

Rethinking the Brain Drain
Census Shows Young Adult Population Grows Slightly on Long Island

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The [Population Reference Bureau](#) has called the “population pyramid” -- the proportion of people at each age, by sex -- the most important demographic characteristic for government policy. A population of young people needs a sufficient number of schools and, later, enough jobs and housing to accommodate them. Regions with a large proportion of older people must develop retirement systems, emergency services, medical facilities, and appropriate modes of transportation. Unfortunately, the age pyramid is one of the most poorly understood data sets produced by the U.S. Census Bureau. Often age group distributions are interpreted as an indicator of migration patterns, about which they tell us, at best, only a modest amount. Changes in the age distribution are also often used by policy advocates, who insist they are outcomes of particular public policies, even when evidence for such linkage is scarce.

Numerous observers and advocates on Long Island, for example, have repeatedly used age group population estimates to bolster a narrative that such data neither proves nor disproves: that young adults are moving away from the region in large numbers due to the high cost of living, particularly housing. It has been said repeatedly that declines in the number of young adults -- variously and, sometimes, arbitrarily defined as “18-34,” “25-40,” or, more recently “35-44,” -- is a clear indication of a “brain drain:” the movement of human capital out of the region due to external factors.

In 2004, the Long Island Index juxtaposed the drop of approximately 140 thousand 18-34 year-olds in Nassau-Suffolk in the 1990s with a poll showing that 53 percent of Long Islanders in that age group have considered leaving the region. When the Long Island Housing Partnership dedicated a dozen affordable housing units in Southampton town in 2007, a spokesperson claimed they were addressing the loss of young people. “We're losing our young from the ages of 20 to 34 at five times the national average. People can't stay because of the high cost of living.” The Long Island Association has repeatedly stated that “the younger portion of that [Long Island's] work force is disappearing.” *Newsday* editorialized in June of 2010 that “Unless Long Island stops this brain drain, it won't prosper.”¹

The reality of living in a high cost region makes the link between high housing costs and the notion of a “brain drain” appear logical to the public. The Rauch Foundation, sponsor of the Long Island Index, conducted a survey of Long Islanders in 2005 that found 89 percent of respondents reporting that the issue of young people moving away from the Island because of the high cost of living was a serious to extremely serious problem.

In fact, though, explanations for the changes in the size of age cohorts from decade to decade amount to little more than speculation. Census estimates of the population by age

group tell us next to nothing about if, when, where, or why people are moving or “disappearing.” The data is a static picture of population age groups as they exist in a given geography on a given day (April 15, 2010, say). Although the American Community Survey does ask about previous residence of householders, that data is not linked to the age group data when reported. Only a sophisticated cross-tabulation of Census’s Public Use Micro Sample data yields information on migration by age group.

