DEMOGRAPHICS

ADOPTED 1992 MASTER PLAN
ALEXANDRIA, VIRGINIA

DEMOGRAPHIC CHARACTERISTICS OF ALEXANDRIA

Since the early 1970s, when the City last updated its Comprehensive Plan, the population of the City has been changing. While the total number of people who live in the City is almost the same as it was in the early 1970s, 110,000, the composition of the population is not the same. The size of households in Alexandria has decreased markedly, and over 40 percent of all households in the City are now composed of only one person; less than half of the City's households are now families. The median age of the population has increased by more than 3 years to 31.4. Only 20 percent of the population are now children, compared to 36.4 percent in 1960. The racial composition of the City's population has become more diverse since the early 1970s; about one-third of the City's population is a member of a minority group.

Women have joined men in the workforce and in 1990 almost 83 percent of the City's population age 16 and over are in the workforce. City residents increasingly have professional, managerial and technical occupations. Household incomes outpaced inflation, but lagged behind those of other Northern Virginia jurisdictions. Per Capita income, remained one of the highest in the Country.

These demographic trends are described in more detail below. It is important to note that this chapter was written before 1990 Census data was available. The data in this report comes from a variety of sources, including the 1980 Census, 1985 American Housing Survey, various WMCOG sources, and Department of Planning estimates.

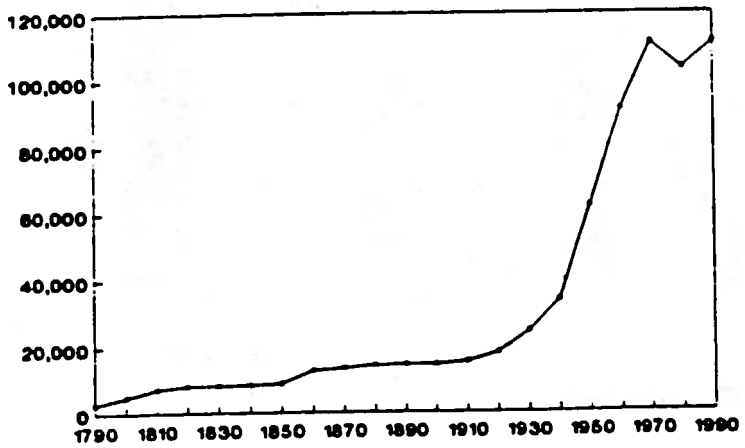
Size of the Population

The City of Alexandria has a long history of population growth. Up until 1940 this growth was slow and steady. During the 1940 to 1960 period, the population increased much more rapidly as people were attracted to the National Capital region during World War II and as the City substantially increased its land area by annexing the area west of Quaker Lane from Fairfax County. The 1970s was the first decade in Alexandria's history in which the population declined. Residential construction peaked in the early seventies and then declined sharply during the late 1970s. Also, in the late 1970s, 2,100 units at the Foxchase apartments were removed from the rental market for renovation and were not occupied at the time of the 1980 census. Many other apartment units were also removed from the market for renovation to condominium conversion. Along with a decline in household size, these trends resulted in the City's population dropping from 110,939 people in 1970 down to 103,217 people by 1980.

Chart 1

POPULATION - 1790 TO 1990

City of Alexandria



In the early 1980s, new residential construction remained limited, but, by the early 1980s, the Foxchase rental units and other units converted to condominiums were back on the market. The population of Alexandria grew accordingly. By 1990, the City had recovered most of the population it had lost during the 1970s, resulting in a total citywide population of 111,620 people.

