

LONG ISLAND INDEX

Long Island's Transformation, 1970-2010

Interactive maps of Long Island show historical trends in population growth, demographics, education, income, and employment

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All maps were created by the CUNY Mapping Service at the Center for Urban Research at The Graduate Center / CUNY. For more information about their work, see www.urbanresearch.org.

Long Island's Transformation, 1970-2010

The transformation of Nassau and Suffolk counties from World War II to the present was described by the Long Island Index in *Long Island Profile 2012*. That report described the powerful forces that shaped the Island's economy, population and landscape into a complex postwar suburb. Now, through a series of interactive maps at <http://historiccensus.longislandindexmaps.org>, we can see how this evolution affected individual communities in different ways, and how patterns emerged that resulted in a different social and economic geography.

The maps show population characteristics by Census tract across Long Island in 1970, 1980, 1990, 2000 and 2010¹. By comparing the decades, we get a closer look at how we arrived at Long Island's current population distribution by age, race, education, income, poverty and housing type.

By 1970, most of the great migration from New York City to Long Island had already taken place. From 1950 to 1970, the combined population of Nassau and Suffolk more than doubled in size, growing by over 1.6 million people as suburban development had pushed well into central Suffolk County. In the forty years that followed, population grew by less than 300,000. As these maps show, however, this modest increase in total population masked dramatic changes in its composition.

The aging of the Baby Boomer generation went from overwhelming schools and generating successive waves of housing development to driving the need for expanded health care and retirement activities. The population became much more racially and ethnically diverse, and more highly educated. Average incomes rose initially before stagnating in the 1990s and 2000s. An economy anchored in manufacturing shifted to both high-wage and low-wage service jobs, particularly in sectors such as health and retail that served an aging and more affluent population. The maps provide detailed pictures of both the magnitude and texture of these changes.

Population Growth and Density

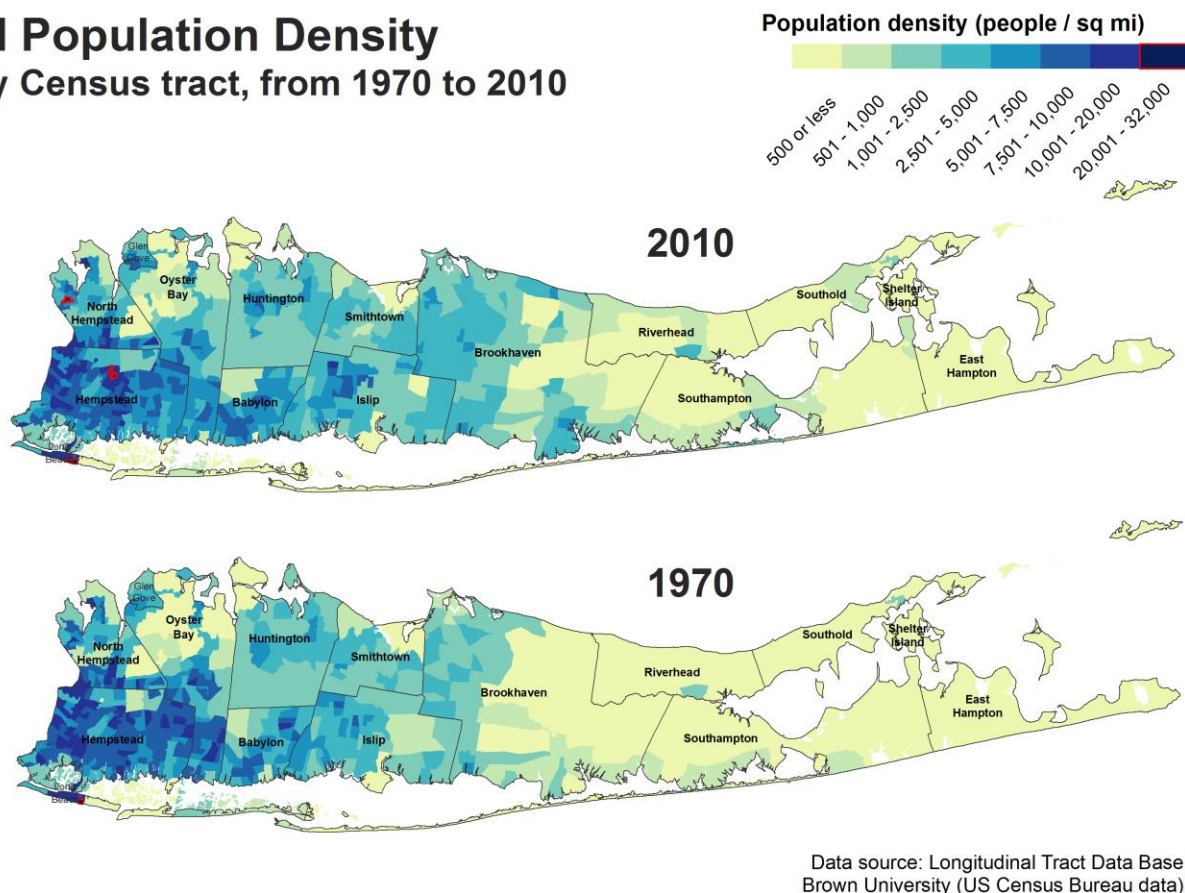
Population growth after 1970 occurred almost entirely in central and eastern Suffolk County, continuing the eastward development of farms, fields and forests into subdivisions and single-family homes. The town of Brookhaven alone added 243,000 people, almost as much as Nassau and Suffolk combined. In 1970, most of this large town in the center of the Island had less than 500 persons per acre. With each succeeding decade, the western half of the town grew denser while the central and eastern portions added population. By 2010, all of its north and south shores and much of its interior had modest increases in population density.

