

Demographic Study

for the

Flemington-Raritan School District

February 2020

Prepared By:

Richard S. Grip, Ed.D.

Table of Contents

Executive Summary
Introduction
Population Trends
1. Flemington Borough
2. Raritan Township
Demographic Profiles
1. Flemington Borough
2. Raritan Township
District Overview
Explanation of the Cohort-Survival Ratio Method
Historical Enrollment Trends
Kindergarten and First Grade Replacement
Birth Data
Historical Enrollments by Race
Economically Disadvantaged Students
New Housing
1. Flemington Borough
Distribution of Homes by Decade Built
Home Sales
2. Raritan Township
Distribution of Homes by Decade Built
Home Sales
Historical Residential Construction
Student Yield Analysis of Detached Single-Family Homes
Student Yield by Length of Ownership for Detached Single-Family Homes
Student Yield Analysis for Townhouses and Condominiums
Student Yield Analysis for Apartments
Estimate of Public School Children from New Housing
Enrollment Projections
Projections by School
Barley Sheaf Elementary School
Copper Hill Elementary School
Francis A. Desmares Elementary School
Robert Hunter Elementary School
Reading-Fleming Intermediate School
J.P. Case Middle School
Projected Enrollments by Grade Configuration
Capacity Analysis

Geocoding and Mapping	75
Housing Turnover Analysis	84
1. Detached Single-Family Homes	84
Turnover Rates	84
Current Distribution of Homes by Length of Ownership	89
Student Yields by Length of Ownership	89
2. Townhouses/Condominiums	93
Turnover Rates	93
Current Distribution of Homes by Length of Ownership	93
Student Yields by Length of Ownership	98
Enrollment Projections Based on Housing Turnover	101

Executive Summary

Statistical Forecasting LLC ("Statistical Forecasting") completed a demographic study for the Flemington-Raritan School District, projecting grade-by-grade enrollments from 2020-21 through 2024-25, a five-year period. In addition, the following tasks were completed:

- analyzed community population trends and age structure, fertility rates, and birth counts,
- examined historical enrollment trends, both districtwide and by grade configuration (PK-4, 5-6, and 7-8),
- investigated historical enrollment trends with respect to race and poverty status in each school and districtwide,
- computed student yields by housing type (e.g., detached single-family, townhouse/condominium, and apartment),
- researched new housing starts and the impact on the school district, and
- projected enrollments, in a totally independent analysis, based on student yields and housing turnover rates (resales) in Flemington Borough and Raritan Township.

Community Overviews

In 2018, the population in Flemington Borough ("Flemington") was 4,589. From 1980-2000, the population in Flemington was fairly stable before increasing by nearly 400 persons in 2010. In 2040, the population is projected to be 4,803, which would be a 4.7% increase from the 2018 population estimate and a gain of 214 persons.

In Raritan Township ("Raritan"), the estimated population in 2018 was 22,219. Unlike Flemington, the population in Raritan has significantly increased from 1940-2010, growing more than ten-fold. Raritan experienced its greatest gain in the 1980s (+88.3%) when the population nearly doubled in size. In 2040, the population is projected to be 24,078, which would be an 8.4% increase and a gain of 1,859 persons from the 2018 population estimate.

Regarding race, Whites were the largest race in Flemington at 78.5% in 2010. "Other Race" was the second-largest race at 8.7% in 2010. In communities with large Hispanic populations, many individuals select "Other Race" as they do not identify with any of the listed choices. The concentration of persons having Hispanic origin was 26.2% in 2010, which is more than double the 2000 percentage (11.0%). Like Flemington, Whites were the largest race in Raritan at 89.6% in 2010, while Asians were the second-largest race at 5.9%. When comparing the two communities, Flemington is more racially diverse than Raritan.

With respect to nativity, 33.5% of Flemington residents are foreign-born, which is greater than that of New Jersey (22.8%) and Raritan (11.6%). Guatemala is the largest source of foreign-born persons in Flemington while India is the largest source in Raritan.

Historical Enrollment Trends

Historical enrollments were analyzed from 2010-11 through 2019-20, a ten-year period. Enrollment steadily declined through 2017-18 before reversing trend. In 2019-20, enrollment is 3,073, which is a loss of 552 students (-15.2%) from the 2010-11 enrollment of 3,625.

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. Since the district had a half-day kindergarten program prior to 2014-15, it is more appropriate to compare the eighth grade student population to the first grade student population in those years, as the district gains a number of students from kindergarten to first grade when parents elect to send their child to a full-day kindergarten program elsewhere before enrolling them in the public school district for the first grade. The district has experienced negative kindergarten/first grade replacement in each of the last nine years. Negative kindergarten/first grade replacement occurs when the number of graduating 8th grade students is larger than the number of kindergarten/first grade students replacing them in the next year. In the last four years, the district has lost an average of 95 students per year due to kindergarten replacement.

Birth Counts

Birth counts, which are used to project kindergarten enrollments, have stabilized in Raritan after a period of decline. In the last seven years, the annual number of births in Raritan has ranged from 155-175. In Flemington, the annual number of births has been fairly stable from 2005-2018, ranging from 55-95.

At the elementary level, the Desmares attendance area had the greatest number of births (1,033) from 2005-2018 while the Copper Hill attendance area had the fewest (635). When comparing birth counts in 2005 to those in 2018, the Copper Hill and Barley Sheaf attendance areas had the largest declines (-48 and -40 respectively) in births over this time period. All four attendance areas had fewer births in 2018 as compared to 2005.

Regarding fertility rates, Flemington is above the rate in both Hunterdon County and the State of New Jersey while the rate in Raritan is below the county and state rates.

The 2000 and 2010 age-sex diagrams for Flemington and Raritan were created to show the percentage of males and females in each age class. In Flemington, the largest number of individuals in 2000 was aged 30-34 for both genders. In 2010, the largest cohort was aged 25-29 for both males and females. From 2000 to 2010, the greatest numerical declines occurred in the 70-74 age group for both genders while the greatest numerical gains occurred in the 20-24 age group for males and the 60-64 age group for females.

In Raritan, the largest cohort in 2000 was aged 40-44 for both males and females. As these individuals advance in age, the largest cohorts in 2010 were aged 45-49 for both males and females. From 2000 to 2010, the greatest decline occurred in the 35-39 age group for both genders. There was also a significant decline in the 30-34 age group for females, which

corresponds to the ages (30-39) when many females have their children. The combination of a low fertility rate and declining number of females in the 30-34 and 35-39 age groups likely led to the declining birth rate in Raritan. The largest numerical gains occurred in the 50-54 age group for both males and females, and to a lesser extent, the 55-59 and 60-64 age groups.

Enrollments by Subgroup

a) Race

The population in the school district is becoming more racially diverse over time. While Whites are the largest race in the district, consisting of 66.6% of the student population in 2019-20, their percentage has declined by 6.8 percentage points since 2014-15. Hispanics, which are the second-largest race, make up a slightly larger share (18.3%) of the population in 2019-20, gaining 4.4 percentage points since 2014-15. Asians are the third-largest race at 10.2% in 2019-20, which is a gain of 3.5 percentage points from the 2014-15 percentage (6.7%).

At the elementary level, Whites are the largest race in each school in 2019-20. The White percentage ranges from a low of 52.4% at Desmares to a high of 82.3% at Barley Sheaf. With the exception of Barley Sheaf, each of the elementary schools had a percentage-point decline in the White population from 2014-15 to 2019-20, with the largest occurring at Hunter (-11.7 percentage points). Excluding Copper Hill, Hispanics are the second-largest race, ranging from a low of 7.5% at Barley Sheaf to a high of 37.0% at Desmares. With the exception of Barley Sheaf, the Hispanic percentage has increased in the last five years, with the largest gain occurring at Desmares (+7.0 percentage points) followed by Hunter (+6.7 percentage points).

In the intermediate and middle schools, Whites are also the largest race in 2019-20. The White percentages are nearly identical in each school: 69.7% at RFIS and 69.3% at Case. In the last five years, Whites declined by 6.4 percentage points at RFIS and 9.0 percentage points at Case. Hispanics are the second-largest race in each school, accounting for 15.4% of the students at RFIS and 14.8% at Case. In both schools, the Hispanic percentage has increased in the last five years, climbing by 5.5 percentage points at Case and 3.0 percentage points at RFIS.

b) Economically Disadvantaged

At the district level, the number and percentage of students that are economically disadvantaged had been fairly stable before increasing in 2019-20. Whereas 538 students (16.1%) were economically disadvantaged in the school district in 2014-15, the number increased to 615 (20.0%) in 2019-20, a 3.9 percentage-point gain. The district gained 77 economically disadvantaged students over this time period despite a decline of 266 students in the overall student population.

At the elementary level, the percentage of students who are economically disadvantaged increased in three of the four schools, with the largest gain occurring at Barley Sheaf (+6.4 percentage points). In 2019-20, Desmares and Hunter have the highest percentages of economically disadvantaged students at 39.0% and 21.1% respectively, while Barley Sheaf has the lowest percentage at 8.7%.

For the intermediate and middle schools, from 2014-15 to 2019-20, the economically disadvantaged percentages increased by 4.8 percentage points at RFIS and by 4.6 percentage points at Case. In 2019-20, RFIS has a slightly higher percentage (19.5%) of economically disadvantaged students than Case (16.3%).

Potential New Housing

In Flemington, there is the potential for 381 multi-family units in three separate developments, all of which would be in the Desmares attendance area. Of the proposed new housing, the largest development, Courthouse Square, would involve the redevelopment of an area bordered by Main Street, Spring Street, Bloomfield Avenue, and Chorister Place, and is situated within the Union Hotel Redevelopment Area. The project would consist of a hotel, a mix of commercial and retail space, and 222 apartment units, of which 14 units will be set aside to meet affordable housing requirements.

In Raritan, there is the potential for 640 new housing units, the majority of which are multi-family units. Four developments would be in the Desmares attendance area while two developments would be in the Barley Sheaf attendance area. The largest proposed development, The Enclave, will consist of 200 apartment units with primarily one- and two-bedrooms. Other proposed developments include Raritan Town Square, which will consist of 140 apartment units, and The Pavilion at Raritan, consisting of 139 apartment units. Willows South will consist of 100 affordable rental apartment units while Hunterdon Creekside will consist of 50 affordable apartments for purchase. The smallest development, which is located at 307 Old York Road, will consist of 11 detached single-family homes.

An estimate was made of the number of public school children that could potentially come from the proposed housing developments in Flemington and Raritan. In total, 325 public school children in grades K-8 are projected.

Student Yields

Student yields by length of ownership were determined for detached single-family homes by joining the parcel-level property databases of Flemington and Raritan with the 2019-20 student address data. Student yields in Flemington and Raritan slowly increase with length of ownership, peaking at 0.75 children per housing unit with eight (8) years of ownership. The average student yield for detached single-family homes in Flemington and Raritan was computed to be 0.56.

Student yields were also computed for townhouses and condominiums in Flemington and Raritan. A total of 396 children were identified living in 2,183 units, which is an average student yield of 0.18. The largest student yields were in Townsende and Flemington South Estates (0.26). In general, the student yields in the developments were quite similar, ranging from 0.11-0.26 public school children.

Finally, student yields were computed for apartment complexes. A total of 322 children were identified living in 664 units, which is an average student yield of 0.49. Excluding

apartment complexes that consisted entirely of affordable housing units, the largest student yield occurred in Flemington Arms (0.87) while the lowest was in Hunterdon Mews (0.15).

Home Sales

The number of annual home sales was tabulated for each community from 1994-2018. In Flemington, after peaking at 76 sales in 2000, the number of sales declined to 17 in 2011 due to the housing market crash and banking crisis. Since then, home sales have rebounded. However, the number of sales in 2018 (63) is still below the peak total that occurred in 2000. Regarding Raritan, the shape of the home sale distribution is very similar to that of Flemington. Home sales peaked in 2002 (575 sales) before declining to 213 in 2011 due to the housing market crash and banking crisis. Since then, home sales have been steadily increasing. While there were 441 sales in 2018, the value is still well below the peak number that occurred in 2002.

Enrollment Projections

PK-8 enrollments were computed for a five-year period, 2020-21 through 2024-25, at the individual school level in two separate projections (baseline and adjusted for housing growth). In the baseline enrollment projections, which assume that the proposed housing developments do not come to fruition or are not occupied within the anticipated construction timeline, enrollment is projected to be 3,142 in 2024-25, which would be a gain of 69 students from the 2019-20 enrollment of 3,073. In the adjusted projections, total enrollment is also projected to increase, albeit at a faster rate. Total enrollment is projected to be 3,318 in 2024-25, which would be a gain of 245 students from the 2019-20 enrollment.

At the elementary level (grades PK-4), enrollments are projected to increase through 2022-23 before reversing trend in both the baseline and adjusted projections. In the baseline projections, enrollment is projected to be 1,669 in 2024-25, which would be a gain of 28 students from the 2019-20 enrollment of 1,641. In the adjusted projections, enrollment is projected to be 1,746 in 2024-25, which would be a gain of 105 students from the 2019-20 enrollment. The largest enrollment gains are projected at Desmares (+74) and Hunter (+50).

At RFIS (grades 5-6), enrollments are projected to remain relatively stable for the next two years in the baseline projections before increasing in the last three years of the projection period. In 2024-25, enrollment is projected to be 737, which would be a gain of 80 students from the 2019-20 enrollment of 657. In the adjusted projections, enrollments are projected to steadily increase throughout the projection period. In 2024-25, enrollment is projected to be 787, which would be a gain of 130 students from the 2019-20 enrollment.

At Case (grades 7-8), enrollments are projected to decline for three years before reversing trend in the baseline projections. In 2024-25, enrollment is projected to be 736, which would be a loss of 39 students from the 2019-20 enrollment of 775. In the adjusted projections, enrollments are projected to decline for the next two years before reversing trend. In 2024-25, enrollment is projected to be 785, which would be a gain of ten (10) students from the 2019-20 enrollment.

Building Capacities

The educational capacities of the school buildings in the Flemington-Raritan School District were compared to the current enrollments in 2019-20 and the enrollment projections in the 2024-25 school year. It should be noted that the capacity values are not fixed and can change from year-to-year based on classroom usage. For instance, additional special education classes in a building would reduce the building's capacity.

Using the building capacities from the district's Long Range Facilities Plan, the differences between capacity and current/projected number of students were computed. Positive values indicate available extra seating while negative values indicate inadequate seating (also known as "unhoused students"). At the elementary level, seating surpluses currently exist in each school, with the greatest being at Copper Hill (+305). There is also a large number of surplus seats at RFIS (+478) and Case (+484).

By 2024-25, at the elementary level, it is anticipated that there will be surplus seats in each school, with the largest being at Copper Hill (+300). A large number of surplus seats is projected at RFIS (+348) and Case (+474).

Mapping

Student addresses from the school district were geocoded or "pin-mapped" for 2015-16 and 2019-20 using mapping software. The greatest number of children per census block in 2015-16 was located in blocks in the Barley Sheaf, Copper Hill, and Desmares attendance areas. In 2019-20, most of the same census blocks had the greatest number of students, as well as several blocks in the Hunter attendance area. In general, the number of students per census block has not changed appreciably in the last four years.

In an effort to control for the different census block sizes, the number of students in each census block was divided by the block's geographical area to determine the density of students (students per square mile). The greatest student densities were scattered throughout the attendance areas, but were generally located within Flemington or just outside of the borough's borders in Raritan. Student densities have not changed appreciably in the last four years.

To see which sections of Flemington and Raritan have the most children per housing unit (student yield), the number of children per census block was divided by the number of housing units in each block. The greatest student yields were located primarily in the Copper Hill attendance area in 2015-16. In 2019-20, the greatest student yields were located in Copper Hill, as well as Hunter and Desmares. In the last four years, student yields have increased in the communities.

Housing Turnover

Using historical housing turnover rates by length of ownership in Flemington and Raritan along with current student yields by length of ownership, the number of students was projected from 2019-2023 in a completely independent analysis. To accomplish this task, housing turnover rates for detached single-family homes and townhouses/condominiums were analyzed separately. To complete this analysis, three inputs were needed:

- 1. housing turnover rates by length of ownership,
- 2. current distribution of homes by length of ownership, and
- 3. student yields by length of ownership.

For both detached single-family homes and townhouses/condominiums, average turnover rates peaked in the third year of ownership. However, the average turnover rate for townhouses/condominiums at three years of ownership (7.9%) is higher than for detached single-family homes (5.0%). The average turnover rates by length of ownership for both detached single-family homes and townhouses/condominiums were very low (less than 2.0%) after 14 years of ownership.

Using the housing turnover methodology, total enrollment (PK-8) is projected to slowly increase over the five-year projection period, gaining approximately 60 students, with the assumption that the turnover rates of long-held homes would be much higher than experienced historically.

It should be clearly stated that the purpose of this analysis is <u>not</u> to use the projections for future planning since the Cohort-Survival Ratio method is the most accurate method available. Rather, it is an independent process to see whether future enrollments may be affected by housing turnover. In this analysis, it appears enrollment is likely to increase due to housing turnover, controlling for all other factors, such as fertility rates, births, inward migration, or new residential construction. However, it should be noted that the model utilized assumed turnover rates that were significantly higher than the average turnover rates and therefore may be considered as a "worst case scenario."

Final Thoughts

After a period of decline, total enrollment increased in the school district in the last two years. In the next five years, this trend is projected to continue. Due to a stabilization in Raritan's birth rate, an inward migration of students (likely due to home sales and new housing starts), and the impending construction of more than 1,000 new housing units, enrollment is likely to continue its upward trend, particularly in the elementary grades. The inward migration of families with children, either under the age of 5 or in the lower elementary grades, may be related to the increase in the number of home sales in the last five years in each community, as parents desire to have their children educated in a highly-rated and excellent school district. In the short term, the greatest impact from recent and proposed residential construction is likely to be at Desmares and Hunter. As the larger elementary cohorts advance into the intermediate and middle schools, enrollments will increase in those configurations as well.

Introduction

Statistical Forecasting LLC ("Statistical Forecasting") completed a demographic study for the Flemington-Raritan School District, projecting grade-by-grade enrollments from 2020-21 through 2024-25, a five-year period. In addition, the following tasks were completed:

- analyzed community population trends and age structure, fertility rates, and birth counts,
- examined historical enrollment trends, both districtwide and by grade configuration (PK-4, 5-6, and 7-8),
- investigated historical enrollment trends with respect to race and poverty status in each school and districtwide,
- computed student yields by housing type (e.g., detached single-family, townhouse/condominium, and apartment),
- researched new housing starts and the impact on the school district, and
- projected enrollments, in a totally independent analysis, based on student yields and housing turnover rates (resales) in Flemington Borough and Raritan Township.

Population Trends

1. Flemington Borough

Located in Hunterdon County, Flemington Borough ("Flemington") contains a land area of 1.08 square miles. In the 2010 Census, Flemington had 4,581 residents, which is 4,241.7 persons per square mile. Historical and projected populations for Flemington from 1940-2040 are shown in Table 1 and Figure 1.

Table 1

<u>Historical and Projected Populations for Flemington</u>
1940-2040

Year	Population	Percent Change							
Historical ¹									
1940	2,617	N/A							
1950	3,058	+16.9%							
1960	3,232	+5.7%							
1970	3,917	+21.2%							
1980	4,132	+5.5%							
1990	4,047	-2.1%							
2000	4,200	+3.8%							
2010	4,581	+9.1%							
2018 (est.)	4,589	+0.2%							
	Projected ²								
2020	4,655	+1.4%							
2030	4,726	+1.5%							
2040	4,803	+1.6%							

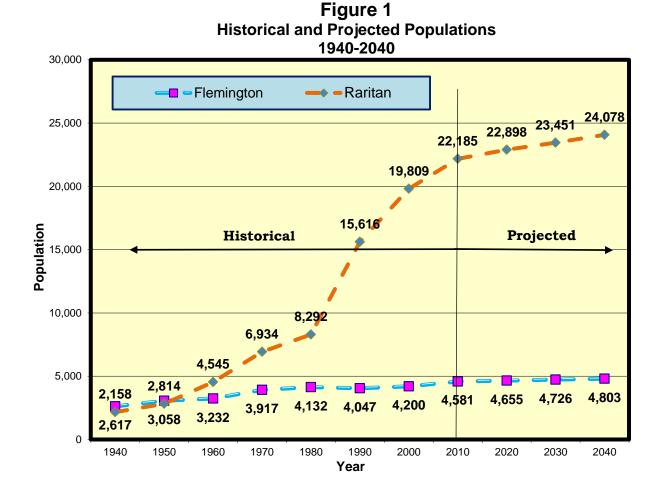
Sources: ¹United States Census Bureau

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

From 1940-1980, the population steadily increased, with its greatest gain occurring in the 1960s (+21.2%). From 1980-2000, the population in Flemington was fairly stable before increasing by nearly 400 persons in 2010.

In addition, a population estimate for 2018 is also provided in Table 1. The estimated population in 2018 is 4,589 persons, which is a gain of eight (8) persons from 2010. In essence, Flemington's population has held constant since 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 ("NJTPA"), indicate that the population in Flemington will continue to increase. In 2040, the population is projected to be 4,803, which would be a 4.7% increase from the 2018 population estimate and a gain of 214 persons.



