

# **Demographic Study**

for the

# Red Bank Regional High School District

# June 2017

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# **Executive Summary**

At the request of the Red Bank Regional High School District ("Red Bank Regional"), Statistical Forecasting completed a demographic study where the main objective was to project enrollments from 2017-18 through 2021-22, a five-year period. In addition, information was also collected regarding community population trends, demographic profiles, new housing starts, and home sales.

#### Community Overviews

Red Bank Regional has one school, Red Bank Regional High School, which serves the children of the boroughs of Little Silver, Red Bank, and Shrewsbury for grades nine through twelve. In addition, the school district receives children from outside communities within Monmouth County to attend one of four Academies in the Career and Technical Education Programs.

Census and American Community Survey ("ACS") data were analyzed for each of the three sending communities, including:

- Historical and projected populations
- Racial composition
- Age distribution
- Educational attainment
- Income
- Housing occupancy and housing types

When comparing the Census and ACS data of the three communities, the following represents some of the highlights:

- The aggregated population of the three communities is 21,965. Red Bank has the greatest population (12,206), accounting for 56% of the total.
- Shrewsbury and Little Silver have very similar racial distributions that are nearly entirely White.
- Red Bank has the highest concentration of persons having Hispanic origin (17.7%).
- Red Bank has the largest foreign-born percentage (25.1%).
- Red Bank has the lowest median age (35.2 years) while Shrewsbury has the highest (44.3 years).
- The median family income in Little Silver and Shrewsbury are fairly similar (exceeding \$140,000) and are more than two times the median family income (\$63,977) in Red Bank.
- Little Silver has the highest median value of an owner-occupied unit (\$597,400) while Red Bank has the lowest (\$353,800).
- The percentage of persons with a bachelor's degree or higher in Little Silver and Shrewsbury is fairly similar (exceeding 62%) and is much higher than Red Bank's percentage (39.3%).

- Little Silver (98.6%) and Shrewsbury (99.5%) have the highest percentage of one-unit homes, either detached or attached, while Red Bank has the lowest (46.8%).
- Red Bank (53.0%) has the highest percentage of renter-occupied units.

#### Historical Enrollment Trends

Historical enrollments for Red Bank Regional were analyzed from 2007-08 through 2016-17, a ten-year period. After declining to 1,009.5 students in 2010-11, enrollment has been slowly increasing. The 2016-17 enrollment is 1,203 students, which is a gain of 87 students (+7.8%) since 2007-08.

#### PK-8 Feeder Districts

PK-8 enrollments were analyzed from 2007-08 to 2016-17 for the three feeder districts: Little Silver Public Schools, Red Bank Borough Public Schools, and the Shrewsbury Borough School District. In addition, enrollments were analyzed for the Red Bank Charter School (PK-8), which has a number of its students attending Red Bank Regional for high school.

In the last five years, enrollment in the Little Silver Public Schools has been fairly stable, ranging from 833 to 860 students per year. Enrollment in 2016-17 is 847, which is a gain of 38 students (+4.7%) from 2007-08.

In the Red Bank Borough Public Schools, enrollment has been steadily increasing over the last decade. In 2016-17, enrollment is 1,287, which is a gain of 445 students (+52.9%) from 2007-08.

Like Little Silver, enrollment in the Shrewsbury Borough School District has been fairly stable, ranging from a low of 478 to a high of 512 over the last decade. In 2016-17, enrollment is 486, which is a decline of 13 students (-2.6%) from 2007-08.

Finally, enrollment in the Red Bank Charter School, which is determined by an admission lottery, is typically capped at 20 students per grade. Enrollment in 2015-16 was 200 students. Enrollment in 2016-17 was unavailable but was estimated to be 200 students as well.

#### Potential New Housing

Municipal representatives in each community provided information regarding current and future residential development. There are no non-age-restricted residential applications currently before the planning board in either Shrewsbury or Little Silver, nor are there any residential developments under construction. However, there is the potential for 35 apartment units on 55 West Front Street in Red Bank, which would be constructed on the site of a former nursing home that has been demolished. The redevelopment would consist of a mix of one- and two-bedroom units. Some of the units may be set aside for affordable housing. The development is still in the application process and has not received approval.

#### Home Sales

Home sales were analyzed for each community from 2001-2016. In Little Silver, the number of home sales was fairly stable from 2001-2009, ranging from 32 to 48 sales per year. However, since 2010, the number of sales has been steadily increasing. In the last four years, the number of sales has ranged from 90 to 93 per year.

In Red Bank, home sales peaked at 125 in 2005 before declining to 71 in 2009 due to the housing market crash and banking crisis. Since 2010, the number of sales has been steadily increasing. In 2016, there were 190 sales, which is significantly higher than the peak number that occurred in 2005.