The town of Islip added 57,000 people over this decade, while the five East End towns increased their population by 52,000. Nassau County's population began to decline after 1970, before rebounding after 1990.

¹ Data for income (including poverty), educational attainment, and employment reflect the 5-year period of 2008-2012.

The following map compares density patterns by Census tract (people per square mile) in 1970 and 2010.

LI Population Density by Census tract, from 1970 to 2010



Unlike the development of Nassau and western Suffolk in the 1950s and 1960s, much of which consisted of small homes on quarter-acre lots, most of this later growth occurred in medium and large lots, resulting in little change in overall density levels but spreading relatively modest population growth over a large land area. It also began to encroach on some of the most environmentally sensitive lands covering Long Island's sole-source aquifer, the Island's main source of fresh drinking water. Many of the new residents were not migrants from New York City, but the children of those who had come in previous decades.

One aspect of life on Long Island has changed very little over the decades. Eighty-one percent of households owned their own homes in 1970, compared to 79% in 2010. Most of these are single-family homes, and only a handful of communities have more than 30% of their homes occupied by renters. These rentals are primarily concentrated in the same communities as forty years ago.

Age

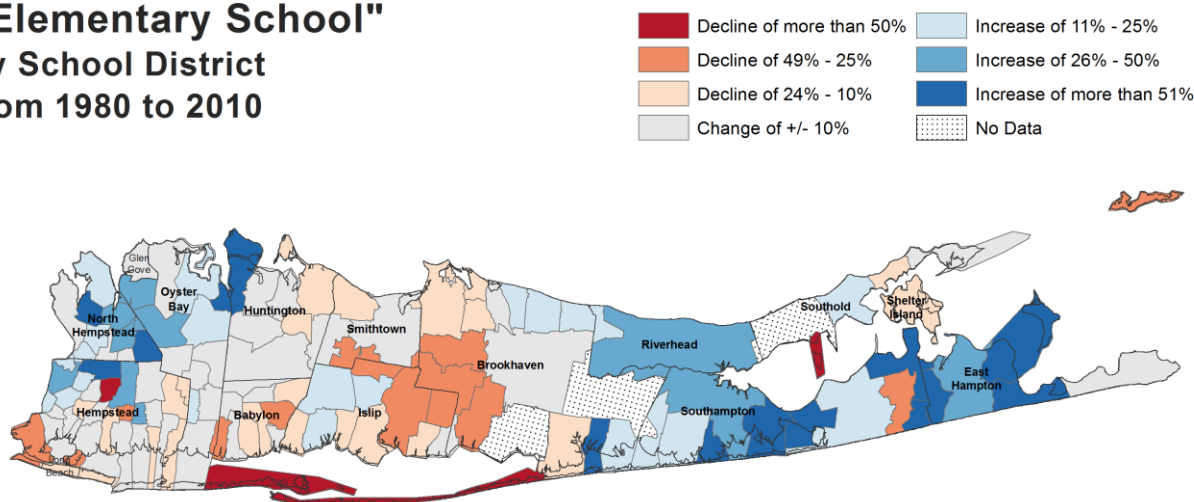
Among the most dramatic changes depicted by the maps are the changes in Long Island's age profile over the last forty years. Most of these changes result from the aging of the two largest generations in America today—the Baby Boomers born between the late 1940s and early 1960s, and the Millennials,