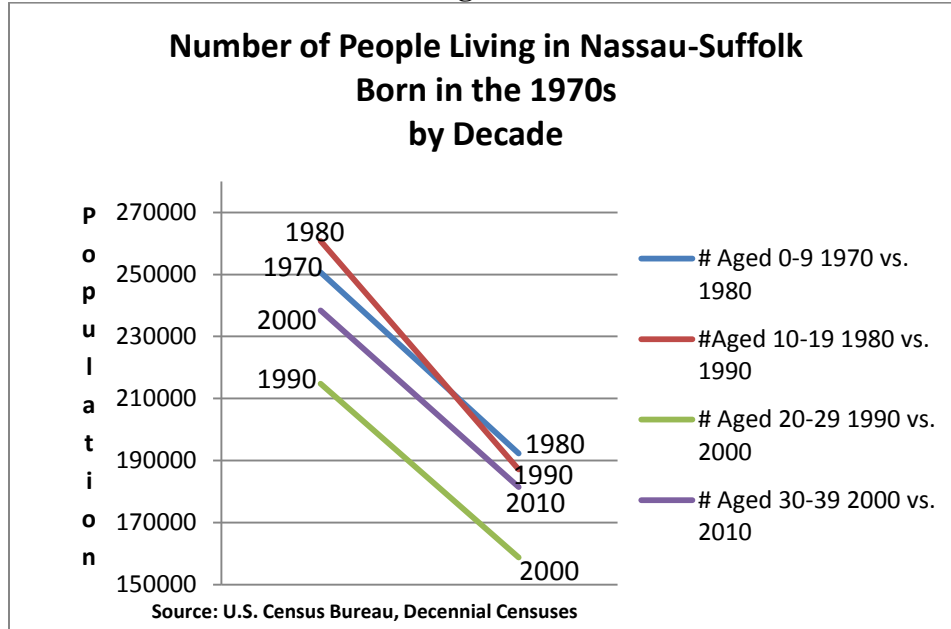
Demographers have long believed that the primary driver of changes in age cohorts are changing patterns of birth and death rates. Figure 1, for example, shows that in 1980, there were 141,917 fewer children below the age of 10 than in 1970 in Nassau-Suffolk (484,145 vs. 342,228). This correlates roughly with the decline of 150,262 in the number of 10-19 year-olds between 1980 and 1990 (497,360 vs. 347,098), the decline of 110,663 in the number of people between 20 and 29 years of age in the 1990s (408,434 vs. 297,771), and the decline of 107,657 in the number of people between the ages of 30 and 39 in the 2000s (441,008 vs. 333,351).

Table 1
Nassau-Suffolk Age Groups by Census Year

	1940	1950	1960	1970	1980	1990	2000	2010
0-4	38,759	106,307	231,946	209,383	156,270	171,801	186,932	159,872
5-9	44,154	81,046	235,522	274,762	185,958	162,267	205,882	181,224
10-14	49,957	57,367	200,149	294,856	236,979	167,251	197,371	199,974
15-19	49,330	51,754	119,335	244,606	260,381	179,847	171,220	201,062
20-24	45,499	59,507	75,614	157,172	207,376	195,972	143,863	169,747
25-29	44,714	78,605	105,637	143,506	182,721	212,462	153,908	152,920
30-34	50,710	81,970	155,732	141,840	194,493	217,940	200,355	156,321
35-39	53,199	78,942	176,045	158,946	174,278	204,484	240,653	177,030
40-44	51,816	74,780	154,442	186,305	150,131	199,988	234,017	213,943
45-49	46,909	65,255	125,383	184,411	153,224	167,323	204,114	238,377
50-54	38,750	59,401	100,477	153,916	169,203	138,422	188,466	225,390
55-59	27,960	48,152	81,294	119,699	157,896	133,172	145,408	188,341
60-64	22,074	37,824	67,718	92,540	120,679	133,667	113,325	162,207
65-69	16,754	27,892	55,504	69,561	89,456	114,726	101,199	118,231
70-74	11,738	18,847	40,528	55,400	66,014	83,236	96,668	88,059
75+	11,780	21,245	41,629	72,621	100,754	126,654	170,532	200,184

This makes perfect sense. Individuals born in the 1970s would be in their teens in the 1980s, in their 20s in the 1990s, and in their 30s in the 2000s. If there were 150 thousand fewer children aged 0-9 in the 1970s, one would expect there to be over 100 thousand fewer people in their 30s in the 2000s.

Figure 1



It is, in other words, most likely the case that the sharp decline of twenty somethings in the 1990s and of thirty-somethings in the 2000s is largely the result of the “birth dearth,” a sharp decline in the birth rate that Nassau-Suffolk county experienced in the 1970s, the decade after the nationally celebrated “baby boom” from 1947 to 1964. Figure 1 illustrates clearly almost identical negative slopes between the decades as the 1970s birth cohort wends its way through the life cycle.