Table 2

POPULATION AND HOUSEHOLDS - 1960 TO 1990
City of Alexandria

	1960	1970	1980	1985	1990
Population	91,023	110,938	103,217	109,100	110,620
Households	28,572	42,477	49,004	54,200	53,811
Average Household Size	3.25	2.57	2.07	2.01	2.03

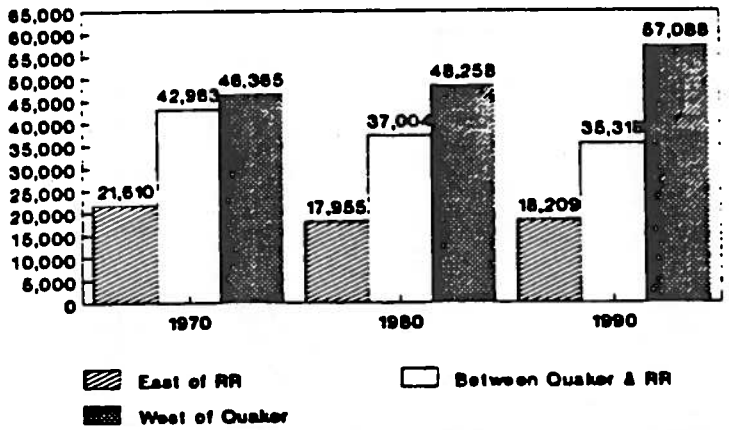
Source: 1960,1970,1980, 1990 U.S. Census

Population growth has not been uniform throughout the City. As Chart 2 shows, only the area west of Quaker Lane has experienced a population increase since 1970; the remainder of the City lost population.

The increase of population in the area west of Quaker Lane reflects an increase in higher density residential development in the western part of the City. The large amounts of vacant land available for this higher density residential development made the growth possible. In the future, this trend of population growth occurring primarily in the western end of the City may not continue. While additional residential sites do exist in the West End, most notably the large Cameron Station site, many of the largest vacant or redevelopable sites suitable for residential development are located in the eastern part of the City near the railroad and metrorail right-of-ways: Potomac Yard, the Braddock Metro station area, the Carlyle site in the Eisenhower Valley, and other sites in the eastern Eisenhower Valley.

Chart 2

POPULATION DISTRIBUTION - 1970 TO 1990
City of Alexandria



Sources: 1970, 1980 U.S. Census; 1990, City of Alexandria

Household Characteristics

Size

The number of households in the City has continued to grow. A decreasing average household size in the City has resulted in a growing number of households even during the period when population declined (Table 2). In 1940 there was an average of 3.8 people per household in Alexandria; by 1990 the average household size had dropped to 2.03. Declining household size is a national phenomena, but the decline in the Alexandria household size has been much sharper than the national trend. The low household size means that Alexandria has a very high percentage of one and two person households; in 1980, over 41 percent of all households in Alexandria had only one person.

The decline in the City's average household size has been paralleled by a shift in the size and type of housing units built in Alexandria. Higher land values relative to other parts of the region have made Alexandria an expensive location for single family housing, which has contributed to the decline of the number of families with children living in Alexandria and the corresponding decline in average household size. The higher land values have made development of smaller higher density residential units, some townhouses, but primarily multi-family rental and condominium units, the more attractive building alternative for residential development. These types of units do not usually attract large households. According to the American Housing Survey, by 1985 over 40% of all housing units in the City had only one bedroom.

There are marked differences in household size in different parts of the City, which reflect the different character of housing in different areas. In 1980, the smallest average households in the City were found in the area west of Quaker Lane, which has far more multi-family units than single family homes. The average household size in that area, 1.92, is well below the City's average household size. At the other extreme, the area of the City east of Quaker Lane and west of the railroad tracks, which is characterized by detached single family homes, had an average household size of 2.32 in 1980, well above the City's average.

Average household size in Alexandria is unlikely to decline as sharply in the future as it has in the past. Because the average size is already relatively low, further decline is likely to be limited to no more than two-tenths of a person by the year 2010. The leveling out of household size in Alexandria translates into more population growth per residential unit added to the housing stock. Ultimately, the average household size in Alexandria is linked to the type of units that are built in the City, which in turn is determined by the level of demand for various types and sizes of units, and the affordability of these units. Recent residential development trends in the City reflect an increasing interest in building some larger units; fewer efficiency units and more two-bedroom or two-bedroom/den units are being constructed and proposed by developers than in the past.

Families

As the size of households in the City has changed, so has the composition of these households. In 1960, more than 83 percent of all households in the City were families, that is, a household composed of two or more people who are related (Table 3). By 1980, the percent of households that were families had dropped to only 49 percent. As was noted in the section on average household size, families, which by their nature have more members than non-family households, are often priced out of the Alexandria market because of the high cost of larger units. The composition of Alexandria's population--family vs. non-family households--is likely to continue unless more affordable housing opportunities are provided for larger households.

