

LONG ISLAND
INDEX



Long Island Index

2012

Profile Report

America's First Postwar Suburb Hits a Midlife Crisis

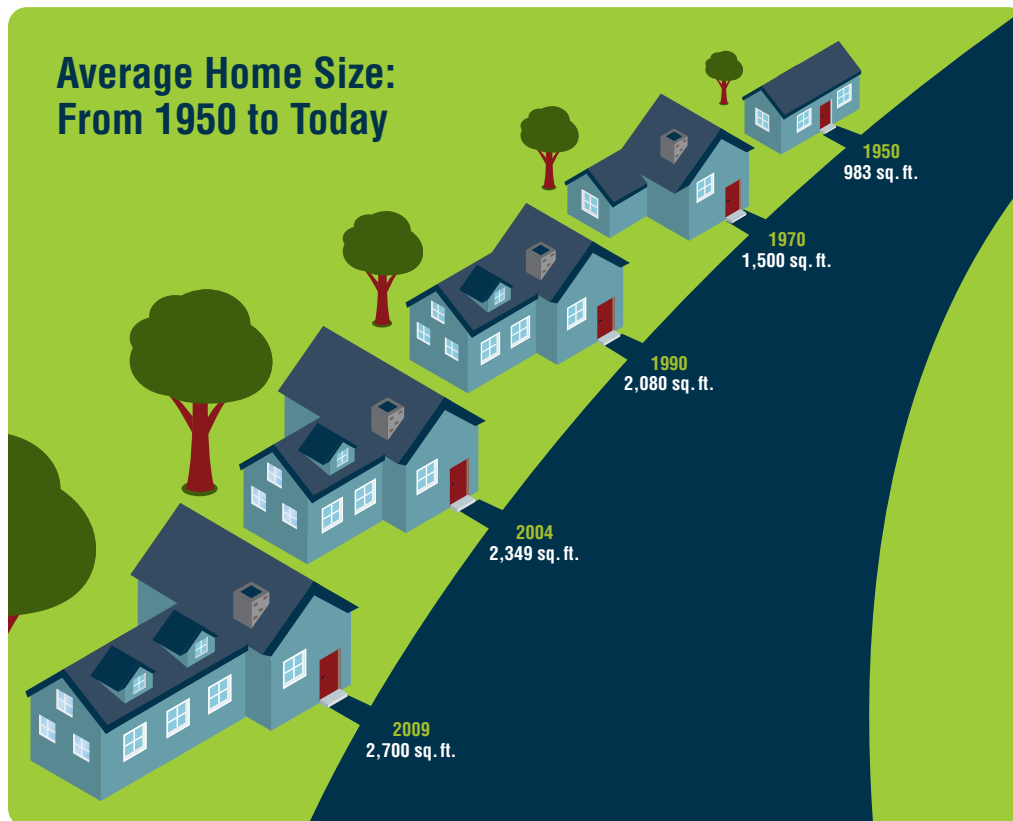


Sixty-five years ago, the modern suburb was born in a potato field in Nassau County. Levittown, built in 1947, was the first of countless mass-produced suburban communities that sprung up following World War II.

It harnessed itself to a powerful wave of demographic, social, economic and political forces that were reshaping America as well as the landscape of Long Island. Its inexpensive, detached housing with just enough room for a young family served pent-up demand that surged after World War II, with a helpful push from new federal legislation that subsidized single-family home ownership. Levittown's reliance on the automobile was perfectly in tune with a country enamored with the freedom of car travel, blessed with plenty of cheap oil, and embarking on a massive expansion of its highway system. Its potential to replicate and expand took advantage of a vast expanse of undeveloped farmland and created an

alternative lifestyle for many wishing to flee the city, whether they were seeking less congestion, better schools, more open space or more racially segregated communities.

Perhaps most of all, Levittown and the hundreds of developments like it epitomized the optimism of the era. Growth was a given. Upward mobility was expected. Each generation would do better than the one that preceded it. And, indeed, Long Island fulfilled this promise for most of the latter half of the 20th century. Population and jobs expanded rapidly. Incomes rose. Houses got bigger...much bigger. The one-car household became the two-, three- and four-car household.



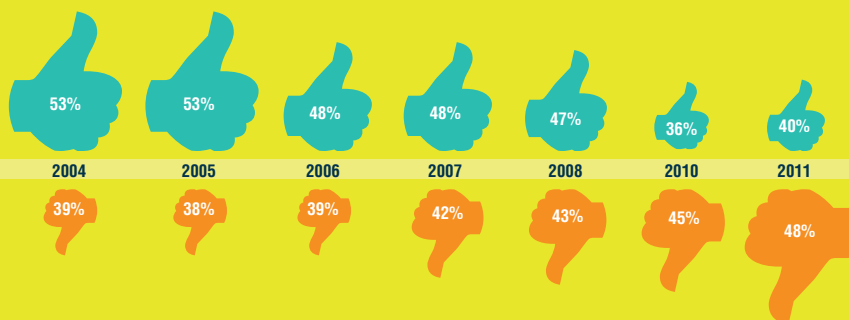
Over time, some of these attributes began to fray. Housing became more expensive and farther from jobs. Roadways became more congested while gas prices increased. Taxes rose. Open space dwindled. The poor fell farther behind. By the time the global financial crisis hit in 2008, there were growing concerns about whether Long Island could maintain its high quality of life, provide jobs and affordable housing to younger generations and compete in a changing global economy. Like the rest of America, Long Island was hit hard by the Great Recession. Challenges that had been slowly growing for years were exposed when the bubble burst. The wave of foreclosures and declining housing values challenged

We asked residents:

Generally speaking, do you think things in Nassau/Suffolk today are headed in the right direction or in the wrong direction?

Right Direction = 

Wrong Direction = 



one of the primary assumptions of suburban America—faith in the investment in home ownership, which is the primary asset of most families. Job and income losses accentuated growing doubts about future economic prosperity. Taxes remained high even as the economy declined.

By 2011, only 40% of Long Islanders thought that things in their county were headed in the right direction. While much of this is obviously a response to a weak global economy, optimism had been fading even before the recession. Annual surveys conducted for the Long Island Index have shown the share of Nassau and Suffolk residents who think things were headed in the right direction steadily declining over the course of the last decade.

The convergence of long-term trends and short-term crisis can be seen in a number of indicators, including job growth. For decades, jobs on Long Island grew at a healthy clip, even after population growth began to slow. As a result, fewer residents commuted to Manhattan and more residents relied on jobs on the Island. Since 2000, however, the number of jobs in Nassau and Suffolk has barely budged. There were 1,222,000 jobs in 2000 and 1,227,000 in 2010. Jobs peaked at 1,266,000 in 2007, so the recession came at the end of a decade of slow job growth. This raises questions, not only for how the region will recover from the recession, but for what will power its economy in the years ahead.

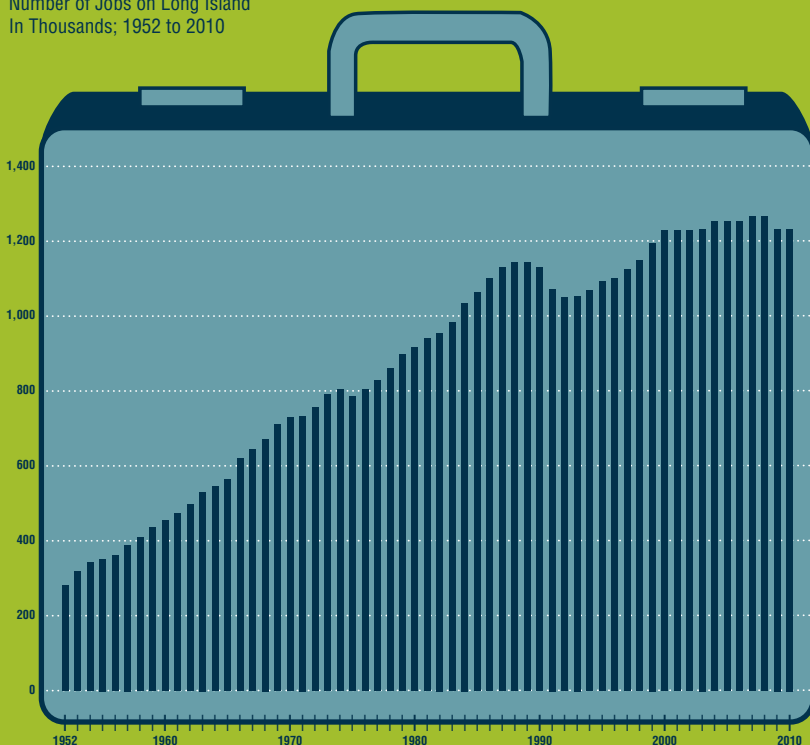
In spite of these troubles, Nassau and Suffolk County residents think highly of their community and way of life. In 2011, 83% were happy with the way their life

was going in general, and previous surveys found that they liked the communities they live in. This dichotomy—happiness with life as it is but worry about the future—frames Long Island's challenge in 2012. With this comes uncertainty over exactly where we stand in the present. In particular, it can be difficult to sort out long-standing problems from cyclical declines, and issues that are national in scope from those that have particular intensity on Long Island.

This profile of Long Island today, where it has come from and where it is headed, is intended to clarify that picture and provide a benchmark

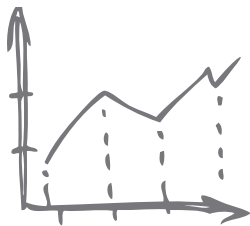
for future progress. It builds on nine years of research and analysis since the Index published its first Long Island Profile in 2003. Through annual publications of indicators and special analyses on topics ranging from downtown growth potential to school performance and finance, we have learned much about what is fact and what is fiction, what we understand and what we still need to find out. The profile also brings together recent information from the U.S. census and other sources, a current survey of residents and a new Innovation Index.

Job Growth
Number of Jobs on Long Island
In Thousands; 1952 to 2010



PEOPLE:

Demographic and Social Trends

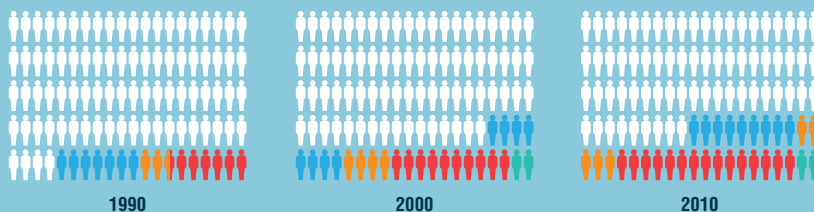


⇒ GROWING DIVERSITY

Any portrait of Long Island residents today needs to start with one well-documented fact. The Island is a far more diverse place than either its past or current images portray. Nearly one in three residents is of Hispanic, African-American, Asian or other non-White heritage. Along with the rest of America, this trend has been growing for decades. The pace of change, however, has been particularly rapid in the last 20 years. From 1990 to 2010, the share of non-white residents nearly doubled, growing from 16% to 31%.

Change in Race and Ethnicity 1990 to 2010

White non-Hispanic Black non-Hispanic
 Asian non-Hispanic Hispanic
 Other non-Hispanic



Much of this is due to a phenomenon that began to emerge in the 1990s as immigrants began to move in greater numbers to the suburbs, rather than settling first in cities and seeing second and third generations migrate to suburban communities. From 1990 to 2010, the number of foreign-born residents grew by 68%, compared to 9% for population overall. This had a particular impact on the growth of Hispanics and Asians.

Both of these groups have more than doubled since 1990, growing by 167% in the case of Hispanics and 150% for Asians. Black residents increased by 33%, while the White population declined by 11%.

A look at the national origin of immigrants living on Long Island shows how diverse this group is. Other than El Salvador, which represents 13% of the foreign-born population, no other country represents more than 6% of immigrants. Of the top 15 countries of origin, 13 are in Latin America or Asia.

Other suburban areas have experienced similar trends, and Long Island, along with southwestern Connecticut, still has the largest share of White residents, 69%, in the New York region. By contrast, 66% of the Hudson Valley's residents are White, and northern New Jersey's share is 57%.

In spite of its growing diversity, Long Island's legacy of residential segregation can be seen in the racial composition of Long Island's elementary and high schools.

