

# **LONG RANGE PLANNING STUDY**

*A service of Western Suffolk BOCES  
Office of School Planning and Research*



**CHAPPAQUA  
CENTRAL SCHOOL DISTRICT**  
*September 2009 Update*

# CHAPPAQUA CENTRAL SCHOOL DISTRICT

## Long Range Planning Study Update: Demographic and Enrollment Analysis September 2009

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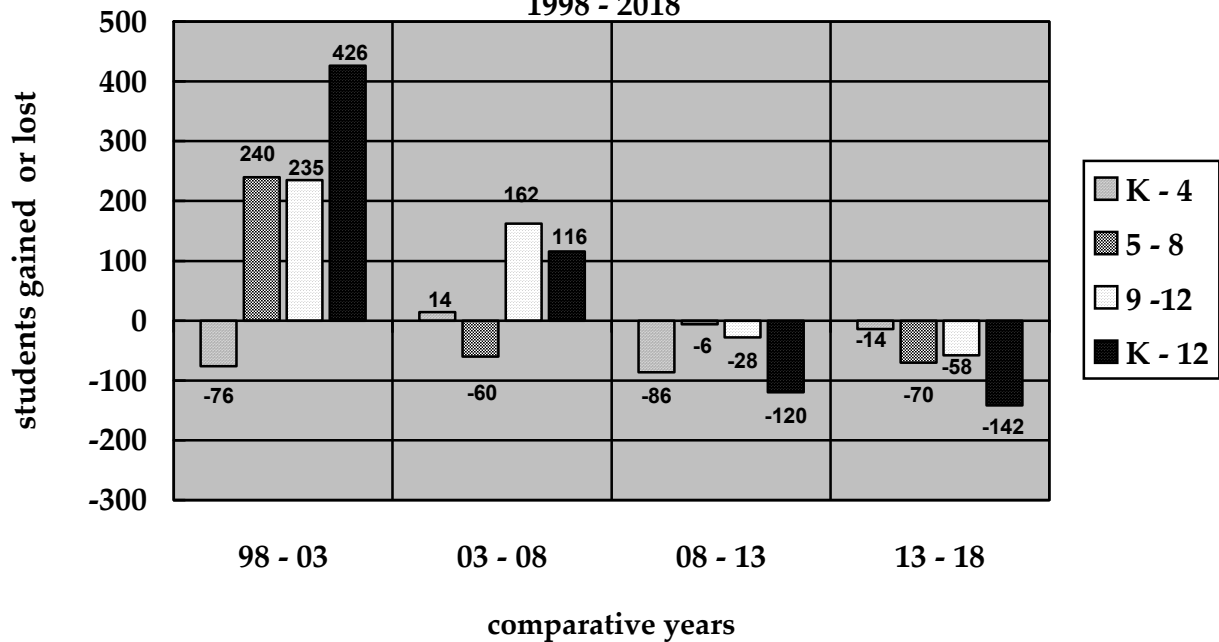
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# Chappaqua Central School District

## Enrollment Comparison

1998 - 2018



The Chappaqua Central School District has shown K - 12 enrollment growth throughout the historical period, 1998 - 2008. Net growth was noted in the middle school and high school grade configurations during the historical period, while the elementary configuration showed losses. It is projected that the district will continue to experience losses in the elementary grades and also show losses in the middle school and high school grades during the projection period.

# I N T R O D U C T I O N

At the request of the Chappaqua Central School District the Western Suffolk BOCES Office of Planning conducted this study that includes review of past projections made by Western Suffolk BOCES, assessment of demographic and historical enrollment trends in order to prepare new projections through the year 2018.

Chappaqua Central School District is committed to meeting the educational needs of its students throughout the future. The continued monitoring of enrollment trends will allow the district the data on which to consider a variety of educational issues. The foundation for this study is in keeping with the promotion of the basic district mission and philosophy.

The Board of Education and the Superintendent's efforts to plan for the future continuation of excellence in education through sound management practices is fostered by comprehensive, objective data, such as is contained within this Comprehensive Long Range Planning Study. This study serves to provide objective data that the Board of Education and administration can use in planning for the future. Planning is, however, a dynamic process that needs to reflect change. The data provided to the district through this study can be modified through periodic updates that allow the incorporation of subtle changes in district trends. This study provides an update to the demographic and enrollment update study prepared for the district in 2003.

Joan E. Townley, School Planning Coordinator, served as principal researcher, analyst and forecaster and oversaw all aspects of the study. Shu-ling Liu, Research Technician, assisted with the research and analysis. Janice Schwartz, Educational Planning Assistant, provided assistance with report compilation.

Dr. David A. Fleishman, Superintendent of Schools, provided access to district records. John Chow, Assistant Superintendent for Business, acted as district liaison and provided Western Suffolk BOCES with data and direction, thus enabling the study to accomplish its goals successfully. In addition, Mr. Jerry Faiella and Mr. Clinton Smith, of the Town of New Castle, provided demographic insights.

Additionally, selected references and resources were used, as indicated below:

Educational Research Service, Arlington, Virginia

Hudson Valley Economic Development Corporation, 2007

Local Non-Public Schools

Marist College Bureau of Economic Research; *Economic Report of the Hudson Valley Annual 2007*

MidHudsonNews.com

National Center for Education Statistics; The Condition of Education 2008

National Center for Health Statistics

New York State Data Center, Empire State Development

New York State Department of Health

New York State Dept. of Education -

Division of Educational Facilities Planning; Bureau of Educational Data Systems

New York State Statistical Yearbook

The Journal News; lohud.com

*The State of the County (Westchester)*, April 2008

Town Planning Departments for: Town of Mount Pleasant & Town of New Castle

U.S. Dept of Commerce, Bureau of the Census

U.S. Department of Health

usgovinfo.about.com – “quick facts”

Westchester 2025

Westchester County Planning Data book

*www.wikipedia.com*

[www.factfinder.census.gov](http://www.factfinder.census.gov)

[www.nylovesbiz.com](http://www.nylovesbiz.com)

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## ENROLLMENT - PAST, PRESENT & FUTURE