In Shrewsbury, the number of home sales peaked at 38 in 2004 before declining to a low of 18 in 2010. Like the previous communities, the number of sales has been steadily increasing, peaking at 101 sales in 2014. While the number of sales has dropped off in the last two years, they are still significantly higher than what had occurred from 2001-2011.

#### **Enrollment Projections**

Enrollments were calculated from 2017-18 to 2021-22 in two separate projections. In the first projection, enrollment is projected to be 1,323 in 2021-22, which would represent a gain of 120 students from the 2016-17 enrollment. In the second projection, enrollment is projected to be 1,395 in 2021-22, which would represent a gain of 192 students from the 2016-17 enrollment.

#### Building Capacity

The capacity of Red Bank Regional High School was compared to the current enrollment in 2016-17 and the projected enrollment in the 2021-22 school year. Using the building capacity from the district's Long Range Facilities Plan, the differences between capacity and actual/projected number of students were computed. Positive values indicate available extra seating while negative values indicate "unhoused students." Currently, there are 160 unhoused students at Red Bank Regional High School. Due to a projected increase in enrollment, the number of unhoused students is projected to be 352 by 2021-22.

#### Final Thoughts

Enrollments are projected to increase for the next five years in the Red Bank Regional High School District. While enrollments in the Little Silver Public Schools and the Shrewsbury Borough School District have been fairly stable, the Red Bank Borough Public Schools has experienced a large increase in its PK-8 student population. As Red Bank accounts for nearly half of the aggregated PK-8 student population, Red Bank Regional's enrollment is projected to increase as those larger elementary and middle school cohorts rise into the high school grades.

## Introduction

Statistical Forecasting completed a demographic study for the Red Bank Regional High School District ("Red Bank Regional"), where the main objective was to compute grade-by-grade enrollments from 2017-18 through 2021-22, a five-year period. In addition, information was also collected regarding community population trends, demographic profiles, new housing starts, and home sales.

# **Population Trends**

#### 1. Borough of Little Silver

Located in Monmouth County, the Borough of Little Silver ("Little Silver") contains a land area of approximately 2.71 square miles, with an additional 0.61 square miles of water area. In the 2010 Census, Little Silver had 5,950 residents, which is approximately 2,195.6 persons per square mile. Historical and projected populations for Little Silver from 1940-2040 are shown in Table 1.

# Table 1 <u>Historical and Projected Populations for the Borough of Little Silver</u> 1940-2040

Year	Population	Percent Change					
Historical <sup>1</sup>							
1940	1,461	N/A					
1950	2,595	+77.6%					
1960	5,202	+100.5%					
1970	6,010	+15.5%					
1980	5,548	-7.7%					
1990	5,721	+3.1%					
2000	6,170	+7.8%					
2010	5,950	-3.6%					
2015 (est.)	5,913	-0.6%					
	Projected <sup>2</sup>						
2020	6,029	+2.0%					
2030	6,236	+3.4%					
2040	6,236	0.0%					

**Notes:** <sup>1</sup>Source: United States Census Bureau

<sup>2</sup>Source: North Jersey Transportation Planning Authority, Inc. (2013)

Little Silver's population more than quadrupled from 1940 to 1970, with the greatest gain occurring in the 1950s when the population doubled. After a decline in the 1970s, the borough's population increased in the 1980s and 1990s before experiencing a small decline in the most recent decade. In addition, a population estimate for 2015 is provided in Table 1. The estimated

population in 2015 is 5,913 persons, which is a decline of 37 persons from the population in 2010. The Census Bureau publishes estimates every July 1<sup>st</sup> 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 ("NJTPA"), indicate that the population in Little Silver will slowly increase before stabilizing. In 2040, Little Silver's population is projected to be 6,236, which would be a 4.8% increase from the 2010 population and a gain of 286 persons.

# 2. Borough of Red Bank

The Borough of Red Bank ("Red Bank"), which is also located in Monmouth County, contains a land area of approximately 1.74 square miles with an additional 0.42 square miles of water area. Historical and projected populations for Red Bank from 1940-2040 are shown in Table 2.

Year	Population	Percent Change						
	Historical <sup>1</sup>							
1940	10,974	N/A						
1950	12,743	+16.1%						
1960	12,482	-2.0%						
1970	12,847	+2.9%						
1980	12,031	-6.4%						
1990	10,636	-11.6%						
2000	11,844	+11.4%						
2010	12,206	+3.1%						
2015 (est.)	12,204	0.0%						
	Projected <sup>2</sup>							
2020	12,458	+2.1%						
2030	13,057	+4.8%						
2040	13,406	+2.7%						

# Table 2 <u>Historical and Projected Populations for the Borough of Red Bank</u> 1940-2040

**Notes:** <sup>1</sup>Source: United States Census Bureau

<sup>2</sup>Source: North Jersey Transportation Planning Authority, Inc. (2013)

As of 2010, Red Bank had 12,206 residents, which is 7,014.9 persons per square mile. Of the three communities that comprise Red Bank Regional, Red Bank has the largest population. After growing to 12,743 in 1950, Red Bank's population was fairly stable through

1970 before declining in the 1970s and 1980s. Red Bank's population in 1990 (10,636) was lower than the population in 1940. Since 1990, the population has been slowly increasing in the borough. The estimated population in 2015 is 12,204 persons, which is nearly unchanged from 2010. Forecasts prepared by the NJTPA project the population to slowly increase and reach 13,406 in 2040, which would be a 9.8% increase and a gain of 1,200 persons from the 2010 population.