most of them children of Boomers born between the late 1970s and early 1990s. These have and will continue to have an outsize influence on housing construction, job creation, and health and education needs.

The first big change to occur was the decline in Long Islanders under the age of 18 between 1970 and 1990 as the Baby Boom generation went to college and entered the labor force. Interestingly, the largest 1970 concentrations in this age group were in the center of the Island stretching from eastern Hempstead through western Brookhaven, the areas that saw the largest increase in population in the previous decades. By 2010, this age cohort was more evenly distributed, with the largest percentages along the north shore. The impacts of the decline can be seen most directly in the changes in school population. Most school districts saw big losses, particularly in the 1980s, and especially in parts of Smithtown, Brookhaven, Huntington, Islip, Babylon and Southampton. The number of children rebounded somewhat in the 1990s and 2000s as the Millennials took their place in Long Island's classrooms.

The following map (available on www.longislandindexmaps.org) shows the percentage increase or decline in enrollment in elementary school grades (kindergarten through fifth grade) by school district from 1980 to 2010.

Percent Change of Students in Grades K - 5 "Elementary School" by School District from 1980 to 2010



Data source: NYS Education Department.

The number of young adults followed the change in number of children. The number of 18-24 year-olds declined between 1980 and 2000, and the number of 25-34 year olds from 1990-2010. These demographic changes were compounded by other factors, such as the shortage of affordable rental housing. Nassau and Suffolk saw larger declines in young adults than the nation or similar parts of the metropolitan region. While the declines occurred everywhere, they were more pronounced in areas like the towns of Smithtown and Huntington. Young adults are somewhat more concentrated along Long Island's south shore in places like Long Beach, Hempstead and Babylon, in Southampton, and in some college communities like Westbury and Stony Brook.

The share of 35-44 year olds peaked in 2000, and those in this age group were distributed fairly evenly across Nassau and Suffolk. The biggest increases occurred in Long Beach, Smithtown and Southampton. The number of adults in their late 40s and early 50s grew through 2010, and increased most in Brookhaven, Islip and Smithtown. This age group is entering peak earning years, and can be expected to own in more expensive housing markets.

The share of adults over 55 grew in every decade from 1970 to 2010, in part due to greater life expectancy, and will grow even more rapidly in coming years as the Baby Boomers enter retirement. The largest increases occurred in the center of the Island, particularly in the town of Oyster Bay. The East End has always had a somewhat higher share of older adults than other parts of Long Island, and is still reflected in the age distribution map for 2010.

Race and Ethnicity

The maps help document the history of two of the most fundamental characteristics about Long Island today. The Island is far more racially and ethnically diverse than either its past or current image portray, yet it remains one of the most racially segregated areas in the nation. Whites declined from 89% of the population in 1980 to 69% in 2010.² Only in the towns of Oyster Bay, Smithtown, Southold and Shelter Island do whites still comprise over 80% of the population. This is the result both of out-migration, particularly of people in their retirement years to Florida and other locations, and of strong in-migration from blacks, Hispanics and Asians. Over the same period, blacks increased from 6% to 9%, Hispanics from 4% to 16%, and Asians from 1% to 5%.