*School enrollment increases occur when more children are born, more new families move into a community, or more children return from non-public schools. The Chappaqua Central School District has experienced an overall gain in district K - 12 enrollment during the historical period 1998 through 2008. This enrollment increase is accounted for by increased birthrates, changing resident characteristics and housing factors.*

### A. BIRTH DATA

The *National Center for Health Statistics'* release of finalized birth data for 2005 indicates a one percent increase in the number of recorded births between 2004 and 2005. The number of births in the U.S. peaked in 1990, and was followed by a downward trend between 1990 and 1997. Since that time, the total number of births increased, but remained below the 1990 peak. Recent data, however, points out that births rose another 3 percent in 2006, the highest since 1990, and that anecdotally, 2007 seems to show a continued increase. These latest events have been described as a "baby boomlet", with the 4.3 million births in 2006 being the largest number of children born in 45 years. The National Center for Health Statistics reported that the U.S. fertility rate rose to 2.1 babies per woman in 2006 - the birth rate required to replace the population. Some demographers speculate, though, that births in 2008 may show a decline as a result of the slower economy. Some families may choose to postpone having children during difficult economic times. Other demographic factors, such as race and age affect the birth rate, as well.

According to a press release from the *National Center for Health Statistics*, the average woman in the United States is expected to have 3.2 pregnancies in her lifetime at current pregnancy rates; black and Hispanic woman are expected to have 4.3 pregnancies each, compared with 2.7 for non-Hispanic white women.

Data reveals that the number of births declined slightly for non-Hispanic white women, but increased for all other races and Hispanic groups between 2004 and 2005. The number of births to non-Hispanic white women decreased one percent in 2005, while births increased by 1 percent for non-Hispanic black women, and 4 percent for Hispanic women. Births also increased for Asian or Pacific Islander women and American Indian or Alaska Native women by 1 and 2 percent, respectively. It is important to note that, while this data reflects birth statistics for American-born women, fertility rates often rise among immigrant women who have left their homelands to pursue a better life in the United States.

Further analysis of the birth data reveal that the 2005 birth rate for women aged 20 - 24 was slightly higher than the record low in 2004. The birth rate for women aged 25 - 29 was unchanged and has been fairly stable since 2002. Birth rates were up for all age groups 30 years and older. The rate for women 30 - 34 increased slightly. Birth rates for women aged 35 - 39 and 40 - 44 each rose 2 percent. The rate for women 45 - 49 increased for the first time since 2000. The number of births for women ages 50 - 54 rose in 2005. The increase in birth rates for women aged 35 and over is due, in part, to the use of fertility drugs, as well as women choosing to postpone childbirth until later in

life. The recent increase in births is not the result of a few women having many children, but rather the result of many women having a few children each.

Local data from the *New York State Department of Health* show a relatively stable trend in the number of births in Westchester County since 1990, with a peak of 13,333 births recorded in 1991. Following this peak, births fluctuated with a sharp rise of almost 6 percent noted in 2000. Subsequently, the number of births dropped and remained relatively stable since then. Births in 2005 showed a decline of approximately 3 percent from 2004 levels, while the number of reported births in 2006 continued to fall to an historical low.

## **B. POPULATION**

The total population of the seven counties that comprise the lower/mid-Hudson Valley (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester) was 2,275, 375 in 2007, according to Census Bureau estimates. This compares to the 2000 Census figure of 2,179,187, constituting an increase of approximately 4 percent in the seven year period. Estimated county increases were maintained within a range of 2.3 - 10.5 percent between 2000 and 2007. This compares to the 1.69 percent growth (lower than the 1.79 percent between 2000 and 2005) estimated to have taken place in New York State as a whole. New York State's median age in 2007 was estimated at 37.7 years, compared to the 2000 median age of 35.9. Three regional counties - Orange, Putnam and Dutchess – again rank among the top ten of the 62 counties in New York State in terms of percent population growth, with Orange County continuing to experience the greatest percent growth of all counties in New York State.

The seven-county Mid-Hudson Region lies north of New York City and south of the Capital Region. It is a mix of urban areas, waterfront cities, rural villages, farmlands, and forests. The high population density and higher cost of living in the New York metropolitan area have contributed to the increased migration to the Mid-Hudson counties. The Mid-Hudson Region also has the largest concentration of Fortune 500 headquarters in New York State outside of New York City. There is a highly diversified economy, with concentrations in biomedical industries, pharmaceuticals, financial/business services and distribution. Semiconductors and microelectronics is a flourishing industry cluster. Services, retail trade and manufacturing comprise the region's leading private employers. Known for high technology, the Mid-Hudson region supports a strong concentration of scientists, engineers, physicists, computer scientists and chemists working at a number of cutting-edge research laboratories. This region also offers access to more than 200 world-class academic research institutes, medical centers, and laboratories. Apple growing operations and wineries are rooted in several counties and dairy farms are scattered throughout the region.

The crowding and high cost of living associated with the New York metropolitan area and its adjacent suburbs has led increasing numbers of people to move from these congested areas to the Hudson Valley and commute into New York City to work. This demand for housing has resulted in increased residential development and a significant increase in housing costs in the lower- and mid-Hudson Valley regions. The overall effect of decreased industrialization and increased residential development has caused a transformation in the region to an exurb struggling to balance the competing demands of maintaining the area's rural character with the conveniences and services of suburban living.

The corporate presence, supported by a workforce that is particularly suited for careers in the fields of science and technology, has contributed to growth in the region. The field of educational services provided the greatest growth in full and part-time jobs in Orange and Putnam Counties, while positions in the real estate field provided the greatest employment growth in Rockland, Ulster and Westchester Counties. Positions within the arts, entertainment and recreation industries provided the greatest employment growth in Sullivan County, according to a survey conducted by the U.S. Census Bureau. In addition, it was noted that although many immigrants arrive in New York City initially, they are more quickly moving to other adjoining areas than they had in the past, possibly because they can join already established communities; this change has also contributed to population growth in the region. It should be noted that, in 2007, there was a widespread reduction in the labor force participation by Hudson Valley residents which resulted in a contraction of the regional labor force when compared to 2006. This was the first significant decrease in the labor force since 1994.

