong relationship between educational attainment and the prevalence of poverty and disability in old age. Figure 19 (and Table 19a in the Appendix) shows that the majority of older adults (60+) in Hamilton County have completed 12 or fewer years of school. Almost one third (30.0%) of older adults have completed high school, and 32.1% have completed less than 12 years. This suggests that a significant proportion of the older population may be economically vulnerable.

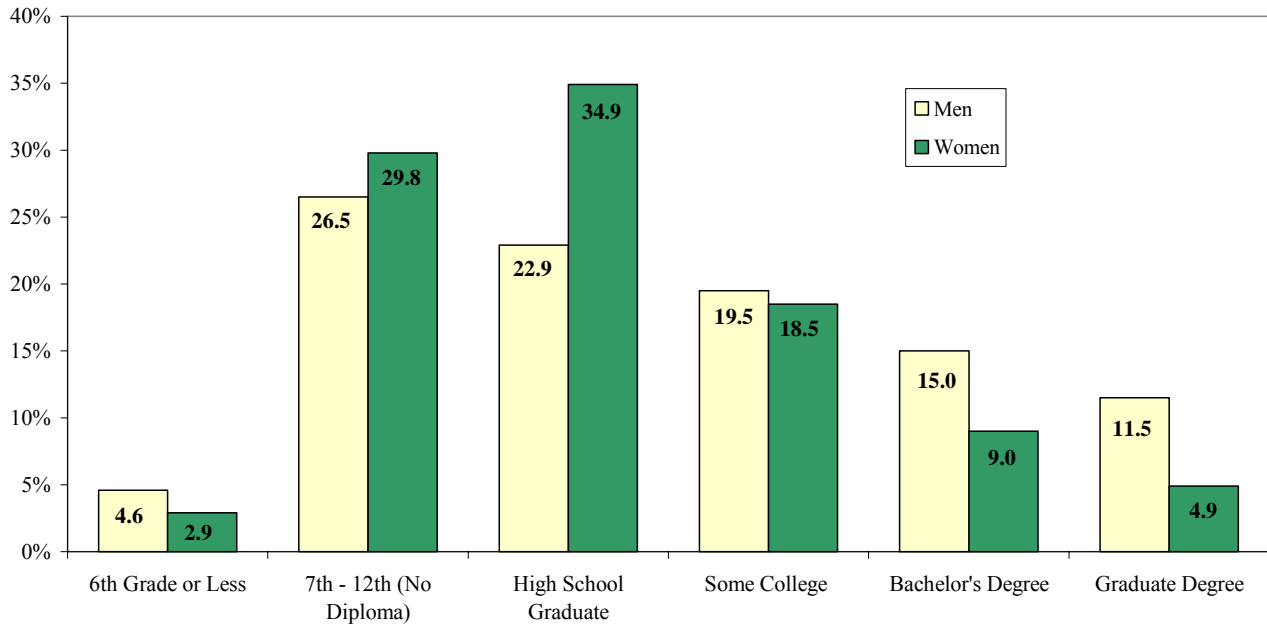
Figure 19
Highest Level of Educational Attainment
Among Population Age 60+
Hamilton County & Ohio, 2000



Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Figure 20 (and Table 20a in the Appendix) contrasts the educational attainment of older adults in Hamilton County by gender. Older women in Hamilton County are more likely to have only completed high school, while older men are more likely to have pursued and obtained higher degrees. As a whole, the older female population in Hamilton County is less educated than the older male population.

Figure 20
Highest Level of Educational Attainment
Among Population Age 60+, by Gender
Hamilton County, 2000



Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Summary

This analysis of population trends and projections in Hamilton County, Ohio reveals several important issues with regard to the prevalence of poverty and disability among the older population. Primarily, it is evident that the County population is aging, and the population age 60+ will continue to grow over the next twenty years. More specifically, the so-called "oldest old" (85+) are the fastest growing age group in the County (as well as the state of Ohio). The unprecedented growth in the older population will present the County (and the state) with a number of challenges in the coming years. Among the older population in Hamilton County, levels of disability and poverty increase with age, with the oldest old experiencing the highest rates of both. Also of concern is the preponderance of older women among the oldest age groups, who comprise a majority of the impoverished, disabled and single populations. These women, who are highly economically vulnerable, and are potentially in need of significant personal care assistance, are frequently living alone; a trend that is expected to become increasingly common over the next several decades.

Methodology

Projections of the disabled older population in Hamilton County were calculated in three steps. We developed projections of the county's older population by gender and age groups from 2000 to 2020. We also made estimates of disability rates for the older population by gender and age groups. And, we applied these disability rates to the projected population to project the number of persons with a disability in Hamilton County.

