

**DEMOGRAPHIC STUDY**

**FOR THE**

**SPRING LAKE**

**SCHOOL DISTRICT**

August 21, 2017



# STATISTICAL FORECASTING

- Provide demographic services for school districts in the New York-New Jersey metropolitan area.
- Performed demographic studies for approximately 100 school districts in NY & NJ.
- Demographic consultant for the NYC Public Schools since 2006.

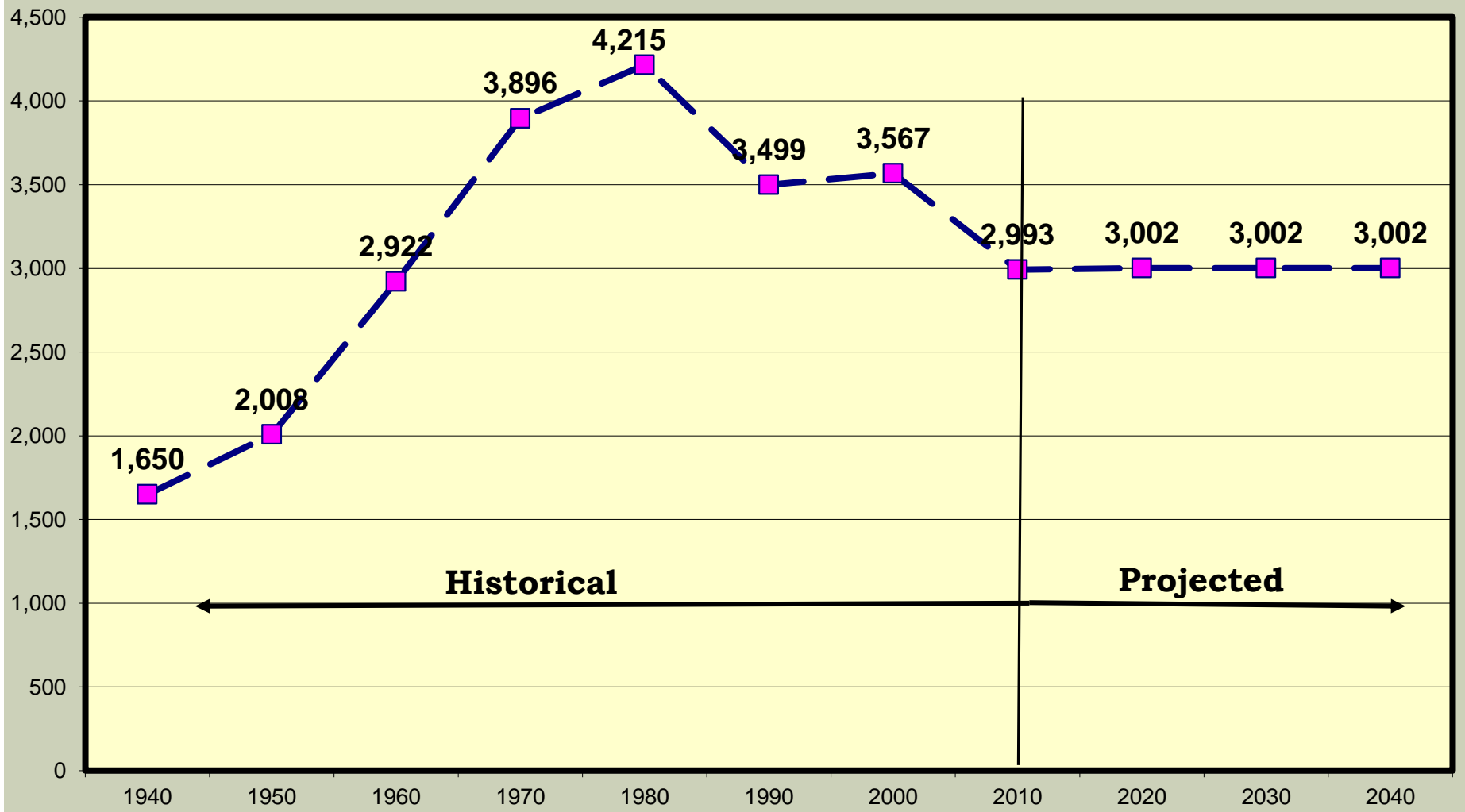
# **RICHARD S. GRIP ED.D.**

- **Executive Director**
- **Doctorate from Rutgers University Graduate School of Education in Educational Statistics and Measurement**
- **Numerous publications on school demography and presentations nationally**
- **Testified as an expert witness in school demography in several Administrative Law court hearings.**

# PURPOSE OF THE STUDY

- ❑ Project grade-by-grade enrollments from 2017-18 through 2021-22
- ❑ Analyze district's historical enrollments, birth and fertility rates, community population trends, and age structure
- ❑ Impact of new developments on enrollment