According to Census estimates, Westchester County is estimated to have experienced continued growth of about 3 percent between 2000 and 2007, reaching approximately 951,325 residents in 2007. Much of this growth comes from in-migration from New York City and Long Island. Westchester County ranks 14<sup>th</sup> of the 62 New York State counties, in terms of percent growth.

The percent of the county population in various age groupings has changed, based on Census estimates. Westchester County's population under 5 and the population up to age 9 have basically stabilized between 2000 and 2007. However, there have been small increases in population among the age 10 - 24 age group. The largest decrease in population has been seen in the 25 - 44 age group, where declines of between 2.6 - 2.8 percent have been seen between 2000 and 2007. It is estimated that the 65 and over age group has remained relatively stable. This would imply that those residents between 10 - 24 and over 45 years of age have influenced the growth in the county. The median age in 2007 was estimated to be 39.7 years, the 2000 median age was 37.6 years. The national and state median ages in both 2007 and 2000 are both somewhat lower; 37.7 years in New York in 2007 compared to 36.0 years in 2000, and 36.6 years for the United States as a whole in 2007, compared to 35.3 years in 2000.

In 2002, there were more than 33 million (11.8%) people living in the United States that had been born in foreign countries, according to U.S. government records. Foreign-born residents comprise the fastest-growing segment of the population. They accounted for 44 percent of the nation's population growth in 2002. The majority of foreign born residents live in four states – California (28%), New York (11.8%), Texas (9.8%) and Florida (8.9%). The percentage of foreign-born residents in Westchester County was approximately 22 percent in 2000.

The population within the Chappaqua School District increased 9.2 percent between 1990 and 2000, when the population grew to 16,074. Adjusted population data show an estimated additional 396 persons living within the Chappaqua School District between 2000 (16,074) and 2008 (16,470). This represents an increase of 2.5 percent.

## C. HOUSING

Living within a commutable distance from New York City, while enjoying the scenic attractions of the area, makes the Hudson Valley region attractive to home buyers. In 2007, employment gains in the service sector compensated for the on-going loss of jobs in the manufacturing area. Since 2003, manufacturing has lost 5,100 jobs; the private service sector has created 28,400 jobs. Because the regional labor force is growing faster than the number of jobs within the region, an increasing number of residents are employed outside of the Hudson Valley. While the New York State unemployment rate was 4.54% in 2007, Putnam and Rockland counties saw rates below that level at 3.25% and 3.60% respectively. The highest average unemployment rates were in Sullivan (5.00%) and Greene (4.70%) counties. Columbia Country experienced the largest increase in unemployment, from 3.74% (2006) to 4.27% (2007). Across the region, the cost of buying a home continues to rise faster than income. The consequence of this is increased outward migration; inter-regional migration away from the southernmost counties and a growing pool of residents who cannot afford to purchase homes within the region.

Although 2007 home sales for the region as a whole continued to decline, the average housing price increased by 5.73%, while the median housing price fell .22%, when compared to 2006. During the same time frame, the median selling price of an existing home in New York State and the U.S. declined, 3.82% and 1.31% respectively. The average selling price in New York State increased 3.16%, while nationwide the average selling price declined .82%.

By the end of 2007, the average selling price of an existing home in the Hudson Valley, at \$601,083, was 126% above the national average and 73.4% above the state average. Home prices in Dutchess, Orange, Putnam, Rockland, and Westchester exceeded both the state and national averages of \$346,684 and \$266,000, respectively. The median selling price of an existing home in the Hudson Valley, at \$340,476, was 55.49% above the national median and 42.46% above the state median. Since 2003, the average selling price of a single-family home in the Hudson Valley rose 36.81%; the median selling price has increased 30.19%. In general, those moving into the region had higher wage earning capacity than those moving out of the area, which may be linked to the increasing median home costs.

Most counties in the Hudson Valley saw out-migration that was greater than in-migration during 2005-2006. The disparity was particularly apparent when examining the in-flow from other than the Tri-State area and comparing it to the out-flow to other than the Tri-State area. In some counties, the outflow was more than double the in-flow into the area.

Permits for single family homes decreased significantly (17.77%) in 2007. This followed a 20.48% decline in the previous year. All counties, with the exception of Rockland and Westchester, saw declines in the annual number of construction permits in 2007. In addition, actual construction has been delayed in some areas until the current inventory of homes is reduced. The availability of land for new residential construction is a factor in some areas as open land preservation programs by town, county and state agencies use large tracts of land and changing zoning restrictions may limit the type and number of dwellings built.

Most communities are increasingly seeing the need for workforce housing to promote home ownership and attract and retain young people entering the workplace. Various initiatives to create this type of housing while maintaining the overall character of existing communities are being entertained. Westchester County's record-setting double-digit appreciation housing market has slowed down; however, there still has been a housing appreciation of almost 22 percent since 2003. In 2007, when many areas saw median home prices decrease, Westchester experienced an increase in excess of one percent. Average sales prices also continued to increase, gaining almost four percent in 2007, reaching \$935,930. Only Rockland and Westchester counties saw an increase in single-family construction permits in 2007; Westchester had seen a drastic drop in permits in 2006. The amount of land available for residential housing is shrinking as the southern part of the county becomes built-out and families move farther north. Affordable housing remains a concern that the county is addressing. The county's highly qualified labor force is well utilized as evidenced by its high rates of employment and low unemployment rates over the last decade. Westchester's unemployment rate (3.63 percent in 2007) is among the lowest in the Hudson Valley Region. In 2007, after several years of job growth, the number of employed workers in the county decreased for the first time in many years. However, with the exception of manufacturing, all major industry sectors have been expanding, each at varying rates. The professional, scientific and technical services have expanded in recent years, creating employment opportunities for residents of Westchester County. More and more businesses are finding Westchester an attractive location, especially when compared to the high rental spaces in New York City.

Westchester County's median home sale price rose to \$676,250 in 2007, which is approximately 1 percent above the 2006 median price, making it the county with the highest median price in New York State. This median price compares to Chappaqua School District's median home sale price of \$880,000 in 2008.

