

SECTION 2: SHAPES AND PATTERNS



Regional Demographics

Regional mobility needs are impacted by where people live, work, and play. Therefore an understanding of population trends and characteristics is necessary to better forecast the region's transportation needs. As population and employment grow, decline, or even shift from one area to another, the demands on the transportation network change as well.

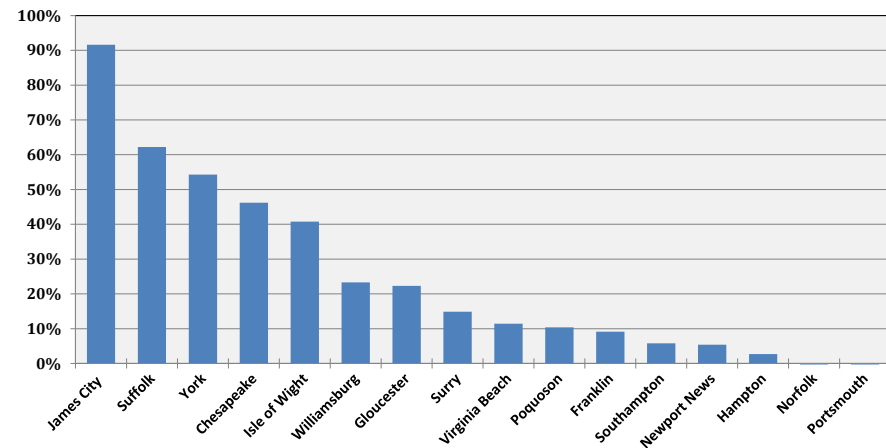
Current Population

Hampton Roads is home to 1.7 million residents. With 2.53 residents per household, this equates to just over 600,000 households. Between 1990 and 2010, the region's population increased by an additional 212,000 residents. However, the rate of population growth in Hampton Roads over this time (15%) trails the growth rate of the State (29%) and the Nation (24%).

About one-third of the Hampton Roads population lives on the Peninsula, with the remaining two-thirds living on the Southside. The Peninsula grew faster than the Southside over the past two decades, with its population increasing from 435,199 residents in 1990 to 513,704 residents in 2010, an 18% increase. The Southside grew from 1,018,986 residents in 1990 to 1,152,606 residents in 2010, an increase of 13%.

James City County, Suffolk, and York County saw the largest increases in population, with growth rates over 50% between 1990 and 2010 (**Figure 3.1**). At the other end of the spectrum, the urbanized cities of Newport News, Hampton, Norfolk, and Portsmouth all saw small increases or decreases in population during this same time period.