Projection Method - We developed population projections using the "cohort component method" (Shryock & Siegel, 1996). This method involves beginning with actual population counts in gender and age groups, and applying specific rates of change (births, deaths, and migration) to estimate the future population. We projected the population in cycles of 5-year periods through the year 2020. We applied projected survival rates to the beginning population in order to calculate the surviving population for a 5-year period (see following section for an explanation of survival rates). Next, we applied gender and age group specific migration rates to calculate the number of survivors leaving and joining the county population during the five years. The final projected population equals the survived population plus the difference between the number of migrants leaving and joining the county. The projected population at the end of each 5-year period becomes the beginning population for the next 5-year period, and the procedure is repeated over the desired time horizon. We used 5-year age groupings of men and women to make the projections. In order to project the population that will be 60+ in 2020, we began with the population that was 40+ in 2000 (these cohorts, of course, age as they are projected forward).

Survival Rates - To calculate survival rates for the older population in Ohio, we combined projected national mortality rates from the Census with actual mortality rates for the state to develop a trended set of survival rates for 2005-2020. All calculations were done for each gender in 5-year age groups. Using Census projected life tables for 2000, 2005, 2010, 2015, and 2020, we developed 5-year survival rates for the nation (for life tables, see <http://www.census.gov/population/www/projections/natdet.html>). Using Ohio counts of death and counts of population for 2000, we developed survival rates for Ohio for 2000. We then projected the County's survival rates to pattern the expected change for the Nation while maintaining the difference between the County and the Nation that occurred in 2000.

Migration Rates - We computed net migration estimates (i.e., the difference in the number of migrants joining and leaving the county) for the County for each gender in 5-year age groups (beginning with ages 40-44 years old, through 95+). We calculated migration estimates using Census data for 1990 and 2000 and counts of County death from Ohio public use mortality files (Ohio Department of Health, 1990-2000). We "survived" the 1990 County population of each gender and age group by subtracting the deaths from those residing in the county from April 1, 1990 through March 31, 2000. In calculating the deaths occurring to an age group, we adjusted for the group's getting older, or aging, during the decade. We calculated net migration by subtracting this survived population from the 2000 count of the age population (the age group that was 10 years older in 2000 than in 1990). Thus, net migration equals the actual 2000 count minus the survived population (or minus the number of people that would have been in the county had no migration taken place during the decade). The aforementioned set of assumptions, which guided our projection methodology, garnered specific results. If these assumptions were

changed, it would yield different results. In 2003, the Ohio Department of Development produced a series of population projections for each of Ohio's 88 counties. As their research was based on a different set of assumptions, their numbers differ from ours slightly (<http://www.odod.state.oh.us/research/>).

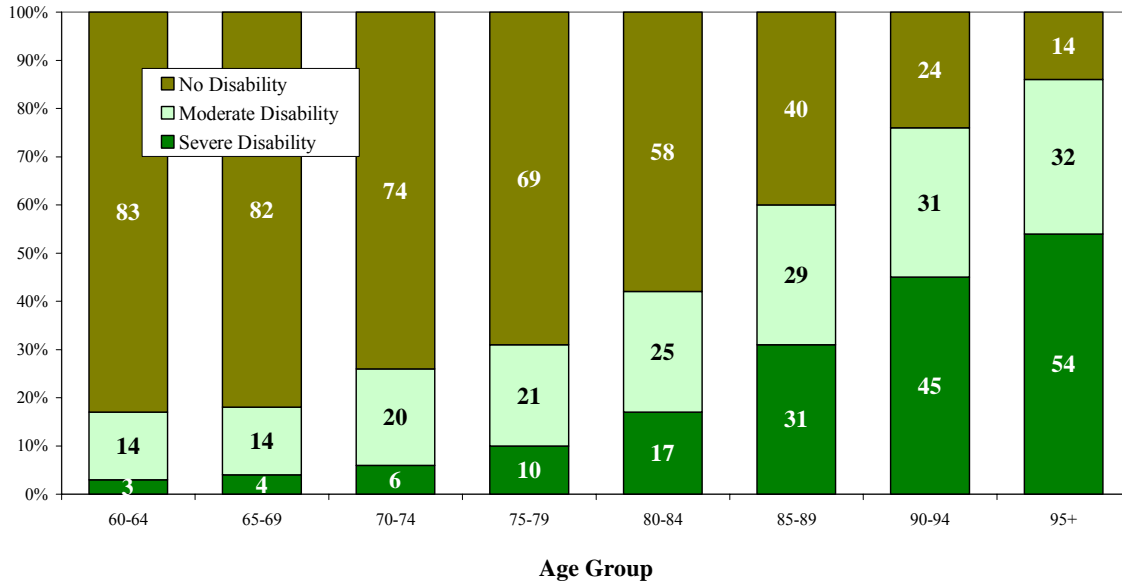
Estimation of Age and Sex Specific Disability Rates for Gender and Age Groups - Disability in this study is defined as a measure of impairment in activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Three levels were assigned to this measure: Severe Disability, Moderate Disability, and Little or No Disability. Disability rates for the institutionalized and community based older population were calculated separately, weighted by their respective proportions in the population, and then combined.