2. Raritan Township

Raritan Township ("Raritan"), which is also located in Hunterdon County, contains a land area of 37.53 square miles, with an additional 0.16 square miles of water area. Historical and projected populations for Raritan from 1940-2040 are shown in Table 2 and Figure 1. In 2010, Raritan had 22,185 residents, which is 591.1 persons per square mile. Unlike Flemington, the population in Raritan has significantly increased from 1940-2010, growing more than tenfold. Raritan experienced its greatest gain in the 1980s (+88.3%) when the population nearly doubled in size. The estimated population in 2018 is 22,219 persons, which is a gain of 34 persons from 2010. Neither Flemington nor Raritan have experienced a significant change in population from 2010-2018.

Forecasts prepared by the NJTPA project Raritan's population to increase to 24,078 in 2040, which would be an 8.4% increase and a gain of 1,859 persons from the 2018 population estimate.

Table 2
<u>Historical and Projected Populations for Raritan</u>
1940-2040

Year	Population	Percent Change							
Historical ¹									
1940	2,158	N/A							
1950	2,814	+30.4%							
1960	4,545	+61.5%							
1970	6,934	+52.6%							
1980	8,292	+19.6%							
1990	15,616	+88.3%							
2000	19,809	+26.9%							
2010	22,185	+12.0%							
2018 (est.)	22,219	+0.2%							
	Projected ²								
2020	22,898	+3.1%							
2030	23,451	+2.4%							
2040	24,078	+2.7%							

Sources: ¹United States Census Bureau

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

Demographic Profiles

In Table 3 following, selected demographic characteristics of Flemington and Raritan are compared from the 2000 and 2010 Censuses and the 2014-2018 American Community Survey ("ACS"). 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 communities with small populations such as Flemington and Raritan, ACS data represent a sample collected over a five-year time period, where the estimates represent the average characteristics between January 2014 and December 2018. 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 2014 to 2018, 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. Flemington Borough

Regarding race, Flemington is predominantly White, yet has become more diverse since 2000. In 2010, Flemington was 78.5% White as compared to 87.7% in 2000, which is a loss of 9.2 percentage points. "Other Race" was the second-largest race at 8.7% in 2010, which is a 5.6 percentage-point gain from the 2000 percentage (3.1%). In communities with large Hispanic populations, many individuals select "Other Race" as they do not identify with any of the listed choices. 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 26.2% in 2010, which is more than double the 2000 percentage (11.0%).

Regarding nativity, 33.5% of Flemington residents were foreign-born in the 2014-2018 ACS as compared to 13.9% in 2000, which is more than double the 2000 percentage and a gain of 19.6 percentage points. As a point of comparison, New Jersey's foreign-born resident percentage was 22.8% in the 2014-2018 ACS, which is lower than that of Flemington. 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 21.0% of the foreign-born population, while El Salvador was the second-largest source (8.8%). In the 2014-2018 ACS, Guatemala is now the largest source and accounts for 27.6% of the foreign-born population, while India is the second-largest source at 19.4%.

The median age in Flemington has increased from 34.9 years in 2000 to 35.3 years in 2010, which is lower than the median age in New Jersey (39.0 years). During the same time period, the percentage of people under the age of 18 years, which predominantly corresponds to school-age children, has increased slightly from 22.2% to 22.3%.

Table 3 **Selected Demographic Characteristics**

	Flemi	ngton	Rar	itan	
Race Origin	2000 Census	2010 Census 2014-2018 ACS	2000 Census	2010 Census 2014-2018 ACS	
White	87.7%	78.5%	93.2%	89.6%	
Black or African American	3.2%	3.9%	1.2%	2.1%	
American Indian and Alaska Native	0.3%	0.3%	0.1%	0.1%	
Asian	3.1%	5.8%	3.5%	5.9%	
Native Hawaiian and Other Pacific Islander	0.2%	0.0%	0.0%	0.0%	
Other Race	3.1%	8.7%	0.7%	0.8%	
Two or more Races	2.4%	2.8%	1.3%	1.4%	
Total	100.0%1	100.0%1	100.0%1	100.0%1	
Hispanic Origin	11.0%	26.2%	2.8%	5.1%	
Place of Birth					
Foreign-Born	13.9%	33.5%	8.2%	11.6%	
Age					
Under 18	22.2%	22.3%	29.3%	26.2%	
18-64	65.7%	67.4%	61.8%	61.8%	
65 and over	12.1%	10.3%	8.9%	12.0%	
Median age	34.9 years	35.3 years	37.4 years	42.4 years	
Educational Attainment					
Bachelor's degree or higher	27.4%	31.0%	48.3%	59.4%	
Graduate or professional degree	11.2%	10.9%	17.7%	25.7%	
Income					
Median family income	\$51,582	\$71,544	\$96,336	\$152,946	
% of Persons in Poverty aged 5-17	8.8%	35.0%	1.8%	7.1%	
Housing Units					
Total number	1,876	1,926 ²	7,094	$8,288^2$	
Occupied units	1,804 (96.2%)	1,815 (94.2%)	6,939 (97.8%)	8,056 (97.2%)	
Owner-occupied units	700 (38.8%)	684 (37.7%)	6,091 (87.8%)	7,146 (88.7%)	
Renter-occupied units	1,104 (61.2%)	1,131 (62.3%)	848 (12.2%)	910 (11.3%)	
Median value of an owner-occupied unit	\$163,300	\$286,700	\$248,300	\$430,500	
Average household size	2.26	2.44	2.81	2.72	
Housing Type					
Total number	1,876	$2,109^2$	7,094	8,398 ²	
1-unit, attached or detached	691 (36.8%)	754 (35.8%)	6,312 (89.0%)	7,350 (87.5%)	
Two units	409 (21.8%)	304 (14.4%)	85 (1.2%)	128 (1.5%)	
Three or four units	422 (22.5%)	381 (18.1%)	125 (1.8%)	191 (2.3%)	
Five to nine units	116 (6.2%)	98 (4.6%)	314 (4.4%)	317 (3.8%)	
10 to 19 units	114 (6.1 %)	400 (19.0%)	202 (2.8%)	171 (2.0%)	
20 or more units	124 (6.6%)	172 (8.2%)	51 (0.7%)	194 (2.3%)	
Mobile home, Boat, Van, RV, etc.	0 (0.0%)	0 (0.0%)	5 (0.1%)	47 (0.6%)	

Sources: American Community Survey (2014-2018), United States Census (2000 and 2010)

Notes: 1 Data may not sum to 100.0% due to rounding. 2 Total number differs as Housing Units are from the 2010 Census while Housing Type data are from the 2014-18 ACS.

Regarding educational attainment for adults aged 25 and over, 31.0% of the population had a bachelor's degree or higher in the 2014-2018 ACS as compared to 27.4% in 2000, which is a gain of 3.6 percentage points. Flemington's percentage of persons having a bachelor's degree or higher is lower than that of the state of New Jersey (40.8%). Persons with graduate or professional degrees decreased from 11.2% to 10.9% during this time period, which is a loss of 0.3 percentage points.

Median family income increased from \$51,582 in 2000 to \$71,544 in the 2014-2018 ACS, a gain of 38.7%. By comparison, median family income in New Jersey is \$101,404, which is significantly higher than Flemington's. During this time period, the percentage of school-age children (5-17) that are in poverty nearly quadrupled from 8.8% to 35.0%.

Regarding housing, there were 1,926 housing units in Flemington in 2010, which is a gain of 50 housing units (+2.7%) from 2000. From 2000 to 2010, the overall occupancy rate declined from 96.2% to 94.2%. Renter-occupied units accounted for 62.3% of the occupied units in 2010, which is slightly higher than the 2000 percentage (61.2%). In the last decade, the average household size has increased from 2.26 to 2.44 persons. Finally, the median home price of an owner-occupied unit in the 2014-2018 ACS was \$286,700, which is a 75.6% increase from the value reported in 2000 (\$163,300).

With respect to housing type, 35.8% of the homes in the 2014-2018 ACS were one-unit, either attached or detached, which is a loss of 1.0 percentage points from the 2000 Census. One-unit homes are the largest housing type in Flemington. Homes with 10-19 units, which typically consist of renters, were the second-largest type of housing in the 2014-2018 ACS and consisted of 19.0% of the housing stock. Homes with 10-19 units had the largest percentage-point gain (+12.9) over this time period while homes with two units (duplexes) had the largest percentage-point decline (-7.4).

2. Raritan Township

With respect to race, Whites were the largest race in Raritan at 89.6% in 2010, which is a decline of 3.6 percentage points from the 2000 percentage (93.2%). Asians were the second-largest race at 5.9% in 2010, which is a gain of 2.4 percentage points from 2000. The concentration of persons having Hispanic origin was 5.1% in 2010, which is a gain of 2.3 percentage points from the 2000 percentage of 2.8%. When comparing the two communities, Flemington is more racially diverse than Raritan.

Regarding nativity, 11.6% of Raritan residents were foreign-born in the 2014-2018 ACS, which is a gain of 3.4 percentage points from 2000. Raritan's foreign-born percentage is significantly lower than that of New Jersey (22.8%) and Flemington (33.5%). While not shown in the table, place of birth, which serves as a proxy for country of origin, indicates that India and Italy were the largest sources of immigrants in 2000, accounting for 13.3% and 10.0% of the foreign-born population respectively. India remained the largest source of immigrants in the 2014-2018 ACS, accounting for 21.9% of the foreign born population, which is a much larger share. China is now the second-largest source, accounting for 9.8% of the foreign born population.

The median age in Raritan has increased from 37.4 years in 2000 to 42.4 years in 2010, which is higher than the median age in New Jersey (39.0) and Flemington (35.3). During the same time period, the percentage of people under the age of 18 years, which predominantly corresponds to school-age children, has decreased from 29.3% to 26.2%.

Regarding educational attainment for adults aged 25 and over, 59.4% of the population had a bachelor's degree or higher in the 2014-2018 ACS, which is a gain of 11.1 percentage points from the 2000 percentage (48.3%) and is greater than that of New Jersey (40.8%). Compared to Flemington, Raritan has a significantly higher percentage of persons with a bachelor's degree or higher. The percentage of persons with graduate or professional degrees increased from 17.7% to 25.7% over this time period, which is a gain of 8.0 percentage points.

Median family income increased from \$96,336 in 2000 to \$152,946 in the 2014-2018 ACS, a gain of 58.8%. Median family income in Raritan is significantly greater than that of New Jersey (\$101,404), and more than twice that of Flemington (\$71,544). During this time period, the percentage of school-age children (5-17) that are in poverty nearly quadrupled from 1.8% to 7.1%. While Raritan's child poverty rate is below the state average (13.2%), Flemington's poverty rate (35.0%) is well above.

Regarding housing, there were 8,288 housing units in Raritan in 2010, which is a gain of 1,194 units (+16.8%) from 2000. From 2000 to 2010, there was a slight decline in the occupancy rate from 97.8% to 97.2%. Renter-occupied units accounted for 11.3% of the occupied units in Raritan in 2010, which is a small decline from the 2000 percentage (12.2%). The percentage of renter-occupied units in Flemington is more than five times higher than Raritan. In the last decade, the average household size decreased from 2.81 to 2.72 persons. The median home price of an owner-occupied unit in the 2014-2018 ACS was \$430,500, which is a 73.4% increase from the value reported in 2000 (\$248,300). The median home price in Raritan is approximately \$144,000 higher than in Flemington.

With respect to housing type, 87.5% of the homes in the 2014-2018 ACS were one-unit, either attached or detached, which is a 1.5 percentage-point decline from the 2000 percentage (89.0%). The percentage of one-unit homes is significantly higher in Raritan as compared to Flemington. Homes with 5-9 units were the second-largest type of housing in the 2014-2018 ACS and consisted of 3.8% of the housing stock. Unlike Flemington, there was little change in the housing distribution in Raritan since 2000.

District Overview

The Flemington-Raritan School District has six schools that serve grades pre-kindergarten through eighth. Children attend one of four elementary schools for grades PK-4: Barley Sheaf Elementary School ("Barley Sheaf"), Copper Hill Elementary School ("Copper Hill"), Francis A. Desmares Elementary School ("Desmares"), or Robert Hunter Elementary School ("Hunter"). Reading-Fleming Intermediate School ("RFIS") educates children in grades 5-6 while J.P. Case Middle School ("Case") educates children in grades 7-8. In Figure 2, the location of each of the district's schools is shown, as well as the municipal boundaries. Figure 3 shows only the four elementary schools and their respective attendance areas.

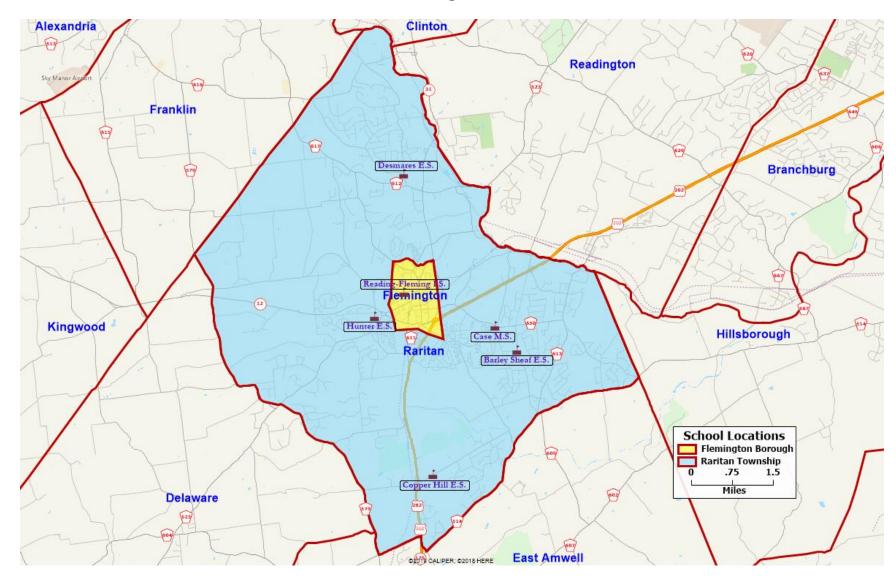


Figure 2
School Locations – Flemington-Raritan School District

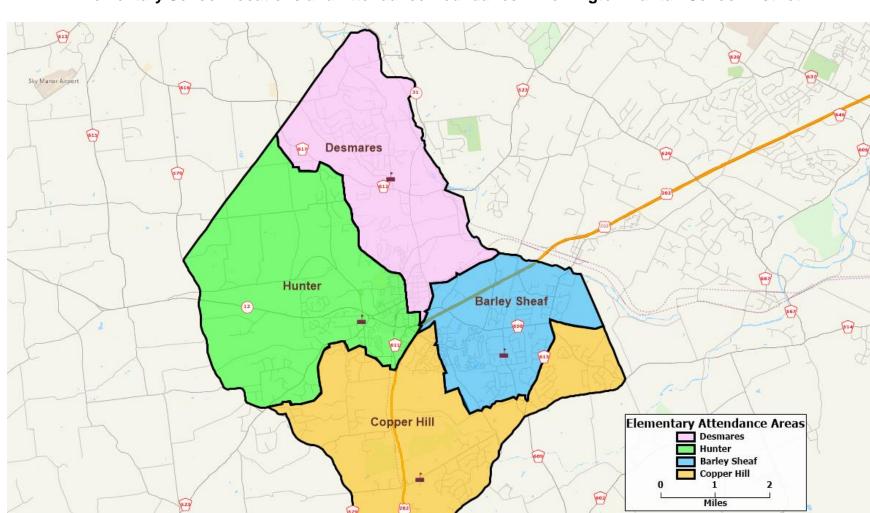


Figure 3
Elementary School Locations and Attendance Boundaries – Flemington-Raritan School District

According to the district's Long Range Facility Plan ("LRFP"), adjusted functional capacity in the district is 4,720. Since buildings cannot be 100% utilized, due in part to scheduling conflicts, most districts employ either an 85% or 90% utilization factor to determine school capacity. A comparison of each school's capacity to current and projected enrollments is provided later in the report.

In this study, historical enrollments from the New Jersey Department of Education ("NJDOE") NJ SMART database were used to project enrollments for five years into the future. Future enrollments were projected using the Cohort-Survival Ratio method.

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 1.00 indicates stable enrollment, less than 1.00 indicates declining enrollment, while greater than 1.00 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 Flemington-Raritan School District from 2010-11 through 2019-20, a ten-year period, are shown in Figure 4 and Table 4. Enrollment steadily declined through 2017-18 before reversing trend. In 2019-20, enrollment is 3,073, which is a loss of 552 students (-15.2%) from the 2010-11 enrollment of 3,625.

Figure 4
Flemington-Raritan School District Historical Enrollments
2010-11 to 2019-20

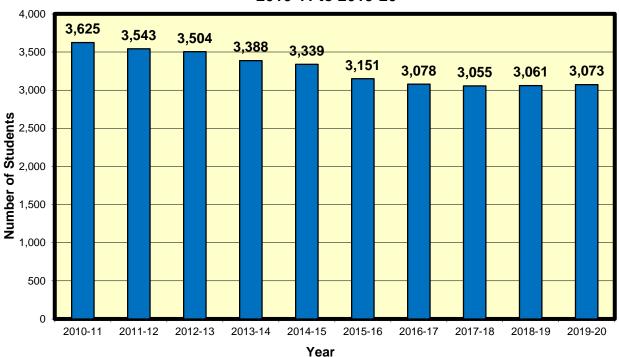


Table 5 shows computed grade-by-grade survival ratios from 2010-11 to 2019-20. In addition, the average, minimum, and maximum survival ratios are shown for the past ten years along with the five-year averages, which were used to project enrollments. The average survival ratios also indicate the net migration by grade, where values over 1.000 reflect net inward migration and values below 1.000 reflect net outward migration. All nine average survival ratios (five-year average) were above 1.000, indicating a net inward migration of students. In comparing the five-year averages with the ten-year averages, the most notable differences were for birth to kindergarten and kindergarten to first grade, which have experienced an increase and decline in their respective ratios in the near term. The increase in the birth-to-kindergarten ratio is likely due to the district's change from a half-day to a full-day kindergarten program in 2014-15. The decline in the kindergarten-to-first grade ratio is likely due to fewer parents enrolling their children in first grade, rather than kindergarten, since the full-day kindergarten program was instituted. The remaining differences were very small, demonstrating the long-term stability of the survival ratios over the last decade.

Table 4
<u>Flemington-Raritan School District Historical Enrollments</u>
<u>2010-11 to 2019-20</u>

Year ¹	PK RE ²	K	1	2	3	4	5	6	7	8	SE ³	PK-4 Total	5-6 Total	7-8 Total	PK-8 Total
2010-11	18	323	349	402	383	423	389	395	388	420	135	1,992	801	832	3,625
2011-12	9	326	369	353	400	388	430	395	408	389	76	1,904	831	808	3,543
2012-13	0	299	353	364	353	393	394	430	405	412	101	1,842	834	828	3,504
2013-14	16	245	349	362	377	354	395	393	436	410	51	1,749	792	847	3,388
2014-15	34	295	292	337	367	374	371	407	395	444	23	1,717	782	840	3,339
2015-16	8	240	299	279	335	353	380	358	408	389	102	1,590	749	812	3,151
2016-17	10	293	235	305	281	360	369	373	370	405	77	1,541	751	786	3,078
2017-18	23	288	305	251	322	288	369	388	385	374	62	1,527	761	767	3,055
2018-19	34	294	292	309	261	332	292	382	384	385	96	1,598	682	781	3,061
2019-20	22	298	304	317	313	288	339	308	383	388	113	1,641	657	775	3,073

Notes: ¹Data were provided by the New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District.

²Pre-kindergarten regular education enrollment

³Self-contained special education enrollment/Ungraded students. Also includes pre-kindergarten special education students.

Table 5
<u>Flemington-Raritan School District Historical Survival Ratios</u>
<u>2010-11 to 2019-20</u>

Progression Years	В-К	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8
2010-11 to 2011-12	0.9849	1.1424	1.0115	0.9950	1.0131	1.0165	1.0154	1.0329	1.0026
2011-12 to 2012-13	0.9614	1.0828	0.9864	1.0000	0.9825	1.0155	1.0000	1.0253	1.0098
2012-13 to 2013-14	0.8419	1.1672	1.0255	1.0357	1.0028	1.0051	0.9975	1.0140	1.0123
2013-14 to 2014-15	1.2190	1.1918	0.9656	1.0138	0.9920	1.0480	1.0304	1.0051	1.0183
2014-15 to 2015-16	1.0300	1.0136	0.9555	0.9941	0.9619	1.0160	0.9650	1.0025	0.9848
2015-16 to 2016-17	1.1627	0.9792	1.0201	1.0072	1.0746	1.0453	0.9816	1.0335	0.9926
2016-17 to 2017-18	1.1566	1.0410	1.0681	1.0557	1.0249	1.0250	1.0515	1.0322	1.0108
2017-18 to 2018-19	1.2405	1.0139	1.0131	1.0398	1.0311	1.0139	1.0352	0.9897	1.0000
2018-19 to 2019-20	1.2213	1.0340	1.0856	1.0129	1.1034	1.0211	1.0548	1.0026	1.0104
Maximum Ratio	1.2405	1.1918	1.0856	1.0557	1.1034	1.0480	1.0548	1.0335	1.0183
Minimum Ratio	0.8419	0.9792	0.9555	0.9941	0.9619	1.0051	0.9650	0.9897	0.9848
Avg. 5-Year Ratios	1.1622	1.0170	1.0467	1.0289	1.0585	1.0263	1.0308	1.0145	1.0035
Avg. 10-Year Ratios	1.0909	1.0740	1.0146	1.0171	1.0207	1.0229	1.0146	1.0153	1.0046
Diff. Between 5-Year and 10-Year Ratios	+0.0713	-0.0570	+0.0321	+0.0118	+0.0378	+0.0034	+0.0162	-0.0008	-0.0012

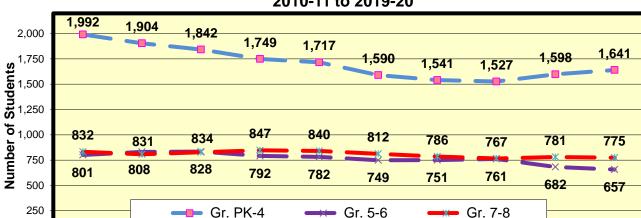
Notes: Blue shaded cells reflect birth-to-kindergarten survival ratios for a full-day kindergarten program. Green shaded cells reflect survival ratios from full-day kindergarten to first grade.