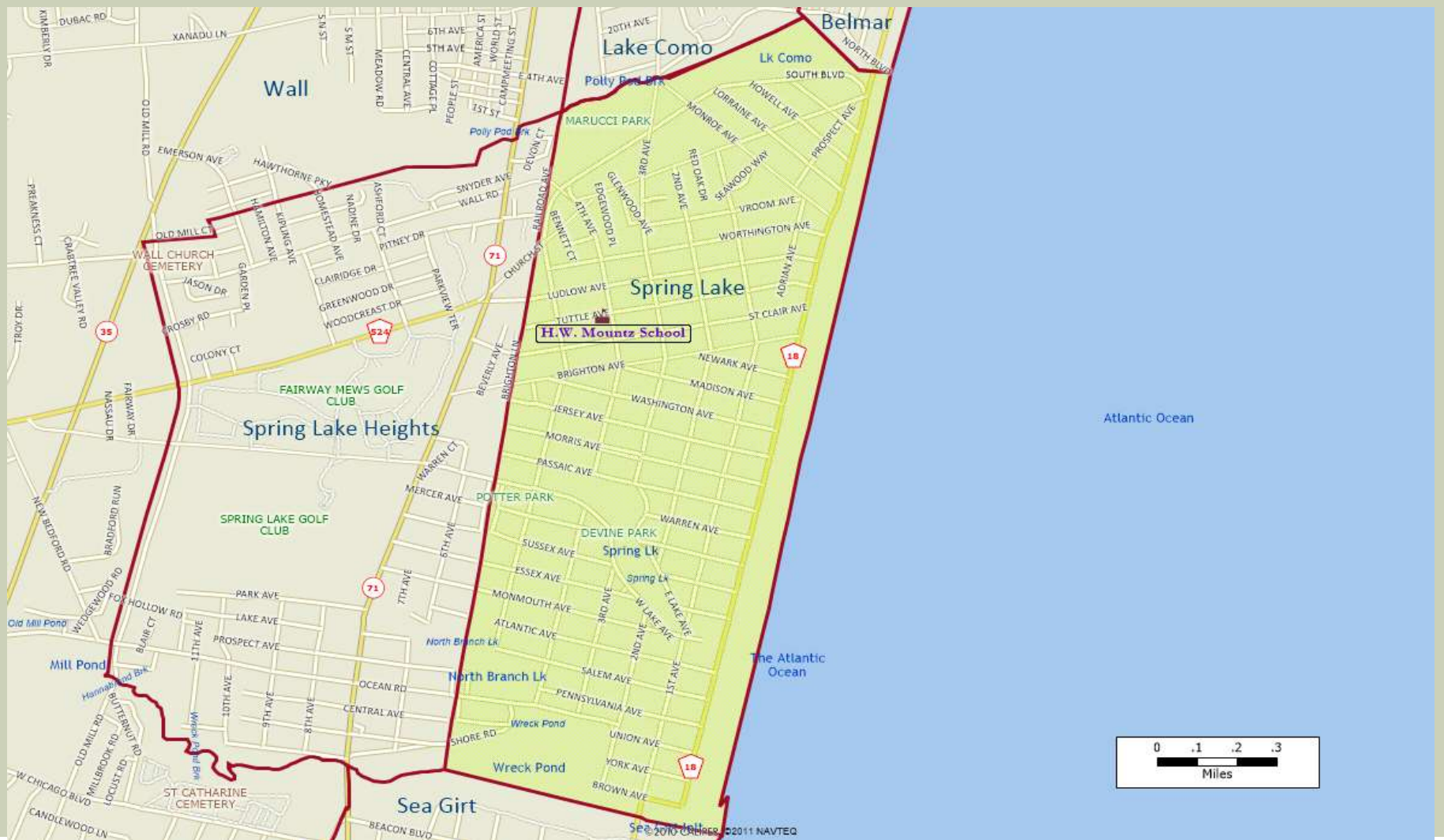
# SPRING LAKE BOROUGH HISTORICAL AND PROJECTED POPULATIONS 1940-2040



# SPRING LAKE BOROUGH DEMOGRAPHIC PROFILE

- ❑ 97.6% White in 2010 (98.8% in 2000)
- ❑ Median age = 51.9 years (NJ=39.4)
- ❑ 3% of population is foreign-born (NJ=22%).
- ❑ Bachelor's Degree or Higher = 67%
- ❑ Median family income = \$137K (NJ =\$88K)
- ❑ Primary occupancy declined from 76% in 2000 to 61% in 2010.
- ❑ Median value of owner-occupied unit = \$1.175 million

# SCHOOL LOCATION



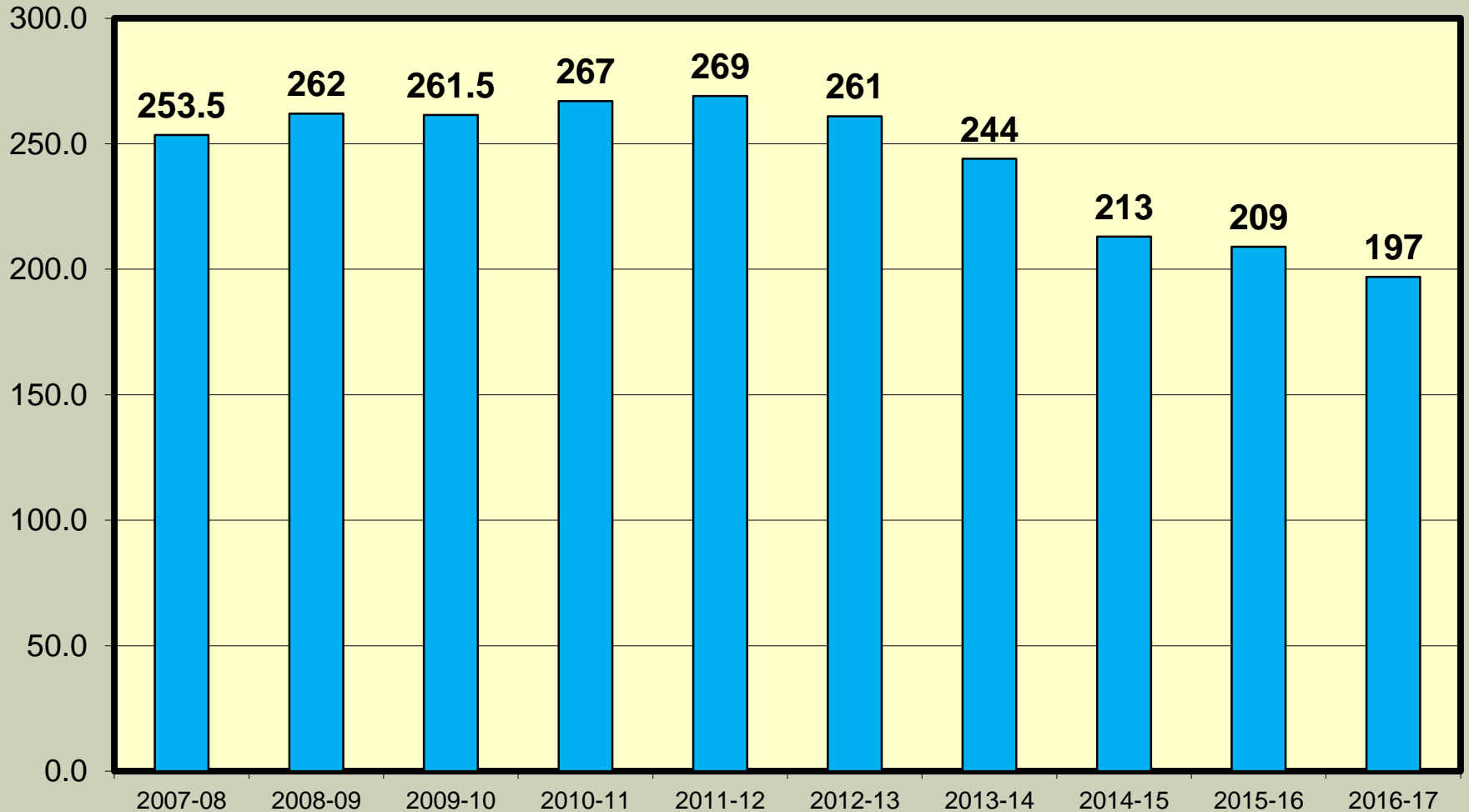
# HISTORICAL ENROLLMENT TRENDS

- ❑ District's 2016-17 enrollment is 197.
- ❑ Enrollment has declined in last 5 years, losing 72 students since peak in 2011-12 (269).
- ❑ Cohort-Survival Ratio Method (CSR) was used to project enrollments five years into the future.



# HISTORICAL ENROLLMENTS

## 2007-08 TO 2016-17



# ENROLLMENT PROJECTION METHOD

## COHORT SURVIVAL RATIO

- ❑ Ratios are calculated for each grade progression. (Ex. 100 1<sup>st</sup> graders in 2015-16 become 95 2<sup>nd</sup> graders in 2016-17 = 0.95)
- ❑ Survival ratios were computed for ten historical years.
- ❑ Averages were then computed and used to project future enrollments.