Racial Composition in Long Island Schools 2010

White Black Hispanic Asian Native American or Multi-Racial

All Long Island Schools:



High Poverty Schools (10%):



Middle Poverty Schools (80%):



Low Poverty Schools (10%):



0% 25% 50% 75% 100%

Blacks and Hispanics constitute 90% of students in high-poverty schools but only 23% in schools with medium poverty rates and 9% in schools with low-poverty rates. The impact that this has on education and career outcomes is explored below.

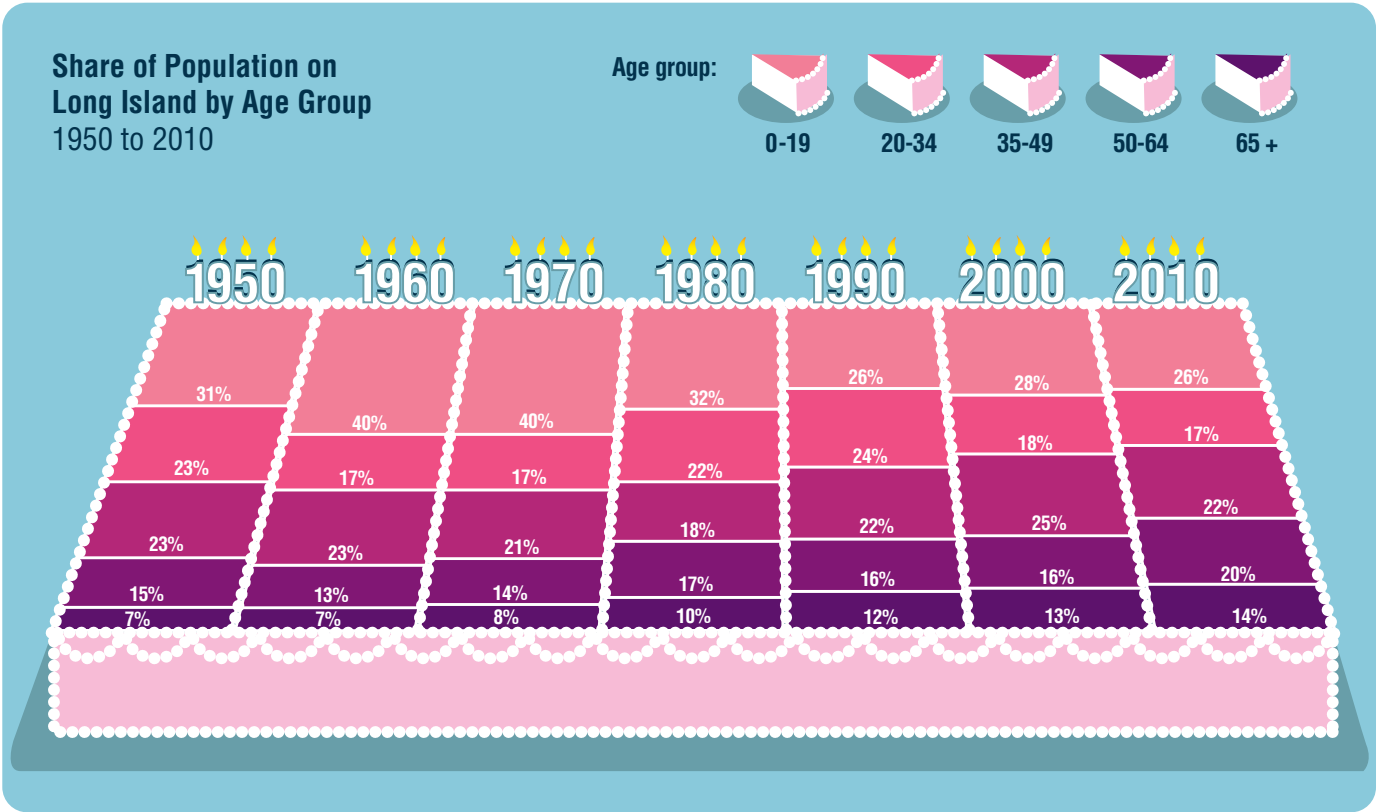
The high concentration of low-income households, minorities and underperforming schools in a few communities with a small tax base can create a self-perpetuating condition that is difficult to transform. Without mixed incomes and a higher tax base, it is difficult to create high-performing schools. Without high-performing schools, it is difficult to improve economic opportunity or attract a mixed-income population.

➡ **AN AGING POPULATION**

The two largest generations in America, the Baby Boomers and the Millennials, have had a profound impact on life on Long Island, affecting everything from schools to jobs. The Boomers, born roughly between 1946 and 1964, fueled much of the growth in starter homes and public schools on Long Island in the 1950s and 1960s, powered the expansion of the labor force and bought larger, more affluent houses in the 1970s, 1980s and 1990s. Today, they are now generating an increase in empty nests and retirement communities. With longer life expectancies, their influence will continue to be felt for some time.

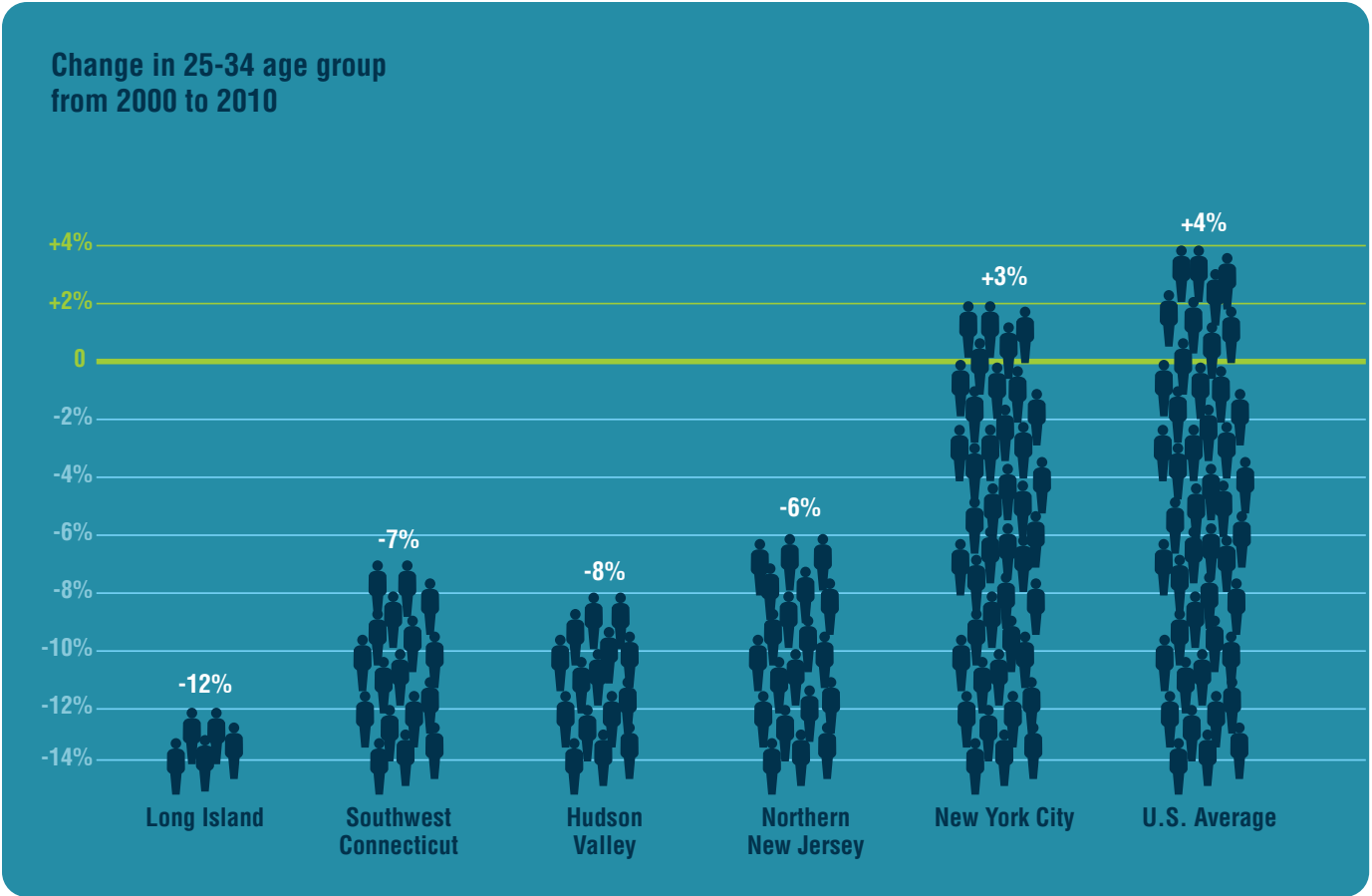
The Millennials, most of them children of Baby Boomers, were born between the late 1970s and mid 1990s. While not as large as their parents' cohort, their numbers, needs and preferences will play a major role in housing construction, job creation, education needs and other issues over the next several decades. In particular, their housing preferences, both in terms of type and location, are likely to vary from previous generations.

One implication of these passing generations is that Long Island's population is getting older and will continue to age for some time. The exploding birth rates in the 1950s and 1960s meant that 40% of Long Island residents were under 20 in 1970. By 2010, the number of children had declined to 26% of the population as birth rates declined. By contrast, from 1970 to 2010, the share of Long Islanders between the ages of 50–64, which includes most of the postwar Baby Boom, increased from 14% to 20%. During those same years, those over 65 have grown from 8% to 14% of the population, even with large numbers migrating to Florida and other warmer climes after retirement. Longer life spans explain much of this growth, but not all of it, as the elderly population nationwide grew less fast, from 10% to 13%. But with Boomers starting to swell the ranks of those over 65, we can expect an even more rapid increase in the senior population for the next two decades.



