



Demographic Study

for the

Spring Lake School District

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Executive Summary

At the request of the Spring Lake School District, Statistical Forecasting LLC completed a demographic study where the main objective was to project enrollments from 2017-18 through 2021-22, a five-year period. In addition to projecting enrollments, the borough's population trends and age structure, birth counts, and new housing starts were also analyzed as part of the process of completing the study.

Community Overview

In the 2010 Census, Spring Lake Borough ("Spring Lake") had 2,993 residents, which is approximately 2,250.4 persons per square mile. Spring Lake experienced its greatest growth from 1940-1980, when the population grew by more than two and a half times over a forty-year period, with its greatest growth occurring in the 1950s. Since 1980, when the population peaked at 4,215, the population has been generally declining. The 2010 population represents a loss of more than 1,200 persons since 1980. The population decline is likely due to an increase in second-home owners who do not have primary residence in Spring Lake. From 2000 to 2010, the overall occupancy rate in Spring Lake declined from 75.8% to 61.2%. The low occupancy rates are primarily due to second-home owners, as Spring Lake borders the Atlantic Ocean and is a popular vacation destination. In 2010, 32.2% of the housing units that were vacant were classified as seasonal or recreational properties, which is a large increase from the 19.5% that existed in 2000.

Historical Enrollment Trends

After a period of stable enrollment, the district (PK-8) has experienced a decline in enrollment in the last five years, losing 72 students since the peak of 269 students in 2011-12. The 2016-17 enrollment is 197, which is a loss of 56.5 (-22.3%) students over the last decade.

Kindergarten replacements were analyzed to determine whether there was any relationship between overall enrollment change and kindergarten replacement, which is the numerical difference between the number of graduating 8th graders and the number of entering kindergarten students. The district has experienced negative kindergarten replacement in six of the last seven years, although many of the values were small. Negative kindergarten replacement occurs when the number of graduating 8th grade students is larger than the number of kindergarten students replacing them in the next year. In 2016-17, the loss of students due to kindergarten replacement was nine (9) students, as 20 eighth graders graduated in 2015-16 and were replaced by 11 kindergarten students in 2016-17. In the last five years, the district has lost an average of nine (9) students per year due to kindergarten replacement.

Birth Counts

The number of births, which is used to project kindergarten enrollments, has been declining in Spring Lake. From 2002-2005, births ranged from 26-31 per year, which is an average of 28 births per year. However, from 2013-2015, births have ranged from 9-11 per year, which is an average of 10 births per year. The declining birth rate has likely led to smaller

entering kindergarten cohorts, which have declined from a high of 31 in 2008 to a low of 11 in 2016.

The 2000 and 2010 age-sex diagrams for Spring Lake were created to show the percentage of males and females in each age class. The largest number of individuals in 2000 was aged 50-54 for males and 55-59 for females. In 2010, the 50-54 age group remained the largest group for males while the 60-64 age cohort was the largest for females. Over this time period, the greatest declines, both in number and percentage points, occurred in the 35-39 age group for both males and females. There was also a significant decline in the 40-44 age group, and to a lesser extent, the 25-29 and 30-34 age groups. The greatest gains, both in number and percentage points, occurred in the 15-19 age group for males and 60-64 age group for females. The declining number of females in the 25-29, 30-34, and 35-39 age groups, which correspond to the ages when many females have their children, has likely led to the declining birth rate in the borough.

Potential New Housing

Spring Lake municipal representatives provided information regarding current and future residential development. Currently, there are no residential developments under construction, nor are there applications for residential subdivisions before the planning board. Available land in Spring Lake is limited and the community is essentially built out.

Home Sales

The number of annual home sales in Spring Lake was tabulated from 2001-2016. Excluding 2003, the number of sales in Spring Lake was fairly consistent from 2002-2009, ranging from 30-42 sales per year. The number of sales in the borough began to increase after the housing market crash and banking crisis in the late 2000s. In the last three years, the number of sales has ranged from 79-82 per year, which is significantly higher than prior to 2012.

Enrollment Projections

PK-8 enrollments were computed for a five-year period, 2017-18 through 2021-22, in two separate projections. Total enrollment is projected to decline in each projection. In the first projection, total enrollment is projected to be 161 in 2021-22, which would be a loss of 36 students from the 2016-17 enrollment of 197. In the second projection, enrollment is projected to be 149 in 2021-22, which would be a loss of 48 students from the 2016-17 enrollment.

In both projections, negative kindergarten replacement is expected to occur. In each instance, the magnitude of the negative kindergarten replacement is projected to be less near the end of the projection period, which could be indicative of impending stabilization of enrollment in the school district.

Building Capacity

The capacity of the H.W. Mountz Elementary School was compared to the current enrollment in 2016-17 and the projected enrollment in the 2021-22 school year. Currently, the school has 134-136 surplus seats depending on the capacity methodology employed. By 2021-22, the number of surplus seats is projected to grow to 170-172 due to declining enrollment.

Final Thoughts

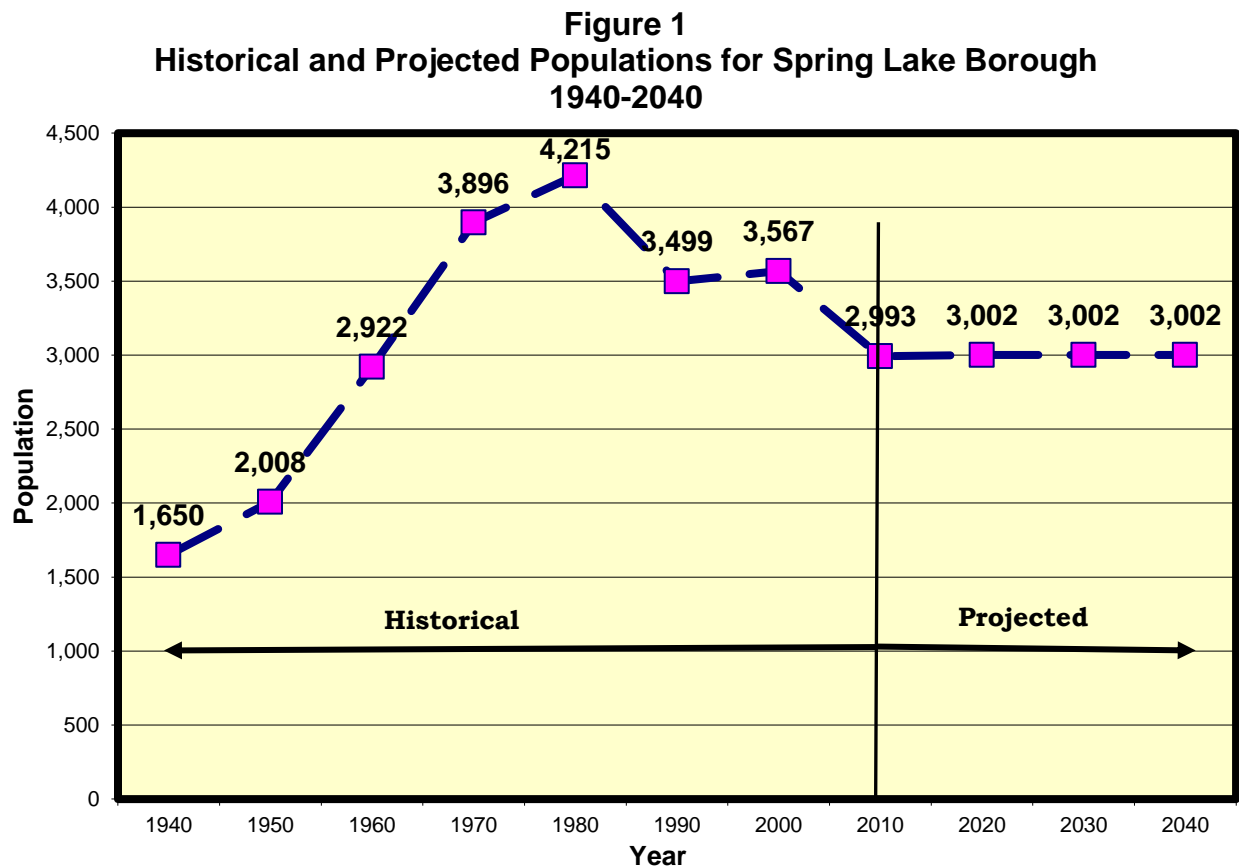
The enrollment decline in the Spring Lake School District appears to be due to an aging population, resulting in less births and smaller kindergarten classes. In addition, the community has had a reduction in its full-time resident population, which reduces the number of children eligible to attend the school district. Looking ahead, the district's enrollment is projected to decline as the smaller cohorts move through the system. However, near the end of the projection period, enrollment is projected to stabilize as the sizes of the graduating 8th grade cohorts are similar to the entering kindergarten classes.

Introduction

Statistical Forecasting LLC (“Statistical Forecasting”) completed a demographic study for the Spring Lake School District, projecting grade-by-grade enrollments from 2017-18 through 2021-22. Information was also collected regarding the borough’s population trends and age structure, birth counts, historical enrollments, and new housing starts.