# SPRING LAKE RESIDENTS NON-PUBLIC ENROLLMENT

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

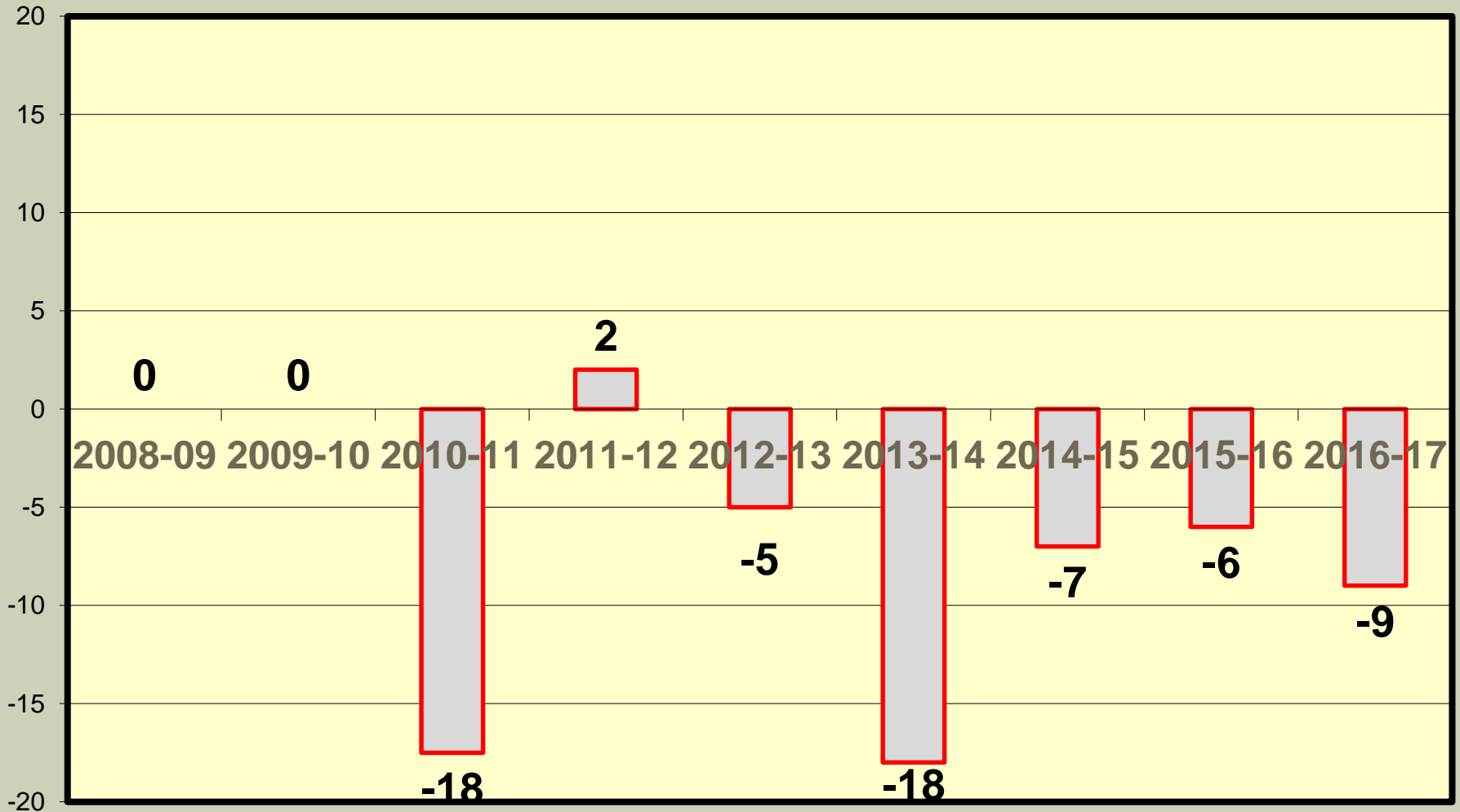
# TUITION STUDENTS ATTENDING SCHOOL DISTRICT

- Accepting tuition students since 2015-16
- 2015-16: 12 students in grades PK-6
- 2016-17: 9 students remained in district, 6 new students.
- 2017-18: 4 new students in district