# **3.** Borough of Shrewsbury

The Borough of Shrewsbury ("Shrewsbury"), which is also located in Monmouth County, contains a land area of approximately 2.17 square miles with an additional 0.03 square miles of water area. Historical and projected populations for Shrewsbury from 1940-2040 are shown in Table 3. As of 2010, Shrewsbury had 3,809 residents, which is 1,755.3 persons per square mile. Like Little Silver, Shrewsbury grew predominantly in the 1940s and 1950s, with the greatest gain occurring in the 1950s when the population doubled. After declining in the 1970s, the population has been slowly increasing. The estimated population in 2015 is 4,131 persons, which would be a gain of 322 persons from 2010. Since 1990, the population has grown by more than 1,000 persons. Since the forecasted populations in 2020 and 2030 by NJPTPA have already been exceeded in 2015, it is likely that the forecasts need to be revised. Of the three communities, Shrewsbury has the smallest population.

 Table 3

 <u>Historical and Projected Populations for the Borough of Shrewsbury</u>

 1940-2040

Year	Population	Percent Change					
Historical <sup>1</sup>							
1940	1,058	N/A					
1950	1,613	+52.5%					
1960	3,222	+99.8%					
1970	3,315	+2.9%					
1980	2,962	-10.6%					
1990	3,096	+4.5%					
2000	3,590	+16.0%					
2010	3,809	+6.1%					
2015 (est.)	4,131	+8.5%					
	Projected <sup>2</sup>						
2020	3,896	-5.7%					
2030	4,129	+6.0%					
2040	4,276	+3.6%					

Notes: <sup>1</sup>Source: United States Census Bureau

<sup>2</sup>Source: North Jersey Transportation Planning Authority, Inc. (2013)

Figure 1 below shows the aggregated historical and projected populations of the three communities from 1940-2040. After declining from 1970 to 1990, the aggregated population has increased in each of the last two decades. In 2010, the aggregated population of the sending area was 21,965 persons, which is a gain of more than 2,500 persons from 1990. By 2040, the aggregated population is projected to increase to 23,918, which would be a gain of 1,953 persons (+8.9%) from 2010.



Figure 1 Aggregated Historical and Projected Populations 1940-2040

In Table 4 following, selected demographic characteristics of Little Silver, Red Bank, and Shrewsbury are compared from the 2000 Census, the 2011-2015 American Community Survey ("ACS"), and the 2010 Census. While some Census variables account for everyone in the population (e.g., age and race), 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 small municipalities such as the ones in this study, ACS data represent a sample collected over a five-year time period, where the estimates represent the <u>average</u> 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.

#### 1. Borough of Little Silver

With respect to race, the racial distribution in Little Silver has changed little from 2000 to 2010. In 2010, 96.4% of the residents were White as compared to 97.1% in 2000, which is a decline of 0.7 percentage points. Asians were the second-largest race at 1.7% in 2010, which is nearly unchanged from 2000. The Census Bureau does not consider Hispanic as a separate race; rather it identifies the percent 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. It is not a mutually exclusive race category. The concentration of persons having Hispanic origin was 3.0% in 2010, which is more than double the 2000 percentage (1.3%).

Regarding nativity, 5.1% of Little Silver residents were foreign-born in the 2011-2015 ACS, which is slightly below the 2000 percentage (5.8%). As a point of comparison, New Jersey's foreign-born resident percentage was 21.7% in the 2011-2015 ACS. While not shown in the table, place of birth, which serves as a proxy for country of origin, indicates that the United Kingdom was the largest source of immigrants in 2000, accounting for 15.3% of the foreign-born population. In the 2011-2015 ACS, the United Kingdom continues to be the largest source but accounts for a much larger share (41.0%) of the foreign-born population.

The median age in Little Silver has increased from 41.1 years in 2000 to 43.8 years in 2010, which is 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 increased slightly from 27.4% to 27.9%.

Regarding educational attainment for adults aged 25 and over, 64.9% of the population had a bachelor's degree or higher in the 2011-2015 as compared to 60.5% in 2000, which is a gain of 4.4 percentage points. The 2011-15 ACS percentage is much higher than the state average (36.8%), indicating a highly-educated population. Persons with graduate or professional degrees increased from 22.0% to 28.2% during this time period.