Table 1 below summarizes subdivision activity as reported by the Towns of Mount Pleasant and New Castle. The Town of Mount Pleasant reports no new subdivisions planned for the area. However, since the last report, all projects have been completed. The Town of New Castle reports that there are 41 units proposed in eight projects. Of these, nine proposed units are town homes and six are apartment units. In addition, the Chappaqua Crossing development, a 278 unit project, is under consideration and the Draft Environmental Impact Study has been received and is under review. As proposed, this development will include 246 units for senior housing.

**TABLE 1 – PROPOSED & APPROVED NEW RESIDENTIAL HOUSING IN THE CHAPPAQUA CSD**

<b>Project Name</b>	<b>Location</b>	<b>Type of Housing</b>	<b>Status</b>
<b>Mount Pleasant</b>			
Danfor Realty*	Greenbriar/Bristol	3 single family homes (reduced from 4)	Completed
Leftkowitz Subdivision *	Deerfield Lane N.	4 single family homes	Completed
<b>New Castle</b>			
Brandywine*	Mount Kisco-off Brandon Drive & Bittersweet Lane: Cyntia Court	8 single family homes (new lots)	Needs Planning Board site plan approval
Robin*	Chappaqua-King Street (NY Route 120)	1 new lot	Site plan approved
<b>Granite’s Crossing</b>	Millwood-Station Place	9 single family townhomes	Completed
<b>Placid Subdivision</b>	Chappaqua-King Street (NY Route 120) & North Place Meadowhill	4 new lots - single family estate homes	Needs Planning Board site plan approval
<b>Ike &amp; Co. Subdivision</b>	Cross Way & Lori Lane	2 new lots – single family homes	Needs Planning Board site plan approval
<b>Jagar Realty/Millwood Town Plaza</b>	Millwood-NY Route 100 (Saw Mill River Road)	6 apartments	No status reported
<b>Chappaqua Crossing</b>	Former Readers’ Digest property	278 units; 246 senior units, 42 affordable homes	DEIS under review
<b>Lawrence Farms Crossway</b>	Lawrence Farms Crossway	10 lot subdivision	Concept study done-application not yet submitted
<b>Inningwood Road</b>	Inningwood Road	1 single family home	Received steep slope permit

\* - indicates a change in status since January 2003

BOLD – indicates new subdivisions since January 2003

The greatest impact to the school district will continue to be through the resale of existing homes. Approximately 187 to 299 homes have sold in the district each year over the past nine years. According to the *New York State Office of Real Property Service*, sales activity has slowed considerably since 2005, when the sales peak was seen. It is noted that the number of sales in 2008 was 187, the lowest since 2000. The median price decreased for the first time in 2008, with a reported median price of \$880,000 compared to the median price of \$990,000 in 2007; an 11 percent decrease.

## D. NON-PUBLIC SCHOOL ENROLLMENT

A final factor that has the potential to impact public school enrollment is the attendance of resident students in non-public schools. According to a report published by the *National Center for Education Statistics*, between 1989 and 2005, national nonpublic school enrollment in kindergarten through grade 12 grew from 4.8 million to 5.3 million students. However, by 2005, enrollment had declined to 5.1 million students. While the actual number of students enrolled in private school increased, the percentage of all students enrolled in private schools showed an overall decline from 11 to 9 percent during this time.

Private schools, on average, are struggling with declining enrollments that are not necessarily related to the quality of the school program, but to demographic and economic factors prompting consolidation and/or school closings. Officials credit financial concerns as the main reason for the declines, along with the aging population. Also, the variety of religions represented by new immigrants to the area requiring individualized school settings is having an impact. To counter this trend, various new initiatives are in place to reverse the current enrollment pattern.

The percentage of children enrolled in private schools also differs by region. In 2005, the percentage of students in nonpublic school was higher in the Northeast (13 percent) than in the Midwest (10 percent), the South, and the West (8 percent each).

The Chappaqua School District reported that currently 106 students, or 2.5 percent, of the total student population attend non-public schools. This compares to the New York State estimated figure of 14.2 percent for 2006. Westchester County ranked 9<sup>th</sup> out of the 62 counties in the state with 14.9 percent of all students attending non-public schools in 2006, the last year for which county ranking is available.

The district's average rate of 2.6 percent has remained stable over the last six years. A survey of local non-public schools revealed that most schools are experiencing stable enrollments. The district continues to gain the most students in transition to the first grade, which is contributed to by returns from the non-public schools.

## E. ENROLLMENT PROJECTION METHODOLOGY

This study, like the previous *Western Suffolk BOCES* study update completed in January 2003, utilizes fall enrollment data provided by the Chappaqua School District. The methodology employed in preparation of projections requires the use of statistics, and number rounding of fractions to the next highest whole number (e.g., 31 could equal 31.33 or 30.82). Therefore, individual numbers may not always add up to the presented total.

The Cohort Survival Technique was used to project the district's enrollment patterns for the next ten years. *Three basic inputs were necessary:*

1. Actual enrollment by grade for 1998 - 2008 for the district [*Appendix A-2*] and each school [*Appendix A-9, A-11, A-13, A-15, A-16, A-17.*]
2. Grade-to-grade retention (migration) ratios for each two-grade transition to grades 1 - 12 for the past five - eight years for the district [*Appendix A-2*] and each school [*Appendix A-9, A-11, A-13, A-15, A-16, A-17.*]

3. Projected Kindergarten entering cohorts based on the number of live births in the Westchester County five years before each year projected [Appendix A-4]. The anticipated kindergarten within each elementary school was based on an analysis of the historical proportionate distribution.

The Cohort Survival Model takes into consideration the normal community processes that affect school enrollment, which include:

1. The number of births and fertility rates
2. Normal in and out migration
3. Transfers to and from non-public schools
4. Population variations
5. Resident family characteristics

The enrollment projections contained within this report are based on assumptions generated through the demographic analysis. *This analysis led to the following assumptions:*

1. Population will continue stabilize as the turnover of existing homes and new residential development bring fewer younger families into the community. The turnover of about 187 - 300 homes each year is anticipated.
2. The level of births and future kindergarten classes is anticipated to be maintained at a lower level relative to housing turnover.
3. Non-public school enrollment will continue to remain at approximately 2 - 3 percent of Chappaqua School District's resident children attending non-public schools each year.