Population Trends in Spring Lake Borough

Located in Monmouth County, Spring Lake Borough (“Spring Lake”) contains a land area of 1.33 square miles, with an additional 0.40 square miles of water area. According to the 2010 decennial census, Spring Lake had 2,993 residents, which is approximately 2,250.4 persons per square mile. Historical and projected populations for Spring Lake from 1940-2040 are shown in Figure 1 and Table 1. Spring Lake experienced its greatest growth from 1940-1980, when the population grew by more than two and a half times over a forty-year period, with its greatest growth occurring in the 1950s. Since 1980, when the population peaked at 4,215, the population has been generally declining. The 2010 population represents a loss of more than 1,200 persons since 1980. The population decline is likely due to an increase in second-home owners who do not have primary residence in Spring Lake.



In addition, a population estimate for 2015 is provided in Table 1. The estimated population in 2015 is 2,965 persons, which is nearly identical to the population in 2010. The Census Bureau publishes estimates every July 1st following the last decennial census and are computed using the decennial census base counts, number of births and deaths in a community, and migration data (both domestic and international).

Population projections from 2020-2040, which were prepared by the North Jersey Transportation Planning Authority, Inc. (“NJTPA”), indicate that the population in Spring Lake will remain fairly constant. Forecasts project the population to be 3,002 in 2040, which would be a 0.3% increase from the 2010 population and a gain of only nine (9) persons.

Table 1
Historical and Projected Populations for Spring Lake Borough
1940-2040

Year	Population	Percent Change
Historical¹		
1940	1,650	N/A
1950	2,008	+21.7%
1960	2,922	+45.5%
1970	3,896	+33.3%
1980	4,215	+8.2%
1990	3,499	-17.0%
2000	3,567	+1.9%
2010	2,993	-16.1%
2015 (est.)	2,965	-0.9%
Projected²		
2020	3,002	+1.2%
2030	3,002	0.0%
2040	3,002	0.0%

Sources: ¹United States Census Bureau

²Source: North Jersey Transportation Planning Authority, Inc. (2013).

Spring Lake Borough Demographic Profile

In Table 2 following, selected demographic characteristics of Spring Lake are compared from the 2000 Census, the 2010 Census, and the 2011-2015 American Community Survey (“ACS”). While some Census variables account for everyone in a 100% population count (e.g., age, race, and total housing units), other variables are collected from a sample (e.g., median family income, educational attainment, poverty status, etc.). The ACS replaced the long form of the Census, last administered in 2000 to approximately 16% of the population in the United States. For smaller municipalities such as Spring Lake, ACS data represent a sample collected over a five-year time period, where the estimates represent the average characteristics between January 2011 and December 2015. This information does not represent a single point in time like the long form of earlier Censuses. The five-year ACS contains 1% annual samples from all households and persons from 2011 to 2015, resulting in a 5% sample of the population. Due to the small sample size, the sampling error is quite large, which increases the degree of uncertainty of the estimated values. Therefore, the forthcoming ACS data should be interpreted with caution.

With respect to race, the racial distribution in Spring Lake has changed little from 2000 to 2010. In 2010, 97.6% of the residents were White as compared to 98.8% in 2000, which is a decline of 1.2 percentage points. The second-largest race in 2010 was Asian representing 1.0% of the population. The Census Bureau does not consider Hispanic as a separate race; rather it identifies the percentage of people having Hispanic origin. Hispanics in the Census population can be part of the White, Black, Asian, or any of the other race categories. The concentration of persons having Hispanic origin increased from 0.7% in 2000 to 1.9% in 2010.

With respect to nativity, 3.2% of Spring Lake residents were foreign-born in the 2011-2015 ACS as compared to 1.9% in 2000. As a point of comparison, New Jersey’s foreign-born resident percentage was 21.7% in the 2011-2015 ACS.

The median age in Spring Lake has increased from 47.7 years in 2000 to 51.9 years in 2010, which is significantly higher than the median age in New Jersey (39.4 years). During the same time period, the percentage of people under the age of 18 years decreased slightly from 21.8% to 21.6%.

Regarding educational attainment for adults aged 25 and over, 66.5% of the population had a bachelor’s degree or higher in the 2011-2015 ACS as compared to 59.5% in 2000, indicating a highly-educated population. Persons with graduate or professional degrees slightly decreased from 26.6% to 26.1% during this time period.

Median family income increased from \$103,405 in 2000 to \$137,625 in the 2011-2015 ACS, a gain of 33.1%. By comparison, median family income in New Jersey is \$88,335, which is much lower than Spring Lake’s. During this time period, the percentage of school-age children (5-17) that are in poverty increased from 0.0% to 6.1%.

Table 2
Selected Demographic Characteristics of Spring Lake Borough

Race Origin	2000 Census	2010 Census 2011-2015 ACS
White	98.8%	97.6%
Black or African American	0.3%	0.3%
American Indian and Alaska Native	0.0%	0.0%
Asian	0.3%	1.0%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%
Other Race	0.1%	0.5%
Two or more Races	0.5%	0.5%
Total	100.0%¹	100.0%¹
Hispanic Origin	0.7%	1.9%
Place of Birth		
Foreign-Born	1.9%	3.2%
Age		
Under 18	21.8%	21.6%
18-64	53.1%	51.0%
65 and over	25.1%	27.4%
Median age	47.7 years	51.9 years
Educational Attainment		
Bachelor's degree or higher	59.5%	66.5%
Graduate or professional degree	26.6%	26.1%
Income		
Median family income	\$103,405	\$137,625
% of Persons in Poverty ages 5-17	0.0%	6.1%
Housing Units		
Total number	1,930	2,048 ²
Occupied units	1,463 (75.8%)	1,253 (61.2%)
Vacant units	467 (24.2%)	795 (38.8%)
Vacant housing for seasonal, recreational, or occasional use	376 (19.5%)	660 (32.2%)
Owner-occupied units	1,162 (79.4%)	1,050 (83.8%)
Renter-occupied units	301 (20.6%)	203 (16.2%)
Median value of an owner-occupied unit	\$638,200	\$1,175,200
Average household size	2.43	2.38
Housing Type		
Total number	1,930	2,122 ²
1-unit, attached or detached	1,727 (89.5%)	1,798 (84.7%)
Two units	53 (2.7%)	26 (1.2%)
Three or four units	23 (1.2%)	68 (3.2%)
Five to nine units	6 (0.3%)	26 (1.2%)
10 to 19 units	18 (0.9%)	0 (0.0%)
20 or more units	90 (4.7%)	179 (8.4%)
Mobile home, boat, R.V., Van ,etc.	13 (0.7%)	25 (1.2%)

Sources: American Community Survey (2011-2015), United States Census (2000 and 2010)

Notes: ¹Data may not sum to 100.0% due to rounding.

²Total number differs as Housing Units are from the 2010 Census while Housing Type data are from the 2011-15 ACS.

Regarding housing, there were 2,048 housing units in Spring Lake in 2010, which is a gain of 118 housing units (+6.1%) from 2000. From 2000 to 2010, the overall occupancy rate declined from 75.8% to 61.2%. The low occupancy rates are primarily due to second-home owners, as Spring Lake borders the Atlantic Ocean and is a popular vacation destination. In 2010, 32.2% of the housing units that were vacant were classified as seasonal or recreational properties, which is a large increase from the 19.5% that existed in 2000. Renter-occupied units accounted for 16.2% of the occupied units in 2010, which is a decline of 4.4 percentage points from the 2000 percentage (20.6%). In the last decade, the average household size decreased slightly from 2.43 to 2.38 persons. Finally, the median home price of an owner-occupied unit in the 2011-2015 ACS was \$1,175,200, which is an 84.1% gain from the value reported in 2000 (\$638,200).

With respect to housing type, 84.7% of Spring Lake homes are one-unit, either attached or detached, which is a decline of 4.8 percentage points from the 2000 percentage. Homes with 20 or more units were the second-largest type of housing in the 2011-2015 ACS and consisted of 8.4% of the housing stock, a 3.7 percentage point gain from 2000. This was the largest percentage point increase of the different home types. This is likely due to the construction of The Essex and Sussex from 2002-2004, an age-restricted community located on Ocean Avenue.

District Overview

The Spring Lake School District serves children in grades pre-kindergarten through eighth. All children attend H.W. Mountz Elementary School, whose location is shown in Figure 2. According to the district's Long Range Facility Plan ("LRFP"), total educational capacity in the district is 333 using District Practices methodology and 331 using Facilities Efficiency Standards ("FES") methodology¹. The District Practices methodology considers how the building is utilized by the school district and its targeted student-teacher ratios. This method does not take into account square footage allowances per student, which is the FES methodology. Capacity using FES methodology is often lower than when using District Practices methodology, but is used by the State for funding purposes. A comparison of the school's capacity to actual and projected enrollments is provided later in the report.