Figure 3.1- Percent Growth in Population by Jurisdiction, 1990-2010



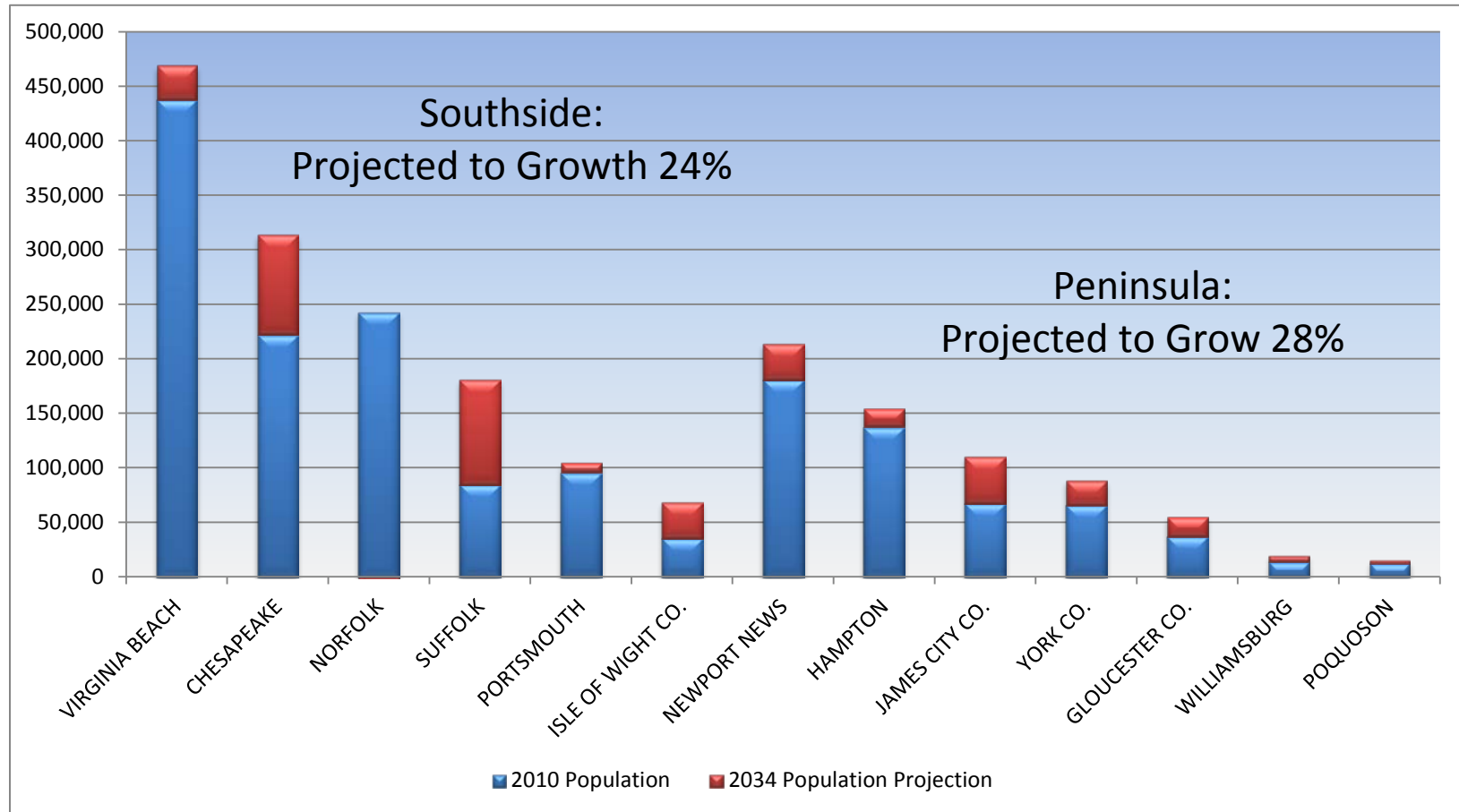
Sources: US Census Bureau, Weldon Cooper Center.

Future Population

As stated previously, population has grown in Hampton Roads over the past decade. Looking towards 2034, the population is expected to increase by 400,000 persons, resulting in a regional community of over two million residents. This translates into approximately 770,000 households for Hampton Roads in 2034.

Figure 3.2 profiles the current and anticipated population for Hampton Roads localities. As seen in the chart, higher anticipated growth rates are expected to occur in Chesapeake, Suffolk, and James City and Isle of Wight Counties.