The Cohort Survival Model is very accurate in forecasting future enrollment patterns, but the occurrence of certain conditions would warrant modifications in these projections. *These conditions include:*

- A level of new housing activity which is significantly higher or lower than that experienced by the district during the past three years.
- A significant change in the level of housing turnover.
- Expansion, consolidation, or the establishment of new non-public schools.
- Economic conditions that affect employment, finance, and housing in a manner dissimilar to the past three - five years.
- Major sociological changes that evidence in changed values or attitudes affecting anticipated family size and birthrate.
- Household characteristics that significantly differ from the past three - five years, including number of persons per household and age of household occupants.

It is important for the reader to understand the nature of enrollment projections. Regardless of the methodology employed to produce projections, *all outcomes fall into three categories of reliability:*

*Category 1* - Those projections based on students already enrolled in the system are the most reliable projections.

*Category 2* - Those projections based on documented births are slightly less reliable than those of Category 1.

*Category 3* - Those projections based on estimates of future births are the least reliable.

Therefore, the most reliable projections are those calculated for the periods closest in time. Projections for periods further out in time are less reliable, particularly those beyond five years from the year of the study. The five-year period (2008- 2013) projections are those best used in district planning and decision-making. That is because this first period consists mainly of Category 1 projections.

It is noted that the overall enrollment projections produced by Western Suffolk BOCES generally fall within a 4 percent margin of error. The greatest discrepancies in projections occur in the smallest subsets of those projections. For example, the projections for the district as a whole are likely to be the most accurate, and the projections of a building's particular grade level in a specific year are likely to be the least accurate. It is advised that updates to projections be continued on a periodic basis to maintain modifications warranted by subtle shifts in migration trends and demographic factors.

## **F. ACCURACY OF PREVIOUS PROJECTIONS**

A comparison was made between the enrollment projections presented in the *January 2003 Western Suffolk BOCES study* and the actual enrollment for 2003/04.

As shown in Table 2, and Appendices A-1 and B-1, the *January 2003 study* projected the 2003/04 K - 12 enrollment at 4,117 students, and there were 4,096 students enrolled. This projection was within 21 students of the actual enrollment, reflecting a projection within a 1 percent margin of error.

The K - 4 grade configuration was projected within 8 students of the actual enrollment in 2003. The 5 - 8 grade configuration was projected within 16 students of the actual enrollment in 2003. The 9 - 12 grade configuration was projected within 13 students in 2003. All grade configurations were projected within 1 - 2 percent of the actual enrollment. The individual schools were projected as follows: Grafflin within 5 students of actual enrollment; Roaring Brook within 2 students of actual enrollment; and Westorcharde within 5 students of actual enrollment.

Actual enrollment for kindergarten was higher than projected by 10 students. The kindergarten projections were based on the assumption that the ratio of students entering the district would be similar to the rate experienced in the past. However, the rate was slightly higher this year than anticipated.

The inspection of the variations in the enrollment, particularly in the grade-to-grade migration, revealed some inconsistencies. These variations can be accounted for mostly by housing and non-public school attendance factors. These variations were taken into account in the current update. The subtle changes used in projection methodology as updates are conducted, yield data which are accurate for enrollment and facilities planning.

**TABLE 2 - PROJECTION ACCURACY OF JANUARY 2003 WESTERN SUFFOLK BOCES STUDY**

Grades	2003 Actual	2003 Projected	Difference	Accuracy
K - 4	1,556	1,548	-8	99.5%
5 - 8	1,370	1,386	16	101.2%
9 - 12	1,170	1,183	13	101.1%
<b>K - 12</b>	<b>4,096</b>	<b>4,117</b>	<b>21</b>	<b>100.5%</b>
Grafflin	555	550	-5	99.1%
Roaring Brook	525	527	2	100.4%
Westorchard	476	471	-5	98.9%

## G. DISTRICT ENROLLMENT

*The Chappaqua Central School District educates students within grades K - 12 in six district schools. Following a district reorganization in 2003, the current configuration includes three elementary schools that house grades K - 4, two middle schools that house grades 5 - 8, and a high school that houses grades 9 - 12.*

**K - 12 enrollment** [Appendix A-2, A-6, B-2] consisted of 3,670 students in 1998 and then rose by 542 students to the current enrollment of 4,212 students in 2008. Enrollment is expected to decrease in eight of the next ten years, with 3,950 students anticipated in 2018. This represents a loss of 262 students, or 6 percent, of the 2008 enrollment.

*The projected decreases can be attributed to several factors:*

- **First**, the kindergarten has totaled more than 300 students in four of the historical years, reaching its peak enrollment of 325 students in 2007. In fact, the kindergarten class exceeded 280 students in eight of the last ten years. While kindergarten classes are expected to remain at 280 or more students in seven of the next ten years, no classes are anticipated to reach 300 students. This grade is projected to remain at a lower level throughout the projection period, reflective of a lower birthrate and fewer births [Appendix A-4].
- **Second**, the kindergarten class was larger than the twelfth grade of the previous year in eight years of the historical period. The displacement added 9 - 57 students to the overall enrollment. During the projection period a negative relationship between the entering kindergarten and the exiting twelfth grade is expected, which will temper enrollment growth during the projection period [Appendix A-8].
- **Third**, on average, the district displays the tendency to gain or maintain students in transition to most grades; however, grades 8 - 11 display the tendency to lose students in transition [Appendix A-2].
- **Fourth**, increases occurred in the average grade level size of kindergarten and grades 1, 6-12 during 2003 through 2008 as compared to 1998 - 2003. These gains are only projected to continue in grades 5 - 7 and grade 12 during 2008 - 2013. Grade level sizes will decrease between 2013 - 2018 in grades 1 - 9, while growth will continue in the remaining grades. This reflects the larger cohorts moving through the system [Appendix A-8].

Table 3 presents the current and projected enrollment through 2018 for the district and each grade configuration. It is shown that the elementary grades (K - 4) are projected to peak in 2009, while the middle grades (5 - 8) are projected to peak in 2010. The secondary grades (9 - 12) are projected to peak in 2014, as the historical growth in the lower grades continues to move through the system. The total projected district enrollment is expected to peak at 4,152 students in 2009. It should be noted that this is 60 students less than the current enrollment in 2008.

