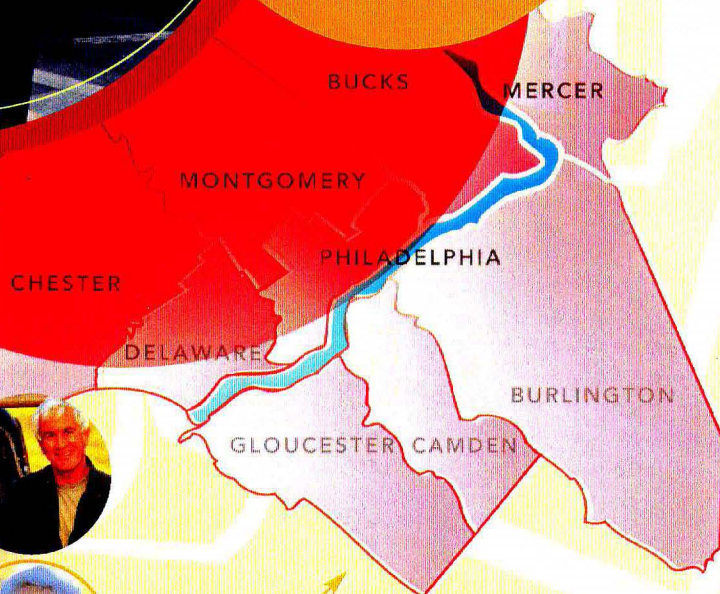
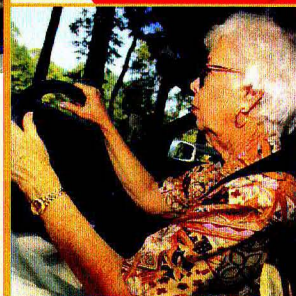
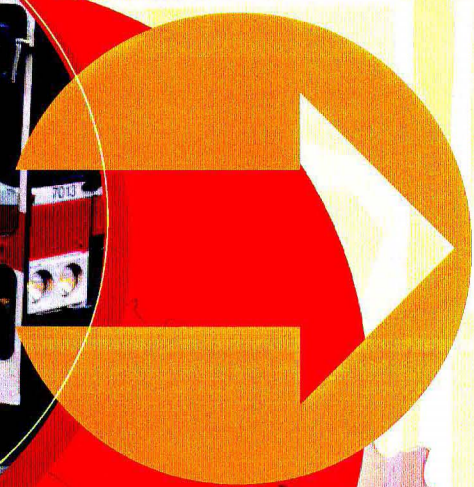


# GETTING OLDER AND ***GETTING AROUND***

Aging and Mobility in the Delaware Valley



Delaware Valley Regional  
Planning Commission

**NOVEMBER 1999**





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Aging and Mobility in the Delaware Valley

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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and three line Divisions: Transportation Planning, Regional Planning, and Administration. DVRPC's mission is to emphasize technical assistance and services and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.



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## Executive Summary

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The number of elderly people has increased dramatically throughout the country and this region in recent years, and is expected to continue to increase at a record pace. As the percentage of elderly residents in the Delaware Valley region increases, the region's municipalities, counties, transit service operators and social service providers will be faced with the challenge of providing necessary services to an aging population. *Getting Older and Getting Around* reviews the location and scale of the region's current and forecasted elderly population and presents recommendations to improve mobility and enhance the quality of life for the elderly, both in urban areas and developed centers and in suburban and rural areas, where many of the next generation of elderly are expected to live.

### Forecasted Growth of the Elderly Population

- The Delaware Valley will be home to over 1.1 million people age 65 and older by 2025, with an expected increase of 58% in the elderly population since 1990. Almost one in five of the region's residents will be over the age of 64, up from its current 13%. Nationally, the number of elderly will more than double by the year 2030 (to over 70 million) and older adults will make up 20% of the population, up from its current 12%.
- Most of this growth will occur in the region's suburbs, in areas not currently served by public transit and at densities which will make it difficult to implement transit as a viable alternative to the private automobile. The City of Philadelphia currently has a higher percentage of residents over the age of 64 than any of the region's counties, but this pattern is expected to change by the year 2025 as suburban "baby boomers" age in place. Although Philadelphia will continue to be home to more elderly residents than any other suburban county, the proportion of the City's population that is elderly will be lower. By 2025, almost 20% of the population of the region's eight suburban counties will be over the age of 64, compared to only 13% in 1990. In contrast, Philadelphia's elderly population will increase from 15% in 1990 to 17% by 2025.

### Accessing Services and Facilities

- Driving is the preferred means of transportation for older adults. Most have always relied solely on their automobiles, are unfamiliar with other modes of transportation and are hesitant or unable to learn new modes at an advanced age. Given current land use trends and lifestyles, tomorrow's senior citizens (especially those aging in the suburbs) are likely to be even more reliant on their automobiles. By the year 2030, almost 20% of all driver mileage is projected to be attributable to elderly drivers. When driving becomes uncomfortable or difficult, most seniors adapt their driving to their circumstances (by reducing their night-time driving, for example, or always driving with a passenger as a navigator). Once they are absolutely unable to drive, many seniors will find themselves

unable to independently access necessary services and facilities or to continue to participate in social, cultural and community activities.

- Although alternatives to the automobile exist (including public transit and taxi service), each has its disadvantages that discourage the elderly from using them. Many senior citizens can not or will not use public transit and cannot afford a taxi, and instead rely on family or friends to provide them with rides. Faced with an inability to drive and a lack of available transit service or other feasible alternatives, the ability of the region's elderly to access necessary services and facilities may be compromised. Many that might have worked or volunteered are unable to do so without a reliable source of transportation. As importantly, the ability of many seniors to continue participating in social or cultural activities or to interact with their community is limited, reducing their quality of life.

## Recommendations

The report recommends both transportation and non-transportation strategies that would improve the ability of the region's seniors to access services and facilities and enhance their quality of life. These recommendations include the following:

- Suburban municipalities should **revise municipal plans and zoning regulations**, to encourage increased densities, mixed-use communities and service clustering. Many of the needs of the elderly that live in these communities and age in place or that move into these areas from surrounding lower density developments could then be met within walking distance of their residence, and effective and efficient public transit services would be feasible. Additionally, senior citizens as well as the general population would be able to accomplish several objectives on one trip.
- Non-profit agencies and developers should work with the region's municipalities to **provide affordable housing opportunities for seniors in existing developed centers**, in close proximity to necessary services and facilities and with access to public transit. A variety of affordable housing alternatives should be available in both urban and suburban communities to meet the varying needs of a diverse elderly population, including independent living units, intermediate care units and nursing homes.
- Municipalities, counties and the private sector should work together to **improve pedestrian facilities and amenities** in urban areas and suburban centers, to encourage more elderly residents to walk to destinations within a reasonable proximity of their home. Pedestrian access and safety can be improved by adjusting the timing of traffic signals to account for the longer time necessary for the elderly to cross the street; incorporating pedestrian safety into local building and zoning regulations; providing or enhancing amenities such as clear, easier-to-read signage and benches for resting; and improving sidewalks and other amenities along routes between facilities and services most likely to be utilized by the elderly and transit stations.

- The region's transit service providers should **work proactively to create a more efficient, cost-effective and accessible region-wide transit network**. Transit accessibility for people of all ages should be enhanced and marketing campaigns that encourage all residents to try transit should be expanded, to familiarize the general public with the region's public transit systems before they become elderly. Transit service along better-performing corridors should be enhanced and expanded, and service along these routes should be more frequent to allow better transferring possibilities.
- The region's transit service providers should **enhance public transit service to make it more attractive to elderly riders**, by improving mid-day and night-time scheduling; providing easier-to-read schedules; clearly identifying transit stops along routes; providing shelters and benches at transit stops, particularly those serving a large number of seniors; increasing security and improving lighting to reduce crime; and providing transit stops in close proximity to known concentrations of elderly residents.
- Federal and state agencies should **increase available funding for public transit and para-transit services, as well as for other social service agencies providing transportation services for seniors**. Reduced-fare transit programs should be expanded and pro-actively marketed to senior citizens, to encourage them to consider transit as a viable alternative to driving. Funding for para-transit and other demand-responsive transit services should be increased, for the very elderly and other disabled seniors who can no longer drive and find it impossible to use traditional fixed-route transit. Likewise, paratransit service providers should explore all available private and public options for providing effective and cost-efficient service.
- The multitude of individual agencies that currently provide transportation services to the elderly should **coordinate their efforts**, to avoid duplication and overlapping of services and most effectively utilize available funding.
- Social service agencies, church and community groups, and other groups that provide services to the elderly should **coordinate the location and scheduling of elderly services and facilities**, to allow senior citizens to fulfill their needs and accomplish several objectives in one trip.
- Public agencies, non-profit organizations and other social service providers should consider enhancing the affordability and accessibility of **taxi service and other demand-responsive services**, for the very elderly and others with disabilities who live in suburban and rural areas where fixed route transit services are not viable.
- State and federal transportation agencies should **re-design suburban highways in appropriate locations** to respond to the functional capabilities of older drivers, to help elderly drivers safely operate their vehicle longer. For example, curves could be softened, edge lines required on roads wider than 22 feet, and road striping lines painted so that they

are more visible to the elderly driver. Roadway signage should be clarified and improved, through larger lettering and better illumination. The timing and location of traffic signals and the length of acceleration and deceleration lanes should also be re-evaluated, taking into consideration the response times of older drivers as opposed to the average driver.

- Likewise, the private sector should **re-design automobiles** to assist elderly people who are capable of safely operating their own vehicle. Options such as improved rear and side view mirrors; advanced on-board guidance systems and other intelligent transportation system (ITS) technologies; larger, clearly marked controls on the dashboard; seats that swivel and re-designed doors that allow easier access; and 5-point seat belt systems that latch in the front rather than to the side might enable the elderly to continue to safely drive their cars longer.
- The State of New Jersey should consider implementing **mandatory testing, re-training and re-licensing requirements** for both the near-elderly and the elderly, and the Commonwealth of Pennsylvania should re-evaluate the effectiveness of their existing re-testing program, to ensure that elderly drivers are aware of their own limitations and are capable of operating their vehicle safely.
- New Jersey should **implement a mandatory physician-reporting requirement** similar to Pennsylvania's, which requires physicians to report to the state Department of Transportation any condition which might impair the ability to drive safely (including age-related medical conditions) for anyone over the age of 15. These reports could then be used to make licensing decisions, including adding restrictions to the person's driving privileges, recalling the driver's license or requiring a driver examination.
- Finally, senior citizens and the near-elderly should be encouraged to **realistically plan for the day when they will no longer be able to drive** and consider how their transportation needs will be met after retirement, recognizing their current and prospective limitations as well as the prospective costs of various travel alternatives.



## **Chapter I. Overview: The Aging of a Nation**

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The elderly population of the country and of this region has grown significantly in recent years, and is expected to increase even more dramatically over the next three decades. The United States Census Bureau predicts that by the year 2030 the number of people over the age of 65 will more than double, to over 70 million. Older adults are expected to make up 20% of the nation's population, up from its current 13%. In the DVRPC region, the percentage of the population over the age of 55 will increase from 22% in 1990 to over 31% by the year 2025.

Many older residents are reluctant to leave the home and the community in which they raised their families, and will spend their later years in suburban areas with limited access to traditional public transit systems. As the percentage of elderly residents in the region increases, the region's municipalities, transit service operators and social service providers will be faced with the challenge of providing services to an aging population.

### **Study Purpose**

This report reviews the location and scale of the region's current and forecasted elderly population; discusses the changing needs of the elderly; and considers the implications of aging on mobility. Chapter I begins by presenting a profile of the nation's elderly and the elderly populations of Pennsylvania and New Jersey. Information is presented on the number of elderly citizens as well as their average income, household types, housing tenure and employment.

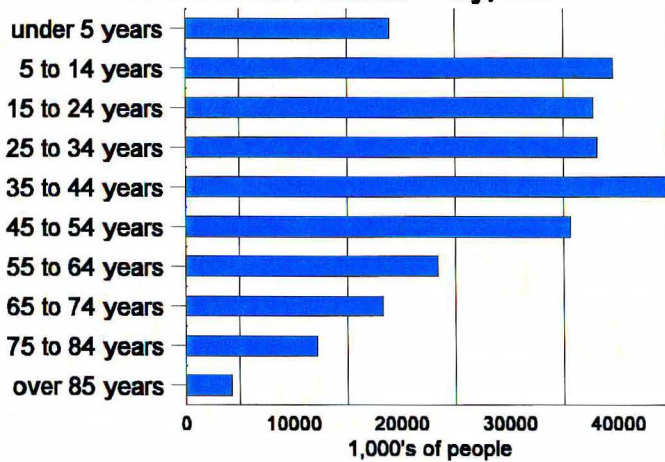
Travel characteristics are discussed as a prelude to Chapter II, which describes the implications of aging on mobility. Chapter III then discusses the current and forecasted locations of elderly residents in the Delaware Valley region, while Chapter IV describes applicable legislation, available funding sources and existing approaches to providing transportation services to senior citizens. Chapter V identifies transportation and non-transportation strategies for improving mobility and enhancing the quality of life for the region's elderly residents.

For the purposes of this report, an "elderly" person is defined as anyone over the age of 64 years. The "near elderly" are defined as those people age 55 to 64 years, while the "extremely old" are defined as being age 85 years and older.

### **A Profile of the Nation's Elderly**

The number of elderly people has increased dramatically throughout this country in recent years, and is expected to continue to increase at a record pace. This phenomenon

**Figure 1: Estimated Age of the Population  
of the United States: May, 1999**



is due in part to the fact that people are living longer, due to various health breakthroughs and healthier lifestyles. More importantly, rapid increases in the percentage of elderly will continue to occur over the next thirty years as people born during the country's "baby boom" reach retirement. As indicated in Figure 1, the United States Census Bureau estimates that in May of 1999, 38% of the country's population was between the age of 35 and 64 years, including almost 45 million people between the ages of 35 and 44.<sup>1</sup> These people will reach the age of 65 sometime between now and 2030.

Source: United States Census Bureau, June, 1999.

One of every eight Americans was over the age of 64 in 1997. Between 1990 and 1997 the elderly population increased by 9.1%, compared to a 7% increase in the number of people younger than 65 years. Since 1900, the percentage of Americans over 64 has tripled, while the absolute number has increased eleven times.<sup>2</sup> Elderly women outnumber older men, with 143 elderly women for every 100 elderly men. About ½ of the nation's elderly live in one of nine states: California, Florida, New York, Texas, Pennsylvania, Ohio, Illinois, Michigan or New Jersey. People over the age of 64 accounted for 16% of the population in Pennsylvania in 1997, second only to the State of Florida. The Commonwealth was home to almost two million elderly people that year, ranking fifth nationally in absolute number (behind only California, Florida, New York and Texas). In New Jersey, seniors numbered over 1.1 million, the 8th highest state total in the country, and made up 14% of the population (ranking 12th nationally). The percentage of elderly in New Jersey is faster growing, however, having increased by 7% between 1990 and 1997 compared to Pennsylvania's increase of 4%.

It is widely assumed that the elderly population is increasing primarily because people are living significantly longer. While it is true that life expectancy has increased

<sup>1</sup>United States Census Bureau, Population Estimates Program: estimates released June 25, 1999.

<sup>2</sup>Program Resources Department, the American Association of Retired Persons and the United States Department of Health and Human Services' Administration on Aging, *Profile of Older Americans, 1998*.

(from 47 years in 1900 to almost 77 years in 1997), this increase is mainly attributable to dramatic decreases in the number of deaths among children and young adults. Life expectancy at age 65 increased by only 2.4 years between 1900 and 1960. More recent medical advances relating to the care of the elderly, however, have resulted in an increase in life expectancy at age 65 by over 3 additional years since 1960. In 1997, 2 million people turned 65; about 1.7 million people over 65 died, resulting in a net increase of 214,000. Approximately 31% of all non-institutionalized people over the age of 65 lived alone in 1997, including 41% of older women and 17% of older men. Women on average live longer, are more likely to be widowed and are therefore more likely to live alone than men.

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## **Figure 2: The Elderly and Income**

### **Median annual household income, 1998:**

All households:	\$38,885
All elderly households:	\$21,729
Elderly white households:	\$22,442
Elderly black households:	\$13,936
Elderly Hispanic households:	\$14,729

### **Median annual income, 1997:**

Elderly men:	\$17,768
Elderly women:	\$10,062

### **Median net worth, 1995:**

Elderly households:	\$86,300
All households:	\$37,600

### **Median family income, 1995:**

Elderly homeowners:	\$21,627
Elderly renters:	\$10,151

Source: United States Census Bureau.

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As illustrated in Figure 2, the nation's elderly generally have lower incomes than its younger population. Thirty-seven percent of the elderly earned less than \$10,000 per year, while only 21% reported \$25,000 or more. One of every seven family households headed by an elderly person had an income of less than \$15,000, and 42% earned less than \$35,000. Nine percent of the elderly in New Jersey and 10% of those in Pennsylvania lived below the poverty level in 1997.

Older women earn significantly less than elderly men, and minorities earn significantly less than whites. Only one of every eleven elderly whites was poor, compared to 26% of elderly blacks and 24% of elderly Hispanics. Although the elderly generally have lower incomes than do younger people they often hold more assets, usually because they own a home. Wide disparity exists, however, between the elderly with assets and those without: the total net worth was below \$10,000 for 16% of the nation's older households but above \$250,000 for 17%.

Of households headed by older persons in 1995, 78% were owners and 22% were renters. Older homeowners typically are wealthier than older renters. The elderly usually own older homes than do younger homeowners; 53% of the homes owned by older persons in 1995 were built prior to 1960, compared to only 35% for younger homeowners. The percent of income spent on housing (including maintenance and repair) is higher for seniors (at 34%) than for younger homeowners (27%). Older homeowners therefore have less disposable cash for other expenses, including transportation. The median value of homes



owned by older people was \$81,956, although the value of homes owned by elderly black homeowners was significantly less, at only \$56,150. Almost 80% of all older homeowners owned their homes free and clear in 1995.

Twelve percent of older Americans were in the labor force in 1997, constituting 3% of the United States labor force. When surveyed, just over 3% considered themselves to be looking for work but unemployed. About ½ of older workers work part-time and 18% were self-employed in 1997, compared to only 6% of younger workers.

In 1995, almost 30% of the nation's elderly assess their health as fair or poor. Thirty-seven percent report that they are limited by chronic conditions, and more than one half report having at least one disability.<sup>3</sup> Most older persons have at least one chronic condition and many have multiple conditions. Many are afflicted with arthritis, which affects 50% of the elderly and can significantly limit mobility. Another 29% have hearing impairments, 17% have cataracts and 16% have orthopedic impairments. These impairments may have serious consequences on the ability of the elderly to continue driving or to utilize traditional public transit.

**Figure 3: Persons Over the Age of 64  
1900 through 2050**

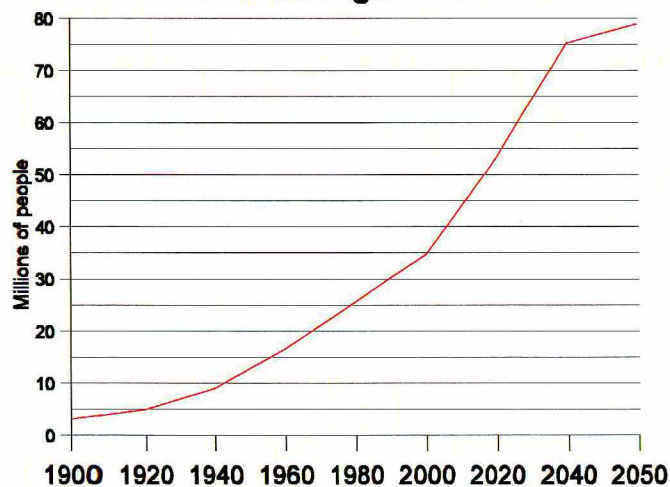


Figure 3 illustrates the number of persons over the age of 64 expected to be living in this country through the year 2050. The United States Census Bureau and the Administration on Aging has projected that by 2030 there will be approximately 70 million people over the age of 64 in the United States, more than twice the number in 1997.<sup>4</sup> This exponential increase will be due in large part to the aging of the "baby boom generation", born between 1946 and 1964.

People over the age of 64 are expected to represent 13% of the national population by the year 2000, up from only 4% in 1900<sup>5</sup>. This percentage is then expected to increase to 20% by the year 2030. This increase has serious implications for federal, state and local service providers,

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<sup>3</sup>United States Administration on Aging. *Profile of Older Americans, 1998*. Principal source of data is the National Center of Health Statistics.

<sup>4</sup>Ibid. Projections for 2000-2050 from the United States Census Bureau.

<sup>5</sup>Howe, Chapman and Baggett. *Planning for an Aging Society*, page 3.



since there will be an ever increasing number of dependents per working-age person. A large proportion of this increase will be in minority population groups, which are expected to make up 25% of the elderly population in 2030, up from 15% in 1990.

## Travel Characteristics

The primary mode of transportation for the elderly is and will continue to be the automobile. The vast majority of people in this country (both elderly and non-elderly) have grown up using their private car as their primary means of getting around. Most senior citizens prefer to remain in the communities where they raised their family, preferably in the same home. A 1996 survey, for example, found that 83% of the responding adults over the age of 55 preferred to retire in or near their present home.<sup>6</sup> Given current land use trends, most now live in communities that are not well served by public transit. The Administration on Aging estimates that 29% of the nation's senior citizens live in central cities, 48% live in the suburbs and 23% live outside of metropolitan areas. By the year 2000, almost 3/4 of seniors over the age of 65 will live in suburban or rural areas where there are few if any alternatives to automobile travel.<sup>7</sup>

Table 1 describes the differences between travel modes used by elderly men and women in urban versus rural locations, utilizing data from the 1990 Nationwide Personal Transportation Survey. Elderly residents in urban locations are slightly less likely to utilize private vehicles and more likely to use public transit, probably because of the lack of accessible public transit as a viable alternative in rural locations. Even in urban locations, however, 90% of elderly men and 87% of elderly women rely on a private vehicle for transportation, and less than 3% choose public transit as an alternative mode of travel. Not surprisingly, urban elderly residents are more likely to walk than their suburban or rural peers, because of the proximity of services, facilities, friends and neighbors. Less than 1% of the elderly residents in either type of location utilize taxi services as their primary mode of travel, probably because of the relatively high cost.

The number of older licensed drivers is increasing dramatically. Between 1984 and 1994, the number of all licensed drivers increased by 13%, while the number of licensed drivers age 70 or older increased by 48%.<sup>8</sup> Admittedly, not all of these seniors who have driver's licenses actually drive. Research has shown, however, that between the ages of 70 and 74, 74% of women have driver's licenses and 69% continue to drive, while 94% of

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<sup>6</sup>Andrews, James. *Leisure Power*, published in *Planning*, November, 1999, page 2.

<sup>7</sup>Rosenbloom, S. *Travel by the Elderly*, published in *Nationwide Personal Transportation Survey: Special Reports*. US Department of Transportation, 1995.

<sup>8</sup>Ibid, page 7. Base data from the US Dept. of Transportation, NHTSA, 1995.

**Table 1**  
**Travel Modes by Gender and Residential Location, 1990**  
**Persons Age 65 and Older**

	Urban		Rural	
Mode	Men	Women	Men	Women
Private vehicle	90%	87%	95%	93%
Public Transit	2.4%	2.6%	0.2%	0.7%
Taxi	0.2%	0.5%	0.3%	0.5%
Walking	7%	9%	3%	6%

Source: *Elder Transit Facts: Improving Travel for the Elderly*. Federal Highway Administration, November, 1994. Original data is from the 1990 Nationwide Personal Transportation Survey (NPTS).

men in the same age group are licensed and 90% still drive. Dramatic decreases in the number of licensed drivers who actually drive do not occur until after the age of 85: although 26% of women over 85 are still licensed and 25% continue to drive, 72% of men still have driver's licenses but only 55% actually drive<sup>9</sup>. By the year 2000, the Automobile Association of America predicts that one of every three drivers will be over the age of 55.

As indicated on Table 2, the average miles traveled by the elderly is expected to increase dramatically through the year 2030. While this increase is in part attributable to an increased number of trips, it is also a reflection of the fact that the average length of trips taken by the elderly has increased by 19% during the last decade, due to changing lifestyles and lower-density residential development patterns. The 1995 Nationwide Personal Transportation Study (NPTS) indicated that the average number of miles per day traveled by older people is approaching that of the general population. Men of all ages traveled an average of 35.2 miles per day, while men between the ages of 65 and 74 traveled 26.3 miles. Women of all ages averaged 27.8 miles, while older women averaged 19.4 miles.<sup>10</sup> Significant decreases did occur, however, after the age of 75, when men traveled an average of 19 miles and women traveled only 10.9 miles per day.