Factors related to inward migration include families with school-age 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 Flemington or Raritan 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 or affordable housing. Outward migration in the school district can also be caused by parents choosing to withdraw their children from public school to attend private, parochial, or charter schools, or to attend a different public school district. In the case of the Flemington-Raritan School District, 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.

Historical enrollments are also shown in Table 4 and Figure 5 by grade configuration (PK-4, 5-6, and 7-8). Self-contained special education/ungraded students were incorporated into the totals by grade configuration. For grades PK-4, enrollments declined through 2017-18 before reversing trend. Enrollments have increased in the last two years, gaining 114 students over this time period. In 2019-20, enrollment is 1,641, which is a loss of 351 students from the 2010-11 enrollment of 1,992.

For grades 5-6 at RFIS, enrollment peaked at 834 in 2012-13 before reversing trend and steadily declining. In 2019-20, enrollment is 657, which is a loss of 144 students from the 2010-11 enrollment of 801.

At Case, which contains grades 7-8, enrollment was fairly stable from 2010-11 to 2014-15 before slowly decreasing in the last five years. Enrollment is 775 in 2019-20, which is a loss of 57 students from the 2010-11 enrollment of 832.



2014-15

Year

2015-16

2016-17

2017-18

2018-19

2019-20

0

2010-11

2011-12

2012-13

2013-14

Figure 5
Flemington-Raritan School District Historical Enrollments by Level 2010-11 to 2019-20

Kindergarten and First Grade 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. Since the district had a half-day kindergarten program prior to 2014-15, it is more appropriate to compare the eighth grade student population to the first grade student population in those years, as the district gains a number of students from kindergarten to first grade when parents elect to send their child to a full-day kindergarten program elsewhere before enrolling them in the public school district for the first grade. The district has experienced negative kindergarten/first grade replacement in each of the last nine years. kindergarten/first grade replacement occurs when the number of graduating 8th grade students is larger than the number of kindergarten/first grade students replacing them in the next year. Positive kindergarten/first grade replacement occurs when the number of graduating 8th grade students is less than the number of kindergarten/first grade students entering the district in the next year. As shown in Figure 6, negative kindergarten/first grade replacement has ranged from 36-204 students per year. In 2019-20, there was a loss of 87 students due to kindergarten replacement, as 385 eighth graders graduated in 2018-19 and were replaced by 298 kindergarten students in 2019-20. In the last four years, the district has lost an average of 95 students per year due to kindergarten replacement.

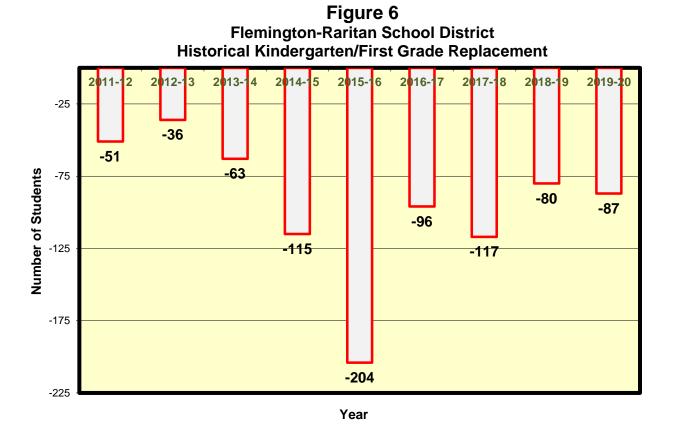
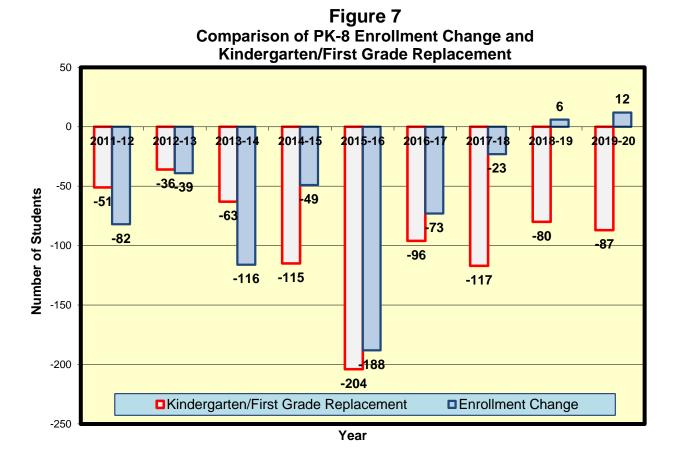


Figure 7 shows the annual change in total enrollment compared to kindergarten/first grade replacement. As the figure demonstrates, there appears to be a strong relationship, statistically speaking, between the overall change in enrollment and kindergarten/first grade replacement. Although this data represents a small sample, the correlation coefficient between the two variables was 0.52. Correlation coefficients measure the relationship or association between two variables; this does not imply that there is cause and effect between the two Other variables, known as lurking variables, may have an effect on the true relationship between kindergarten/first grade 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 zero indicate a weak linear relationship. Based on the correlation of 0.52, there appears to be a strong relationship between kindergarten/first grade replacement and enrollment change in the school district in the last nine years.

In each of the last six years, the district's losses due to negative kindergarten replacement have been partially offset (or totally, resulting in an enrollment increase) by a net inward migration of students in the other grades (K to 1, 1 to 2, 2 to 3, etc.). This was confirmed previously as all nine average survival ratios in the five-year trend were above 1.000.



Birth Data

Birth data were needed to compute kindergarten enrollments, which were calculated as follows. Birth data, which are lagged five years behind their respective kindergarten classes, were used to calculate the survival ratio for each birth-to-kindergarten cohort. For instance, in 2014, there were a total of 244 births in Flemington and Raritan. Five years later (the 2019-20 school year), 298 children enrolled in kindergarten, which is equal to a survival ratio of 1.221 from birth to kindergarten. Birth counts and birth-to-kindergarten survival ratios are displayed in 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 into the district. 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, 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, charter, 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 child to a private full-day kindergarten for the first year.

Table 6
Birth Counts and Historical Birth-to-Kindergarten Survival Ratios
in the Flemington-Raritan School District

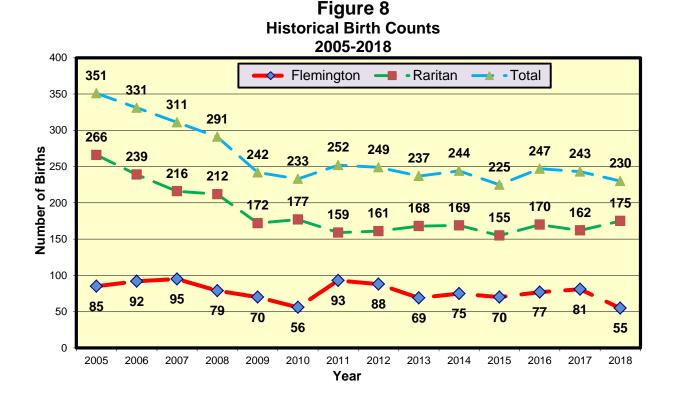
Birth Year ¹	Flemington Births	Raritan Births	Total Number of Births	Kindergarten Students Five Years Later	Birth-to- Kindergarten Survival Ratio
2005	85	266	351	323	0.920
2006	92	239	331	326	0.985
2007	95	216	311	299	0.961
2008	79	212	291	245	0.842
2009	70	172	242	295	1.219
2010	56	177	233	240	1.030
2011	93	159	252	293	1.163
2012	88	161	249	288	1.157
2013	69	168	237	294	1.241
2014	75	169	244	298	1.221
2015	70	155	225	N/A	N/A
2016	77	170	247	N/A	N/A
2017	81	162	243	N/A	N/A
2018	55	175	230	N/A	N/A

Notes: ¹Birth data were provided by the New Jersey Center for Health Statistics from 2005-2018. Blue-shaded areas reflect implementation of a full-day kindergarten program.

Since changing to a full-day kindergarten program in 2014-15, birth-to-kindergarten survival ratios have been above 1.000 in the Flemington-Raritan School District, which is shaded blue in Table 6. Birth-to-kindergarten survival ratios ranged from 0.842-0.985 (average = 0.927) with the half-day program and ranged from 1.030-1.241 (average = 1.172) after the implementation of the full-day program, which is somewhat higher. As the birth-to-kindergarten survival ratios are well above 1.000 in the last few years, this indicates that many children who were born in other communities are enrolling in the school district.

Geocoded birth data were provided by the New Jersey Center for Health Statistics ("NJCHS") from 2005-2018 by assigning geographic coordinates to a birth mother based on her street address. Births for 2018 are provisional while births for 2019 were not yet available. Since the NJCHS did not have birth data for 2019, an estimate was formulated by averaging historical births. Birth counts were needed for 2019 since this cohort will become the kindergarten class of 2024.

As shown in Figure 8, the number of births in Raritan declined from a high of 266 in 2005 to a low of 159 in 2011 before stabilizing. In the last seven years, the annual number of births has ranged from 155-175. In Flemington, the annual number of births has been fairly stable, ranging from 55-95. Combining the counts from the two communities, the number of births declined from 351 in 2005 to 233 in 2010 before stabilizing. In the last eight years, the annual number of births has ranged from 225-252. During the period of birth decline, first grade enrollment (rather than kindergarten due to the half-day program) declined from 369 in 2011-12 to 235 in 2016-17. However, as the birth counts have stabilized in the last eight years, kindergarten enrollment has stabilized as well, ranging from 292-305 in the last three years.



Using mapping software, elementary school attendance area boundaries, and NJCHS birth data by Census block, the number of births from 2005-2018 was determined for each elementary school attendance area and is displayed in Table 7. In some instances, the address of the mother within Flemington or Raritan was unknown. The greatest number of unknown births occurred in 2010, accounting for 51 of the 233 births (21.9%) in that year. For the purposes of projecting enrollments, the unknown births were redistributed into the four elementary attendance areas using proportional allocations of the births in each school attendance area with respect to the total number of births. From 2005-2018, the Desmares attendance area had the greatest number of births (1,033) while the Copper Hill attendance area had the fewest (635).

Table 7
Births by Elementary School Attendance Area
in the Flemington-Raritan School District
2005-2018

Birth Year	Barley Sheaf	Copper Hill	Desmares	Hunter	Unknown
2005	92	85	82	86	6
2006	77	69	100	67	18
2007	65	60	84	67	35
2008	73	49	77	65	27
2009	50	35	75	50	32
2010	58	34	51	39	51
2011	58	33	68	62	31
2012	67	40	67	59	16
2013	62	40	68	62	5
2014	72	34	79	55	4
2015	57	39	62	57	10
2016	50	46	70	74	7
2017	60	34	75	60	14
2018	52	37	75	57	9
Total 2005-2018	893	635	1,033	860	
Difference 2005-2018	-40	-48	-7	-29	

For comparison purposes, Figures 9 and 10 (using the same scale) show the number of births by elementary attendance area in 2005 and 2018. In 2005, the greatest number of births occurred in the Barley Sheaf attendance area, while in 2018 the greatest number of births occurred in the Desmares attendance area. While the differences in the birth counts were not significantly different between the attendance areas in 2005, there were differences in 2018 as births ranged from a low of 37 at Copper Hill to a high of 75 at Desmares.

Figure 11 shows the differences in the birth counts by attendance area when comparing birth counts in 2005 to 2018. The Copper Hill and Barley Sheaf attendance areas had the largest declines (-48 and -40 respectively) in births over this time period. All four attendance areas had fewer births in 2018 as compared to 2005.

Finally, Figures 12 and 13 show the specific location(s) where birth counts are changing, as births by census block were mapped for 2005 and 2018. Census blocks are the smallest geographic unit in which data are collected by the Census Bureau. Blocks are typically bound by streets, roads, or bodies of water. These maps provide greater detail of the locations where most of the births are occurring. In 2005, the greatest number of births, which are shaded dark blue, occurred in the Desmares attendance area. However, in 2018, using the same scale, there are no blocks shaded blue, showing the overall decline in births.

Figure 9
Flemington-Raritan Births by Elementary Attendance Area 2005

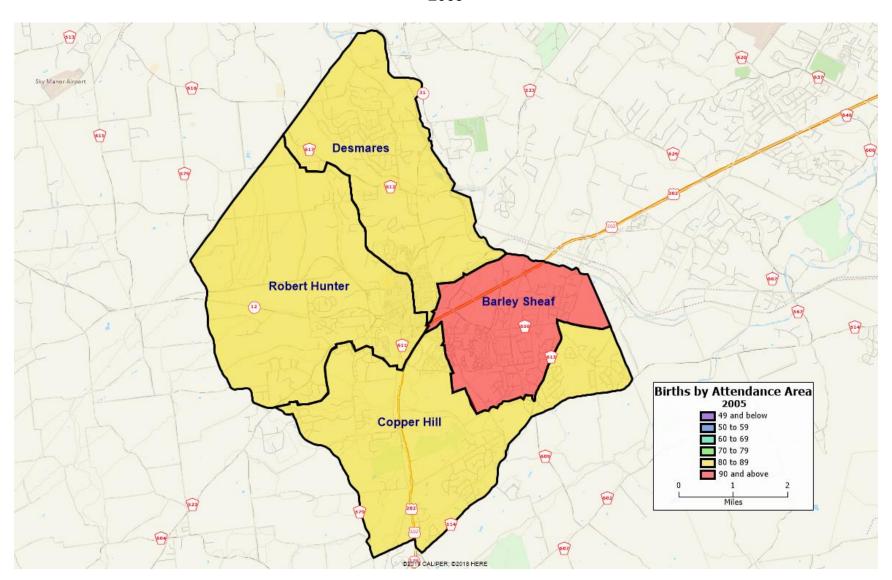


Figure 10
Flemington-Raritan Births by Elementary Attendance Area 2018

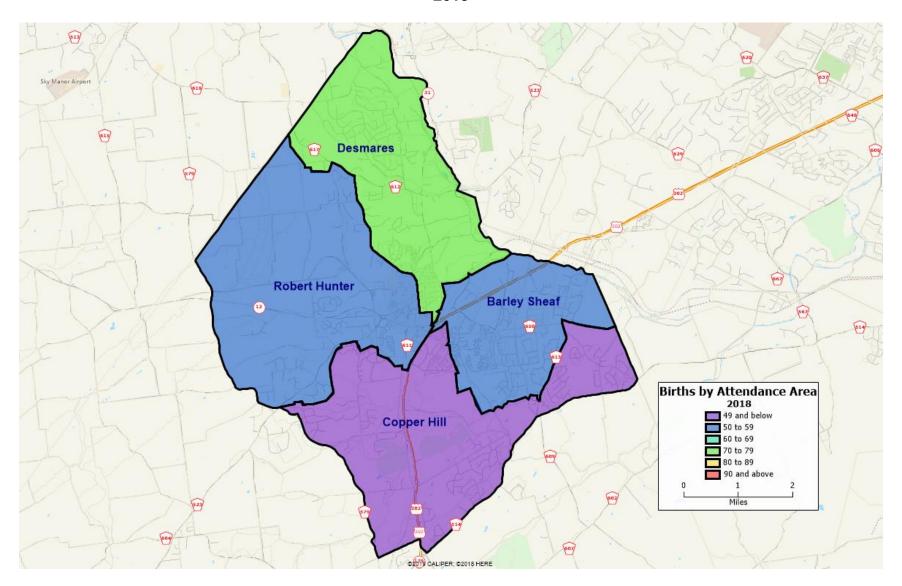


Figure 11
Flemington-Raritan Change in the Number of Births by Elementary Attendance Area 2005-2018

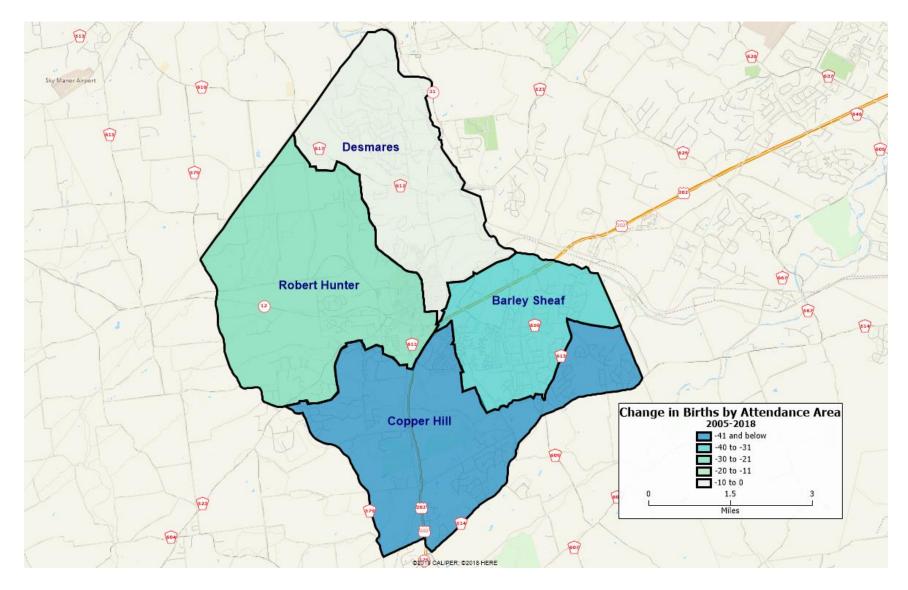


Figure 12
Flemington-Raritan Births by Census Block 2005

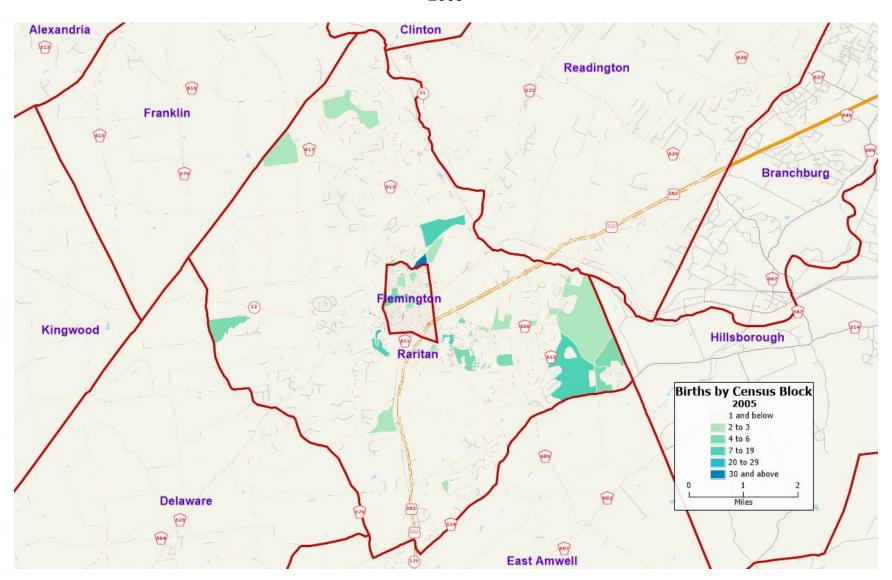
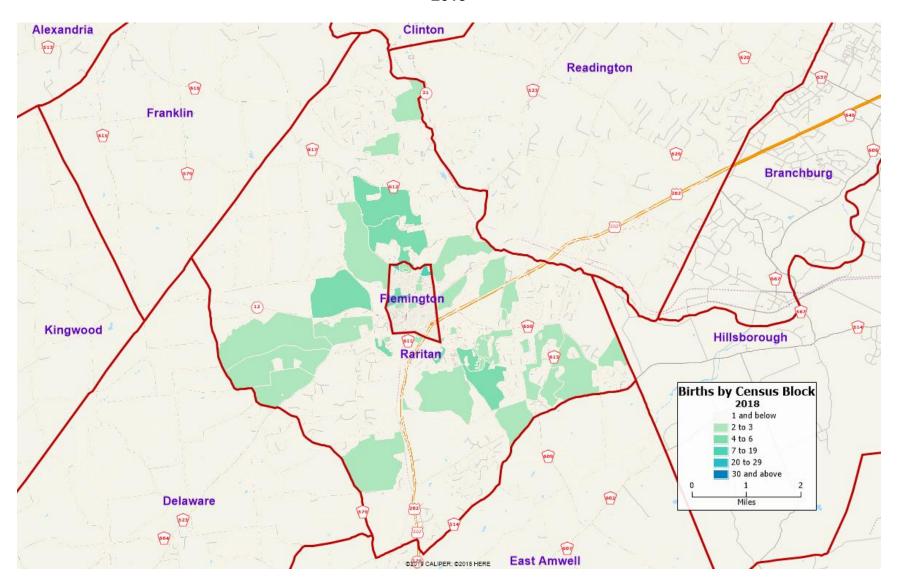
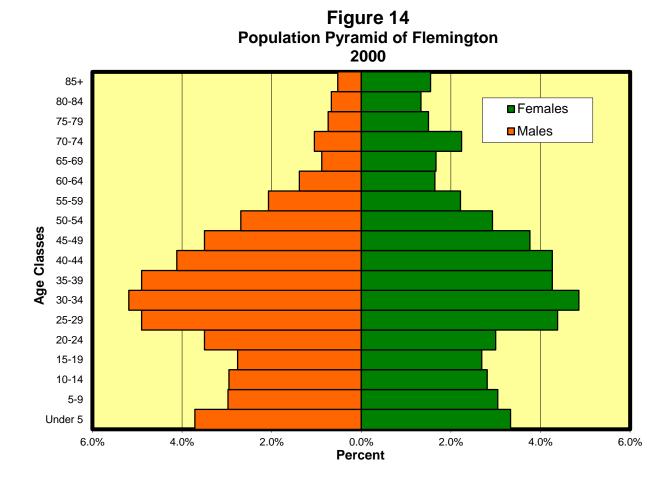


Figure 13
Flemington-Raritan Births by Census Block 2018



Regarding fertility rates, Flemington is above the rate in both Hunterdon County and the State of New Jersey while the rate in Raritan is below the county and state rates. According to the 2014-2018 ACS, the fertility rate of women aged 15 to 50 in Flemington was 94 births per 1,000 women and was 35 births per 1,000 women in Raritan. In comparison, as reported by the NJCHS, the 2018 fertility rate in Hunterdon County was 48.4 births per 1,000 women (ages 15-49) and was 60.0 births per 1,000 women in New Jersey. However, it should be noted that while the municipal, county, and state data are all based on a sample, the municipal data has a margin of error that is much higher than the county and state data and may not reflect the "true" fertility rate in the communities.