The biggest changes occurred after 1990, when the number of both Hispanics and Asians nearly tripled in size, and the black population grew by 42%. Much of this was driven by the same forces that led earlier waves of Italian-Americans, Irish-Americans and others to move to Long Island. Immigrants and their children looked to move out of the city for a better way of life. But this was also reinforced by changing national patterns of immigration. Immigrants are now much more likely to settle directly in suburban areas, rather than in central cities, speeding the pace of demographic change in places like Long Island.

Even with this increase in diversity, segregation remains a current as well as a historical condition. The New York metropolitan region is by some measures one of the most segregated in the U.S., and Nassau and Suffolk Counties are the most segregated parts of that region.³ The largest concentrations of blacks remain in parts of the town of Hempstead and Babylon, and to a lesser extent in areas of Islip and Brookhaven. Blacks have lost share in parts of the East End, notably Southampton and Riverhead.

² Data for 1970 is not completely comparable to later years for race and ethnicity. In 1970, the Census Bureau did not cross-tabulate data on Hispanic ethnicity *and* race, whereas in 1980 and subsequent decades the Bureau tabulated results for Hispanic origin combined with a person's race.

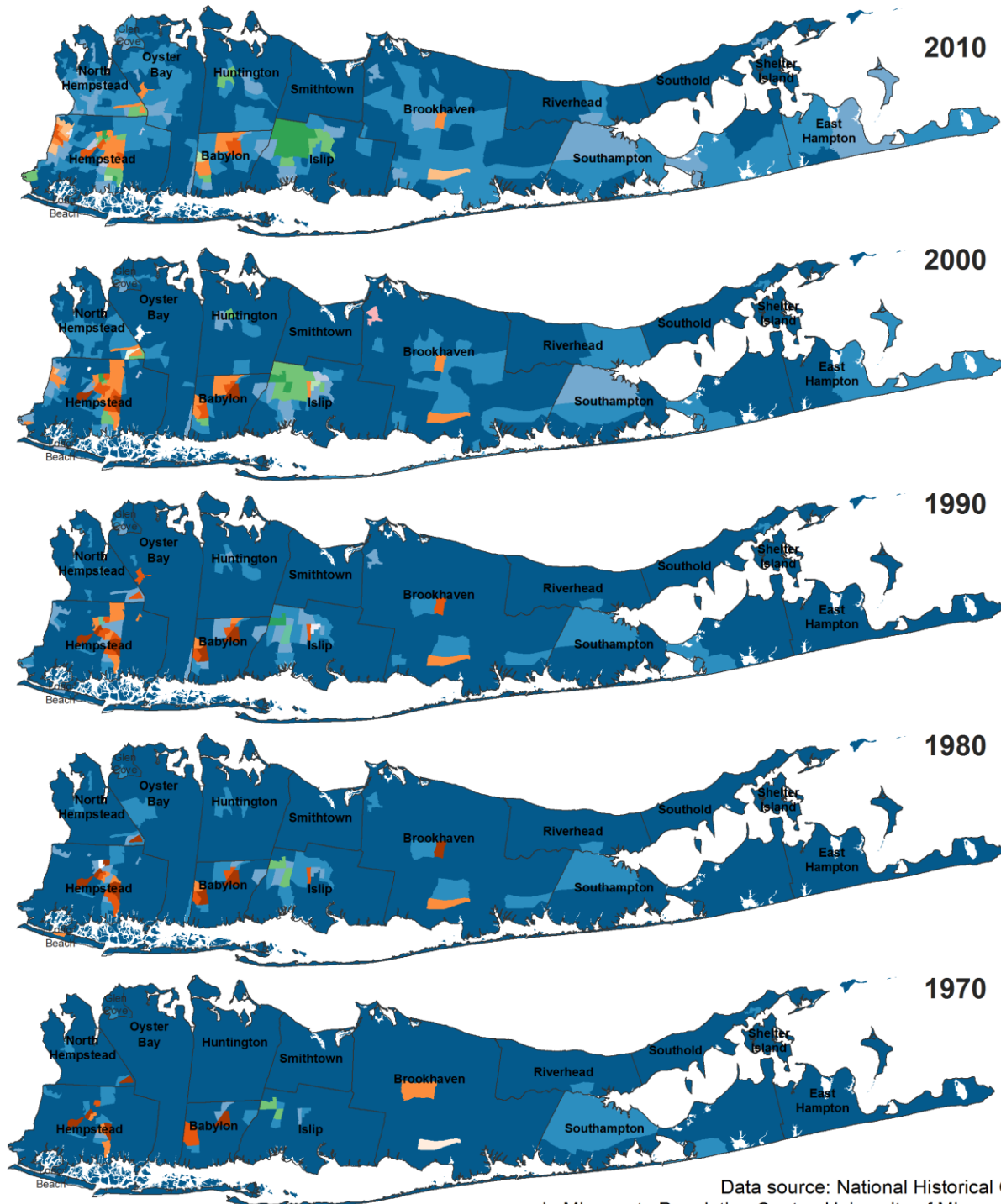
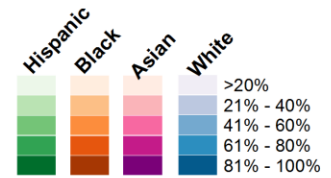
³ ERASE Racism, Housing and Neighborhood Preferences of African Americans on Long Island (2012), 1,10.
http://www.eraseracismny.org/storage/documents/FINAL_ERASE_Racism_2012_Housing_Survey_Report_web_version.pdf