Indeed, even as critics decry the “brain drain,” it looks like Nassau-Suffolk is starting to partially reverse this pattern. Because birth rates rose in the late 1980s and early 1990s, there has been a substantial increase in the number of people between 15 and 24 years of age. The population aged 15-19 increased by 17.4 percent, or 28,842 between 2000 and 2010, while the 20-24 year-old group increased by 18 percent, or 25,884 (see Figures 2 and 3), for a total increase of 15-24 year-olds of 54,726 over the last ten years. If the correlation between housing costs and people in their early 20s were strong, it is unlikely that during a period when the price of a median single-family home increased by 66 percent, from \$220,000 in 2000 to \$366,000 in 2010, that the population of twentysomethings would increase as well.

Figure 2

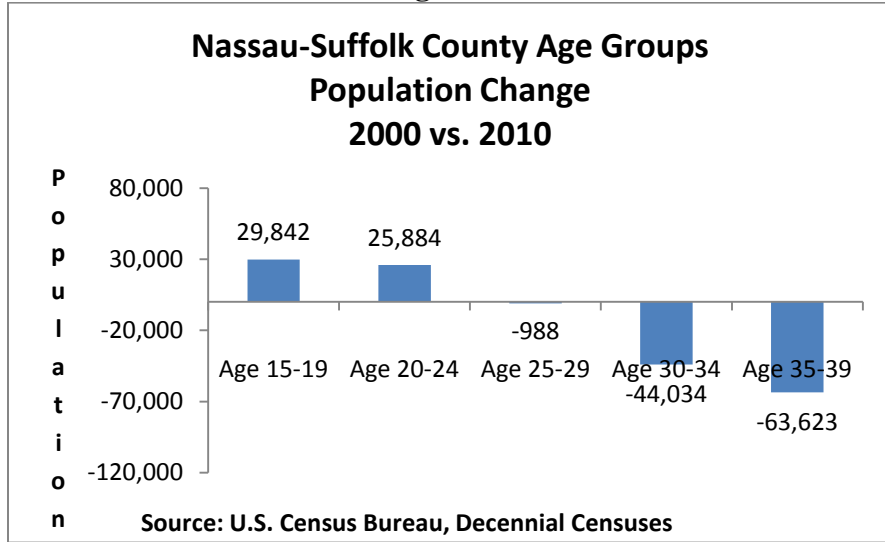


Figure 3

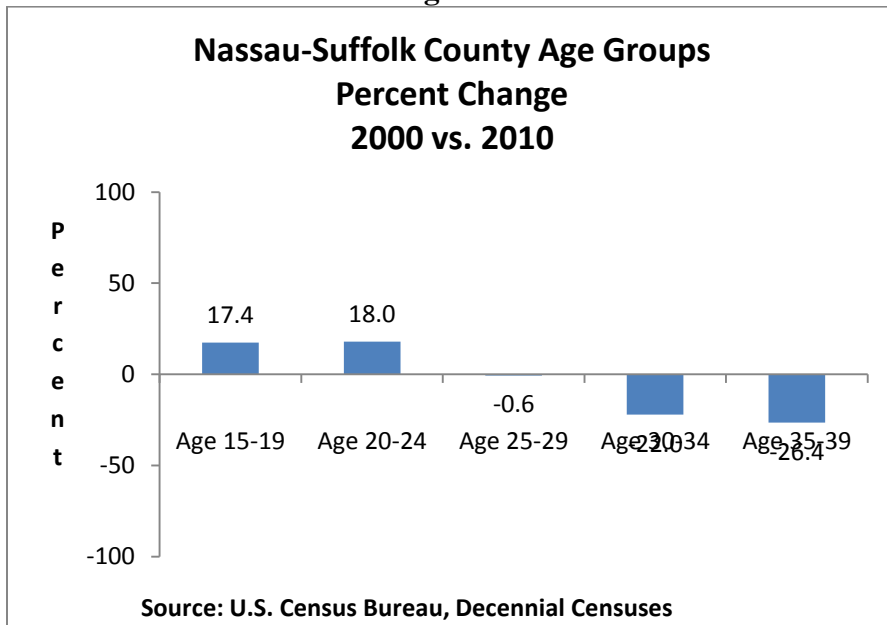
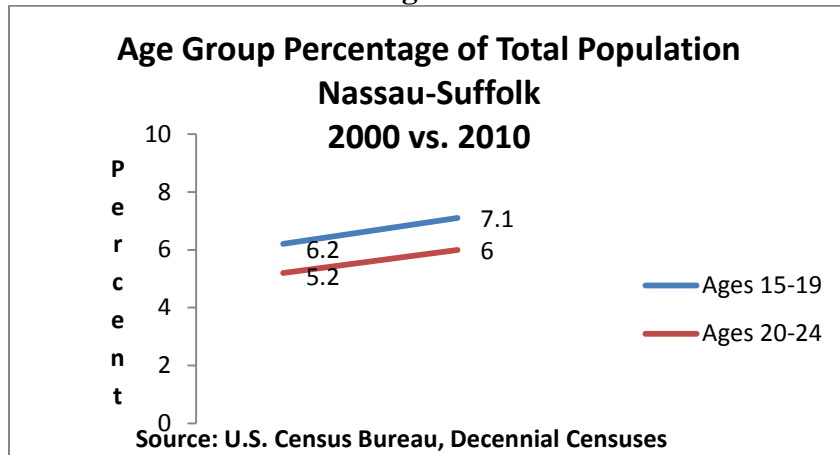