In this study, historical enrollments from the October 15th Fall Reports and the NJ SMART database were used to project enrollments for five years into the future. With the advent of NJ SMART, the Fall Report was eliminated by the New Jersey Department of Education ("NJDOE") in the 2010-11 school year. In the past, the Fall Report was used by the NJDOE as a tool to uniformly compare school district enrollment data across the state. Unfortunately, the method of reporting special education students for NJ SMART is different, as these students are now referred to as "ungraded." To maintain a level of consistency, "ungraded" student counts in the forthcoming tables were listed under the self-contained special education heading. Future enrollments were then projected using the Cohort-Survival Ratio method.

¹ As referenced in the January 25, 2008 Long Range Facilities Plan Final Determination Letter from the NJDOE.

Figure 2
School Location – Spring Lake School District



Explanation of the Cohort-Survival Ratio Method

In 1930, Dublin and Lodka provided an explicit age breakdown, which enabled analysts to follow each cohort through its life stages and apply appropriate birth and death rates for each generation. A descendant of this process is the Cohort-Survival Ratio (“CSR”) method, which is the NJDOE-approved methodology to project public school enrollments. In this method, a survival ratio is computed for each grade progression, which essentially compares the number of students in a particular grade to the number of students in the previous grade during the previous year. The survival ratio indicates whether the enrollment is stable, increasing, or decreasing. A survival ratio of one indicates stable enrollment, less than one indicates declining enrollment, while greater than one indicates increasing enrollment. If, for example, a school district had 100 fourth graders and the next year only had 95 fifth graders, the survival ratio would be 0.95.

The CSR method assumes that what happened in the past will also happen in the future. In essence, this method provides a linear projection of the population. The CSR method is most applicable for districts that have relatively stable increasing or decreasing trends without any major unpredictable fluctuations from year to year. In school districts encountering rapid growth not experienced historically (a change in the historical trend), the CSR method must be modified and supplemented with additional information. In this study, survival ratios were calculated using historical data for birth to kindergarten, kindergarten to first grade, first grade to second grade, etc. Due to the fluctuation in survival ratios from year to year, it is appropriate to calculate an average survival ratio, which is then used to calculate grade enrollments five years into the future.

Historical Enrollment Trends

Historical enrollments for the Spring Lake School District from 2007-08 through 2016-17, a ten-year period, are shown in Figure 3 and Table 3. After a period of stable enrollment, the district has experienced a decline in enrollment in the last five years, losing 72 students since the peak of 269 students in 2011-12. The 2016-17 enrollment is 197, which is a loss of 56.5 (-22.3%) students since 2007-08.

Table 4 following shows computed grade-by-grade survival ratios from 2007-08 to 2016-17. In addition, the average, minimum, and maximum survival ratios are shown for the past ten years along with the three- and five-year averages, which were used to project enrollments. The average survival ratios also indicate the net migration by grade, where values over 1.000 reflect net inward migration and values below 1.000 reflect net outward migration. Five of the nine average survival ratios in the five-year trend were below 1.000, indicating an overall net outward migration of students. Factors related to inward migration include families with school-aged children purchasing an existing home or new housing unit. The reasons for families moving into a community vary. For instance, a family could move into Spring Lake for economic reasons and proximity to employment. Another plausible reason for inward migration is the reputation of the school district, as the appeal of a school district draws families into a community, resulting in the transfer of students into the district. On the flip side, outward migration is caused by families with children moving out of the community, perhaps due to difficulty in finding employment. Outward migration in the school district can also be caused by parents choosing to withdraw their children from public school to attend private or parochial schools. In the case of Spring Lake, the reasons for migration are not explicitly known (such as for economic reasons or the appeal of the school district), as exit and entrance interviews would need to be conducted for all children leaving or entering the district.

Figure 3
Spring Lake School District Historical Enrollments
2007-08 to 2016-17

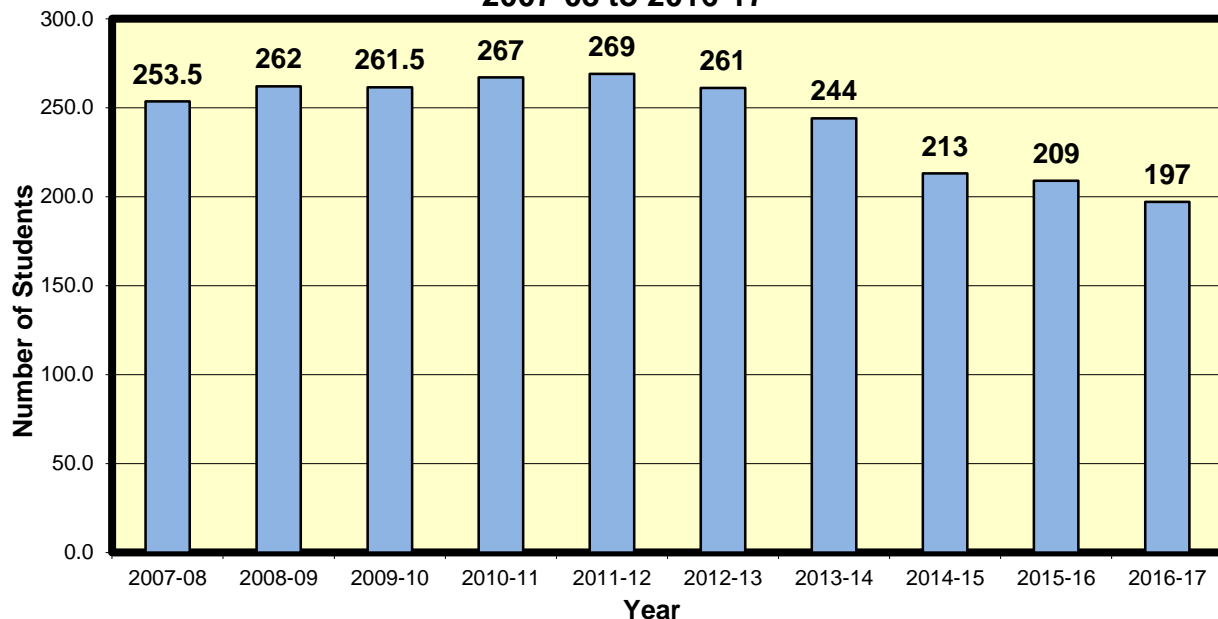


Table 3
Spring Lake School District Historical Enrollments
2007-08 to 2016-17

Year ¹	PK RE ²	K	1	2	3	4	5	6	7	8	SE ³	PK-8 Total
2007-08	26	20.5	20	25	33	24	19	33	22	31	0	253.5
2008-09	29	31	21	23	26	32	26	19	33	22	0	262
2009-10	29	22	26	23	23	26	32	26	21	33.5	0	261.5
2010-11	40	16	23	29	22	24	29	36	27	21	0	267
2011-12	28	23	28	23	28	22	23	31	37	26	0	269
2012-13	27	21	23	29	20	30	22	23	32	34	0	261
2013-14	21	16	18	22	30	20	29	25	27	31	5	244
2014-15	14	24	15	15	21	29	19	28	23	25	0	213
2015-16	14	19	26	15	16	19	31	19	30	20	0	209
2016-17	11	11	19	28	15	15	17	28	20	33	0	197

Notes: ¹Data were provided by the New Jersey Department of Education (<http://www.nj.gov/education/data/enr/>)

²Pre-kindergarten regular education enrollment

³Self-contained special education enrollment/Ungraded Students

Table 4
Spring Lake School District Historical Survival Ratios
2007-08 to 2016-17

Progression Years	B-K	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8
2007-08 to 2008-09	1.0000	1.0244	1.1500	1.0400	0.9697	1.0833	1.0000	1.0000	1.0000
2008-09 to 2009-10	0.8462	0.8387	1.0952	1.0000	1.0000	1.0000	1.0000	1.1053	1.0152
2009-10 to 2010-11	0.5714	1.0455	1.1154	0.9565	1.0435	1.1154	1.1250	1.0385	1.0000
2010-11 to 2011-12	1.2778	1.7500	1.0000	0.9655	1.0000	0.9583	1.0690	1.0278	0.9630
2011-12 to 2012-13	1.6154	1.0000	1.0357	0.8696	1.0714	1.0000	1.0000	1.0323	0.9189
2012-13 to 2013-14	0.7273	0.8571	0.9565	1.0345	1.0000	0.9667	1.1364	1.1739	0.9688
2013-14 to 2014-15	1.0000	0.9375	0.8333	0.9545	0.9667	0.9500	0.9655	0.9200	0.9259
2014-15 to 2015-16	1.5833	1.0833	1.0000	1.0667	0.9048	1.0690	1.0000	1.0714	0.8696
2015-16 to 2016-17	1.1000	1.0000	1.0769	1.0000	0.9375	0.8947	0.9032	1.0526	1.1000
Avg. 10-Year Ratios	1.0802	1.0596	1.0292	0.9875	0.9882	1.0042	1.0221	1.0469	0.9735
Maximum Ratio	1.6154	1.7500	1.1500	1.0667	1.0714	1.1154	1.1364	1.1739	1.1000
Minimum Ratio	0.5714	0.8387	0.8333	0.8696	0.9048	0.8947	0.9032	0.9200	0.8696
Avg. 3-Year Ratios	1.2278	1.0417	1.0385	1.0333	0.9211	0.9819	0.9516	1.0620	0.9848
Avg. 5-Year Ratios	1.2052	0.9695	0.9667	1.0139	0.9522	0.9701	1.0013	1.0545	0.9661

Non-Public and Other Public School Enrollments

In Table 5 below, the number of Spring Lake resident students (regular education only) that attended non-public or other public schools is shown from 2012-13 to 2016-17. During this time period, the number of Spring Lake resident students attending other schools ranged from 12-21 students per year. The majority of these students attended St. Catharine School on 2nd Avenue in Spring Lake. It does not appear that the school district's declining enrollment is due to resident students attending other schools outside of the district, as the counts have been fairly stable over the five-year period.