The community disability rates were calculated using the community portion of the 1994 National Long Term Care Survey (NLTCS). Institutional disability rates were calculated using the 1995 National Nursing Home Survey (NNHS). These surveys provided information to calculate the disability rate for the 65+ population. As we defined disability, we relied on individual ADL-IADL item scores. Sample participants were identified as either dependent in performing Activities of Daily Living or independent in order to assign disability status to each individual. Two criteria were used in selecting individual ADL or IADL items to include in the disability scale: 1) items must have similar wording, content, and time span in both surveys; and 2) the scale, and the items used in creating the scale, must be as similar as possible to the items used in calculating the disability measure that we created in our earlier studies of projecting disabled older population of Ohio.

We used 2000 Census data on self-care disabilities and the National Health Interview Survey on Disability, 1995: Phase II Adult Followback as a guide to extend the disability rates established for the 65+ population to the 60-64 age group. We are assuming that the proportion of the population that will become disabled in each gender and age group will remain constant from 1995 (the survey dates) to the year 2020. We acknowledge that there are studies that suggest it could be otherwise.

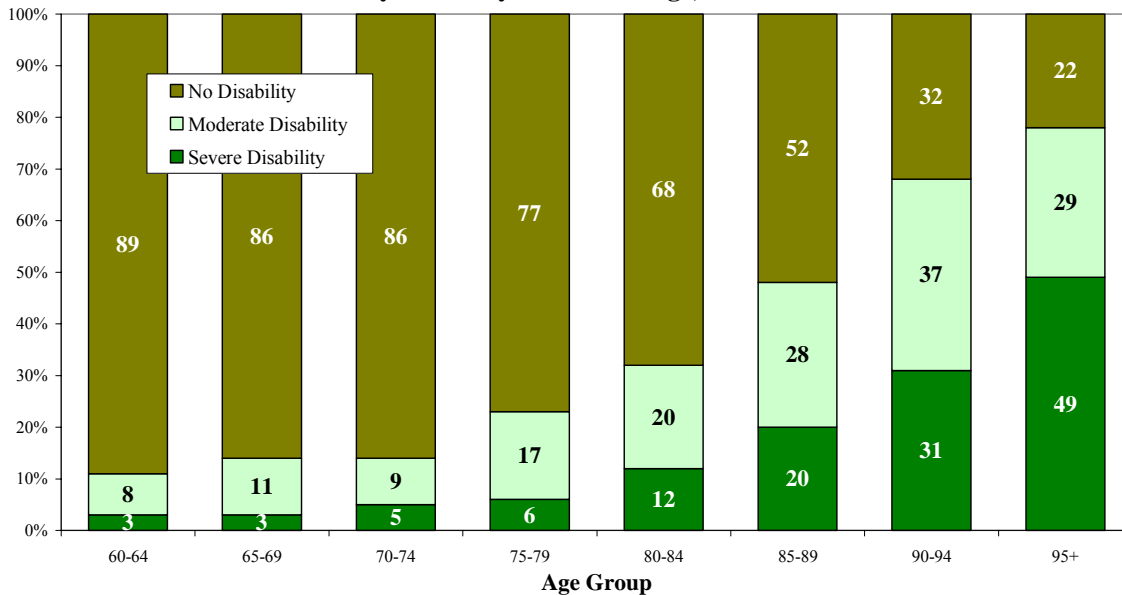
Figures 21 and 22 (and Tables 21a and 22a in the Appendix) show the higher rates of severe disability among women of all ages, and the consistent increase in the prevalence of disability with advancing age for both men and women.

Figure 21
Estimated Percentage Distribution of Women
by Disability Status and Age, 1995



Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled Population: 2015 to 2050*. Oxford, OH: Scripps Gerontology Center, Miami University.

Figure 22
Estimated Percentage Distribution of Men
by Disability Status and Age, 1995



Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled Population: 2015 to 2050*.