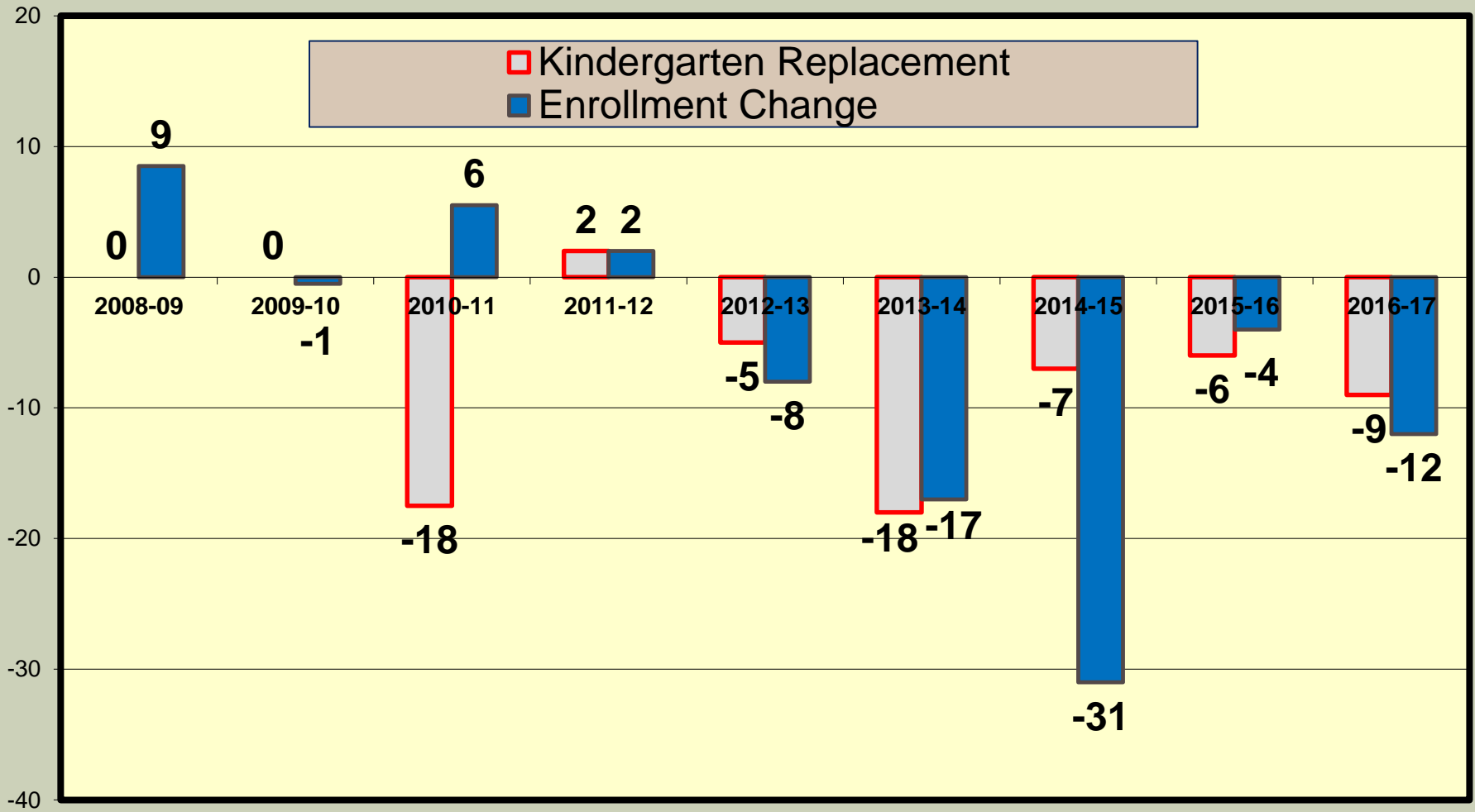
# KINDERGARTEN REPLACEMENT

- ❑ Negative kindergarten replacement (KR) has occurred in 6 of last 7 years.
- ❑ Magnitudes of negative KR are very small.
- ❑ Negative KR- Number of graduating 8<sup>th</sup> grade students is greater than the number of kindergarten students replacing them in the next year.
- ❑ Negative KR was 9 students in 2016-17, as 20 8<sup>th</sup> graders graduated in 2015-16 and were replaced by 11 kindergarten students in 2016-17.

# HISTORICAL KINDERGARTEN REPLACEMENT



# TOTAL ENROLLMENT CHANGE VS. KINDERGARTEN REPLACEMENT



# BIRTHS

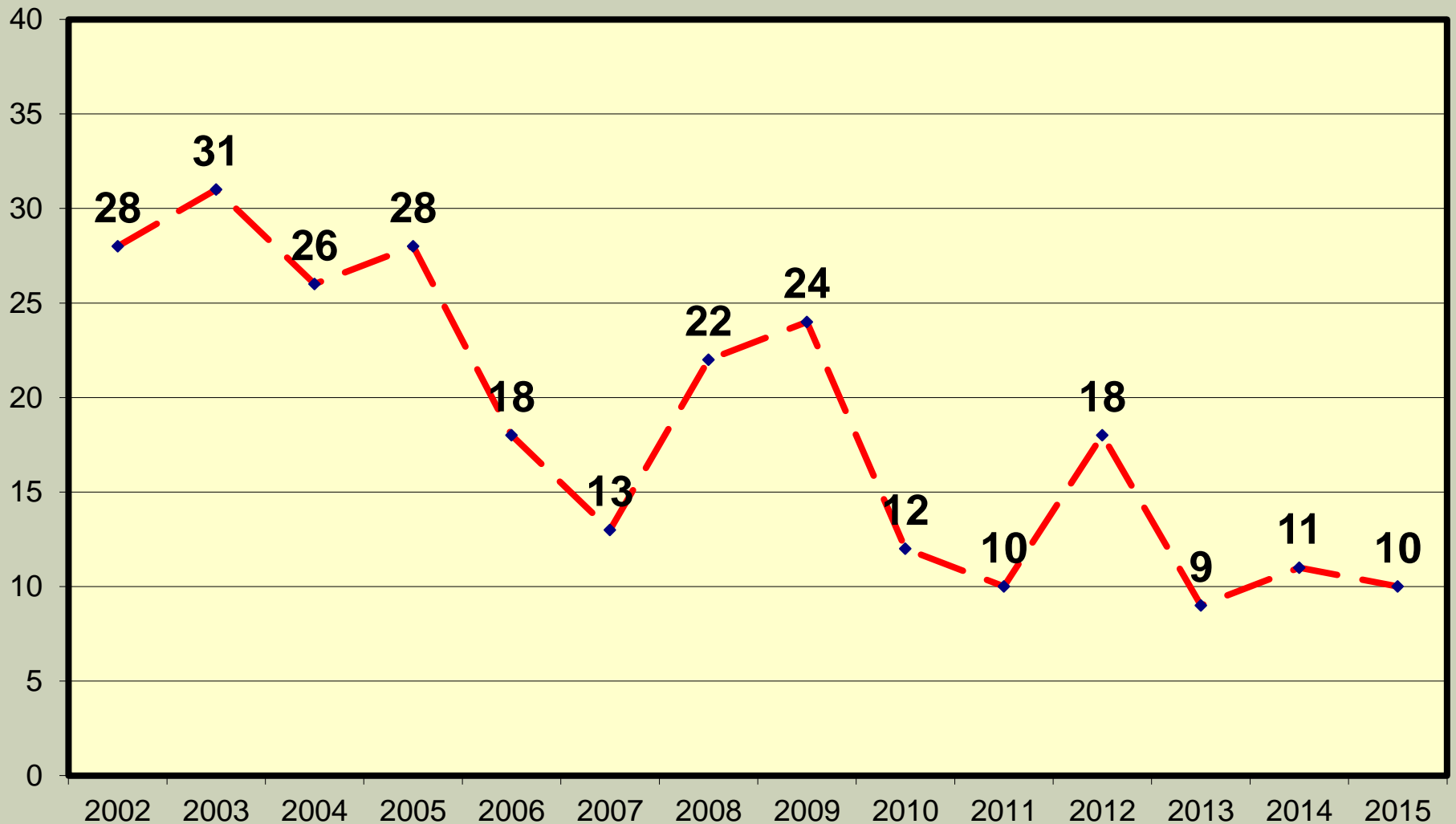
- ❑ Births are used to project kindergarten students 5 years later.
- ❑ Births in Spring Lake have been declining.
- ❑ 2002-2005: range was 26-31 (avg. =28).
- ❑ 2013-2015: range was 9-11 (avg. =10).
- ❑ 31 kindergarten students in 2008-09, 11 in 2016-17.