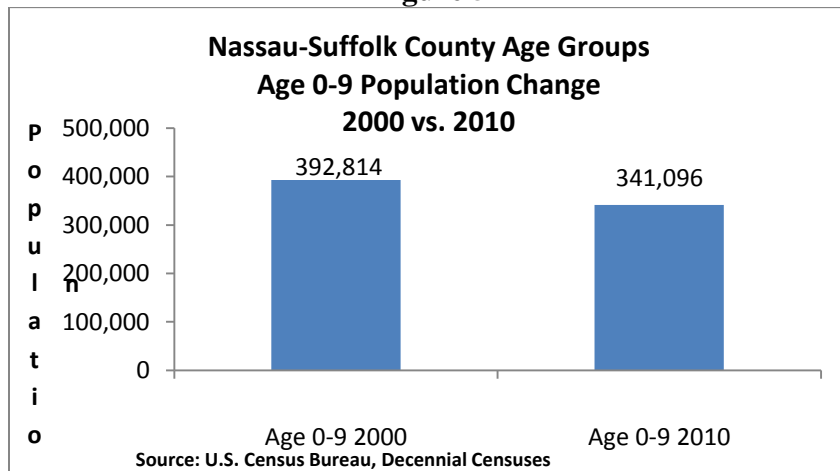
Figure 4



As a percentage of the total population in Nassau-Suffolk, the 15 to 19 year-old age group increased between the 2000 census and 2010 from 6.2 percent to 7.1 percent. The 20-24 year-old age group increased from 5.2 percent of the total population in 2000 to 6 percent (see figure 4).

Note that the pattern illustrated in this data was the driving force behind the decisions of several Suffolk county school districts to build or reopen additional high school buildings in the 2000s (e.g. Sachem, Smithtown). Undoubtedly, the pattern that shows 51,718 fewer children in Nassau-Suffolk aged 0-9 in 2010 than in 2000 will also drive high school consolidation at some point in the near future (see figure 5).

Figure 5



All of this is not to discount the importance of migration patterns or the attraction of a region to those in particular age groups. But misinterpreting data can lead to misplaced policy priorities. For example, as previously illustrated, it is generally believed that having young adults move away from a region is bad, and that policies should be put in place (e.g. “hip” downtowns, sports stadiums, and entertainment venues, smaller, attached housing units) to reverse it. *Newsday* even asked in a 2007 editorial “Can we

create a social environment more conducive to finding a date? Why does sex and the city seem an exciting combination, while sex and the suburbs is defined by desperate housewives?”