References

- Administration on Aging (no date). Aging into the 21st century. Retrieved February 27, 2004, from http://www.aoa.gov/prof/statistics/future_growth/aging21/Program.asp
- Federal Interagency Forum on Aging-Related Statistics (July 28, 2000). Older Americans 2000: Key Indicators of Well-Being. Retrieved March 3, 2004, from <http://www.agingstats.gov/chartbook2000/dataneeds.html>
- Mehdzadeh, S.A., Kunkel, S.R., & Ritchey, P.N. (2001). Projections of Ohio's older disabled population: 2015 to 2050. Oxford, OH: Scripps Gerontology Center, Miami University.
- National Center for Health Statistics (1995). *National Nursing Home Survey, 1995*. Hyattsville, MD: United States Department of Health and Human Services.
- National Center for Health Statistics (1995). *National Health Interview Survey on Disability, 1995: Phase II, Adult Followback*. Hyattsville, MD: United States Department of Health and Human Services.
- National Institute on Aging & Center for Demographic Studies (1994) *National Long Term Care Survey, 1994*. Durham, NC: Center for Demographic Studies, Duke University.
- Ohio Department of Development (no date). Ohio County Profiles: Population Projections 2005-2030. Retrieved February 27, 2004, from <http://www.odod.state.oh.us/research/>
- Ohio Department of Health (1990-2000) *Ohio Death Statistics*. Columbus, Ohio: Ohio Department of Health.
- Shryock, H.S., Siegel, J. S. (1996). *The Methods and Materials of Demography*. Condensed edition by E.C. Stockton. New York: New York, Academic Press.
- U.S. Census Bureau (2003). Census 2000 Summary File 1 (SF 1) 100 – Percent Data. Retrieved 2003 from <http://factfinder.census.gov>.
- U.S. Census Bureau. (August 2, 2002). National Population Projections, Detailed Files. Retrieved November 5, 2003, from <http://www.census.gov/population/www/projections/natdet.html>
- U.S. Census Bureau (no date). Poverty thresholds. Retrieved February 27, 2004, from <http://www.census.gov/hhes/poverty/threshld.html>
- U.S. Department of Commerce, Bureau of the Census. CENSUS OF POPULATION AND HOUSING, 1990 [UNITED STATES]: PUBLIC USE MICRODATA SAMPLE: 5-PERCENT SAMPLE [Computer file]. 3rd release. Washington, DC: U.S. Dept. of Commerce, Bureau of the Census [producer], 1995.
- U.S. Department of Commerce, Bureau of the Census. CENSUS OF POPULATION AND HOUSING, 2000 [UNITED STATES]: PUBLIC USE MICRODATA SAMPLE: 5-PERCENT SAMPLE [Computer file]. 3rd release. Washington, DC: U.S. Dept. of Commerce, Bureau of the Census [producer], 2000.

Appendix

Table 1a
Population Distribution by Age Group (40-85+)
Hamilton County and Ohio, 2000

Age Group	Hamilton County	Ohio
40 - 44	67,713	921,545
45 - 49	61,066	834,831
50 - 54	51,106	731,553
55 - 59	37,992	553,174
60 - 64	31,557	455,732
65 - 69	29,685	402,668
70 - 74	28,617	387,584
75 - 79	24,325	325,468
80 - 84	16,137	215,241
85+	15,134	176,796
Total 40+	363,332	5,004,592

Source: U.S. Census Bureau, 2000 Census of Population: P12. SEX BY AGE [49].

Table 2a
Population Distribution by Age Group (40-85+)
Hamilton County, 1990 & 2000

Age Group	1990		2000	
	Number	%	Number	%
40 - 44	56,892	6.6%	67,713	8.0%
45 - 49	44,324	5.1%	61,066	7.2%
50 - 54	38,519	4.4%	51,106	6.0%
55 - 59	37,925	4.4%	37,992	4.5%
60 - 64	39,161	4.5%	31,557	3.7%
65 - 69	36,280	4.2%	29,685	3.5%
70 - 74	28,123	3.2%	28,617	3.4%
75 - 79	22,658	2.6%	24,325	2.9%
80 - 84	15,859	1.8%	16,137	1.9%
85+	12,506	1.4%	15,134	1.8%
Total 40+	332,247		363,332	

Source: U.S. Census Bureau, 1990 & 2000 Census of Population: P12. SEX BY AGE [49].