# BIRTH COUNTS AND BIRTH-TO-KINDERGARTEN SURVIVAL RATIOS

Birth Year	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

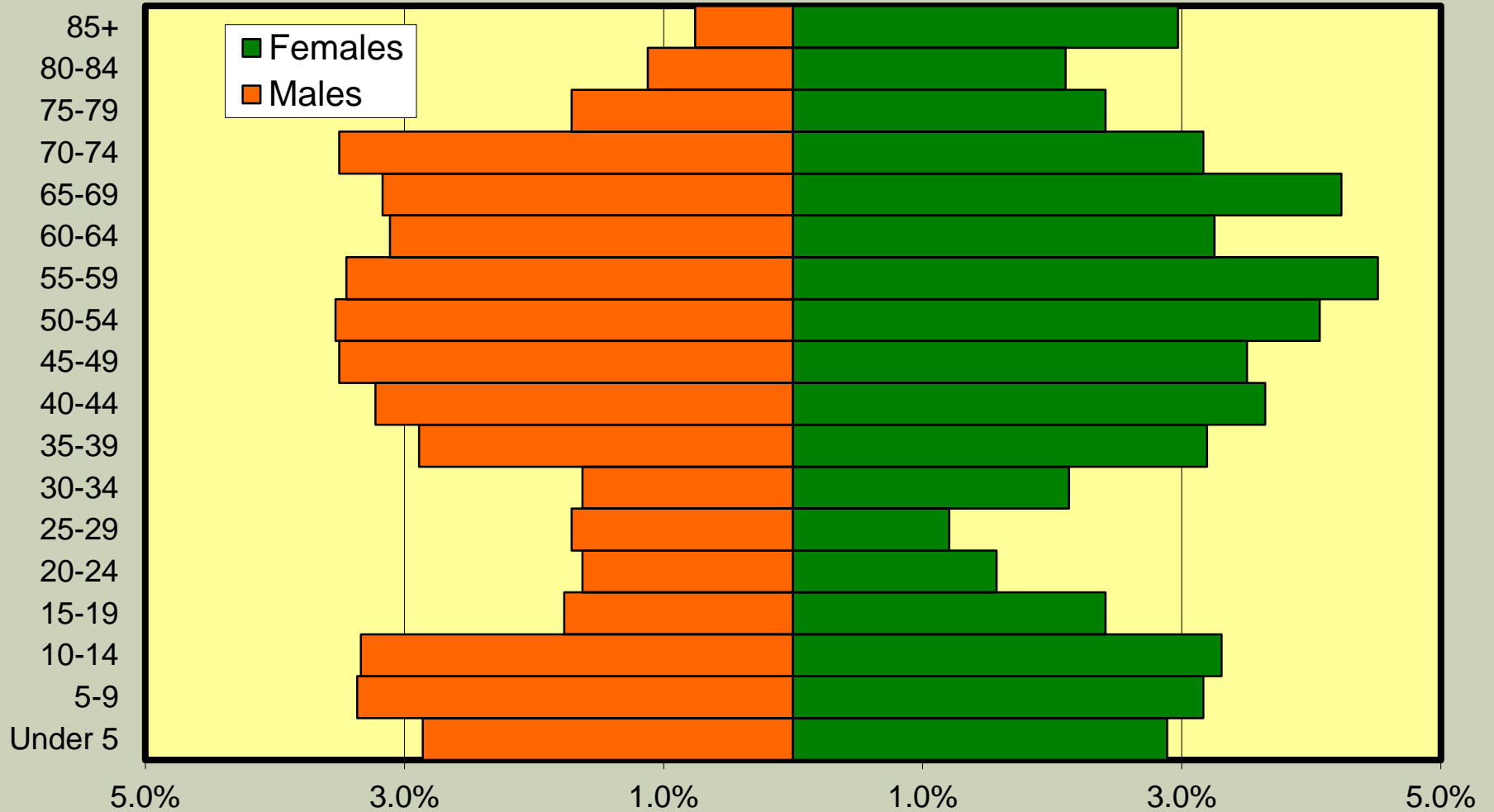
# HISTORICAL BIRTHS SPRING LAKE BOROUGH 2002-2015