The Hispanic population spread out from villages in central Hempstead and Babylon to other parts of these towns, and now has large concentrations in parts of Islip, Southampton and East Hampton. School district populations show even greater concentrations within these towns. In percentage terms, five East End towns had the largest increase in the Hispanic share of their population.

Asians are most highly concentrated along the north shore of Nassau County in the towns of North Hempstead and Oyster Bay, and to a lesser extent in northern Brookhaven. The largest increases over the last 30 years took place in East Hampton, Southampton, Islip and Glen Cove.

The maps on the following page show the changing concentrations of predominant racial/ethnic groups by tract for each decade from 1970 through 2010.

LI Population by Plurality Race/Ethnicity by Census tract, from 1970 to 2010



Data source: National Historical GIS
via Minnesota Population Center, University of Minnesota.

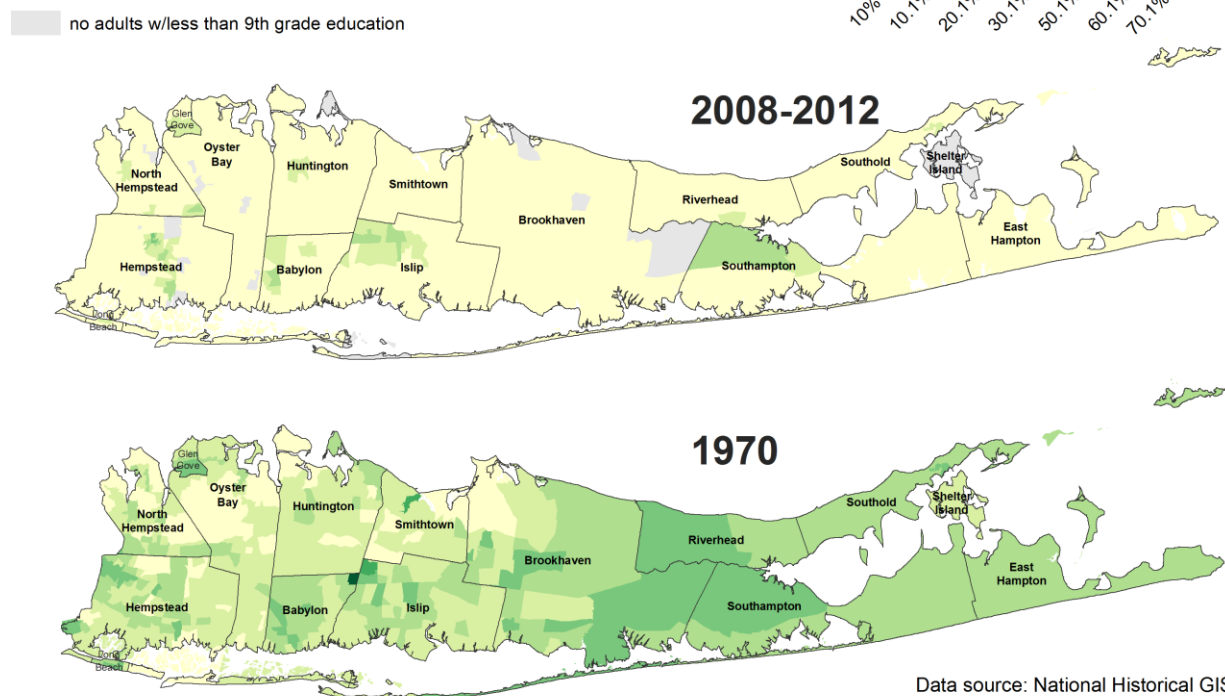
Education

One of Long Island's greatest assets is its highly skilled and educated workforce. In today's global economy, regions with the highest levels of education are the most competitive, most productive and have the highest incomes. Educational attainment in Nassau and Suffolk exceeds that of the metropolitan region as a whole, New York State and the U.S. For example, 17% of Long Island residents have graduate degrees, compared to only 11% for the nation.

Education levels are far higher than they were 40 years ago. In 2010, 37% of Long Island adults over the age of 25 had at least four years of college, more than double the 15% of adults in 1970. The biggest increases happened between 1970 and 1990, when attending college started becoming the expectation rather than the exception for high school graduates. Large increases were widespread across the Island's landscape, with highest shares of college graduates now in the towns of Huntington, N. Hempstead, Oyster Bay and East Hampton.

While the number of college graduates were rising, the share of adults with very low education levels—less than a 9th grade education—dropped from nearly one in five adults in 1970 to just 5% in 2010. (The two maps below highlight this decline.) Most of the change occurred before 1990. The declines were most pronounced on the East End, where the shrinking agricultural economy reduced the number of jobs that require little formal schooling. The only towns that still have at least 10% of their populations with less than nine years of schooling are Southampton, Islip, Babylon and Hempstead.

Decline of adults with very low education levels by Census tract, from 1970 to 2008-12



Data source: National Historical GIS