Table 5
Spring Lake Resident Students
Attending Non-Public or Other Public Schools
2012-13 to 2016-17

Year	St. Catharine	Other	Total
2012-13	16	5	21
2013-14	15	3	18
2014-15	7	5	12
2015-16	12	3	15
2016-17	10	5	15

Source: Spring Lake School District

Non-Resident Students Attending the Spring Lake School District

Since the 2015-16 school year, the Spring Lake School District has been accepting non-resident students who pay tuition to enter the district. In 2015-16, twelve (12) non-resident students in grades PK-6 entered the district. In 2016-17, nine of those students remained in the district while six new students entered the district, three of which were in grade 8. In 2017-18, it is projected that four (4) new students will enter the district. The acceptance of new students in 2015-16 had the effect of slightly increasing the cohort survival ratios. In 2016-17 and subsequent years, the effect is not likely to be as great as the students are already in the district and only 4-6 new students are accepted each year.

Kindergarten Replacement

Kindergarten replacements were analyzed to determine whether there was any relationship between overall enrollment change and kindergarten replacement, which is the numerical difference between the number of graduating 8th graders and the number of entering kindergarten students. The district has experienced negative kindergarten replacement in six of the last seven years, although many of the values were small. Negative kindergarten replacement occurs when the number of graduating 8th grade students is larger than the number of kindergarten students replacing them in the next year. Positive kindergarten replacement occurs when the number of graduating 8th grade students is less than the number of kindergarten students entering the district in the next year. As shown in Figure 4, negative kindergarten replacement has ranged from 5-18 students per year. In 2016-17, the loss of students due to kindergarten replacement was nine (9) students, as 20 eighth graders graduated in 2015-16 and were replaced by 11 kindergarten students in 2016-17. In the last five years, the district has lost an average of nine (9) students per year due to kindergarten replacement.

Figure 4
Historical Kindergarten Replacement

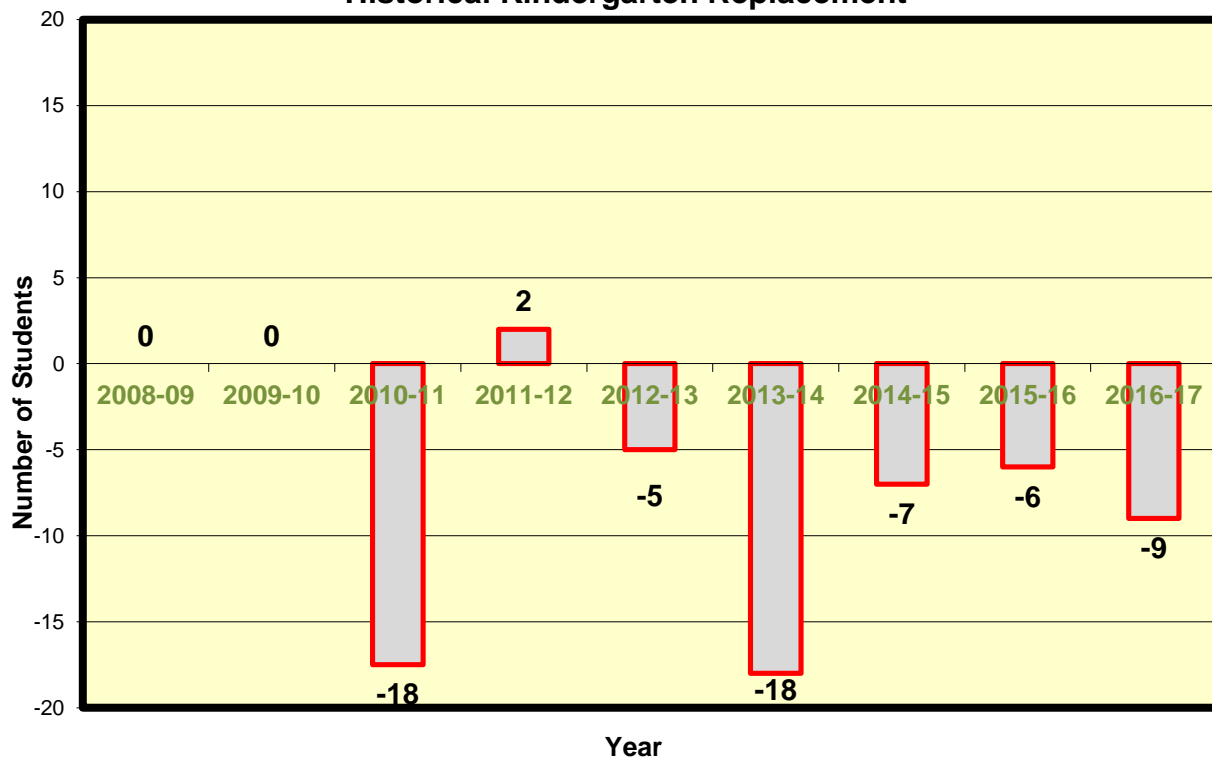
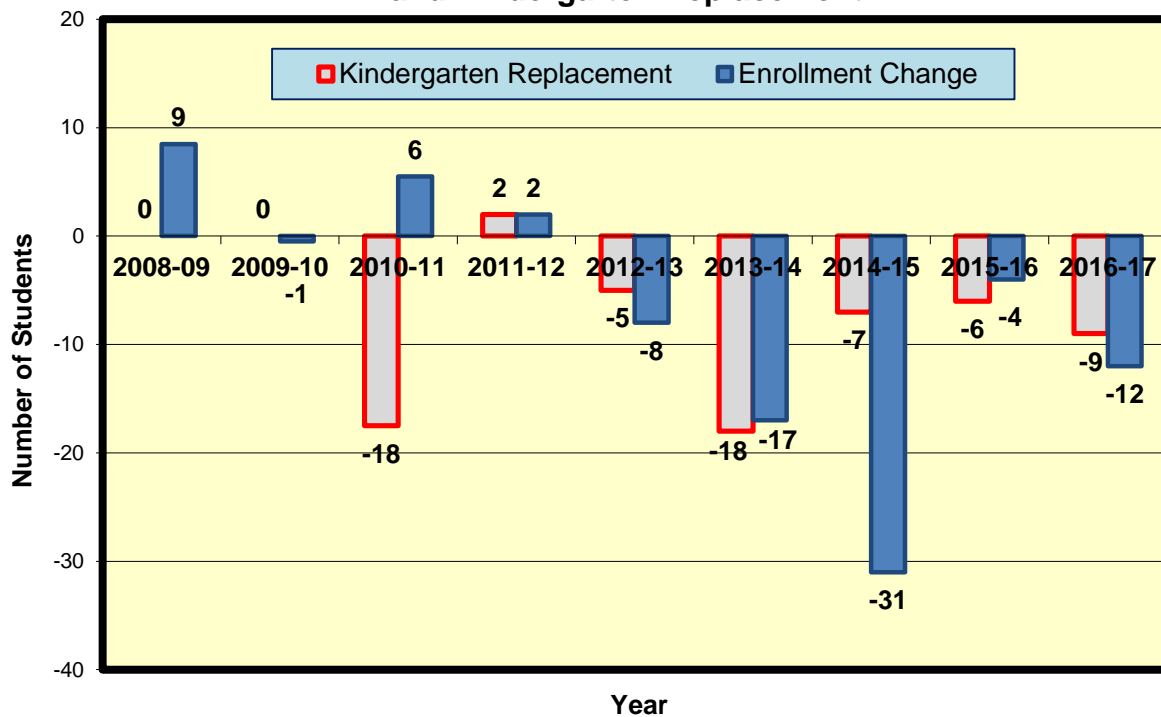


Figure 5 shows the annual change in enrollment compared to kindergarten replacement. As the figure demonstrates, there appears to be a moderately strong relationship, statistically speaking, between the overall change in enrollment and kindergarten replacement. Although this data represents a small sample, the correlation coefficient between the two variables was 0.31. It should be noted that the correlation coefficient can be greatly influenced by one or two values. Correlation coefficients measure the relationship or association between two variables; this does not imply that there is cause and effect between the two variables. Other variables, known as lurking variables, may have an effect on the true relationship between kindergarten replacement and total enrollment change. Negative correlation coefficients indicate that as one variable is increasing (decreasing), the other variable is decreasing (increasing). Positive correlation coefficients indicate that as one of the variables increases (decreases), the other variable increases (decreases) as well. The computed linear correlation coefficient is always between -1 and $+1$. Values near -1 or $+1$ indicate a strong linear relationship between the variables while values near 0 indicate a weak linear relationship. Based on the correlation of 0.31 , there appears to be a moderately strong relationship between kindergarten replacement and enrollment change in the school district in the last nine years.