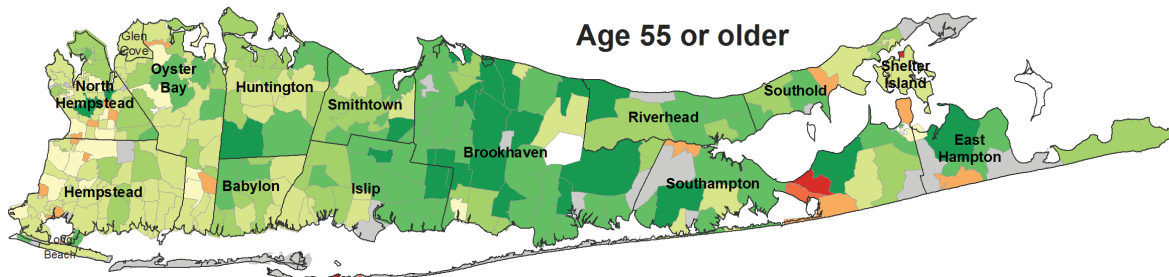
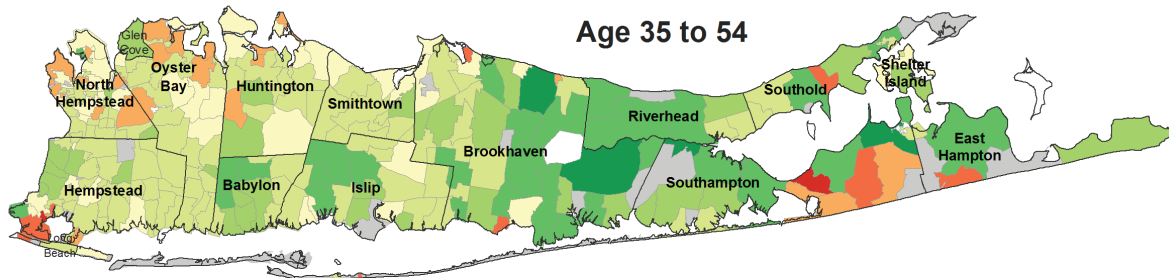
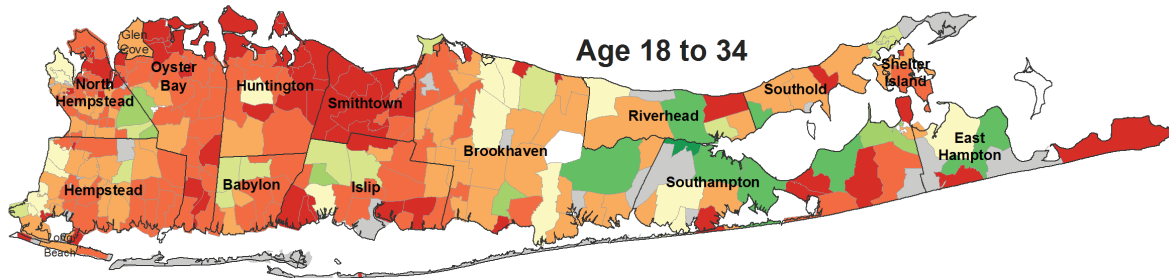
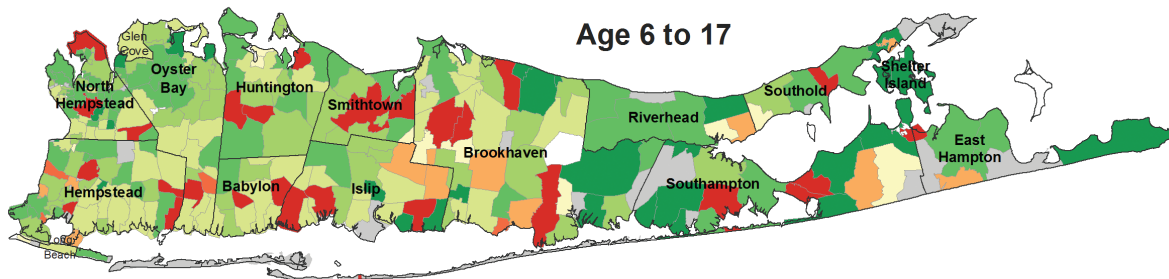
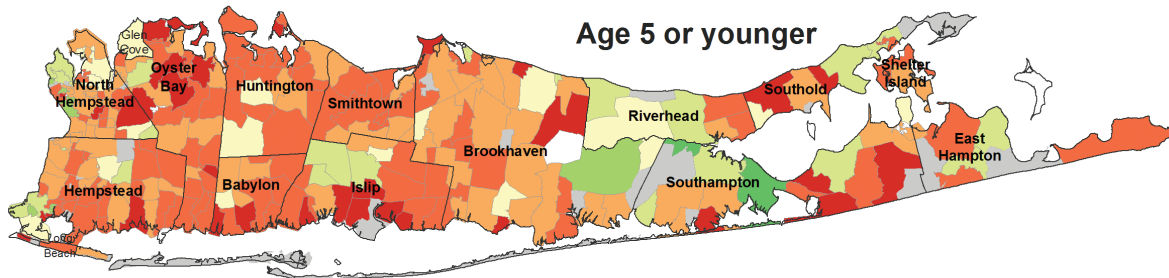
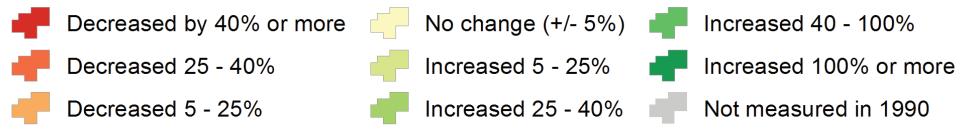
The flip side of an aging population is a shrinking workforce. Like much of America, for the last 40 years, Long Island's workforce has relied on three sources of labor to support a growing economy—Baby Boomers entering their prime work years, women joining the labor force, and immigrants. The aging Boomers are about to reverse that trend just as the share of women in the labor force appears to have peaked. The Millennials, now ranging from their late teens to early thirties, will provide a modest counterbalance initially, but without growth from some other source—stronger immigration, more migration from other parts of the U.S., or higher labor force participation from those already here—job growth will be nearly impossible to maintain. And without jobs and workers, there will be fewer people paying taxes to support health care for the elderly, schools for children and services for everyone.

With this dynamic, regions that cannot retain and attract people in their prime work years could see a shrinking economy. On this score, Long Island's recent track record does not bode well. Young adults entering their prime work years, those aged 25–34, represented a shrinking share of the population throughout the U.S. in the 1990s and 2000s. But they declined even more sharply in both Nassau and Suffolk than in either the U.S. or other parts of the New York region. In fact, this age group grew modestly in the U.S. and New York City between 2000 and 2010, even though it was shrinking as a share of the population. By contrast, young adults declined by 12% on Long Island, even more than the declines of 6–8% experienced in places like northern New Jersey, the Hudson Valley and southwestern Connecticut.



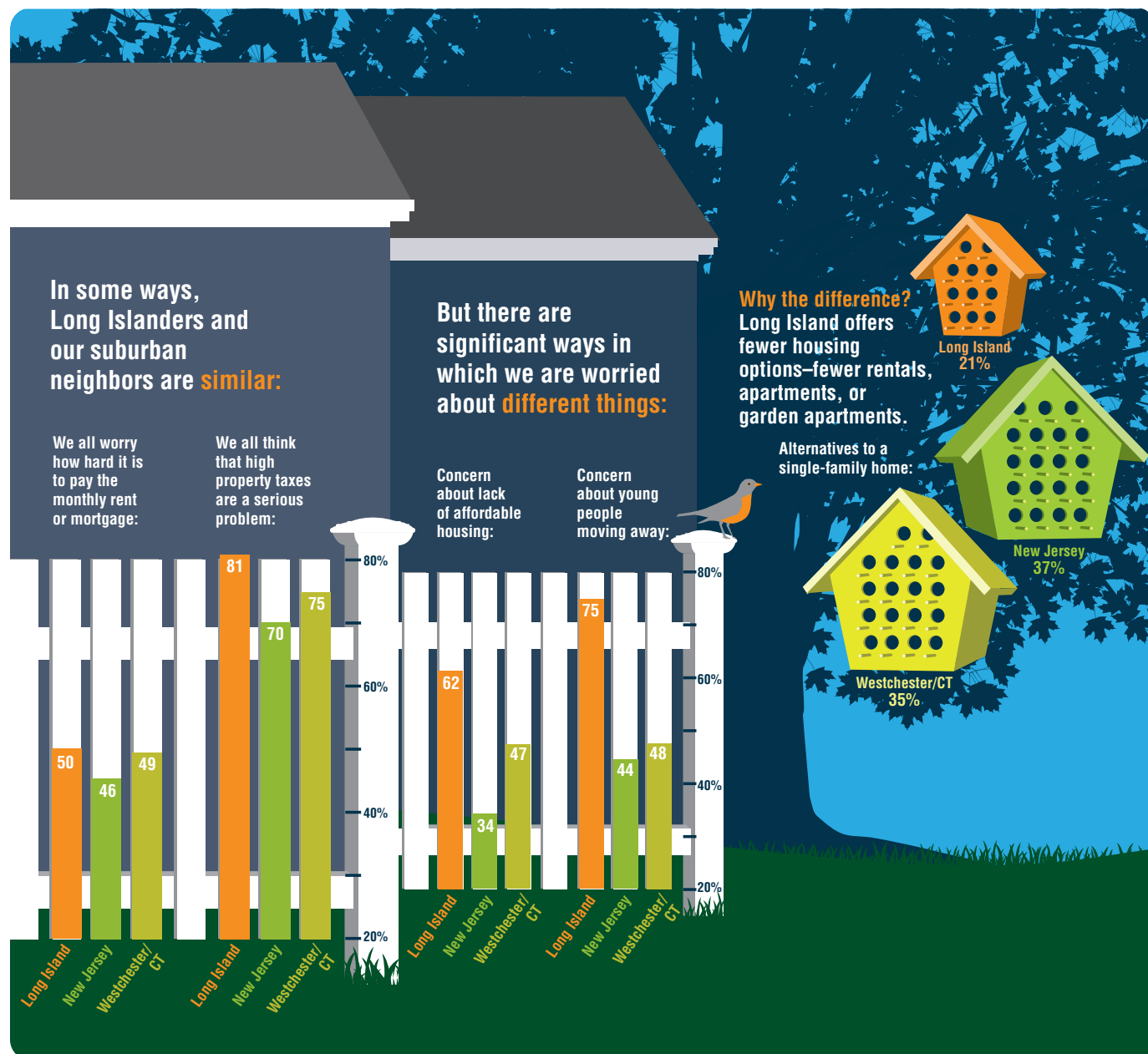
Two decades of population change on Long Island

Age group trends by village, 1990 to 2010



While there are several potential reasons for the decline in young adults, both survey and housing data point to the high cost of housing as a primary factor. Residents on Long Island are more worried about both the high cost of housing and young people leaving than residents in other parts of the New York region. And the share of household income that 25–34-year-olds spend on housing is higher than in any other part of the region. On Long Island, 43% in this age group pay more than 35% of their income for housing,

compared to 37% in New York City and 38% in the other suburban parts of the region. Long Island also has far fewer rental apartments—only 21% of housing units are rentals on the Island compared to 35% in Westchester and southwestern Connecticut and 37% in northern New Jersey. For young adults who have not yet accumulated the savings or achieved the income needed to buy a home, renting can be the only viable option.



➔ HIGH SKILLS, EDUCATION DISPARITIES

If a growing workforce is important, an educated workforce is critical. Regions with the highest education levels have the greatest productivity and highest incomes. Long Island has always benefited from a wealth of skilled, educated workers to drive an innovative economy, whether these were engineers and technicians in the days when the defense industry led the Island's economy, or the scientists, programmers and health professionals of today.

Thirty-nine percent of 25–64-year-olds on Long Island have graduated from college, a much higher rate than the 30% of U.S. residents. This is comparable to other suburban parts of the New York region and higher than the 36% of New York City residents. Graduate degrees are held by 17% of Long Island adults, again much higher than the 11% in the U.S. and comparable to other areas in the region.

Students in Long Island's schools also perform very well compared to the rest of New York State. Without uniform educational measurements across states, statewide educational benchmarks are the best comparisons for Nassau and Suffolk schools. By one measure developed by Hofstra University, 35% of high school students on Long Island have a high degree of college readiness, as measured by mastery of the New York State high school curriculum, compared to only 22% for the state as a whole. Both percentages are lower than they were a few years earlier, but this may have to do with changing tests and standards over this period.

While Long Island schools do well on average, there are wide disparities among schools depending on the neighborhoods they serve. In particular, schools serving high-poverty neighborhoods have much lower scores than the average school in Nassau or Suffolk. Only 15% of students in high-poverty schools are considered college ready, compared to 35% in schools with average poverty and 52% in schools with low poverty. As shown below, Blacks and Hispanics are concentrated in high-poverty schools, perpetuating the economic disparities among racial and ethnic groups.

College Readiness: New York State & Long Island by Poverty Level 2010

 = NY State Average

 = Long Island Average

 Long Island
= Low-Poverty Schools

 Long Island
= Mid-Poverty Schools

 Long Island
= High-Poverty Schools



➡ MAKING ENDS MEET

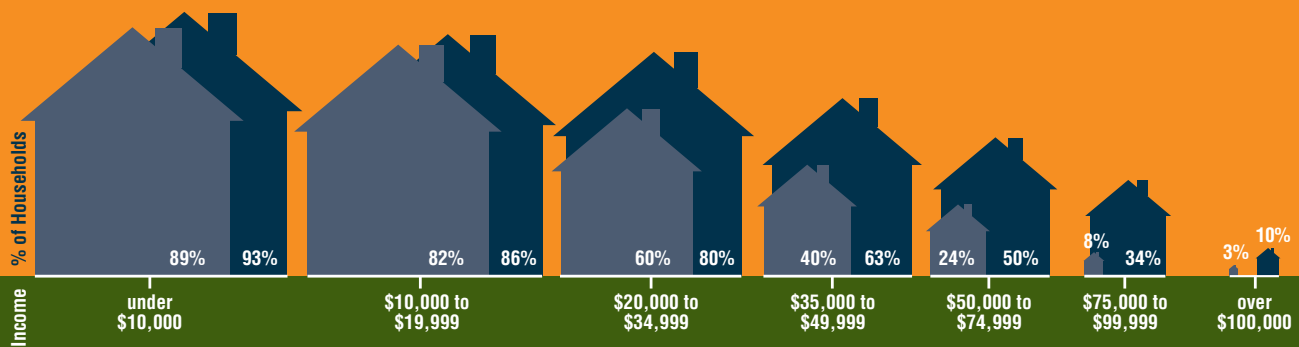
As Long Island has become wealthier, it has also become a much more expensive place to live. And the biggest household expense—the cost of housing—has risen dramatically in the last decade. In 2000, 27% of Long Island households spent more than 35% of their income on housing. By 2010, that share had risen to 38%, despite the drop in housing prices in the later part of the decade. Breaking this down by income levels reveals how much this average varies, and how much it has risen particularly for moderate income households. The share of households with incomes between \$20,000 and \$35,000 that paid more than 35% of their income on housing rose from 60% to 80%. For those with incomes between \$35,000 and \$50,000, the share rose from 40% to 63%. Even for households between \$75,000 and \$100,000, the share increased from only 8% in 2000 to 34% in 2010. This dramatic rise was only possible because a rising stock market, increasing home equity and low interest rates for much of the decade made it possible for households to use savings, equity loans and credit card purchases to cover housing and other expenses. However, the bursting of the housing bubble also removed most of these safety nets.