via Minnesota Population Center, University of Minnesota.

The large and diverse middle tier, including those with some high school, high school graduates and those with less than four years of college, was relatively stable at about two-thirds of Long Island's adults until 1990. While the number of people graduating high school and entering college increased, these numbers were balanced by the increase in those going on to complete four years of college. After 1990, the share declined from 68% to 59%. The only town that increased in share was Riverhead.

Income and Poverty

The income of the average household on Long Island rose along with education levels. The median household income, adjusted for inflation, rose in all of Long Island's 13 towns between 1980 and 2010.⁴ These ranged from an 18% increase in Hempstead to a 58% increase in Southampton. Overall, the largest increases occurred in Brookhaven and the five East End towns. The highest incomes remain on Long Island's north shore in the towns of North Hempstead, Oyster Bay, Huntington and Smithtown.

The largest share of improvement was in the 1980s. Since 1990, median incomes have been much more variable, going up in some places and down in others. Overall, incomes have been largely stagnant over the last 20 years. This is consistent with national and regional trends, in which wage growth has been sluggish and incomes have lagged for all but the most affluent families. Deep recessions in the early 1990s and 2007-2009 also constrained income growth, both nationally and on Long Island.

Mirroring these trends, poverty on Long Island declined from 5% in 1970 to 4.2% in 1990, but then rose once more to 6 % in 2008-2012.⁵ The last twenty years have seen a suburbanization of poverty across America, and Long Island is no exception. This is consistent with stagnating wages and incomes, but also seems to result from changing demographics and economies on Long Island and in other suburbs. Poverty is more highly concentrated in several communities, particularly in central Hempstead, Glen Cove, and parts of Babylon, Islip, Brookhaven, Southampton, East Hampton and Riverhead.

Employment

Changes in education and income can be understood by seeing how the types of industries Long Islanders work in changed over the same period. For years after World War II, Long Island's economy was driven by two major activities—commuting to jobs in Manhattan and the Island's defense and aerospace industries. Both types of jobs tended to be high-paying, and both have declined as a share of employment in recent decades. At the same time, a number of industries grew to serve Long Island's changing population. All of these trends can be seen in the changing industry mix and location of Long Island's workforce.