Figure 5
Comparison of PK-8 Enrollment Change
and Kindergarten Replacement



Birth Data

Birth data were needed to compute kindergarten enrollments, which were calculated as follows. Birth data, which were lagged five years behind their respective kindergarten classes, were used to calculate the survival ratio for each birth-to-kindergarten cohort. For instance, in 2011, there were a total of 10 births in Spring Lake. Five years later (the 2016-17 school year), 11 children enrolled in kindergarten, which is equal to a survival ratio of 1.100 from birth to kindergarten. Birth counts and birth-to-kindergarten survival ratios are displayed in Table 6. Values greater than 1.000 indicate that some children are born outside of a community's boundaries and are attending kindergarten in the school district five years later, i.e. an inward migration of children. This type of inward migration is typical in school districts with excellent reputations, because the appeal of a good school district draws families into the community. Inward migration is also seen in communities where there are a large number of new housing starts (or home resales), with families moving into the community having children of age to attend kindergarten. Birth-to-kindergarten survival ratios that are below 1.000 indicate that a number of children born within a community are not attending kindergarten in the school district five years later. This is common in communities where a high proportion of children attend private, parochial, or out-of-district special education facilities, or where there is a net migration of families moving out of the community. It is also common in school districts that have a half-day kindergarten program where parents choose to send their children to a private full-day kindergarten for the first year. Birth-to-kindergarten survival ratios have been above 1.000 in six of the last ten years, but have been very inconsistent, which is a function of the very small birth and kindergarten counts, leading to increased variability. The ratios have ranged from a low of 0.571 to a high of 1.615.

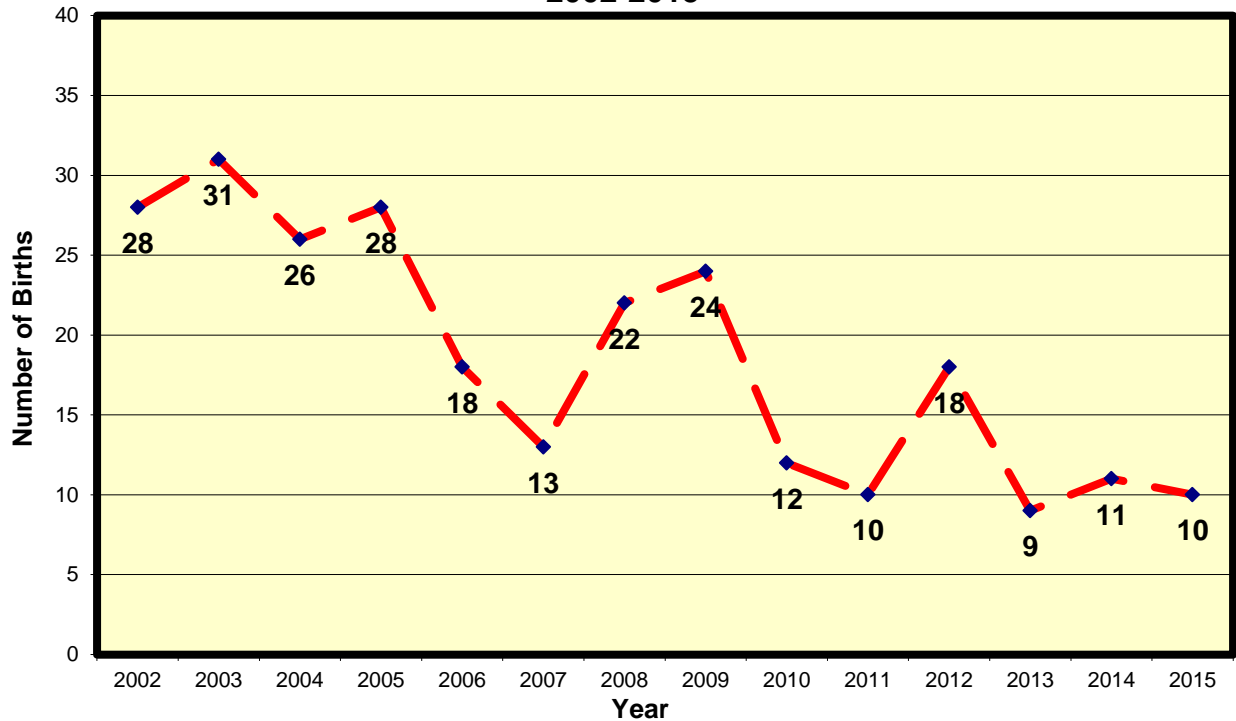
Table 6
Birth Counts and Historical Birth-to-Kindergarten Survival Ratios
in the Spring Lake School District

Birth Year¹	Number of Births Spring Lake Borough	Kindergarten Students Five Years Later	Birth-to-Kindergarten Survival Ratio
2002	28	20.5	0.732
2003	31	31	1.000
2004	26	22	0.846
2005	28	16	0.571
2006	18	23	1.278
2007	13	21	1.615
2008	22	16	0.727
2009	24	24	1.000
2010	12	19	1.583
2011	10	11	1.100
2012	18	N/A	N/A
2013	9	N/A	N/A
2014	11	N/A	N/A
2015	10	N/A	N/A

Notes: ¹Birth data were provided by the New Jersey Center for Health Statistics from 2002-2015.

Geocoded birth data were provided by the New Jersey Center for Health Statistics (“NJCHS”) from 2002-2015 by assigning geographic coordinates to a birth mother based on her street address. Births for 2016 were not yet available. Figure 6 below shows the number of births in Spring Lake from 2002-2015. In general, births have been declining in Spring Lake. From 2002-2005, births ranged from 26-31 per year, which is an average of 28 births per year. However, from 2013-2015, births have ranged from 9-11 per year, which is an average of 10 births per year. The declining birth rate has likely led to the smaller entering kindergarten cohorts, which have declined from a high of 31 in 2008-09 to a low of 11 in 2016-17.

Figure 6
Spring Lake Borough Historical Birth Data
2002-2015



Figures 7 and 8 show the age pyramids of males and females in Spring Lake from both the 2000 and 2010 Censuses. In 2000, the largest number of individuals was aged 50-54 for males and 55-59 for females. In 2010, the 50-54 age group remained the largest group for males while the 60-64 age cohort was the largest for females. As shown in Table 7, the greatest declines (shaded red), both in number and percentage points, occurred in the 35-39 age group for both males and females. There was also a significant decline in the 40-44 age group, and to a lesser extent, the 25-29 and 30-34 age groups. The greatest gains (shaded blue), both in number and percentage points, occurred in the 15-19 age group for males and 60-64 age group for females. The declining number of females in the 25-29, 30-34, and 35-39 age groups, which correspond to the ages when many females have their children, has likely led to the declining birth rate in the borough.