Table 3

HOUSEHOLDS BY TYPE AND PLANNING DISTRICT: 1970 AND 1980
City of Alexandria

	Family Households				Female Head of Household No Husband Present With Children under 18			
	1970	Percent Of All Households	1980	Percent Of All Households	1970	Percent Of All Families	1980	Percent Of All Families
East of Railroad	4,995	58.1	3,889	44.6	531	10.6	631	16.2
Between Railroad & Quaker	11,254	73.8	9,105	57.7	745	6.6	1,109	12.1
West of Quaker Lane	12,324	66.2	10,857	44.3	890	7.2	1,086	10.0
Total	28,573	67.3	23,851	48.7	2,166	7.6	2,816	11.8

Source: 1970, 1980 U.S. Census, Bureau of the Census

Female Heads of Households

Even as the total number of families have been decreasing in Alexandria, the number of families headed by a female with no husband present has been increasing in the City (Table 2). In 1970, there were 2,166 female headed households (7.6 percent of all families); by 1980, this number had risen to 2,816 (11.8 percent of all families). Female headed households tend to have low incomes. The high cost of housing in Alexandria makes it difficult for this type of family to find affordable units. If the trend toward more female headed households continues, it will contribute to the ever increasing demand in the City for affordable housing units.

Population Characteristics

Age

The median age of the City's population has been rising, up from 28 in 1960 to 31.4 in 1980. As with declining household size, the aging of the population is a national phenomena, caused by decreasing birth rates and greater longevity.

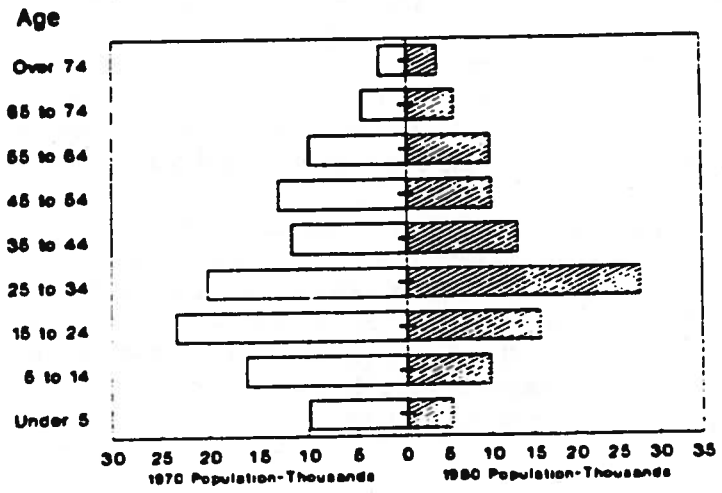
As the median age has risen, the percentage of the total population which are children, age 19 or younger, has declined, from 36.4 percent in 1960 to 20.8 percent in 1980. This decline is likely to continue, given national and regional birth trends. By the year 2000, only 15.4 percent of the population is forecasted to be 19 years old or less. Unless population growth overall increases markedly, the absolute number of children in the City will continue to decline. Fewer classrooms will be needed in the City schools by the year 2000, and there will also be less demand for services targeting children, i.e. children's recreational programs and social service programs, if these age of the population trends continue.

As the percentage of children in Alexandria's population declines, the percentage of adults rises. As the existing population ages, the most marked increase will be in the number of Alexandrians aged 45 to 54 who are forecasted to rise from 9.8 percent of the City's population in 1980 to 21.2 percent in 2000.