Perhaps the clearest manifestation of these changes can be seen in the divergent paths of manufacturing and health care. In 1970, 21% of Long Island's employed residents worked in manufacturing. People working in this industry tended to live in eastern Nassau and western Suffolk counties near industrial centers such as Grumman industries in Bethpage and related manufacturing

⁴ Median household income by tract for 1970 is not available from the National Historic GIS data website.

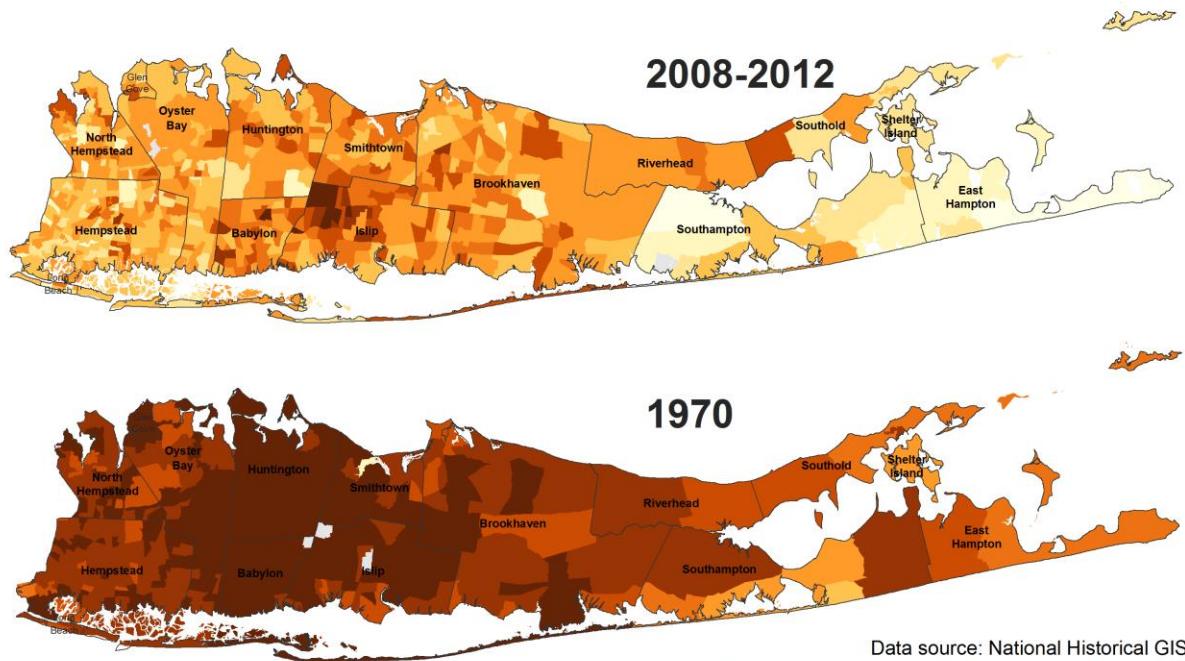
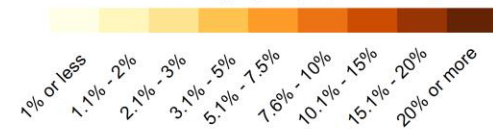
⁵ Poverty data is a five-year average for 2008-2012, rather than 2010.

near the Route 110 corridor. By 2010, manufacturing employed less than 7% of Long Islanders, a share that declined steadily with each decade through 2000. The maps below highlight these changes.