Median family income increased from \$104,033 in 2000 to \$145,614 in the 2011-2015 ACS, a gain of 40.0%. By comparison, median family income in New Jersey is \$88,335, which is significantly lower than Little Silver's. During this time period, the percentage of children under the age of 18 that are in poverty increased from 0.0% to 3.7%.

Regarding housing, there were 2,278 housing units in Little Silver in 2010, which is nearly unchanged (-10) from 2000. From 2000 to 2010, the overall occupancy rate declined from 97.6% to 94.2%. Renter-occupied units accounted for 5.6% of the occupied units in 2010, which is a small increase from the 2000 percentage (3.5%). In 2010, the average household size was 2.77 persons, which is nearly unchanged from 2000. Finally, the median home price of an owner-occupied unit in the 2011-2015 ACS was \$597,400, which is nearly double the value reported in 2000 (\$300,400).

With respect to housing type, 98.6% of the homes are one-unit, either attached or detached, which is nearly identical to the 2000 Census percentage. Homes with 20 or more units, which typically consist of renters, were the second-largest type of housing in the 2011-2015 ACS and consisted of 0.8% of the housing stock.

#### 2. Borough of Red Bank

Of the three communities, Red Bank is the most racially diverse. Whites are the largest race in Red Bank and were 68.6% of the population in 2010, which is nearly unchanged from 2000 (68.2%). Blacks/African Americans were the second-largest race at 13.7% in 2010, which is a decline of 6.4 percentage points from 2000. Asians are the fastest growing racial group, increasing from 2.2% to 8.3% in the last decade. The concentration of persons having Hispanic origin was 17.7% in 2010, which is a small increase from the 2000 percentage (17.1%).

Regarding nativity, 25.1% of the borough's residents were foreign-born in the 2011-2015 ACS, which is a large increase of 10.1 percentage points from 2000 and is larger than the percentage in New Jersey (21.7%). While not shown in the table, place of birth, which serves as a proxy for country of origin, indicates that Mexico was the largest source of immigrants in 2000, accounting for 39.8% of the foreign-born population. While Mexico remains the largest source in the 2011-2015 ACS, it accounts for a much larger share (60.5%) of the foreign-born population.

The median age in Red Bank decreased from 37.5 years in 2000 to 35.2 years in 2010, which is lower 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 increased from 17.5% to 20.4%.

Regarding educational attainment for adults aged 25 and over, 39.3% of the population had a bachelor's degree or higher in the 2011-2015 ACS as compared to 31.9% in 2000, which is a gain of 7.4 percentage points. Persons with graduate or professional degrees increased from 10.6% to 17.5% during this time period.

Borough of Little Silver **Borough of Red Bank Borough of Shrewsbury** 2010 Census 2010 Census 2010 Census Race Origin 2000 Census 2000 Census 2000 Census 2011-15 ACS 2011-15 ACS 2011-15 ACS White 97.1% 96.4% 68.2% 68.6% 96.6% 95.6% Black or African American 0.3% 0.3% 20.1% 13.7% 0.5% 0.7% American Indian and Alaska Native 0.2% 0.1% 0.3% 0.3% 0.0% 0.1% 1.5% 1.7% 2.2% 8.3% 1.7% 2.1% Asian Native Hawaiian and Other Pacific Islander 0.0% 0.1% 0.1% 0.0% 0.0% 0.0% Other Race 0.2% 0.2% 6.7% 6.4% 0.4% 0.6% Two or more Races 0.7% 1.1% 2.4% 2.7% 0.8% 0.9% 100.0%<sup>1</sup> 100.0%<sup>1</sup> 100.0%<sup>1</sup> 100.0%<sup>1</sup>  $100.0\%^{1}$ 100.0%<sup>1</sup> Total Hispanic Origin 1.3% 3.0% 17.1% 17.7% 1.9% 2.5% Place of Birth Foreign-Born 5.8% 5.1% 15.0% 25.1% 7.4% 5.0% Age Under 18 27.4% 27.9% 17.5% 20.4% 30.8% 27.0% 18-64 56.9% 56.3% 64.2% 66.9% 57.2% 55.4% 65 and over 15.7% 15.8% 18.3% 12.7% 12.0% 17.6% Median age 41.1 years 43.8 years 37.5 years 35.2 years 38.4 years 44.3 years **Educational Attainment** Bachelor's degree or higher 60.5% 64.9% 31.9% 39.3% 48.7% 62.6% 22.0% 28.2% 10.6% 17.5% 19.6% Graduate or professional degree 21.0% Income Median family income \$104,033 \$145,614 \$63,333 \$63,977 \$92,719 \$141,778 % of Persons in Poverty under age 18 3.7% 0.0% 0.0% 16.5% 20.6% 1.8% Housing Units<sup>2</sup> Total number 2.288 2.278 5,450 5.381 1.223 1.310 Occupied units 2.232 (97.6%) 2,146 (94,2%) 5.201 (95.4%) 4.929 (91.6%) 1.207 (98.7%) 1.261 (96.3%) Owner-occupied units 2,153 (96.5%) 2,026 (94.4%) 2,478 (47.6%) 2,316 (47.0%) 1,150 (95.3%) 1,201 (95.2%) Renter-occupied units 79 (3.5%) 120 (5.6%) 2,723 (52.4%) 2,613 (53.0%) 57 (4.7%) 60 (4.8%) Median value of an owner-occupied unit \$300,400 \$597,400 \$178,900 \$353,800 \$258,300 \$519,800 2.20 Average household size 2.76 2.77 2.43 2.96 2.87 Housing Type<sup>2</sup> Total number 2.209 5,450 5.592 1.223 1.457 2.288 1-unit, attached or detached 2,244 (98.1%) 2,177 (98.6%) 2,453 (45.0%) 2,619 (46.8%) 1,223 (100.0%) 1,449 (99.5%) Two units 11(0.5%)0(0.0%)613 (11.2%) 599 (10.7%) 0(0.0%)8 (0.5%) Three or four units 25 (1.1%) 0(0.0%)615 (11.3%) 578 (10.3%) 0(0.0%)0(0.0%)312 (5.7%) Five to nine units 8 (0.3%) 15 (0.7%) 225 (4.0%) 0(0.0%)0 (0.0%) 0(0.0%)0(0.0%)294 (5.4%) 404 (7.2%) 0(0.0%)0(0.0%)10 to 19 units 20 or more units 0(0.0%)17 (0.8%) 1,163 (21.3%) 1,167 (20.9%) 0(0.0%)0(0.0%)Mobile home. 0 (0.0%) 0 (0.0%) 0 (0.0%) 0 (0.0%) 0 (0.0%) 0(0.0%)