But numbers from the U.S. Census Bureau’s American Community Survey recently crunched for the Suffolk County Comprehensive Plan show that 74.1 percent of 15-24 year-olds who move out of Suffolk are enrolled in college. When looking at only the primary college-aged group -- that is, 18-21 year-olds -- the percentage of those leaving Suffolk enrolled in college rises to 85.4 percent (see Figure 6). Suffolk county had a college-going rate among high school graduates of 86.5 in 2010. Are high rates of college going bad, or something that needs to be reversed? Many of these college goers return to Long Island, sometimes after stints in New York or other cities as young careerists, helping raise the median household income of migrants coming to Suffolk county to \$81,471 (2008 dollars), compared to only \$67,241 for those leaving Suffolk (see Figure 7).

Figure 6

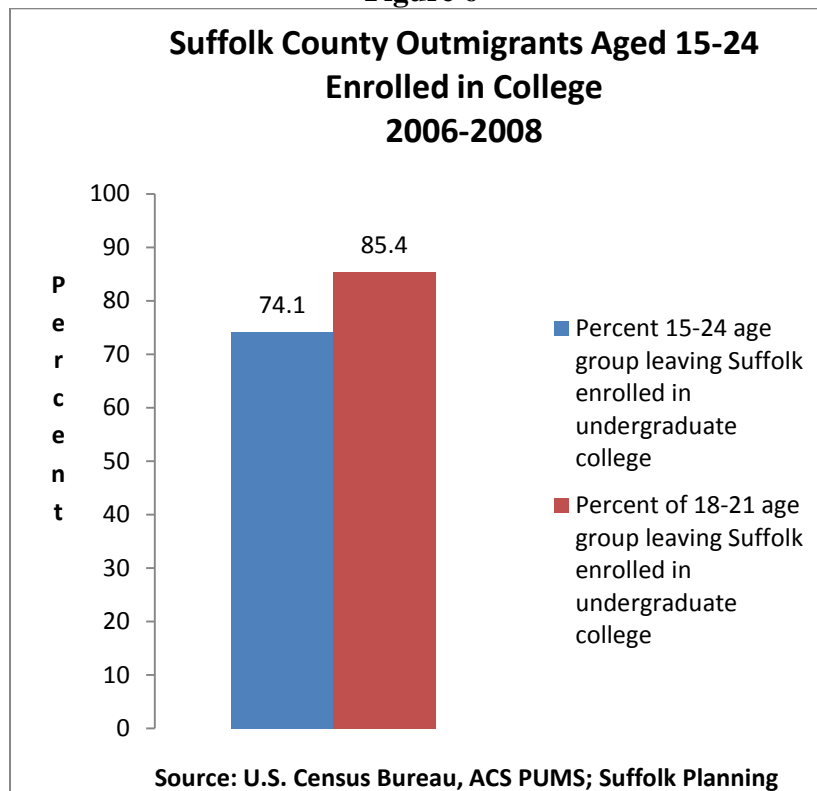
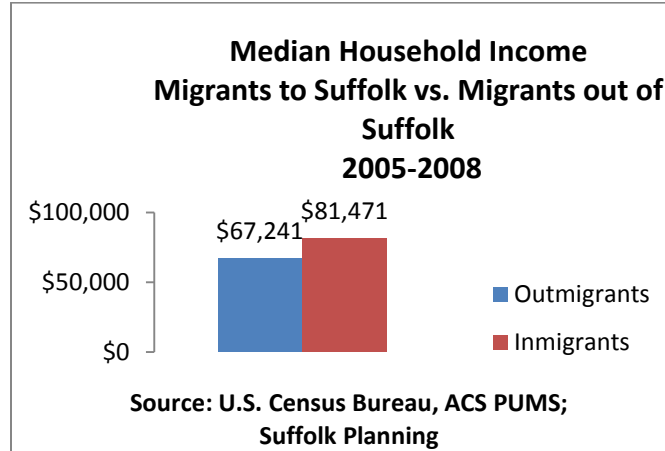