**TABLE 3 - CHAPPAQUA CSD PROJECTED ENROLLMENT**

	K - 4	5 - 8	9 - 12	K - 12
<b>2008</b>	1,570	1,310	1,332	<b>4,212</b>
<b>Projected 2009</b>	1,553*	1,334	1,265	<b>4,152*</b>
<b>2010</b>	1,514	1,372*	1,231	<b>4,117</b>
<b>2011</b>	1,503	1,322	1,281	<b>4,106</b>
<b>2012</b>	1,469	1,340	1,281	<b>4,090</b>
<b>2013</b>	1,484	1,304	1,304	<b>4,092</b>
<b>2014</b>	1,478	1,275	1,342*	<b>4,095</b>
<b>2015</b>	1,481	1,270	1,292	<b>4,043</b>
<b>2016</b>	1,486	1,226	1,310	<b>4,022</b>
<b>2017</b>	1,480	1,238	1,276	<b>3,994</b>
<b>2018</b>	1,470	1,234	1,246	<b>3,950</b>

Note: It is noted that the sum of the numbers may not add up to totals due to rounding.

\* = denotes peak enrollment during 2009 – 2018

## H. ENROLLMENT OF GRADE CONFIGURATIONS

### ELEMENTARY GRADES ENROLLMENT *[Appendix A-3, A-7, B-8]*

The elementary enrollment consisted of 1,931 students in grades K - 5 in 1998. The number of students rose the next year but decreases were seen the following three years. In 2003, the fifth grade students were moved to the middle school which accounted for an 18 percent decrease in enrollment. Increases were seen the following two years and stability followed in 2006. Decreases have been seen over the past two years bringing the current enrollment to 1,570 students in grades K - 4. Despite these recent losses, there has been an increase of 14 students since the grade reconfiguration in 2003.

The elementary enrollment (K - 4) is projected to peak at 1,553 students in 2009, which is 17 students less than the current enrollment. Decreases will continue through 2012 and then stabilization is expected for the remainder of the projection period. The number of students is expected to range between 1,469 and 1,553 during the projection period. The projected enrollment decline in the first half of the projection period can be attributed to an entering kindergarten that is smaller than the exiting fourth grade of the previous year.

The elementary grades are housed in three schools: Grafflin Elementary School, Roaring Brook Elementary School, and Westorchard Elementary School.

Table 4 presents the current and projected enrollment through 2018 for each district elementary school. It is shown that the elementary schools will be at their peak enrollments for the projection period in 2009. The current enrollment ranges from 500 students at Westorchard to 551 students at Grafflin.

**TABLE 4 - PROJECTED CHAPPAQUA CSD ELEMENTARY SCHOOL ENROLLMENT**

Year	Grafflin	Roaring Brook	Westorchard
2008	551	519	500
<b>Projected</b> 2009	543*	494*	516*
2010	535	478	501
2011	530	481	492
2012	513	476	480
2013	519	476	489
2014	521	473	484
2015	521	474	486
2016	522	474	490
2017	519	472	489
2018	516	469	485

Note: It is noted that the sum of the numbers may not add up to totals due to rounding  
 \* = denotes peak enrollment during 2009 - 2018

**Grafflin Elementary School** [Appendix A-9, A-10, B-4] housed 692 K - 5 students in 1998. The number of students increased in the next two years bringing enrollment to a peak of 726 students in 2000. Decreases followed over the next two years. Enrollment decreased 19 percent when the fifth grade classes were moved to the middle school in 2003. Continued decreases were seen in the subsequent two years, but this was followed by increases over the past three years. The current enrollment of 551 K - 4 students represents a decrease of four students since the grade reconfiguration in 2003.

The enrollment in this school is expected to decrease during the next four years. Stabilization is expected during the second half of the projection period. Although this school shows the trend to gain students in progression to all grades, the incoming kindergarten is projected to be smaller than the exiting fourth grade of the prior year in all projection years, which will serve to moderate gains through migration.

Grafflin Elementary School currently houses twenty-six (26) instructional sections, with five - six sections per grade level. The average class size for this school during 2008-2009 ranged from 18.8 - 23.0 students per section. The projections suggest a need for 25 - 26 instructional sections each year throughout the projection period, 2009 - 2018, to allow the district to maintain its current class size guidelines of no greater than 20 students in kindergarten; 23 students in first grade; and 25 students in grades 2 - 4.

**Roaring Brook Elementary School** [Appendix A-11, A-12, B-4] housed 639 K - 5 students in 1998. Enrollment increased to an historical high of 663 students in 2000. Decreases occurred over the next two years followed by a redistricting in 2003 that moved the fifth grade students to the middle school and resulted in an 18 percent enrollment decline. Two years of increases were followed by decreases over the past three years, bringing the current enrollment to 519, representing a decrease of six students from the 2003 enrollment.

The enrollment in this school is projected to decline in six of the ten projection years. Enrollment is expected to range between 469 - 494 students between 2009-2018. This school shows the trend to maintain or gain students in progression to all but the fourth grade, which shows a loss in transition. Additionally, the incoming kindergarten is projected to be smaller or the same as the exiting fourth grade of the prior year for all but one year of the projection period.

Roaring Brook Elementary School currently houses twenty-four (24) instructional sections, with four to five sections per grade level. The average class size for this school during 2008-2009 ranged from 18.8 - 22.6 students per section. The projections suggest a need for 22 - 24 instructional sections to allow the district to maintain its current class size guidelines of no greater than 20 students in kindergarten; 23 students in first grade; and 25 students in grades 2 - 4.

**Westorcharad Elementary School** [Appendix A-13, A-14, B-4] housed 600 K - 5 students in 1998. This was the highest enrollment of the ten-year historical period. Subsequently, enrollment declined each year through 2001. An increase the following year was followed by a 17 percent decrease in 2003 when the fifth grade students were moved to the middle school during a district reconfiguration. Increases were seen each year through 2007, followed by a decline to the current enrollment of 500 students in 2008. Despite the recent decrease, the current enrollment represents an increase of 24 students since the reconfiguration in 2003.