Average housing cost burdens have declined only slightly from their peak in 2006. Refinancing and lower housing prices have helped many reduce their costs, but declining employment and wages have kept the housing cost burden high.

A more inclusive way of looking at the costs of where a person lives is to also include the cost of transportation. It may be possible to reduce housing costs by moving farther away from job locations, but the added expense of gas and other auto-related expenses from longer commutes can also eat up much of what is saved in lower housing payments. Estimates by the Center for Transit-Oriented Development for the year 2000 found that the combination of housing and transportation expenses accounted for 47% of household income, on average, in the New York region, 31% from housing and 16% from transportation. Within half a mile of transit, both housing and transportation costs were lower, with a combined average of 41% of income. The share of income for households within a half mile of Long Island Rail Road stations ranged from a low of 39% along the Long Beach branch to a high of 47% on the Port Washington branch. Data for 2010 are not available, but would be much higher due to both rising housing costs and increasing fuel costs.

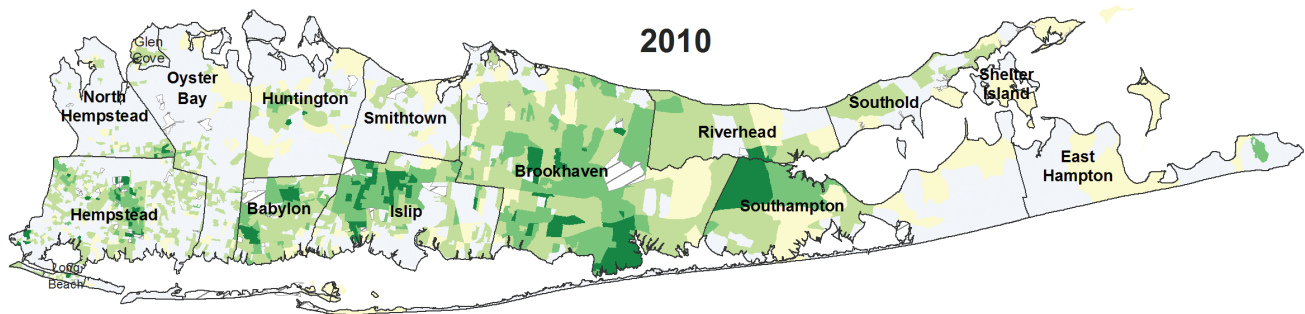
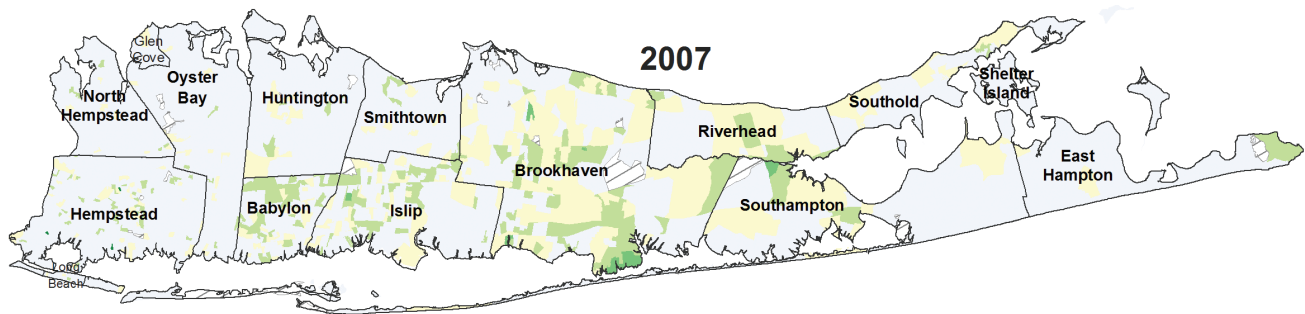
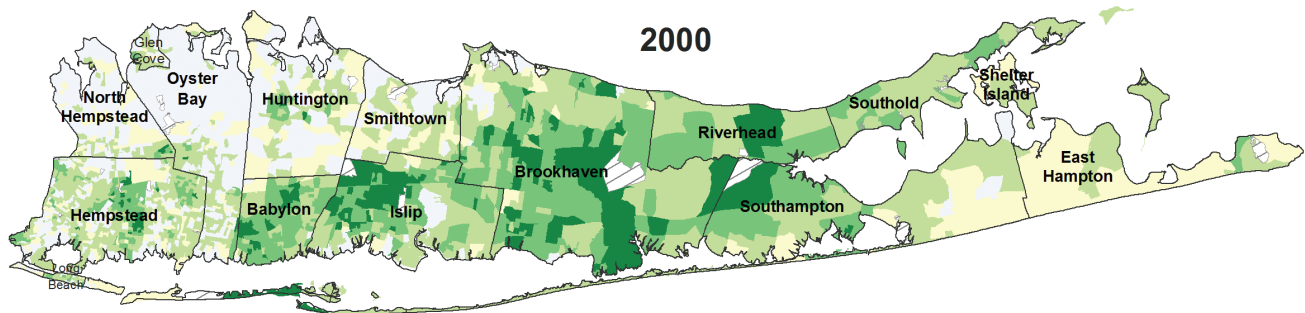
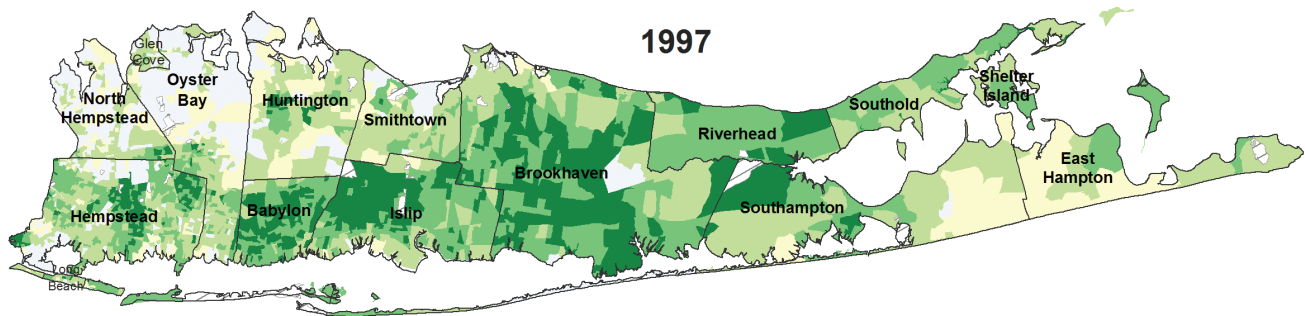
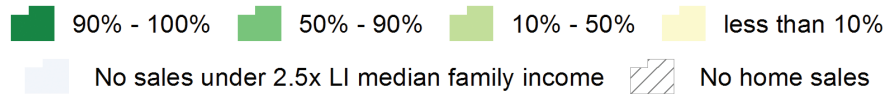
Long Island Households Paying More Than 35% of Their Income on Housing Expenses Percentage of Households by Income Level

2000 =  2010 = 



Availability of Affordable Homes on Long Island in 1997, 2000, 2007, & 2010

Percent of homes sold in each Census Block Group that sold for less than 2.5 times the LI median family income
(2.5x LI median family income = \$171,250 in 1997 • \$191,250 in 2000 • \$234,500 in 2007 • \$254,500 in 2009 • \$268,105 in 2010)



PLACE: Long Island's Natural and Built Environment



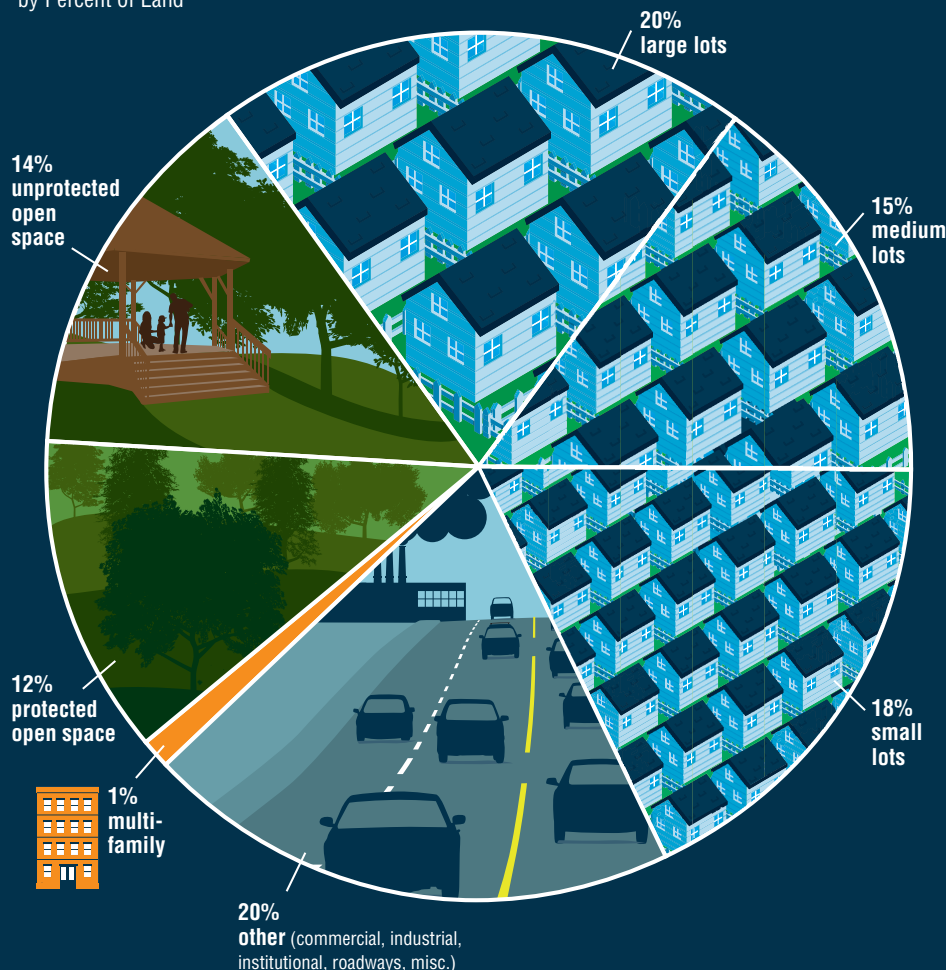
Long Island is a special place whose natural beauty, strategic location and easily developed land combined to make it one of the most attractive and economically successful suburban regions anywhere on the planet. Both its natural systems and built environment are shared assets that

connect communities on the Island to each other, and tie Nassau and Suffolk to the rest of the world. This includes 1,180 miles of coastline along the Atlantic Ocean and Long

Island Sound that have attracted residents, visitors, tourists and maritime industries for centuries. Nassau and Suffolk share this coastline and these waterways with residents of New York City, Connecticut and New Jersey. They also share the busiest commuter rail network in the country, an extensive highway network, an electric power grid and even, or maybe especially, the air that we all breathe and the water that we drink. Long Island's unique source of drinking water—the underground aquifer that supplies 138 billion gallons of water a year to residents—is a particularly fragile resource that is sensitive to changes in development and ways that we treat our wastewater and storm runoff.

Land Use on Long Island

by Percent of Land



Like Long Island's population, both the natural and built environments have changed dramatically over the last 65 years. New development has altered the landscape, and changing settlement patterns have required an expansion and retrofitting of infrastructure systems. But as the last remaining acres of available open space are developed, and as infrastructure systems built for a previous era are stretched past their capacity and anticipated lifespan, the Island faces critical questions for how it will adapt these resources to the needs of the coming era.

➡ WHAT'S LEFT OF LONG ISLAND'S OPEN SPACE?

If you look at Long Island from a satellite today, you will see a far different landscape from what the first astronauts saw little more than 50 years ago. The vast majority of Long Island's development occurred with the population explosion following the founding of Levittown. Today, nearly 500,000 acres, almost two-thirds of Long Island's land surface, are covered with buildings, pavement and other man-made structures. Residential neighborhoods occupy over half of Nassau and Suffolk's land area, with a diverse set of places that include downtowns built in the early 20th century, high density suburbs with quarter acre lots, and low density neighborhoods with large homes on an acre or more.