 Table 4

 Selected Demographic Characteristics

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

Notes: <sup>1</sup>Data may not sum to 100.0% due to rounding.

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

Median family income was \$63,977 in the 2011-2015 ACS, which is nearly unchanged from 2000. The median family income in Red Bank is significantly below that of New Jersey (\$88,335). During this time period, the percentage of children under the age of 18 that are in poverty increased from 16.5% to 20.6%, a gain of 4.1 percentage points.

Regarding housing, there were 5,381 housing units in Red Bank in 2010, which is a loss of 69 housing units (-1.3%) from 2000. From 2000 to 2010, the overall occupancy rate declined from 95.4% to 91.6%. Renter-occupied units accounted for 53.0% of the occupied units in 2010, which is nearly identical to the 2000 percentage. In the last decade, the average household size increased from 2.20 persons in 2000 to 2.43 persons in 2010. Finally, the median home price of an owner-occupied unit in the 2011-2015 ACS was \$353,800, which is nearly double the value reported in 2000 (\$178,900).

With respect to housing type, 46.8% of the homes in Red Bank are one-unit, either attached or detached, which is a 1.8 percentage point gain from the 2000 percentage (45.0%). Homes with 20 or more units, which typically consist of renters, were the second-largest type of housing in the 2011-2015 ACS and consisted of 20.9% of the housing stock. Homes with 10-19 units had the largest percentage point gain (+1.8) from 2000 to 2010.

#### **3.** Borough of Shrewsbury

With respect to race, the distribution in Shrewsbury has changed little from 2000 to 2010. In 2010, 95.6% of the residents were White as compared to 96.6% in 2000, which is a decline of 1.0 percentage point. Asians were the second-largest race at 2.1% in 2010, which is a small gain from the 2000 percentage (1.7%). The concentration of persons having Hispanic origin was 2.5% in 2010, which is a gain of 0.6 percentage points from 2000. Of the three communities, the racial distributions in Little Silver and Shrewsbury are the most similar.

Regarding nativity, 5.0% of Shrewsbury residents were foreign-born in the 2011-2015 ACS, which is a decline of 2.4 percentage points from 2000. Like Little Silver, Shrewsbury's foreign-born percentage is well below the state average (21.7%). While not shown in the table, place of birth, which serves as a proxy for country of origin, indicates that the United Kingdom was the largest source of immigrants in 2000, accounting for 20.8% of the foreign-born population. However, in the 2011-2015 ACS, Chile was the largest source accounting for 21.7% of the foreign-born population.

The median age in Shrewsbury has increased from 38.4 years in 2000 to 44.3 years in 2010, which is 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 from 30.8% to 27.0%.

Regarding educational attainment for adults aged 25 and over, 62.6% of the population had a bachelor's degree or higher in the 2011-2015 as compared to 48.7% in 2000, which is a gain of 13.9 percentage points. The 2011-15 ACS percentage is also much higher than the state average (36.8%), indicating a highly-educated population. Persons with graduate or professional degrees increased slightly from 19.6% to 21.0% during this time period.