Table 2 also indicates that the average annual miles traveled by elderly women is expected to increase even more dramatically than that of elderly men by 2030. This is in

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<sup>9</sup>Eberhard, J. W. *Safe Mobility for Senior Citizens*, pages 29 through 37.

<sup>10</sup>United States Department of Health and Human Services, *Tomorrow's Older Drivers: Who? How Many? What Impacts?*, page 11.

**Table 2**  
**Average Annual Miles Traveled, Elderly versus non-Elderly**  
**1983 through 2030**

<b>Year</b>	<b>Men age 65 and over</b>	<b>Women age 65 and over</b>	<b>Men under age 65</b>	<b>Women under age 65</b>
<b>1983</b>	7,198	3,308	15,357	6,721
<b>1990</b>	9,162	4,750	17,551	10,149
<b>1995</b>	9,680	3,956	16,324	9,957
<b>2000</b>	10,359	6,318	16,727	10,202
<b>2010</b>	11,875	7,242	17,534	10,694
<b>2020</b>	13,391	8,167	18,340	11,185
<b>2030</b>	14,907	9,092	19,146	11,677
<b>% increase 1983-2030</b>	<b>107%</b>	<b>175%</b>	<b>25%</b>	<b>74%</b>

Source: Burkhardt, Berger, Creedon and McGavock. *Mobility and Independence: Changes and Challenges for Older Drivers*. pg. 40. Data from National Personal Transportation Survey; projections by Ecosometrics, Inc.

part because women generally outlive men, and the proportion of elderly women is expected to increase in the future. Additionally, many of today's elderly women were part of a generation where women were typically not part of the work force and often did not have a driver's license, instead depending on others or somehow limiting their trips. In contrast, many aging female baby boomers are used to greater independence, having worked outside their home and had a driver's license for most of their adult life. As described above, many elderly women have "aged in place", and now live in suburban and rural communities where the only means of maintaining their independence is to continue driving. This next generation of elderly women will therefore be more likely to continue driving well into their post-retirement years.

Figure 4 illustrates the percentage of the total mileage driven by all drivers that is expected to be attributable to elderly drivers by the year 2030. Between 1983 and 1995, the percent of miles driven by people over the age of 65 increased from just over 5% to 8%. Given the expected increase in the number of elderly drivers as well as the increased mileage that each older driver will drive each year, it is expected that almost 20% of all

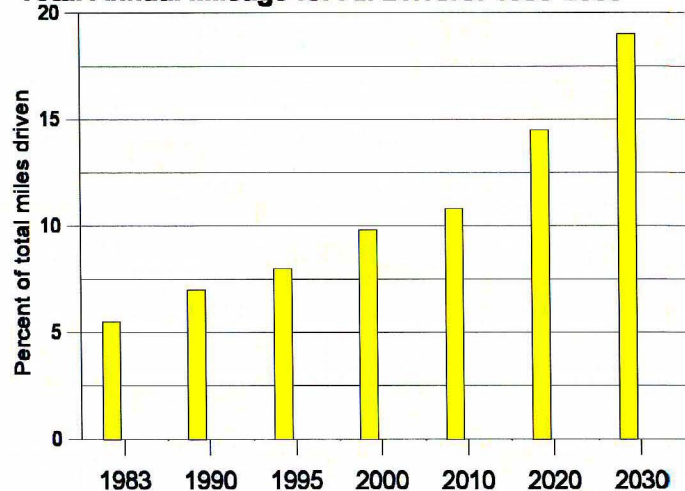
miles driven in this country by the year 2030 will be driven by an elderly driver<sup>11</sup>.

## Summary

The following points have been presented in this chapter which will have implications on the mobility of the nation's senior citizens, their quality of life and the ability of service providers to meet the changing needs of tomorrow's elderly:

- The number of people over the age of 64 has increased significantly in recent decades and is expected to increase even more dramatically over the next thirty years.
- Many elderly residents live alone, including 41% of all elderly women.
- Although they usually have more assets than do younger people, the elderly often have lower incomes (and therefore less disposable cash) than do non-elderly persons.
- Given current land-use trends and lifestyles, the primary mode of transportation for the elderly is and will continue to be the automobile.
- Most of the nation's elderly live in suburban or rural locations where few if any alternatives to the automobile exist. In 1990, 29% of the elderly lived in central cities, compared to 43% who lived in the suburbs and 23% who lived outside of metropolitan areas.
- Most elderly people prefer to remain in the same community (and often in the same house) in which they raised their families. Suburban municipalities that are currently home to many aging baby boomers can expect to see dramatic increases in their elderly populations in coming years.
- The average annual miles traveled by the elderly is expected to increase dramatically in the future, to the point that by the year 2030 almost 20% of all miles driven in this country will be driven by older drivers.

**Figure 4: Elderly Driver Mileage as a Percent of Total Annual Mileage for All Drivers: 1983-2030**



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<sup>11</sup>Burkhardt, Berger, Creedon and McGavock. *Mobility and Independence: Changes and Challenges for Older Drivers*, page 42.



## Chapter II. The Implications of Aging on Mobility

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Chapter I described characteristics of the nation's elderly and the rapid growth in the number of people over the age of 65 that is forecast over the next thirty years. This chapter considers the implications that aging may have on mobility, describes available alternatives to the automobile and discusses the impacts of reduced mobility on quality of life.

As discussed in Chapter I, the principal mode of transportation for senior citizens in this country (and indeed for the population as a whole) is the private automobile. The natural process of aging, however, often leads to health problems that can impair the person's ability to safely operate a vehicle. Health problems that may impact the ability of the elderly to continue to safely operate a vehicle include the following:

- visual impairments, including gradual loss of vision and loss of depth perception;
- hearing impairments;
- the effects of medication and treatments of ailments associated with aging;
- reduced reflex and response time;
- general confusion or, in more extreme cases, dementia; and,
- physical disabilities associated with aging, including arthritis

In addition to physical impairments that may limit the continued use of their automobile, the cost of operating an automobile may be prohibitive for many senior citizens. Owning an automobile is expensive. This is especially true for the elderly, who seldom drive and drive for mostly short distances when they do drive. Few seniors, however, understand the true cost of driving their car, which includes gasoline, tolls and parking fees as well as maintenance, insurance, car payments, depreciation and other fixed costs. Likewise, few people (regardless of age) understand how much mobility the same amount of money could purchase using other alternatives.

Based on research by the Automobile Association of America, the total annual cost of a sub-compact car driven 10,000 miles per year averages \$4,736, while the cost of driving a full-size car driven 20,000 miles per year averages approximately \$9,128. Most older people own older cars (reducing interest and depreciation costs) and drive fewer miles per year than do younger people, reducing their costs somewhat. However, the cost of driving a private automobile car can still cost an elderly person over \$2,800 per year<sup>12</sup>.

The elderly usually use their automobiles for numerous short trips, which is the least efficient and most expensive kind of travel. Although many elderly drivers drive fewer than

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<sup>12</sup>Burkhardt, Berger, Creedon and McGavock. *Mobility and Independence: Changes and Challenges for Older Drivers*. Page 114.

10,000 miles per year, driving less actually increases the cost per mile of each trip. Drivers over the age of 75 take an average of six trips per week. Assuming that they travel 10,000 miles during the year, each one-way trip would cost about \$9.00 for a new car and \$4.35 for an older car. A round-trip to the store or to the doctor in your own car can therefore cost between \$8.70 and \$18.00, depending on the age of the car. Additionally, the true cost of using a car also includes waiting time and inconvenience as well as the obligation to reciprocate to friends, family and neighbors if they provide the ride.

Another concern to older drivers is their risk of being involved in an automobile accident. Contrary to popular opinion, persons over the age of 64 are not the ones most likely to be involved in an accident; instead, people age 16 to 20 have the highest accident rate. The elderly, however, are more likely to be seriously injured or killed once they are involved in an automobile accident, probably because of their general frailty.

Based on National Highway Traffic Safety Administration data, the number of people over the age of 70 involved in fatal automobile crashes increased by 33% between 1988 and 1998, despite the fact that the overall number of traffic deaths declined during the same time period. The number of elderly traffic fatalities is expected to more than triple by the year 2030, making them 35% greater in number than the total number of alcohol-related fatalities that occurred in 1995<sup>13</sup>. Reducing fatalities amongst elderly drivers (either by making driving safer or by providing reasonable and attractive alternatives to driving) deserves the same level of attention that has been paid to reducing the incidence of drunk driving.

## **Alternatives to Driving**

As discussed previously, a private automobile is the first choice for older adults, preferably with themselves as the driver. As their ability to drive comfortably and safely diminishes, many seniors adapt their driving habits to meet their individual circumstances. Many elderly drivers, for example, reduce their night-time driving, drive only during off-peak hours (thus avoiding the commuter rush), avoid driving during certain weather conditions (especially in the winter) and/or drive only if they have a passenger along as a navigator. Many will eventually reach a point, however, where they can no longer safely or comfortably drive themselves, and will have to rely on other modes of travel.

Because the majority of the population relies solely on their automobiles, most people are often unfamiliar with other modes of transportation as they get older and are hesitant or unable to learn new modes at an advanced age. Alternatives that are available to the elderly include the following:

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<sup>13</sup>Burkhardt, Berger, Creedon and McGavock. *Mobility and Independence: Changes and Challenges for Older Drivers*. Page s-4.

- **Rides from family and friends.** This is the most common alternative, largely because it does not require learning a new transportation mode. Relying on family and friends, however, can result in feelings of a loss of independence and loss of control. Older people who were once drivers generally hesitate to ask for a ride, and may end up driving longer than they safely should.
- **Walking.** This is the second most preferred choice for the elderly, being perhaps the most obvious alternative to driving. Given current land use patterns, however, it is often impossible (particularly in suburban or rural areas) to access necessary or preferred destinations by walking. Heavy traffic or a lack of pedestrian amenities may make it difficult to walk in certain areas, regardless of the distance to the destination. Many seniors also eventually suffer from health problems that incapacitate them or limit their ability to walk any significant distance.
- **Public transit.** Studies have shown that it can cost up to 60% less to use transit than drive and up to 50% less to use a combination of auto and transit. Even in urban areas, however, less than 3% of the elderly utilize fixed-route public transit, and surveys have shown that public transit is the least likely alternative to be chosen by the elderly. Survey respondents cite inconvenience, a fear of crime, a lack of availability and cost as reasons why they cannot or will not use fixed route public transit. Physical limitations associated with aging may also make it difficult to utilize transit, including being unable to wait for long periods of time (particularly if seating or a sheltered waiting area are unavailable), to climb stairs or to stand while a bus or rail car is in motion. Many seniors are totally unfamiliar with transit and are either unable or reluctant to learn routes, schedules and operating procedures. Still others have had negative experiences with public transit in the past, and refuse to consider it as a viable option in their later years.
- **Specialized, demand-responsive paratransit services.** Demand-responsive paratransit services are available in metropolitan areas throughout the country. The Americans with Disabilities Act (ADA) requires that operators of fixed-route public transit offer both accessible services and specialized paratransit for disabled individuals living within 3/4 mile of any transit route, including the disabled elderly. For example, the Southeastern Pennsylvania Transit Authority (SEPTA) offers door-to-door ride-sharing service to riders over the age of 65 who are unable to utilize fixed-route transit service.

When surveyed, however, senior citizens note that paratransit is often not chosen because of restrictions on destination, the need for advance reservations, and limited hours. Many seniors think that paratransit is primarily for lower-class, lower-income individuals, or for people who are much more disabled than they are. Additionally, the ADA requires only that paratransit be offered to disabled people who are absolutely unable to access and utilize fixed-route transit. Many elderly residents are unable to access transit without some assistance but do not qualify as disabled under ADA requirements, and are thus ineligible for paratransit service. While some transit providers offer para-transit services to non-

disabled seniors as space allows, their ability to continue to do so in the face of the anticipated demands of an escalating elderly population is likely to be compromised.

- **Taxis.** Taxi service is one of the most demand-responsive alternatives to driving your own car, and is a useful alternative to many seniors making occasional trips to specific locations. However, it is also the most expensive alternative, and is not therefore usually perceived as an option for everyday travel. According to the 1995 Nationwide Personal Transportation Study, only 2% of the nation's senior citizens routinely use taxis. Taxi service is also limited or unavailable in many locations, particularly suburban or rural areas.
- **Public and private senior transportation services.** Many public and private agencies and organizations provide transportation services for the elderly, including area agencies on aging, municipal governments, non-profit social service organizations and private nursing homes and assisted living facilities. These services typically provide rides to and from medical facilities, shopping opportunities and recreational activities using vans and mini-buses, leaving from specific locations and stopping at specific destinations. Federal funds are often used to under-write the cost of these services, which can be very useful for seniors who need to get to those specific destinations and who are able to access the service.

While these agencies and organizations provide an essential service to those seniors able to take advantage of them, their effectiveness can be limited. For example, although many of the region's elderly care facilities offer transportation services to their residents, the majority of the region's elderly live in their own homes. Most public and non-profit elderly transportation services offer fixed-route service to certain destinations, which may or may not meet the specific needs of each older individual. Additionally, these services typically run only during the day and often offer no service on the weekend. Finally, many of these services rely heavily on federal funding to remain viable, and their ability to continue to meet the transportation demands of an ever increasing elderly population is uncertain.

### **The Impacts of Aging on Mobility and Quality of Life**

Regardless of age, all people need to fulfill two types of need, including basic maintenance needs (things like grocery shopping and health care, for example) and life-enriching needs (socialization, recreation, participating in community or cultural events and worship). Research has shown that most senior citizens usually can and will find a way to fulfill their basic needs, regardless of whether or not they drive. Once older people stop driving, however, life-enriching needs are often compromised, and the quality of their life may be diminished.

Elderly people often alter their activities and expectations to fit their circumstances, gradually reducing the number, length and destination of their trips as they become older. They often fulfill two or more objectives in one trip; for example, they might combine a

medical appointment with shopping or a social visit. Night-time trips are often the first to be eliminated; this is unfortunate, since social and cultural events are often held at night. With the exception of trips to the doctor and to the grocery store, elderly people who still drive have a much greater trip frequency than those who have stopped driving, and are much more likely to participate in "life-enriching" activities.

Interestingly, surveys have shown that most seniors believe that they will know when to stop driving, but also know peers whose driving they consider to be so unsafe that they will not accept rides from them. Thus, it appears that while the elderly recognize that their ability to drive safely may someday be impaired, they may fail to honestly assess their own ability to continue driving. Retaining their mobility (which for most people means continuing to drive their own car) allows the elderly to continue to access friends, employment, services, social interaction, and religious and educational opportunities. Contrarily, reductions in mobility can instead lead to isolation and a reduced quality of life. In a survey conducted in January of 1999 by the Denver Regional Council of Governments (DRCOG), almost 1 in 10 older residents reported not going somewhere on occasion due to a lack of transportation, and 2% said that lack of transportation posed a frequent problem. When asked why transportation was a problem, most respondents said it was because their only alternative was to rely on others.<sup>14</sup>

Most of today's seniors have lived their lives entirely dependent on their automobile. Seniors who have reduced their driving during certain times or conditions or who can no longer drive at all usually reduce their participation in social and community activities, and many that might have worked or volunteered are unable to do so without a reliable source of transportation. Loss of their participation as workers, volunteers and consumers can have an economic impact on the entire community, as the elderly earn and spend less and as community organizations lose a valuable source of quality volunteer labor. Since many senior citizens will not use transit and cannot afford a taxi, family and friends are often faced with providing the necessary transportation and incurring its associated costs, loss of time and, sometimes, loss of income. Being dependent on others for rides increases waiting time, inconvenience and uncertainty. Many seniors forced to ask for rides feel obligated to return the favor, and will further reduce the trips they take rather than ask again.

## Conclusion

Driving their own car is the preferred means of transportation for older adults. Most have always relied solely on their automobiles, are unfamiliar with other modes of transportation and are hesitant or unable to learn new modes at an advanced age. As today's suburban baby boomers age in place, many will find themselves unable to

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<sup>14</sup>Denver Regional Council of Governments. *Status of Older Adults living in the Denver Region*. August, 1999.

independently access necessary services and facilities or to continue to participate in social, cultural and community activities once they are unable to drive.

Given the value placed on autonomy and independence by American society, most senior citizens expect their lives to be more difficult and less happy after they stop driving and view losing one's driver's license as a loss of status.<sup>15</sup> Although alternatives to the automobile exist, each has its disadvantages that discourage many of the elderly from using them. Consequently, most older people who can no longer drive rely instead on other people for rides and reduce their trips as necessary, often eliminating life-enrichening experiences. Since transportation links individuals to their social network and to most of their activities, reduced mobility can lead to isolation, loneliness and a reduced quality of life. As their mobility decreases, the elderly suffer financially, socially, psychologically and emotionally, and society as a whole suffers from the loss of active older adults as workers and volunteers.

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<sup>15</sup>Ibid. Survey responses from focus groups conducted as background research for the report.



### Chapter III: The Aging of a Region: Seniors in the Delaware Valley

The two preceding chapters have presented a profile of the nation's elderly, discussed the ramifications of this growth on travel and mobility, and considered the impacts of reduced mobility on the quality of life of the nation's seniors. The number of people over the age of 65 is growing at a record pace in this country. This growth is projected to escalate in the future as the baby boom generation ages. By the year 2030, elderly persons are expected to make up over 20% of the nation's population, compared to just over 12% in 1990.

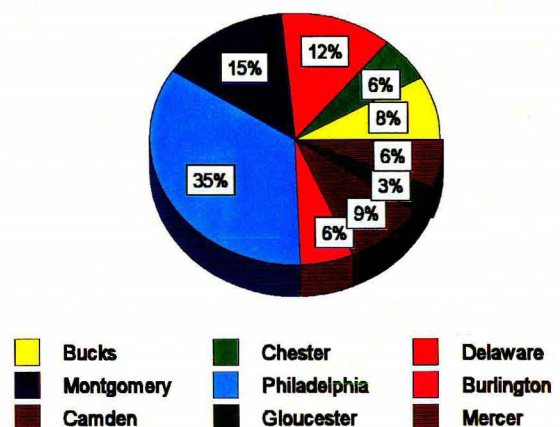
Most of today's elderly and near-elderly rely on their private automobile as their primary means of transportation. Research indicates that the elderly prefer to live and age in their own community. Given current land use trends, the elderly of tomorrow will travel more miles each year, be more likely to live in areas with poor access to public transit and have less experience at using public transit than the preceding generation. Tomorrow's elderly are expected to be wealthier than their current counterparts and will likely be even more reliant on their automobile. Additionally, over 60% of today's elderly are women, and elderly women are expected to continue to outnumber elderly men. Since older women are more likely to live alone than older men, usually have lower incomes and often are more frail, this trend presents additional challenges in terms of mobility.

This chapter discusses the current and future elderly population of the Delaware Valley. It first discusses where the region's elderly are currently located and their general characteristics, including their relative income, household types and housing tenure. Projections of the percentage of the population that is expected to be elderly by the year 2025 are presented for each county. Finally, concentrations of the elderly are compared to the region's transit network.

#### Regional Profile of the Elderly

Figure 5 illustrates the proportion of the region's elderly population living in each of the nine counties. Philadelphia is home to over 240,000 people over the age of 64, accounting for almost 35% of the region's elderly. Forty-one percent of the region's elderly live in the region's four suburban Pennsylvania counties, and the remaining 24% live in the New Jersey counties.

**Figure 5: Location of the Region's Elderly Population, 1990**



Source: United States Census Bureau.

As indicated in Table 3, almost 700,000 people over the age of 64 lived in the nine-county Delaware Valley region in 1990, accounting for over 13% of the region's population. The "youngest" of the region's counties, based on the percentage of their population which is elderly, are in the suburbs, including Bucks and Chester counties in Pennsylvania and Gloucester County in New Jersey. Significant new residential construction has occurred in these counties in recent years, which usually attracts young families and first-time home buyers. Philadelphia, Delaware and Montgomery counties each are home to a greater share of the region's elderly population than to the region's overall population.

Map 1 illustrates the relative density of elderly residents by municipality throughout the Delaware Valley region in 1990, while Map 2 depicts the density of the City of Philadelphia's elderly residents by census tract. Additional information can be found in Appendix A, which describes the number of residents in each county by age group between 1970 and 1990, and Appendix B, which details the changes between decades.

**Table 3**  
**Persons over the Age of 64, 1990**

	<b>Persons over 64 years, 1990</b>	<b>% of each county's total population over the age of 64</b>	<b>% of the region's total population living in each county</b>	<b>% of the region's population over the age of 64 living in each county</b>
Bucks	58,912	11%	10%	8%
Chester	40,977	11%	7%	6%
Delaware	84,932	16%	11%	12%
Montgomery	101,993	15%	13%	15%
Philadelphia	240,714	15%	31%	35%
<b>PA Counties</b>	<b>527,528</b>	<b>14%</b>	<b>72%</b>	<b>76%</b>
Burlington	42,188	11%	7%	6%
Camden	61,191	12%	11%	9%
Gloucester	24,761	11%	4%	3%
Mercer	42,229	13%	6%	6%
<b>NJ Counties</b>	<b>170,369</b>	<b>12%</b>	<b>28%</b>	<b>24%</b>
<b>DVRPC Region</b>	<b>697,897</b>	<b>14%</b>	<b>100%</b>	<b>100%</b>

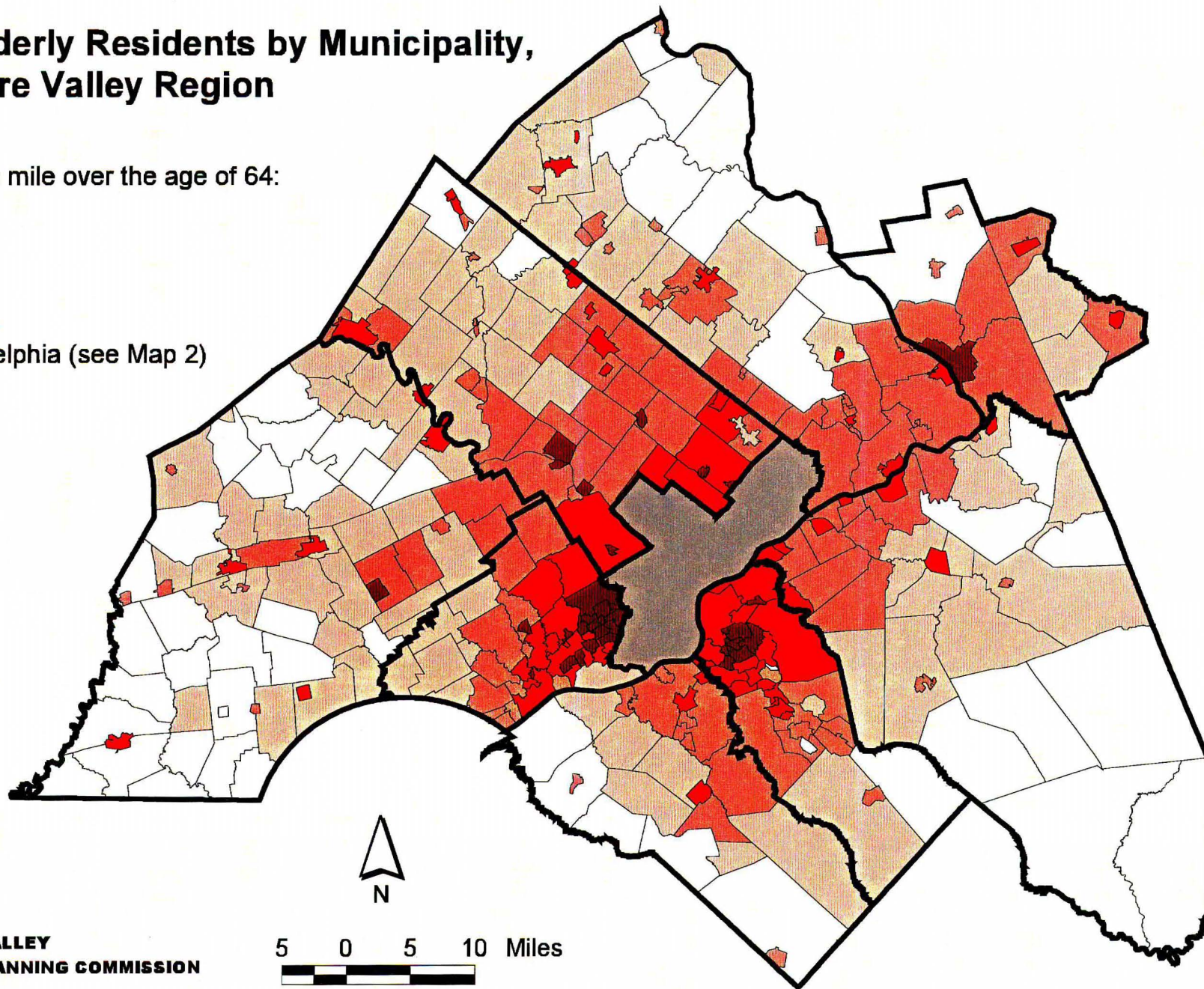
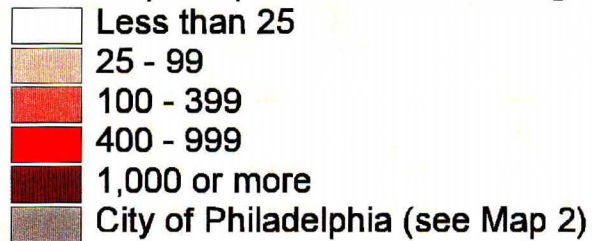
**Source:** United States Department of Commerce, Bureau of the Census: *1990 Census of Population and Housing*. Includes persons living in group quarters.