Figure 7
Population Pyramid of Spring Lake Borough
2000 Census

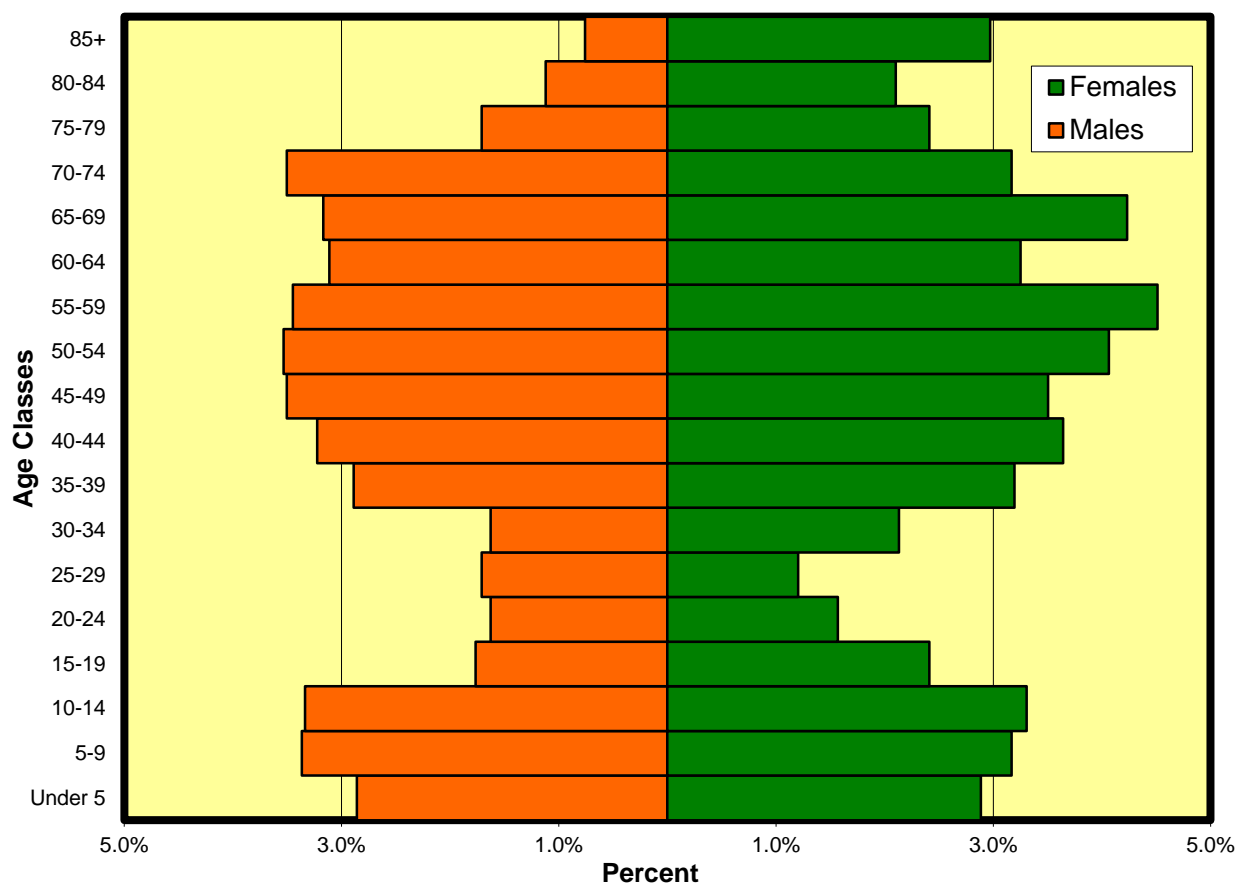


Figure 8
Population Pyramid of Spring Lake Borough
2010 Census

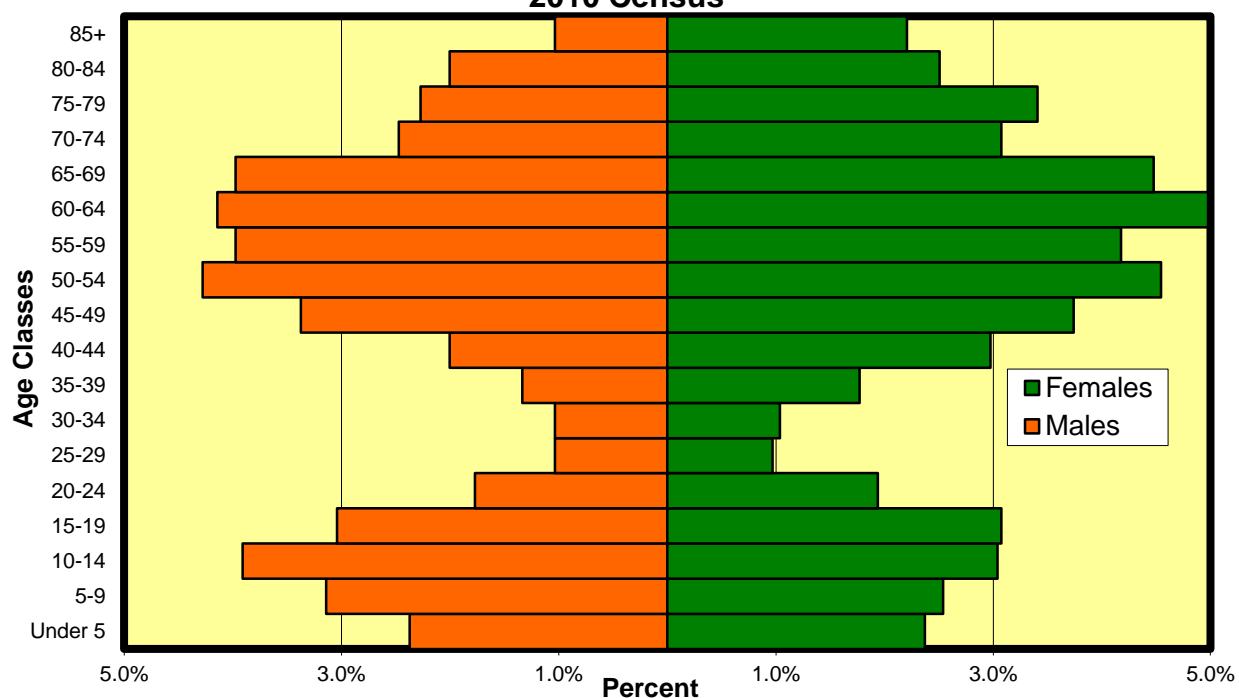


Table 7
Numerical and Percentage Point Changes of Males and Females in Spring Lake
2000 to 2010

Age Group	Males		Females	
	Numerical Change	Percentage Point Change	Numerical Change	Percentage Point Change
Under 5	-31	-0.5	-32	-0.5
5-9	-26	-0.2	-37	-0.6
10-14	-2	+0.6	-27	-0.3
15-19	+28	+1.3	+6	+0.7
20-24	-5	+0.1	+2	+0.4
25-29	-30	-0.7	-14	-0.2
30-34	-27	-0.6	-45	-1.1
35-39	-63	-1.6	-61	-1.4
40-44	-55	-1.2	-41	-0.7
45-49	-24	-0.1	-13	+0.2
50-54	+2	+0.7	-9	+0.5
55-59	-4	+0.5	-36	-0.3
60-64	+13	+1.0	+33	+1.7
65-69	+6	+0.8	-17	+0.2
70-74	-51	-1.0	-21	-0.1
75-79	+7	+0.6	+16	+1.0
80-84	+20	+0.9	0	+0.4
85+	+4	+0.3	-40	-0.8

Notes: Cells shaded blue reflect the greatest gains over the ten-year period.
Cells shaded red reflect the greatest losses over the ten-year period.

New Housing

Ms. Margaret McElynn, Spring Lake Borough Planning Board Secretary, provided information regarding current and future residential development. Currently, there are no residential developments under construction, nor are there applications for residential subdivisions before the planning board. Available land in Spring Lake is limited and the community is essentially built out. As there are no housing developments planned in Spring Lake, the baseline enrollment projections were not modified to account for any additional children from new housing developments.

Regarding affordable housing, the Council on Affordable Housing (“COAH”) was eliminated by Governor Chris Christie in August 2011, when he transferred all functions, powers, duties, and personnel of COAH to the Commissioner of the Department of Community Affairs. However, in March 2012, a New Jersey appeals court overturned the Governor’s efforts to abolish the agency. Recently, in March 2015, the New Jersey Supreme Court ruled that the trial courts, not the state government, are responsible, on a case-by-case basis, to determine the amount of affordable housing communities must provide. Each community’s 3rd round, or projected growth share, is to be satisfied by 2018. The projected growth share is an estimate based on projected housing growth and employment in a community. Spring Lake’s projected growth share is three (3) units. It is unclear what impact the recent Supreme Court ruling may have on the number of units a community is required to build.

With respect to historical new construction, the number of certificates of occupancy (“COs”) issued for new homes in Spring Lake from 2012-2016 is shown in Table 8. A total of 102 COs were issued in Spring Lake over this time period, of which 98 were for single-family or two-family homes. However, during the same time period, there were 69 demolitions as shown in Table 8, resulting in a net gain of 33 homes. Many of the COs are due to the building of a new home after the demolition of an older one. In these instances, there is no net gain in the number of housing units.

Table 8
Number of Residential Certificates of Occupancy and Demolitions in Spring Lake
2012-2016

Spring Lake Borough			
Year	COs¹	Demolitions²	Net Total
2012	17	16	+1
2013	23	9	+14
2014	16	16	0
2015	24	27	-3
2016	22	1	+21
Total	102	69	+33