Chart 3

POPULATION AGE STRUCTURE - 1970 AND 1980

City of Alexandria



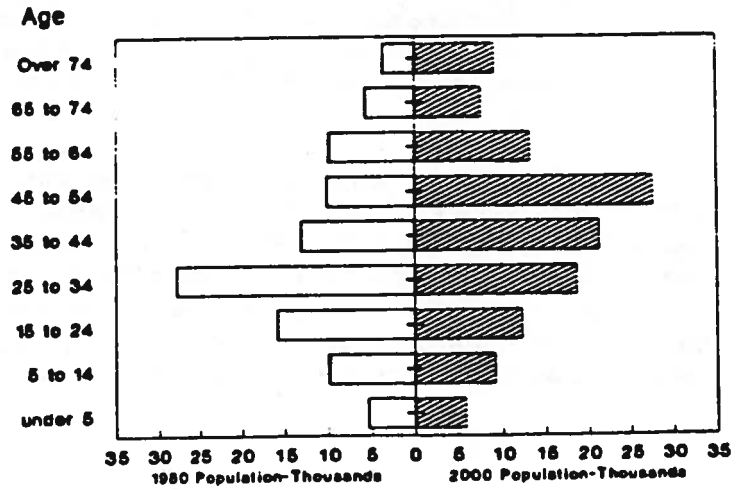
The number of Alexandrians age 65 and older will also be increasing between now and the year 2000. In 1980 9.2 percent of the City's population was in this age group; by the year 2000, the elderly population is likely to almost double, increasing to 13.0 percent of the total population.

The area west of Quaker Lane has the lowest concentration of elderly people, but it is the area where the elderly population is increasing the fastest. Between 1970 and 1980, the elderly population in the West End more than doubled. Three continuing care retirement facilities are located within the area West of Quaker Lane. Also, the housing types in this area, primarily apartments and condominiums, are smaller and more affordable for retirees.

Chart 4

POPULATION AGE STRUCTURE - 1980 AND 2000

City of Alexandria



Other areas of the City have had less dramatic shifts in the percent elderly. The area between the Railroad Tracks and Quaker Lane had more elderly residents than other areas in both 1970 and 1980, growing by several hundred persons during the 1970s. The growth is significant since this area's total population dropped by almost 14 percent during the 1970s. As this area's population continues to age, it is quite likely that some of the elderly will relocate, both within the City and in other locations.

The extent to which the aging population remains within the City will be determined, in part, by the availability and affordability of units within Alexandria which are suitable for this elderly population. The percent of those 65 years old and older in Alexandria who have incomes below the poverty level has declined between 1970 and 1980. In 1980, only 665 elderly persons had incomes below the poverty level.

Statistics on vehicle ownership show that the elderly are more likely than others not to have access to a vehicle. In 1980, one-third of all households which included a person aged 65 and over did not have access to a vehicle. The problem of transportation is exacerbated because 17 percent of all elderly are unable, because of physical limitations, to use public transportation. The City does have special programs which provide transportation for the elderly and the handicapped. As the elderly population increases in the City, there will be an increased demand for these special transportation services, as well as an increased demand for public transportation in general.

Sex

For at least the last four decades in Alexandria, women have outnumbered men. Since 1960, females have gradually increased as a percentage of the City's population, until, by 1980, 53.2 percent of Alexandria's population was female. Females outnumber males in all age groups except for those 19 years and younger.

Race

Data on the race of Alexandria's residents suggest that the distribution of the population over various racial groups is fairly stable. However, it is not clear that the 1985 American Housing Survey data is accurate and 1990 Census data is not yet available. The 1985 data suggests that the largest minority group in the City is African Americans, with 21 percent (22,817 persons) of the City's total population in 1985. After increasing about 47 percent during from 1970 to 1980, the size of the City's African American population has remained fairly stable throughout the 1980s, increasing by less than 100 people. The minority group experiencing the greatest growth in the 1980s was the City's Asian population. Second only to the African American population in size, the Asian population of the City was 6,888 people in 1985, up 125 percent from 2,888 people in 1980. The 1985 Housing Survey data shows that the Hispanics population remained fairly stable in size during the 1980s, increasing only slightly from 4,042 people in 1980 to 4,591 people in 1985. The Spanish speaking population may be seriously under-represented in this data. The City Department of Human Services's Hispanic Outreach program and Casey Clinic's Hispanic patient caseload have doubled in recent years, suggesting a significant increase in the Hispanic population. Many of the Hispanics using these City services are undocumented aliens, and may continue to be uncounted after the 1990 census.