# MAP 1

## Density of Elderly Residents by Municipality, 1990, Delaware Valley Region

Persons per square mile over the age of 64:



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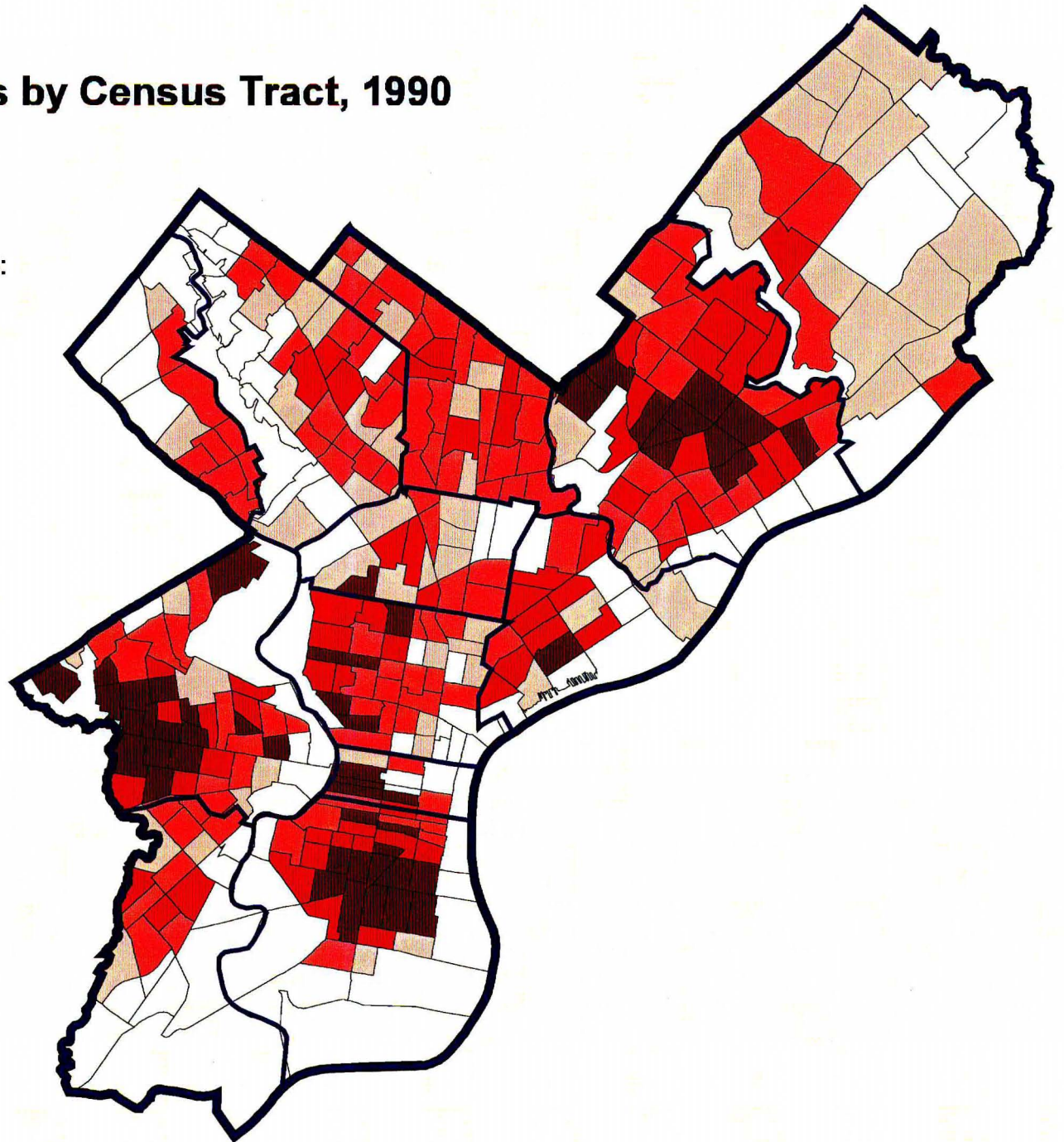
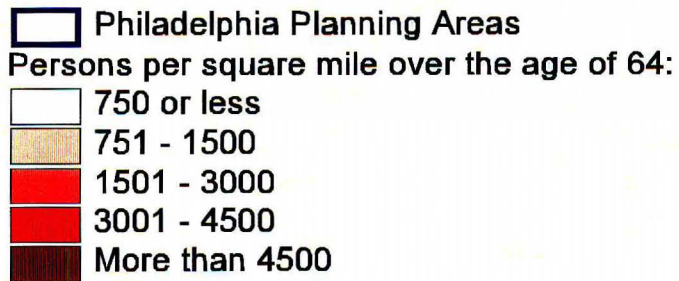
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## MAP 2

### Density of Elderly Residents by Census Tract, 1990 City of Philadelphia



**DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION**



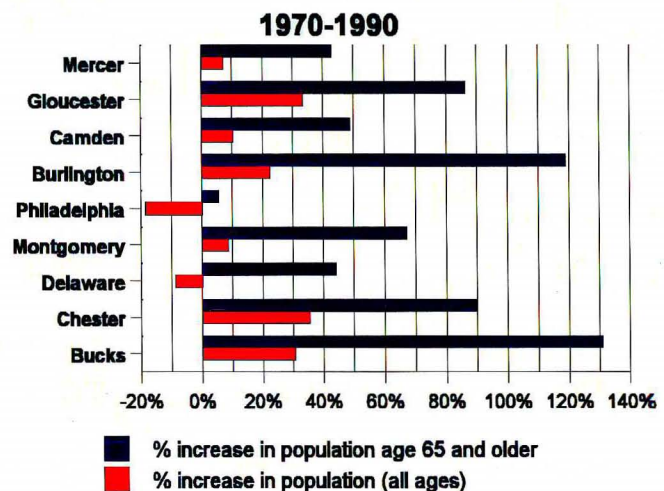


Elderly population density generally mimics the region's overall population density pattern, with the densest concentrations of elderly residents found in the older communities surrounding the City of Philadelphia and in the region's older urban boroughs. Communities in eastern Delaware County, southern Montgomery County, and western Camden County, in particular, are currently home to high concentrations of elderly residents.

The number of residents over the age of 64 has skyrocketed in many communities in recent years, as the first of the "baby boom" generation reaches retirement age. Table 4 describes the changes in elderly residents that occurred between 1970 and 1990 in each of the region's counties. The number of elderly residents living in the Delaware Valley region grew by almost 40% between 1970 and 1990, while the overall population increased by only 1%.

Figure 6 illustrates the differences between growth in the elderly population and overall population growth in each of the region's nine counties. The percentage change in the number of elderly residents significantly exceeded overall population growth in every county in the DVRPC region. Even in Philadelphia, where the population declined by almost 19% between 1970 and 1990, the number of elderly residents increased by over 5%. The number of elderly living in the region's four New Jersey counties increased by over 65%, compared to an increase of only 16% in the population as a whole. In Pennsylvania, the elderly population increased by 33% despite the fact that the overall population of the five counties declined by almost 4% (primarily because of population decreases in the City of Philadelphia).

**Figure 6: Growth of the Elderly Population**



Map 3 illustrates the percentage of elderly residents living in each of the region's municipalities in 1990. Although Philadelphia has many more elderly residents than does any other suburban municipality, the City as a whole has a lower percentage of elderly residents (at just over 15%) than do many individual communities. These communities include Southampton and Mansfield Townships in Burlington County, Audubon Park Borough in Camden County, Springfield Township in Montgomery County and Doylestown Borough in Bucks County, all of which had 25% or more of their residents over the age of 64 in 1990. This data includes persons living in group quarters, and many of the communities with high percentages of elderly residents, such as Southampton Township, are home to nursing homes, assisted care facilities or retirement communities.



**Table 4**  
**Growth of the Elderly Population, 1970 - 1990**

<b>County</b>	<b>Residents over the age of 64, 1970</b>	<b>Residents over the age of 64, 1990</b>	<b>% Increase, 1970-1990</b>	<b>Total Residents, 1970</b>	<b>Total Residents, 1990</b>	<b>% Increase, 1970-1990</b>
<b>Bucks</b>	25,540	58,912	<b>131%</b>	415,056	541,174	<b>30%</b>
<b>Chester</b>	21,620	40,977	<b>90%</b>	278,311	376,396	<b>35%</b>
<b>Delaware</b>	59,039	84,932	<b>44%</b>	600,035	547,651	<b>-9%</b>
<b>Montgomery</b>	61,093	101,993	<b>67%</b>	623,799	678,111	<b>9%</b>
<b>Philadelphia</b>	228,148	240,714	<b>6%</b>	1,948,609	1,585,577	<b>-19%</b>
<b>Pennsylvania Counties</b>	395,440	527,528	<b>33%</b>	3,865,810	3,728,909	<b>-4%</b>
<b>Burlington</b>	19,279	42,188	<b>119%</b>	323,132	395,066	<b>22%</b>
<b>Camden</b>	41,161	61,191	<b>49%</b>	456,291	502,824	<b>10%</b>
<b>Gloucester</b>	13,295	24,761	<b>86%</b>	172,681	230,082	<b>33%</b>
<b>Mercer</b>	29,603	42,229	<b>43%</b>	303,968	325,824	<b>7%</b>
<b>New Jersey Counties</b>	103,338	170,369	<b>65%</b>	1,256,072	1,453,796	<b>16%</b>
<b>DVRPC Region</b>	498,778	697,897	<b>40%</b>	5,121,882	5,182,075	<b>1%</b>

**Source:** United States Department of Commerce, Bureau of the Census: *1990 Census of Population and Housing*.

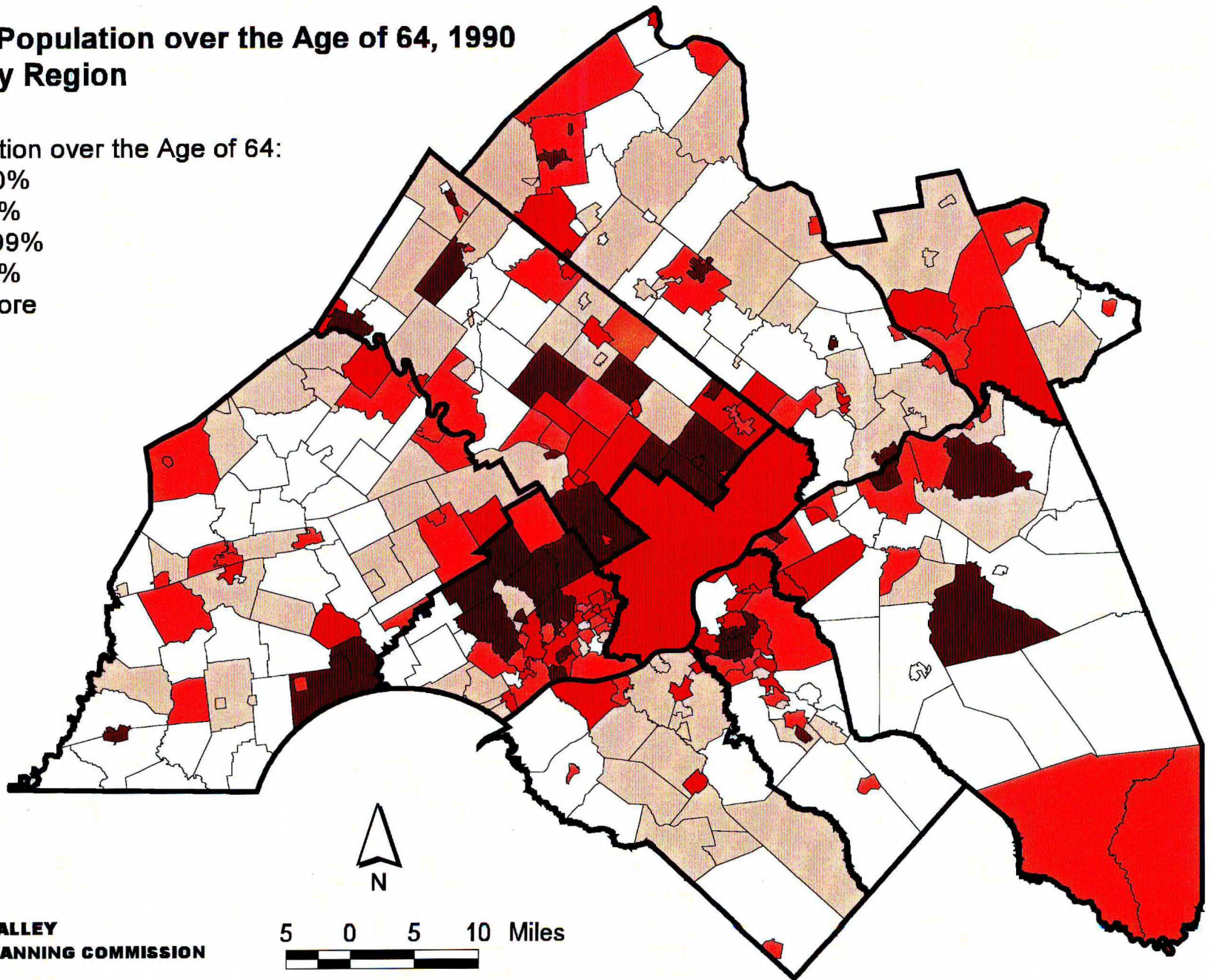
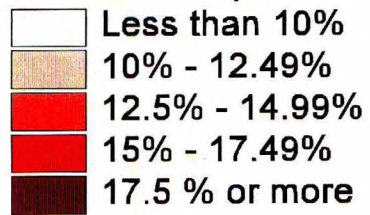
This information is important to municipalities when planning for local service provision, since it reflects the number of dependent elderly residents as compared to people of working age. In some suburban municipalities, elderly residents may be wealthier than their younger neighbors; in other communities, however, many of the elderly are poor. Additionally, many elderly residents, particularly homeowners, have significant assets but little disposable cash. Thus, many will depend upon the local government for transportation and other social services. Many elderly homeowners may also find it difficult to pay their share of the property taxes necessary to support local services, particularly schools.

Another issue of importance to local, county and state governments in planning for service provision is the location and number of the "oldest of the old" (defined as those persons over the age of 84), who are more likely to have physical or mental impairments and may demand a different level and type of services, including transportation, health and

### MAP 3

## Percent of the Population over the Age of 64, 1990 Delaware Valley Region

Percent of Population over the Age of 64:



**DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION**

5 0 5 10 Miles



social services. Table 5 indicates the relative number of extremely old residents living in each county, while Map 4 illustrates their density in each of the region's municipalities. The City of Philadelphia was home to almost 23,000 extremely old people in 1990. Although this translates to a city-wide density of only 160 persons per square mile, certain areas have much higher concentrations. Map 5 illustrates the density of City residents over the age of 84 by tract, with some tracts having over 700 extremely old residents per square mile.

The region's elderly population as a whole is getting older. As indicated in Table 5, the number of residents over the age of 84 increased by 90% regionally between 1970 and 1990, compared to an increase of 40% in the number of people over the age of 64. Over 9% of all of the region's elderly residents were over the age of 84 in 1990, as opposed to only 7% in 1970. The proportion of the region's extremely old residents living in the suburbs has also increased significantly. In 1970, 43% of the 9-county DVRPC region's residents over the age of 84 lived in Philadelphia; by 1990, only 35% lived in the City.

**Table 5**  
**Extremely Old Residents by County, 1970 - 1990**

County	Residents over the age of 84, 1970	Residents over the age of 84, 1990	% increase in extremely old residents, 1970-90	% of all elderly residents over age 84, 1970	% of all elderly residents over age 84, 1990
<b>Bucks</b>	1,875	5,657	202%	7%	10%
<b>Chester</b>	1,722	3,903	127%	8%	10%
<b>Delaware</b>	4,240	8,113	91%	7%	10%
<b>Montgomery</b>	4,472	10,891	144%	7%	11%
<b>Philadelphia</b>	14,681	22,801	55%	6%	10%
<b>PA counties</b>	<b>26,990</b>	<b>51,365</b>	<b>90%</b>	<b>7%</b>	<b>10%</b>
<b>Burlington</b>	1,588	3,725	135%	8%	9%
<b>Camden</b>	2,639	5,274	100%	6%	9%
<b>Gloucester</b>	899	1,581	76%	7%	6%
<b>Mercer</b>	2,133	3,116	46%	7%	7%
<b>NJ counties</b>	<b>7,259</b>	<b>13,696</b>	<b>89%</b>	<b>7%</b>	<b>8%</b>
<b>DVRPC region</b>	<b>34,249</b>	<b>65,061</b>	<b>90%</b>	<b>7%</b>	<b>9%</b>

**Source:** United States Dept. of Commerce, Bureau of the Census: *1990 Census of Population and Housing*.

## Household Characteristics, Tenure and Income

Elderly persons are almost twice as likely to live alone than are persons under the age of 64. As illustrated in Table 6, almost one-half million households in the region (or 26% of all households) contained at least one resident over the age of 64 in 1990, including over 178,000 in the City of Philadelphia. Thirty-eight percent of these households contained only one person; by comparison, only 21% of the households with no elderly members were single-person households in 1990. In Philadelphia, which is home to 36% of the region's households containing at least one elderly person, over 42% of the households with at least one elderly person were single-person households.

**Table 6**  
**Households with Elderly Residents, 1990**

County	Total households	Households with 1 or more persons over age 64	% of all households with 1 or more persons over age 64	% of elderly family households containing one person	% of non-elderly family households containing one person
<b>Bucks</b>	190,507	40,688	21%	33%	15%
<b>Chester</b>	133,257	27,377	20%	34%	17%
<b>Delaware</b>	201,374	59,432	30%	38%	20%
<b>Montgomery</b>	254,995	69,061	27%	38%	20%
<b>Philadelphia</b>	603,075	178,797	30%	42%	27%
<b>Pennsylvania Counties</b>	1,383,208	375,355	<b>27%</b>	<b>39%</b>	<b>22%</b>
<b>Burlington</b>	136,554	29,376	22%	32%	16%
<b>Camden</b>	178,758	44,161	25%	37%	19%
<b>Gloucester</b>	78,842	17,579	22%	34%	15%
<b>Mercer</b>	116,941	30,568	26%	38%	19%
<b>New Jersey</b>	511,095	121,684	<b>24%</b>	<b>36%</b>	<b>18%</b>
<b>DVRPC region</b>	1,894,303	497,039	<b>26%</b>	<b>38%</b>	<b>21%</b>

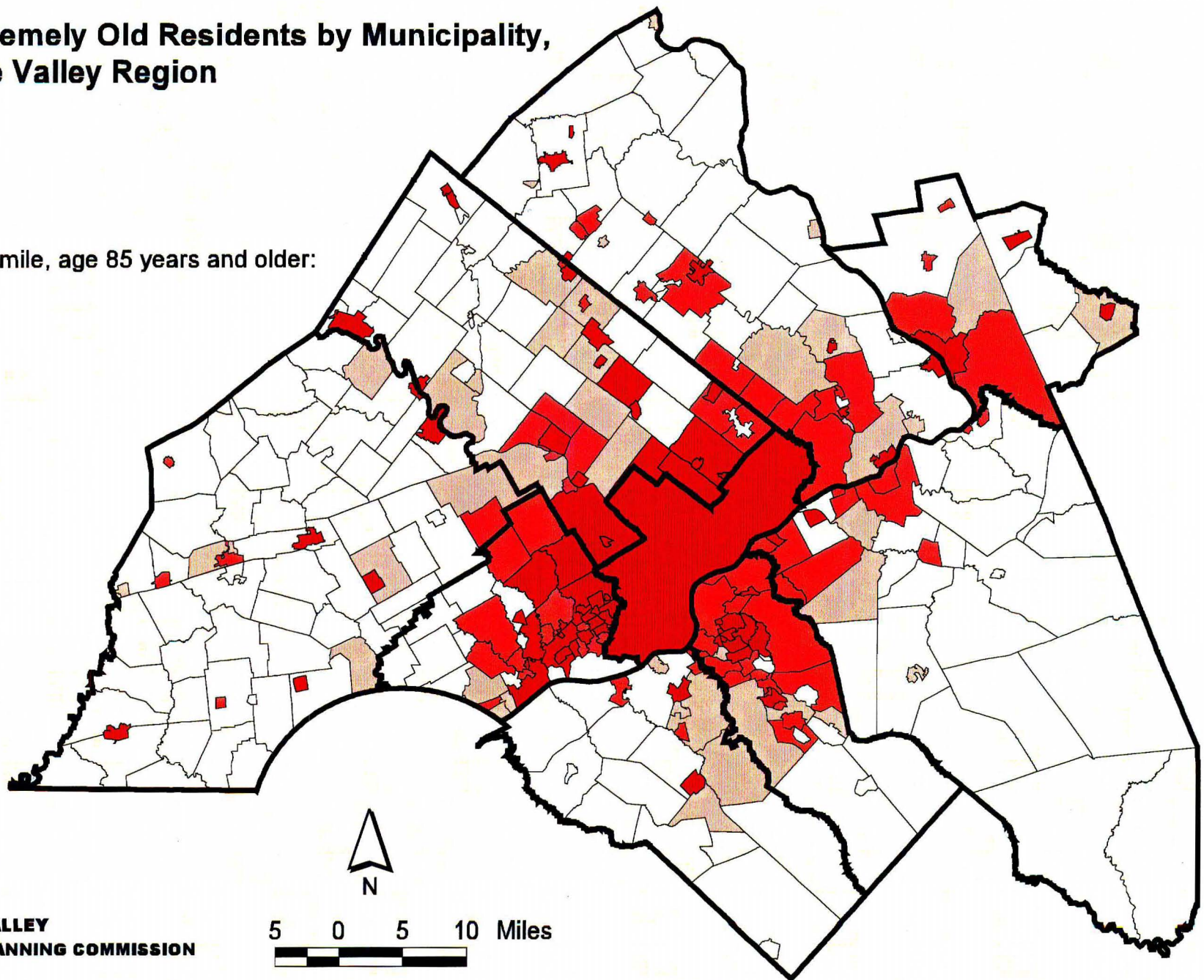
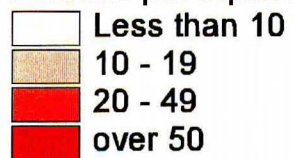
**Source:** United States Dept. of Commerce, Bureau of the Census: *1990 Census of Population and Housing*. For the purposes of this table, "elderly household" is defined as any family household having at least one person over the age of 64 years, and "non-elderly household" is defined as any family household not having any person over the age of 64 years. This data does not include persons living in group quarters, including nursing homes.