Long Island's remaining farmland and open space is divided between land that is available for development and land that is substantially protected from further commercial and residential development by federal, state, county or local regulations, including approximately 800 public parks ranging from small community playgrounds to destinations such as Fire Island National Seashore and Bethpage State Park. Virtually every public survey and many voter initiatives place a high priority on preserving remaining open space, and in 2006, New York State set a goal of preserving 37,000 acres within 10 years' time. By 2010, almost halfway through this decade, only 6,646 of these acres, or about 18% of the target, have been protected. Once the economy revives and demand for new housing increases, there will be even greater development pressure on remaining open space.



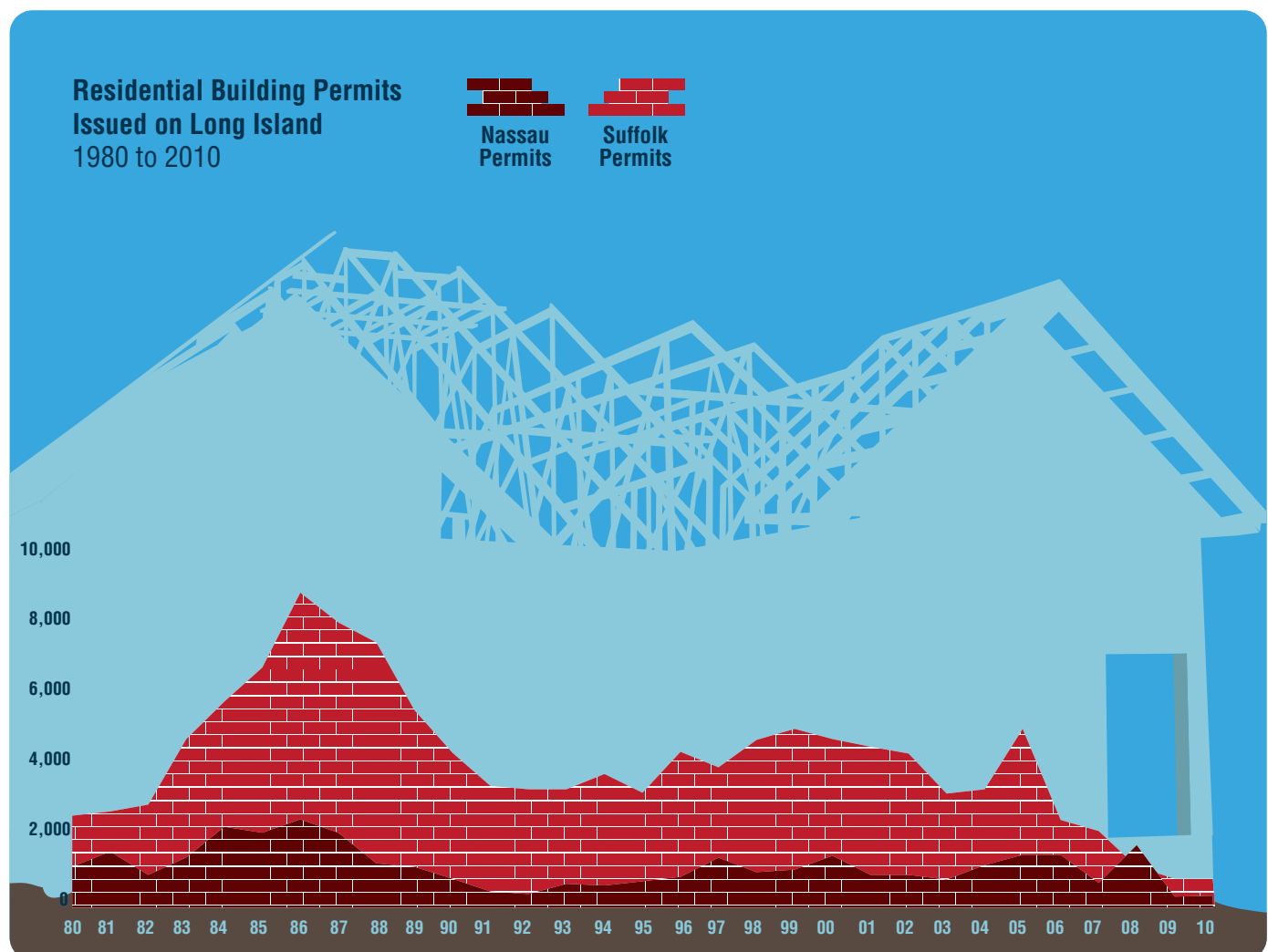
➔ 20TH CENTURY HOUSING FOR 21ST CENTURY FAMILIES

As Long Island's supply of developable land has dwindled, and as the powerful demographic forces of growth have receded, housing construction has slowed to a fraction of what it was in the 1950s and 1960s. Over the last thirty years, construction has ebbed and flowed with the economy. But the trend has continued to slope downward. After peaking at 11,500 units in 1986, only 1,500 housing permits were issued in 2010. Even Suffolk County, which accounted for most of Long Island's new housing in the last three decades, built less than 2,000 units of housing on average in the last five years.

This means that not only are there fewer new and affordable homes for new residents, it also means that 21st century families will be living largely in 20th century housing. Retrofitting older homes for energy efficiency and modern amenities can often be more expensive. What's more,

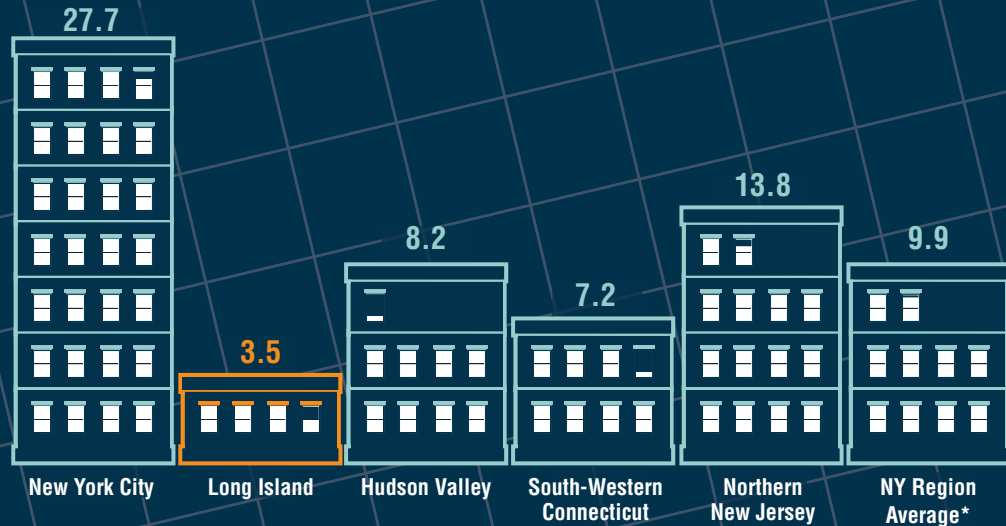
the size and type of homes have become increasingly disconnected from the needs of new households. As houses have gotten larger, households have become smaller. Much of this reflects greater affluence on Long Island and in America in general. But increasingly, it may be a luxury that we can no longer afford nor necessarily want. Many retiring Baby Boomers will want smaller homes, and for most Millennials expansive homes that are far from jobs and community life will be neither affordable nor desirable.

On both of these scales—number of new homes and the variety of housing types—Long Island is falling behind its suburban neighbors. In the last decade, there were 16 residential building permits issued for each 1,000 residents of Nassau and Suffolk. By comparison, there were 25 permits issued for every resident of southwestern Connecticut, 27 in the Hudson Valley and 31 in northern New Jersey. Even New York City has far surpassed Long Island in building new housing stock. Other places have also been building far more multifamily housing. While the share of housing permits going to multifamily units ranged from 29% in Connecticut



Permit Imbalance

Number of new residential building permits issued for Multi-Family Units; Permits per 1000 residents (2000-2010)



to 44% in New Jersey, on Long Island it was only 21%. This perpetuates the Island's relative shortage of rental housing and raises questions about its ability to generate homes in a variety of types, sizes and prices.

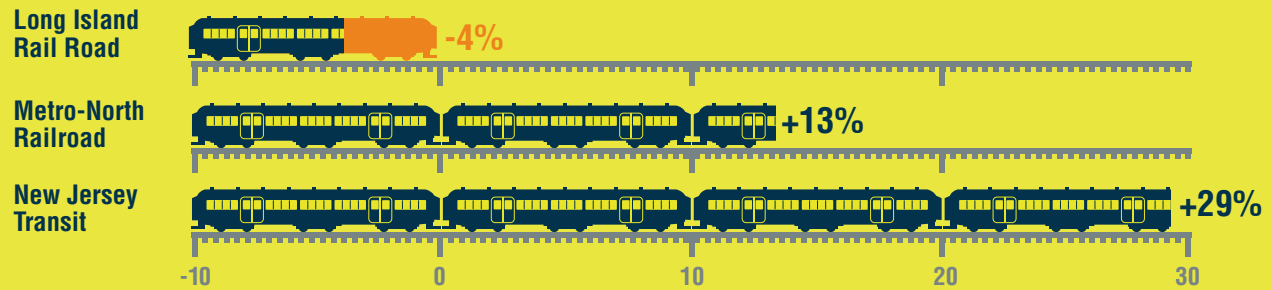
⇒ EXTENSIVE BUT AGING TRANSPORTATION INFRASTRUCTURE

If Long Island's housing stock is aging, its infrastructure is even older. Most of Long Island's highway network and the Long Island Rail Road were built many decades ago, much of it in the early 20th century. At rush hour, and even at other times, many roadways are beyond capacity, slowing commutes and travel of all types. And even though most residents rely primarily on their car, Long Island is highly dependent on an extensive transit network. More people take the Long Island Rail Road than any other commuter railroad in the country, and nearly 40 million passengers ride Long Island Bus and Suffolk County Transit every year. Without these networks, auto traffic would grind to a halt and the economy would slow to a crawl.

While bus ridership has grown in the last decade, LIRR ridership has not. Ridership declined by 4% while ridership on Metro-North Railroad and New Jersey Transit increased by 13% and 29%, respectively. In fact, final statistics for 2011 are likely to show that Metro-North has overtaken LIRR in ridership. While some of this is due to slower population growth on Long Island, much of it is also because other systems have added new capacity and services. New Jersey Transit invested in several new links that permitted far more New Jersey residents to avoid transfers and have a direct ride into Midtown Manhattan. Metro-North added a third track on its Harlem Line that has greatly increased the capacity for reverse commutes in particular. Long Island Rail Road has added no new capacity and has significant bottlenecks on its two-track mainline to Hicksville and its one-track line to Ronkonkoma.

Some of this will change when the LIRR completes its East Side Access project. Thousands of the LIRR riders will be able to disembark at Grand Central Station on the east side of Manhattan, saving many up to 40 minutes a day in travel time. If the experience of New Jersey Transit holds here, property values near LIRR stations will increase substantially once the service is in place. However, this will not help add capacity for travel within Long Island or from New York City out to Nassau and Suffolk.

Percent Change in Annual Ridership (2000-2010):



➡ THE POTENTIAL OF LONG ISLAND'S DOWNTOWNS

With so few acres left to develop, with housing construction slowing and many highways at capacity, has Long Island “maxed out” at its current numbers of population and jobs? If there is indeed no more room left to grow, then current residents and their children will be confronted with some difficult questions. Will we increase property taxes even more because we can’t attract new businesses and households to expand the tax base? Will we lose even more young adults because housing will become increasingly expensive? Will we be unable to provide economic opportunity and upward mobility to struggling and middle class families, and new communities, housing and amenities for seniors?

Fortunately, there is a way that Long Island can continue to expand its economy and provide more choices for its residents without developing more open space. With over 100 downtowns, Long Island can add housing and jobs in a diverse set of communities ranging from East End village centers to large downtowns in places like Mineola and Hempstead. Right now, about 21% of Long Island residents lives within a half-mile of these downtowns or a Long Island Rail Road station, many in single-family home neighborhoods

bordering downtowns. By contrast, as many as 45% of Long Islanders surveyed in 2010 could imagine themselves living in a downtown condo, apartment or townhouse. In particular, this opinion was held by 50% of young adults 18–34.