Table 3a
Projections of Total Older Population by Age Group and Level of Disability
Hamilton County, 2000, 2005, 2010, 2015, 2020

Year	Age Group	Total Population	No Disability	Moderate Disability	Severe Disability
2000*	60 - 69	61,242	51,963	7,392	1,887
	70 - 79	52,942	40,064	9,190	3,688
	80 - 89	25,888	14,161	6,543	5,184
	90+	5,383	1,259	1,746	2,378
	Total Age 60+	145,455	107,447	24,871	13,137
2005	60 - 69	61,637	52,361	7,388	1,888
	70 - 79	47,571	35,953	8,287	3,331
	80 - 89	27,061	14,982	6,789	5,290
	90+	5,269	1,238	1,710	2,321
	Total Age 60+	141,538	104,534	24,174	12,830
2010	60 - 69	72,176	61,386	8,596	2,194
	70 - 79	43,248	32,743	7,499	3,006
	80 - 89	27,249	14,937	6,883	5,429
	90+	5,348	1,265	1,743	2,340
	Total Age 60+	148,021	110,331	24,721	12,969
2015	60 - 69	85,175	72,414	10,163	2,598
	70 - 79	44,245	33,668	7,561	3,016
	80 - 89	25,186	13,736	6,387	5,063
	90+	6,080	1,455	1,986	2,639
	Total Age 60+	160,686	121,273	26,097	13,316
2020	60 - 69	93,257	79,259	11,142	2,856
	70 - 79	52,540	40,170	8,863	3,507
	80 - 89	23,724	12,991	5,999	4,734
	90+	6,359	1,507	2,077	2,775
	Total Age 60+	175,880	133,927	28,081	13,872

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

* Year 2000 data are actual disability counts, years 2005-2020 are projections.

Table 4a
Proportion of Population Age 60+, with Sensory, Physical, Mental & Self-Care Disabilities
Hamilton County and Ohio, 2000

	Hamilton County		Ohio	
	Number	%	Number	%
Sensory	17,924	12.3%	248,532	12.7%
Physical	39,549	27.2%	549,510	28.0%
Mental	15,424	10.6%	212,562	10.8%
Self-Care	15,023	10.3%	210,751	10.7%
Total 60+ Population	145,540		1,961,995	

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 5a
Disability Among Population Age 60+, by Type of Disability and by Age Group,
Hamilton County, 2000

		Age Group	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90+	Total
Sensory	Number		1,441	2,503	2,400	3,030	3,521	2,992	2,037	17,924
	%		4.6%	8.3%	8.4%	13.5%	20.4%	27.7%	44.0%	
Physical	Number		5,200	5,941	6,422	6,700	6,514	5,570	3,202	39,549
	%		16.6%	19.7%	22.4%	29.8%	37.7%	51.5%	69.2%	
Mental	Number		1,674	1,726	1,952	2,682	2,767	2,838	1,785	15,424
	%		5.3%	5.7%	6.8%	11.9%	16.0%	26.2%	38.6%	
Self-Care	Number		1,494	1,669	1,831	2,442	2,893	2,774	1,920	15,023
	%		4.8%	5.5%	6.4%	10.9%	16.7%	25.6%	41.5%	

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 6a
Estimated Percentage Distribution of Total Population
by Disability Status and Age Group

	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95+
No Disability	86%	84%	80%	71%	62%	44%	26%	15%
Moderate Disability	11%	13%	15%	20%	23%	29%	33%	32%
Severe Disability	3%	3%	5%	9%	15%	27%	41%	53%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled Population: 2015-2050*. Oxford, OH: Scripps Gerontology Center, Miami University.

Table 7a
Projections of the 60+ Female Population by Age Group and Level of Disability
Hamilton County

<u>Year</u>	<u>Age Categories</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2000	60-64	17,344	14,402	2,463	479
	65-69	16,707	13,764	2,334	609
	70-74	16,636	12,385	3,252	999
	75-79	15,027	10,234	3,224	1,569
	80-84	10,592	6,114	2,638	1,840
	85-89	7,098	2,870	2,059	2,169
	90-94	3,106	750	965	1,391
	95+	1,060	148	341	571
	Total	87,570	60,667	17,276	9,627
<u>Year</u>	<u>Age Categories</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2005	60-64	18,263	15,165	2,594	504
	65-69	15,503	12,772	2,165	566
	70-74	14,474	10,776	2,830	868
	75-79	13,780	9,385	2,957	1,438
	80-84	11,354	6,554	2,828	1,972
	85-89	6,591	2,665	1,912	2,014
	90-94	3,097	748	963	1,386
	95+	981	137	316	528
	Total	84,043	58,202	16,565	9,276
<u>Year</u>	<u>Age Categories</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2010	60-64	22,389	18,591	3,180	618
	65-69	16,392	13,505	2,290	597
	70-74	13,514	10,061	2,642	811
	75-79	12,110	8,247	2,598	1,265
	80-84	10,581	6,108	2,635	1,838
	85-89	7,253	2,933	2,104	2,216
	90-94	3,006	726	934	1,346
	95+	1,007	141	324	542
	Total	86,252	60,312	16,707	9,233