Figure 3.2: Hampton Roads Current and Anticipated Population Profile



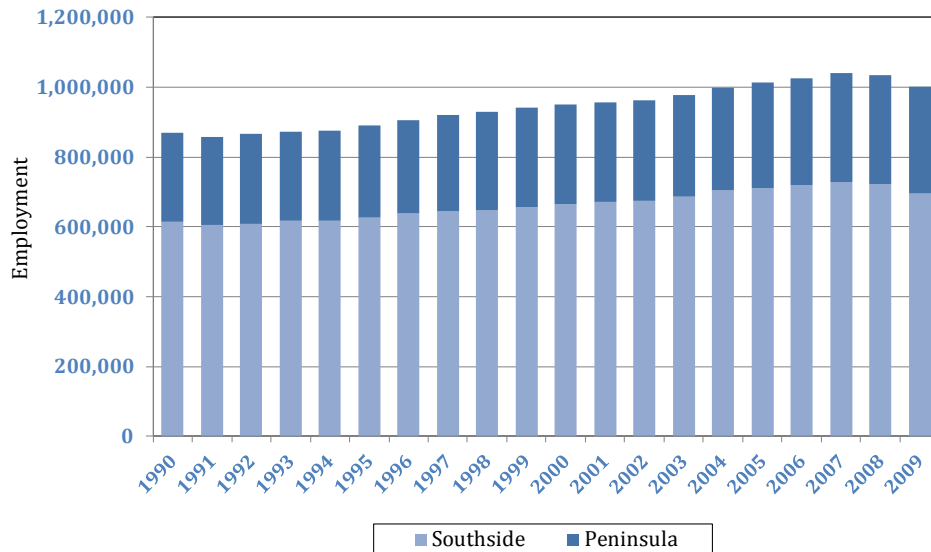
Source: US Census and HRTPO

Current Employment

As with population, the region’s employment has also grown in the past decade. There are 1,000,875 jobs in Hampton Roads as of 2009, up 130,530 jobs from the levels seen in 1990 (Figure 3.3). As with the rest of the country, the downturn in the economy has impacted employment in Hampton Roads, with the number of jobs about 40,000 lower in 2009 than the level seen in 2007.

Of the 1,000,875 jobs in Hampton Roads, approximately 70% are located on the Southside and 30% on the Peninsula.

Figure 3.3: Hampton Roads Employment, 1990-2009

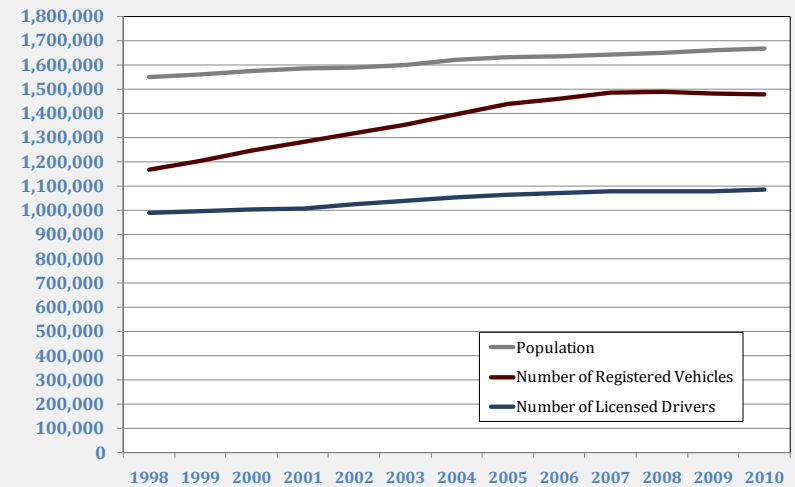


Source: Bureau of Economic Analysis.

Did you know...

The increase in population has also contributed to more drivers and vehicles on the regional roadway system. The growth in the number of vehicles, however, has far outpaced both population and driver growth (Figure 3.4). Between 1998 and 2010, the number of registered vehicles in Hampton Roads increased by 27%, up to 1.48 million vehicles. During this time, the growth in registered vehicles was more than three times the growth in both population (8%) and licensed drivers (10%).