# AGE PYRAMID

## SPRING LAKE BOROUGH

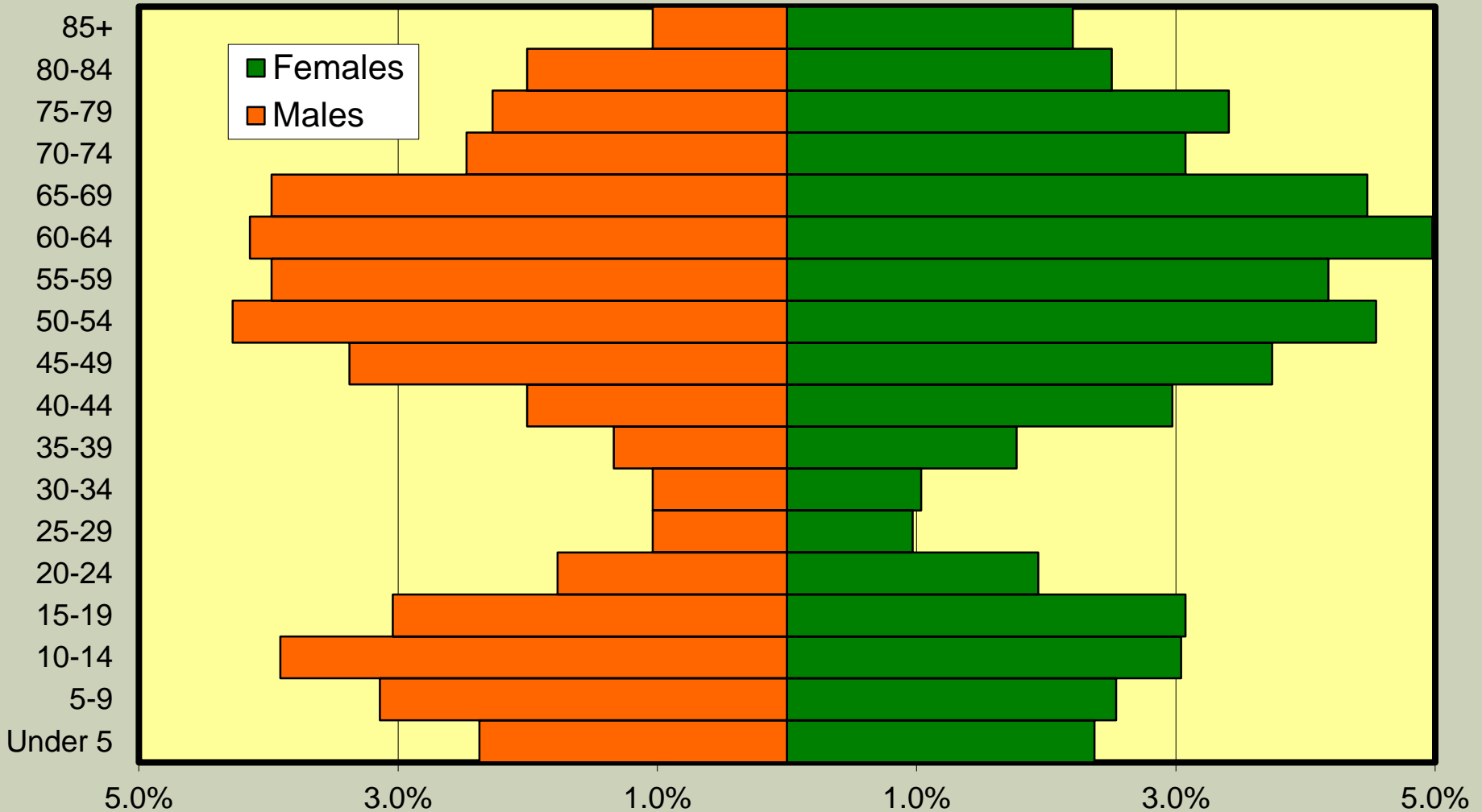
### 2000



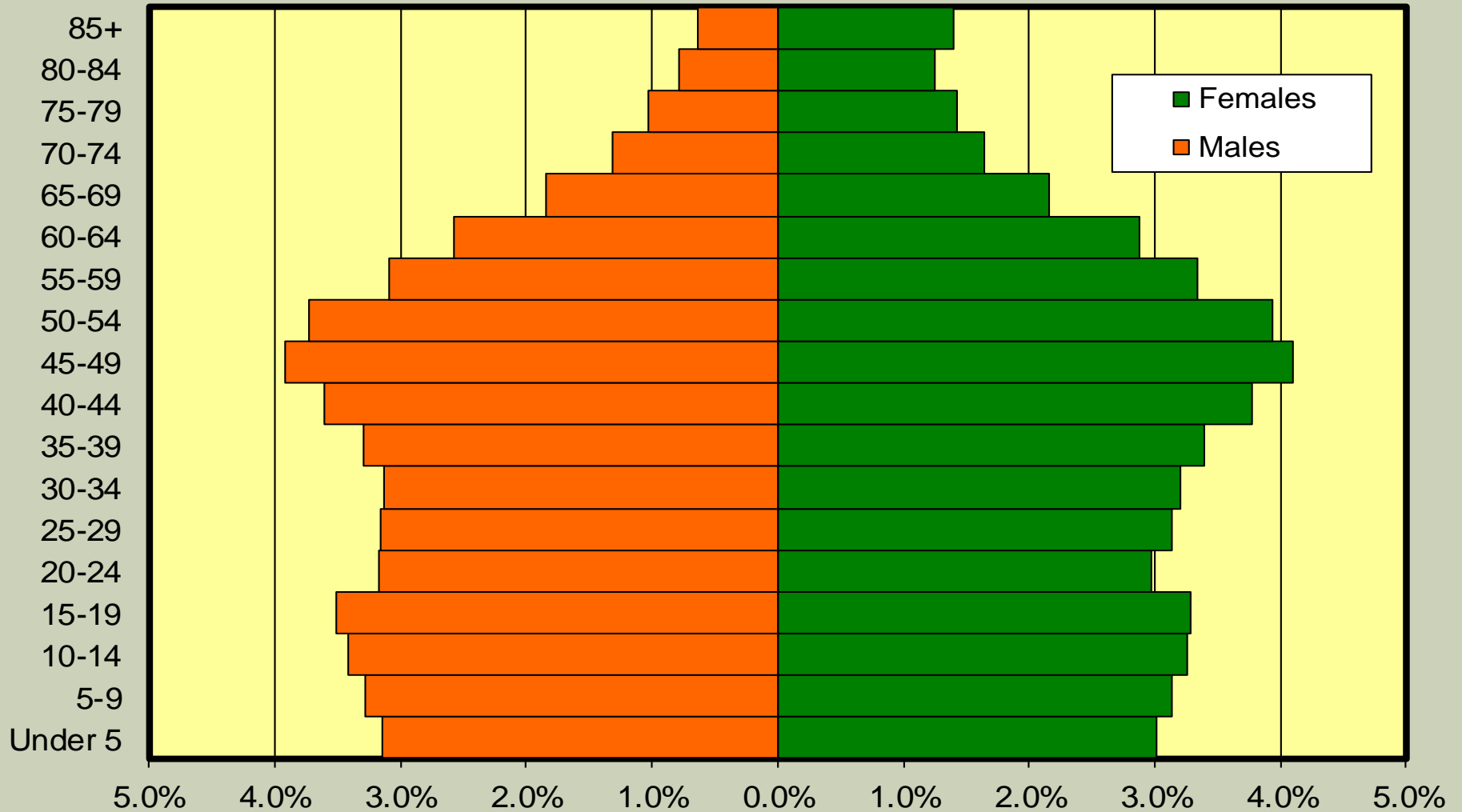
# AGE PYRAMID

## SPRING LAKE BOROUGH

### 2010



# AGE PYRAMID NEW JERSEY 2010



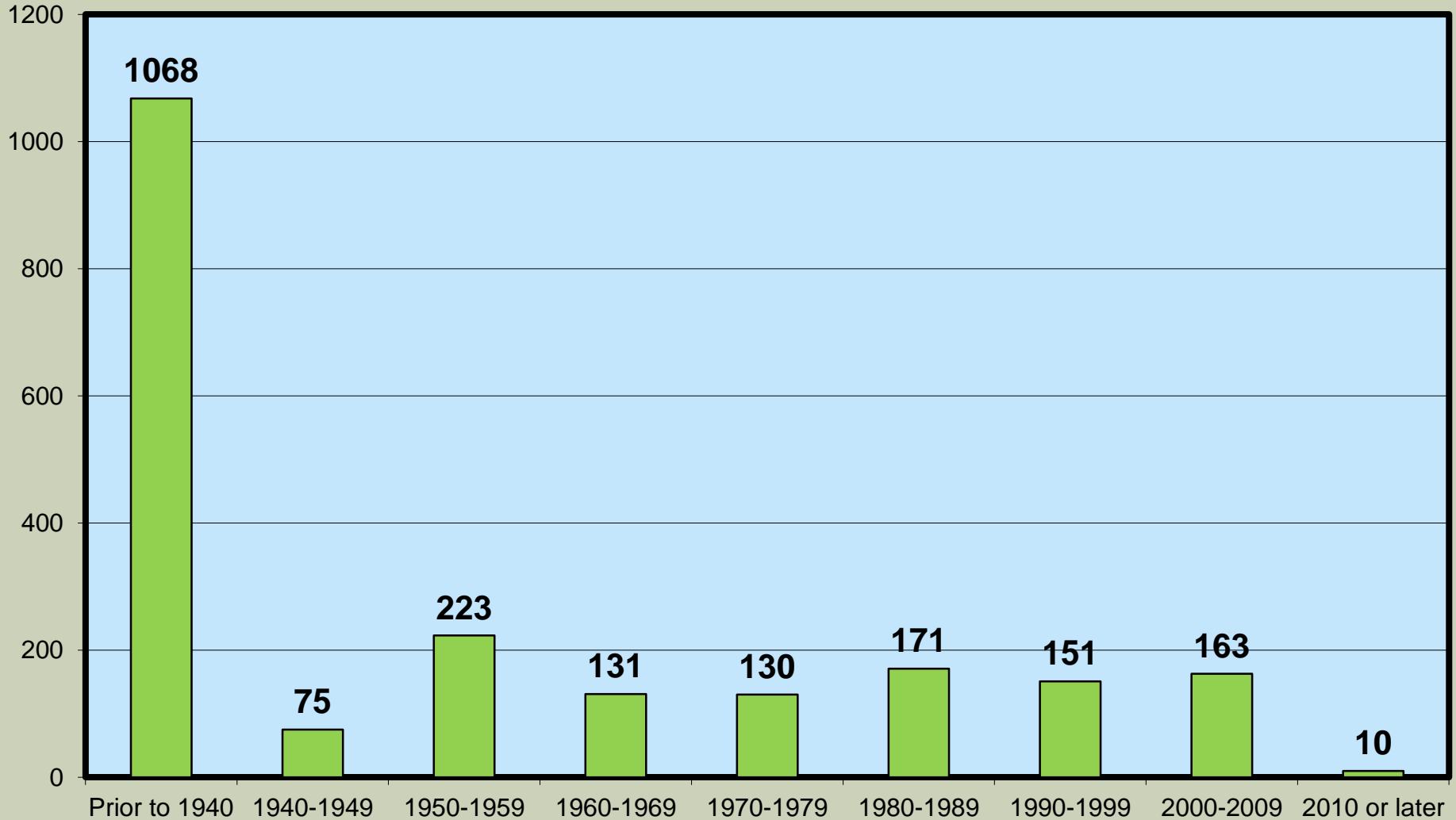
# CHANGE IN MALES AND FEMALES 2000 TO 2010