Median family income increased from \$92,719 in 2000 to \$141,778 in the 2011-2015 ACS, a gain of 52.9%. Like Little Silver, median family income in Shrewsbury is much higher than the state average (\$88,335). During this time period, the percentage of children under the age of 18 that are in poverty increased from 0.0% to 1.8%.

Regarding housing, there were 1,310 housing units in Shrewsbury in 2010, which is a gain of 87 units (+7.1%) from 2000. From 2000 to 2010, the overall occupancy rate declined from 98.7% to 96.3%. Renter-occupied units accounted for 4.8% of the occupied units in 2010, which is nearly unchanged from 2000. In the last decade, the average household size declined from 2.96 persons in 2000 to 2.87 persons in 2010. Finally, the median home price of an owner-occupied unit in the 2011-2015 ACS was \$519,800, which is more than double the value reported in 2000 (\$258,300).

With respect to housing type, nearly all (99.5%) of the homes are one-unit, either attached or detached, which is nearly identical to the 2000 Census percentage (100.0%).

#### **District Overview**

Red Bank Regional has one school, Red Bank Regional High School, which serves the children of Little Silver, Red Bank, and Shrewsbury for grades nine through twelve. In addition, the school district receives children from outside communities within Monmouth County to attend one of four Academies in the Career and Technical Education Programs. Red Bank Regional High School, which is located in Little Silver, is shown in Figure 2. According to the district's Long Range Facility Plan ("LRFP"), total educational capacity in the district is 1,043 using District Practices methodology and 765 using Facilities Efficiency Standards ("FES") methodology. 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, but is used by the State for funding purposes. A comparison of the school's capacity to current and projected enrollments is provided later in the report.

In this study, historical enrollments from the October 15<sup>th</sup> 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.

Figure 2 High School Location – Red Bank Regional High 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 ninth graders and the next year only had 95 tenth 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. 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**

#### 1. Red Bank Regional High School District

Historical enrollments for Red Bank Regional from 2007-08 through 2016-17, a ten-year period, are shown in Table 5 and Figure 3. After declining to 1,009.5 students in 2010-11, enrollment has been slowly increasing. The 2016-17 enrollment is 1,203 students, which is a gain of 87 students (+7.8%) since 2007-08. Figure 4 shows the district's annual change in enrollment, which has declined on five occasions and increased on four others.

Year <sup>1</sup>	9	10	11	12	SE <sup>2</sup>	9-12 Total
2007-08	284	266.5	285	257	23.5	1,116
2008-09	276.5	277.5	248.5	283	28	1,113.5
2009-10	295	271.5	269	240.5	17.5	1,093.5
2010-11	302	258	212.5	223	14	1,009.5
2011-12	313	293	278	233	6	1,123
2012-13	302	311	287	275	6	1,181
2013-14	293	303	299.5	270	8	1,173.5
2014-15	332	296	293	290.5	9	1,220.5
2015-16	280.5	332.5	282.5	287	9	1,191.5
2016-17	326	267	306.5	286	17.5	1,203

 Table 5

 Red Bank Regional High School District Historical Enrollments

 2007-08 to 2016-17

**Notes:** <sup>1</sup>Data were provided by the Red Bank Regional High School District and the New Jersey Department of Education (<u>http://www.nj.gov/education/data/enr/</u>)

<sup>2</sup>Self-contained special education enrollment/Ungraded Students



Figure 3 Red Bank Regional Historical Enrollments 2007-08 to 2016-17

Figure 4 Annual Enrollment Change in Red Bank Regional



Year

Table 6 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 four- 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. Three of the four average survival ratios in the four-year or five-year trend were below 1.000, indicating a general 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 the area served by Red Bank Regional 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 Red Bank Regional, 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.

 Table 6

 Red Bank Regional High School District Historical Survival Ratios

 2007-08 to 2016-17

Progression Years	8-9 <sup>1</sup>	9-10	10-11	11-12
2007-08 to 2008-09	1.2626	0.9771	0.9325	0.9930
2008-09 to 2009-10	1.2041	0.9819	0.9694	0.9678
2009-10 to 2010-11	1.2479	0.8746	0.7827	0.8290
2010-11 to 2011-12	1.3096	0.9702	1.0775	1.0965
2011-12 to 2012-13	1.3246	0.9936	0.9795	0.9892
2012-13 to 2013-14	1.2795	1.0033	0.9630	0.9408
2013-14 to 2014-15	1.2481	1.0102	0.9670	0.9699
2014-15 to 2015-16	1.1543	1.0015	0.9544	0.9795
2015-16 to 2016-17	1.1164	0.9519	0.9218	1.0124
Maximum Ratio	1.3246	1.0102	1.0775	1.0965
Minimum Ratio	1.1164	0.8746	0.7827	0.8290
Avg. 4-Year Ratios	1.1730	0.9879	0.9477	0.9873
Avg. 5-Year Ratios	1.1996	0.9917	0.9516	0.9757
Avg. 10-Year Ratios	1.2386	0.9738	0.9498	0.9753

**Notes:** <sup>1</sup>Grade 8-9 ratios were computed using aggregated 8<sup>th</sup> grade counts from the K-8 feeder districts.