Figure 3.4: Hampton Roads Population, Registered Vehicles, and Licensed Drivers, 1998-2010



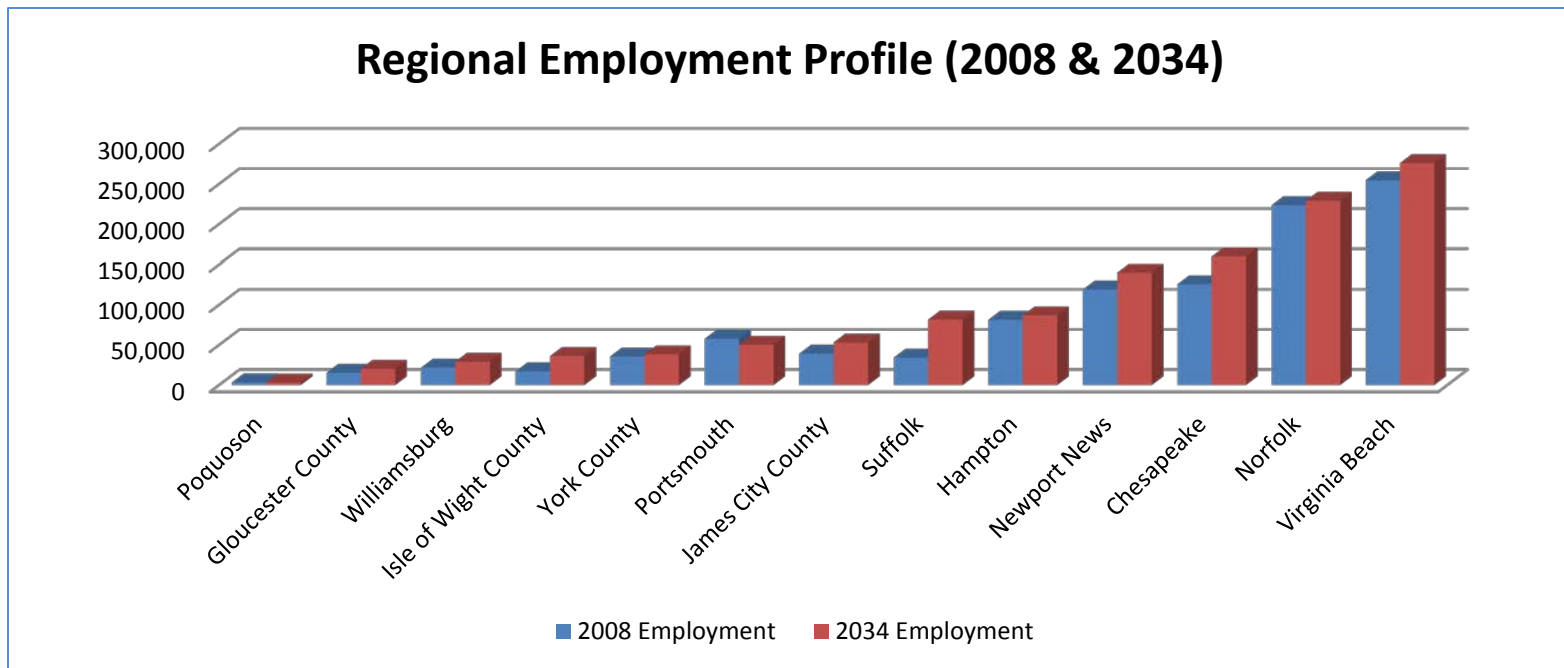
Sources: Virginia DMV, US Census Bureau, Weldon Cooper Center.

Future Employment

As the population in Hampton Roads grows, employment is expected to increase as well. According to the 2034 socioeconomic forecast, Hampton Roads is expected to have slightly more than 1.2 million jobs in the region. The localities with the highest anticipated growth rate include the historically suburban communities of Suffolk, Isle of Wight County, and James City County. **Figure 3.5** profiles the current and anticipated employment for the Hampton Roads localities.



Figure 3.5: Hampton Roads Current and Anticipated Employment Profile



Environmental Justice

Environmental Justice entails the **fair treatment** and **meaningful involvement** of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

U.S. EPA, Office of Inspector General, Evaluation Report; March 2004

Title VI of the Civil Rights Act of 1964 set a standard that authoritatively outlawed discrimination under any program or activity utilizing federal funds. Executive Orders 12898¹ and 13166² reinforced the importance of fundamental rights and legal requirements contained in Title VI of the Civil Rights Act of 1964 and directed that "each Federal agency shall make achieving environmental justice part of its mission."