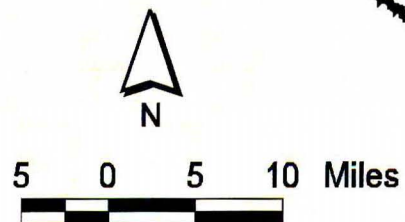
## MAP 4

### Density of Extremely Old Residents by Municipality, 1990, Delaware Valley Region

Persons per square mile, age 85 years and older:



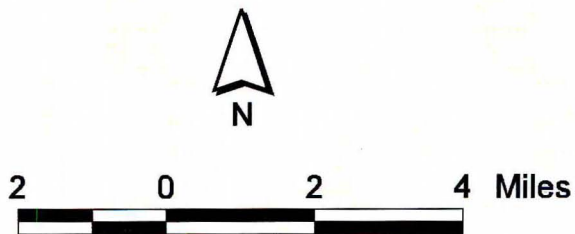
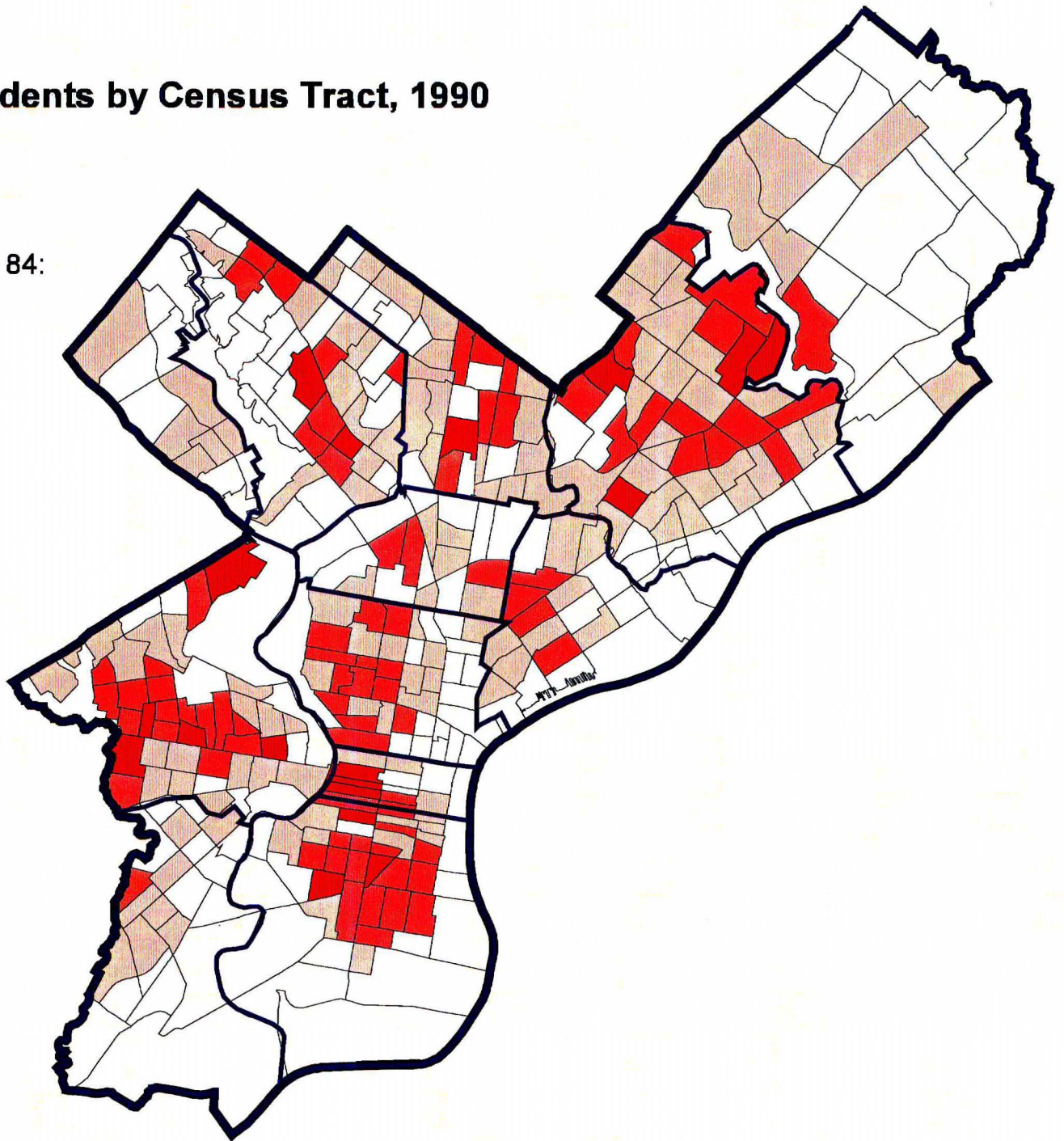
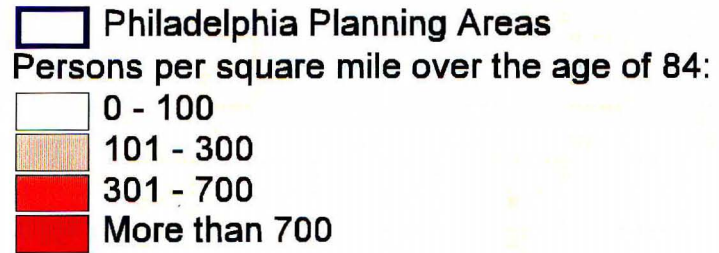
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## MAP 5

### Density of Extremely Old Residents by Census Tract, 1990 City of Philadelphia



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Table 7 describes the differences in homeownership rates between elderly and non-elderly heads of households. The elderly are generally more likely to own their homes than are their younger counterparts, with 75% of the region's elderly heads-of-household owning as opposed to 67% of householders under the age of 65. This is slightly lower than the national average of 78%, described in Chapter I. One in four of the region's owner-occupied units were owned by elderly persons in 1990, including almost one of every three in Philadelphia. Several studies have demonstrated that seniors on average have more assets than younger residents (often because they own their own homes) but lower annual incomes, and therefore have less disposable income available to pay for necessities, including transportation.

**Table 7**  
**Homeownership Rates, 1990**

<b>County</b>	<b>Percent of all owner-occupied housing units headed by an elderly person</b>	<b>Percent of heads-of-household over the age of 64 that own their home</b>	<b>Percent of heads-of-household under the age of 65 that own their home</b>
<b>Bucks</b>	18%	76%	76%
<b>Chester</b>	19%	78%	74%
<b>Delaware</b>	28%	73%	71%
<b>Montgomery</b>	25%	78%	72%
<b>Philadelphia</b>	31%	73%	58%
<b>5 Pennsylvania counties</b>	<b>26%</b>	<b>75%</b>	<b>67%</b>
<b>Burlington</b>	20%	83%	74%
<b>Camden</b>	22%	73%	69%
<b>Gloucester</b>	20%	82%	78%
<b>Mercer</b>	25%	72%	65%
<b>4 New Jersey counties</b>	<b>22%</b>	<b>76%</b>	<b>71%</b>
<b>9-county DVRPC Region</b>	<b>25%</b>	<b>75%</b>	<b>67%</b>

**Source:** United States Department of Commerce, Bureau of the Census. *1990 Census of Population and Housing*.



Table 8 describes the relative percentages of persons living below poverty level in 1990. The region's elderly residents are more likely to live below poverty than are persons under the age of 65, particularly those residents over the age of 75. In Bucks, Chester and Montgomery counties in Pennsylvania, for example, an average of 6% of the residents age 65 and older lived below poverty in 1990, compared to only 3.5% of non-elderly residents. In the City of Philadelphia, however, a higher percentage of younger residents (21% as opposed to 16%) were living below poverty in 1990. This is due to the fact that the City is home to a disproportionate share of the region's poor. This was also true (though to a lesser degree) in Camden County, where a high percentage of young residents of the City of Camden live below poverty level.

**Table 8**  
**The Elderly and Poverty, 1990**

<b>County</b>	<b>Percent of residents under 65 years of age and living below poverty level</b>	<b>Percent of residents over 64 years of age and living below poverty level</b>	<b>Percent of residents over 74 years of age and living below poverty level</b>
<b>Bucks</b>	3.7%	6.1%	8.5%
<b>Chester</b>	4.5%	6.1%	9.0%
<b>Delaware</b>	6.9%	7.8%	9.8%
<b>Montgomery</b>	3.2%	5.8%	8.4%
<b>Philadelphia</b>	21.0%	16.3%	18.5%
<b>5 Pennsylvania Counties</b>	<b>11.4%</b>	<b>11.1%</b>	<b>13.7%</b>
<b>Burlington</b>	4.1%	5.8%	7.8%
<b>Camden</b>	10.5%	8.6%	10.6%
<b>Gloucester</b>	6.0%	7.9%	11.2%
<b>Mercer</b>	7.4%	7.9%	10.5%
<b>4 New Jersey Counties</b>	<b>7.3%</b>	<b>7.6%</b>	<b>10.0%</b>
<b>9-county DVRPC region</b>	<b>10.2%</b>	<b>10.2%</b>	<b>12.8%</b>

**Source:** United States Department of Commerce, Bureau of the Census: *1990 Census of Population and Housing*. Data does not include persons living in group quarters.

## The Near-Elderly

The number of near-elderly residents, defined as those people age 55 to 64, must also be considered in planning for service provision for the elderly. These residents will reach retirement age and be formally classified as "elderly" by the time the year 2000 Census is undertaken. Since many by this point in their lives have raised their children and settled in the communities where they intend to live in their later years, the number and percentage of near-elderly people residing in each county is a strong indication of where growth in the numbers of elderly residents will occur in the future.

Map 6 illustrates the density of near-elderly residents by municipality throughout the region, while Map 7 illustrates the density of near-elderly residents within the City of Philadelphia. Table 9 identifies the number and percent of near-elderly people in 1990, and forecasts the percentage of near-elderly people that will reside in each county in the years 2005 through 2025. It's interesting to note the slight decrease in the percentage of near-elderly between the years 2015 and 2025, as the last of the "baby boomers" reach retirement age and the "baby bust" generation follows.

**Table 9**  
**Near-Elderly Residents by County, 1990 through 2025**

County	Number of residents age 55 to 64 years, 1990	Percent of residents age 55-64 years, 1990	Percent of residents age 55-64 years, 2005	Percent of residents age 55-64 years, 2015	Percent of residents age 55-64 years, 2025
<b>Bucks</b>	48,620	9%	11%	15%	13%
<b>Chester</b>	32,673	9%	11%	15%	12%
<b>Delaware</b>	53,901	10%	11%	14%	13%
<b>Montgomery</b>	67,193	10%	12%	14%	13%
<b>Philadelphia</b>	142,880	9%	10%	12%	11%
<b>Burlington</b>	35,549	9%	11%	14%	13%
<b>Camden</b>	43,446	9%	10%	14%	13%
<b>Gloucester</b>	19,220	8%	10%	13%	12%
<b>Mercer</b>	29,325	9%	11%	14%	12%
<b>DVRPC Region</b>	<b>472,807</b>	<b>9%</b>	<b>11%</b>	<b>14%</b>	<b>12%</b>

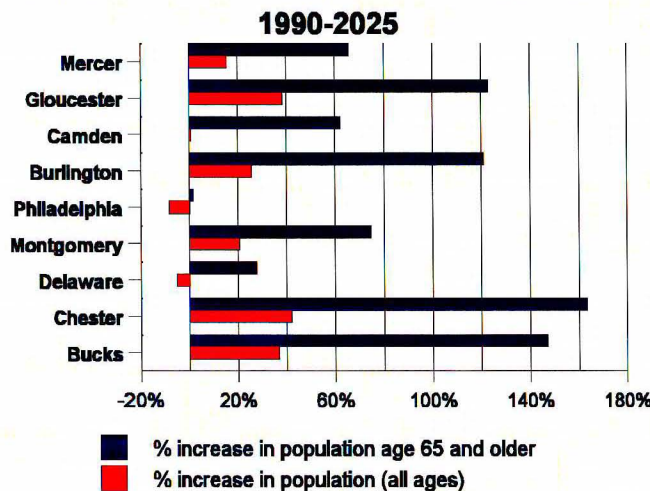
**Source:** United States Department of Commerce (Bureau of the Census) and Delaware Valley Regional Planning Commission population forecasts.

## Forecasted Changes in the Region's Elderly Population

This report does not attempt to forecast the number of elderly living within any particular community by the year 2025, since the construction of one major nursing home, retirement community or assisted living facility could dramatically alter the forecasted

number of elderly persons in any given municipality. It is possible, however, to forecast the expected number of elderly people that will reside in each of the region's counties.

**Figure 7: Growth of the Elderly Population**

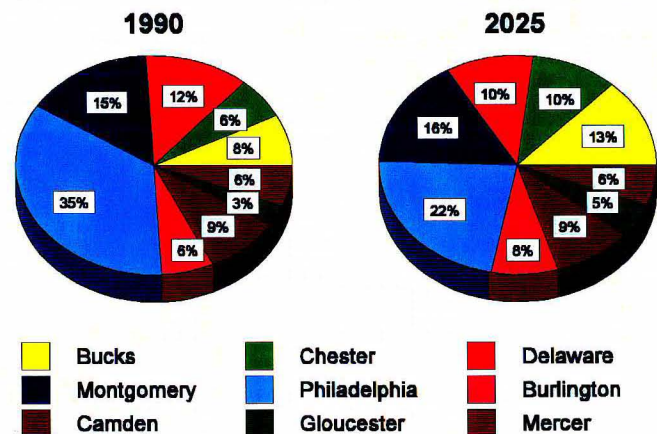


Source: DVRPC. Based on non-group quarter population only.

As a result, a smaller share of the region's elderly is expected to live in Philadelphia in the future, as indicated in Figure 8. While 35% of the region's elderly currently live in the City, by 2025 that share will likely decrease to 22%.

Table 10 describes the estimated percentage of each county's population that were elderly in 1990 and the forecasted percentages through the year 2025. The percentage of the region's population that is elderly is expected to increase from its current 13% to over 19%, with almost one in five of the region's residents over the age of 64 by 2025. While the City currently has the highest percentage of elderly residents, this pattern is expected to change by 2025 as suburban baby boomers age in place. Although the City will continue to be home to more elderly residents than any other county, the proportion of its population that is elderly will be lower (at just over 16%) than any other county, as illustrated in Figure 9.

**Figure 8: Location of the Region's Elderly Population**

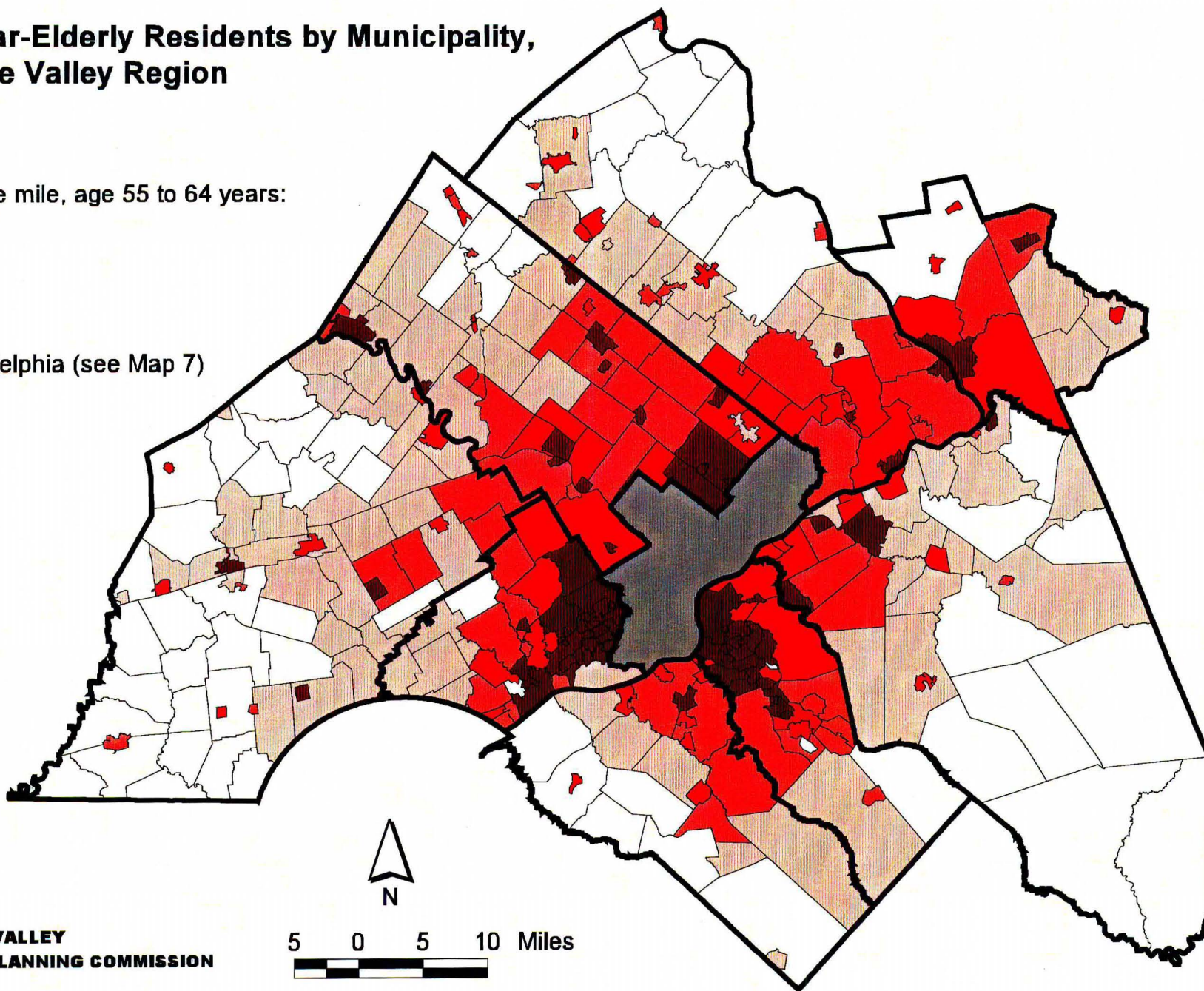
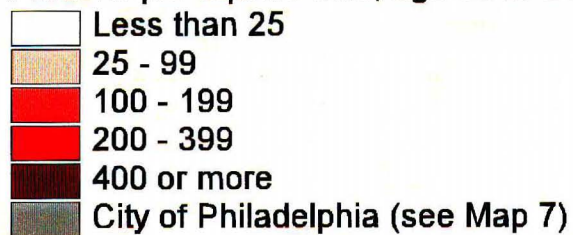




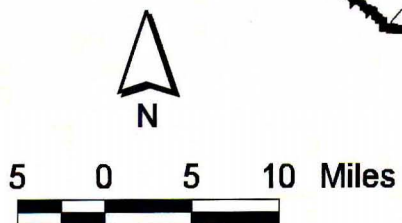
## MAP 6

### Density of Near-Elderly Residents by Municipality, 1990, Delaware Valley Region

Persons per square mile, age 55 to 64 years:



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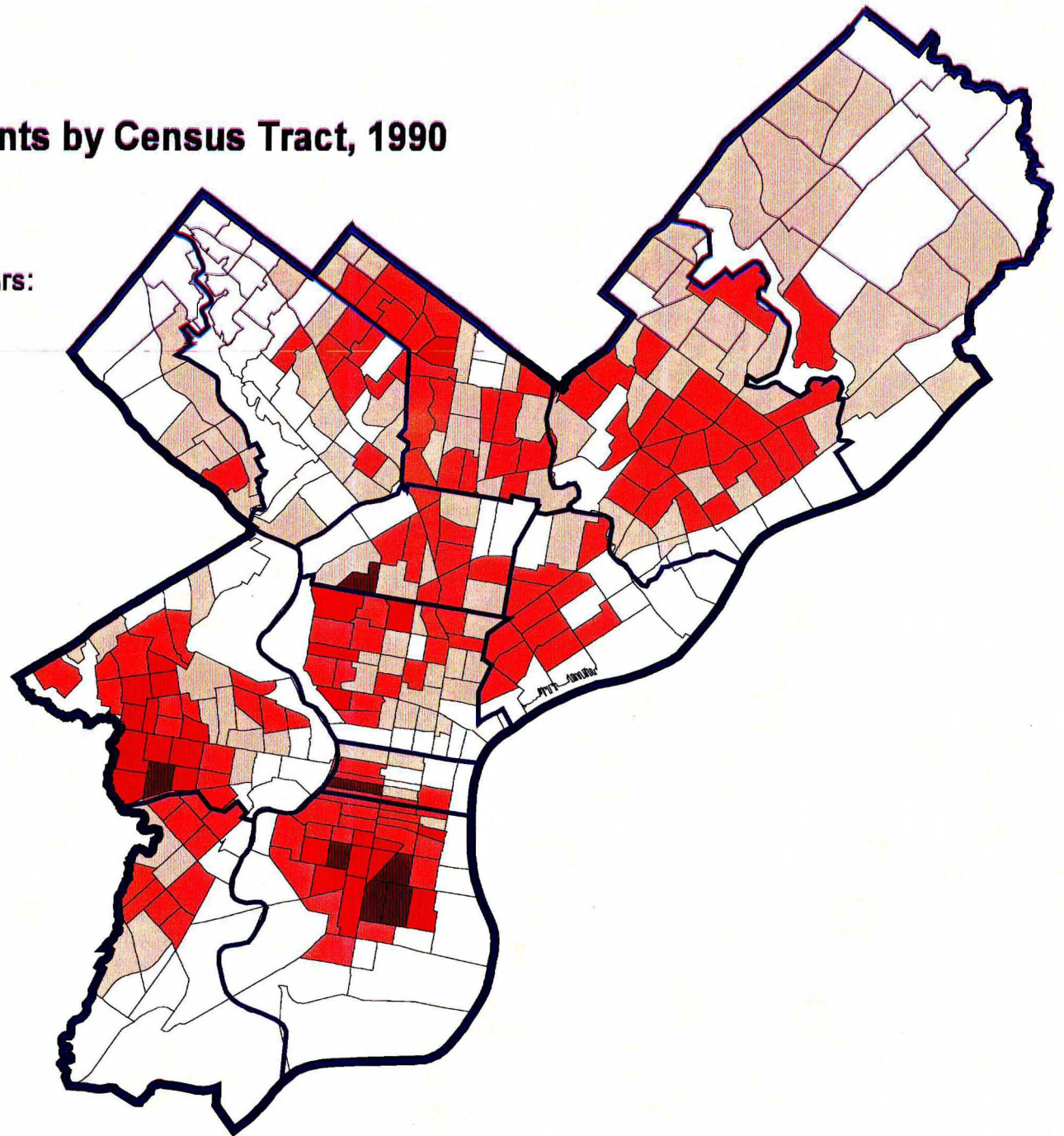
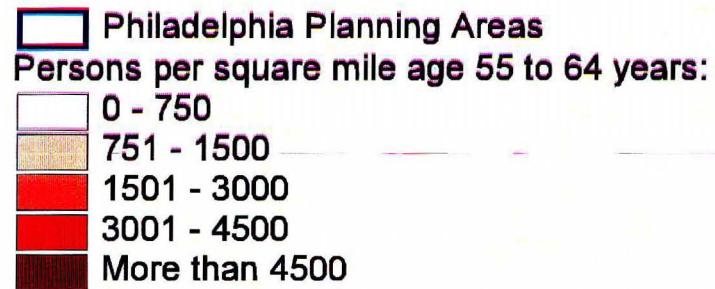






## MAP 7

### Density of Near-Elderly Residents by Census Tract, 1990 City of Philadelphia



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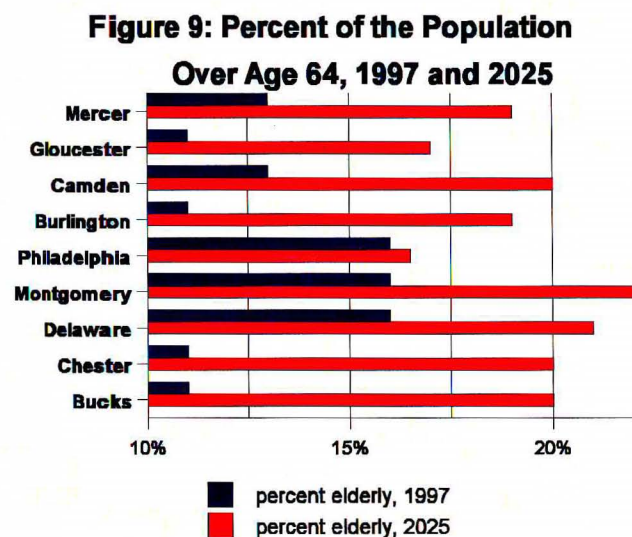
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**Table 10**  
**Percent of Each County's Population Over the Age of 64 Years, 1997-2025**

County	1997	2005	2015	2025
Burlington	11%	12%	15%	19%
Camden	13%	13%	15%	20%
Gloucester	11%	11%	13%	17%
Mercer	13%	13%	15%	19%
<b>NJ Counties</b>	<b>12%</b>	<b>12%</b>	<b>15%</b>	<b>19%</b>
Bucks	11%	12%	15%	20%
Chester	11%	12%	15%	20%
Delaware	16%	16%	17%	21%
Montgomery	16%	15%	18%	22%
Philadelphia	16%	15%	15%	17%
<b>PA Counties</b>	<b>15%</b>	<b>15%</b>	<b>16%</b>	<b>20%</b>
<b>DVRPC Region</b>	<b>14%</b>	<b>14%</b>	<b>16%</b>	<b>19%</b>

**Source:** United States Census Bureau 1997 Population Estimates and Delaware Valley Regional Planning Commission forecasts. Does not include people living in group quarters (including nursing homes facilities).