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

# NEW HOUSING IN SPRING LAKE BOROUGH

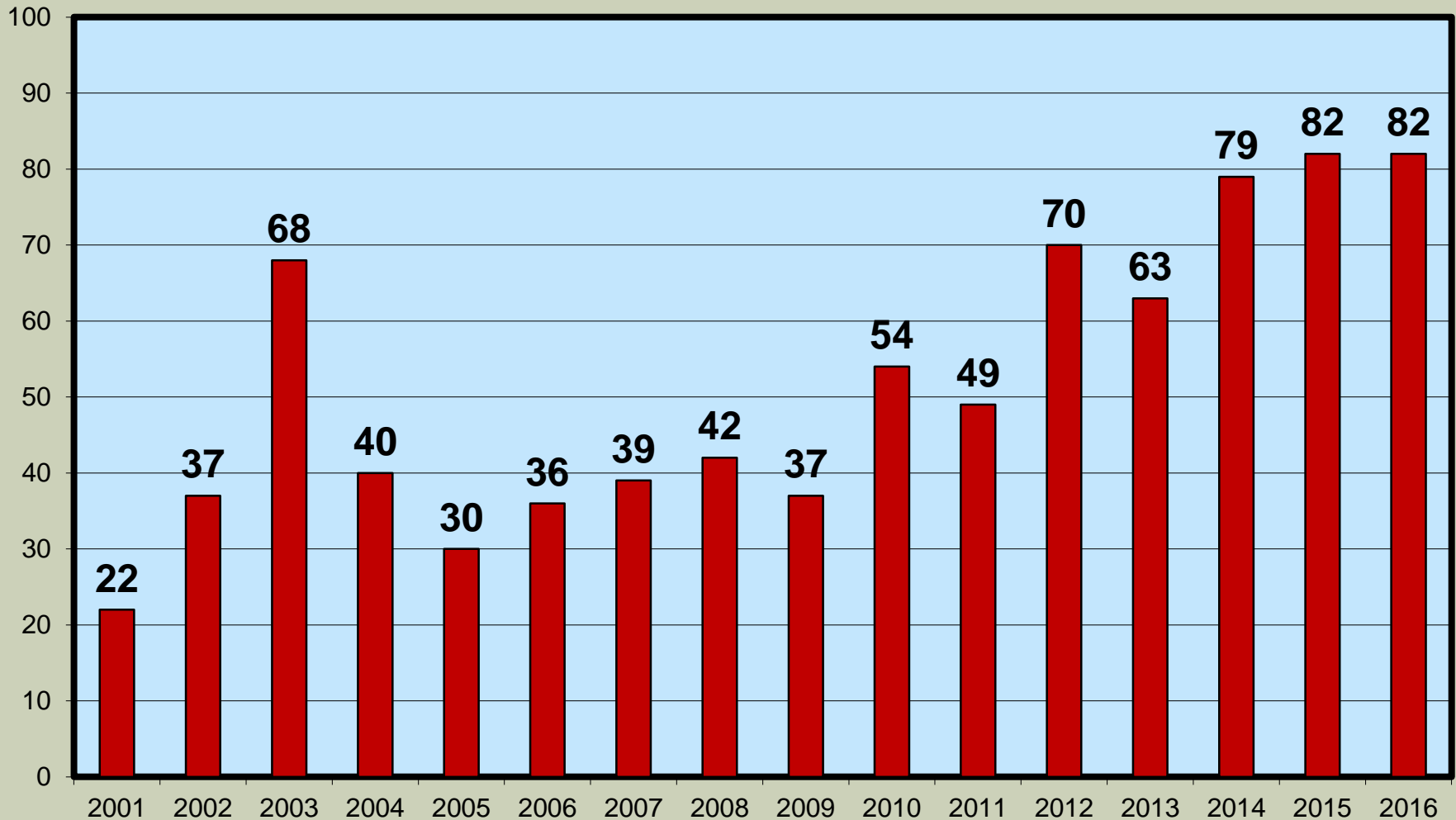
- No residential developments under construction.
- No residential applications before planning board. Available land is limited and community is nearly built out.
- Many demolitions and rebuilds on same lot.