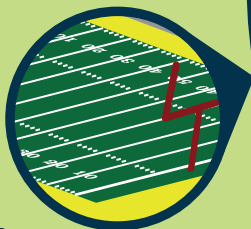
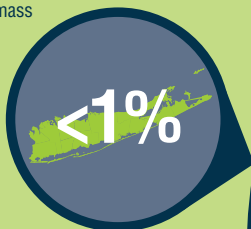
These downtowns have tremendous potential not only to provide new housing and jobs, but to build vibrant, walkable, mixed-income communities that can attract the next generation and provide alternatives for empty nesters and others looking for a less car-dependent way of life. Some can also be “hubs” for the networks of professionals, entrepreneurs, students and creative individuals that drive high-value, innovative clusters of business activity.

In fact, downtowns and rail station areas have the capacity to produce as much housing as all of Long Island’s remaining open space. If half of the 8,300 acres of surface parking, vacant land and open space in downtown areas were developed with a mixture of townhouses, garden apartments and midrise apartment buildings, it could produce 90,000 units of housing, enough to accommodate over 200,000 new residents. It would require building enough structured parking to meet demand, but would also encourage less driving. And this does not include all of the underutilized industrial properties and abandoned shopping centers that also dot the landscape.

8,300 acres =
11% of all the land
within 1/2 mile of
our rail stations
and downtowns

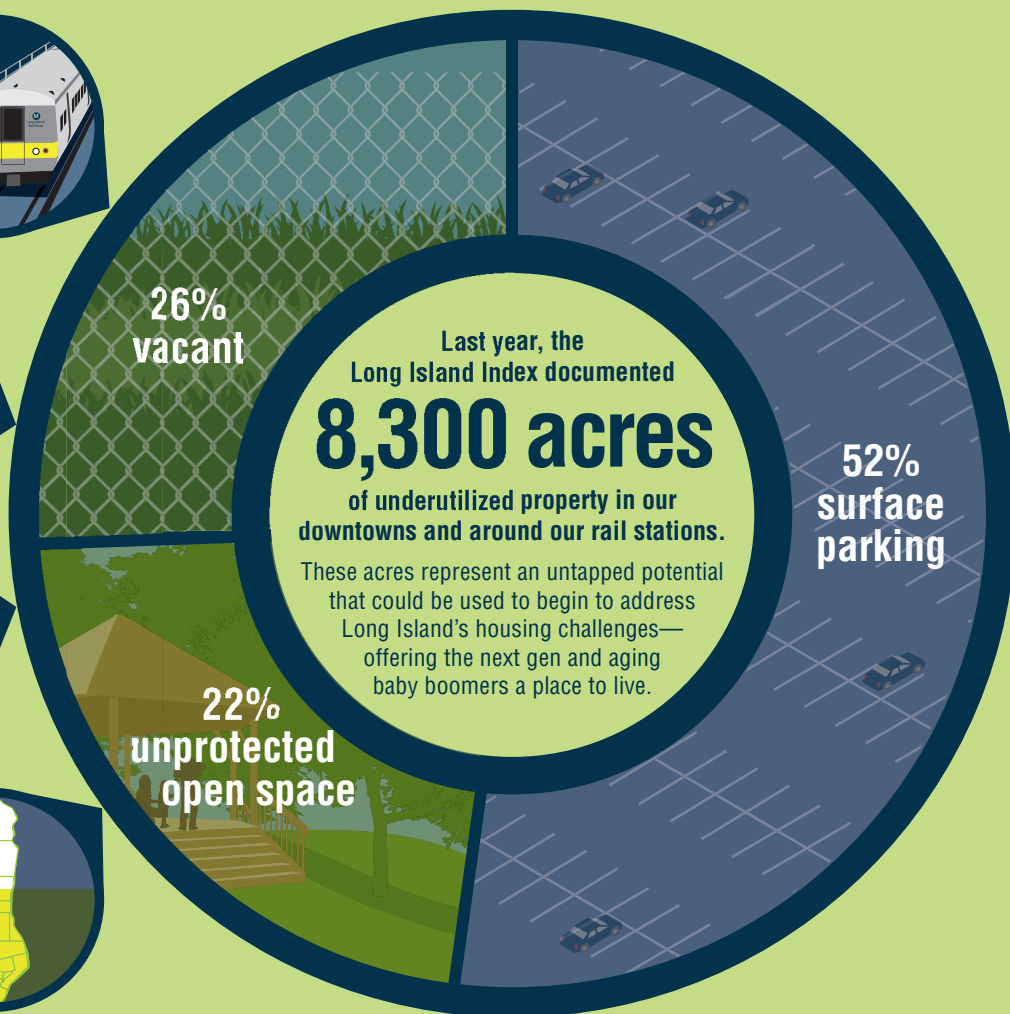


8,300 acres =
Less than 1% of
the Island's total
land mass



8,300 acres =
7,580 football
fields

8,300 acres =
Everything south
of 50th Street in
Manhattan



So, what's the potential?

If we used just **HALF** of those 8,300 acres to build a variety of housing we would add **90,000 units of housing:**

- = Mid-rise Apartments
 - = Townhouses
 - = Garden Apartments
- = 250



Finally, how do you swap surface parking for housing yet still provide enough parking?
Multi-story parking facilities!

PROSPERITY: Economic Growth, Innovation and Opportunity



CHANGING SOURCES OF JOBS AND INCOME IN A NEW GLOBAL ECONOMY

For most of the postwar period, Long Island's economy was driven by two powerful engines—income flowing to commuters from jobs in Manhattan, and a large defense industry fueled by Washington DC. Now, prosperity comes from many sources, and Long Island needs to look for more of its income to be generated from within its own boundaries.

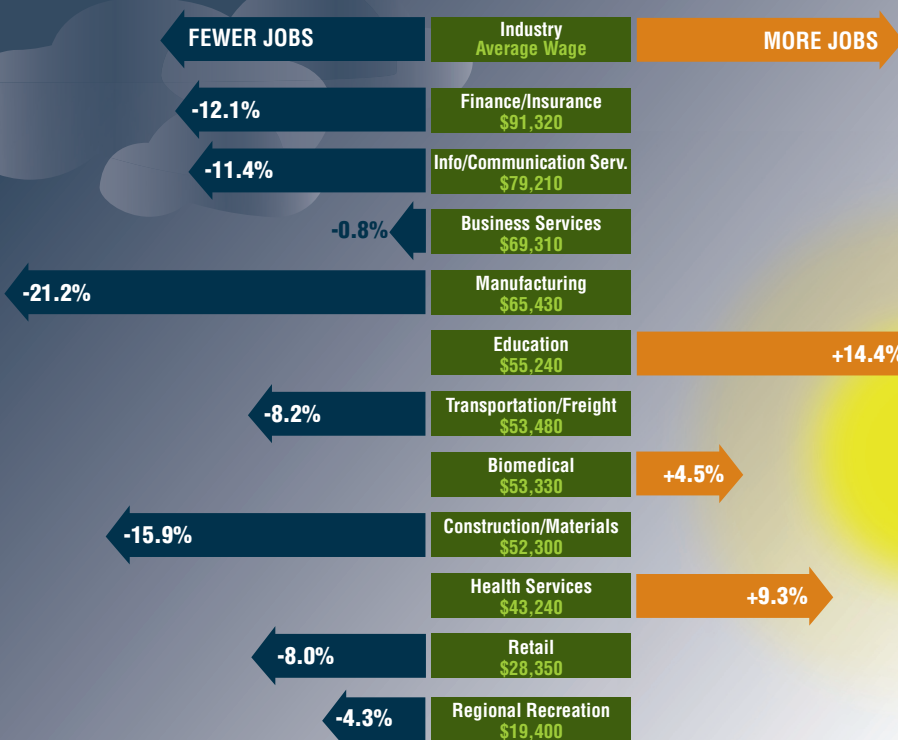
Wages earned by commuters are still an important part of Long Island's prosperity. Every year, \$24 billion more in wages flows into Nassau and Suffolk from people working elsewhere than wages that flow out. Most of this is from residents with high-income jobs in Manhattan, and it accounts for 24% of the personal income of Long Island residents. This means that one out of every four dollars that are used to buy everything from homes to groceries and support local businesses are earned in Manhattan, Queens or other locations outside of Nassau and Suffolk. However, 40 years ago, 35% of personal income came from wages earned elsewhere. As the number of jobs on Long Island grew, the share of residents commuting off the Island declined.

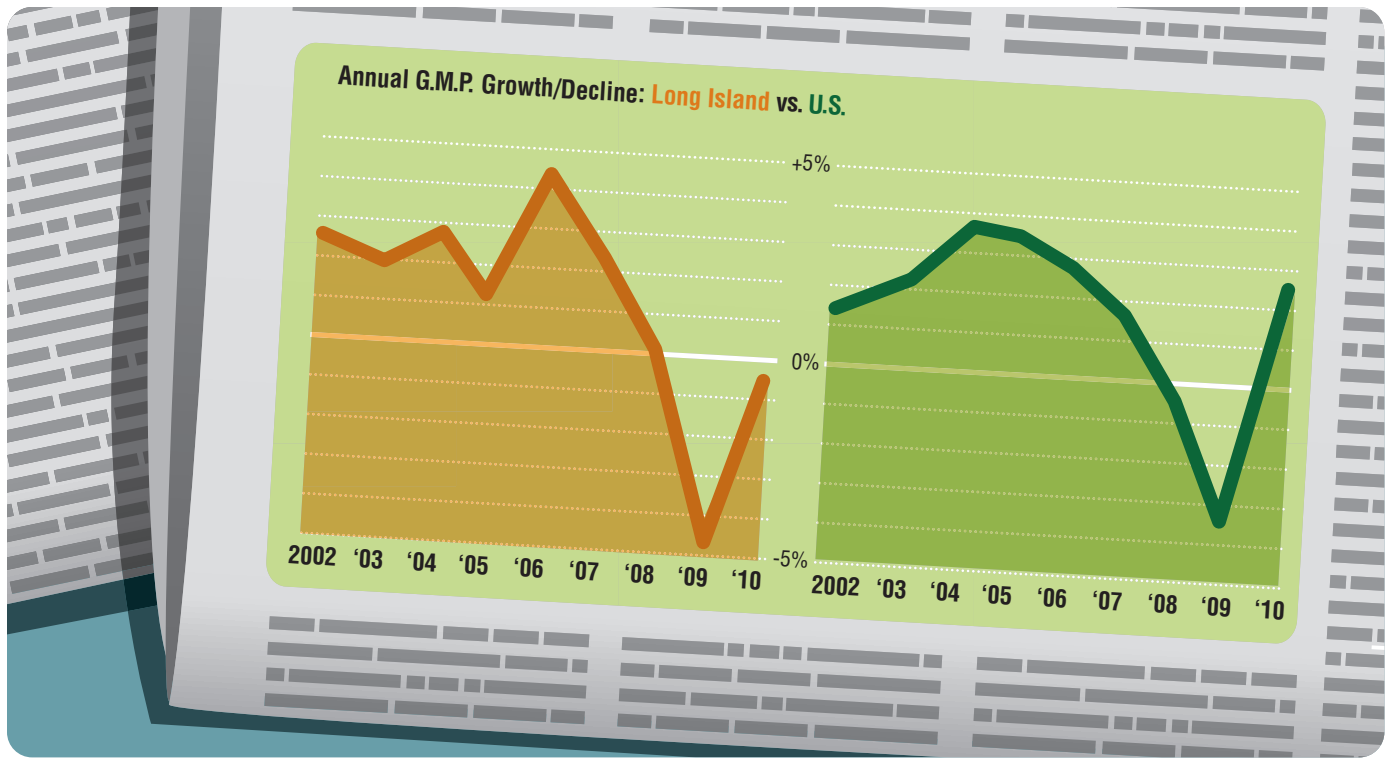
The types of jobs have also changed. As recently as the 1980s, Long Island's industry was dominated by large firms in the defense and aerospace industry, employing everyone from engineers to assembly line workers. However, the

end of the Cold War was followed by a sharp contraction in defense industries in the 1990s, and little of this industry cluster remains. However, its imprint still remains in research institutions, technology companies and skilled professionals who found a home on the Island and have integrated into industry clusters as different as information services and biomedicine.