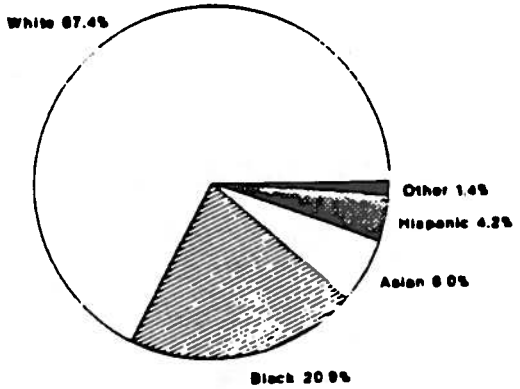
While the size of the minority population in Alexandria has remained very stable, there have been notable shifts in the location of some of the minority population in the City. The City's African American population has historically been concentrated in the eastern end of the City; in 1970, the area east of the railroad tracks had only one-fifth of the City's total population but two-thirds of the City's African American population. Conversely, the area west of Quaker Lane, which had about 42 percent of the City's total population, had only 12 percent of the City's African American population. By 1980, the African American population had become somewhat more dispersed. The area east of the railroad tracks had slightly less

than one fifth of the City's total population relative to about one-third of the total African American population in the City. The area west of Quaker Lane had increased its share of the City's total population slightly to 46.8 percent, and had increased its share of the City's African American population more dramatically, to 25.1 percent.

Chart 5

RACE OF THE POPULATION - 1985

City of Alexandria



Source 1985 American Housing Survey

The City's Asian and Hispanic populations are concentrated in the western part of the City. In 1980, over 70 percent of the Asian population and 60 percent of the Hispanic population resided in the West End.

Income

Between 1980 and 1989 inflation in the Washington Region was 54.0 percent. Growth of household incomes was estimated to have outpaced inflation. Between 1980 and 1990 the average household income was estimated to have risen by 103 percent. Per capita income rose even more quickly, increasing by 118.7 percent during the slightly shorter period of 1980 to 1988.

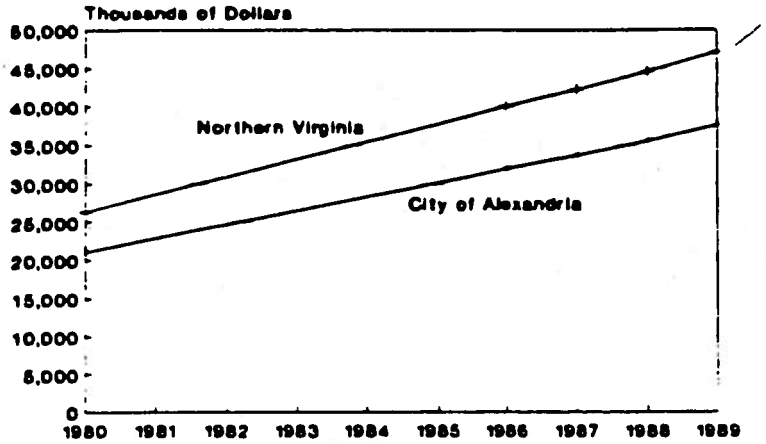
Alexandria residents have one of the highest per capita incomes in the United States. The most recent per capita income data, from 1988, show a per capita income of $28,629, which was eighth highest in the United States in 1987. Relative to the rest of the Washington D.C. region, only Arlington's per capita income of $30,248 exceeded Alexandria.

But Alexandria trails behind the rest of the Northern Virginia region in median incomes of families and households. Even though the incomes of Alexandria's households have grown substantially over the past years, from $21,016 in 1980 to $42,660 in 1990, and the rate of growth has been similar to that of other Northern Virginia jurisdictions, the gap between household and family median incomes in Alexandria and Northern Virginia has remained at about $10,000. This gap exists because Alexandria has a smaller average family and household size than the rest of Northern Virginia. For instance, in 1980 23.4 percent of Northern Virginia households were comprised of only a single person compared to 41.3 percent of Alexandria's households. One-person households are one-earner households, which is why Alexandria's household income is relatively low while its per capita income is relatively high.