Figures 14 and 15 show the age pyramids of males and females in Flemington from both the 2000 and 2010 Censuses. As the diagrams show, the largest number of individuals in 2000 was aged 30-34 for both genders. In 2010, the largest cohort was aged 25-29 for both genders. As shown in Table 8, the greatest numerical declines (shaded red) over this time period occurred in the 70-74 age group for both genders. The greatest numerical gains (shaded blue) occurred in the 20-24 age group for males and the 60-64 age group for females.



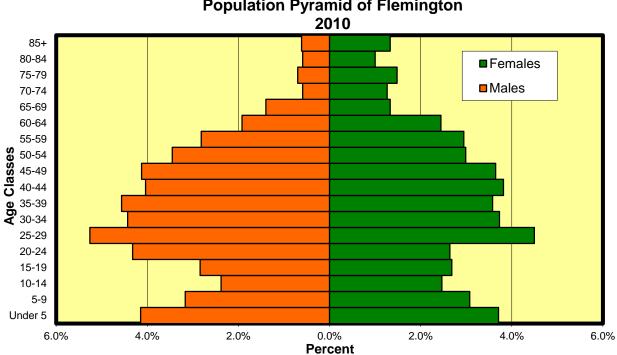


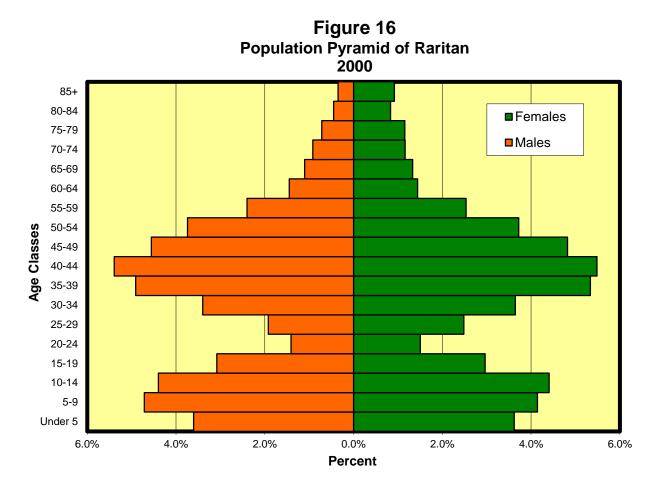
Figure 15 **Population Pyramid of Flemington**

Table 8 Numerical and Percentage Point Changes of Males and Females in Flemington 2000 to 2010

	M	lales	Fe	males
Age Group	Numerical Change	Percentage Point Change	Numerical Change	Percentage Point Change
Under 5	+34	+0.4	+30	+0.4
5-9	+20	+0.2	+13	0.0
10-14	-15	-0.6	-5	-0.3
15-19	+14	+0.1	+10	0.0
20-24	+51	+0.8	-5	-0.4
25-29	+35	+0.4	+22	+0.1
30-34	-15	-0.8	-33	-1.1
35-39	+3	-0.3	-15	-0.7
40-44	+12	-0.1	-4	-0.4
45-49	+42	+0.6	+9	-0.1
50-54	+45	+0.8	+14	+0.1
55-59	+42	+0.7	+42	+0.7
60-64	+30	+0.5	+43	+0.8
65-69	+27	+0.5	-9	-0.3
70-74	-17	-0.5	-36	-1.0
75-79	+1	0.0	+5	0.0
80-84	-1	-0.1	-10	-0.3
85+	+6	+0.1	-4	-0.2

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.

Figures 16 and 17 show the age pyramids of males and females in Raritan from both the 2000 and 2010 Censuses. The largest cohort in Raritan in 2000 was aged 40-44 for both males and females. As these individuals advance in age, the largest cohorts in 2010 were aged 45-49 for both males and females. Table 9 shows the greatest numerical declines (shaded red) over this time period. From 2000 to 2010, the greatest decline occurred in the 35-39 age group for both genders. There was also a significant decline in the 30-34 age group for females, which corresponds to the ages (30-39) when many females have their children. The low fertility rate and declining number of females in the 30-34 and 35-39 age groups have likely led to the declining birth rate in Raritan. The largest numerical gains (shaded blue) occurred in the 50-54 age group for both males and females, and to a lesser extent, the 55-59 and 60-64 age groups.



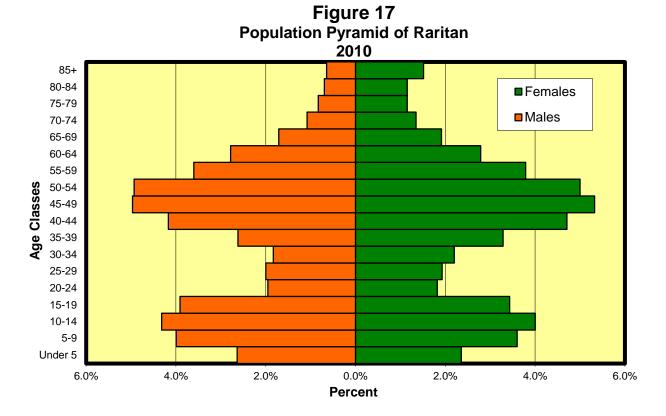


Table 9
Numerical and Percentage Point Changes of Males and Females in Raritan
2000 to 2010

	M	lales	Fe	males
Age Group	Numerical Change	Percentage Point Change	Numerical Change	Percentage Point Change
Under 5	-129	-1.0	-194	-1.3
5-9	-48	-0.7	-22	-0.5
10-14	+87	-0.1	+15	-0.4
15-19	+257	+0.8	+175	+0.5
20-24	+154	+0.5	+106	+0.3
25-29	+63	+0.1	-64	-0.6
30-34	-267	-1.6	-234	-1.4
35-39	-391	-2.3	-328	-2.0
40-44	-143	-1.2	-41	-0.8
45-49	+200	+0.4	+227	+0.5
50-54	+353	+1.2	+373	+1.3
55-59	+324	+1.2	+339	+1.3
60-64	+330	+1.3	+333	+1.3
65-69	+161	+0.6	+161	+0.6
70-74	+57	+0.2	+69	+0.2
75-79	+42	+0.1	+27	0.0
80-84	+65	+0.2	+91	+0.3
85+	+74	+0.3	+154	+0.6

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.

Historical Enrollments by Race

In Figure 18, total enrollment is shown by race for the Flemington-Raritan School District from 2014-15 to 2019-20. In the NJDOE enrollment database, the races listed are White, Hispanic/Latino ("Hispanic"), Asian or Native Hawaiian/Other Pacific Islander ("Asian"), Black or African American ("Black"), Native American or Alaska Native, and Two or more races ("Multiracial"). The population in the school district is becoming more racially diverse over time. While Whites are the largest race in the district, consisting of 66.6% of the student population in 2019-20, their percentage has declined by 6.8 percentage points since 2014-15. Hispanics, which are the second-largest race, make up a slightly larger share (18.3%) of the population in 2019-20, gaining 4.4 percentage points since 2014-15. Asians are the third-largest race at 10.2% in 2019-20, which is a gain of 3.5 percentage points from the 2014-15 percentage (6.7%). The percentages of Blacks have been fairly stable, ranging from 3.0%-3.4%, while the percentages of Multiracial students were very small, ranging from 0.3%-2.9%. The number and percentage of Native American or Alaska Native students were insignificant.

0.1% 0.1% 0.1% 0.1% 0.0% 0.1% 100.0% 9:3% 2.9% 3.4% 9:9% 3:4% **3:8%** 8.3% 8.9% 6.7% 7.5% 10.1% 10.2% 12.5% 80.0% 13.9% 14.1% 14.8% 15.4% 18.3% Percentage 60.0% 40.0% 75.4% 73.4% **72.5**% 71.3% 69.8% 66.6% 20.0% ■ Hispanic ■ Asian ■ Multiracial ■ Native American/Alaska Native White Black 0.0% 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 Year

Figure 18
Flemington-Raritan School District Enrollments by Race

In Table 10, enrollments by race from 2014-15 are displayed for each of the schools in the district, as well as the districtwide totals. The largest race in each school is shaded blue. In each school, Whites were the largest race. At the elementary level, White percentages ranged from a low of 59.1% at Desmares to a high of 76.8% at Barley Sheaf. Hispanics were the second-largest race in all four schools, ranging from a low of 7.9% at Barley Sheaf to a high of 30.0% at Desmares. Asians were the third-largest race in each school, ranging from a low of 4.9% at Desmares to a high of 9.7% at Hunter. Of the four major racial subgroups, Blacks were the smallest at each elementary school, ranging from 1.4%-4.2%. With the exception of Barley Sheaf, the Multiracial percentages were small in each school, ranging from 1.9%-7.1%. The number and percentage of Native American or Alaska Native students were insignificant.

Table 10
Enrollments by Race and School in the Flemington-Raritan School District
2014-15

School	White	Black	Hispanic	Asian	Alaska Native/ Native American	Multiracial	Total
Barley Sheaf E.S.	271	5	28	24	0	25	353
Darley Sileal E.S.	76.8%	1.4%	7.9%	6.8%	0.0%	7.1%	100.0%
Copper Hill E.S.	382	13	55	40	0	17	507
Copper Hill E.S.	75.3%	2.6%	10.8%	7.9%	0.0%	3.4%	100.0%
Desmares E.S.	280	20	142	23	0	9	474
Desiliales E.S.	59.1%	4.2%	30.0%	4.9%	0.0%	1.9%	100.0%
Hunter E.S.	265	9	64	37	0	8	383
Hullel E.S.	69.2%	2.3%	16.7%	9.7%	0.0%	2.1%	100.0%
Deeding Flowing I C	595	28	97	47	2	13	782
Reading-Fleming I.S.	76.1%	3.6%	12.4%	6.0%	0.3%	1.7%	100.0%
Coso M S	658	28	78	54	0	22	840
Case M.S.	78.3%	3.3%	9.3%	6.4%	0.0%	2.6%	100.0%
Total	2,451	103	464	225	2	94	3,339
Total	73.4%	3.1%	13.9%	6.7%	0.1%	2.8%	100.0%

Source: New Jersey Department of Education (http://www.nj.gov/education/data/enr/)

Note: Cells highlighted blue are the largest race in the school.

In the intermediate and middle schools (RFIS and Case), Whites were the largest race in each school. The White percentage was fairly similar in each school and was highest at Case (78.3%). Hispanics were the second-largest race in each school, although the percentage at RFIS (12.4%) was slightly higher than at Case (9.3%). Asians were the third-largest race in both schools, accounting for 6.4% of the students at Case and 6.0% at RFIS. The Multiracial percentages were small in each school and were below 3.0%. The number and percentage of Native American or Alaska Native students were insignificant.

In Table 11, enrollments by race from 2019-20 are displayed for each of the schools in the district, as well as the districtwide totals. The largest race in each school is shaded blue. Whites remain the largest race in each school. At the elementary level, the White percentage ranges from a low of 52.4% at Desmares to a high of 82.3% at Barley Sheaf. With the exception of Barley Sheaf, each of the elementary schools had a percentage-point decline in the White population, with the largest occurring at Hunter (-11.7 percentage points). Excluding Copper Hill, Hispanics are the second-largest race, ranging from a low of 7.5% at Barley Sheaf to a high of 37.0% at Desmares. With the exception of Barley Sheaf, the Hispanic percentage has increased in the last five years, with the largest gain occurring at Desmares (+7.0 percentage points) followed by Hunter (+6.7 percentage points). With the exception of Copper Hill, Asians are the third-largest race, ranging from a low of 4.1% at Desmares to a high of 14.0% at Copper Hill. With the exception of Desmares, the percentage of Asian students has increased in each school, with the largest occurring at Copper Hill (+6.1 percentage points). percentages are fairly small in each school, ranging from 1.2%-3.4%. Of the four major racial subgroups, Blacks are the smallest in each elementary school. The Black percentages have not changed significantly from 2014-15 to 2019-20. The Multiracial percentages are also fairly small in each school, ranging from 1.1%-3.2%. The number and percentage of Native American or Alaska Native students were insignificant, which is consistent with the 2014-15 data.

Table 11
Enrollments by Race and School in the Flemington-Raritan School District 2019-20

School	White	Black	Hispanic	Asian	Alaska Native/ Native American	Multiracial	Total
Barley Sheaf E.S.	284	4	26	24	0	7	345
Darley Silear E.S.	82.3%	1.2%	7.5%	7.0%	0.0%	2.0%	100.0%
Copper Hill E.S.	298	15	57	61	0	5	436
Copper Hill E.S.	68.3%	3.4%	13.1%	14.0%	0.0%	1.1%	100.0%
Desmares E.S.	242	15	171	19	0	15	462
Desiliales E.S.	52.4%	3.2%	37.0%	4.1%	0.0%	3.2%	100.0%
Hunter E.S.	229	13	93	55	0	8	398
nullier E.S.	57.5%	3.3%	23.4%	13.8%	0.0%	2.0%	100.0%
Dooding Flowing I C	458	19	101	65	3	11	657
Reading-Fleming I.S.	69.7%	2.9%	15.4%	9.9%	0.5%	1.7%	100.0%
Coop M C	537	25	115	88	0	10	775
Case M.S.	69.3%	3.2%	14.8%	11.4%	0.0%	1.3%	100.0%
Total	2,048	91	563	312	3	56	3,073
Total	66.6%	3.0%	18.3%	10.2%	0.1%	1.8%	100.0%

Source: Flemington-Raritan School District

Note: Cells highlighted blue are the largest race in the school.

In the intermediate and middle schools, Whites are the largest race in 2019-20. The White percentages are nearly identical in each school: 69.7% at RFIS and 69.3% at Case. In the last five years, Whites declined by 6.4 percentage points at RFIS and 9.0 percentage points at

Case. Hispanics are the second-largest race in each school, accounting for 15.4% of the students at RFIS and 14.8% at Case. In both schools, the Hispanic percentage has increased in the last five years, climbing by 5.5 percentage points at Case and 3.0 percentage points at RFIS. Asians are the third-largest race in each school, accounting for 11.4% of the student population at Case and 9.9% at RFIS. The Asian percentage has increased by 5.0 percentage points at Case and 3.9 percentage points at RFIS. Blacks are the smallest race in each school, accounting for 3.2% of the students at Case and 2.9% at RFIS. The racial percentages of the Black student populations have not changed significantly from 2014-15 to 2019-20. The Multiracial percentages were small in each school and were below 2.0%. The number and percentage of Alaska Native or Native American students were insignificant.

Economically Disadvantaged Students

As a proxy for measuring poverty in the school district, counts of students receiving free or reduced lunch were compiled from 2014-15 through 2019-20. Figure 19 partitions the district's total number of students that were economically disadvantaged by school in 2014-15. Nearly one-third (29.2%) of the district's economically disadvantaged population attended Desmares. At the elementary level, Desmares had the greatest percentage of the district's economically disadvantaged population while Barley Sheaf had the smallest percentage (1.5%). At the intermediate and middle schools, RFIS had the greatest percentage (21.4%) of the district's economically disadvantaged population.

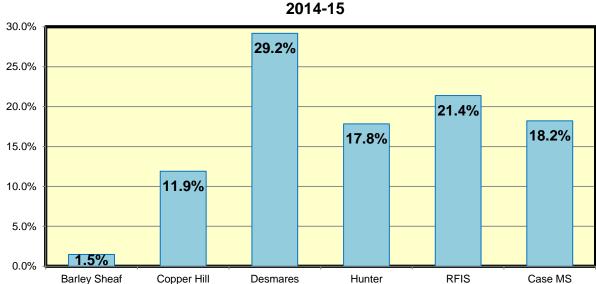
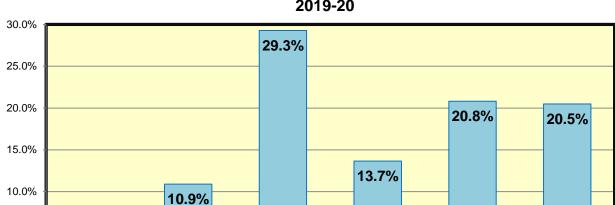


Figure 19
Flemington-Raritan Economically Disadvantaged by School 2014-15

Figure 20 partitions the district's total number of students that are economically disadvantaged by school in 2019-20. The largest percentage of the district's economically disadvantaged population is at Desmares (29.3%), which is nearly unchanged from 2014-15. Barley Sheaf continues to have the smallest percentage (4.9%) of the district's economically disadvantaged population, though there was an increase of 3.4 percentage points from 2014-15.

At the intermediate and middle school levels, RFIS (20.8%) and Case (20.5%) have nearly identical percentages of the district's economically disadvantaged population.



5.0%

0.0%

4.9%

Barley Sheaf

Copper Hill

Figure 20
Flemington-Raritan Economically Disadvantaged by School 2019-20

Since the size of the school often dictates the percentage of the district's apportioned economically disadvantaged population, the total number of economically disadvantaged students was compiled by school (Table 12) from 2014-15 through 2019-20, as well as the *within school* percentages (Table 13). Table 12 also shows the overall percentage of students that are economically disadvantaged with respect to the district's total enrollment and the change in the number of students that are economically disadvantaged over this time period for each school. At the district level, the number and percentage of students that are economically disadvantaged had been fairly stable before increasing in 2019-20. Whereas 538 students (16.1%) were economically disadvantaged in the school district in 2014-15, the number increased to 615 (20.0%) in 2019-20, a 3.9 percentage-point gain. The district gained 77 economically disadvantaged students over this time period despite a decline of 266 students in the overall student population.

Desmares

Hunter

RFIS

Case MS

At the elementary level, each school, except Hunter, has a greater number of economically disadvantaged students in 2019-20 as compared to 2014-15. The largest gains over this time period occurred at Desmares (+23) and Barley Sheaf (+22). At the intermediate and middle school levels, both schools have a greater number of economically disadvantaged students in 2019-20 as compared to 2014-15, with the largest gain occurring at Case (+28).

The percentages of students that are economically disadvantaged *within each school* are shown from 2014-15 through 2019-20 in Table 13. At the elementary level, the percentage of students who are economically disadvantaged increased in three of the four schools, with the largest gain occurring at Barley Sheaf (+6.4 percentage points). On the other hand, Hunter declined by 4.0 percentage points over this time period. In 2019-20, Desmares and Hunter have

the highest percentages of economically disadvantaged students at 39.0% and 21.1% respectively, while Barley Sheaf has the lowest percentage at 8.7%.

For the intermediate and middle schools, the economically disadvantaged percentages increased by 4.8 percentage points at RFIS and by 4.6 percentage points at Case. In 2019-20, RFIS has a slightly higher percentage (19.5%) of economically disadvantaged students than Case (16.3%).

Table 12
<u>Flemington-Raritan School District Economically Disadvantaged Students</u>
<u>2014-15 to 2019-20</u>

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Change	
Barley Sheaf E.S.	8	13	15	24	24	30	+22	
Copper Hill E.S.	64	52	49	52	52	67	+3	
Desmares E.S.	157	147	133	145	156	180	+23	
Hunter E.S.	96	86	89	84	75	84	-12	
Reading-Fleming I.S.	115	115	110	130	124	128	+13	
Case M.S.	98	91	105	113	112	126	+28	
Total	538	504	501	548	543	615	+77	
Total District Enrollment	3,339	3,151	3,078	3,055	3,061	3,073		
Percent of Total	16.1%	16.0%	16.3%	17.9%	17.7%	20.0%		

Source: New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

Table 13

Flemington-Raritan School District Economically Disadvantaged Students

Within School Percentages

2014-15 to 2019-20

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Change	
Barley Sheaf E.S.	2.3%	3.9%	4.5%	7.1%	6.9%	8.7%	+6.4	
Copper Hill E.S.	12.6%	11.4%	11.4%	12.8%	12.6%	15.4%	+2.8	
Desmares E.S.	33.1%	32.8%	31.1%	34.0%	34.9%	39.0%	+5.9	
Hunter E.S.	25.1%	24.2%	25.6%	23.5%	19.3%	21.1%	-4.0	
Reading-Fleming I.S.	14.7%	15.4%	14.6%	17.1%	18.2%	19.5%	+4.8	
Case M.S.	11.7%	11.2%	13.4%	14.7%	14.3%	16.3%	+4.6	

Source: New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

New Housing

1. Flemington Borough

Ms. Eileen Parks, Flemington Planning Board Secretary, provided Planning Board resolutions regarding future residential development in the community. A list of potential developments, location, affected attendance area, number of units, bedroom distribution, housing type, and project status is shown in Table 14 and Figure 21. The table excludes new houses to be built on single in-fill lots, or the subdivision of existing lots, or homes that are built after the demolition of an existing older home. There is the potential for 381 multi-family units in three separate developments, all of which would be in the Desmares attendance area.