Two of the largest employment sectors—education and health services—are also the fastest growing. Driven by advances in medicine and an aging population, health services have grown through both ups and downs in the economy, and can be expected to continue to grow in the future. The growth in education, which includes primary,

Average Wage and Change in Employment by Industry
Long Island, 2005 to 2010





secondary, college and graduate education, is a response to the growing premium placed on educational attainment and career skills. Families are willing to invest more in primary and secondary education, in spite of periodic battles over school budgets. And more people are going to college and continuing graduate studies.

The only other industry cluster to have grown in the last five years, biomedicine, typifies the type of industry that can take advantage of Long Island's assets and drive future growth in wages and income. Although small in size, it pays relatively high wages and draws on the concentration of research institutions, scientists and health care professionals on Long Island.

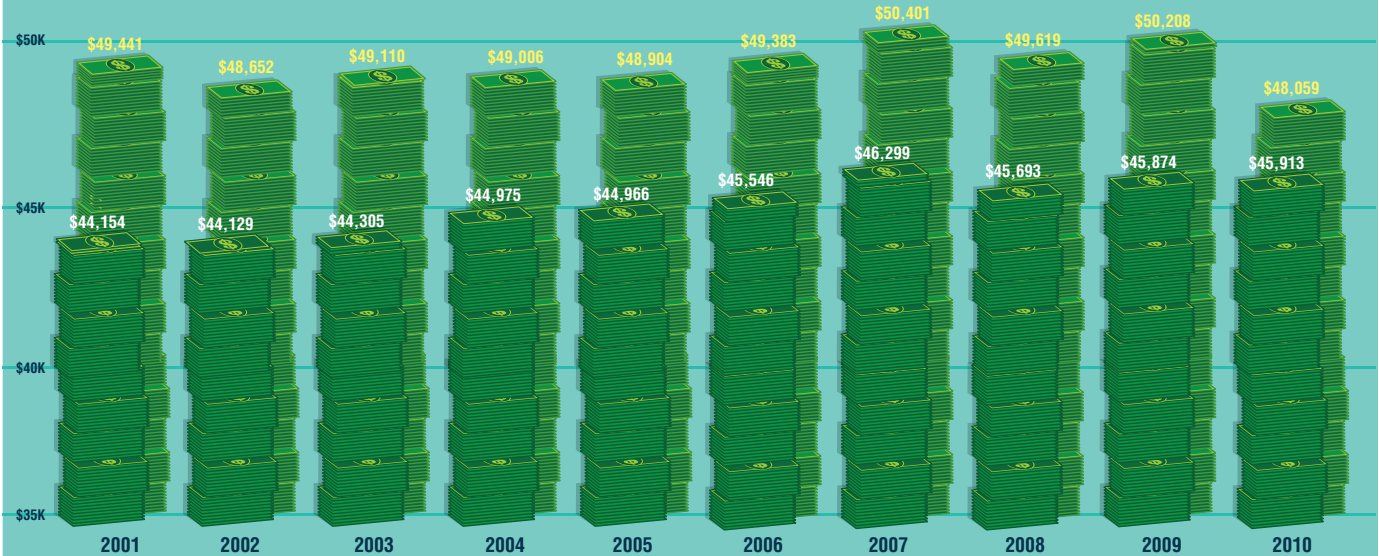
The remainder of Long Island's industry base is dominated by two large, low-wage sectors—Retail and Recreational Services; the high-wage, high-skill sectors of finance, business and information services, and contracting, as well as the medium-wage sectors—manufacturing, construction and transportation.

➔ SLOWING ECONOMIC GROWTH

Long Island's economy was able to transition from the collapse of the defense industry in the early 1990s and resume growth from this new set of industries. However, growth in the last decade has been tepid by historical standards. Employment was largely flat from 2000 to 2010. Gross Metropolitan Product, which measure the value of all the goods and services produced on Long Island, increased by 10% over the decade, even with the downturn since 2007. However, this rate of growth has lagged the national economic growth rate.

Slower growth and a changing industry mix have also resulted in a flattening of wages for those who work in Nassau and Suffolk. After adjusting for inflation, average wages declined by 3% between 2000 and 2010. Even before the recession brought them down, wages were largely flat through most of the decade. By 2010, wages on Long Island were only slightly higher than the U.S. average, closing an advantage that the Island has long held.

Average Pay Per Employee, U.S. and Long Island 2001 to 2010



➡ LONG ISLAND'S UNTAPPED INNOVATION POTENTIAL

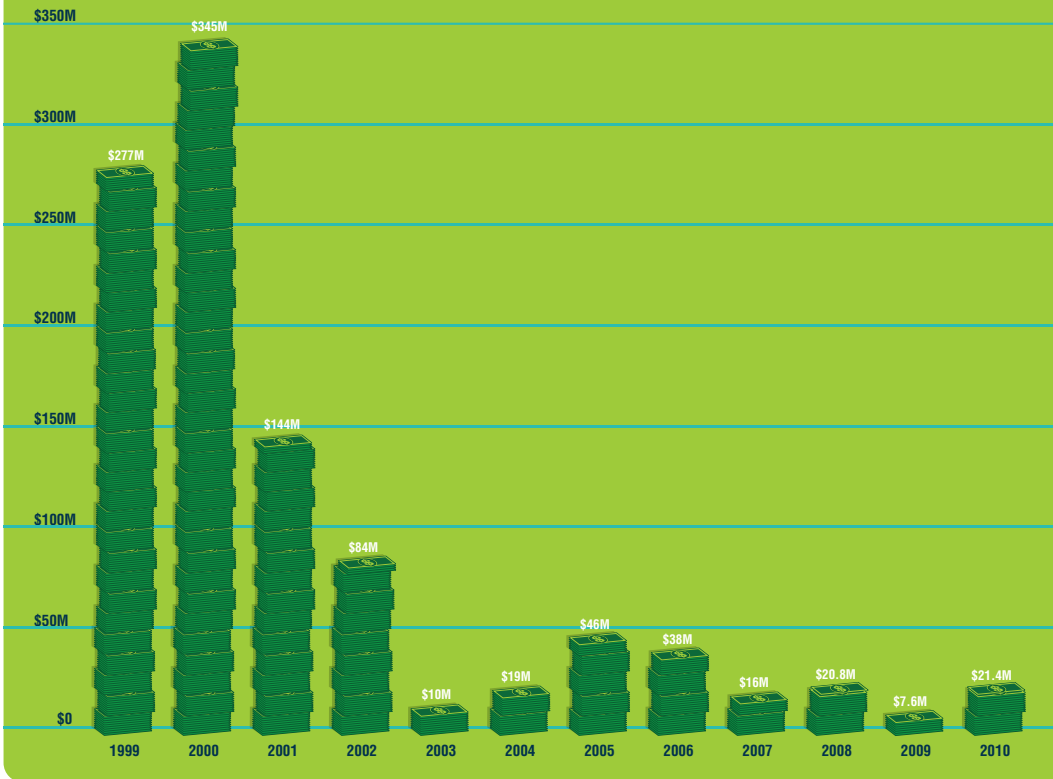
Even though Long Island's economic engine has slowed, it has all the ingredients for a competitive, high value-added economy. Productive, high-wage regional economies in the 21st century are driven by dense networks of innovative people and institutions. The Island's development since World War II has created many of the assets needed to succeed in any number of growing and emerging sectors, from life sciences and biotechnology to engineering and information technology.

Assets start with a highly-educated workforce, with concentrations in specialized expertise in science, engineering, medicine and professional services. These are anchored by first-class research institutions, such as Brookhaven Labs, Cold Spring Harbor Labs and Stony Brook University. Proximity to businesses, clients, research institutions and professionals in the rest of the New York region also gives Long Island a strategic advantage. A growing network of entrepreneurs provides a platform for commercialization of research and development. Even during the economic downturn from 2008–2009, over 11,000 new businesses were started, led by management, scientific and technical consulting services.

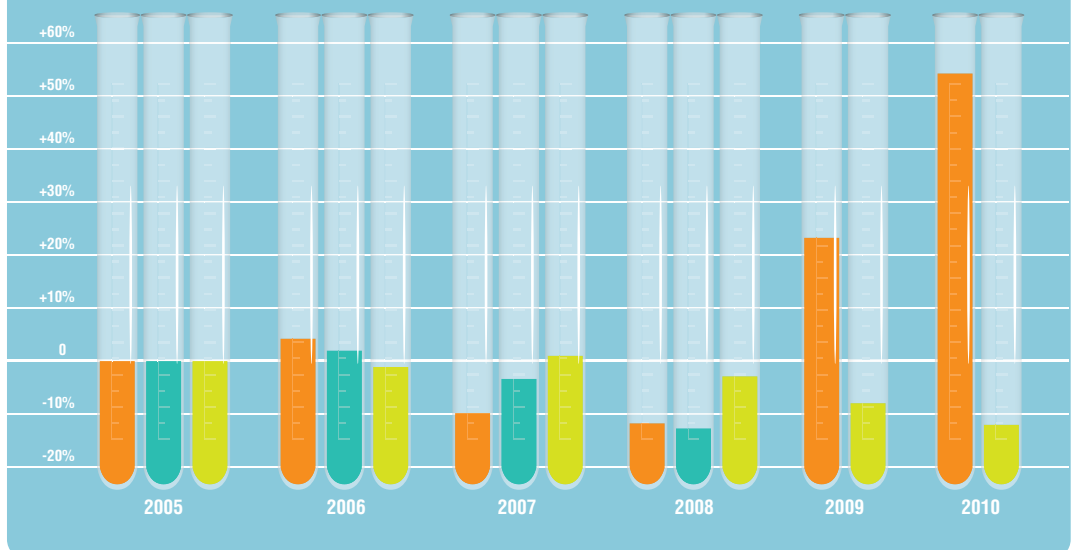
Long Island has also been successful in capturing federal funding to support research and development. Direct research grants to institutions increased 54% in the last five years, an increase far greater than for the increase for either New York State or the United States. Most of the Long Island increase occurred in the last two years. By contrast, Long Island received only 0.5% of all U.S. private venture capital funding in 2010, indicating a lag between its ability to draw support for basic research and support for commercializing that research.

Regions that have created successful high-value innovation economies, including Silicon Valley, San Diego and the North Carolina Research Triangle, have had assets similar to those that Long Island possesses. These regions have also been able to connect these assets to create dense networks of researchers, entrepreneurs, venture capitalists, marketing specialists and others. This has generally required creating physical environments where people from different disciplines meet and share ideas on a regular basis. It also involves creating the institutional and professional relationships in which collaboration can happen spontaneously and tap into an existing web of expertise, financing and support. Long Island's current challenge is to develop similar networks to capitalize on its potential.

Venture Capital Investment
Millions of Dollars Invested
 Long Island, 1999 to 2010

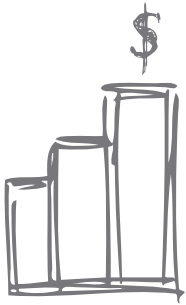


**Relative Growth of
 Federal R&D Funding**
 2005 to 2010



MANAGING CHANGE:

Many Governments, Rising Costs



There is no single governmental entity responsible for Long Island's future. Guiding its transformation will require coordination among the New York State, Nassau and Suffolk counties, 13 towns, 2 cities, 96 incorporated villages and literally hundreds of special districts and authorities. Successful collaborations in other regions indicate that private and civic stakeholders will also need to be part of any intentional effort to shape Long Island's future.

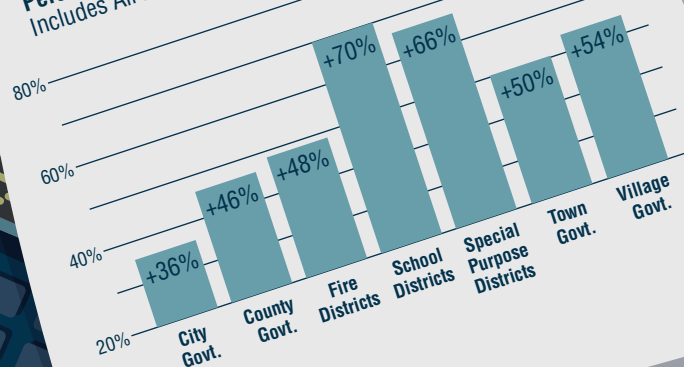
The number of governmental entities on Long Island not only makes governance more complicated, it also contributes to the high cost of living and doing business. In the last decade, government expenditures increased in

counties, towns, villages, school districts, fire districts and other special districts. School districts, which account for the largest portion of local property taxes, increased the most, by 70%. Other Special Purpose Districts were next with a 66% increase. General purpose governments ranged from 36% to 54%.