# 2. PK-8 Feeder School Districts

Figure 5 below displays the PK-8 enrollments from 2007-08 to 2016-17 for the three feeder districts: Little Silver Public Schools, Red Bank Borough Public Schools, and the Shrewsbury Borough School District. In addition, enrollments are also shown for the Red Bank Charter School (PK-8), which has a number of its students attending Red Bank Regional for high school.

In the last five years, enrollment in the Little Silver Public Schools has been fairly stable, ranging from 833 to 860 students per year. Enrollment in 2016-17 is 847, which is a gain of 38 students (+4.7%) from 2007-08.

In the Red Bank Borough Public Schools, enrollment has been steadily increasing over the last decade. In 2016-17, enrollment is 1,287, which is a gain of 445 students (+52.9%) from 2007-08.

Like Little Silver, enrollment in the Shrewsbury Borough School District has been fairly stable, ranging from a low of 478 to a high of 512 over the last decade. In 2016-17, enrollment is 486, which is a decline of 13 students (-2.6%) from 2007-08.

Finally, enrollment in the Red Bank Charter School, which is determined by an admission lottery, is typically capped at 20 students per grade. Enrollment in 2015-16 was 200 students. Enrollment in 2016-17 was unavailable but was estimated to be 200 students as well.



#### Figure 5 PK-8 Feeder Districts Historical Enrollments 2007-08 to 2016-17

# **Effects of Housing Growth**

#### 1. Borough of Little Silver

Ms. Colleen Mayer, Planning Board Secretary for Little Silver, provided information regarding current and future development in the community. At present, there are no non-age-restricted residential applications before the planning board. In addition, there are no residential developments under construction.

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 that communities must provide. In July 2016, an appellate court overturned a lower court's ruling that municipalities meet an accumulation of affordable housing units that were unfulfilled between 1999 and 2015. With the latest ruling, the number of units a community is required to build may be less than the original quota.

#### 2. Borough of Red Bank

Ms. Dina Anastasio, Planning and Zoning Administrative Assistant for Red Bank, provided information regarding current and future development in the community. There is the potential for 35 apartment units on 55 West Front Street, which would be constructed on the site of a former nursing home that has been demolished. The redevelopment would consist of a mix of one- and two-bedroom units. Some of the units may be set aside for affordable housing. The development is still in the application process and has not received approval.

# **3.** Borough of Shrewsbury

Ms. Lorraine Kelleher, Planning/Zoning Board Secretary for Shrewsbury, provided information regarding current and future development in the community. Like Little Silver, there are no non-age-restricted residential applications currently before the planning board, nor are there any residential developments under construction. There is the potential for two assisted-living facilities for senior citizens, but that would have no impact on the school district.

#### Historical Residential Construction

With respect to historical new construction, the number of certificates of occupancy ("COs") issued for new homes in each community from 2012 to 2016 is shown in Table 7. During this timeframe, 51 COs were issued for single- or two-family homes in Little Silver while seven (7) COs were issued for either multi-family or mixed-use units for a total of 58 COs. In Red Bank, a total of 40 COs were issued, which were predominantly for single- or two-family homes. Of the three communities, Shrewsbury has had the most residential construction (143 COs), which was nearly entirely for single- or two-family homes. However, many of these COs were for homes that were age-restricted (Enclave at Shrewsbury). If the CO data from the three communities is aggregated, a total of 241 COs were issued, where 231 COs were issued for single- or two-family homes and ten (10) were issued for multi-family or mixed-use units.

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Year	1&2 Family	Multi- Family/ Mixed Use	Total	1&2 Family	Multi- Family/ Mixed Use	Total	1&2 Family	Multi- Family/ Mixed Use	Total
2012	8	0	8	12	0	12	24	0	24
2013	10	0	10	11	1	12	38	0	38
2014	14	2	16	9	0	9	60	0	60
2015	11	5	16	3	1	4	20	1	21
2016 (thru November)	8	0	8	3	0	3	0	0	0
Total	51	7	58	38	2	40	142	1	143

 Table 7

 Number of Residential Certificates of Occupancy by Year

**Source:** New Jersey Department of Community Affairs.

When determining the impact of future new housing, it should be clearly stated that enrollment projections utilize cohort survival ratios that do take into account prior new home construction growth. Children who move into new homes during the historical period are captured by the survival ratios. Therefore, it is not appropriate to add all of the new children generated from new housing units without considering the historical period, as double counting would occur.

From 2012 to 2016, a total of 241 new housing units were built in the three communities. Based on this data and that 35 housing units are planned, it appears that future residential construction in the sending communities will be less than that which occurred since 2012. Therefore, enrollment projections were not adjusted for the additional children anticipated from any potential new housing.