Table 7a Continued
Projections of the 60+ Female Population by Age Group and Level of Disability
Hamilton County

<u>Year</u>	<u>Age Categories</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2015	60-64	25,466	21,146	3,617	703
	65-69	20,173	16,620	2,818	735
	70-74	14,370	10,698	2,809	863
	75-79	11,410	7,771	2,448	1,191
	80-84	9,438	5,448	2,351	1,639
	85-89	6,930	2,802	2,010	2,118
	90-94	3,446	833	1,071	1,542
	95+	1,035	145	333	557
	Total	92,268	65,463	17,457	9,348
<u>Year</u>	<u>Age Categories</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2020	60-64	26,975	22,399	3,831	745
	65-69	23,020	18,965	3,215	840
	70-74	17,778	13,235	3,476	1,067
	75-79	12,233	8,331	2,625	1,277
	80-84	9,015	5,204	2,245	1,566
	85-89	6,327	2,558	1,835	1,934
	90-94	3,425	827	1,065	1,533
	95+	1,202	168	387	647
	Total	99,975	71,687	18,679	9,609

^a Moderate disability is defined as having received help in at least one of the following activities of daily living: eating, transferring in or out of bed or chair, getting to the toilet, dressing, bathing, remaining continent; or in at least two of the following instrumental activities of daily living: walking, shopping, meal preparation, housekeeping, or using transportation.

^b Severe disability is defined as having received help in at least two of the following activities of daily living: eating, transferring in or out of bed or chair, getting to the toilet, dressing, remaining continent, or having cognitive impairment.

Table 8a
Projections of the 60+ Male Population by Age Group and Level of Disability
Hamilton County

<u>Year</u>	<u>Age Group</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2000	60-64	14,213	12,615	1,186	412
	65-69	12,978	11,182	1,409	387
	70-74	11,981	10,339	1,102	540
	75-79	9,298	7,106	1,612	580
	80-84	5,545	3,786	1,109	650
	85-89	2,653	1,391	737	525
	90-94	973	307	369	297
	95 +	244	54	71	119
	Total	57,885	46,780	7,595	3,510
<u>Year</u>	<u>Age Group</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2005	60-64	15,793	14,018	1,318	457
	65-69	12,078	10,406	1,311	361
	70-74	10,425	8,996	959	470
	75-79	8,892	6,796	1,541	555
	80-84	6,206	4,237	1,241	728
	85-89	2,910	1,526	808	576
	90-94	955	301	362	292
	95 +	236	52	69	115
	Total	57,495	46,332	7,609	3,554
<u>Year</u>	<u>Age Group</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2010	60-64	19,900	17,663	1,661	576
	65-69	13,495	11,627	1,465	403
	70-74	9,784	8,443	900	441
	75-79	7,840	5,992	1,359	489
	80-84	6,057	4,135	1,211	711
	85-89	3,358	1,761	933	664
	90-94	1,093	345	414	334
	95 +	242	53	71	118
	Total	61,769	50,019	8,014	3,736

Table 8a Continued
Projections of 60+ Male Population by Age Group and Level of Disability
Hamilton County

<u>Year</u>	<u>Age Group</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2015	60-64	22,446	19,923	1,873	650
	65-69	17,090	14,725	1,855	510
	70-74	11,015	9,505	1,013	497
	75-79	7,450	5,694	1,291	465
	80-84	5,443	3,716	1,089	638
	85-89	3,375	1,770	937	668
	90-94	1,316	415	499	402
	95 +	283	62	83	138
	Total	68,418	55,810	8,640	3,968
<u>Year</u>	<u>Age Group</u>	<u>Total Population</u>	<u>Population with No Disability</u>	<u>Population with Disability</u>	
				Moderate ^a	Severe ^b
2020	60-64	23,900	21,213	1,994	693
	65-69	19,362	16,682	2,102	578
	70-74	14,047	12,122	1,292	633
	75-79	8,482	6,482	1,470	530
	80-84	5,265	3,595	1,053	617
	85-89	3,117	1,634	866	617
	90-94	1,378	434	522	422
	95 +	354	78	103	173
	Total	75,905	62,240	9,402	4,263

Source: Authors' projections.