Chart 6

MEDIAN HOUSEHOLD INCOME - 1980 TO 1989

City of Alexandria and Northern Virginia



Source Taylor Murphy Institute

Wealth and Poverty

In 1980, 22 percent of the City's households had incomes of $35,000 or more, and there was comparatively little difference between the percentage of households in different areas of the City.

The percentage of persons living in the City with incomes below the poverty level was 10.1 in 1980. There was, however, a marked difference in the percentage of persons in different areas of the City that have incomes below the poverty level. The area east of the railroad tracks had 16.3 percent of its population with incomes below the poverty level the area west of Quaker Lane had only 5.4 percent of its population below the poverty level. One of the reasons persons with incomes below the poverty level are more concentrated in the eastern part of the City is that much of the City's publicly assisted housing is located in this area.

The area east of Quaker Lane and West of the railroad tracks actually had the highest number of people with incomes below the poverty level, but as a percentage of the area's total population, persons in poverty were not disproportionately located in this area. Unlike the area east of the railroad tracks, the area west of the tracks and east of Quaker Lane has comparatively few assisted housing units. One of the major public housing projects in this area, Cameron Valley Homes, was redeveloped in 1988-1890. While some new public housing units were built to replace those demolished on the site, most of the units were scattered to small sites across the City. This area also had many inexpensive private rental apartments units, in the Arlandria area, which were attractive to households with low incomes. Many of these apartments are being renovated and many low income households who had lived in these units have been displaced. Data from the City's school system indicated that some of the low income people displaced from the Arlandria area are relocating to the City's West End.

Table 4

WEALTH AND POVERTY
City of Alexandria

	Households With Incomes of $35,000 or more		Persons With Incomes Below the Poverty Level	
	Number	Percent of All Households	Number	Percent of All Households
East of Railroad	1,989	22.7	2,907	16.3
Between Railroad and Quaker Lane	3,687	23.1	3,693	10.1
West of Quaker Lane	5,316	21.6	2,583	5.4
Total	10,992	22.3	9,183	9.0

Source: 1980 Census

It is difficult to assess whether the number of Alexandrians who have incomes below the poverty level has changed since 1980. Indicators such as the number of people on Medicaid or food stamps show a distinct decline between 1985 and 1988, and a sharp increase in the past two years, between 1988 and 1990. In 1990, the number of persons receiving food stamps is 3,611; this represents a 33 percent decline between 1985 and 1988, but also reflects a 20 percent increase between 1988 and 1990.
The number of persons receiving Medicaid in 1990 is 3,951. This number declined by 22 percent between 1985 and 1988, but has increased by over 17 percent in the past two years. It is not clear whether these changes in numbers may be caused by changes in the conditions needed to qualify for Medicaid or food stamps and may not actually be due to a changes in the City's population in poverty.

Employment Characteristics of the Population

Labor Force Participation

The 1980 U.S. Census reported that 71.6 percent of Alexandria's adults (age 16 and over) were in the civilian labor force. By 1990, the Virginia Employment Commission was estimating that 78,711 Alexandrians, 81.1 percent of the City's adult population, were in the civilian labor force.

These high rates of labor force participation by Alexandria residents are mirrored by low unemployment rates among the population. Through the 1980s, Alexandria's unemployment rate for residents dropped from a high 6 to 8 percent down to a 1988 estimate of 1.9 percent. The tight labor market reflected by these statistics means that there are relatively few existing Alexandria residents available to fill new jobs; most new jobs will need to be filled either through population growth in the City or by residents of other jurisdictions.

Female Labor Force Participation

The percentage of female Alexandrians (over age 16) in the labor force rose from 55.6 percent in 1970 to 66.5 percent in 1980. Since 1980 female participation in the labor force has continued to rise; the Virginia Employment Commission's estimated 81.8 percent labor participation rate for Alexandria in 1989 implies a very high female participation rate in Alexandria's labor force in 1989. In fact, this data shows that female participation rates are approaching males. In the past, new jobs were filled by greater female participation

in the labor force. Given these high participation rates for both sexes, it is likely that most new jobs in Alexandria will be filled by non-Alexandrians.