This 'suburbanization' of the elderly may have serious consequences on mobility, since many of the region's future seniors will live in areas not currently served by public transit systems. Many of these residents will have grown up accustomed to owning their own car and will be totally unfamiliar with public transit, and most will expect to continue using their automobile as their primary means of transportation. The average annual miles driven by elderly drivers is expected to increase dramatically in the future, to the point that one in every five miles driven in this country will be driven by an older driver.

Source: US Census Bureau and DVRPC (forecasts).



This changing dynamic will have serious implications for the region's planners and policy makers. Additionally, the eventual loss of the ability to drive independently will almost certainly impede the ability of these aging suburbanites to access services and facilities and participate in the social, cultural and community activities that enhance one's quality of life.

### **Access to Traditional Fixed-Route Public Transit**

A primary purpose of this report is to consider the opportunities available to the region's current and future elderly residents to access necessary services and facilities as well as cultural, social and community events. Previous chapters have discussed the fact that the majority of the nation's elderly rely on private automobiles for transportation, but eventually reach a point where safe operation of a vehicle may not be possible. Surveys have shown that many seniors who can no longer drive themselves are usually able to find alternative transportation to those services that they deem to be absolutely necessary, including medical appointments and shopping for necessities, by asking friends or relatives for rides or through the use of taxis or demand-responsive paratransit services.

For many, however, losing the use of their own private vehicle often means that their access to cultural or community events and opportunities for social interaction is severely curtailed, reducing the quality of their life. Losing their ability to drive also creates the additional psychological burden of feeling dependent or helpless at a time when the elderly are already facing other vulnerabilities, including health problems and general frailty. Public transit may offer an alternative means of travel.

Map 8 illustrates existing access to fixed-route public transit in the region, depicting areas located within 1/4 mile of a bus or trolley line or within 1/4 mile of a rail station. The 1/4 mile buffer was chosen based on the fact that many elderly have physical limitations which would limit the distance that they could reasonably travel to access transit. Based on previous maps illustrating the density of elderly residents, it appears that many of the municipalities where the densest concentrations of seniors live are served by an existing bus, trolley or rail transit line, which may therefore make public transit a viable alternative to driving. A recent DVRPC report found that over half of the region's total population lives within 1/4 mile of an existing bus or trolley line or rail station<sup>16</sup>. The exceptions are locations in the outlying suburbs, particularly in northern Bucks County, western Montgomery County and southern Chester County, where concentrations of elderly residents are not served by any existing fixed route transit line.





Surveys and other research have demonstrated, however, that many of the elderly are hesitant to use fixed-route public transit even when it is available, because of unfamiliarity with the routes, confusion, visual impairments which make it difficult to read

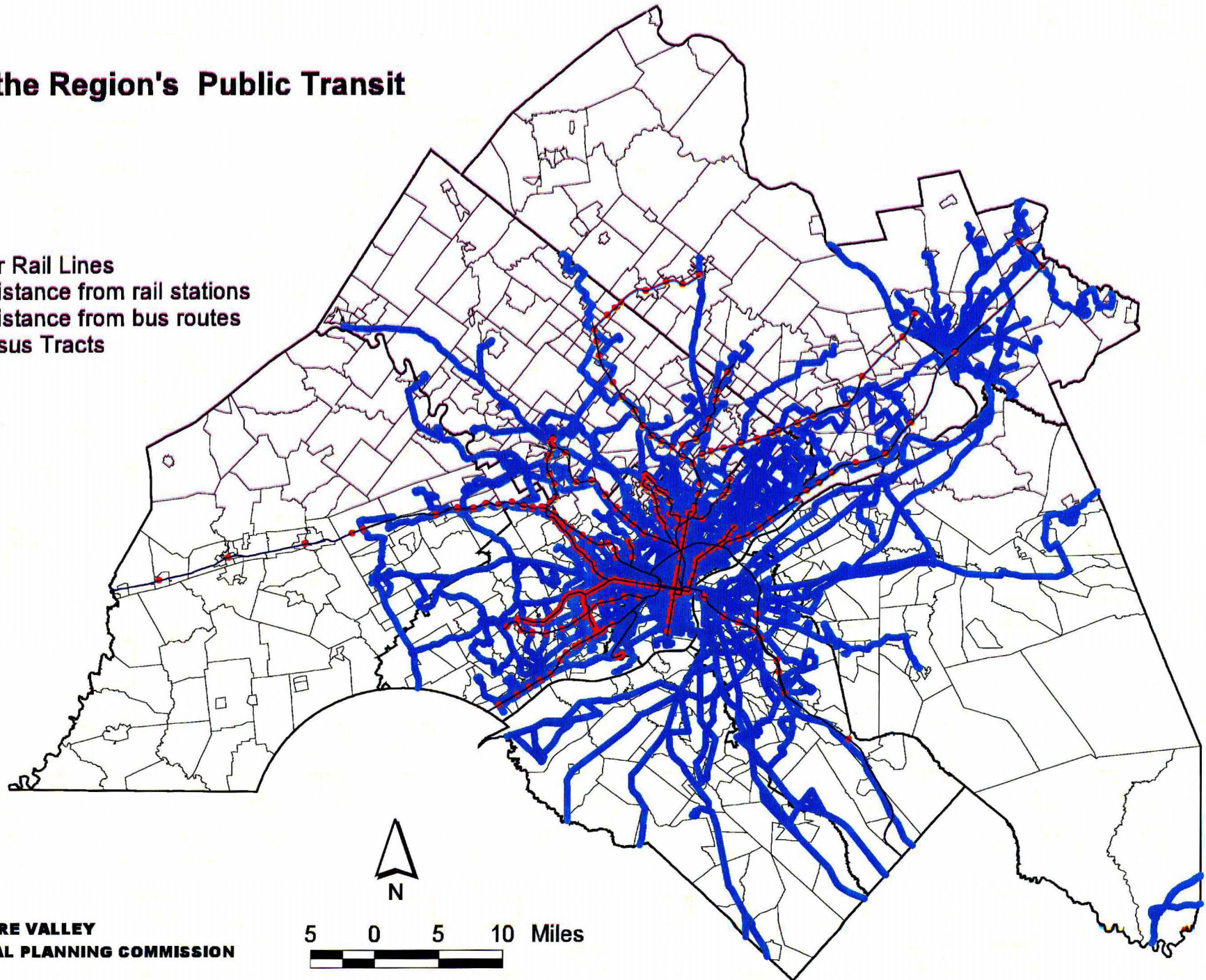
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<sup>16</sup>DVRPC. *Transit Accessibility in the Delaware Valley*, report number 98015.

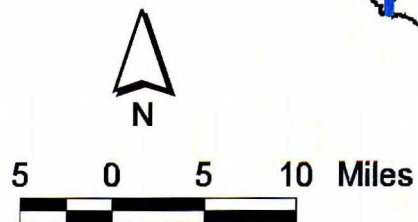
## MAP 8

### Access to the Region's Public Transit

-  Commuter Rail Lines
-  1/4 mile distance from rail stations
-  1/4 mile distance from bus routes
-  1990 Census Tracts



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signs and other physical limitations. Many have never used public transit in their lives, having grown up in the suburbs, and are either unable or unwilling to learn the system.

For some seniors, an alternative to fixed route transit is paratransit, demand-responsive or shared ride services for people unable to utilize traditional fixed-route service because of a disability. The Americans with Disabilities Act (ADA) requires that operators of fixed-route public transit offer equivalent services to the disabled (including disabled senior citizens) living within 3/4 mile of any fixed transit route (see Chapter IV). These ADA services do not have to be provided, however, to elderly people that may need some assistance but are not absolutely unable to utilize traditional transit, or to senior citizens living outside the 3/4 mile corridor along either side of the route.

For some, transportation services to and from specific destinations (such as the nearest senior center or hospital) may be available through the local area agency on aging, a local non-profit organization, their municipal government or, for residents of assisted living facilities or nursing homes, their residential facility. The ability of these agencies to meet the increasing demands placed on them by an ever-increasing elderly population, however, is uncertain. Better marketing and enhanced transit systems that are sensitive to the needs of elderly users may make transit a more attractive option, particularly for the near-elderly. Increasing the availability of demand-responsive paratransit may represent a better option for other older residents or those with physical limitations.

## Summary

This chapter has discussed the number, location and household characteristics of the Delaware Valley's current and forecasted elderly population. The following key points have been discussed, which may have serious implications for the state, county and municipal officials who will be responsible for meeting the future transportation needs of the region's elderly population:

- The number of people over the age of 64 that live in the Delaware Valley is expected to increase dramatically over the next 30 years. By the year 2025, one in every five of the region's residents will be over 64 years of age. Previous chapters have documented that tomorrow's senior citizens will be even more reliant on their automobiles and that the average miles traveled by the elderly is expected to increase dramatically, to the point that almost 20% of all driver mileage is expected to be attributable to elderly drivers by the year 2030<sup>17</sup>.

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<sup>17</sup>Burkhardt, Berger, Creedon and McGavock. *Mobility and Independence: Changes and Challenges for Older Drivers*, page 40.



- Most of this growth in elderly population is expected to occur in the region's suburbs, in areas not currently served by public transit and at densities which will make it difficult to implement fixed-route transit as a viable alternative to the private automobile. While the City of Philadelphia will still contain more elderly residents than any other county, the percentage of elderly is expected to be higher in all of the region's suburban counties than in the City by the year 2025.
- The elderly are more likely to own their homes than are younger adults, with 75% of all heads-of-households over the age of 64 owning their home as compared to 68% of householders age 64 or younger. One in four of the region's owner-occupied housing units is owned by a person age 65 or older. The elderly often have lower annual incomes than their younger neighbors, and many elderly homeowners find it difficult to maintain their properties and pay their property taxes. This may present a problem for municipalities that rely heavily on property taxes to fund local services and facilities.
- Despite having greater assets, the region's suburban elderly residents are more likely to live below poverty than are younger residents in the same areas. Only in the region's urban areas, and particularly in the City of Philadelphia, is the percentage of elderly residents living below poverty lower than that among residents under the age of 65.
- In all of the region's counties, the "oldest" of the elderly (those over the age of 74) are more likely to be poor than other elderly residents. Thus, many residents most in need of specialized, demand-responsive alternatives, such as taxi service, are least likely to be able to afford to pay for the service.
- The elderly are almost twice as likely to live alone than are people under the age of 64. While the predominant mode of transportation for the elderly is driving their own car, the second-most preferred alternative is usually relying on others for rides. As driving becomes less feasible due to infirmities associated with the natural process of aging, seniors who live alone have the greatest difficulty in finding an alternative means of transportation and often end up curtailing their outside activities, particularly social interaction and community or cultural activities.
- While a significant percentage of the region's elderly residents live within a reasonable proximity to public transit, research has shown that many elderly people are reluctant to use traditional fixed-route transit. Many have never used transit before, are unfamiliar with the routes and are reluctant or unable to learn the system. Others have health problems or disabilities that make it difficult or impossible to access and utilize traditional transit. Although paratransit may be an alternative for the disabled elderly, many senior citizens require some assistance but are not considered disabled (and thus eligible for paratransit services) under ADA rules.

## IV. Applicable Legislation and Existing Approaches

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As described in previous chapters, the elderly population will increase dramatically in this region and throughout the country over the next thirty years. Much of this growth will occur in suburban and rural areas, where few alternatives to the private automobile exist. The report has described the expected increases in the average number of miles that will be driven annually by the elderly and the proportion of total vehicle miles that will be attributable to senior citizens.

As their ability to drive their own car decreases, many seniors will find it difficult to access necessary services and facilities. Perhaps more importantly, seniors who no longer are able to drive often find themselves unable to continue to participate in social and cultural activities, and the quality of their life is severely diminished.

This chapter presents background information on applicable legislation that specifically addresses the issues of the elderly. It then describes different approaches that have been utilized to improve the mobility of the elderly.

### **Applicable Legislation**

Four important pieces of legislation have set the stage for the provision of transportation services and facilities for the elderly: the Older Americans Act, passed in 1965; the Americans with Disabilities Act (ADA), enacted in 1990; the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA); and the Transportation Equity Act for the 21st Century (TEA-21), enacted in 1998.

#### ***The Older Americans Act*** (1965, since amended)

The Older Americans Act (OAA) was enacted in 1965, and is the primary conduit for the organization and delivery of services to persons age 60 and older. The Act was re-authorized in 1995, and is once again up for re-authorization. The OAA spelled out broad policy objectives relating to the nation's elderly, and created the Administration on Aging (within the Department of Health, Education and Welfare) as the leading advocate for the nation's senior citizens.

The OAA provides that area agencies on aging be designated that serve specific planning or service areas within each state. In this region, both the Commonwealth of Pennsylvania and the State of New Jersey have designated area agencies that service each county. These area agencies on aging are responsible for developing comprehensive systems of community-based services for older adults. Their specific responsibilities include:

- coordinating all programs on aging regardless of funding source, and serving as an information resource for senior citizens;
- preparing an area plan which analyzes the existing services and needs within the county and defines a strategy for delivering necessary services to the elderly;
- administering their jurisdiction's annual allocation of federal Older Americans Act and state funds;
- monitoring and evaluation of ongoing projects serving the elderly;
- increasing public awareness of issues relating to aging; and,
- advising local governments and state agencies of unmet needs and recommending legislation as appropriate.

There are currently 51 state units on aging (including the District of Columbia) and almost 700 local area agencies on aging nationwide. Several offer transportation services to their jurisdiction's elderly, providing bus or van services between senior centers, shopping malls, hospitals and other health care services. A listing of state and area agencies on aging serving the nine-county Delaware Valley region is included in Appendix C.

Title III-B of the Older Americans' Act provides funding on a formula basis to each state, which then award grants to area agencies on aging. These funds can be used to provide services that improve access (such as transportation, outreach, information and assistance) as well as case management, in-home services (such as homemaker and home health aid services) and community services (such as adult day care and legal assistance). Many of the region's counties and municipalities utilize Title III-B funds to help to fund van and bus transportation services for elderly residents. In fiscal year 1999, funding exceeded \$300 million.

In addition to Title III-B, funds for elderly transportation projects are available under Title IV of the OAA, which provides grants for training, research and demonstration activities in the field of aging. The law requires that some of the Title IV funding available each year be awarded to projects that seek to improve transportation and mobility. Title IV funding amounted to \$30.1 million in 1999. Other funding is available under Title VI, which supports services for Native American elders, including transportation. Title IV funding totaled \$18.4 million in 1999.

### ***The Americans with Disabilities Act (1990)***

The Americans with Disabilities Act (ADA), signed into law in July of 1990, extended the Civil Rights Act of 1964 to include persons with disabilities, including age-related infirmities. Title II of the ADA mandates that all public transit systems which provide fixed-route service must also provide both accessible fixed-route services and complementary paratransit services for people who are unable to use fixed-route transit. This mandatory paratransit service must be comparable to the fixed-route transit service in terms of service area; response time; fares; and days and hours of service. Fares for the service may be

up to twice the basic transit fare, but the system cannot limit service based on the purpose of the trip or capacity constraints.

People eligible for demand-responsive paratransit services include anyone who cannot board or ride the transit vehicle independently, riders who need a level-changing device to access a traditional bus; and riders who have a specific condition that would prevent them from traveling to a transit stop to board a vehicle at the stop. The ADA requires that paratransit services be offered to eligible people living in corridors within 3/4 mile of any existing fixed transit route.

In addition to these requirements, Title III of the ADA requires that any public or private agency that provides transportation services must also offer the same level of service to all its program participants. For example, area agencies on aging that transport elderly people to senior citizen centers must offer elderly people with disabilities the same service. Some agencies have responded by using taxis, van services or even volunteers to pick up individuals with disabilities that prevent them from using the standard service.

While the enactment of ADA has enabled some elderly people to receive specialized paratransit services, many more cannot use traditional services and are not eligible for paratransit. The ADA requires public transit agencies to offer paratransit services only to those elderly people who are absolutely unable to utilize traditional fixed-route service. Many elderly require some assistance but could use traditional transit if such assistance were available, and thus are ineligible for specialized paratransit service. Both SEPTA and NJ Transit limit the provision of paratransit services to only those seniors that qualify under ADA guidelines.

Many of the nation's other transit providers have allowed the elderly to use paratransit services if space is available, regardless of whether they actually qualify. It is expected, however, that future demand for paratransit service and its associated costs will force most if not all of these agencies to offer paratransit service only to those that qualify under ADA guidelines. Additionally, elderly and disabled individuals living outside the 3/4 mile corridor along each side of existing transit routes are not eligible for paratransit.

### ***ISTEA and TEA-21***

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) required that planning for highways, transit and land use be accomplished cooperatively. ISTEA significantly increased the level of funding available for public transit, and allowed communities to use a substantial portion of their highway funds for public transit. The Transportation Equity Act for the 21st Century (TEA-21), adopted in 1998, continues to provide record levels of federal funding for community-based transit services. Additionally, it contains a provision that specifically requires that almost 100% of transit authorizations be appropriated and allocated.

The Federal Transit Administration (FTA) administers the transit provisions of ISTEA and TEA-21, the main source of federal funding for public transportation. Section 3 of ISTEA stated that discretionary capital assistance funds could be used for projects which are planned for and designed to meet the needs of elderly and disabled people. Section 9 of the Act provided program funds for public transit programs in large and small urban areas, with continued assistance conditioned on the accessibility of the services to the elderly and disabled. Additionally, Section 16 of ISTEA specifically stated that the elderly and disabled have the same rights as other people to use mass transit facilities and services, and mandated that special efforts be made to plan and design mass transit that is accessible to these groups.

ISTEA significantly increased the amount of transit funds available, and allowed public agencies to receive Section 16 funds. It also allowed non-profit agencies to lease Section 16 vehicles to public agencies to improve their service delivery to elderly and disabled people; allowed recipients to use capital assistance funds to pay to contract or lease transportation services; and required that Section 16 recipients coordinate with other federally funded transportation programs. Section 18 of ISTEA provided funding for public transit programs in rural areas (those with a population of less than 50,000). Under TEA-21, Section 16 became known as the Section 5310 Program.

Although a goal of the ISTEA legislation was coordination amongst agencies, most of the providers that currently receive funding under the Section 5310 program provide services to either the elderly or the disabled, with only 8% serving both groups. Section 5310 of TEA-21 continues to provide capital assistance to transportation providers, including senior centers, disability groups, community action agencies and transit agencies. These funds are primarily used to purchase transit vehicles. Congress allocated \$67 million under Section 5310 in 1999. While that amount may seem significant, it represented only a small fraction of the total transit budget, which itself represented only a small fraction of the total federal transportation budget.

### **Existing Approaches to the Provision of Elderly Transit Services**

This section discusses several programs that have been utilized in various parts of the country to improve the mobility of senior citizens. The ability of transit providers and non-profit agencies to continue to provide necessary services to an escalating number of seniors will depend on their ability to combine a number of program methods, travel modes and funding sources and to respond to the challenges presented in low density suburban and rural areas, where traditional approaches to public transit are not feasible.

The Southeastern Pennsylvania Transportation Authority's (SEPTA's) paratransit, suburban on-call programs and shared-ride services and New Jersey Transit's reduced fare program are described below. This section also discusses several different approaches, including:



- the MCDOT program in Monmouth County, New Jersey, which combines a number of modes and program methods to secure transit services for seniors;
- the Independent Transit Network (ITN), a program in Portland, Maine, which uses cars to chauffeur its senior citizens;
- the National Caucus and Center for Black Aged (NCBA), which works closely with the local transit authority to provide escort services in a relatively dense area (Springfield, Massachusetts) as a means of reducing crimes against the elderly;
- Boston's Taxi Discount Program, a public-private partnership initiated in 1975; and,
- the Transportation Project for Cayuga County, Inc., which relies primarily on volunteer drivers and escorts to transport elderly residents in a large, sparsely populated rural area.

### ***Transit Services in the Delaware Valley***

The Southeastern Pennsylvania Transportation Authority (SEPTA) provides public transit within the City of Philadelphia and its surrounding suburban counties, and offers a variety of accessible services to both the disabled and to senior citizens. Almost 60% of the agency's city bus fleet is wheelchair accessible, and 32% have motorized lifts as well as computerized announcements to assist people with physical, visual and hearing disabilities. SEPTA expects its entire city bus fleet to be 100% accessible by the year 2002. SEPTA's suburban bus routes are accessible via an "on-call" program, which allows disabled individuals (including senior citizens) to call at least one day in advance and be serviced by a lift-equipped vehicle.

SEPTA's traditional ADA Paratransit Program provides services only to senior citizens who are also disabled and qualify as such under ADA requirements. Its Shared-Ride Program, however, provides door-to-door ride-sharing services on a space-available basis to senior citizens age 65 and older. This program, funded primarily by the Commonwealth's Lottery Fund, uses vans and sedans to provide services within the City of Philadelphia and to forty selected sites in the suburban counties, including senior centers, shopping malls and health care facilities.

New Jersey Transit (NJT) provides transit service throughout New Jersey, and offers ADA-required paratransit services to disabled seniors. Additionally, NJT offers a reduced-fare program which allows persons age 62 and older to ride for a discount of up to half the regular cost of the trip during off-peak hours.

### ***MCDOT: Monmouth County, New Jersey***

The Monmouth County Division of Transportation (MCDOT) coordinates, manages and directly operates transportation services for the elderly, disabled and general public in Monmouth County, New Jersey. The program utilizes a number of different public and private sector components to provide services to its diverse rural and suburban population.

Funding for the program includes Section 18 funds, Title III funding, county money, user fees and casino revenue.

MCDOT directly provides and/or coordinates a variety of transit services, using mini-buses, passenger vans, station wagons, and taxis. MCDOT's Shared-Ride Taxi (SRT) program, for example, is an advance-reservation contract taxi service that provides rides for people not living near public transit services. SRT feeds service to New Jersey Transit routes and also provides direct transportation to specific destinations at a fare equal to a one-zone bus ride. The county's shuttle bus program provides fixed-route scheduled service to a variety of shopping centers, hospitals, employment centers and residential communities, providing access on residential streets where traditional fixed-route buses cannot operate efficiently.

In addition to directly providing transportation services and contracting with other providers (such as taxi services), MCDOT acts as a coordinator, working to match mobility needs with the appropriate provider. Trip needs are assigned when possible to public transit and local human service agencies that provide transportation.

#### ***Independent Transit Network: Portland, Maine***

The Independent Transportation Network (ITN) operates in Portland, Maine. ITN is a non-profit organization that uses automobiles to provide on-demand, consumer-oriented transit for seniors citizens. Services are available 24 hours a day, 7 days per week, with no restrictions based on income or trip purpose. Rides can be booked on the day of service, and riders can choose to share a ride with others or ride alone. Costs are reduced if the passenger books ahead or shares the ride. Senior citizens are given the option of trading in a car that they no longer drive in exchange for future trips. The value of the car is put into an account, which can then be used to purchase future rides.

#### ***National Caucus and Center on Black Aged/Massachusetts Services for Seniors, Inc.***

The National Caucus and Center on Black Aged (NCBA) operates senior transportation services in Springfield, Massachusetts. In 1976, the NCBA was awarded a demonstration grant from the Administration on Aging (AoA) to reduce the elderly's susceptibility to crime. Recognizing that most crimes against the elderly occur while they are commuting to various services, the organization used this grant to initiate a transportation and escort service, utilizing vans to provide rides to medical appointments, congregate meal sites, shopping areas, senior centers and banks. While the original grant from the AoA expired in 1981, funding is currently provided by the Pioneer Valley Transit Authority (PVTA), Title IIIB Older Americans Act funding and grants from the local area agency on aging.

The program now provides door-to-door transportation and escort services to primarily low-income seniors and disabled people, using nine vans to provide over 50,000 one-way trips per year. The service currently operates at a substantially reduced cost because of its close affiliation with the PVTa. The transit authority provides fuel, maintenance, driver training and liability coverage at no cost to the NCBA; in return, the NCBA provides 16% of the paratransit services provided by the transit authority and almost a quarter of all of its elderly transportation services.