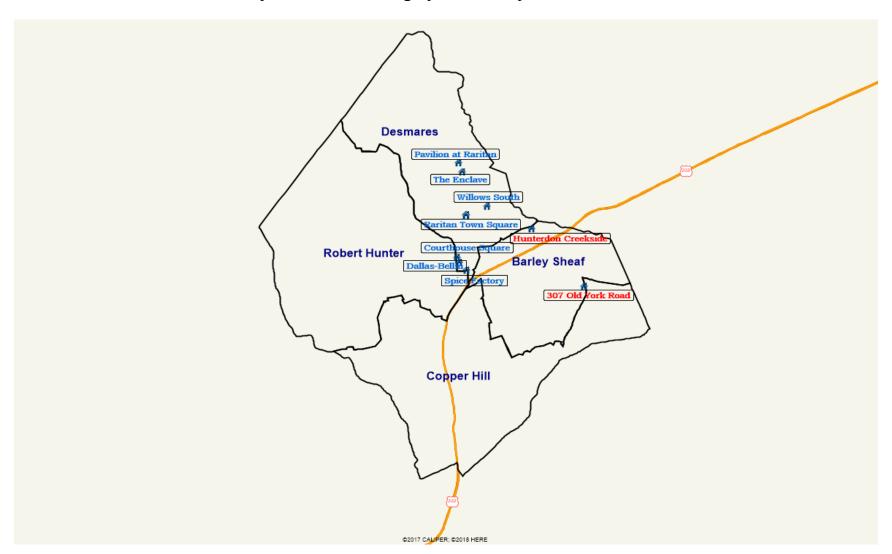
Table 14
Potential Residential Developments in Flemington

Subdivision/D eveloper	Location	Attendance Area	Number of Units	Bedroom Distribution	Housing Type	Notes/Status
Spice Factory	70 Church Street	Desmares	100	32 Studios 54 1-BR 10 2-BR 4 3-BR	Apartments (market- rate and affordable)	To be constructed in two phases. First phase would modify existing building as upper floors would contain apartments. Second phase would consist of a new residential apartment building. Application approved December 2019. 15 units (3 1-BR, 9 2-BR, and 3 3-BR) will be set aside for Low-Moderate Income households
Dallas-Bellin Flemington, LLC	Main & Broad Streets	Desmares	59	N/A	Apartments (market- rate and affordable)/ Duplexes	Received Preliminary site plan approval in January 2012. Mixed- use commercial and residential project consisting of 59 units. 6 units will be set aside for Low- Moderate Income households.
Courthouse Square Redevelopment	Main Street, Spring Street, Bloomfield Avenue, and Chorister Place	Desmares	222	N/A	Apartments (market- rate and affordable)	Mixed-use commercial and residential project consisting of 222 apartment units. 14 units will be set aside for Low-Moderate Income households. Received Preliminary and Final site plan approval in November 2018.
Total			381			

Source: Flemington Borough Planning Board Resolutions

Of the proposed new housing, the largest development, Courthouse Square, would involve the redevelopment of an area bordered by Main Street, Spring Street, Bloomfield Avenue, and Chorister Place, and is situated within the Union Hotel Redevelopment Area. The project, which was approved in November 2018, would consist of a hotel, a mix of commercial and retail space, and 222 apartment units, of which 14 units will be set aside to meet affordable housing requirements. The bedroom distribution of the development was unavailable. The project has not yet started construction.

Figure 21
Projected New Housing by Elementary Attendance Area



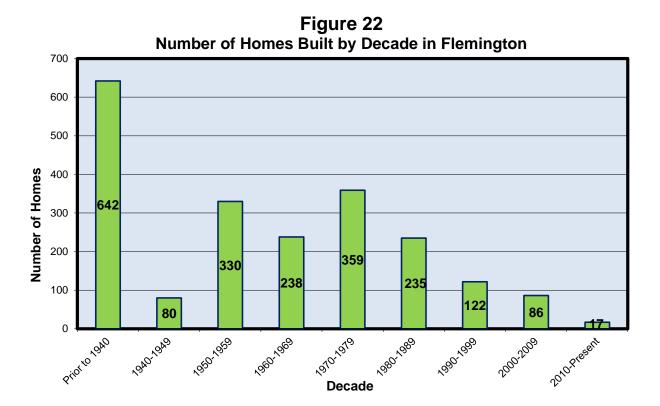
A second development at the existing Spice Factory on 70 Church Street would modify the existing structure whereby residential units would be constructed on the upper floors and commercial spaces would be on the lower floors. A new building would also be built consisting of solely residential units. The project, which received approval in December 2019, will consist of 100 apartment units of which 15 units will be set aside to meet affordable housing requirements.

Finally, a third development by Dallas-Bellin Flemington, LLC on Main and Broad Streets, which was approved in January 2012, will consist of a mix of commercial and retail space and 59 apartment units/duplexes, whereby six (6) units will be set aside to meet affordable housing requirements. It is not clear whether this project will go forward since there has been no activity since it was approved.

While not shown in the table, there is the potential for approximately 100 apartment units by Captiva at the former Global Agway property, which is located in a redevelopment area. However, the project is very preliminary in nature and has not been approved by the Planning Board. A site plan has not yet been submitted by the developer.

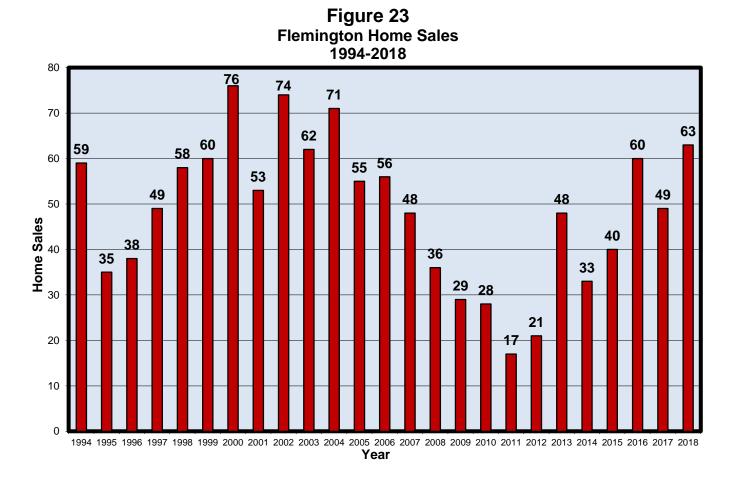
Distribution of Homes by Decade Built

Figure 22 shows the number of homes built by decade in Flemington as provided by the 2014-2018 ACS. As shown in the figure, the number of homes built per decade from 1950-1990 has been fairly uniform, ranging from 235-359. Flemington has an older housing stock with 78% of the homes being built prior to 1980. Since 1990, the number of homes built per decade has been steadily declining.



Home Sales

In Figure 23, the number of annual home sales in Flemington is shown from 1994-2018. The information was retrieved from the Monmouth County Tax Board database, which possesses tax records and home sales for <u>all</u> 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. After peaking at 76 sales in 2000, the number of sales declined to 17 in 2011 due to the housing market crash and banking crisis. Since then, home sales have rebounded. However, the number of sales in 2018 (63) is still below the peak total that occurred in 2000.



2. Raritan Township

Ms. Amy Fleming, Raritan Planning Board Secretary, provided information regarding current and future residential development in the community. A list of potential developments, location, affected attendance area, number of units, bedroom distribution, housing type, and project status is shown in Table 15 and Figure 21. The table excludes new houses to be built on single in-fill lots, or the subdivision of existing lots, or homes that are built after the demolition of an existing older home. In total, there is the potential for 640 new housing units, the majority of which are multi-family units. Four developments would be in the Desmares attendance area while two developments would be in the Barley Sheaf attendance area.

The largest proposed development, The Enclave, which was approved in 2017, will consist of 200 apartment units with primarily one- and two-bedrooms. A total of 40 units will be set aside to meet affordable housing requirements. Other proposed developments include Raritan Town Square, which will consist of 140 apartment units, and The Pavilion at Raritan, consisting of 139 apartment units. In each of these developments, 20% of the units will be set aside to meet affordable housing requirements and the majority of units will consist of one- and two-bedrooms. Willows South will consist of 100 affordable rental apartment units while Hunterdon Creekside will consist of 50 affordable apartments for purchase. The smallest development, which is located at 307 Old York Road, will consist of 11 detached single-family homes.

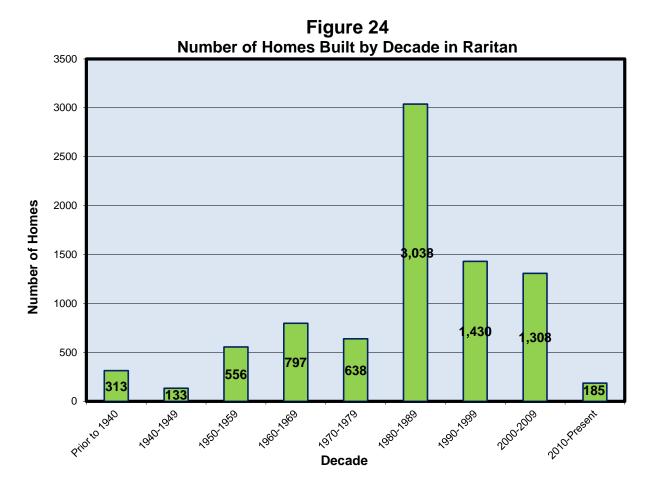
Table 15
Potential Residential Developments in Raritan

Subdivision/ Developer	Location	Attendance Area	Number of Units	Bedroom Distribution	Housing Type	Notes/Status
The Enclave	5 Bartles Corner Road	Desmares	200	55 1-BR 137 2-BR 8 3-BR	Apartments (market-rate and affordable)	Approved in 2017. Has not begun construction. 20% of units will be set aside for Low-Moderate Income households.
The Pavilion at Raritan	2 Healthquest Boulevard	Desmares	139	47 1-BR 86 2-BR 6 3-BR	Apartments (market-rate and affordable)	Completed. 20% of units will be set aside for Low-Moderate Income households.
Hunterdon Creekside	Altra and Cain Road	Barley Sheaf	50	10 1-BR 30 2-BR 10 3-BR	Affordable for sale apartments	Approved. Nearing completion.
Raritan Town Square	NJ Route 31 and Route 523	Desmares	140	62 1-BR 72 2-BR 6 3-BR	Apartments (market-rate and affordable)	Approved in 2018. 20% of units will be set aside for Low-Moderate Income households.
Willows South	66 Junction Road	Desmares	100	18 1-BR 57 2-BR 25 3-BR	Affordable apartments	Recently approved
307 Old York Road	307 Old York Road	Barley Sheaf	11	N/A	Detached Single-Family	Has not started construction
Total			640			

Sources: Raritan Planning Board Secretary and the Flemington-Raritan School District

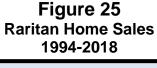
Distribution of Homes by Decade Built

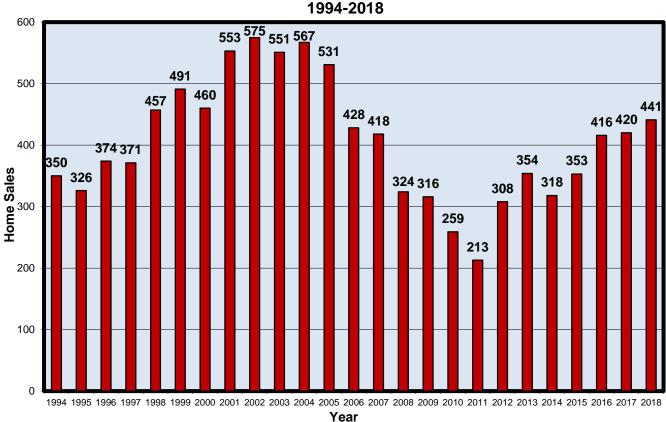
Figure 24 shows the number of homes built by decade in Raritan as provided by the 2014-2018 ACS. Unlike Flemington, Raritan has a newer housing stock with 71% of the homes being built after 1980. Of the decades shown, Raritan had the largest number of homes built in the 1980s, which is more than one-third (36.2%) of the housing stock and corresponds to the sizable population gain in Raritan (+88.3%) shown previously in Table 2. While the number of homes built per decade in the 1990s and 2000s was less than that which was built in the 1980s, it is still significantly larger than the number of homes built per decade from 1940-1980.



Home Sales

In Figure 25, the number of annual home sales in Raritan is shown from 1994-2018. The information was again retrieved from the Monmouth County Tax Board database, which possesses tax records and home sales for <u>all</u> 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. The shape of the home sale distribution in Raritan is very similar to that of Flemington. After peaking at 575 sales in 2002, the number of sales declined to 213 in 2011 due to the housing market crash and banking crisis. Since then, home sales have been steadily increasing. While there were 441 sales in 2018, the value is still well below the peak number that occurred in 2002.





Historical Residential Construction

With respect to historical new construction in Flemington, only two (2) certificates of occupancy ("COs") were issued for single-family or two-family homes from 2014-2019 as shown in Table 16. New home construction has been very limited in Flemington. In Raritan, there have been significantly more residential units constructed in recent years. From 2014-2019, a total of 403 COs were issued; 295 COs were issued for single-family or two-family homes while 108 COs were issued for multi-family units. The construction of Mountain View at Hunterdon (110 detached single-family homes), The Willows at Flemington Junction (84 affordable apartments units), and portions of Flemington Fields (228 age-restricted single-family homes), and Hunterdon Creekside (246 age-restricted single-family homes) are likely the sources of the majority of issued COs.

Table 16
Number of Residential Certificates of Occupancy by Year

.,		Flemi	ngton		Raritan				
Year	1&2 Family	Multi- Family	Mixed Use	Total	1&2 Family	Multi- Family	Mixed Use	Total	
2014	0	0	0	0	41	0	0	41	
2015	0	0	0	0	33	0	0	33	
2016	0	0	0	0	40	0	0	40	
2017	2	0	0	2	23	96	0	119	
2018	0	0	0	0	87	0	0	87	
2019 (thru October)	0	0	0	0	71	12	0	83	
Total	2	0	0	2	295	108	0	403	

Source: New Jersey Department of Community Affairs

Student Yield Analysis of Detached Single-Family Homes

To determine the number of children per housing unit (student yield) of detached single-family homes in Flemington and Raritan, the parcel-level MOD IV database of each community was joined to the school district's 2019-20 student database. Age-restricted housing units, condominiums, townhouses, and apartments were removed from the database¹. A total of 1,972 children² living in 6,337 detached single-family homes were identified.

The simplest way to compute student yields is to divide the total number of students by the total number of homes. However, there are several drawbacks in computing yields in this fashion. First, the *type* of housing unit helps determine the magnitude of the student yield, as yields are typically greatest for detached single-family homes and smallest for multi-family homes such as apartments and townhouses/condominiums. A second drawback of this computation is that the student yield would include homes owned by all age segments of the population, such as empty-nesters and senior citizens, which would lower the overall student yield. Yields computed in this fashion are likely underestimating the future number of children in proposed developments or from home resales, where families with children are likely to be the buyers, particularly if the school district has an excellent reputation.

Instead, the length of ownership of the housing unit was considered, as student yields are typically highest in homes with 0-10 years of ownership and are lowest in homes with 20 or more years of ownership. As such, a unique student yield distribution by length of ownership was created for the combined properties in Flemington and Raritan. It should be noted that the forthcoming student yield distribution is a snapshot in time. If the percentage of children in the population changes, or the demographics of the communities change where ethnic groups of larger sizes enter, or if the school district's reputation changes and more or less children attend the district, student yields are likely to change as well.

To determine length of ownership, parcel-level records of all detached single-family homes in Flemington and Raritan were downloaded from the Monmouth County Tax Board³ MOD IV database. Besides the property address, other variables include block and lot, sale dates and prices, and in most instances, the year that the home was built. To compute student yields by length of ownership, it was necessary to know the year of the most recent sale, where reliable sales data in the database were available from 1989-2018, a 29-year period. Data for 2019 were not yet available. Determining the most recent sale date was not always obvious. Some of the most recent sale dates had a sales price of \$1 or \$100. These "paper sales" were coded as a non-usable deed transaction. These transactions include sales between members of the immediate family, resulting in a change in title but often not a change of the occupant. In these instances, the data were excluded from the analysis and the next most recent sale date was used instead. If there were no secondary sale dates, the length of ownership exceeded 29 years but the exact number of years was unknown.

¹ While most of the housing units analyzed were detached single-family homes, a small number of multi-family units may exist in the database.

A total of 286 students live in addresses that could not be matched in the parcel level-database. The majority of these students live in addresses listed as a mixed-use property (commercial and residential).

³ The Monmouth County database provides information for <u>all municipalities</u> in the state.

One of the limitations of the database was the lack of recorded sales prior to 1989. Since many of the homes (n = 845) have never been sold since 1989, the earliest sale date recorded, the length of ownership exceeded 29 years for these homes but the exact length of ownership was unknown. Flemington and Raritan also had homes constructed after 1989 that had never been sold. However, in these instances, the length of ownership could be computed by simply subtracting the year that the home was built from 2018.

Student Yields by Length of Ownership for Detached Single-Family Homes

Student yields by length of ownership for detached single-family homes was determined by joining the parcel-level property databases of Flemington and Raritan with 2019-20 student address data, which was provided by the school district. It is expected that longer-held homes will have fewer children, as they would have graduated from the district. Figure 26 shows that, in general, student yields slowly increase with length of ownership, peaking at 0.75 children per housing unit with eight (8) years of ownership. Student yields then decline through 17 years of ownership before stabilizing. After 17 years of ownership, student yields are typically below 0.15 children per home. Table 17 shows the student yields by length of ownership for the PK-8 student population (public school students only).

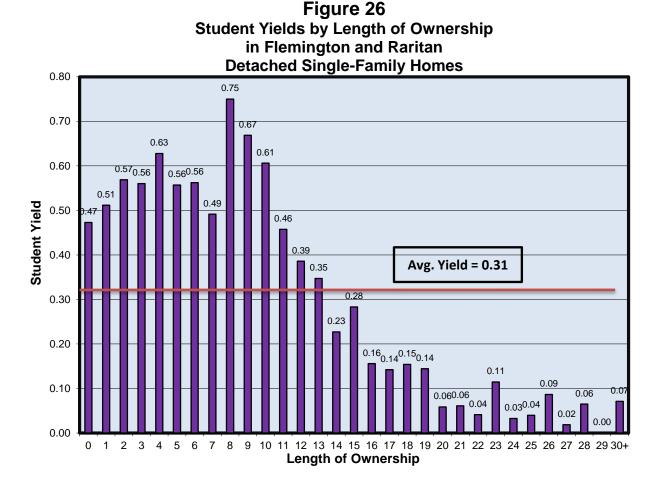


Table 17
Student Yields (PK-8) by Current Length of Ownership in Flemington and Raritan
Detached Single-Family Homes

Years of Ownership	Housing Units	Students 2019-20	Student Yield	
0	370	175	0.47	
1	303	155	0.51	
2	320	182	0.57	
3	257	144	0.56	
4	215	135	0.63	
5	228	127	0.56	
6	192	108	0.56	
7	120	59	0.49	
8	144	108	0.75	
9	148	99	0.67	
10	132	80	0.61	
11	164	75	0.46	
12	197	76	0.39	
13	193	67	0.35	
14	282	64	0.23	
15	265	75	0.28	
16	231	36	0.16	
17	218	31	0.14	
18	162	25	0.15	
19	180	26	0.14	
20	188	11	0.06	
21	164	10	0.06	
22	121	5	0.04	
23	122	14	0.11	
24	92	3	0.03	
25	100	4	0.04	
26	127	11	0.09	
27	106	2	0.02	
28	77	5	0.06	
29	74	0	0.00	
30+	845	60	0.07	
Total	6,337	1,972	0.31	

Since the length of ownership is a distribution, how can one determine what is the likely student yield in a home resale or newly constructed unit? Since the distribution is a snapshot in time, what is a reasonable student yield to use? Computing the average over the entire length of ownership period underestimates the number of children, since there are so few children at longer lengths of ownership as children graduate from the school district. Unfortunately, there is no research-based metric to determine what part of the distribution should be used to estimate future schoolchildren. Instead, we propose computing an average using all of the years up to the peak student yield, which estimates the maximum impact before student yields begin to decline.

As discussed above, the average student yield computed from the entire housing stock, which is 0.31 children per home, likely underestimates the actual student yield when a family either moves into a new (or resale) detached single-family home. If the average student yield is computed for the first eight years of ownership when the peak student yield occurs, the yield increases to 0.56. This is likely a better estimate of the student yield for detached single-family homes in Flemington and Raritan.