#### Home Sales

In Figure 6, the number of annual home sales in Little Silver, Red Bank, and Shrewsbury is shown from 2001-2016. In Little Silver, the number of home sales was fairly stable from 2001-2009, ranging from 32 to 48 sales per year. However, since 2010, the number of sales has been steadily increasing. In the last four years, the number of sales has ranged from 90 to 93 per year.

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In Red Bank, home sales peaked at 125 in 2005 before declining to 71 in 2009 due to the housing market crash and banking crisis. Since 2010, the number of sales has been steadily increasing. In 2016, there were 190 sales, which is significantly higher than the peak number that occurred in 2005.

The number of home sales in Shrewsbury peaked at 38 in 2004 before declining to a low of 18 in 2010. Like the previous communities, the number of sales has been steadily increasing, peaking at 101 sales in 2014. While the number of sales has dropped off in the last two years, they are still significantly higher than what had occurred from 2001-2011.

Figure 6



# **Enrollment Projections**

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

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 regular education subtotals and multiplying that value by the future regular education subtotals. Average proportions from the last four years (0.0092) and five years (0.0084) were used to estimate the future number of self-contained special education/ungraded students.

On September 10, 2010, New Jersey Governor Chris Christie signed into law the Interdistrict School Choice Program, which took effect in the 2011-12 school year. This enables students the choice to attend a school outside their district of residence if the selected school is participating in the Choice program. The choice school sets the number of openings per grade level. Red Bank Regional does not participate in the program and therefore has no impact on the enrollment projections. Despite not participating in the Choice program, the school district does receive children from outside communities within Monmouth County to attend one of the Career and Technical Education Programs, which is separated into four academies: the Academy of Visual and Performing Arts, Academy of Information Technology, Academy of Engineering, and Academy of Finance.

As the district receives a number of children from outside of the district to attend one of the Academies, there has been lot of variability in the grade 8-9 survival ratio, which has ranged from 1.12 to 1.32 in the last ten years as shown previously in Table 6. Since the grade 8-9 survival ratios have been much higher than 1.00, it indicates that the district is receiving students in addition to its sending communities. Hence, in the forthcoming projections, two grade 8-9 ratios were used that reflect the district's historical survival rates. In the first projection, an average ratio using the last three years of historical data was used (1.14). In the second projection, an average ratio using the last five years of historical data was used (1.20), which would reflect a higher growth rate.

Projected 9-12 enrollments for Red Bank Regional based on historical data from the last four years follow in Table 8 and Figure 7. Total enrollments are projected to slowly increase throughout the projection period. In 2021-22, enrollment is projected to be 1,323, which would be a gain of 120 students from the 2016-17 enrollment of 1,203.

Table 8
Red Bank Regional High School District Projected Enrollments
Using Cohort-Survival Ratios and 4 Years of Historical Data
<u>2017-18 to 2021-22</u>

Year	9	10	11	12	SE	9-12 Total
2017-18	313	322	253	303	11	1,202
2018-19	334	309	305	250	11	1,209
2019-20	319	330	293	301	11	1,254
2020-21	358	315	313	289	12	1,287
2021-22	349	354	299	309	12	1,323

Projected 9-12 enrollments using cohort-survival ratios based on historical data from the last five years follows in Table 9 and Figure 7. Total enrollments are also projected to increase throughout the projection period, albeit at a faster rate. In 2021-22, enrollment is projected to be 1,395, which would be a gain of 192 students from the 2016-17 enrollment.

Table 9
Red Bank Regional High School District Projected Enrollments
Using Cohort-Survival Ratios and 5 Years of Historical Data
<u>2017-18 to 2021-22</u>

Year	9	10	11	12	SE	9-12 Total
2017-18	331	323	254	299	10	1,217
2018-19	353	328	307	248	10	1,246
2019-20	336	350	312	300	11	1,309
2020-21	377	333	333	304	11	1,358
2021-22	367	374	317	325	12	1,395



Figure 7 **Red Bank Regional High School District Enrollment Projections** 

# **Capacity Analysis**

Table 10 shows the educational capacity of Red Bank Regional High School in comparison to both the actual enrollment in 2016-17 and the enrollment projection in the 2021-22 school year. 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 "unhoused students." Since there were two sets of projections, only the highest projection is shown. Currently, there are 160 unhoused students at Red Bank Regional High School. Due to a projected increase in enrollment, the number of unhoused students is projected to be 352 by 2021-22.

# Table 10 **Capacity Analysis**

School	Capacity <sup>1</sup>	Actual Enrollment 2016-17	Difference	Projected Enrollment 2021-22	Difference
Red Bank Regional High School (9-12)	1,043	1,203	-160	1,395	-352

**Note:** <sup>1</sup>District Practices Capacity from Red Bank Regional High School District Long Range Facility Plan