Environmental Justice helps to ensure that programs, policies, and activities that have adverse effects on communities do not have disproportionately high and adverse effects on minority and low-income populations. The basic concept behind Environmental Justice (EJ) is that federal funds should not be used to support intentional and willfully discriminatory practices or effects on minority and low-income persons.

Federal guidelines require MPOs to enhance their public involvement programs to "ensure the full and fair participation by all potentially affected communities in the transportation decision-making process." Furthermore, MPOs need to address

EJ populations and evaluate the extent to which their current programs or activities may cause direct or disparate impacts.

An important step in addressing EJ concerns is to identify those populations that may experience barriers to mobility and therefore, may be adversely affected by transportation planning decisions. These groups include:

- Minority Populations
- Persons in Poverty
- Elderly Population
- Medical and Functional Needs Population
- Linguistically-isolated Households (non-English speaking households)
- Zero-Vehicle Households

This section describes regional characteristics of each group stated above. Mobility issues, fair treatment, and meaningful involvement in the transportation planning process will be discussed in later chapters.

¹ Executive Order 12898 was issued on February 11, 1994.

² Executive Order 13166 was issued on August 11, 2000.

Minority Populations

Minority populations are often underrepresented in the transportation planning process. For the purposes of EJ, the term ‘minority’ refers to racial and ethnic minorities, including: African American, Hispanic, American Indian and Alaskan Native, and Asian-American.

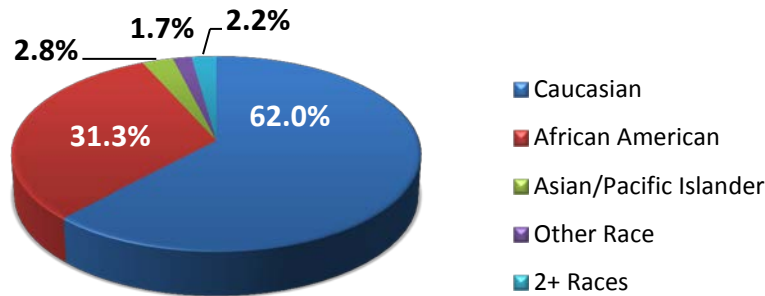
In the 2000 Census, 38 percent of Hampton Roads was comprised of people from minority racial backgrounds (**Figure 4.1**). As of the 2010 Census, this number increased to 41 percent (**Figure 4.2**).

Ethnic origin is considered to be a separate component from race. Hispanic ethnic origin, often included in the minority definition, deserves special mention since it is not a racial category. Hispanics are defined as persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race. Thus, persons of Hispanic origin can be of any race.



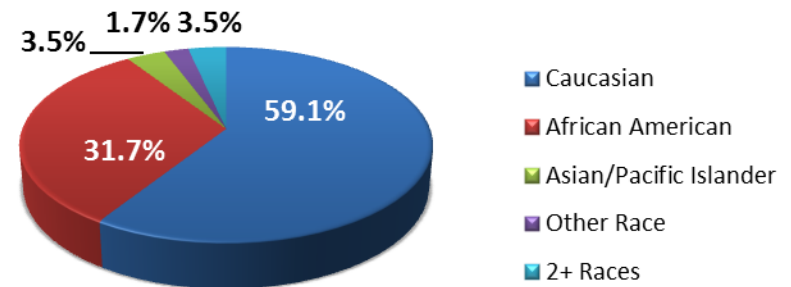
In 2000, 3.2 percent of the regional population noted a Hispanic heritage background. In 2010, those of Hispanic descent increased their share of Hampton Roads’ population to 5.4 percent.

Figure 4.1: 2000 Hampton Roads Racial Profile



Source: US Census

Figure 4.2: 2010 Hampton Roads Racial Profile



Source: US Census

Persons in Poverty (Low-Income)

In 2010, poverty was defined by the US Department of Health and Human Services as a household income at or below \$22,050 for a family of four. For the purposes of characterizing poverty in the region, HRTPO staff identified low-income households (households with incomes at or below 200 percent of the poverty level³) and households that received public assistance.