Figure 7



Another finding from the Suffolk Comprehensive Plan on domestic migration (movement within the United States) seems to mitigate against received wisdom. While the age group with the largest net domestic migration out of Suffolk was the largely college-going 15-24 year-old age group, the second largest was the 55-64 age group. As a percent of base year population (2005), the 15-24 year olds had a net loss of 7.1 percent, followed by the 55-64 age group (-4.3), the 45-54 age group (-3.7), the 35-44 age group (-2.1), the 25-34 age group (-1.5), and the under 15 age group (-0.6). The 65 and older age group had a 1.4 percent net domestic migration gain (see Figure 8).

In other words, the age groups widely believed to be the most in danger of shrinking or “disappearing” due to outmigration are, according to the best available data, the least in danger of doing so. In general, the 25-34 and 35-44 year-old age groups are the smallest net domestic migration “losers” because it is a relatively stable time in life. If people marry, it is typically in these years that they do so, caring for young children and moving up the ranks of a career or job. Those in this age group that don’t marry still typically make investments in housing.

Figure 8

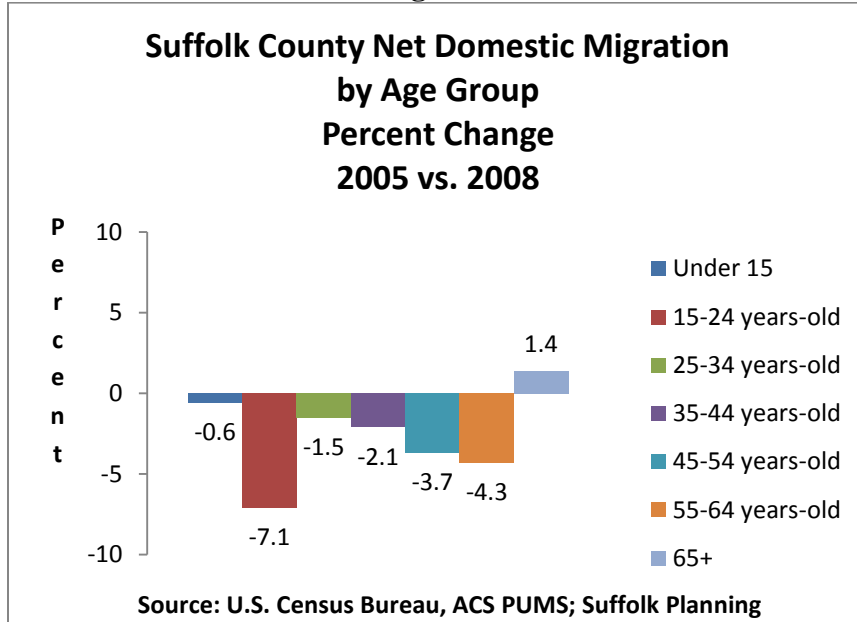


Figure 9

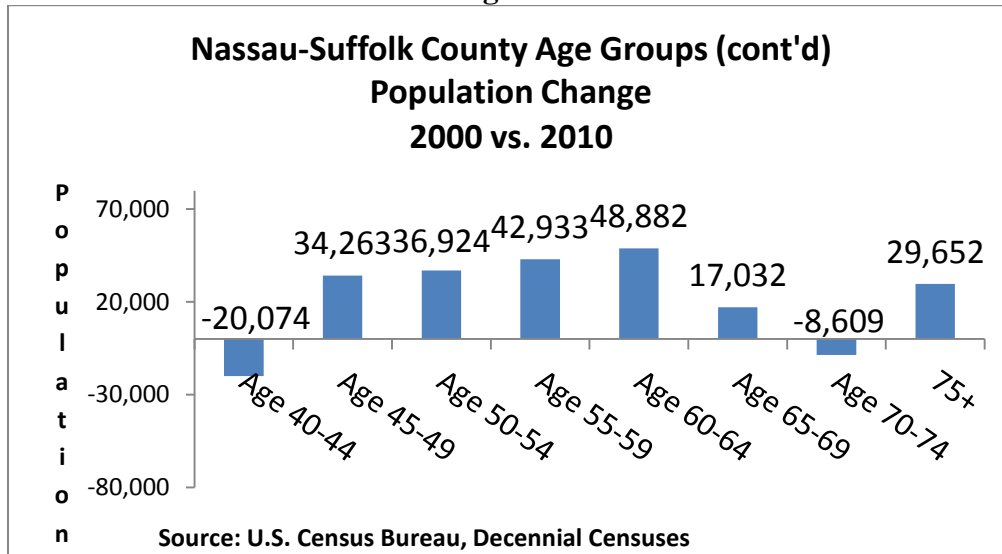
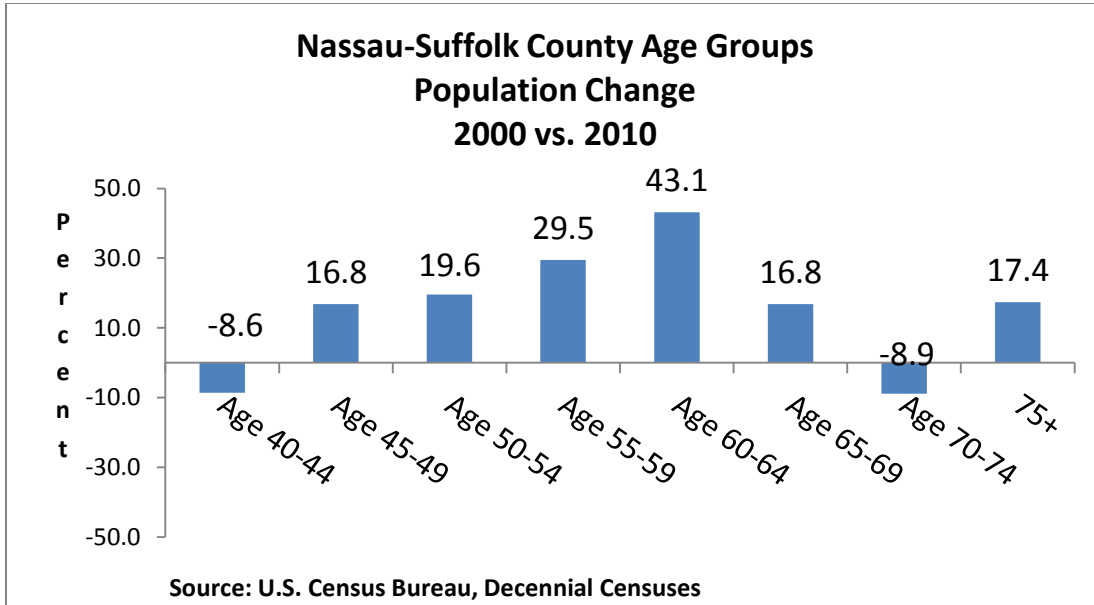


Figure 10



Demographic data can be a useful tool for policy makers attempting to clarify complicated public issues. But data that is not properly understood, or that is misinterpreted, can stymie public policy debate.

As far back as 1978 *Newsday* screamed in a headline that “An Exodus of the Young Threatens Life-Style.” In fact, the 1970s saw a sharp increase in the number of young adults in Nassau-Suffolk, as the population aged 15-39 grew by 178,179, or 21 percent, from 846,070 in 1970 to 1,019,249 in 1980.

Then, as now, life trumps perception.

ⁱ “Long Island looks to get youthful makeover,” *Newsday*, Sept. 11, 2007; “LI needs to keep younger workers,” *Newsday*, January 27, 2005.