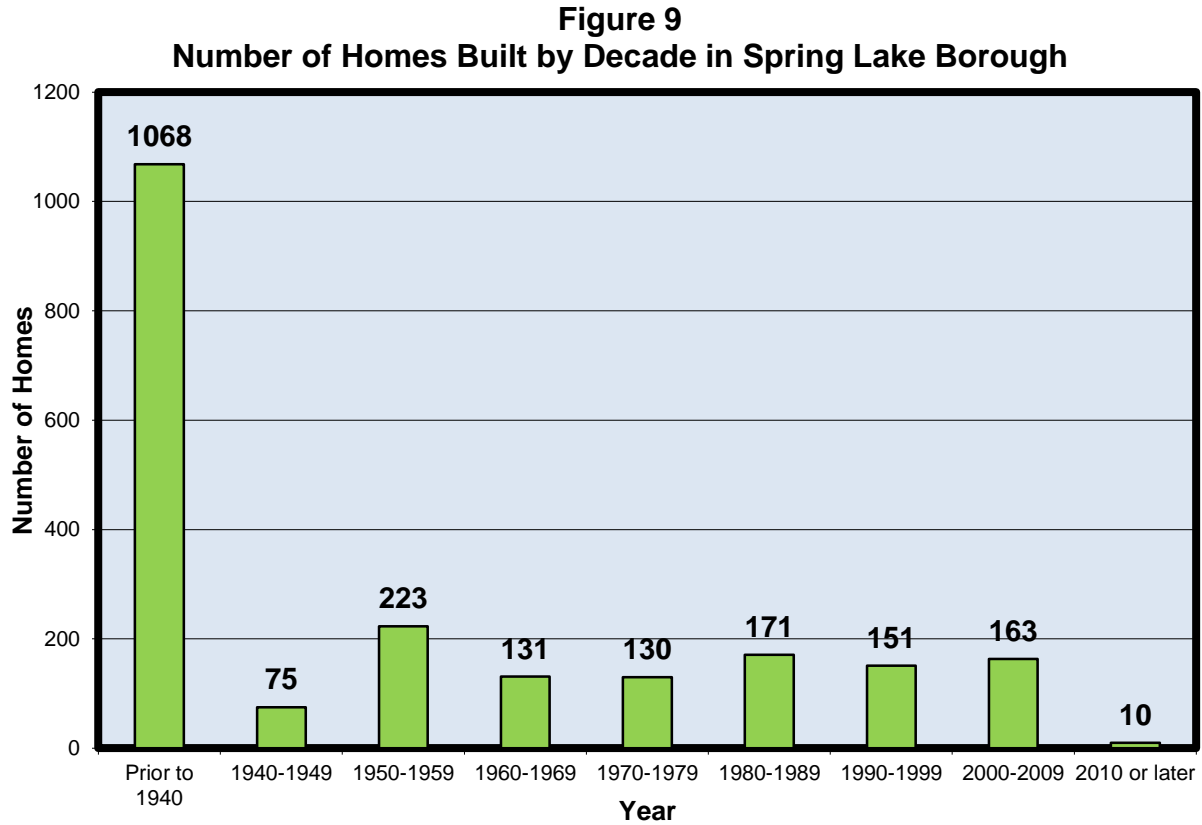
Source: New Jersey Department of Community Affairs

Notes: ¹All but four (4) COs were for 1-2 family homes.

²All demolitions were for 1-2 family homes.

Distribution of Homes by Year Built

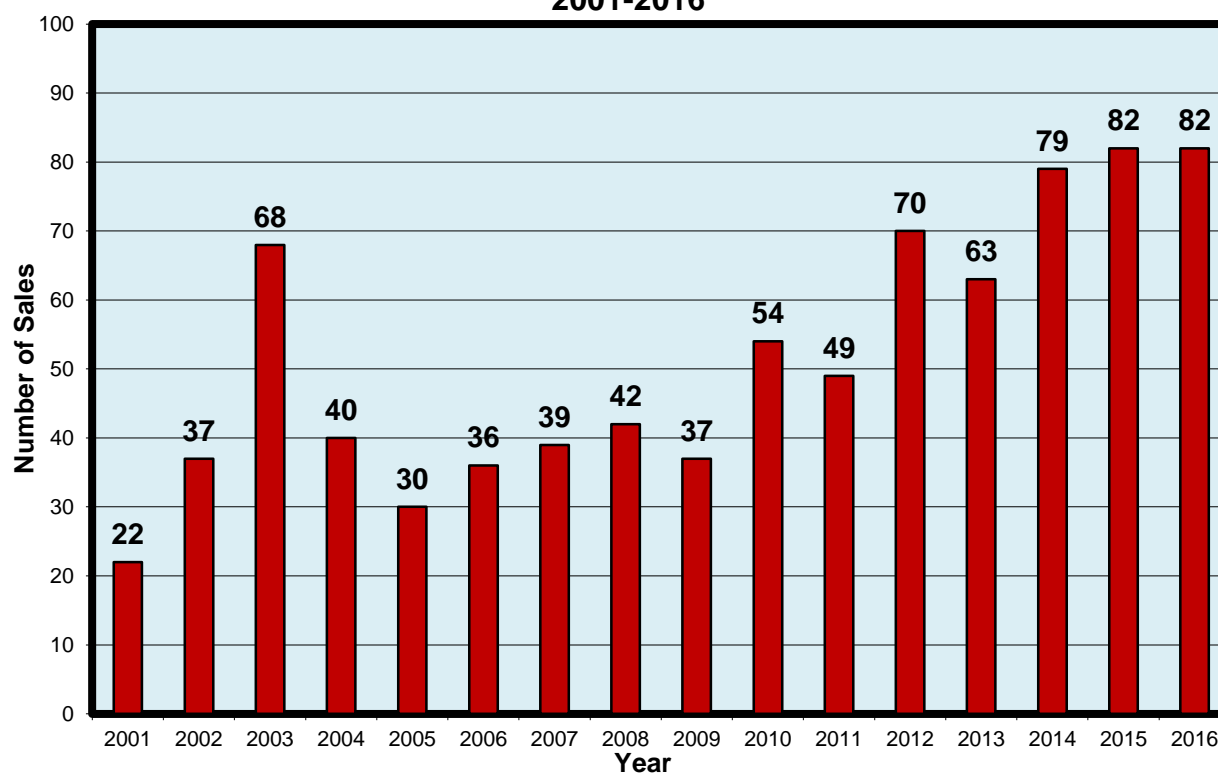
Figure 9 shows the number of homes built by decade in Spring Lake according to the 2011-2015 ACS. Half of the borough's housing stock was built prior to 1940, reflecting an older housing stock. Since 1960, there have been fewer than 200 homes built per decade in Spring Lake.



Home Sales

In Figure 10 below, the number of annual home sales in Spring Lake is shown from 2001-2016. The information was retrieved from the Monmouth County Tax Board database, which possesses tax records and home sales for all municipalities in the state. "Paper sales," which are sales between members of the immediate family for a low price (e.g., \$1 or \$100) and result in a change in title but often not a change of the occupant, were excluded from the totals below. As the figure shows, excluding 2003, the number of sales was fairly consistent from 2002-2009, ranging from 30-42 sales per year. The number of sales began to increase after the housing market crash and banking crisis in the late 2000s. In the last three years, the number of sales has ranged from 79-82 per year, which is significantly higher than prior to 2012.

Figure 10
Spring Lake Borough Home Sales
2001-2016



Enrollment Projections

Enrollments were calculated using cohort-survival ratios in two separate projections based on the last three and five years of historical enrollment data. Enrollments were computed for each grade from 2017-18 through 2021-22.

Enrollments for the self-contained special education/ungraded classes were computed by calculating the historical proportion of self-contained special education/ungraded students with respect to the PK-8 subtotals and then multiplying that value by the future general education PK-8 subtotals. The average proportion from the last three years (0.000) was used to estimate the future number of self-contained special education/ungraded students for each of the enrollment projection calculations.

With respect to grade-level pre-kindergarten students, an average of the last three historical years was computed and used to estimate the future pre-kindergarten enrollment in the district. Pre-kindergarten enrollment has been declining and has ranged from 11-14 students in the last three years. It was estimated that there would be 13 students in the program annually in the future.

As part of the School Funding Reform Act of 2008 (“SFRA”), all school districts in New Jersey are to provide expanded Abbott-quality pre-school programs for at-risk 3- and 4-year olds as outlined in N.J.A.C. 6A:13A. The State of New Jersey intends to provide aid for the full-day program based on projected enrollment. School districts categorized as District Factor Group² (“DFG”) A, B, and CD with a concentration of at-risk pupils equal to or greater than 40 percent, must offer a pre-school program to all pre-school aged children regardless of income, known as “Universal” pre-school. For all other school districts, a pre-school program must be offered only to at-risk children, known as “Targeted” preschool. School districts may educate the pre-school children in-district, by outside providers, or through Head Start programs. School districts were required to offer these programs to at least 90% of the eligible pre-school children by 2013-14.

Due to budgetary constraints, the NJDOE postponed the roll-out of the program, which was scheduled for the 2009-10 school year. According to a recent conversation with Ms. Karin Garver, Educational Program Development Specialist in the NJDOE Early Childhood Education, there are no plans in the imminent future by the State Legislature to fund the program, which would prevent school districts from implementing the program. Since it is unclear if and when the program will be funded and subsequently mandated, the forthcoming enrollment projections do not include additional pre-kindergarten students from the SFRA. The pre-school program would have been rolled out over a five-year period according to the following schedule:

- At least 20% of the eligible pre-school universe in Year 1
- At least 35% of the universe in Year 2
- At least 50% of the universe in Year 3
- At least 65% of the universe in Year 4
- At least 90% of the universe in Year 5

² Introduced by the New Jersey Department of Education in 1975, DFG provides a system of ranking school districts in the state by their socio-economic status. While the system is no longer used, the number of pre-kindergarten students was determined by the former DFG rankings.