In low-income households, housing, transportation, and food costs exceed or disproportionately consume household income. Once basic needs are met, little to no income remains to improve the household's quality of life. Often, these households have minimal or no access to vehicles, making it difficult to get back and forth to work, school, shopping, etc.

In Hampton Roads, poverty rates have remained relatively constant over the past decade. As of 2010, the region had 60,886 households living in poverty, translating to 9.9 percent of the region's households⁴. Though poverty has remained constant in the Hampton Roads region, there has been a drop in the number of low-income households as well as households receiving public assistance. In 2010, approximately 38 percent of the households in Hampton Roads were classified as low-income, down from 40 percent in 2000. Of the total households in the region in 2010, 2.2 percent received public assistance; down from 2.8 percent in 2000.

Table 4.1: 2000 and 2010 Low-Income Households

Income Characteristics	2000		2010	
	Number of Households	% of Total	Number of Households	% of Total
Low-Income Households	226,087	39.9%	237,553	38.4%
Households receiving Public Assistance	16,101	2.8%	13,787	2.2%

Source: 2000 Census and 2010 ACS

³ Source: US Department of Health and Human Services

⁴ Source: 2010 American Community Survey

Elderly Populations

The population in a region is comprised of people of varying ages. A traditionally healthy community and economy have a generation spectrum that resembles a pyramid (see **Figure 4.3**)⁵. At the tip of the population pyramid are the elderly members of the community, followed by a broader working adult population, and supported at the base by the children of the working adult population. A traditionally broad pyramid base composed of children ensures ample replacement to the current working population.