Table 5

FEMALE WORK FORCE PARTICIPATION: 1970 AND 1980
City of Alexandria

	1970			1980		
	Females Age 16+ In Labor Force	Percent of Females Age 16+ In Labor Force	Percent of Females in Labor Force With Child Under 6	Females Age 16+ In Labor Force	Percent of Females Age 16+ In Labor Force	Percent of Females in Labor Force With Child Under 6
East of Railroad	5,088	56.6	7.0	5,172	61.9	6.4
Between Quaker and RR	8,422	49.5	10.6	9,507	60.8	10.6
West of Quaker Lane	11,344	60.7	8.3	16,468	72.1	7.9
Total	24,854	55.6	8.8	31,147	66.5	8.5

Source: U.S. Census

The number of female labor force participants with a child under the age of six increased by 21 percent between 1970 and 1980, up from 2,191 to 2,647. As a percentage of the total female labor force, females with children under six stayed almost constant. The actual number of women in the workforce with children under the age of 6 will grow as the City's population grows, but the existing high female participation rates mean that the percentage of women in the workforce with children under the age of six will not increase dramatically in the future, unless more women start having children. Day care is already a major concern in Alexandria. Given the number of Alexandria women with children under the age of six who participate in the workforce, daycare is likely to become even more of a priority.

Types of Employment

In 1980, over 40% of the City's employed residents worked in managerial or professional occupations. Another 35% of the employed population was employed in technical, sales and administrative support, which includes clerical workers. Only 10 percent of the population worked in service industries, and less than 8 percent in precision production, craft and repair occupations, 6% operators, fabricators and laborers, and less than 1 percent in farming, forestry and fishing.

Place of Employment

Since 1960, there has been a trend for Alexandrians to find employment outside of the City. In 1960, about 33% of Alexandria's civilian labor force was employed in the City; by 1980 this percentage had dropped to under 25%. Data from the 1985 Washington Metropolitan Council of Governments' home interview study on travel behavior suggests that the percentage of City residents who also work in the City has probably dropped below 20%.

Table 6

Residents' Place of Work 1960-1980
City of Alexandria, Virginia

	1960		1970		1980	
	Number	%	Number	%	Number	%
Alexandria	13,285	33.4%	14,789	26.7%	15,279	24.8%
Washington D.C.	14,896	37.5%	16,689	30.25	22,438	36.4%
Arlington Co.	5,046	12.7%	9,341	16.9%	8,573	13.9%
Fairfax Co.	3,616	9.1%	6,157	11.1%	5,508	9.0%
Montgomery Co.	338	0.9%	1,074	1.9%	981	1.6%
Prince Georges Co.	271	0.7%	1,123	2.0%	1,131	1.8%
Falls Church	214	0.5%	420	.8%	633	1.0%
Other	575	1.4%	1,184	2.1%	1,159	1.9%
Not Reported	1,516	3.8%	4,579	8.3%	5,927	9.6%
TOTAL	39,757	100.0%	55,356	100.0%	61,629	100.0%

Other includes Loudoun, Prince William and Charles Counties.

Source: 1960, 1970 and 1980 U.S. Census, Bureau of the Census.

Where do Alexandria residents work? In 1980, over one-third (36%) of the City's civilian labor force worked in Washington. Another 23% worked in the neighboring counties of Arlington and Fairfax. The remainder of the labor force worked in other locations in the SMSA or at unknown locations. The 1985 WMCOG home interview study showed more than 45 percent of the City's residents worked in the District, and only 20 percent working in the adjoining Fairfax and Arlington Counties.

Conclusions

It is likely that the 1990 Census will reflect a continuation of the demographic trends established over the past 20 years; a stable and aging population with fewer families and fewer school age children and smaller households whose members work and earn relatively high per capita incomes. Although Alexandria has increased job opportunities within the City it is evident that the percentage of people living and working in the City is decreasing to less than one in five. The lack of affordable housing may be one reason why families cannot live closer to work.

The next chapter, Land Use, discusses development trends since 1974, the last time a Comprehensive Plan was prepared, analyzes potential growth areas and projects future development trends to year 2010. Based on the demographic and land use trends and forecasts, the chapter identifies the key principles which should govern and guide the City's land use and zoning policies over the next 10 to 20 years.