### ***The Taxi Discount Program: Boston, Massachusetts***

Boston's Taxi Discount Program was initiated in 1975, when the Boston Taxi Industry raised cab fares to a level that was unaffordable to many of the City's elderly. People over the age of 65 as well as disabled people are able to purchase discount ticket books at sites throughout Boston that enable them to save 40% off the cost of taxi service. All cabs operating in the City are required to honor the tickets. The program is monitored by the Boston Police Department, while the Commission on Elderly Affairs oversees the sale of the ticket books. Program funding is provided by the Boston Taxi Industry owners, with each cab owner contributing an annual fee. The city's taxi discount program represents one component of a comprehensive program to provide transportation services to elderly and disabled residents.

### ***Transportation Program for Cayuga County, Inc.***

The Transportation Project for Cayuga County provides approximately 40,000 rides per year to senior citizens living in a 700 square mile rural county in central New York State. Initiated in 1975, the project now provides demand-responsive services to senior citizens throughout the county, providing rides to medical appointments, nutrition sites, shopping areas, personal business and recreation. Nine vans based in one small city (Auburn) and four smaller rural villages provide curb-to-curb service to or from any location in the county with 48 hours notice.

The project employs only two full-time employees (the executive director and one dispatcher), relying on four volunteer dispatchers and almost 100 volunteer drivers and escorts. Many volunteers are near-elderly or newly-retired people, who are screened, trained and supported by the executive director. The community takes an active part in the project, and caps, shirts and jackets are provided to the volunteers by local businesses. The Board of Directors, which oversees both operations and administration, includes riders from all areas of the county as well as elderly service providers, volunteer drivers and community agency representatives.

Because of its large volunteer component, the project runs a relatively small budget (less than \$150,000 per year). Current funding sources include the County Office on Aging, the City of Auburn, the County of Cayuga, local town and village governments, churches,

service organizations and the private sector. Vehicles were purchased using Section 16(b) funds from the FTA as well as Regional Transportation Authority funds.

## Conclusion

Federal funding available under the legislation described at the beginning of this chapter represents the primary source of funding for elderly transportation services in this country. Other less traditional sources of revenue for such services include private foundations, public/private partnerships, local funding (including taxes), donations and user fees. Non-profit agencies such as the Red Cross and Volunteers of America have provided elderly transportation services utilizing combinations of funding, donations and volunteer labor.

Federal funding has to date been unable to provide transportation services to a large proportion of the nation's elderly. In 1991, for example, Title III of the Older Americans Act provided approximately 51 million trips to approximately one million elderly people. In that same year, there were over 31 million people over the age of 65 living in this country.<sup>18</sup>

The elderly population is expected to increase dramatically over the next three decades, particularly in areas where few alternatives to the automobile currently exist. Tomorrow's elderly are expected to be even more diverse than today's seniors, and many will live in sparsely populated rural and suburban areas. Most will be used to a high level of mobility, having been car owners for their entire lives. As these older drivers lose their ability to drive, the need and demand for elderly transportation services will increase exponentially. Given this increased demand and in light of existing federal and state budget constraints, public and non-profit social service agencies and transportation providers will need to cultivate alternative sources of funding and combine multiple programs and travel modes if they hope to maintain the current levels of service and to provide transportation services to an even greater proportion of elderly.

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<sup>18</sup>National ElderCare Institute on Transportation. *Finding Funds for Transporting the Elderly*. Issue brief number 5, September, 1993.



## Chapter V. Summary and Recommendations

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As documented in this report, the number of senior citizens living in the Delaware Valley region has increased significantly in recent years and is expected to increase even more dramatically over the next thirty years. A majority of the region's growth in its elderly population will be concentrated in its suburban counties, where few alternatives to the private automobile exist. Due to changing residential locations and lifestyles, the average annual miles driven by senior citizens is also forecast to increase dramatically, and by 2030 one of every five miles traveled by car in the region is expected to be attributable to an elderly driver.

The transportation needs of the region's elderly vary greatly, given their diversity in characteristics such as location, income and physical health. Tomorrow's senior citizens will be accustomed to an even higher level of mobility than today's elderly, with most having been car owners for their entire lives. Most elderly people continue to rely heavily on their private automobiles for mobility as they age. Many, however, will eventually be unable to drive themselves, and will need to find an alternative mode of travel. Although almost half of the region's population currently lives within 1/4 mile of a bus, trolley or rail line, the elderly are often reluctant to utilize fixed-route public transit, and many also do not consider paratransit as a viable option, even if they are eligible.

Faced with limitations on mobility, the ability of the region's elderly to access necessary services and facilities may be compromised. As importantly, the ability of many seniors to continue participating in social or cultural activities or to interact with their community is limited, and their quality of life may be reduced.

As older drivers lose their ability to drive, the need and demand for elderly transportation services will increase exponentially. While local area agencies on aging and other service providers have utilized available federal funding to provide transportation services to specific destinations, the ability of these agencies to meet the escalating needs of the elderly in the future is uncertain. Given the multi-faceted nature of the problem, possible interventions will also need to be multi-dimensional, focusing on:

- changing development patterns in the region, to create attractive communities where the need to drive is reduced and thus alter the trip patterns of the region's senior citizens;
- creating more alternatives to driving;
- education and counseling, to increase the public's awareness of mobility alternatives;
- enhancing automobile driver capabilities; and,
- planning on the part of the near-elderly as to how their transportation needs can continue to be met after they retire from driving, just as they plan for their financial future after their retirement from work.

## Recommendations for Improving the Mobility of the Region's Elderly

The following recommendations would improve the ability of the region's seniors to access necessary services and facilities as well as cultural and religious activities, thereby enhancing their quality of life. Recommendations to improve access for seniors living in suburban or rural locations, where past and current land use practices have created low-density, sprawling communities where residents are required to use their automobile to access most if not all of their necessary services, facilities and activities, are presented first. These are followed by recommendations that would improve the mobility and enhance the quality of life for elderly residents in the region's urban areas and developed centers. Finally, overall strategies that would help to improve the mobility of the elderly throughout the Delaware Valley region are identified.

### *To Improve Access for the Elderly Living in Suburban Areas:*

- Municipalities should **revise municipal plans and zoning regulations**, to support and encourage increased densities and mixed-use communities where the needs of the elderly (including opportunities for social and other life-enriching experiences) can be met within walking distance of their residence. Increased densities are essential for the provision of efficient and effective fixed-route transit services, and a mix of commercial and residential uses would also allow elderly residents as well as the general population to accomplish several objectives on one trip.
- Non-profit agencies and developers should work with the region's municipalities to **create attractive and affordable housing opportunities for seniors in higher-density suburban centers** with access to services and effective public transit. This would enable seniors to walk to fulfill many of their needs (including health care, shopping, social interaction and religious experiences) and to take advantage of reduced fares on the region's existing public transit systems. A variety of housing alternatives that meet the varying needs of a diverse elderly population should be available within their own home communities, including affordable independent living units, transitional care facilities and nursing homes. Many seniors living in locations where transportation alternatives are not available might opt to move from their current homes if higher density options with better access to services and transit were available within their existing suburban community.
- Municipalities should **revise local plans and ordinances to encourage service clustering**, or situating services and facilities in close proximity to one another and in close proximity to transit. This would enable senior citizens as well as the general population to access stores and service establishments and meet several objectives on one trip to one destination while discouraging "trip-chaining" (making multiple stops along one route to meet different personal needs).

- For elderly and near-elderly residents with limited transit opportunities that are capable of safely operating their own automobile, state departments of transportation should **re-design suburban highways in appropriate locations to respond to the functional capabilities of older drivers**. Despite the growth in recent years in the number of elderly drivers and the forecasted growth in the number of older drivers, the current highway system has not been designed in response to the physical limitations and capabilities of the elderly. In January of 1998, the Federal Highway Administration released the *Older Driver Highway Design Handbook*, which provides a set of highway design guidelines that take into account the impact of aging on driving. Although such adaptations are not appropriate in all locations (since they may in fact encourage younger drivers to drive unsafely), they may be critical in others (including areas near retirement communities and other known concentrations of elderly drivers). Improvements that might allow senior citizens to continue to safely drive for a longer period of time include:
  - Improving and clarifying roadway signage, by reducing visual clutter, increasing luminance, using larger lettering, and using advance signing where appropriate;
  - Altering roadway designs where possible, including softening curves and requiring edge lines on the sides of roads wider than 22 feet;
  - Painting road striping lines so they are more visible; and,
  - Adjusting the timing and location of traffic signals in response to increasing numbers of elderly drivers. For example, more time should be allowed to turn left on an arrow at busy intersections and the timing of yellow lights could be increased, to allow more stopping time for drivers with slower response rates.
- Likewise, private manufacturers should **re-design and market safer automobiles** to elderly drivers who are capable of driving their own automobile. Many seniors could continue to drive but have physical limitations or health problems that make it difficult to enter or operate the vehicle. Additionally, studies have shown that seniors (not unlike children) are more likely to be seriously injured or killed in an accident, due to their physical size and general frailty. Options that could be made available to older drivers that would allow them to safely operate their vehicle longer include:
  - larger rear view mirrors;
  - air bags on both the driver and passenger sides;
  - side view mirrors;
  - swivel seats and redesigned doors that provide easier access to the vehicle;
  - seats designed with the safety and comfort of the older driver in mind, with features such as head support and arm rests;
  - 5-point seat belt systems, that latch in the front rather than to the side;
  - larger, clearly marked controls on the dashboard; and,

- in-vehicle intelligent transportation systems (ITS), such as advanced on-board guidance systems for trip planning and route finding; adaptive cruise control that automatically adjusts the speed of the vehicle as it approaches other cars and objects; and emergency alert or notification systems, to immediately notify roadside service or emergency personnel if the car malfunctions or is in an accident.
- Finally, for very elderly people living in suburban and rural locations, public agencies, non-profit corporations and other agencies responsible for providing transportation services to the elderly should explore programs that **enhance the affordability and accessibility of taxi services and other demand-responsive, shared-ride services** utilizing vans and automobiles.

***To Improve Access for Elderly Residents in Urban Areas and Developed Centers:***

- County and municipal agencies, non-profit organizations and developers should work to **expand affordable and safe housing opportunities for seniors in the region's urban centers**, where they can walk to fulfill many of their basic needs and take advantage of reduced-fare public transit. Some seniors may be willing to move into urban centers if these locations were seen as attractive alternatives to their suburban community. A variety of housing alternatives that meet the varying needs of a diverse elderly population should be available, including affordable independent living units, transitional care facilities and nursing homes. The threat of crime should also be reduced, through increased patrols, town-watch type community programs and better lighting.
- Municipalities, state agencies and community development organizations should work together to **improve pedestrian facilities and amenities** in appropriate areas, to encourage more elderly residents to walk to destinations within a reasonable proximity of their home (including transit stops). Pedestrian access and safety can be improved by:
  - Adjusting the timing of traffic signals to account for the longer time necessary for an elderly person to cross the street;
  - Incorporating pedestrian safety into local building and zoning regulations;
  - Improving existing pedestrian amenities in developed areas, including improved signage, better lighting and benches for resting; and,
  - Improving sidewalks and other amenities along routes between transit stations and those facilities and services most likely to be utilized by the elderly.



***To Improve Access for All Elderly Residents throughout the Delaware Valley:***

- The region's transit service providers should **work proactively with the region's municipalities and counties to create a more efficient, cost-effective and accessible region-wide transit network**. Transit accessibility should be enhanced for people of all ages and marketing campaigns that encourage all residents to try transit should be expanded, to familiarize them with the region's public transit systems as an alternative to driving one's own car before they become elderly. Transit service along better-performing corridors should be expanded, and service on these routes should be made more frequent in order to allow better transferring possibilities.
- The region's transit service providers should strive to **make transit more attractive to seniors citizens**. Station stops should be improved, with benches for resting while waiting; signage should be clarified, with larger, easy-to-read lettering; schedules should be revised to be more sensitive to the needs of the elderly, including enhanced night time and weekend service; and enhancements such as improved lighting and increased security should be provided, to reduce crime.
- Federal and state agencies should **increase available funding for transit**, to improve the availability and accessibility of the service for the region's elderly. Reduced-fare programs should be expanded and both fixed-route transit and para-transit should be actively marketed to senior citizens, to encourage them to consider transit as a viable alternative to driving.
- Federal and state agencies should **increase and stabilize the funding available to community and non-profit agencies that provide transportation services, including van and mini-bus service, for the elderly**.
- For the very elderly and others with disabilities that can no longer drive and find it impossible to use traditional fixed-route transit, federal and state funding agencies should **increase available funding for para-transit** and other demand-responsive transit services. Paratransit service providers should also **explore all available private and public options** for providing effective and cost-efficient service.
- Social service providers and church and community leaders should be encouraged to **locate elderly services, facilities and activities in close proximity to one another and coordinate their scheduling**, to allow the elderly to accomplish several objectives in a single trip.
- Transit and non-profit social service providers should work to **improve access to night-time and weekend activities** for the elderly, to allow them to remain active in their communities and interact with their family and friends.

- Agencies that provide transportation services to the elderly and the disabled should **coordinate their efforts**, to avoid duplication and effectively utilize available funding.
- The State of New Jersey should explore the feasibility of implementing **re-testing, re-training and re-licensing requirements** for both the near-elderly and the elderly and the Commonwealth of Pennsylvania should assess the effectiveness of their existing re-testing program, to ensure that elderly drivers are aware of their own limitations and are capable of operating their vehicle safely. Pennsylvania's existing program provides for the random re-examination of any driver over the age of 45, although drivers over the age of 65 are most likely to be chosen. Each selected driver must undergo both vision and physical examinations, and may be required to also complete an on-road driving examination. The Commonwealth has no provisions, however, for retraining and re-licensing if the driver's license is not renewed as a result of their re-examination.
- The State of New Jersey should **implement a mandatory physician-reporting requirement** similar to Pennsylvania's, which requires physicians to report any condition that may impair the ability to drive safely for anyone over the age of 15 to the Pennsylvania Department of Transportation (PennDOT). These reports, 50,000 of which were submitted in 1998 alone, are confidential and may be used only for licensing decisions. These reports may be used by PennDOT to add or delete restrictions to the person's driving privileges, to recall or restore a license, or to require the person to provide more detailed medical information or pass a driver's test.
- **Detailed profiles of existing examples of successful model alternatives** for meeting the mobility needs of the elderly **should be developed**, similar to those developed by the National ElderCare Institute on Transportation in the early 1990's and briefly described in Chapter IV. These alternatives could then be used as models for agencies struggling to meet the mobility needs of the elderly in their own communities. The ability of social service agencies, transportation providers and non-profit groups to meet the needs of tomorrow's diverse elderly population will depend on their ability to combine numerous public and private funding sources, travel modes and program approaches.
- Finally, senior citizens and the near-elderly should be encouraged to **realistically plan for the day when they will no longer be able to drive** and consider how their transportation needs will be met after retirement. While most of today's work force actively plans for their financial future, few recognize the difficulties they may have in maintaining their desired lifestyle if they reach a point where they can no longer drive. Those approaching retirement must recognize their current and prospective limitations as well as the prospective costs of various travel alternatives, and plan for the "golden years" accordingly.

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# **APPENDIX A**

## **Elderly Population by County, 1970 through 2025**

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# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Burlington

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	11,422	18,116	18,094	18,718	21,898	26,222	30,914	34,293	33,821	29,679
60to64	8,573	14,004	17,455	14,839	16,700	20,963	25,200	29,677	33,086	32,642
65to69	6,383	10,302	15,344	13,929	13,796	15,420	19,514	23,451	27,846	31,031
70to74	5,187	7,382	11,184	11,604	12,006	12,154	13,638	17,224	20,834	24,714
75to79	3,847	5,017	7,516	8,723	9,185	9,816	10,012	11,220	14,316	17,308
80to84	2,274	3,236	4,419	5,285	5,911	6,666	7,219	7,349	8,372	10,657
Over85	1,588	2,745	3,725	4,649	5,190	6,170	7,166	7,966	8,556	9,459
<b>Percent of Total Population</b>										
55to59	3.5%	5.0%	4.6%	4.7%	5.3%	6.2%	7.0%	7.5%	7.1%	6.0%
60to64	2.7%	3.9%	4.4%	3.7%	4.1%	4.9%	5.7%	6.5%	6.9%	6.6%
65to69	2.0%	2.8%	3.9%	3.5%	3.4%	3.6%	4.4%	5.1%	5.8%	6.3%
70to74	1.6%	2.0%	2.8%	2.9%	2.9%	2.9%	3.1%	3.8%	4.4%	5.0%
75to79	1.2%	1.4%	1.9%	2.2%	2.2%	2.3%	2.3%	2.5%	3.0%	3.5%
80to84	0.7%	0.9%	1.1%	1.3%	1.4%	1.6%	1.6%	1.6%	1.8%	2.1%
Over85	0.5%	0.8%	0.9%	1.2%	1.3%	1.5%	1.6%	1.7%	1.8%	1.9%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	19,995	32,120	35,549	33,558	38,597	47,185	56,114	63,970	66,907	62,321
<b>Elderly: (65+)</b>	19,279	28,682	42,188	44,190	46,088	50,226	57,549	67,210	79,924	93,169
<b>Very Elderly: (75+)</b>	7,709	10,998	15,660	18,657	20,286	22,652	24,396	26,535	31,244	37,424
<b>Extremely Elderly (85+)</b>	1,588	2,745	3,725	4,649	5,190	6,170	7,166	7,966	8,556	9,459
<b>All Elderly (55+)</b>	39,274	60,802	77,737	77,748	84,685	97,412	80,511	131,180	146,831	155,490
<b>Total Population (All Ages)</b>	323,132	362,542	395,066	401,983	410,886	424,465	441,062	457,596	477,980	496,314
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	6.2%	8.9%	9.0%	8.3%	9.4%	11.1%	12.7%	14.0%	14.0%	12.6%
<b>Elderly: (65+)</b>	6.0%	7.9%	10.7%	11.0%	11.2%	11.8%	13.0%	14.7%	16.7%	18.8%
<b>Very Elderly: (75+)</b>	2.4%	3.0%	4.0%	4.6%	4.9%	5.3%	5.5%	5.8%	6.5%	7.5%
<b>Extremely Elderly (85+)</b>	0.5%	0.8%	0.9%	1.2%	1.3%	1.5%	1.6%	1.7%	1.8%	1.9%
<b>All Elderly (55+)</b>	12.2%	16.8%	19.7%	19.3%	20.6%	22.9%	18.3%	28.7%	30.7%	31.3%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Camden

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	23,717	27,125	21,397	21,301	24,388	28,850	33,505	37,508	36,339	29,345
60to64	18,938	22,750	22,049	18,031	19,125	22,769	27,043	31,441	35,398	34,283
65to69	14,398	17,860	20,889	18,494	17,198	17,328	20,806	24,744	29,027	32,696
70to74	11,656	13,115	16,261	16,299	16,164	14,938	15,102	18,135	21,730	25,482
75to79	8,055	8,865	11,761	13,225	13,225	13,101	12,154	12,267	14,897	17,860
80to84	4,413	5,562	7,006	8,119	9,054	9,671	9,675	8,964	9,189	11,150
Over85	2,639	3,830	5,274	6,718	7,805	9,639	11,021	11,696	11,736	11,893
<b>Percent of Total Population</b>										
55to59	5.2%	5.8%	4.3%	4.3%	4.9%	5.7%	6.7%	7.4%	7.2%	5.8%
60to64	4.2%	4.8%	4.4%	3.6%	3.8%	4.5%	5.4%	6.2%	7.0%	6.8%
65to69	3.2%	3.8%	4.2%	3.7%	3.4%	3.4%	4.1%	4.9%	5.7%	6.5%
70to74	2.6%	2.8%	3.2%	3.3%	3.2%	3.0%	3.0%	3.6%	4.3%	5.0%
75to79	1.8%	1.9%	2.3%	2.6%	2.6%	2.6%	2.4%	2.4%	2.9%	3.5%
80to84	1.0%	1.2%	1.4%	1.6%	1.8%	1.9%	1.9%	1.8%	1.8%	2.2%
Over85	0.6%	0.8%	1.0%	1.3%	1.6%	1.9%	2.2%	2.3%	2.3%	2.4%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	42,655	49,875	43,446	39,332	43,513	51,619	60,548	68,949	71,738	63,628
<b>Elderly: (65+)</b>	41,161	49,232	61,191	62,855	63,446	64,678	68,758	75,805	86,577	99,081
<b>Very Elderly: (75+)</b>	15,107	18,257	24,041	28,062	30,083	32,412	32,850	32,926	35,821	40,904
<b>Extremely Elderly (85+)</b>	2,639	3,830	5,274	6,718	7,805	9,639	11,021	11,696	11,736	11,893
<b>All Elderly (55+)</b>	83,816	99,107	104,637	102,188	106,959	116,297	93,398	144,754	158,315	162,710
<b>Total Population (All Ages)</b>	456,291	471,650	502,824	500,272	502,030	502,895	503,799	503,901	505,886	504,659
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	9.3%	10.6%	8.6%	7.9%	8.7%	10.3%	12.0%	13.7%	14.2%	12.6%
<b>Elderly: (65+)</b>	9.0%	10.4%	12.2%	12.6%	12.6%	12.9%	13.6%	15.0%	17.1%	19.6%
<b>Very Elderly: (75+)</b>	3.3%	3.9%	4.8%	5.6%	6.0%	6.4%	6.5%	6.5%	7.1%	8.1%
<b>Extremely Elderly (85+)</b>	0.6%	0.8%	1.0%	1.3%	1.6%	1.9%	2.2%	2.3%	2.3%	2.4%
<b>All Elderly (55+)</b>	18.4%	21.0%	20.8%	20.4%	21.3%	23.1%	18.5%	28.7%	31.3%	32.2%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Gloucester Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	7,881	10,347	9,584	10,149	12,181	14,943	18,166	21,231	21,262	17,818
60to64	6,104	8,606	9,636	8,406	9,234	11,708	14,385	17,452	20,478	20,522
65to69	4,558	6,543	8,851	8,391	7,994	8,487	10,830	13,292	16,255	19,066
70to74	3,680	4,630	6,813	7,342	7,402	7,098	7,564	9,614	11,850	14,467
75to79	2,684	2,974	4,488	5,487	5,838	6,121	5,911	6,295	8,062	9,922
80to84	1,474	1,995	2,629	3,254	3,688	4,238	4,497	4,338	4,694	5,995
Over85	899	1,581	1,980	2,638	3,066	3,818	4,581	5,116	5,372	5,714
<b>Percent of Total Population</b>										
55to59	4.6%	5.2%	4.2%	4.2%	4.9%	5.7%	6.6%	7.4%	7.0%	5.6%
60to64	3.5%	4.3%	4.2%	3.5%	3.7%	4.5%	5.2%	6.0%	6.7%	6.4%
65to69	2.6%	3.3%	3.8%	3.5%	3.2%	3.2%	3.9%	4.6%	5.3%	6.0%
70to74	2.1%	2.3%	3.0%	3.0%	3.0%	2.7%	2.8%	3.3%	3.9%	4.5%
75to79	1.6%	1.5%	2.0%	2.3%	2.3%	2.3%	2.2%	2.2%	2.7%	3.1%
80to84	0.9%	1.0%	1.1%	1.3%	1.5%	1.6%	1.6%	1.5%	1.5%	1.9%
Over85	0.5%	0.8%	0.9%	1.1%	1.2%	1.5%	1.7%	1.8%	1.8%	1.8%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	13,985	18,953	19,220	18,556	21,415	26,651	32,551	38,683	41,740	38,340
<b>Elderly: (65+)</b>	13,295	17,723	24,761	27,111	27,988	29,762	33,382	38,655	46,233	55,164
<b>Very Elderly: (75+)</b>	5,057	6,550	9,097	11,378	12,592	14,177	14,988	15,749	18,128	21,631
<b>Extremely Elderly (85+)</b>	899	1,581	1,980	2,638	3,066	3,818	4,581	5,116	5,372	5,714
<b>All Elderly (55+)</b>	27,280	36,676	43,981	45,667	49,403	56,413	47,540	77,338	87,973	93,505
<b>Total Population (All Ages)</b>	172,681	199,917	230,082	241,910	249,215	261,172	274,648	288,633	304,008	318,182
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	8.1%	9.5%	8.4%	7.7%	8.6%	10.2%	11.9%	13.4%	13.7%	12.0%
<b>Elderly: (65+)</b>	7.7%	8.9%	10.8%	11.2%	11.2%	11.4%	12.2%	13.4%	15.2%	17.3%
<b>Very Elderly: (75+)</b>	2.9%	3.3%	4.0%	4.7%	5.1%	5.4%	5.5%	5.5%	6.0%	6.8%
<b>Extremely Elderly (85+)</b>	0.5%	0.8%	0.9%	1.1%	1.2%	1.5%	1.7%	1.8%	1.8%	1.8%
<b>All Elderly (55+)</b>	15.8%	18.3%	19.1%	18.9%	19.8%	21.6%	17.3%	26.8%	28.9%	29.4%



# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Mercer

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	16,507	18,176	14,439	14,221	16,416	19,716	22,975	25,662	24,947	20,899
60to64	13,262	15,392	14,886	12,054	12,756	15,298	18,524	21,594	24,296	23,578
65to69	10,311	12,626	14,194	12,453	11,613	11,697	14,176	17,153	20,183	22,672
70to74	8,130	9,024	11,103	10,954	10,909	10,132	10,271	12,449	15,199	17,862
75to79	5,645	6,316	8,181	8,960	8,981	8,941	8,344	8,445	10,363	12,647
80to84	3,384	4,118	4,895	5,585	6,278	6,751	6,803	6,336	6,534	7,980
Over85	2,133	3,116	3,856	4,764	5,512	6,831	7,871	8,430	8,520	8,693
<b>Percent of Total Population</b>										
55to59	5.4%	5.9%	4.4%	4.5%	5.1%	6.0%	6.8%	7.4%	6.9%	5.6%
60to64	4.4%	5.0%	4.6%	3.8%	3.9%	4.6%	5.4%	6.2%	6.7%	6.3%
65to69	3.4%	4.1%	4.4%	3.9%	3.6%	3.5%	4.2%	4.9%	5.6%	6.0%
70to74	2.7%	2.9%	3.4%	3.4%	3.4%	3.1%	3.0%	3.6%	4.2%	4.8%
75to79	1.9%	2.1%	2.5%	2.8%	2.8%	2.7%	2.5%	2.4%	2.9%	3.4%
80to84	1.1%	1.3%	1.5%	1.7%	1.9%	2.0%	2.0%	1.8%	1.8%	2.1%
Over85	0.7%	1.0%	1.2%	1.5%	1.7%	2.1%	2.3%	2.4%	2.4%	2.3%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	29,769	33,568	29,325	26,275	29,172	35,014	41,499	47,256	49,243	44,478
<b>Elderly: (65+)</b>	29,603	35,200	42,229	42,716	43,294	44,352	47,464	52,813	60,799	69,855
<b>Very Elderly: (75+)</b>	11,162	13,550	16,932	19,309	20,771	22,523	23,018	23,211	25,417	29,320
<b>Extremely Elderly (85+)</b>	2,133	3,116	3,856	4,764	5,512	6,831	7,871	8,430	8,520	8,693
<b>All Elderly (55+)</b>	59,372	68,768	71,554	68,990	72,466	79,366	64,517	100,069	110,041	114,332
<b>Total Population (All Ages)</b>	303,968	307,863	325,824	319,542	324,169	330,555	340,149	348,755	362,433	375,305
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	9.8%	10.9%	9.0%	8.2%	9.0%	10.6%	12.2%	13.6%	13.6%	11.9%
<b>Elderly: (65+)</b>	9.7%	11.4%	13.0%	13.4%	13.4%	13.4%	14.0%	15.1%	16.8%	18.6%
<b>Very Elderly: (75+)</b>	3.7%	4.4%	5.2%	6.0%	6.4%	6.8%	6.8%	6.7%	7.0%	7.8%
<b>Extremely Elderly (85+)</b>	0.7%	1.0%	1.2%	1.5%	1.7%	2.1%	2.3%	2.4%	2.4%	2.3%
<b>All Elderly (55+)</b>	19.5%	22.3%	22.0%	21.6%	22.4%	24.0%	19.0%	28.7%	30.4%	30.5%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Bucks

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	16,905	26,237	24,448	25,906	31,049	40,795	49,345	52,552	49,671	46,262
60to64	12,508	19,748	24,172	21,022	23,504	30,075	39,433	47,641	50,905	48,152
65to69	8,859	13,749	21,116	19,816	19,778	22,071	28,320	37,092	45,071	48,154
70to74	6,867	9,846	15,079	16,527	17,264	17,725	19,770	25,289	33,219	40,326
75to79	4,987	6,751	10,315	12,431	13,175	14,277	14,722	16,412	21,160	27,770
80to84	2,952	4,427	6,745	8,457	8,794	9,546	10,448	10,759	12,191	15,678
Over85	1,875	3,526	5,657	7,317	8,164	9,299	10,367	11,388	12,248	13,518
<b>Percent of Total Population</b>										
55to59	4.1%	5.5%	4.5%	4.5%	5.2%	6.5%	7.5%	7.7%	7.0%	6.3%
60to64	3.0%	4.1%	4.5%	3.6%	3.9%	4.8%	6.0%	7.0%	7.1%	6.5%
65to69	2.1%	2.9%	3.9%	3.4%	3.3%	3.5%	4.3%	5.4%	6.3%	6.5%
70to74	1.7%	2.1%	2.8%	2.9%	2.9%	2.8%	3.0%	3.7%	4.7%	5.5%
75to79	1.2%	1.4%	1.9%	2.1%	2.2%	2.3%	2.2%	2.4%	3.0%	3.8%
80to84	0.7%	0.9%	1.2%	1.5%	1.5%	1.5%	1.6%	1.6%	1.7%	2.1%
Over85	0.5%	0.7%	1.0%	1.3%	1.4%	1.5%	1.6%	1.7%	1.7%	1.8%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	29,413	45,985	48,620	46,928	54,553	70,870	88,778	100,192	100,576	94,414
<b>Elderly: (65+)</b>	25,540	38,299	58,912	64,547	67,174	72,918	83,627	100,939	123,889	145,444
<b>Very Elderly: (75+)</b>	9,814	14,704	22,717	28,204	30,132	33,122	35,537	38,559	45,599	56,965
<b>Extremely Elderly (85+)</b>	1,875	3,526	5,657	7,317	8,164	9,299	10,367	11,388	12,248	13,518
<b>All Elderly (55+)</b>	54,953	84,284	107,532	111,475	121,727	143,787	124,315	201,132	224,465	239,858
<b>Total Population (All Ages)</b>	415,056	479,211	541,174	578,570	597,317	627,419	656,186	684,709	714,053	739,848
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	7.1%	9.6%	9.0%	8.1%	9.1%	11.3%	13.5%	14.6%	14.1%	12.8%
<b>Elderly: (65+)</b>	6.2%	8.0%	10.9%	11.2%	11.2%	11.6%	12.7%	14.7%	17.4%	19.7%
<b>Very Elderly: (75+)</b>	2.4%	3.1%	4.2%	4.9%	5.0%	5.3%	5.4%	5.6%	6.4%	7.7%
<b>Extremely Elderly (85+)</b>	0.5%	0.7%	1.0%	1.3%	1.4%	1.5%	1.6%	1.7%	1.7%	1.8%
<b>All Elderly (55+)</b>	13.2%	17.6%	19.9%	19.3%	20.4%	22.9%	18.9%	29.4%	31.4%	32.4%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Chester

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	12,458	16,984	16,584	17,755	21,848	29,616	35,867	37,660	34,997	32,063
60to64	9,785	13,238	16,089	14,046	16,003	21,236	28,719	34,737	36,545	33,980
65to69	7,428	10,041	14,304	13,504	13,341	15,059	20,022	27,047	32,867	34,574
70to74	5,753	7,426	10,577	11,639	11,990	12,082	13,638	18,063	24,453	29,682
75to79	4,163	5,060	7,396	8,925	9,470	10,129	10,245	11,549	15,382	20,812
80to84	2,554	3,477	4,797	5,937	6,431	7,164	7,724	7,803	8,900	11,817
Over85	1,722	2,682	3,903	4,949	5,824	7,141	8,323	9,257	9,890	10,907
<b>Percent of Total Population</b>										
55to59	4.5%	5.4%	4.4%	4.4%	5.2%	6.6%	7.6%	7.6%	6.8%	6.0%
60to64	3.5%	4.2%	4.3%	3.5%	3.8%	4.8%	6.1%	7.1%	7.1%	6.4%
65to69	2.7%	3.2%	3.8%	3.3%	3.2%	3.4%	4.3%	5.5%	6.4%	6.5%
70to74	2.1%	2.3%	2.8%	2.9%	2.8%	2.7%	2.9%	3.7%	4.8%	5.6%
75to79	1.5%	1.6%	2.0%	2.2%	2.2%	2.3%	2.2%	2.3%	3.0%	3.9%
80to84	0.9%	1.1%	1.3%	1.5%	1.5%	1.6%	1.6%	1.6%	1.7%	2.2%
Over85	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	1.9%	1.9%	2.0%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	22,243	30,222	32,673	31,800	37,851	50,851	64,586	72,396	71,542	66,043
<b>Elderly: (65+)</b>	21,620	28,686	40,977	44,955	47,056	51,575	59,953	73,718	91,493	107,792
<b>Very Elderly: (75+)</b>	8,439	11,219	16,096	19,812	21,725	24,434	26,293	28,609	34,173	43,536
<b>Extremely Elderly (85+)</b>	1,722	2,682	3,903	4,949	5,824	7,141	8,323	9,257	9,890	10,907
<b>All Elderly (55+)</b>	43,863	58,908	73,650	76,755	84,907	102,426	90,878	146,114	163,035	173,836
<b>Total Population (All Ages)</b>	278,311	316,650	376,396	405,502	421,012	445,925	469,569	492,631	514,574	534,245
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	8.0%	9.5%	8.7%	7.8%	9.0%	11.4%	13.8%	14.7%	13.9%	12.4%
<b>Elderly: (65+)</b>	7.8%	9.1%	10.9%	11.1%	11.2%	11.6%	12.8%	15.0%	17.8%	20.2%
<b>Very Elderly: (75+)</b>	3.0%	3.5%	4.3%	4.9%	5.2%	5.5%	5.6%	5.8%	6.6%	8.1%
<b>Extremely Elderly (85+)</b>	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	1.9%	1.9%	2.0%
<b>All Elderly (55+)</b>	15.8%	18.6%	19.6%	18.9%	20.2%	23.0%	19.4%	29.7%	31.7%	32.5%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Delaware

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	32,380	36,834	25,301	24,181	26,308	31,183	35,453	37,611	35,973	33,539
60to64	26,825	30,861	28,600	22,339	22,578	24,751	29,453	33,499	35,752	34,181
65to69	20,824	24,435	28,501	24,211	21,951	20,662	22,803	27,160	31,147	33,238
70to74	16,348	18,799	22,057	21,748	21,443	19,249	18,180	20,057	24,055	27,562
75to79	11,303	13,375	16,090	17,403	17,679	17,598	15,861	14,961	16,675	20,000
80to84	6,324	8,451	10,171	11,607	12,316	12,986	13,045	11,734	11,235	12,514
Over85	4,240	6,262	8,113	9,675	11,200	13,389	15,003	15,811	15,569	15,094
<b>Percent of Total Population</b>										
55to59	5.4%	6.6%	4.6%	4.6%	5.0%	5.9%	6.7%	7.2%	6.9%	6.5%
60to64	4.5%	5.6%	5.2%	4.2%	4.3%	4.7%	5.6%	6.4%	6.9%	6.6%
65to69	3.5%	4.4%	5.2%	4.6%	4.1%	3.9%	4.3%	5.2%	6.0%	6.4%
70to74	2.7%	3.4%	4.0%	4.1%	4.0%	3.6%	3.5%	3.8%	4.6%	5.3%
75to79	1.9%	2.4%	2.9%	3.3%	3.3%	3.3%	3.0%	2.9%	3.2%	3.9%
80to84	1.1%	1.5%	1.9%	2.2%	2.3%	2.5%	2.5%	2.3%	2.2%	2.4%
Over85	0.7%	1.1%	1.5%	1.8%	2.1%	2.5%	2.9%	3.0%	3.0%	2.9%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	59,205	67,695	53,901	46,519	48,887	55,934	64,906	71,110	71,725	67,720
<b>Elderly: (65+)</b>	59,039	71,322	84,932	84,644	84,589	83,885	84,891	89,723	98,680	108,409
<b>Very Elderly: (75+)</b>	21,867	28,088	34,374	38,685	41,195	43,974	43,909	42,506	43,479	47,608
<b>Extremely Elderly (85+)</b>	4,240	6,262	8,113	9,675	11,200	13,389	15,003	15,811	15,569	15,094
<b>All Elderly (55+)</b>	118,244	139,017	138,833	131,163	133,475	139,819	108,814	160,833	170,406	176,129
<b>Total Population (All Ages)</b>	600,035	555,007	547,651	528,639	529,564	528,411	525,925	521,497	520,613	518,403
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	9.9%	12.2%	9.8%	8.8%	9.2%	10.6%	12.3%	13.6%	13.8%	13.1%
<b>Elderly: (65+)</b>	9.8%	12.9%	15.5%	16.0%	16.0%	15.9%	16.1%	17.2%	19.0%	20.9%
<b>Very Elderly: (75+)</b>	3.6%	5.1%	6.3%	7.3%	7.8%	8.3%	8.3%	8.2%	8.4%	9.2%
<b>Extremely Elderly (85+)</b>	0.7%	1.1%	1.5%	1.8%	2.1%	2.5%	2.9%	3.0%	3.0%	2.9%
<b>All Elderly (55+)</b>	19.7%	25.0%	25.4%	24.8%	25.2%	26.5%	20.7%	30.8%	32.7%	34.0%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Montgomery Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	33,425	40,307	32,777	33,569	38,740	47,924	55,882	58,483	55,625	53,045
60to64	28,025	33,289	34,416	28,581	30,944	37,466	46,262	53,896	56,533	53,786
65to69	21,169	26,957	32,950	29,732	27,992	29,033	35,250	43,491	50,934	53,419
70to74	16,696	21,095	25,454	26,732	26,760	25,218	26,149	31,685	39,209	45,881
75to79	11,738	15,260	19,461	22,315	22,519	22,674	21,433	22,192	27,058	33,453
80to84	7,018	10,043	13,237	16,024	16,676	17,244	17,495	16,514	17,313	21,068
Over85	4,472	7,524	10,891	13,421	16,024	19,493	21,752	23,038	23,271	23,902
<b>Percent of Total Population</b>										
55to59	5.4%	6.3%	4.8%	4.8%	5.4%	6.5%	7.4%	7.5%	7.0%	6.5%
60to64	4.5%	5.2%	5.1%	4.1%	4.3%	5.1%	6.1%	6.9%	7.1%	6.6%
65to69	3.4%	4.2%	4.9%	4.3%	3.9%	3.9%	4.6%	5.6%	6.4%	6.5%
70to74	2.7%	3.3%	3.8%	3.8%	3.8%	3.4%	3.4%	4.1%	4.9%	5.6%
75to79	1.9%	2.4%	2.9%	3.2%	3.2%	3.1%	2.8%	2.8%	3.4%	4.1%
80to84	1.1%	1.6%	2.0%	2.3%	2.3%	2.3%	2.3%	2.1%	2.2%	2.6%
Over85	0.7%	1.2%	1.6%	1.9%	2.2%	2.6%	2.9%	3.0%	2.9%	2.9%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	61,450	73,596	67,193	62,151	69,683	85,391	102,144	112,380	112,158	106,830
<b>Elderly: (65+)</b>	61,093	80,879	101,993	108,224	109,971	113,662	122,078	136,919	157,785	177,723
<b>Very Elderly: (75+)</b>	23,228	32,827	43,589	51,760	55,219	59,411	60,679	61,743	67,642	78,423
<b>Extremely Elderly (85+)</b>	4,472	7,524	10,891	13,421	16,024	19,493	21,752	23,038	23,271	23,902
<b>All Elderly (55+)</b>	122,543	154,475	169,186	170,375	179,655	199,053	162,823	249,299	269,943	284,553
<b>Total Population (All Ages)</b>	623,799	643,621	678,111	695,444	712,364	737,936	759,004	778,764	798,724	816,564
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	9.9%	11.4%	9.9%	8.9%	9.8%	11.6%	13.5%	14.4%	14.0%	13.1%
<b>Elderly: (65+)</b>	9.8%	12.6%	15.0%	15.6%	15.4%	15.4%	16.1%	17.6%	19.8%	21.8%
<b>Very Elderly: (75+)</b>	3.7%	5.1%	6.4%	7.4%	7.8%	8.1%	8.0%	7.9%	8.5%	9.6%
<b>Extremely Elderly (85+)</b>	0.7%	1.2%	1.6%	1.9%	2.2%	2.6%	2.9%	3.0%	2.9%	2.9%
<b>All Elderly (55+)</b>	19.6%	24.0%	24.9%	24.5%	25.2%	27.0%	21.5%	32.0%	33.8%	34.8%



# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Philadelphia

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	111,716	98,392	68,766	65,270	68,147	77,775	87,407	90,378	85,435	84,049
60to64	98,963	90,918	74,114	58,249	57,294	59,703	69,837	79,092	82,677	77,774
65to69	82,234	81,894	75,294	64,005	56,172	50,552	53,196	62,773	71,184	74,055
70to74	64,491	64,226	62,881	60,538	56,457	47,252	42,922	45,484	53,960	60,931
75to79	42,793	45,531	49,140	51,399	49,444	44,933	37,747	34,430	36,744	43,500
80to84	23,949	27,153	30,598	33,221	35,869	36,325	33,277	28,121	25,890	27,492
Over85	14,681	18,566	22,801	26,575	31,416	38,762	43,119	43,331	40,597	37,713
<b>Percent of Total Population</b>										
55to59	5.7%	5.8%	4.3%	4.3%	4.6%	5.4%	6.1%	6.2%	5.8%	5.8%
60to64	5.1%	5.4%	4.7%	3.8%	3.9%	4.1%	4.9%	5.4%	5.6%	5.4%
65to69	4.2%	4.9%	4.7%	4.2%	3.8%	3.5%	3.7%	4.3%	4.9%	5.1%
70to74	3.3%	3.8%	4.0%	4.0%	3.8%	3.3%	3.0%	3.1%	3.7%	4.2%
75to79	2.2%	2.7%	3.1%	3.4%	3.3%	3.1%	2.6%	2.4%	2.5%	3.0%
80to84	1.2%	1.6%	1.9%	2.2%	2.4%	2.5%	2.3%	1.9%	1.8%	1.9%
Over85	0.8%	1.1%	1.4%	1.8%	2.1%	2.7%	3.0%	3.0%	2.8%	2.6%
<b>Population Group SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	210,679	189,310	142,880	123,519	125,442	137,478	157,244	169,470	168,113	161,823
<b>Elderly: (65+)</b>	228,148	237,370	240,714	235,738	229,358	217,823	210,261	214,138	228,375	243,690
<b>Very Elderly: (75+)</b>	81,423	91,250	102,539	111,195	116,729	120,020	114,143	105,881	103,231	108,704
<b>Extremely Elderly (85+)</b>	14,681	18,566	22,801	26,575	31,416	38,762	43,119	43,331	40,597	37,713
<b>All Elderly (55+)</b>	438,827	426,680	383,594	359,257	354,799	355,302	271,386	383,608	396,488	405,513
<b>Total Population (All Ages)</b>	1,948,609	1,688,210	1,585,577	1,515,283	1,484,141	1,452,101	1,436,052	1,454,950	1,463,791	1,447,573
<b>Percent of Population SubTotals:</b>										
<b>Near Elderly: (55to64)</b>	10.8%	11.2%	9.0%	8.2%	8.5%	9.5%	10.9%	11.6%	11.5%	11.2%
<b>Elderly: (65+)</b>	11.7%	14.1%	15.2%	15.6%	15.5%	15.0%	14.6%	14.7%	15.6%	16.8%
<b>Very Elderly: (75+)</b>	4.2%	5.4%	6.5%	7.3%	7.9%	8.3%	7.9%	7.3%	7.1%	7.5%
<b>Extremely Elderly (85+)</b>	0.8%	1.1%	1.4%	1.8%	2.1%	2.7%	3.0%	3.0%	2.8%	2.6%
<b>All Elderly (55+)</b>	22.5%	25.3%	24.2%	23.7%	23.9%	24.5%	18.9%	26.4%	27.1%	28.0%



## **APPENDIX B**

### **Absolute and Percent Changes in Elderly Population by County, 1990 through 2025**

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# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Burlington Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	11,422	18,116	18,094	18,718	21,898	26,222	30,914	34,293	33,821	29,679
60to64	8,573	14,004	17,455	14,839	16,700	20,963	25,200	29,677	33,086	32,642
65to69	6,383	10,302	15,344	13,929	13,796	15,420	19,514	23,451	27,846	31,031
70to74	5,187	7,382	11,184	11,604	12,006	12,154	13,638	17,224	20,834	24,714
75to79	3,847	5,017	7,516	8,723	9,185	9,816	10,012	11,220	14,316	17,308
80to84	2,274	3,236	4,419	5,285	5,911	6,666	7,219	7,349	8,372	10,657
Over85	1,588	2,745	3,725	4,649	5,190	6,170	7,166	7,966	8,556	9,459
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	6,694	-22	624	3,804	4,324	4,692	3,379	-472	-4,142	10,961
60to64	5,431	3,451	-2,616	-755	4,263	4,237	4,477	3,409	-444	17,802
65to69	3,919	5,042	-1,415	-1,548	1,625	4,094	3,937	4,395	3,185	17,101
70to74	2,195	3,802	420	822	148	1,484	3,586	3,610	3,880	13,110
75to79	1,170	2,499	1,207	1,669	631	196	1,208	3,096	2,992	8,585
80to84	962	1,183	866	1,492	755	552	131	1,023	2,286	5,372
Over85	1,157	980	924	1,465	980	996	800	590	903	4,810
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	12,125	3,429	-1,991	3,048	8,588	8,929	7,855	2,937	-4,586	28,763
<b>Elderly: (65+)</b>	9,403	13,506	2,002	3,900	4,139	7,322	9,662	12,714	13,245	48,979
<b>Very Elderly: (75+)</b>	3,289	4,662	2,997	4,626	2,366	1,745	2,139	4,709	6,180	18,767
<b>Extremely Elderly (85+)</b>	1,157	980	924	1,465	980	996	800	590	903	4,810
<b>All Elderly (55+)</b>	21,528	16,935	11	6,948	12,726	16,251	9,994	15,651	8,658	77,742
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	60.6%	10.7%	-5.6%	8.6%	22.2%	18.9%	14.0%	4.6%	-6.9%	85.7%
<b>Elderly: (65+)</b>	48.8%	47.1%	4.7%	9.2%	9.0%	14.6%	16.8%	18.9%	16.6%	110.8%
<b>Very Elderly: (75+)</b>	42.7%	42.4%	19.1%	29.5%	11.7%	7.7%	8.8%	17.7%	19.8%	100.6%
<b>Extremely Elderly (85+)</b>	72.9%	35.7%	24.8%	39.3%	18.9%	16.1%	11.2%	7.4%	10.5%	103.5%
<b>All Elderly (55+)</b>	23.9%	27.9%	0.0%	8.9%	15.0%	16.7%	8.8%	11.9%	5.9%	100.0%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Camden