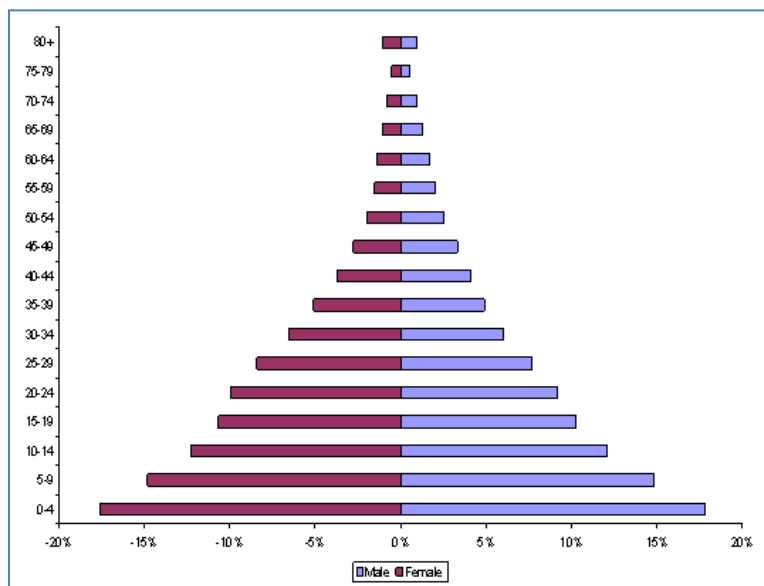


Figure 4.3: Traditional Population Pyramid

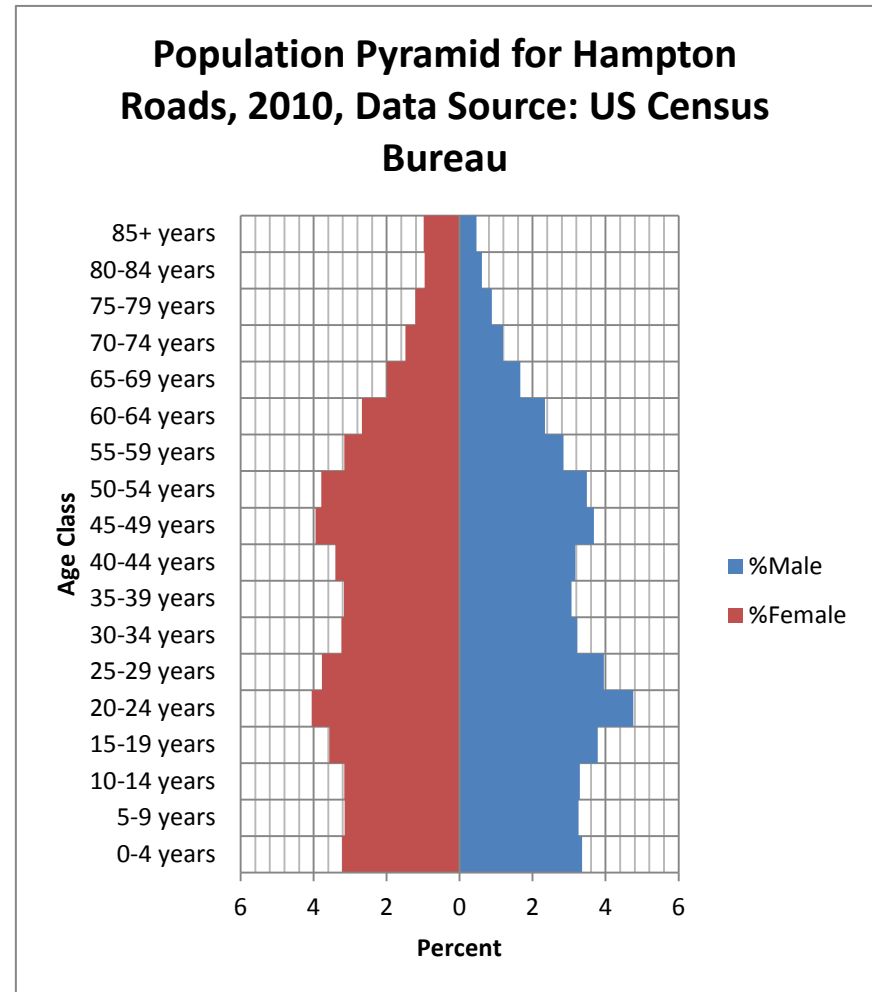
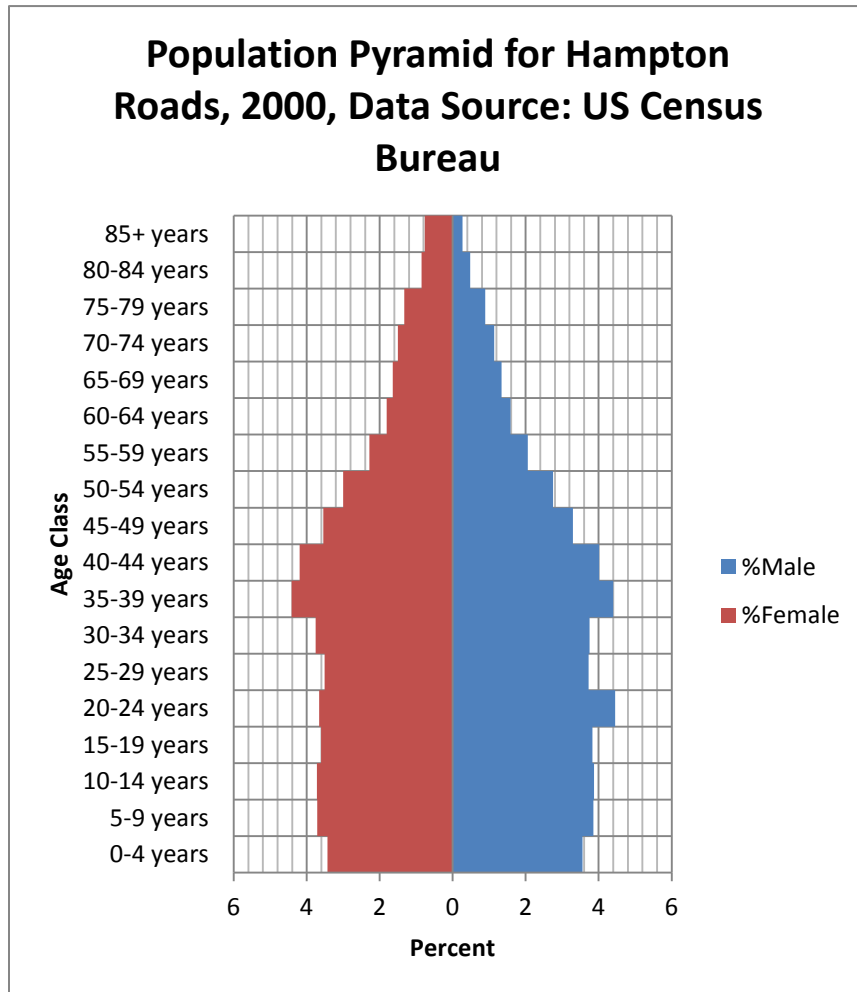