Student Yield Analysis for Townhouses and Condominiums

Student yields were also computed for townhouses and condominiums in Flemington and Raritan by joining the parcel-level databases with student addresses from the 2019-20 year. Lengths of ownership were not computed as there is a lot of variation of the student yields based on the development's bedroom distribution and whether it has child-friendly amenities, such as a playground or swimming pool. In Table 18, student yields are shown by name of the development and the town where it is located. Through internet research, we were able to identify the elementary attendance area, unit type, bedroom distribution, the year the development was built, and the number of units. A total of 396 children⁴ were identified living in 2,183 units in 12 separate developments. The largest student yields, in developments with at least 25 units, were in Townsende and Flemington South Estates (0.26). In general, the student yields were quite similar, ranging from 0.11-0.26 public school children per development. The average student yield for townhouses and condominiums in Flemington and Raritan is 0.18.

Student Yield Analysis for Apartments

Student yields were also computed for apartment complexes in Flemington and Raritan as shown in Table 19. The table is <u>not</u> an all-inclusive list of all apartment units, as it only includes large apartment complexes. Through internet research, we were able to identify the elementary attendance area, rent, bedroom distribution, the year the development was built, and the number of units. The list does not include multi-family buildings that may have less than ten apartment units or mixed-use properties with apartments above retail space. A total of 322 children⁵ were identified living in 664 units in six (6) separate developments. Excluding apartment complexes that consisted entirely of affordable housing units (The Willows at Flemington Junction), the largest student yield occurred in Flemington Arms (0.87) while the lowest was in Hunterdon Mews (0.15). As shown in the table, the average student yield for apartments in Flemington and Raritan is 0.49.

⁴ Not including pre-kindergarten children

⁵ Not including pre-kindergarten children

Table 18
Flemington and Raritan Student Yields (K-8) for Condominiums and Townhouses

Development	Town	Attendance Area	Year Built	Bedrooms	Number of Units ¹	K-4 Students	5-6 Students	7-8 Students	K-8 Students ²	2019-20 Student Yield
Carriage Gate	Raritan	Hunter	2000-2001	3-4 BR	58	3	3	3	9	0.16
Concord Ridge	Raritan	Barley Sheaf	1982-1988	2-BR	342	32	12	15	59	0.17
Oak Ridge at Flemington	Raritan	Cooper Hill	1981-1985	1-BR	190	6	6	8	20	0.11
Stone Gate Condos	Raritan	Barley Sheaf	1989	1-2 BR	225	15	5	5	25	0.11
Sun Ridge	Raritan	Barley Sheaf	1985-1988	2-3 BR	622	62	32	15	109	0.18
Townsende	Raritan	Desmares	1996-1999	2-3 BR	243	32	14	17	63	0.26
Flemington South Estates	Raritan	Cooper Hill	1981-1987	2-3 BR	261	38	9	21	68	0.26
Coppermine Village	Flemington	Hunter	1985	2-BR	54	4	3	3	10	0.19
Grant Avenue	Flemington	Hunter	1880	3-BR	4	1	0	0	1	0.25
South Main Village	Flemington	Hunter	1988-1990	2-3 BR	60	4	3	5	12	0.20
Village Commons	Flemington	Hunter	1986	1-2 BR	94	7	6	3	16	0.17
Victorian Square	Flemington	Desmares	1998	2-BR	30	3	1	0	4	0.13
Total					2,183	207	94	95	396	0.18

Note: ¹As derived from the Flemington and Raritan property databases

²Based on 2019-20 enrollment in the Flemington-Raritan School District

Table 19
Flemington and Raritan Student Yields (K-8) for Apartments

Development (Property Address)	Town	Attendance Area	Rent (\$)	Year Built	Bedrooms	Number of Units ¹	K-4 Students	5-6 Students	7-8 Students	K-8 Students ²	2019-20 Student Yield
Flemington Arms (81 N. Main Street)	Flemington	Several	N/A	1964	1-2 BR	112	66	23	8	97	0.87
Hunter Hills (1 Garden Lane)	Flemington	Desmares	1,450-1,750	1974	1-2 BR	180	68	27	23	118	0.66
Hunterdon Mews (65 N. Main Street)	Flemington	Desmares	1,170-1,470	1965	1-2 BR	60	4	2	3	9	0.15
Prospect Hills & Madison Arms (2 Prospect Hill)	Flemington	Hunter	1,175-1,530	1962	1-2 BR	164	18	6	7	31	0.19
Regional Court (100 Regional Court)	Flemington	Desmares	N/A	N/A	N/A	64 ³	17	5	3	25	0.39
The Willows at Flemington Junction ⁴ (200 Justin Court)	Raritan	Desmares	1,267-1,533	2017	2-BR	84	26	6	10	42	0.50
Total						664	199	69	54	322	0.49

Notes: ¹As derived from internet research

²Based on 2019-20 enrollment in the Flemington-Raritan School District

³Estimated as unit count was unavailable

⁴Consists entirely of affordable housing units

Table 20 summarizes the student yields for townhouses/condominiums and apartments for the K-4, 5-6, and 7-8 grade configurations. Student yields are greatest for children in grades K-4, which is not unexpected since there are five grades.

Table 20
Student Yields by Housing Type in Flemington and Raritan

Housing Type	K-4 Student Yield	5-6 Student Yield	7-8 Student Yield	K-8 Student Yield ¹
Townhouse/ Condominium	0.095	0.043	0.044	0.181
Apartment	0.300	0.104	0.081	0.485

Note: ¹Student yields are based on 2019-20 enrollments in the Flemington-Raritan School District

Estimate of Public School Children from New Housing

An estimate was made of the number of public school children that could potentially come from the proposed housing developments. It should be clearly stated that this is a <u>rough</u> estimate for Dallas-Bellin Flemington, LLC and Courthouse Square, as the bedroom distributions were unavailable, which are needed to compute the estimated number of public school children.

Since the number of affordable and market-rate housing units in Flemington and Raritan with one and three bedrooms was limited, *Who Lives in New Jersey Housing*?⁶, published by the Rutgers University Center for Urban Policy Research ("CUPR"), was utilized instead. The resource provides statewide housing multipliers (student yields) based on housing type, number of bedrooms, housing value, housing tenure (ownership versus rental), and whether the housing units are market-rate or affordable.

To project the number of public school children from the new housing units, several additional assumptions were made:

- 1. All affordable apartment units were assumed to have the following distribution (when not available): 1-bedroom = 20%, 2-bedroom = 60%, 3-bedroom = 20%.
- 2. All affordable 1-BR and 3-BR apartment units were assumed to have the following student yield multipliers as provided by CUPR: 1-bedroom = 0.088 and 3-bedroom = 1.087.

⁶ Listokin, David, and Voicu, Alexandru. (2018). Who Lives in New Jersey Housing? Updated New Jersey Demographic Multipliers. Rutgers University Center for Urban Policy Research.

- 3. All affordable 2-BR apartment units were assumed to have the same student yield multiplier that currently exists at The Willows at Flemington Junction: 0.50.
- 4. All market-rate 2-BR apartment units were assumed to have the average Flemington and Raritan student yield multiplier: 0.49.
- 5. All market-rate 1-BR and 3-BR apartment units were assumed to have the following student yield multipliers as provided by CUPR: 1-bedroom = 0.018 and 3-bedroom = 0.614.
- 6. All detached single-family homes were assumed to have the following student yield multiplier: 0.56^7 .
- 7. Dallas-Bellin Flemington, LLC was assumed to have 27 1-bedroom units and 26 2-bedroom units (market-rate) as the bedroom distribution was unavailable.
- 8. Courthouse Square was assumed to have 104 1-bedroom units and 104 2-bedroom units (market-rate) as the bedroom distribution was unavailable.
- 9. The full build-out and occupation of the Spice Factory, Courthouse Square, Dallas-Bellin Flemington, LLC, The Enclave, The Pavilion at Raritan, Willows South, 307 Old York Road, and Raritan Town Square would occur over a two-year period coinciding with the 2020-21 and 2021-22 school years.
- 10. The full build-out and occupation of Hunterdon Creekside would occur in the 2020-21 school year.

All of the multipliers from CUPR were for grades K-12. It was estimated that 70.8% of the children would be students in grades K-8, which would reduce the impact on the school district, as the remaining children would be in grades 9-12. In total, 325 public school children in grades K-8 are projected according to the following distribution:

- Courthouse Square 60
- Dallas-Bellin Flemington, LLC 16
- The Enclave 74
- Hunterdon Creekside 23
- 307 Old York Road 6
- The Pavilion at Raritan 47
- Raritan Town Square 41
- Spice Factory 9
- Willows South 49

⁷ As derived from the Flemington and Raritan current length of ownership for detached single-family homes

⁸ According to the CUPR distribution for developments with 50+ apartment units and two bedrooms in New Jersey

Based on the district's current elementary attendance boundaries, the impact would be greatest on Desmares, as most of the developments are located within its boundaries.

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, as these ratios will be used to project future enrollments. 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. enrollment projections should only be adjusted if the projected housing growth is significantly greater than prior housing growth. From 2014-2019, a total of 405 new housing units were built in Flemington and Raritan. However, a large number of these homes were age-restricted units from Flemington Fields and Hunterdon Creekside, which reduces the actual number of newlyconstructed homes that could potentially have children. Based on this data and that 1,021 housing units are planned, it appears that future residential construction in Flemington and Raritan will be much greater than that which occurred since 2014. Therefore, the baseline enrollment projections were modified to account for additional children from the new housing developments. It should be noted that the estimated number of children from Dallas-Bellin Flemington, LLC and Courthouse Square were **not** incorporated into the projections, since the bedrooms distributions were unavailable and that the estimated number of children is a very rough estimate.

Enrollment Projections

Enrollment projections were computed from 2020-21 through 2024-25 at the individual school level using cohort-survival ratios based on the last five years of historical enrollment data. As these are smaller subgroups of the overall population as compared to using districtwide grade counts, the reliability of the school projections are lower than the overall districtwide projections. In general, the smaller the forecasted population, the higher the probability of error associated with the projection.

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 at each school and multiplying that value by the future regular education subtotals. The proportions will be shown in the forthcoming tables.

With respect to grade-level pre-kindergarten students at Copper Hill, enrollment was projected by computing an average based on historical data from the last three years and using this value throughout the five-year projection period. In the last three years, grade-level pre-kindergarten enrollment has ranged from 22-34 students per year. It was estimated that there would be 26 students in the program annually in the future. Special education pre-kindergarten students were projected in the manner described above.

As birth-to-kindergarten survival ratios have been increasing, using a five-year average birth-to-kindergarten ratio would likely underestimate future kindergarten enrollments. Instead, a three- or four-year average birth-to-kindergarten ratio was used.

On September 10, 2010, former New Jersey Governor Chris Christie signed into law the Interdistrict School Choice Program ("Choice"), which took effect in the 2011-12 school year. This enables students the choice in attending a school outside their district of residence if the selected school is participating in the Choice program. The Choice district sets the number of openings per grade level. The Flemington-Raritan School District does not participate in the program and therefore it has no impact on the enrollment projections.

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 Group⁹ ("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.

⁹Introduced 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.

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. 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

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 Flemington-Raritan School District is a "Targeted" district since its DFG is "I" with a concentration of at-risk pupils less than 40 percent (6.42%). In Table 21, the estimated number of total eligible pre-school students is provided with the estimated five-year rollout. As the table shows, there is the potential for 51 pre-kindergarten students as a result of the SFRA. 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. For the purpose of this study, it has been assumed that the district would educate its pre-school children in-house.

Table 21
<u>Estimated Number of Eligible Pre-School Students</u>
<u>as Per School Funding Reform Act of 2008</u>

DFG (2000)	Total eligible	Year 1	Year 2	Year 3	Year 4	Year 5
I	51	10	18	26	33	46

Source: New Jersey Department of Education, Division of Early Childhood Education

In a different pre-school initiative, the administration of Governor Phil Murphy announced the availability of Preschool Education Expansion Aid ("PEEA") in 2018. In September 2018, the first round of funding (\$20.6 million) was publicized, where 31 districts received aid to expand their pre-kindergarten programs. A second round of funding was announced in January 2019, providing 33 additional school districts with roughly \$27 million in funding. The second round targeted districts whose free and reduced lunch percentage is above 20% and who have not previously received State preschool aid. Some districts that were eligible to apply for PEEA would fall under the "Universal" category while others would be considered "Targeted" districts. However, the main difference with this expansion aid is that districts under

SFRA were restricted to serve low-income children where now districts can educate all preschool age children through PEEA. It appears that the Murphy administration may be moving towards a pre-school program for all children, rather than just for those who are low-income. The Flemington-Raritan School District did not receive a PEEA grant in either the first or second round of funding and therefore has no bearing on the outcome of this study.

Two sets of enrollment projections follow. The first set of projections (referred to as "baseline") do <u>not</u> reflect the anticipated housing growth in Flemington and Raritan. If the housing developments previously shown do not come to fruition or are not occupied within the anticipated construction timeline, the baseline enrollment projections would best reflect the future enrollments in the school district. The second set of projections (referred to as "adjusted") reflects projected enrollments adjusted for housing growth, assuming full buildout and the timeline of construction and occupancy discussed previously.

Projected PK-8 enrollments follow in Figure 27 and Table 22. In the baseline projections, total enrollment is projected to increase throughout the projection period. Baseline enrollment is projected to be 3,142 in 2024-25, which would be a gain of 69 students from the 2019-20 enrollment of 3,073. In the adjusted projections, total enrollment is projected to increase, albeit at a faster rate. In the adjusted projections, total enrollment is projected to be 3,318 in 2024-25, which would be a gain of 245 students from the 2019-20 enrollment.

2020-21 to 2024-25 4,000 ■ Baseline Adjusted 3,500 3,318 3.265 3,259 3,194 3,016^{3,111} 3,142 3,079 3,085 3,019 3,000 **Number of Students** 2,500 2,000 1,500 1,000 500 0

2022-23

Year

2023-24

2024-25

2020-21

2021-22

Figure 27
Flemington-Raritan School District Projected Enrollments
2020-21 to 2024-25

Table 22
<u>Flemington-Raritan School District Projected Enrollments (PK-8)</u>
<u>2020-21 to 2024-25</u>

Year	PK	K	1	2	3	4	5	6	7	8	SE	PK-8 Total
	Baseline											
2020-21	26	278	303	321	325	332	296	349	312	384	90	3,016
2021-22	26	309	284	319	331	345	341	305	354	313	92	3,019
2022-23	26	297	317	298	328	352	354	351	309	355	92	3,079
2023-24	26	284	301	335	306	347	361	365	356	310	94	3,085
2024-25	26	293	289	319	343	324	356	372	370	357	93	3,142
			Adj	usted	d for	Hous	ing G	irowt	h			
2020-21	26	291	316	334	338	345	306	358	318	389	90	3,111
2021-22	26	323	308	343	354	368	363	324	369	324	92	3,194
2022-23	26	310	331	322	352	375	378	374	329	370	92	3,259
2023-24	26	297	314	349	330	371	385	390	379	330	94	3,265
2024-25	26	306	302	332	357	348	381	397	396	380	93	3,318

Projections by School

Barley Sheaf Elementary School

Historical enrollments for Barley Sheaf from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 23. In general, enrollment declined through 2015-16 before stabilizing. In 2019-20, enrollment is 345, which is a loss of 99 students from the 2010-11 enrollment of 444. In the baseline projections, enrollments are projected to slowly decrease beginning in 2021-22. In 2024-25, enrollment is projected to be 305, which would be a loss of 40 students from the 2019-20 enrollment. In the adjusted projections, enrollment is also projected to decrease beginning in 2021-22, albeit at a slower rate. In 2024-25, enrollment is projected to be 321, which would be a loss of 24 students from the 2019-20 enrollment.

Table 23
Historical and Projected Enrollments of Barley Sheaf Elementary School

Year	PK	К	1	2	3	4	SE ²	Total		
Historical ¹										
2010-11	10	78	77	90	81	102	6	444		
2011-12	0	66	79	78	91	85	10	409		
2012-13	0	66	72	74	74	88	17	391		
2013-14	0	64	72	69	75	77	18	375		
2014-15	0	65	66	71	69	75	7	353		
2015-16	0	55	69	63	71	69	4	331		
2016-17	0	76	53	60	66	77	4	336		
2017-18	0	67	76	53	70	68	4	338		
2018-19	0	79	67	74	56	70	4	350		
2019-20	0	62	77	66	73	61	6	345		
CSR 5-Yr. Ratios		1.0508 ³	0.9846	0.9571	1.0643	1.0510	0.01314			
		l	Projected	l – Basel	ine		•			
2020-21	0	62	61	74	70	77	5	349		
2021-22	0	54	61	58	79	74	4	330		
2022-23	0	67	53	58	62	83	4	327		
2023-24	0	57	66	51	62	65	4	305		
2024-25	0	63	56	63	54	65	4	305		
	Projected – Adjusted for Housing Growth									
2020-21	0	65	64	77	73	80	5	364		
2021-22	0	57	65	62	82	77	4	347		
2022-23	0	70	56	62	66	86	4	344		
2023-24	0	60	69	54	66	69	4	322		
2024-25	0	66	59	66	57	69	4	321		

Notes: ¹ Data as provided by the New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

² Self-contained special education enrollment/Ungraded students

³ Birth-to-kindergarten survival ratio based on birth data five years prior using the last four years of historical data.

⁴Average proportion of self-contained special education/Ungraded students with respect to PK-4 subtotals.

.Copper Hill Elementary School

Historical enrollments for Copper Hill from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 24. In general, enrollment declined through 2017-18 before reversing trend. In 2019-20, enrollment is 436, which is a loss of 171 students from the 2010-11 enrollment of 607. In the baseline projections, enrollments are projected to be fairly stable throughout the projection period, ranging from 423-451 students per year. In 2024-25, enrollment is projected to be 441, which would be similar to the 2019-20 enrollment. As there are no housing units planned in the Copper Hill attendance area, the baseline projections were not adjusted.

Table 24
Historical and Projected Enrollments of Copper Hill Elementary School

Year	PK	К	1	2	3	4	SE ²	Total	
Historical ¹									
2010-11	8	90	102	103	124	133	47	607	
2011-12	9	80	104	103	102	126	46	570	
2012-13	0	70	87	109	104	97	43	510	
2013-14	16	66	96	102	115	117	14	526	
2014-15	34	72	84	88	103	118	8	507	
2015-16	8	57	69	76	87	101	58	456	
2016-17	10	64	65	70	79	91	51	430	
2017-18	23	63	66	65	71	80	37	405	
2018-19	34	53	67	68	69	70	52	413	
2019-20	22	74	56	67	69	74	74	436	
CSR 5-Yr. Ratios		1.6240 ³	1.0729	1.0112	1.0325	1.0293	0.1459^4		
			Projected	l – Basel	ine				
2020-21	26	67	79	57	69	71	54	423	
2021-22	26	76	72	80	59	71	56	440	
2022-23	26	58	82	73	83	61	56	439	
2023-24	26	63	62	83	75	85	57	451	
2024-25	26	65	68	63	86	77	56	441	

Notes: ¹ Data as provided by the New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

.

² Self-contained special education enrollment/Ungraded students

³ Birth-to-kindergarten survival ratio based on birth data five years prior using the last three years of historical data.

⁴ Average proportion of self-contained special education/Ungraded students with respect to PK-4 subtotals.

Francis A. Desmares Elementary School

Historical enrollments for Desmares from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 25. In general, enrollments have been trending lower before increasing in the last two years. In 2019-20, enrollment is 462, which is a loss of 30 students from the 2010-11 enrollment of 492. In the baseline projections, enrollment is projected to slowly increase in the first three years of the projection period before stabilizing. In 2024-25, enrollment is projected to be 475, which would be a gain of 13 students from the 2019-20 enrollment. In the adjusted projections, enrollments are projected to increase due to a significant amount of proposed residential construction. In 2024-25, enrollment is projected to be 536, which would be a gain of 74 students from the 2019-20 enrollment.

Table 25
Historical and Projected Enrollments of Desmares Elementary School

Year	PK	K	1	2	3	4	SE ²	Total		
Historical ¹										
2010-11	0	85	90	110	91	96	20	492		
2011-12	0	98	96	88	108	91	2	483		
2012-13	0	89	105	96	93	111	1	495		
2013-14	0	64	101	103	98	89	0	455		
2014-15	0	101	81	97	104	89	2	474		
2015-16	0	68	100	86	93	101	0	448		
2016-17	0	84	58	101	82	102	0	427		
2017-18	0	85	83	66	108	83	1	426		
2018-19	0	92	80	90	67	117	1	447		
2019-20	0	90	96	101	95	78	2	462		
CSR 5-Yr. Ratios		1.2066 ³	0.9564	1.1237	1.0234	1.0891	0.0018^4			
			Projected	d – Basel	line					
2020-21	0	78	86	108	103	103	1	479		
2021-22	0	87	75	97	111	112	1	483		
2022-23	0	97	83	84	99	121	1	485		
2023-24	0	94	93	93	86	108	1	475		
2024-25	0	90	90	105	95	94	1	475		
	Projected – Adjusted for Housing Growth									
2020-21	0	88	96	118	113	113	1	529		
2021-22	0	98	95	117	131	132	1	574		
2022-23	0	107	94	104	119	141	1	566		
2023-24	0	104	103	104	106	128	1	546		
2024-25	0	100	100	115	106	114	1	536		

Notes: ¹ Data as provided by the New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

² Self-contained special education enrollment/Ungraded students

³ Birth-to-kindergarten survival ratio based on birth data five years prior using the last three years of historical data.

⁴ Average proportion of self-contained special education/Ungraded students with respect to PK-4 subtotals.