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	23,717	27,125	21,397	21,301	24,388	28,850	33,505	37,508	36,339	29,345
60to64	18,938	22,750	22,049	18,031	19,125	22,769	27,043	31,441	35,398	34,283
65to69	14,398	17,860	20,889	18,494	17,198	17,328	20,806	24,744	29,027	32,696
70to74	11,656	13,115	16,261	16,299	16,164	14,938	15,102	18,135	21,730	25,482
75to79	8,055	8,865	11,761	13,225	13,225	13,101	12,154	12,267	14,897	17,860
80to84	4,413	5,562	7,006	8,119	9,054	9,671	9,675	8,964	9,189	11,150
Over85	2,639	3,830	5,274	6,718	7,805	9,639	11,021	11,696	11,736	11,893
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	3,408	-5,728	-96	2,991	4,462	4,656	4,003	-1,169	-6,994	8,044
60to64	3,812	-701	-4,018	-2,924	3,644	4,274	4,398	3,957	-1,116	16,251
65to69	3,462	3,029	-2,395	-3,691	130	3,478	3,937	4,283	3,669	14,202
70to74	1,459	3,146	38	-97	-1,226	164	3,033	3,594	3,752	9,182
75to79	810	2,896	1,464	1,464	-123	-947	113	2,629	2,964	4,636
80to84	1,149	1,444	1,113	2,048	618	3	-711	225	1,961	3,031
Over85	1,191	1,444	1,444	2,531	1,834	1,383	674	40	158	5,175
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	7,220	-6,429	-4,114	67	8,106	8,929	8,401	2,789	-8,109	24,296
<b>Elderly: (65+)</b>	8,071	11,959	1,664	2,255	1,232	4,080	7,047	10,772	12,504	36,226
<b>Very Elderly: (75+)</b>	3,150	5,784	4,021	6,042	2,329	439	76	2,895	5,083	12,842
<b>Extremely Elderly (85+)</b>	1,191	1,444	1,444	2,531	1,834	1,383	674	40	158	5,175
<b>All Elderly (55+)</b>	15,291	5,530	-2,449	2,322	9,338	13,010	8,477	13,561	4,395	60,522
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	16.9%	-12.9%	-9.5%	0.2%	18.6%	17.3%	13.9%	4.0%	-11.3%	61.8%
<b>Elderly: (65+)</b>	19.6%	24.3%	2.7%	3.7%	1.9%	6.3%	10.2%	14.2%	14.4%	57.6%
<b>Very Elderly: (75+)</b>	20.9%	31.7%	16.7%	25.1%	7.7%	1.4%	0.2%	8.8%	14.2%	45.8%
<b>Extremely Elderly (85+)</b>	45.1%	37.7%	27.4%	48.0%	23.5%	14.3%	6.1%	0.3%	1.3%	77.0%
<b>All Elderly (55+)</b>	9.6%	5.6%	-2.3%	2.2%	8.7%	11.2%	6.6%	9.4%	2.8%	59.2%



# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Gloucester Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	7,881	10,347	9,584	10,149	12,181	14,943	18,166	21,231	21,262	17,818
60to64	6,104	8,606	9,636	8,406	9,234	11,708	14,385	17,452	20,478	20,522
65to69	4,558	6,543	8,851	8,391	7,994	8,487	10,830	13,292	16,255	19,066
70to74	3,680	4,630	6,813	7,342	7,402	7,098	7,564	9,614	11,850	14,467
75to79	2,684	2,974	4,488	5,487	5,838	6,121	5,911	6,295	8,062	9,922
80to84	1,474	1,995	2,629	3,254	3,688	4,238	4,497	4,338	4,694	5,995
Over85	899	1,581	1,980	2,638	3,066	3,818	4,581	5,116	5,372	5,714
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	2,466	-763	565	2,597	2,762	3,223	3,064	32	-3,444	7,669
60to64	2,502	1,030	-1,230	-402	2,474	2,677	3,067	3,026	44	12,116
65to69	1,985	2,308	-460	-857	493	2,343	2,463	2,962	2,812	10,676
70to74	950	2,183	529	589	-304	465	2,050	2,236	2,617	7,126
75to79	290	1,514	999	1,350	283	-210	384	1,768	1,859	4,435
80to84	521	634	625	1,059	550	259	-158	355	1,301	2,741
Over85	682	399	658	1,086	752	762	535	257	342	3,076
<b>Absolute Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	4,968	267	-664	2,195	5,236	5,900	6,131	3,057	-3,400	19,784
<i>Elderly: (65+)</i>	4,428	7,038	2,350	3,227	1,774	3,620	5,273	7,578	8,931	28,054
<i>Very Elderly: (75+)</i>	1,493	2,547	2,281	3,495	1,585	812	760	2,380	3,502	10,252
<i>Extremely Elderly (85+)</i>	682	399	658	1,086	752	762	535	257	342	3,076
<i>All Elderly (55+)</i>	9,396	7,305	1,686	5,422	7,011	9,520	6,892	10,636	5,532	47,838
<b>Percent Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	35.5%	1.4%	-3.5%	11.4%	24.5%	22.1%	18.8%	7.9%	-8.1%	106.6%
<i>Elderly: (65+)</i>	33.3%	39.7%	9.5%	13.0%	6.3%	12.2%	15.8%	19.6%	19.3%	103.5%
<i>Very Elderly: (75+)</i>	29.5%	38.9%	25.1%	38.4%	12.6%	5.7%	5.1%	15.1%	19.3%	90.1%
<i>Extremely Elderly (85+)</i>	75.9%	25.2%	33.2%	54.9%	24.5%	20.0%	11.7%	5.0%	6.4%	116.6%
<i>All Elderly (55+)</i>	16.2%	19.9%	3.8%	12.3%	14.2%	16.9%	10.5%	13.8%	6.3%	104.8%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Mercer

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	16,507	18,176	14,439	14,221	16,416	19,716	22,975	25,662	24,947	20,899
60to64	13,262	15,392	14,886	12,054	12,756	15,298	18,524	21,594	24,296	23,578
65to69	10,311	12,626	14,194	12,453	11,613	11,697	14,176	17,153	20,183	22,672
70to74	8,130	9,024	11,103	10,954	10,909	10,132	10,271	12,449	15,199	17,862
75to79	5,645	6,316	8,181	8,960	8,981	8,941	8,344	8,445	10,363	12,647
80to84	3,384	4,118	4,895	5,585	6,278	6,751	6,803	6,336	6,534	7,980
Over85	2,133	3,116	3,856	4,764	5,512	6,831	7,871	8,430	8,520	8,693
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	1,669	-3,737	-218	1,977	3,300	3,259	2,687	-716	-4,048	6,678
60to64	2,130	-506	-2,832	-2,130	2,542	3,225	3,071	2,702	-718	11,525
65to69	2,315	1,568	-1,741	-2,581	84	2,479	2,978	3,030	2,489	10,219
70to74	894	2,079	-149	-194	-778	139	2,177	2,750	2,664	6,909
75to79	671	1,865	779	800	-40	-598	101	1,918	2,284	3,687
80to84	734	777	690	1,383	473	52	-466	198	1,446	2,395
Over85	983	740	908	1,656	1,319	1,041	558	90	172	3,928
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	3,799	-4,243	-3,050	-153	5,842	6,485	5,757	1,986	-4,765	18,203
<b>Elderly: (65+)</b>	5,597	7,029	487	1,065	1,058	3,113	5,349	7,986	9,056	27,139
<b>Very Elderly: (75+)</b>	2,388	3,382	2,377	3,839	1,752	495	194	2,206	3,903	10,011
<b>Extremely Elderly (85+)</b>	983	740	908	1,656	1,319	1,041	558	90	172	3,928
<b>All Elderly (55+)</b>	9,396	2,786	-2,564	912	6,900	9,597	5,951	9,972	4,291	45,342
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	12.8%	-12.6%	-10.4%	-0.5%	20.0%	18.5%	13.9%	4.2%	-9.7%	69.3%
<b>Elderly: (65+)</b>	18.9%	20.0%	1.2%	2.5%	2.4%	7.0%	11.3%	15.1%	14.9%	63.5%
<b>Very Elderly: (75+)</b>	21.4%	25.0%	14.0%	22.7%	8.4%	2.2%	0.8%	9.5%	15.4%	51.8%
<b>Extremely Elderly (85+)</b>	46.1%	23.7%	23.6%	42.9%	23.9%	15.2%	7.1%	1.1%	2.0%	82.5%
<b>All Elderly (55+)</b>	9.4%	4.1%	-3.6%	1.3%	9.5%	12.1%	6.7%	10.0%	3.9%	65.7%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.  
DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Bucks

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	16,905	26,237	24,448	25,906	31,049	40,795	49,345	52,552	49,671	46,262
60to64	12,508	19,748	24,172	21,022	23,504	30,075	39,433	47,641	50,905	48,152
65to69	8,859	13,749	21,116	19,816	19,778	22,071	28,320	37,092	45,071	48,154
70to74	6,867	9,846	15,079	16,527	17,264	17,725	19,770	25,289	33,219	40,326
75to79	4,987	6,751	10,315	12,431	13,175	14,277	14,722	16,412	21,160	27,770
80to84	2,952	4,427	6,745	8,457	8,794	9,546	10,448	10,759	12,191	15,678
Over85	1,875	3,526	5,657	7,317	8,164	9,299	10,367	11,388	12,248	13,518
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	9,332	-1,789	1,458	6,601	9,746	8,550	3,207	-2,881	-3,409	20,356
60to64	7,240	4,424	-3,150	-668	6,571	9,358	8,208	3,264	-2,753	27,130
65to69	4,890	7,367	-1,300	-1,338	2,294	6,249	8,772	7,980	3,082	28,338
70to74	2,979	5,233	1,448	2,185	460	2,045	5,519	7,930	7,107	23,799
75to79	1,764	3,564	2,116	2,860	1,102	445	1,690	4,748	6,610	15,339
80to84	1,475	2,318	1,712	2,049	752	902	311	1,432	3,487	7,221
Over85	1,651	2,131	1,660	2,507	1,135	1,068	1,021	860	1,270	6,201
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	16,572	2,635	-1,692	5,933	16,317	17,908	11,414	383	-6,162	47,485
<b>Elderly: (65+)</b>	12,759	20,613	5,635	8,262	5,743	10,709	17,313	22,950	21,555	80,898
<b>Very Elderly: (75+)</b>	4,890	8,013	5,487	7,415	2,989	2,415	3,022	7,040	11,366	28,761
<b>Extremely Elderly (85+)</b>	1,651	2,131	1,660	2,507	1,135	1,068	1,021	860	1,270	6,201
<b>All Elderly (55+)</b>	29,331	23,248	3,943	14,195	22,060	28,617	14,436	23,333	15,394	128,383
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	56.3%	5.7%	-3.5%	12.2%	29.9%	25.3%	12.9%	0.4%	-6.1%	101.2%
<b>Elderly: (65+)</b>	50.0%	53.8%	9.6%	14.0%	8.6%	14.7%	20.7%	22.7%	17.4%	125.3%
<b>Very Elderly: (75+)</b>	49.8%	54.5%	24.2%	32.6%	9.9%	7.3%	8.5%	18.3%	24.9%	102.0%
<b>Extremely Elderly (85+)</b>	88.1%	60.4%	29.3%	44.3%	13.9%	11.5%	9.8%	7.6%	10.4%	84.8%
<b>All Elderly (55+)</b>	23.2%	27.6%	3.7%	13.2%	18.1%	19.9%	8.4%	11.6%	6.9%	115.2%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Chester

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	12,458	16,984	16,584	17,755	21,848	29,616	35,867	37,660	34,997	32,063
60to64	9,785	13,238	16,089	14,046	16,003	21,236	28,719	34,737	36,545	33,980
65to69	7,428	10,041	14,304	13,504	13,341	15,059	20,022	27,047	32,867	34,574
70to74	5,753	7,426	10,577	11,639	11,990	12,082	13,638	18,063	24,453	29,682
75to79	4,163	5,060	7,396	8,925	9,470	10,129	10,245	11,549	15,382	20,812
80to84	2,554	3,477	4,797	5,937	6,431	7,164	7,724	7,803	8,900	11,817
Over85	1,722	2,682	3,903	4,949	5,824	7,141	8,323	9,257	9,890	10,907
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	4,526	-400	1,171	5,264	7,768	6,251	1,793	-2,663	-2,933	14,309
60to64	3,453	2,851	-2,043	-86	5,232	7,483	6,018	1,809	-2,565	19,934
65to69	2,613	4,263	-800	-963	1,718	4,963	7,024	5,820	1,707	21,069
70to74	1,673	3,151	1,062	1,413	92	1,556	4,425	6,391	5,229	18,043
75to79	897	2,336	1,529	2,074	659	116	1,303	3,834	5,430	11,887
80to84	923	1,320	1,140	1,634	732	561	79	1,097	2,917	5,880
Over85	960	1,221	1,046	1,921	1,318	1,182	934	634	1,017	5,958
<b>Absolute Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	7,979	2,451	-873	5,178	13,000	13,735	7,810	-854	-5,499	34,243
<i>Elderly: (65+)</i>	7,066	12,291	3,978	6,079	4,519	8,378	13,766	17,775	16,299	62,837
<i>Very Elderly: (75+)</i>	2,780	4,877	3,716	5,629	2,709	1,859	2,316	5,564	9,364	23,725
<i>Extremely Elderly (85+)</i>	960	1,221	1,046	1,921	1,318	1,182	934	634	1,017	5,958
<i>All Elderly (55+)</i>	15,045	14,742	3,105	11,257	17,519	22,112	10,127	16,921	10,801	97,080
<b>Percent Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	35.9%	8.1%	-2.7%	15.8%	34.3%	27.0%	12.1%	-1.2%	-7.7%	107.7%
<i>Elderly: (65+)</i>	32.7%	42.8%	9.7%	14.8%	9.6%	16.2%	23.0%	24.1%	17.8%	139.8%
<i>Very Elderly: (75+)</i>	32.9%	43.5%	23.1%	35.0%	12.5%	7.6%	8.8%	19.4%	27.4%	119.8%
<i>Extremely Elderly (85+)</i>	55.7%	45.5%	26.8%	49.2%	22.6%	16.6%	11.2%	6.8%	10.3%	120.4%
<i>All Elderly (55+)</i>	16.1%	25.0%	4.2%	15.3%	20.6%	21.6%	8.1%	11.6%	6.6%	126.5%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Delaware

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	32,380	36,834	25,301	24,181	26,308	31,183	35,453	37,611	35,973	33,539
60to64	26,825	30,861	28,600	22,339	22,578	24,751	29,453	33,499	35,752	34,181
65to69	20,824	24,435	28,501	24,211	21,951	20,662	22,803	27,160	31,147	33,238
70to74	16,348	18,799	22,057	21,748	21,443	19,249	18,180	20,057	24,055	27,562
75to79	11,303	13,375	16,090	17,403	17,679	17,598	15,861	14,961	16,675	20,000
80to84	6,324	8,451	10,171	11,607	12,316	12,986	13,045	11,734	11,235	12,514
Over85	4,240	6,262	8,113	9,675	11,200	13,389	15,003	15,811	15,569	15,094
Absolute Change	70 to 80	80 to 90	90 to 97	90 to 00	00 to 05	05 to 10	10 to 15	15 to 20	20 to 25	97 to 25
55to59	4,454	-11,533	-1,120	1,007	4,874	4,270	2,159	-1,638	-2,434	9,359
60to64	4,036	-2,261	-6,261	-6,022	2,173	4,702	4,046	2,253	-1,571	11,842
65to69	3,611	4,066	-4,290	-6,550	-1,288	2,141	4,357	3,987	2,092	9,027
70to74	2,451	3,258	-309	-614	-2,195	-1,069	1,877	3,998	3,508	5,814
75to79	2,072	2,715	1,313	1,589	-80	-1,737	-900	1,714	3,325	2,597
80to84	2,127	1,720	1,436	2,145	670	58	-1,311	-499	1,280	907
Over85	2,022	1,851	1,562	3,087	2,189	1,614	809	-242	-476	5,419
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	8,490	-13,794	-7,382	-5,014	7,048	8,971	6,205	615	-4,005	21,201
<b>Elderly: (65+)</b>	12,283	13,610	-288	-343	-704	1,007	4,832	8,957	9,728	23,765
<b>Very Elderly: (75+)</b>	6,221	6,286	4,311	6,821	2,779	-65	-1,402	973	4,129	8,923
<b>Extremely Elderly (85+)</b>	2,022	1,851	1,562	3,087	2,189	1,614	809	-242	-476	5,419
<b>All Elderly (55+)</b>	20,773	-184	-7,670	-5,358	6,344	9,978	4,802	9,572	5,723	44,965
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	14.3%	-20.4%	-13.7%	-9.3%	14.4%	16.0%	9.6%	0.9%	-5.6%	45.6%
<b>Elderly: (65+)</b>	20.8%	19.1%	-0.3%	-0.4%	-0.8%	1.2%	5.7%	10.0%	9.9%	28.1%
<b>Very Elderly: (75+)</b>	28.4%	22.4%	12.5%	19.8%	6.7%	-0.1%	-3.2%	2.3%	9.5%	23.1%
<b>Extremely Elderly (85+)</b>	47.7%	29.6%	19.3%	38.1%	19.5%	12.1%	5.4%	-1.5%	-3.1%	56.0%
<b>All Elderly (55+)</b>	10.4%	-0.1%	-5.5%	-3.9%	4.8%	7.1%	3.2%	6.0%	3.4%	34.3%

# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Montgomery Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	33,425	40,307	32,777	33,569	38,740	47,924	55,882	58,483	55,625	53,045
60to64	28,025	33,289	34,416	28,581	30,944	37,466	46,262	53,896	56,533	53,786
65to69	21,169	26,957	32,950	29,732	27,992	29,033	35,250	43,491	50,934	53,419
70to74	16,696	21,095	25,454	26,732	26,760	25,218	26,149	31,685	39,209	45,881
75to79	11,738	15,260	19,461	22,315	22,519	22,674	21,433	22,192	27,058	33,453
80to84	7,018	10,043	13,237	16,024	16,676	17,244	17,495	16,514	17,313	21,068
Over85	4,472	7,524	10,891	13,421	16,024	19,493	21,752	23,038	23,271	23,902
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	6,882	-7,530	792	5,963	9,184	7,957	2,602	-2,859	-2,580	19,476
60to64	5,264	1,127	-5,835	-3,472	6,523	8,796	7,634	2,637	-2,748	25,204
65to69	5,788	5,993	-3,218	-4,958	1,041	6,217	8,241	7,443	2,485	23,687
70to74	4,399	4,359	1,278	1,306	-1,543	931	5,536	7,525	6,671	19,149
75to79	3,522	4,201	2,854	3,058	155	-1,242	759	4,866	6,395	11,138
80to84	3,025	3,194	2,787	3,439	568	251	-980	798	3,756	5,044
Over85	3,052	3,367	2,530	5,133	3,469	2,259	1,286	234	631	10,481
<b>Absolute Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	12,146	-6,403	-5,042	2,490	15,707	16,753	10,236	-222	-5,328	44,680
<i>Elderly: (65+)</i>	19,786	21,114	6,231	7,978	3,691	8,416	14,842	20,866	19,938	69,499
<i>Very Elderly: (75+)</i>	9,599	10,762	8,171	11,630	4,192	1,268	1,064	5,898	10,782	26,663
<i>Extremely Elderly (85+)</i>	3,052	3,367	2,530	5,133	3,469	2,259	1,286	234	631	10,481
<i>All Elderly (55+)</i>	31,932	14,711	1,189	10,469	19,398	25,169	11,300	20,644	14,610	114,179
<b>Percent Change By Elderly Age Cohort:</b>										
<i>Near Elderly: (55to64)</i>	19.8%	-8.7%	-7.5%	3.7%	22.5%	19.6%	10.0%	-0.2%	-4.8%	71.9%
<i>Elderly: (65+)</i>	32.4%	26.1%	6.1%	7.8%	3.4%	7.4%	12.2%	15.2%	12.6%	64.2%
<i>Very Elderly: (75+)</i>	41.3%	32.8%	18.7%	26.7%	7.6%	2.1%	1.8%	9.6%	15.9%	51.5%
<i>Extremely Elderly (85+)</i>	68.2%	44.8%	23.2%	47.1%	21.6%	11.6%	5.9%	1.0%	2.7%	78.1%
<i>All Elderly (55+)</i>	16.1%	9.5%	0.7%	6.2%	10.8%	12.6%	5.0%	8.3%	5.4%	67.0%



# Elderly Population 1970 to 2025

Note 1970, 80 and 90 data based on total population.

DVRPC 1997 to 2025 forecasts based on non-group quarter population only.

## Philadelphia

### Elderly Population

Age	1970	1980	1990	1997	2000	2005	2010	2015	2020	2025
55to59	111,716	98,392	68,766	65,270	68,147	77,775	87,407	90,378	85,435	84,049
60to64	98,963	90,918	74,114	58,249	57,294	59,703	69,837	79,092	82,677	77,774
65to69	82,234	81,894	75,294	64,005	56,172	50,552	53,196	62,773	71,184	74,055
70to74	64,491	64,226	62,881	60,538	56,457	47,252	42,922	45,484	53,960	60,931
75to79	42,793	45,531	49,140	51,399	49,444	44,933	37,747	34,430	36,744	43,500
80to84	23,949	27,153	30,598	33,221	35,869	36,325	33,277	28,121	25,890	27,492
Over85	14,681	18,566	22,801	26,575	31,416	38,762	43,119	43,331	40,597	37,713
<b>Absolute Change</b>	<b>70 to 80</b>	<b>80 to 90</b>	<b>90 to 97</b>	<b>90 to 00</b>	<b>00 to 05</b>	<b>05 to 10</b>	<b>10 to 15</b>	<b>15 to 20</b>	<b>20 to 25</b>	<b>97 to 25</b>
55to59	-13,324	-29,626	-3,496	-619	9,628	9,632	2,971	-4,943	-1,386	18,779
60to64	-8,045	-16,804	-15,865	-16,820	2,409	10,133	9,255	3,585	-4,903	19,525
65to69	-340	-6,600	-11,289	-19,122	-5,621	2,645	9,577	8,411	2,871	10,051
70to74	-265	-1,345	-2,343	-6,424	-9,205	-4,330	2,562	8,477	6,970	392
75to79	2,738	3,609	2,259	304	-4,511	-7,186	-3,318	2,314	6,756	-7,899
80to84	3,204	3,445	2,623	5,271	456	-3,048	-5,156	-2,231	1,602	-5,729
Over85	3,885	4,235	3,774	8,615	7,345	4,357	212	-2,734	-2,884	11,138
<b>Absolute Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	-21,369	-46,430	-19,361	-17,438	12,037	19,765	12,226	-1,358	-6,290	38,304
<b>Elderly: (65+)</b>	9,222	3,344	-4,976	-11,356	-11,534	-7,562	3,877	14,237	15,315	7,952
<b>Very Elderly: (75+)</b>	9,827	11,289	8,656	14,190	3,291	-5,877	-8,261	-2,650	5,474	-2,491
<b>Extremely Elderly (85+)</b>	3,885	4,235	3,774	8,615	7,345	4,357	212	-2,734	-2,884	11,138
<b>All Elderly (55+)</b>	-12,147	-43,086	-24,337	-28,795	502	12,203	3,965	12,880	9,025	46,256
<b>Percent Change By Elderly Age Cohort:</b>										
<b>Near Elderly: (55to64)</b>	-10.1%	-24.5%	-13.6%	-12.2%	9.6%	14.4%	7.8%	-0.8%	-3.7%	31.0%
<b>Elderly: (65+)</b>	4.0%	1.4%	-2.1%	-4.7%	-5.0%	-3.5%	1.8%	6.6%	6.7%	3.4%
<b>Very Elderly: (75+)</b>	12.1%	12.4%	8.4%	13.8%	2.8%	-4.9%	-7.2%	-2.5%	5.3%	-2.2%
<b>Extremely Elderly (85+)</b>	26.5%	22.8%	16.6%	37.8%	23.4%	11.2%	0.5%	-6.3%	-7.1%	41.9%
<b>All Elderly (55+)</b>	2.1%	-10.1%	-6.3%	-7.5%	0.1%	3.4%	1.1%	3.4%	2.3%	12.9%



## **APPENDIX C**

### **State and Area Agencies on Aging Serving the Delaware Valley Region**

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## **COUNTY AREA AGENCIES ON AGING:**

### **Burlington County Office on Aging**

County Office Building  
49 Rancocas Road, P.O. Box 6000  
Mount Holly, NJ 08060

### **Camden County Office of Aging**

Haddon Office Center, Suite 103  
120 White Horse Pike  
Haddon Heights, NJ 08035

### **Bucks County Office on Aging**

30 East Oakland Avenue  
Doylestown, Pennsylvania 18901

### **Delaware County Services for the Aging**

20 South 69th Street, 4th Floor  
Upper Darby, Pennsylvania 19082

### **Montgomery County Office of Aging and Adult Services**

1430 DeKalb Pike, Box 311  
Norristown, Pennsylvania 19404-0311

### **Gloucester County Office on Aging**

Route 45 and Budd Boulevard  
P.O. Box 337  
Woodbury, NJ 08096

### **Mercer County Office on Aging**

640 S. Broad Street  
P.O. Box 8068  
Trenton, NJ 08650-0068

### **Chester County Office on Aging**

Government Services Center  
601 Westtown Road, Suite 320  
West Chester, Pennsylvania 19382-4525

### **Philadelphia Agency on Aging**

642 North Broad Street  
Philadelphia, Pennsylvania 19103-3409

## **STATE AGENCIES ON AGING:**

### **Pennsylvania Department of Aging**

Rachel Carson Office Building  
400 Market Street  
Harrisburg, PA 17101-2301

### **New Jersey Department of Health and Senior Services**

Division of Senior Affairs  
P.O. Box 807  
Trenton, New Jersey 08625-0807

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