The enrollment in this school is projected to increase next year to 516 students, which will be the peak for the projection period. Subsequently, decreases are expected through 2012. This will be followed by relative stability for the remainder of the projection period. Although this school shows the trend to gain or maintain students in progression to all grades, the incoming kindergarten is projected to be smaller than the exiting fourth grade of the prior year in eight of the next ten years, causing the decline in enrollment. Enrollment is projected to range between 480 and 516 students during the projection period.

Westorcharad Elementary School currently houses twenty-five (25) instructional sections, with four to six sections per grade level. The average class size for this school during 2008-2009 ranged from 17.2 - 22.4 students per section. The projections suggest a need for 22 - 24 instructional sections to allow the district to maintain its current class size guidelines of no greater than 20 students in kindergarten; 23 students in first grade; and 25 students in grades 2 - 4.

## ELEMENTARY INSTRUCTIONAL SECTIONS

The current and projected need for elementary instructional sections is presented in Table 5. These needs are based on the application of the following class size guidelines:

- Kindergarten                   no greater than 20 students
- Grade 1                           no greater than 23 students
- Grades 2 - 4                   no greater than 25 students

It is shown that the district currently housed a total of 76 sections for core instruction of grades K – 4 during the 2008-2009 school year. The projected enrollment suggests the need for 69 - 75 sections during the projection period for grades K - 4. It is noted that Roaring Brook will require fewer sections than allocated in 2008-2009. Grafflin will require 26 sections, the same as currently used, in 2009 and 2011; otherwise it will require one less section. Westorcharad will need the same allocation in 2009 as it had in 2008; subsequently it will require fewer sections.

**TABLE 5 - PROJECTED ELEMENTARY INSTRUCTIONAL SECTIONS**

Year	Grafflin	Roaring Brook	Westorcharad	Total
2008	26	25	25	76
2009	26	24	25	75
2010	25	23	24	72
2011	26	23	24	73
2012	25	23	23	71
2013	25	22	23	70
2014	25	22	22	69
2015	25	22	22	69
2016	25	22	23	70
2017	25	22	23	70
2018	25	22	23	70

## MIDDLE GRADES ENROLLMENT [Appendix A-3, A-7, B-5, B-8]

The middle grades (5 - 8) are currently housed in the **Robert E. Bell Middle School and Seven Bridges Middle School**. In 1998, Bell Middle School, then the district’s only middle school, housed 804 students in grades 6 - 8. Enrollment increased steadily through 2002 when enrollment reached 1,023 students. A district reconfiguration in 2003 moved the fifth grade students from the elementary schools to Bell Middle School and the newly opened Seven Bridges Middle School, which initially housed grades 5 - 7. The following year grade 8 was added to the Seven Bridges configuration. Enrollment declined over the next three years, but increased during the past two years to the current enrollment of 1,310 students. This represents a 14 student increase over the 2003 enrollment.

The enrollment is expected to increase during the next two years and rise to the projection period middle grades’ peak of 1,372 in 2010. Subsequently, decreases in enrollment are expected in six of the remaining eight years of the projection period. The fifth grade is projected to be smaller than the outgoing eighth grade of the prior year in six of the projection years. This negative displacement is compounded by the district’s trend to gain, maintain or lose students as they progress to all grades.

**Robert E. Bell Middle School** [Appendix A-15, B-6] housed 804 students in grades 6 - 8 in 1998.

The enrollment increased each year of the historical period through 2002, when enrollment peaked at 1,023 students. The following year, a new middle school opened as part of the district's grade reconfiguration. Students in grade five were transferred from the elementary schools to the middle schools. Enrollment continued to decline over the next three years, but increased in 2007. A decrease this year brought the current enrollment to 663 students.

The enrollment in this school is projected to increase for the next two years and is expected to reach its projected peak of 710 students in 2010. Subsequently, decreases are expected in six of the remaining eight years of the projection period, resulting in an enrollment of 635 students in 2018. This represents an overall decrease of 28 students during the next ten years.

This school shows the trend to gain or maintain students as they progress to grades six and seven, and lose students as they progress to eighth grade. The incoming fifth grade is projected to be smaller than the exiting eighth grade of the previous year in six of the ten projection years. This negative displacement paired with the trend to lose or maintain students as they progress to the sixth and eighth grades will contribute to the projected enrollment decrease. Enrollment is expected to range between 630 and 710 during the projection period.

**Seven Bridges Middle School** [Appendix A-16, B-6] opened in 2003 and housed 509 students in grades 5 - 7 that year. The enrollment increased the following year when eighth grade students also attended this school. Enrollment has fluctuated since then. The current enrollment of 647 students represents a decrease of seven students since its first full enrollment in 2004.

The enrollment in this school is projected to increase for the next two years and is expected to reach its projected peak of 662 students in 2010. Subsequently, decreases are expected in six of the remaining eight years of the projection period, resulting in an enrollment of 599 students in 2018. This represents an overall decrease of 48 students during the next ten years.

This school shows the trend to maintain students as they progress to all grades. The incoming fifth grade is projected to be smaller than the exiting eighth grade of the previous year in six of the ten projection years. This negative displacement paired with the trend to maintain students as they progress to the all grades will contribute to the projected enrollment decrease. Enrollment is expected to range between 596 and 662 during the projection period.

**SECONDARY GRADES ENROLLMENT** [Appendix A-3, A-7]

The secondary grades, 9 - 12, are housed in the **Horace Greeley High School** [Appendix A-17, B-7, B-8]. In 1998, the number of students enrolled was 935. The enrollment increased throughout most of the historical period until declines occurred over the past two years resulted in the current enrollment of 1,332 students. Despite recent losses, a gain of 397 students, or 42 percent of the 1998 enrollment, was noted over the last ten years.

The enrollment in this school is projected to continue to decline through 2010 and then see slight increases until reaching a projection period peak of 1,342 students in 2014. Declines are expected in three of the remaining four years of the projection period resulting in an enrollment of 1,246 students in 2018. This represents a loss of 86 students over the next ten years.