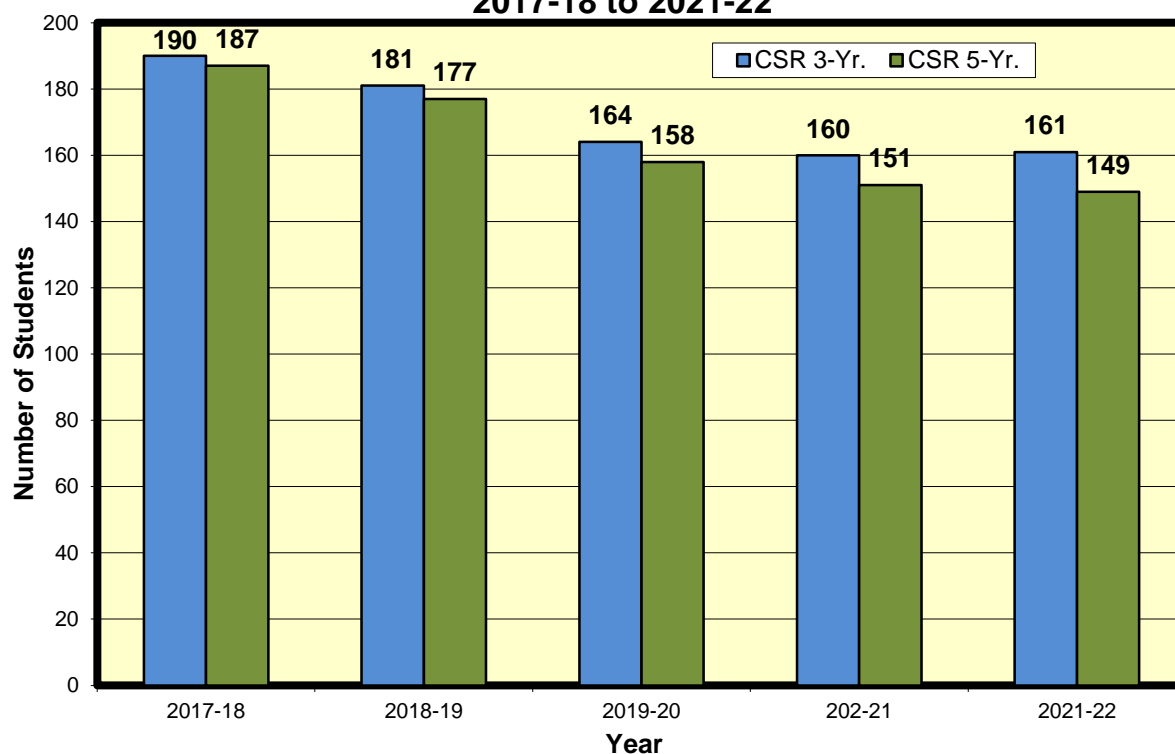
The universe of pre-school children in “Universal” districts is computed by multiplying the 1st grade enrollment in 2007-08 by two. The universe of pre-school children in “Targeted” districts is computed by multiplying the 1st grade enrollment in 2007-08 by two and then multiplying by the percentage of students having free or reduced lunch in the district. The Spring Lake School District is a “Targeted” district since its DFG is “I” with a concentration of at-risk pupils less than 40 percent (0.00%). Since the school district’s concentration of at-risk pupils is 0.00%, there are no eligible pre-school students as per the SFRA.

Projected PK-8 enrollments using cohort-survival ratios based on historical data from the last three years follows in Table 9 and Figure 11. Total enrollment is projected to slowly decrease before stabilizing. Enrollment is projected to be 161 in 2021-22, which would be a loss of 36 students from the 2016-17 enrollment of 197.

Table 9
Spring Lake School District Projected Enrollments
Using Cohort-Survival Ratios and 3 Years of Historical Data
2017-18 to 2021-22

Year	PK	K	1	2	3	4	5	6	7	8	SE	K-8 Total
2017-18	13	22	11	20	29	14	15	16	30	20	0	190
2018-19	13	11	23	11	21	27	14	14	17	30	0	181
2019-20	13	14	11	24	11	19	27	13	15	17	0	164
2020-21	13	12	15	11	25	10	19	26	14	15	0	160
2021-22	13	15	13	16	11	23	10	18	28	14	0	161

Figure 11
Spring Lake School District Enrollment Projections
2017-18 to 2021-22



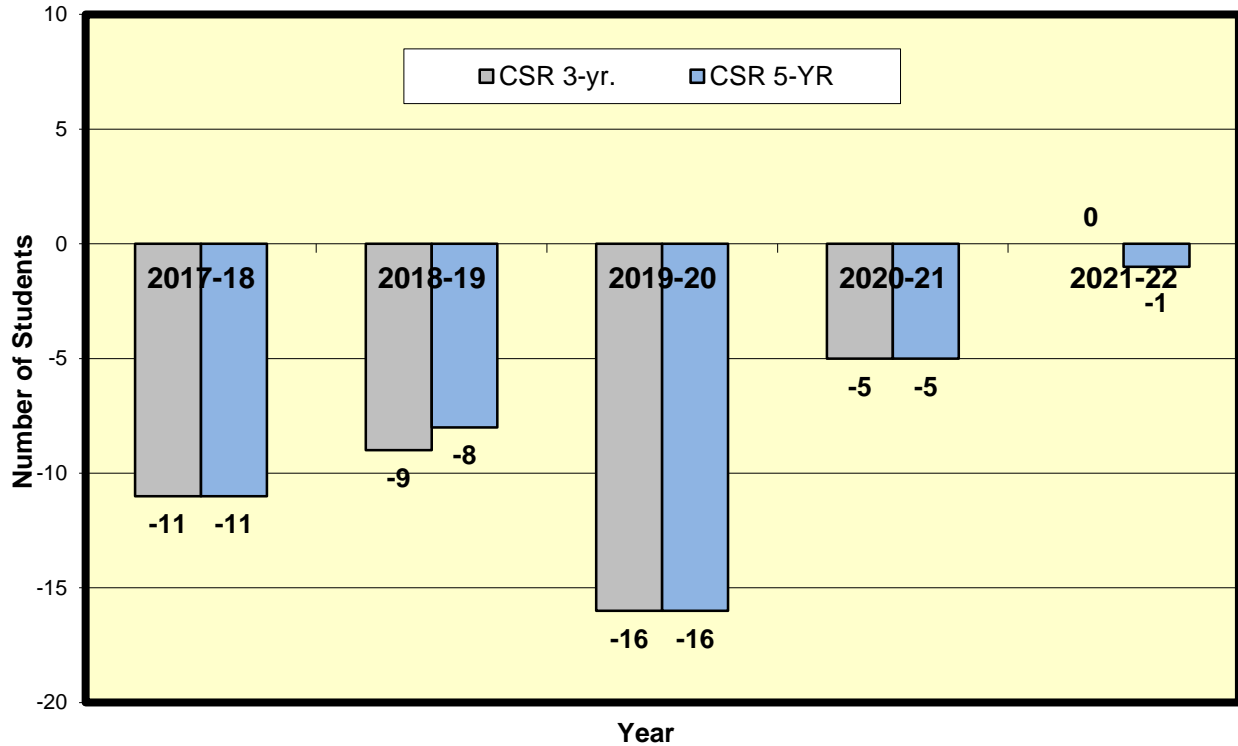
Projected PK-8 enrollments using cohort-survival ratios based on historical data from the last five years follows in Table 10 and Figure 11. Total enrollment is projected to decrease throughout the projection period. The 2021-22 projected enrollment of 149 students would be a loss of 48 students from the 2016-17 enrollment of 197.

Table 10
Spring Lake School District Projected Enrollments
Using Cohort-Survival Ratios and 5 Years of Historical Data
2017-18 to 2021-22

Year	PK	K	1	2	3	4	5	6	7	8	SE	K-8 Total
2017-18	13	22	11	18	28	14	15	17	30	19	0	187
2018-19	13	11	21	11	18	27	14	15	18	29	0	177
2019-20	13	13	11	20	11	17	26	14	16	17	0	158
2020-21	13	12	13	11	20	10	16	26	15	15	0	151
2021-22	13	14	12	13	11	19	10	16	27	14	0	149

In both projections, negative kindergarten replacement is expected to occur as shown in Figure 12. In each instance, the magnitude of the negative kindergarten replacement is projected to be less near the end of the projection period, which could be indicative of impending stabilization of enrollment in the school district.

Figure 12
Projected Kindergarten Replacement



Capacity Analysis

Table 11 shows the educational capacity of the H.W. Mountz Elementary School in comparison to both the actual enrollment in 2016-17 and the enrollment projection in the 2021-22 school year. Since capacity is not a fixed number and the value can vary due to the methodology employed (FES vs. District Practices), both capacities are shown from the LRFP. While there were two projections, only the highest projection is shown. Using the building capacity from the district's LRFP, the differences between capacity and actual/projected number of students were computed. Positive values indicate available extra seating while negative values indicate inadequate seating. Currently, the H.W. Mountz Elementary School has 134-136 surplus seats depending on the capacity methodology employed. By 2021-22, the number of surplus seats is projected to grow to 170-172 due to declining enrollment.

Table 11
Capacity Analysis

School	District Practices Capacity ¹	Actual Enrollment 2016-17	Difference	Projected Enrollment 2021-22	Difference
H.W. Mountz Elementary School (PK-8)	333	197	+136	161	+172
	FES Capacity ¹	Actual Enrollment 2016-17	Difference	Projected Enrollment 2021-22	Difference
	331	197	+134	161	+170

Source: ¹As referenced in the January 25, 2008 Long Range Facilities Plan Final Determination Letter from the NJDOE.