^a Moderate disability is defined as received help in at least one of the following activities of daily living: eating, transferring in or out of bed or chair, getting to the toilet, dressing, bathing, remaining continent; or in at least two of the following instrumental activities of daily living: walking, shopping, meal preparation, housekeeping, or using transportation.

^b Severe disability is defined as received help in at least two of the following activities of daily living: eating, transferring in or out of bed or chair, getting to the toilet, dressing, remaining continent, or having cognitive impairment.

Table 9a
Population Age 60+, by Poverty Threshold Ratio,
Hamilton County and Ohio, 2000

	Hamilton County		Ohio	
	Number	%	Number	%
(0 - 100%) At or Below Poverty Threshold	19,106	13.1%	244,061	12.4%
(101 - 200%) Just Above, to Two Times Poverty Threshold	24,088	16.6%	366,227	18.7%
to Two Times, to Three Times Poverty Threshold	24,945	17.1%	393,076	20.0%
Three Times, to Four Times Poverty Threshold	21,525	14.8%	311,277	15.9%
(> 400%) Above Four Times Poverty Threshold	55,876	38.4%	647,354	33.0%
Total	145,540	100%	1,961,995	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 10a
Population Age 60+, by Poverty Threshold Ratio
Hamilton County, 1990 & 2000

	1990		2000	
	Number	%	Number	%
(0 - 100%) At or Below Poverty Threshold	16,448	11.3%	19,106	13.1%
(101 - 200%) Just Above, to Two Times Poverty Threshold	29,986	20.6%	24,088	16.6%
(201 - 300%) Just Above to Two Times, to Three Times Poverty Threshold	28,080	19.3%	24,945	17.1%
(301 - 400%) Just Above Three Times, to Four Times Poverty Threshold	21,773	14.9%	21,525	14.8%
(> 400%) Above Four Times Poverty Threshold	49,435	33.9%	55,876	38.4%
Total	145,722	100%	145,540	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 11a
Population Age 60+, by Poverty Threshold Ratio and Age Group,
Hamilton County, 2000

		60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90+
0 - 100%	Number	3,340	2,525	2,517	2,618	3,173	3,099	1,834
	%	10.6%	8.4%	8.8%	11.6%	18.4%	28.7%	39.6%
101 - 200%	Number	3,567	4,349	4,255	4,775	3,737	2,393	1,012
	%	11.4%	14.4%	14.8%	21.2%	21.6%	22.1%	21.9%
201 - 400%	Number	8,394	10,048	10,491	7,876	5,916	2,846	899
	%	26.7%	33.3%	36.6%	35.0%	34.2%	26.3%	19.4%
> 400%	Number	16,106	13,296	11,411	7,242	4,460	2,479	882
	%	51.3%	43.9%	39.8%	32.2%	25.8%	22.9%	19.4%
Total	Number	31,407	30,218	28,674	22,511	17,286	10,817	4,627
	%	100%	100%	100%	100%	100%	100%	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 12a
Population Age 60+, by Poverty Threshold Ratio, by Gender and by Age Group,
Hamilton County, 2000

	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90+
Men 0-100% Poverty	1,362	822	780	728	762	458	418
Women 0-100% Poverty	1,978	1,703	1,737	1,890	2,411	2,641	1,416
Men > 400% Poverty	8,511	6,892	5,425	3,007	2,114	1,078	149
Women > 400% Poverty	7,595	6,404	5,986	4,235	2,346	1,401	733

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 13a
Race and Ethnic Distribution Among Population Age 60+
Hamilton County and Ohio, 2000

	Hamilton County		Ohio	
	Number	%	Number	%
White Alone	118,459	81.4%	1,760,708	89.7%
Black Alone 60+	24,391	16.8%	164,695	8.4%
Other Race Alone	2,605	1.8%	38,086	1.9%
Hispanic*	604	0.4%	14,293	0.7%
Total 60+	145,455	100%	1,963,489	100%

Source: U.S. Census Bureau, 2000 Census of Population: PCT12J, PCT12J, & PCT12H SEX BY AGE

* Persons identifying themselves with Hispanic ethnicity could be of any race

Table 14a
Marital Status Among Population
Age 60+, by Age Group
Hamilton County, 2000

	Married		Widowed/Divorced/ Separated		Never Married		Total
	Number	%	Number	%	Number	%	
60-64	20,209	64.3%	8,945	28.5%	2,253	7.2%	31,407
65-69	18,999	62.9%	9,741	32.2%	1,478	4.9%	30,218
70-74	16,675	58.1%	10,404	36.3%	1,595	5.6%	28,674
75-79	10,207	45.3%	11,202	49.8%	1,102	4.9%	22,511
80-84	7,004	40.5%	9,320	53.9%	962	5.6%	17,286
85-89	3,888	35.9%	6,444	59.6%	485	4.5%	10,817
90+	1,212	26.2%	3,188	68.9%	227	4.9%	4,627
Total	78,194	53.7%	59,244	40.7%	8,102	5.6%	145,540