The secondary grades enrollment shows the trend to lose students as they progress to grades ten and eleven, and maintain students to twelfth grade. The incoming ninth grade is projected to be larger than the exiting twelfth grade of the previous year in five of the ten projection years. This positive displacement will temper the trend to lose as they progress to the tenth and eleventh grades will contribute to the projected enrollment loss. Enrollment is expected to range between 1,231 and 1,342 during the projection period.

## I. IMPACT OF CHAPPAQUA CROSSING DEVELOPMENT

As noted in the demographic analysis, a large development is under consideration that would be located within the boundaries of the Chappaqua Central School District. A Draft Environmental Impact Study has been issued and is under review. It is proposed that this 120-acre site, formerly the headquarters of Readers' Digest, be developed into a 278 unit housing area. The majority of the units would be "age-restricted," i.e., limited to persons 55 years and older. The units would include both market-rate and affordable age-restricted housing. In addition, a limited number (32) would be workforce homes (not age-restricted). The project would consist of multi-family, low-rise buildings and townhomes. No one under the age of eighteen would be permitted to reside in senior units.

Residents of the affordable units would be chosen by lottery to be overseen by the Town Board. Preference would be given to municipal employees, school district employees, police officers, volunteer emergency responders and local senior citizens. Thereafter, any unfilled units would be available to the general residents first with the Town of New Castle and then within "the region." This information was provided in the Draft Environmental Impact Study.

Construction is proposed to begin in 2010, when the East Village portion of the development would be started. Fifty-four units, including thirty-two workforce units, would be completed by the end of 2011. In 2012, fifty-four additional units would be completed - two multi-family buildings and two town home clusters. Construction would also begin on the North Village portion. By 2013, fifty-six units would be completed, including twelve additional affordable senior units. In 2014, fifty-six units would be completed, including twelve affordable, senior units. In 2015, the project would be completed when an additional fifty-eight units would be built.

According to the DEIS, an analysis of comparable market-rate projects revealed that between 30 - 80 percent of units were sold to buyers from the town in which the project was located. Based on this, it was projected that 72 of 222 market-rate, age restricted units **could** be sold to buyers from the Town of New Castle.

It was also estimated that approximately sixty-two households containing "persons who work within New Castle" could qualify for affordable housing and could be seeking a new home on an annual basis.

Based on this information, the Office of School Planning and Research of Western Suffolk BOCES analyzed the potential student impact based on a number of scenarios. Using the Rutgers University's **Residential Demographic Multipliers** taken from the *Estimates of the Occupants of New Housing* (June 2006), student yields were developed, resulting in the following scenarios:

- Scenario I: 278 units: 246 age-restricted, senior (market-rate and affordable) and 32 affordable, non-age restricted units
- Scenario II: 278 units: no age restrictions - with 56 affordable units
- Scenario III: Reuse of existing building with 13 multi-family dwellings per floor totaling 26 2-bedroom units (in Building 600)
- Scenario IV: 26 Single Family Homes-no affordable or age-restricted units

**Scenario I: 278 units: 246 age-restricted, senior and 32 affordable, non-age restricted units**  
 With this option, the student yield would be **14** students to the Chappaqua School District. These students would reside in the 32 affordable, non-age restricted units.

**Scenario II: 278 units: no age restrictions - with 56 affordable units**  
 Approximately **61** public school students would come from a development with 278 non-age restricted units, 56 of which would be affordable units. According to the analysis, the breakdown of students by grade groupings would be as follows:

Kindergarten - Grade 2:	10 students
Grades 3 - 6:	21 students
Grades 7 - 9:	17 students
Grades 10 - 12:	13 students

**Scenario III: Reuse of existing building with 13 multi-family dwellings per floor totaling 26 2-bedroom units (in Building 600)**  
 With this option, approximately **five** children could be expected from this development of this size.

**Scenario IV: 26 Single Family Homes-no affordable or age-restricted units**  
 If twenty-six single family homes were to be built on this site, **41** students could be expected in the school district. The assumption was made that these single-family homes would be five bedrooms and priced more than \$329,000. The student breakdown would be as follows:

Kindergarten - Grade 2:	12 students
Grades 3 - 6:	15 students
Grades 7 - 9:	8 students
Grades 10 - 12:	6 students

In addition, the following is included as a **major** consideration for the Chappaqua School District, based on the supposition that **all** 222 market-rate units in Chappaqua Crossing would be sold to current Chappaqua residents. This consideration is presented below as Scenario V:

***Scenario V: 222 Chappaqua homes sold to “new-to-the community” families; all original owners move to Chappaqua Crossing***

Based on information that was provided in the DEIS, it could be expected that 222 Chappaqua residents could purchase units and move to Chappaqua Crossing, thus making that number of homes available for purchase within the school district. If that were to happen, the district could expect an additional **194** students from the sale of these houses to “new-to-the-community” families. The breakdown by grade configurations would be as follows:

Kindergarten - Grade 2:	54 students
Grades 3 - 6:	72 students
Grades 7 - 9:	43 students
Grades 10 - 12:	25 students

In addition, **14** more students could be expected from the affordable housing units as described in Option I, bringing the expected total to **208** students. However, if the age restrictions were lifted from the Chappaqua Crossing Project, the district could expect **20** additional students from the affordable units, for a total of **214** students.

**Conclusions:**

- Overall enrollment, independent of the development of Chappaqua Crossing, in the Chappaqua Central School District is projected to decrease by 86 students between 2008 and 2013. Enrollment is projected to decrease by a total of 262 students by 2018, the end of the forecast period. Declines are expected at all levels - elementary, middle and high schools.
- Additional enrollment from the proposed Chappaqua Crossing development could range from a low of **14** students to a high of **214**, depending on the scenarios considered. Given the offset of the projected decrease in overall enrollment, the Chappaqua Central School District should be able to physically accommodate the enrollment additions resulting from the proposed Chappaqua Crossing development.
- It should be noted that this Enrollment Analysis focused solely on demographic influences, enrollment trends, and capacities of school facilities in the Chappaqua Central School District. Costs and other financial considerations resulting from decreases/increases in enrollment were not included in this study. These would be determined by the Chappaqua Central School District.