# HOMES BUILT BY DECADE SPRING LAKE BOROUGH

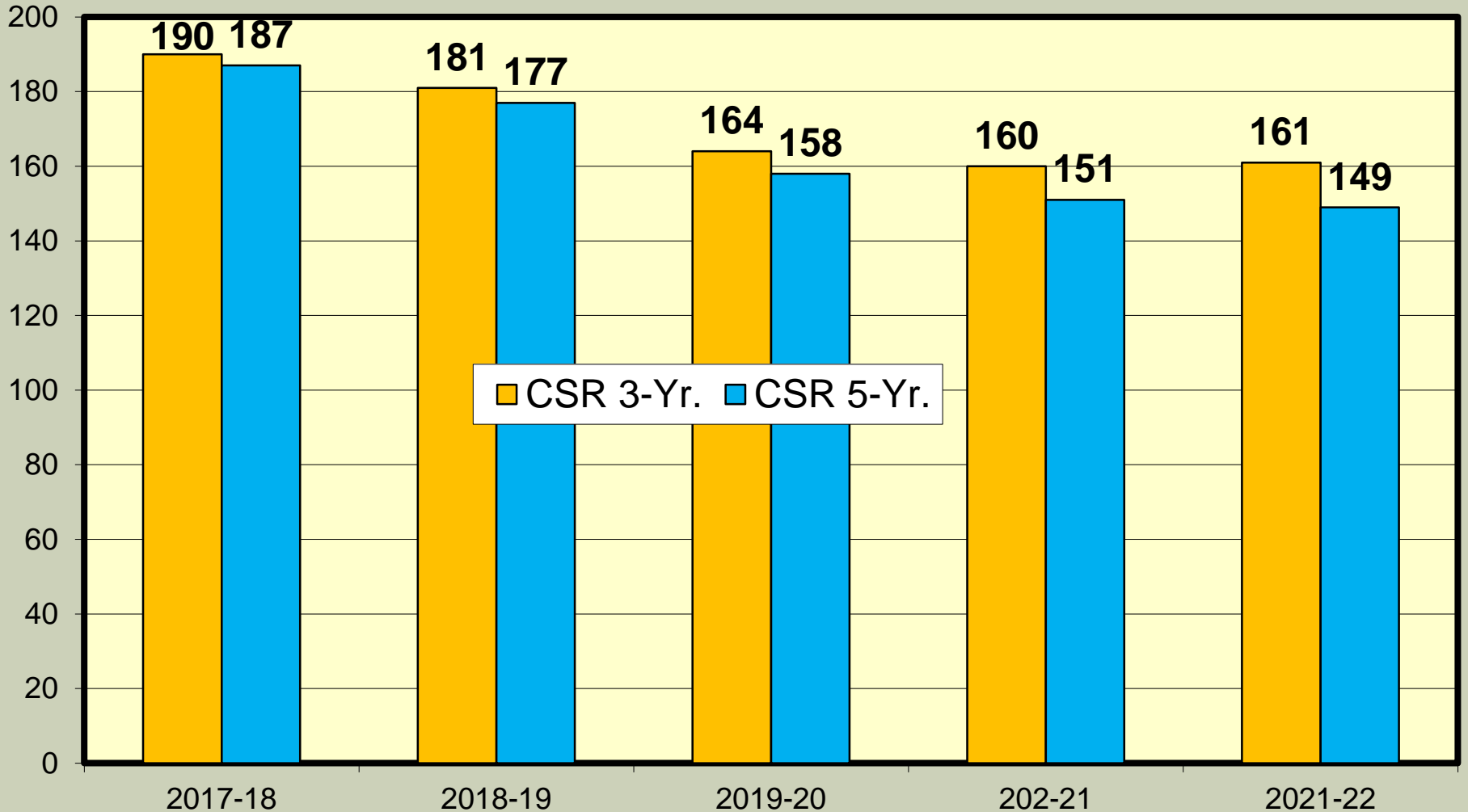




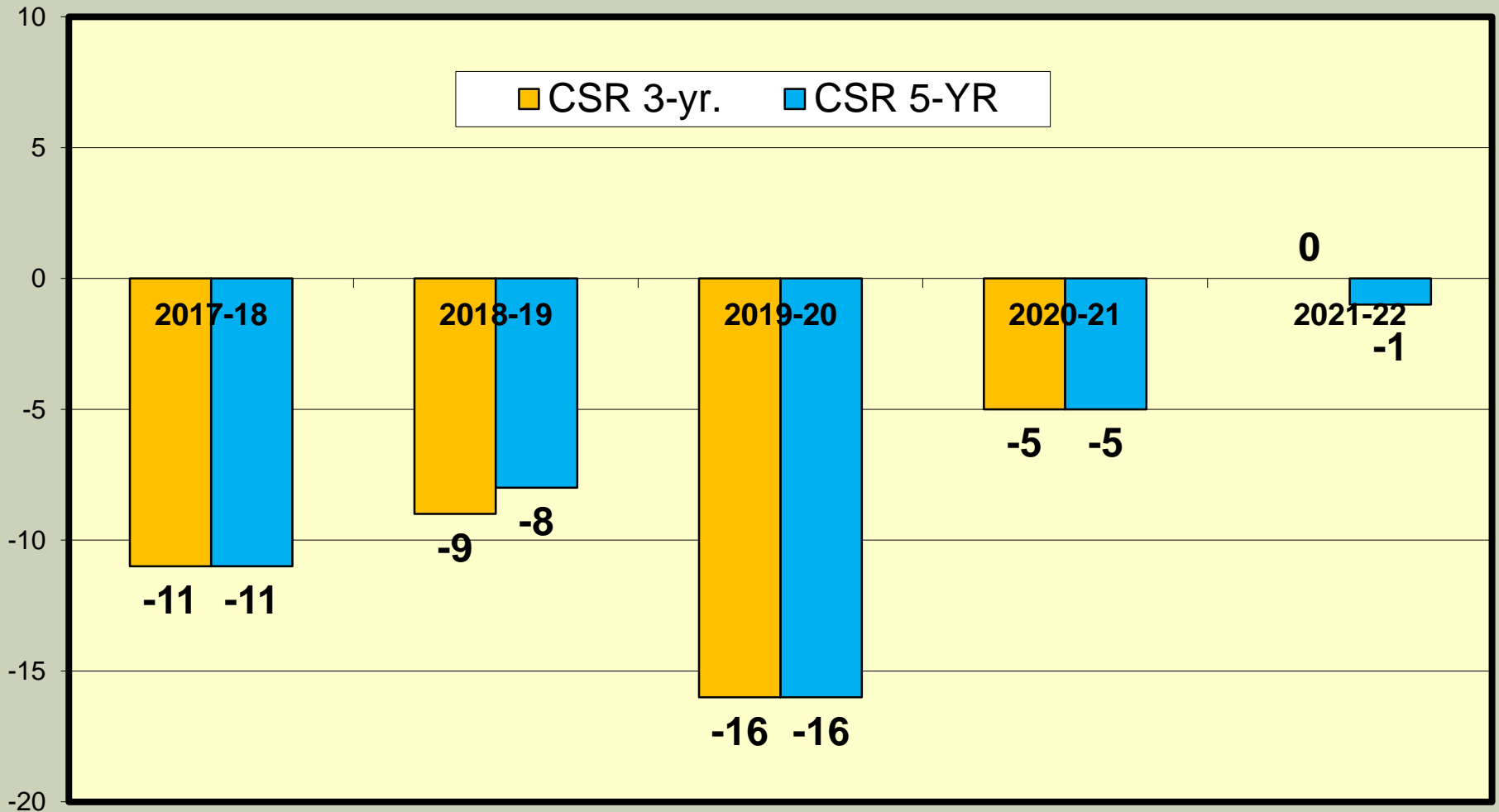
# SPRING LAKE BOROUGH HOME SALES 2001-2016



# ENROLLMENT PROJECTIONS



# PROJECTED KINDERGARTEN REPLACEMENT



# CAPACITY ANALYSIS

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

# SUMMARY

- Enrollments are projected to be lower at the end of the 5-year projection period.
- Lower number of primary occupants in Spring Lake
- Older population
- Declining birth rate has led to fewer children entering kindergarten.
- Projections are based on current policy for accepting tuition students. Enrollments can change if policy is altered.