Robert Hunter Elementary School

Historical enrollments for Hunter from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 26. In general, enrollment declined through 2016-17 before reversing trend. In the last three years, there has been a gain of 50 students, which is likely due to the construction of Mountain View at Hunterdon. Despite the gain, enrollment in 2019-20 is still lower than in 2010-11 enrollment (449). In the baseline projections, enrollments are projected to slowly increase throughout the projection period. In 2024-25, enrollment is projected to be 448, which would be a gain of 50 students from the 2019-20 enrollment, and would be nearly identical to the 2010-11 enrollment. As there are no housing units planned in the Hunter attendance area, the baseline projections were not adjusted.

Table 26
<u>Historical and Projected Enrollments of Hunter Elementary School</u>

Year	PK	К	1	2	3	4	SE ²	Total		
Historical ¹										
2010-11	0	70	80	99	87	92	21	449		
2011-12	0	82	90	84	99	86	1	442		
2012-13	0	74	89	85	82	97	19	446		
2013-14	0	51	80	88	89	71	14	393		
2014-15	0	57	61	81	91	92	1	383		
2015-16	0	60	61	54	84	82	14	355		
2016-17	0	69	59	74	54	90	2	348		
2017-18	0	73	80	67	73	57	8	358		
2018-19	0	70	78	77	69	75	19	388		
2019-20	0	72	75	83	76	75	17	398		
CSR 5-Yr. Ratios		1.1914 ³	1.0707	1.0938	1.0008	1.0603	0.0332^4			
	Projected – Baseline									
2020-21	0	71	77	82	83	81	13	407		
2021-22	0	92	76	84	82	88	14	436		
2022-23	0	75	99	83	84	87	14	442		
2023-24	0	70	80	108	83	89	14	444		
2024-25	0	75	75	88	108	88	14	448		

Notes: ¹ Data as provided by the New Jersey Department of Education (http://www.nj.gov/education/data/enr/) and the Flemington-Raritan School District

² Self-contained special education enrollment/Ungraded students

³ Birth-to-kindergarten survival ratio based on birth data five years prior using the last three historical years of historical data.

⁴ Average proportion of self-contained special education/Ungraded students with respect to PK-4 subtotals.

Reading-Fleming Intermediate School

Historical enrollments for RFIS, from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 27. In general, enrollment has been declining since 2013-14. In 2019-20, enrollment is 657, which is a decline of 144 students from the 2010-11 enrollment of 801. In the baseline projections, enrollments are projected to remain relatively stable for the next two years before increasing in the last three years of the projection period. In 2024-25, enrollment is projected to be 737, which would be a gain of 80 students from the 2019-20 enrollment. In the adjusted projections, enrollments are projected to steadily increase throughout the projection period. In 2024-25, enrollment is projected to be 787, which would be a gain of 130 students from the 2019-20 enrollment.

Table 27
<u>Historical and Projected Enrollments of Reading-Fleming Intermediate School</u>

Year	5	6	SE ²	Total
	H	listorical ¹		
2010-11	389	395	17	801
2011-12	430	395	6	831
2012-13	394	430	10	834
2013-14	395	393	4	792
2014-15	371	407	4	782
2015-16	380	358	11	749
2016-17	369	373	9	751
2017-18	369	388	4	761
2018-19	292	382	8	682
2019-20	339	308	10	657
CSR 5-Yr. Ratios	1.0263 ³	1.0308	0.0119^4	
	Projec	ted – Baselir	ie	
2020-21	296	349	8	653
2021-22	341	305	8	654
2022-23	354	351	8	713
2023-24	361	365	9	735
2024-25	356	372	9	737
Pro	jected – Adju	sted for Hous	sing Growth	
2020-21	306	358	8	672
2021-22	363	324	8	695
2022-23	378	374	8	760
2023-24	385	390	9	784
2024-25	381	397	9	787

Notes: ¹Data as provided by the New Jersey Department of Education and the Flemington-Raritan School District (http://www.nj.gov/education/data/enr/)

²Self-contained special education enrollment/Ungraded students

³Grade 4-5 ratio based on aggregated 4th grade enrollments of elementary schools

⁴Average proportion of self-contained special education/Ungraded students with respect to 5-6 subtotals

J.P. Case Middle School

Historical enrollments for Case, from 2010-11 to 2019-20, and projected enrollments from 2020-21 to 2024-25, are shown in Table 28. Enrollments have been fairly stable in the last four years, ranging from 767-786. In 2019-20, enrollment is 775, which is a decline of 57 students from the 2010-11 enrollment of 832. In the baseline projections, enrollments are projected to decline for three years before reversing trend. In 2024-25, enrollment is projected to be 736, which would be a loss of 39 students from the 2019-20 enrollment. In the adjusted projections, enrollments are projected to decline for the next two years before reversing trend. In 2024-25, enrollment is projected to be 785, which would be a gain of ten (10) students from the 2019-20 enrollment.

Table 28
Historical and Projected Enrollments of Case Middle School

Year	7	8	SE ²	Total
	H	listorical ¹		
2010-11	388	420	24	832
2011-12	408	389	11	808
2012-13	405	412	11	828
2013-14	436	410	1	847
2014-15	395	444	1	840
2015-16	408	389	15	812
2016-17	370	405	11	786
2017-18	385	374	8	767
2018-19	384	385	12	781
2019-20	383	388	4	775
CSR 5-Yr. Ratios	1.0145 ³	1.0035	0.0129^4	
	Projec	ted – Baselir	ne	
2020-21	312	384	9	705
2021-22	354	313	9	676
2022-23	309	355	9	673
2023-24	356	310	9	675
2024-25	370	357	9	736
Pro	jected – Adju	sted for Hou	sing Growth	
2020-21	318	389	9	716
	369	324	9	702
2021-22	309	321		
2021-22 2022-23	329	370	9	708
			9	708 718

Notes: ¹Data as provided by the New Jersey Department of Education and the Flemington-Raritan School District (http://www.nj.gov/education/data/enr/)

²Self-contained special education enrollment/Ungraded students

³Grade 6-7 ratio based on 6th grade enrollment at Reading-Fleming Intermediate School

⁴Average proportion of self-contained special education/Ungraded students with respect to 7-8 subtotals

Projected Enrollments by Grade Configuration

In Table 29 following, projected enrollments are shown by the elementary, intermediate, and middle school grade levels (PK-4, 5-6, and 7-8) in the Flemington-Raritan School District. Ungraded special education students were reassigned into each of the grade configurations.

For grades PK-4, enrollments are projected to increase through 2022-23 before reversing trend in both the baseline and adjusted projections. In the baseline projections, enrollment is projected to be 1,669 in 2024-25, which would be a gain of 28 students from the 2019-20 enrollment of 1,641. In the adjusted projections, enrollment is projected to be 1,746 in 2024-25, which would be a gain of 105 students from the 2019-20 enrollment.

For RFIS (grades 5-6) and Case (grades 7-8), the projected enrollments were discussed previously.

Table 29
Projected Enrollments for Grades PK-4, 5-6, and 7-8

Historical	PK-4	5-6	7-8							
2019-20	1,641	657	775							
	Baseline									
Projected	PK-4	5-6	7-8							
2020-21	1,658	653	705							
2021-22	1,689	654	676							
2022-23	1,693	713	673							
2023-24	1,675	735	675							
2024-25	1,669	737	736							
5-year Change	+28	+80	-39							
Ad	justed for Hou	using Growth								
2020-21	1,723	672	716							
2021-22	1,797	695	702							
2022-23	1,791	760	708							
2023-24	1,763	784	718							
2024-25	1,746	787	785							
5-year Change	+105	+130	+10							

Capacity Analysis

Table 30 shows the educational capacities of the school buildings in the Flemington-Raritan School District in comparison to both the current enrollments in 2019-20 and the enrollment projections in the 2024-25 school year. Since there were two sets of projections (baseline and adjusted for housing growth), only the adjusted projections are shown, as this would reflect the full impact on the school district if all of the proposed housing is constructed and occupied. Using the building capacities from the district's LRFP, the differences between capacity and current/projected number of students were computed. Positive values indicate available extra seating while negative values indicate inadequate seating (also known as "unhoused students"). It should be noted that the capacity values are not fixed and can change from year-to-year based on classroom usage. For instance, additional special education classes in a building would reduce the building capacity. On the other hand, districts with unhoused students can accommodate these children by increasing class sizes, which in turn increases the school's capacity. As such, the capacity of a school is not a fixed value and can be changed depending on how the building is used.

At the elementary level, seating surpluses currently exist in each school, with the greatest being at Copper Hill (+305). There is also a large number of surplus seats at RFIS (+478) and Case (+484).

By 2024-25, at the elementary level, it is anticipated that there will be surplus seats in each school, with the largest being at Copper Hill (+300). A large number of surplus seats is projected at RFIS (+348) and Case (+474).

Table 30
Capacity Analysis

School	Capacity ¹	Current Enrollment 2019-20	Difference	Projected Enrollment 2024-25	Difference
Barley Sheaf E.S. (K-4)	487	345	+142	321	+166
Copper Hill E.S. (PK-4)	741	436	+305	441	+300
Desmares E.S. (K-4)	590	462	+128	536	+54
Hunter E.S. (K-4)	508	398	+110	448	+60
Reading-Fleming I.S. (5-6)	1,135	657	+478	787	+348
Case M.S. (7-8)	1,259	775	+484	785	+474

Note: ¹Adjusted functional Capacity from the Flemington-Raritan School District Long Range Facility Plan (2019)

Geocoding and Mapping

Student addresses from the school district were geocoded or "pin-mapped" for 2015-16 and 2019-20 for comparison purposes. Figures 28 and 29 show the residential locations of all students (PK-8) in 2015-16 and 2019-20 respectively with respect to the municipal boundaries.

In order to show relative concentrations of where students live, student counts were aggregated by census block, which are small geographical areas derived from census tracts as created by the United States Census Bureau. Figures 30 and 31 show the number of students per census block in 2015-16 and 2019-20 respectively with respect to the elementary attendance areas. Since all census blocks are not the same size, the greatest number of students are typically located in the largest census blocks. The greatest number of children per census block (colored red) in 2015-16 was located in the Barley Sheaf, Copper Hill, and Desmares attendance areas. In 2019-20, using the same scale, most of the same census blocks had the greatest number of students, as well as several blocks in the Hunter attendance area. In general, the number of students per census block has not changed appreciably in the last four years.

Figures 32 and 33 show the density of students in square miles by census block. In an effort to control for the different census block sizes, the number of students in each census block was divided by the block's geographical area to determine the density of students (students per square mile). This was completed for both 2015-16 and 2019-20. The greatest student densities, which are shaded red, were scattered throughout the attendance areas, but were generally located within Flemington or just outside of the borough's borders in Raritan. In comparing the figures over time, the student densities have not changed appreciably.

To see which sections of Flemington and Raritan have the most children per housing unit (student yield), the number of children per census block was divided by the number of housing units in each census block as shown in Figures 34 and 35. This was completed for both 2015-16 and 2019-20. The greatest student yields, which are shaded red, were located primarily in the Copper Hill attendance area in 2015-16. In 2019-20, the greatest student yields were located in Copper Hill, as well as Hunter and Desmares. In comparing the figures over time (using the same scale), there are more census blocks shaded red in 2019-20, indicating that the number of students per housing unit has increased.

Figure 28
Flemington-Raritan School District – PK-8 Students 2015-16

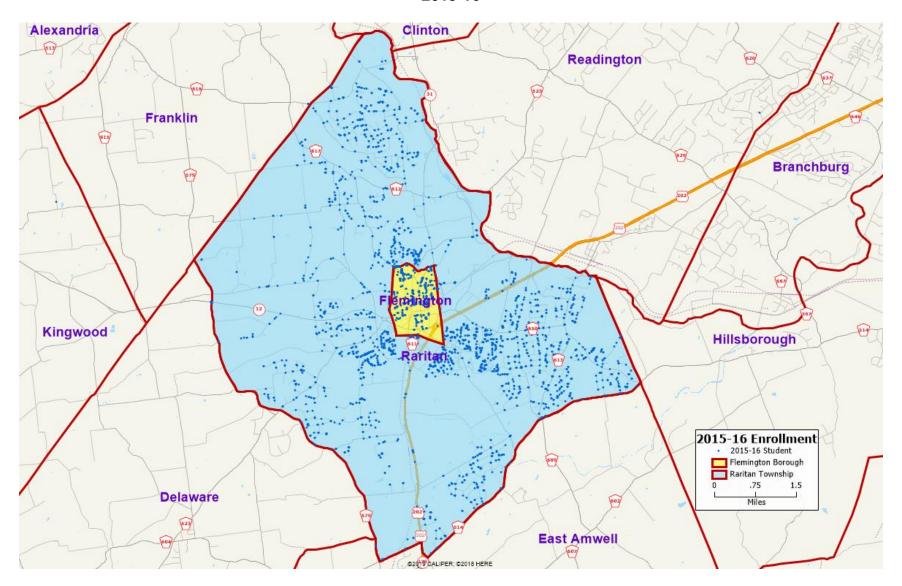


Figure 29
Flemington-Raritan School District – PK-8 Students 2019-20

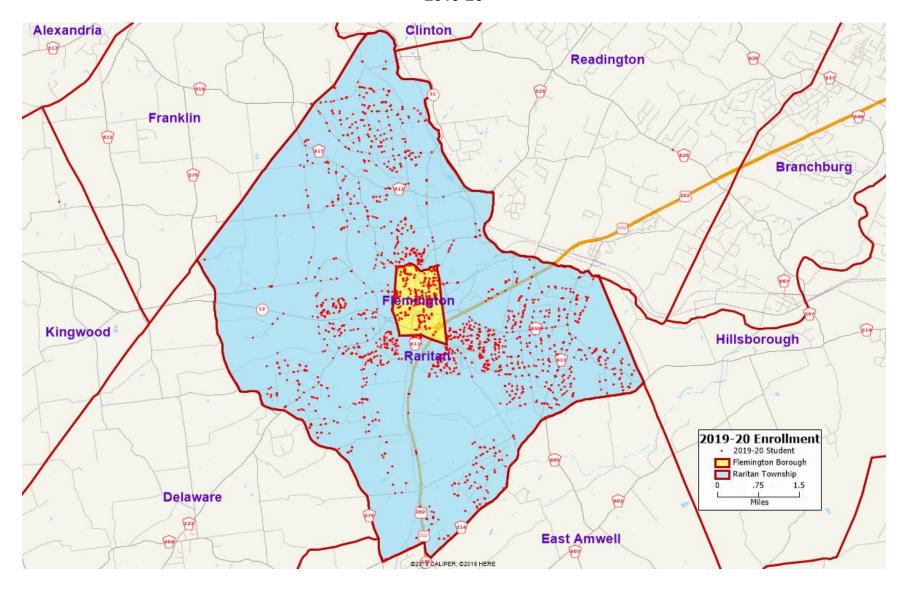


Figure 30
Flemington-Raritan School District Enrollment (PK-8) by Census Block 2015-16

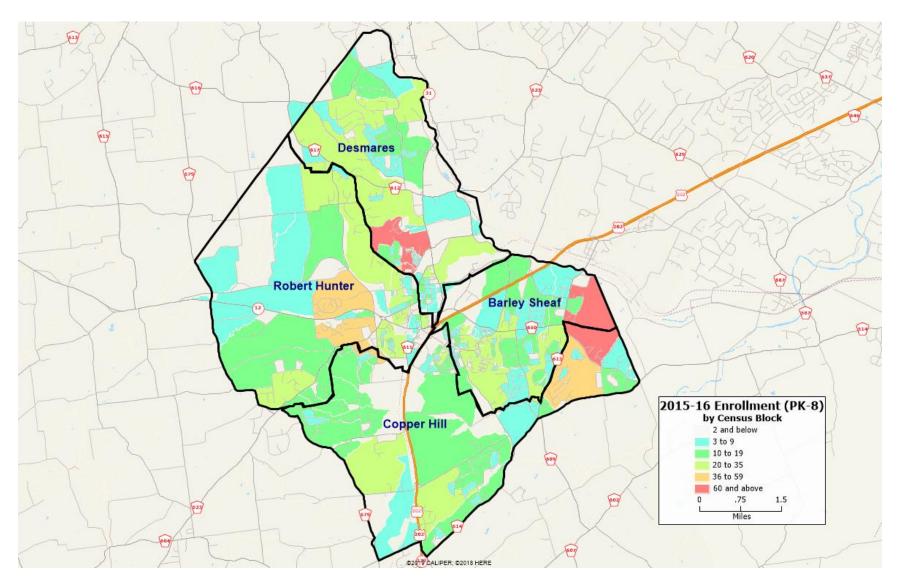


Figure 31
Flemington-Raritan School District Enrollment (PK-8) by Census Block 2019-20

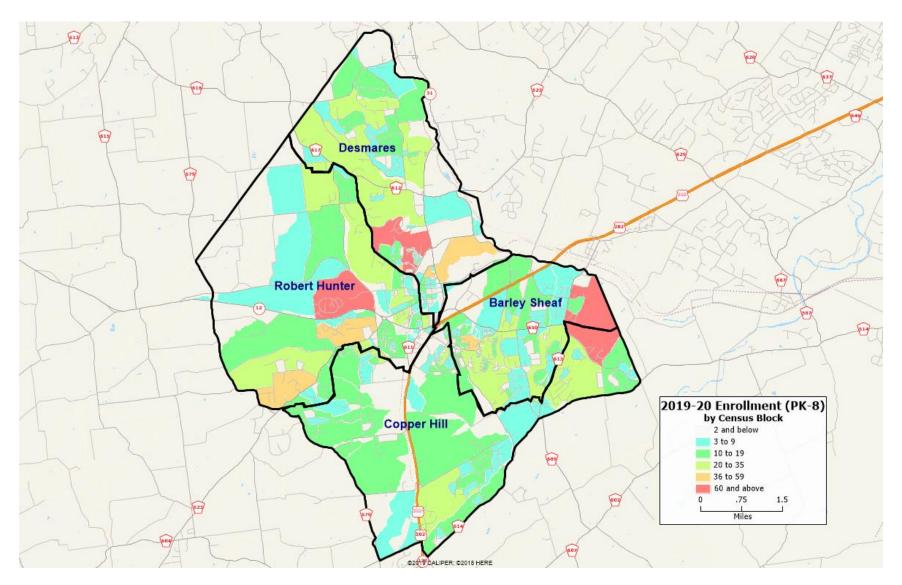


Figure 32
Flemington-Raritan School District Student Density (PK-8) by Census Block 2015-16

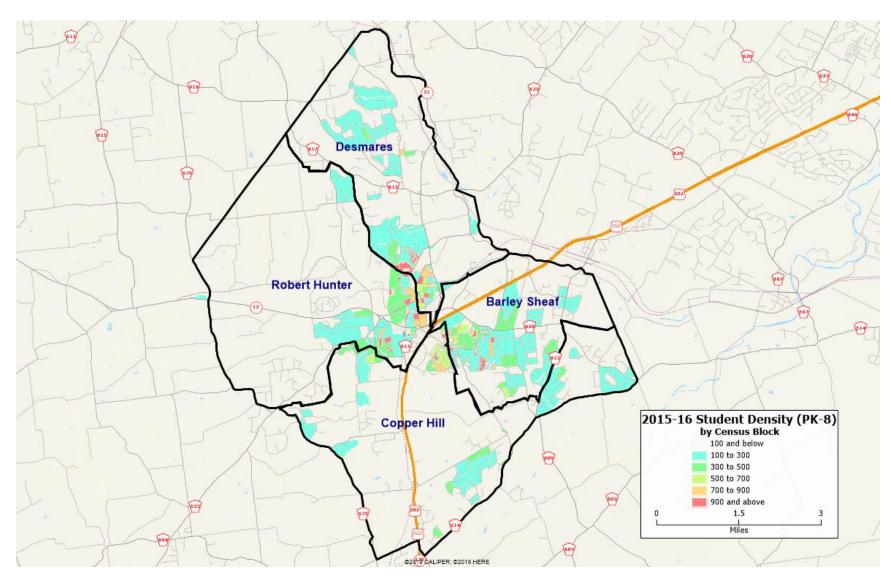


Figure 33
Flemington-Raritan School District Student Density (PK-8) by Census Block 2019-20

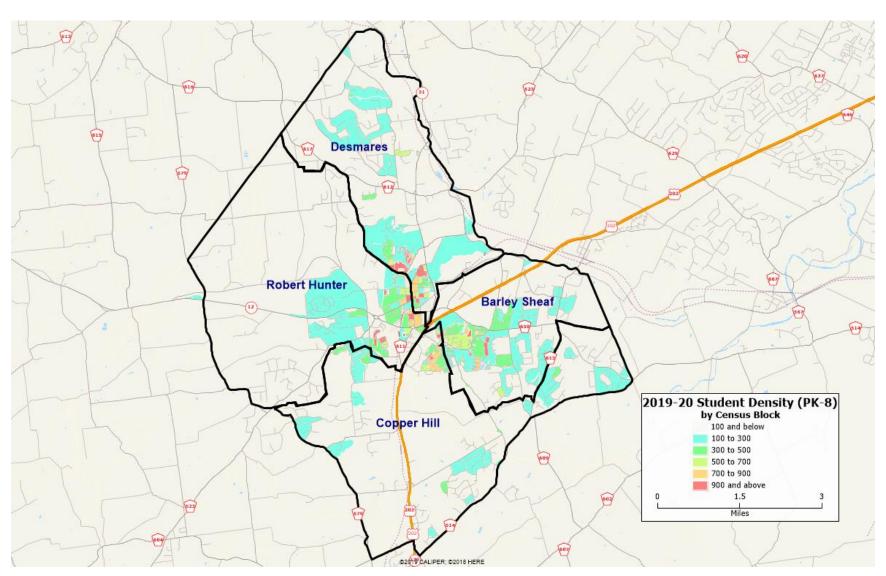


Figure 34
Flemington-Raritan School District Student Yield (PK-8) by Census Block 2015-16