Many other factors contribute to government expenditures and property taxes, and affluent regions tend to have higher total expenditures and tax receipts. The net result over the last decade is that both local government expenditures and property taxes have considerably outpaced the rate of inflation in the last decade. While overall costs have increased by 30%, expenditures have risen by 57% and tax levies have increased by 64%. The difference between expenditures and taxes are likely the result of changes in the level of federal and state aid to localities.

Local Government Expenditures Change from 2000 to 2009

Percent of Change from 2000 to 2009
Includes All Local Governments on Long Island



Districts labeled by name,
color-coded to match
district boundary



Municipal Services in Nassau County

336 Districts providing Fire, Garbage, Library, Police, Schools, Sewer, and Water Services

Coming soon: interactive maps
showing all Long Island districts.
Check longislandindexmaps.org
in early 2012.



Growth on Long Island 2000-2009

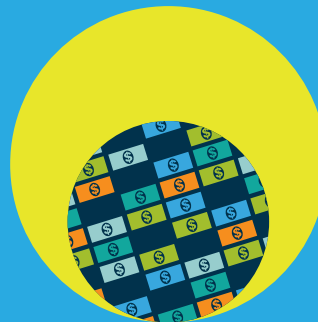
● = 2000 ● = 2009



Population on
Long Island
+3%



Inflation
+30%



Total Local
Government
Expenditures
+57%



Total Property
Tax Levies
+64%

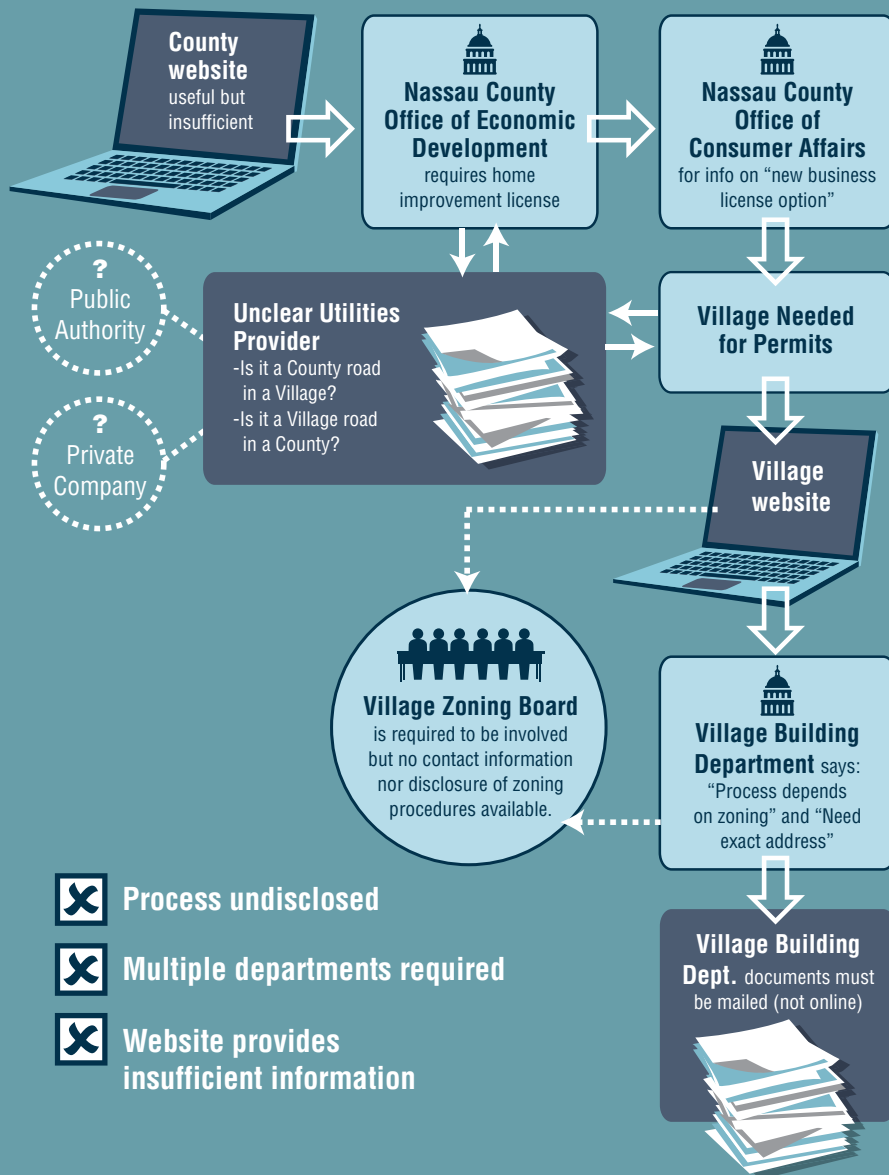
➡ GETTING IT DONE

Multiple levels of government can also impede the process of adaptation to new realities. In a study of planning and development processes, the Long Island Index found both a wide variation in procedures and regulations among the Island's many jurisdictions and an overall lag with national best practices. The result is that the transformation of Long Island's built environment is slower and more costly than it could be. Processes also make it far easier to replicate the auto-dependent, single-purpose suburb of the past than to create new mixed-use, walkable downtowns. A comparison with a region governed by a single authority demonstrates the difference in layers of approvals, time frames and criteria more clearly than any description. Compared to Fairfax, VA, where a single agency was the point of contact for information, forms and approvals, Long Island was a maze of multiple village, county and regional agencies that was difficult and confusing to navigate.

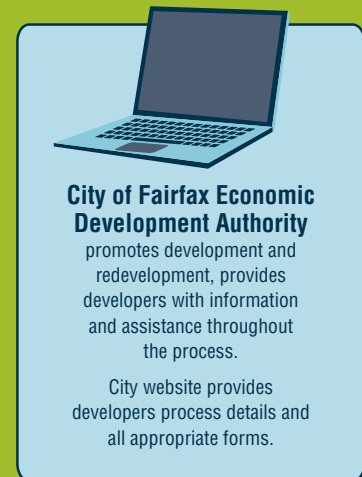
While the challenges facing Long Island are substantial, it can look to its past for inspiration. It helped create a new way of life after World War II that provided a high quality of life and upward mobility for up to three generations. It has spawned new ideas, concepts, products and technology that have contributed to both regional and national economies. And it has all the capabilities to lead the nation once more in redesigning how suburban communities can thrive in a new global economy.

Comparison of Downtown Revitalization Approval Process: Long Island vs. Fairfax, VA

EXAMPLE (A) from a Village in Nassau County, Long Island



EXAMPLE (B) from City of Fairfax, Fairfax County, VA



Source Materials

Average Home Size: From 1950 to Today

National Association of Home Builders (Housing Facts, Figures and Trends) 2006 and 2009 reports; see www.nahb.com

Moving in the Right/Wrong Direction

Data from Long Island Index Surveys 2004–2011 conducted by Center for Survey Research, Stony Brook University.

Jobs on Long Island, 1952–2010

U.S. Bureau of Labor Statistics; data compiled by RPA.

Change in Race and Ethnicity 1990 to 2010

1990, 2000 and 2010 U.S. Census of Population; data compiled by RPA.

Racial Composition in Long Island Schools, 2010

New York State Education Department; data compiled by Hofstra.

Share of Population on Long Island by Age Group, 1950 to 2000

1950, 1960, 1970, 1980, 1990, 2000 and 2010 U.S. Census of Population; data compiled by RPA.

Change in 25–34 Age Group from 2000 to 2010

2000 and 2010 U.S. Census of Population; data compiled by RPA.

Map: Two Decades of Population Change on Long Island, Age Group Trends by Village, 1990 to 2010

1990 and 2010 U.S. Census of Population; map created by CUNY Mapping Service at the Center for Urban Research.

Comparison of Long Islanders and Our Suburban Neighbors

Long Island Index Survey 2011 conducted by Center for Survey Research, Stony Brook University.

College Readiness, 2006–2010

New York State Education Department; data compiled by Hofstra. The college readiness indicator reflects mastery of the New York State High School Curriculum. It indicates the percentage of scores in a school at 85% or better across numerous statewide Regents examinations, including English, Chemistry, Physics, U.S. History, Global History, and the two highest level Mathematics exams. Broad-based superior performance reflects that graduates are prepared for the rigors of higher education.

Long Island Households Paying More Than 35% of Their Income on Housing Expenses

2000 and 2010 US Census of Population; data compiled by RPA.

Map: Availability of Affordable Homes on Long Island

Sales data provided by The Long Island Real Estate Reports (www.lirealestatereport.com) and LI Profiles (www.liprofiles.com). Map shows percent of homes sold in each Census Block Group that sold for less than 2.5 times the LI median family income. Map created by CUNY Mapping Service at the Center for Urban Research.

Home prices began rising dramatically in the early 2000s and continued until the housing bubble burst in 2008. Prior to the rise in prices, a much-used rule of thumb was to spend no more than 2.5 times the purchaser's annual household income. As prices rose and mortgage rates declined, this standard rose and today on Long Island, the norm is to spend upwards of 5 times one's household income on the purchase of a home. These maps look at four key time periods: 1997 (before the rise in home prices), 2000 (when price rises began to accelerate), 2007 (the height of the boom), and 2010 (after the housing bubble). The color shading on the maps shows the percent of homes in each neighborhood that sold for less than 2.5 times the Long Island median family income (\$171,250 in 1997, \$191,250 in 2000, \$234,500 in 2007, and \$268,105 in 2010).

Land Use on Long Island by Percent of Land

Data developed by Regional Plan Association for the Long Island Regional Planning Council and the New York Metropolitan Transportation Council.

Land Preservation: Actual vs. Goal

Data from: NYS Department of Environmental Conservation, Nassau County, Nature Conservancy, Suffolk County Planning Department, Town of Brookhaven, Town of East Hampton, Town of Huntington, Town of Riverhead, Town of Shelter Island, Town of Southampton, Town of Southold. Compiled by Long Island Pine Barrens Society.

Residential Building Permits Issues on Long Island, 1980 to 2010

Census Bureau Building Permits Survey; data compiled by RPA.

Permit Imbalance (2000–2010)

Census Bureau Building Permits Survey; data compiled by RPA.

Percent Change in Annual Ridership (2000–2010)

Metropolitan Transit Authority, New Jersey Transit; data compiled by RPA.

Credits

8,300 Acres of Underutilized Property in Our Downtowns and Around Our Rail Stations

Analysis conducted by RPA.

Average Wage and Change in Employment by Industry, Long Island, 2005 to 2010

Bureau of Labor Statistics, Hofstra University.

Annual GMP Growth/Decline: Long Island vs. U.S. 2002 to 2010

Economy.com; Hofstra University.

Average Pay Per Employee, U.S. and Long Island, 2001 to 2010

Bureau of Labor Statistics, Hofstra University.

Venture Capital Investment, Long Island, 1999 to 2010

Pricewaterhouse Coopers/National Venture Capital Association MoneyTree™ Report, Data: Thomson Reuters. Analysis: Collaborative Economics.

Relative Growth of Federal R&D Funding

National Science Foundation data compiled by Decision Data Resources. Analysis: Collaborative Economics. Note: New York State 2009 data will be available in January 2012.

Map: Nassau County Districts for Schools, Libraries, Fire, Police, Sanitation, Water, Sewer Services

Data from Nassau County Assessor's Office, Nassau County Planning Department/GIS Basemap, New York State GIS Clearinghouse, and research by Long Island Index staff. Map created by CUNY Mapping Service at the Center for Urban Research.

Local Government Expenditures: Change from 2000 to 2009

Office of the NYS Comptroller; analysis by Center for Governmental Research.

Comparison of Growth in LI Taxes from 2000 to 2009

Office of the NYS Comptroller; analysis by Center for Governmental Research.

Approval Process Comparison: Long Island vs. Fairfax County, VA

Data compiled through phone calls and internet searches to clarify approval process for a downtown revitalization project; analysis by Center for Governmental Research.

This report was written by Christopher Jones, vice president for research, Regional Plan Association, with assistance from RPA's Juliette Michaelson, Fiona Zhu, Richard Barone and Robert Freudenberg. For more information about their work, see www.rpa.org.

All maps were created by Steven Romalewski, Director, CUNY Mapping Service at the Center for Urban Research at The Graduate Center / CUNY; www.urbanresearch.org.

All infographics were created by Amy Unikewicz of JellyFever Design; www.jellyfever.com.

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