Decline of adults employed in the manufacturing industry by Census tract, from 1970 to 2008-12

no adults age 16+ employed in manufacturing

% of each tract's employed population age 16+



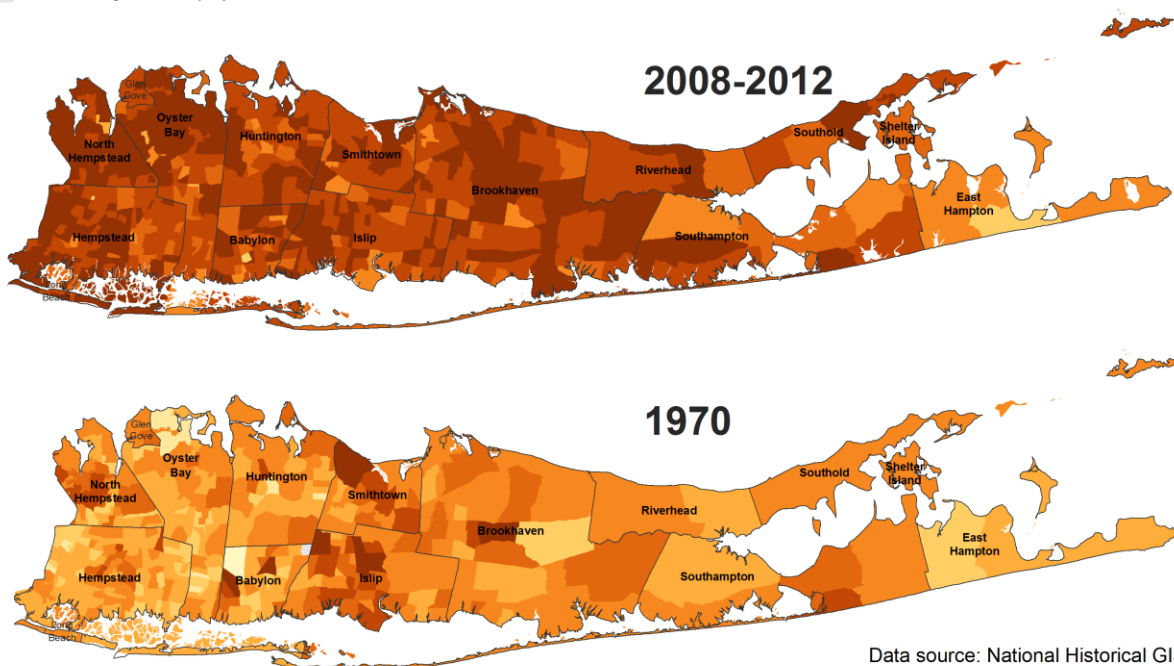
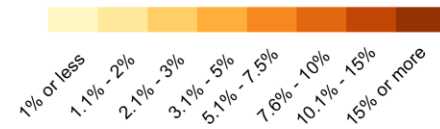
Data source: National Historical GIS via Minnesota Population Center, University of Minnesota.

Meanwhile, health care employment steadily increased as medical care expanded for a variety of reasons, including an aging population and advances in medical treatments. In 1970, health care and social services employed less than 6% of Long Island's workforce. By 2010, it was its largest industry employing over 14%. There are no particular concentrations, with hospitals, medical offices and their workers dispersed throughout Nassau and Suffolk. The maps below show the changes in employment in the health care and social services industries.

Increases in employment in health care & social services by Census tract, from 1970 to 2008-12

no adults age 16+ employed in health care/social services

% of each tract's employed population age 16+



Data source: National Historical GIS
via Minnesota Population Center, University of Minnesota.

Persons employed in the finance industry tend to be clustered in Nassau County and the town of Huntington, particularly along the north shore. Many of these workers commute to finance jobs in Manhattan. Employment in this cyclical industry fluctuated, rising in some decades and declining in others, and now employs about 9% of residents. The composition of the industry has changed, however. There are fewer middle-management and clerical jobs, and real estate jobs have grown on Long Island rather than in Manhattan.

Other large or changing industries also show how Long Island has evolved. Education employs 12% of resident workers compared to less than 10% in 1970. After declining in the 1980s it grew from 1990-2010 as the school age population rebounded and as more people went to college. Retail expanded rapidly in the 1970s to support a growing and more affluent population, but has been declining since 1980 as a share of the population. Construction employs about 7% of residents Island-wide but a much higher share in many East End communities. Agriculture employs only 0.2% of Long Island's workforce, but in 1970 employed over 7% of residents in the East End towns of Riverhead and Southold.