In Hampton Roads, as with the rest of the United States and other industrialized nations, the traditional population pyramid is eroding with the shifting of age distribution. The portion of elderly is increasing, while the young are becoming less numerous which can be attributed to the fact that people are living longer and having fewer children (**Figure 4.4** depicts the regional population pyramid for the 2000 and 2010 Census). This trend will have implications in the near future as there will be fewer children to replace the working population.

11.6 percent of the regional population was identified as age 65 or older in 2010, compared with 10.2 percent in 2000.

⁵ Traditional population pyramids exhibit a lower dependency ratio, or ratio of dependents (children and elderly) cared for by the working age population (Source: Population Geography, Peters, G. and Larkin, R. (2005)).

Figure 4.4: 2000 and 2010 Regional Population Pyramid



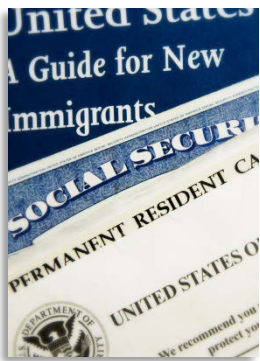
Medical and Functional Needs Populations



Another group of people in our community who often experience barriers to mobility include those with medical and functional needs. This group is defined as people with mobility, sensory, or intellectual challenges acquired either at birth, abruptly, or evolved over time.

In Hampton Roads, approximately 10.5 percent of the region's population is identified as members of the medical/functional needs community⁶.

Linguistically-Isolated Households



Another group identified for EJ analysis includes linguistically-isolated households (households in which English is not spoken at home). In 2000, there were 63 documented languages spoken in Hampton Roads other than English⁷. Common languages include Spanish, Tagalog, French, German, Korean, and Vietnamese. Approximately 8 percent of the regional population reported speaking a language other than English at home.⁸

Certain segments of this population experience a greater struggle in communicating in English. In 2000, approximately 12,409 persons, or 0.9 percent of the total Hampton Roads population

⁶ Source: Hampton Roads Benchmarking Study (2010), HRPDC.

⁷ Source: 2000 Census, Special Tabulation 224, US Census Bureau.

⁸ Source: 2000 Census, Summary File 3, US Census Bureau.

were identified as Limited English Proficient (LEP) persons. This number climbs in 2009, to 17,730 persons, or 1.1 percent. As the region continues to grow and diversify, it can be anticipated that Hampton Roads will have an LEP population that will grow in parallel.

Zero-Vehicle Households



Zero-Vehicle Households are those households without access to cars. This population is often referred to as “transit dependent,” meaning these individuals must rely on public transit for their daily travel needs.

In 2000, approximately 9.8 percent of the region's households were identified as carless. In 2010, approximately 6.2 percent of households were identified as carless.