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 15a
Marital Status Among Population Age 60+
Hamilton County, 1990 & 2000

	1990		2000	
	Number	%	Number	%
Married	81,849	53.1%	78,194	53.7%
Widowed/Divorced/ Separated	61,332	39.9%	59,244	40.7%
Never Married	10,718	7.0%	8,102	5.6%
Total	153,899	100%	145,540	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 16a
Marital Status Among Population Age 60+, by Gender
Hamilton County, 2000

	Married		Widowed/Divorced/ Separated		Never Married		Total
	Number	%	Number	%	Number	%	
Male	42,351	71.7%	13,845	23.4%	2,883	4.9%	59,079
Female	35,843	41.5%	45,399	52.5%	5,219	6.0%	86,461
Total	78,194		59,244		8,102		145,540

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 17a
Living Alone Among Population Age 60+
Hamilton County, 1990 & 2000

	1990		2000	
	Number	%	Number	%
Hamilton County	54,448	35.4%	53,265	36.6%
Ohio	593,788	31.2%	629,045	32.1%

Source: U.S. Census Bureau, 1990 and 2000: Public Use Microdata Sample: 5-Percent.

Table 18a
Population Age 60+ Living Alone, by Gender and Age Group,
Hamilton County, 2000

		60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90+
Male Living Alone	Number	2,882	2,560	2,678	2,212	1,959	1,230	601
	%	9.2%	8.5%	9.3%	9.8%	11.3%	11.4%	13.0%
Male Not Living Alone	Number	12,194	11,290	9,285	5,858	3,885	2,072	373
	%	38.8%	37.3%	32.4%	26.0%	22.5%	19.2%	8.1%
Female Living Alone	Number	4,593	5,278	6,557	7,475	6,809	5,543	2,888
	%	14.6%	17.5%	22.9%	33.3%	39.4%	51.2%	62.4%
Female Not Living Alone	Number	11,738	11,090	10,154	6,966	4,633	1,972	765
	%	37.4%	36.7%	35.4%	30.9%	26.8%	18.2%	16.5%
Total	Number	31,407	30,218	28,674	22,511	17,286	10,817	4,627
	%	100%	100%	100%	100%	100%	100%	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 19a
Highest Level of Educational Attainment
Among Population Age 60+
Hamilton County & Ohio, 2000

	Hamilton County	Ohio
6th Grade or Less	5,232	68,928
7th - 12th (No Diploma)	41,483	548,406
High School Graduate	43,703	760,829
Some College	27,460	322,885
Bachelor's Degree	16,623	155,023
Graduate Degree	11,039	105,924
Total	145,540	1,961,995

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 20a
Highest Level of Educational Attainment
Among Population Age 60+, by Gender
Hamilton County, 2000

	Men		Women	
	Number	%	Number	%
6th Grade or Less	2,687	4.6%	2,545	2.9%
7th - 12th (No Diploma)	15,735	26.5%	25,748	29.8%
High School Graduate	13,540	22.9%	30,163	34.9%
Some College	11,493	19.5%	15,967	18.5%
Bachelor's Degree	8,846	15.0%	7,777	9.0%
Graduate Degree	6,778	11.5%	4,261	4.9%
Total	59,079	100%	81,375	100%

Source: U.S. Census Bureau, 2000: Public Use Microdata Sample: 5-Percent.

Table 21a
Estimated Percentage Distribution of Female Population
by Disability Status and Age Group

	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95+
No Disability	83%	82%	74%	69%	58%	40%	24%	14%
Moderate Disability	14%	14%	20%	21%	25%	29%	31%	32%
Severe Disability	3%	4%	6%	10%	17%	31%	45%	54%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled*
 Population: 2015-2050. Oxford, OH: Scripps Gerontology Center, Miami University.

Table 22a
Estimated Percentage Distribution of Male Population
by Disability Status and Age Group

	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95+
No Disability	89%	86%	86%	77%	68%	52%	32%	22%
Moderate Disability	8%	11%	9%	17%	20%	28%	37%	29%
Severe Disability	3%	3%	5%	6%	12%	20%	31%	49%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Mehdizadeh, S.A., Kunkel, S.R., Ritchey, P.N. (2001). *Projections of Ohio's Older Disabled*
 Population: 2015-2050. Oxford, OH: Scripps Gerontology Center, Miami University.