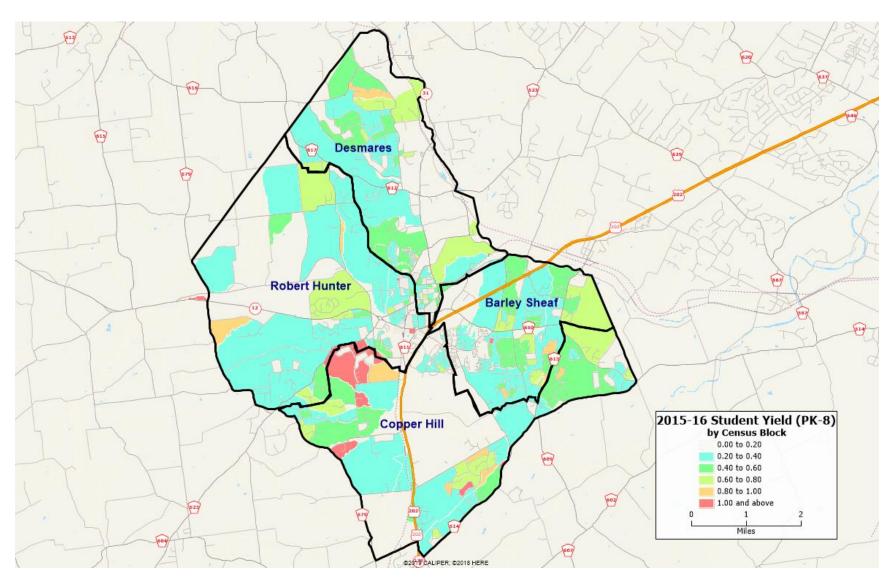
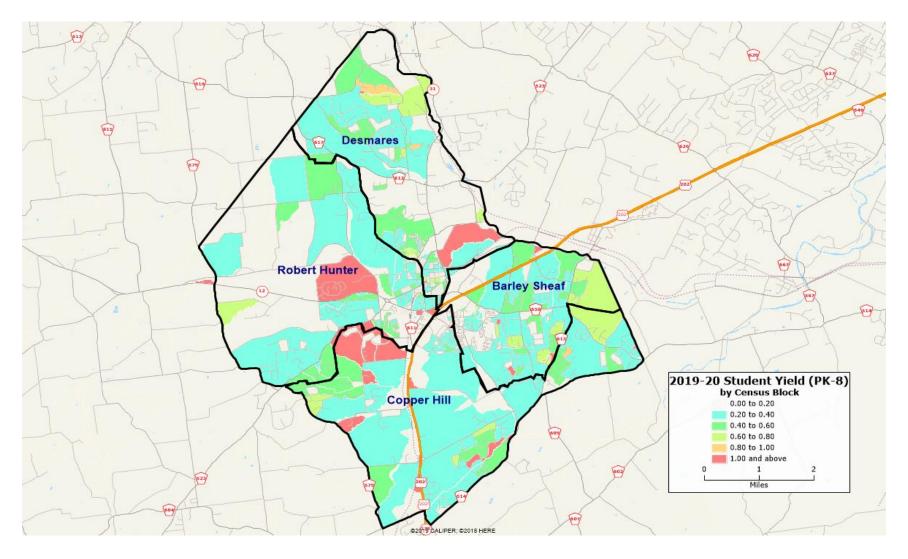


Figure 35
Flemington-Raritan School District Student Yield (PK-8) by Census Block 2019-20



Housing Turnover Analysis

In a completely independent analysis, historical housing turnover rates by length of ownership in Flemington and Raritan were used along with current student yields by length of ownership to project the number of students from 2019-2023¹⁰, a five-year period. To accomplish this task, housing turnover rates for detached single-family homes and townhouses/condominiums were analyzed separately. Mixed-use properties (commercial and residential combined) were removed from the database, as well as age-restricted homes. Apartments were also excluded since the length of time a tenant occupies a residence cannot be determined. Farms (if any) were also excluded from this investigation. To complete this analysis, three inputs were needed:

- 1. housing turnover rates by length of ownership,
- 2. current distribution of homes by length of ownership, and
- 3. student yields by length of ownership.

1. Detached Single-Family Homes

Turnover Rates

To compute turnover rates, parcel-level data were once again obtained from the Monmouth County Tax Board database, which possesses tax records for <u>all counties and municipalities</u> in the state. The parcel-level data includes the year the home was built, the most recent sale dates, and the sale prices. For detached single-family homes, the earliest sale date recorded in the database was 1989, providing 29 years of historical sale data through 2018.

Each cohort of homes was followed to see when it was sold next to compute the housing turnover rate by length of ownership. As an example, we will assume that a house was built in 1960 and its three most recent sale dates in the database were 1999, 2005, and 2009. We cannot assume that the first length of ownership is 39 years since the house may have been sold prior to 1989, the earliest year sales were recorded. The first length of ownership is six years (1999 to 2005) whereby the home then becomes part of the 2005 cohort. After being sold four years later in 2009, the house becomes part of the 2009 cohort. Each time a home is sold, it becomes part of a different cohort of homes. In this example, the house was in three separate cohorts. Turnover rates were then computed by dividing the number of homes sold at a particular length of ownership by the total number of homes in the cohort. For instance, in the 2002 cohort, 15 homes sold in the first year of ownership out of 431 homes, resulting in a turnover rate of 3.5%. An additional 26 homes were sold in the second year of ownership, resulting in a turnover rate of 6.0%. Turnover rates by length of ownership were computed and capped at 16 years for this cohort, since 2018 is the most recent year that sales data were available. Since the oldest sales were from 1989, computing turnover rates was possible on homes with lengths of ownership up to 29 years. Unfortunately, one of the drawbacks of the study was that sales data were not available prior to 1989, which prevented computation of turnover rates on long-held homes exceeding 29 years of ownership.

¹⁰ Students were projected beginning in 2019 since the last year of complete home sale data was in 2018.

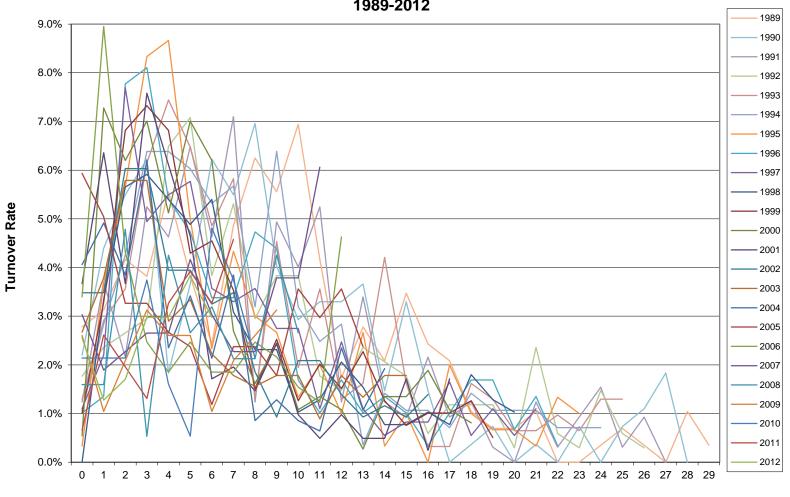
In short, for each year from 1989-2018, there is a distribution of turnover rates by length of ownership. Length of ownership data was not collected for homes built or sold in 2019 as the data were incomplete. Obviously, there is not much information for homes with recent sale dates, such as 2016, since these homes may not have been sold again or would only have turnover rates by length of ownership of up to two years.

Turnover rates by length of ownership also vary according to the housing market. For instance, when the housing market was very strong in the early 2000s, the turnover rate for the first year of ownership in Flemington and Raritan ranged from 6-7%, as sellers tried to maximize their housing profits or move up into a bigger home. However, in the period following the housing market crash of 2008, the turnover rate in the first year of ownership was 1-2%, which is a significantly lower rate, as homeowners had difficulty selling their homes or fewer homeowners put their homes up for sale.

Figure 36 shows the distribution of turnover rates by length of ownership for detached single-family homes in Flemington and Raritan from 1989-2012. Although data were collected from 1989-2018, turnover rates for homes from 2013-2018 are not shown, as they would only have maximum lengths of ownership of five years or less. Figure 37 shows the distribution of turnover rates by length of ownership for detached single-family homes using a 3-year moving average to smooth out unusual year-to-year variations in the turnover rates. While there is still a lot of variation even after using the three-year moving average, both figures show that turnover rates decrease as lengths of ownership increase.

In Figure 38, the weighted average turnover rates by length of ownership are shown, which combines length of ownership data from <u>all</u> of the historical years. This data takes into account all housing market cycles, both when the housing market was very strong, such as the early to mid-2000s, and when it was weak, such as the period after the banking and financial crises of 2008. As the figure shows, turnover rates are greatest in Flemington and Raritan in the third year of ownership (5.0%) before declining, as turnover rates are lowest for longer lengths of ownership. For homes with 13 or more years of ownership, average turnover rates were less than 2.0%. While it appears that turnover rates are rising at 21 years of ownership, this is misleading since there are very few homes at this length of ownership and one or two additional sales had a great impact on the turnover rate. Based on our experience with school districts that had 35-40 years of sales data available to compute lengths of ownership, turnover rates remain low, or decline further, at the longest lengths of ownership.

Figure 36
Flemington and Raritan Turnover Rates by Length of Ownership
Detached Single-Family Homes
1989-2012



Length of Ownership

Figure 37
Flemington and Raritan Turnover Rates by Length of Ownership 3-Year Moving Average for Detached Single-Family Homes 1991-2012

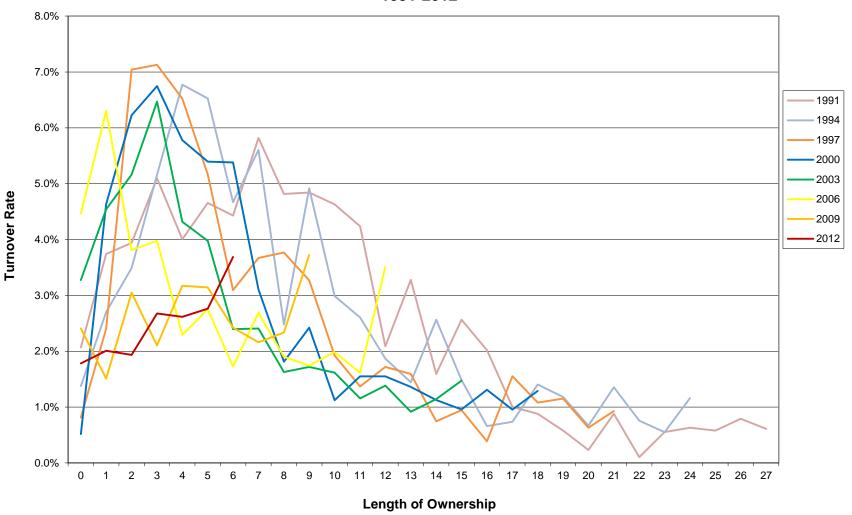
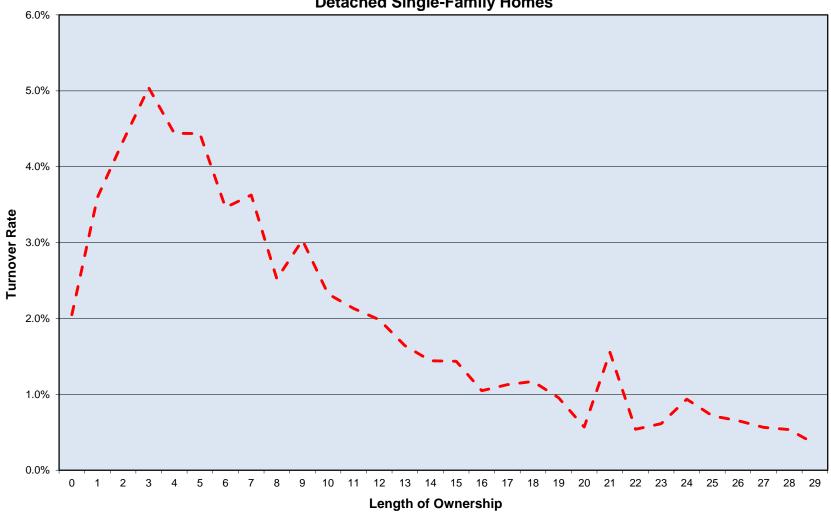


Figure 38
Historical Weighted-Average of Flemington and Raritan
Turnover Rates by Length of Ownership
Detached Single-Family Homes



Current Distribution of Homes by Length of Ownership

The second input variable, current length of ownership, was computed by simply subtracting the most recent sale date from 2018. Paper sales were excluded and the next most recent sale date was used instead. Table 31 and Figure 39 show the current length of ownership distribution for detached single-family homes in Flemington and Raritan. Since some homes did not have a sales date, they have been owned at least 30 years, as the oldest sales data were from 1989. In general, the number of homes slowly decreases through seven years of ownership before reversing trend and increasing through 14 years of ownership. After this time, the number of homes decreases through 29 years of ownership. A total of 845 homes (13.3%) have never been sold, which is a relatively large percentage of the housing population, and therefore have been owned 30 or more years. This is not shown in the figure, as it would skew the end of the distribution.

Student Yields by Length of Ownership

The third variable, student yields by length of ownership, was determined by linking the Flemington and Raritan parcel-level property databases with 2019-20 student address data, which was provided by the school district. Table 31 shows the student yields by length of ownership for detached single-family homes. It is expected that longer-held homes will have fewer children, as they would have graduated from the district. In 2019-20, there were 3,074 students in the Flemington-Raritan School District database. Of this number, we were able to match 1,972 Flemington and Raritan resident students (64.2%) to an address in the Flemington and Raritan property databases that was a detached single-family home. Additional children lived either in apartments, townhouses/condominiums, or were unmatched. Many of the unmatched students lived in mixed-use units or resided in other towns.

Figure 40, which is reproduced from earlier in the report, shows that student yields generally increase with length of ownership, peaking at 0.75 children per housing unit at eight (8) years of ownership. Student yields then decline through 17 years of ownership before stabilizing. After 17 years of ownership, student yields are typically below 0.15 children per home.

It should be noted that student yields by length of ownership may change over time. The distribution shown represents the student yields based on the 2019-20 enrollment data and should be considered as a "snapshot" in time. The student yield distribution can be affected by a number of factors, such as an inward migration of students due to a school district's excellent reputation, or perhaps a change in the age structure of the community where there may be more or less children as a percentage of the population. There is no way of predicting what the future student yield distribution by length of ownership will be.

Table 31
Student Yields by Current Length of Ownership in Flemington and Raritan
Detached Single-Family Homes

Years of Ownership	Housing Units	Students 2019-20	Student Yield
0	370	175	0.47
1	303	155	0.51
2	320	182	0.57
3	257	144	0.56
4	215	135	0.63
5	228	127	0.56
6	192	108	0.56
7	120	59	0.49
8	144	108	0.75
9	148	99	0.67
10	132	80	0.61
11	164	75	0.46
12	197	76	0.39
13	193	67	0.35
14	282	64	0.23
15	265	75	0.28
16	231	36	0.16
17	218	31	0.14
18	162	25	0.15
19	180	26	0.14
20	188	11	0.06
21	164	10	0.06
22	121	5	0.04
23	122	14	0.11
24	92	3	0.03
25	100	4	0.04
26	127	11	0.09
27	106	2	0.02
28	77	5	0.06
29	74	0	0.00
30+	845	60	0.07
Total	6,337	1,972	0.31

Figure 39
Flemington and Raritan Current Number of Detached Single-Family Homes by Length of Ownership

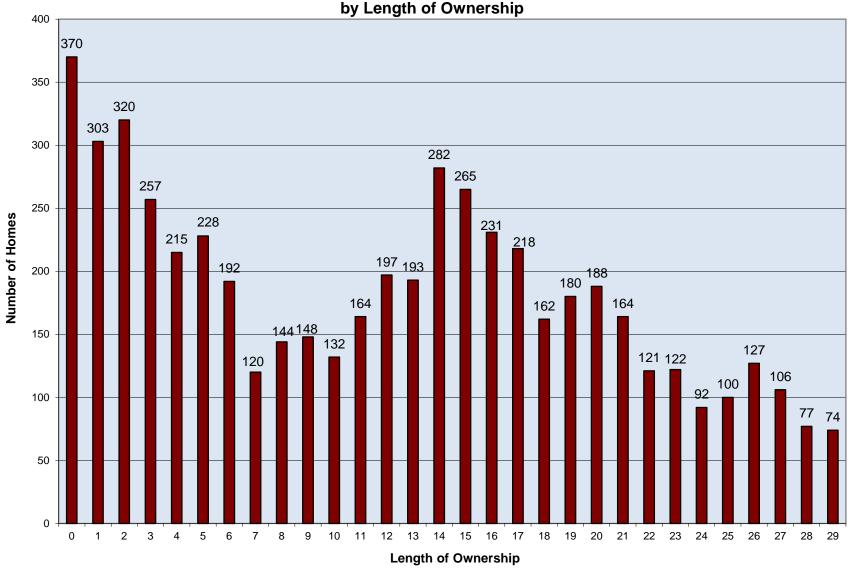
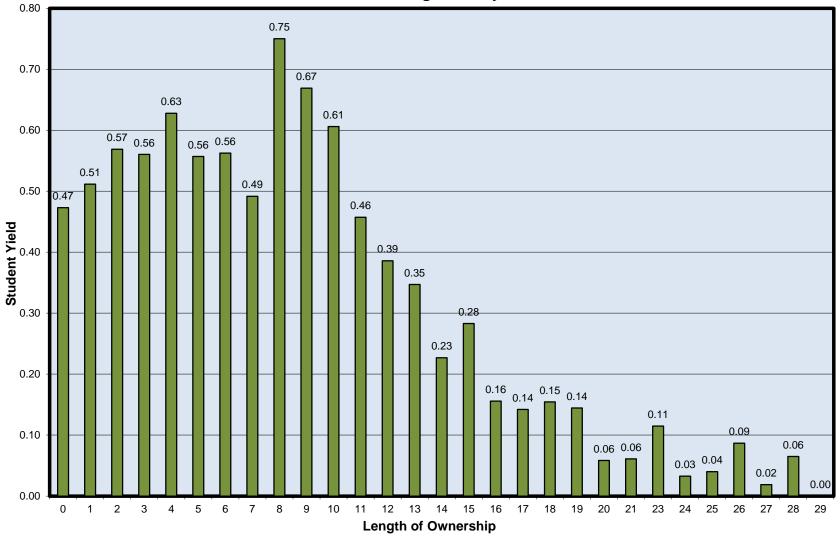


Figure 40
Flemington and Raritan Student Yields by Length of Ownership
Detached Single-Family Homes



2. Townhouses/Condominiums

Turnover Rates

Turnover rates were computed separately for townhouses/condominiums as it was expected that there would be different historical patterns of home selling compared to detached single-family homes. Parcel-level data and historical sales were also obtained from the Monmouth County Tax Board database. The earliest sale date utilized from the database was also 1989, providing 29 years of historical sale data through 2018. Figure 41 shows the distribution of turnover rates by length of ownership for townhouses/condominiums in Flemington and Raritan from 1989-2012. Although data were collected from 1989-2018, turnover rates for homes from 2013-2018 are not shown, as they would only have maximum lengths of ownership of five years or less.

Figure 42 shows the distribution of turnover rates by length of ownership for townhouses/condominiums in Flemington and Raritan from 1989-2012 using a 3-year moving average to smooth out unusual year-to-year variations in the turnover rates. Although data were collected from 1989-2018, turnover rates for homes sold from 2013-2018 are not shown, as they would only have maximum lengths of ownership of five years or less.

In Figure 43 following, weighted-average turnover rates by length of ownership for townhouses/condominiums are shown, which combines length of ownership data from <u>all</u> of the historical years. This data takes into account all housing market cycles, both when the housing market was very strong, such as the early to mid-2000s, and when it was weak, such as the period after the banking and financial crises of 2008. As the figure shows, turnover rates are greatest in Flemington and Raritan in the third year of ownership (7.9%) before declining, as turnover rates are lowest for longer lengths of ownership. For homes with 19 or more years of ownership, average turnover rates were typically less than 1.0%.

For both detached single-family homes and townhouses/condominiums, average turnover rates peaked in the third year of ownership. However, the average turnover rate for townhouses/condominiums at three years of ownership (7.9%) is higher than for detached single-family homes (5.0%). The average turnover rates by length of ownership for both detached single-family homes and townhouses/condominiums were very low (less than 2.0%) after 14 years of ownership.

Current Distribution of Homes by Length of Ownership

As discussed previously, the second input variable, current length of ownership, was computed by simply subtracting the most recent sale date from 2018. Figure 44 shows the current length of ownership distribution for 1,883 townhouses/condominiums in Flemington and Raritan. Unlike detached single-family homes, most homes had a sale date, indicating that the "lifespan" of a townhouse/condominium with an owner is much shorter as compared to a detached single-family home. The number of homes steadily decreases through seven years of ownership before reversing trend and increasing through 14 years of ownership. After this time, the number of homes decreases through 29 years of ownership. Only seven (7) homes (0.4%) have never been sold, and therefore have been owned 30 or more years.

Figure 41
Flemington and Raritan Turnover Rates by Length of Ownership
Townhouses/Condominiums
1989-2012

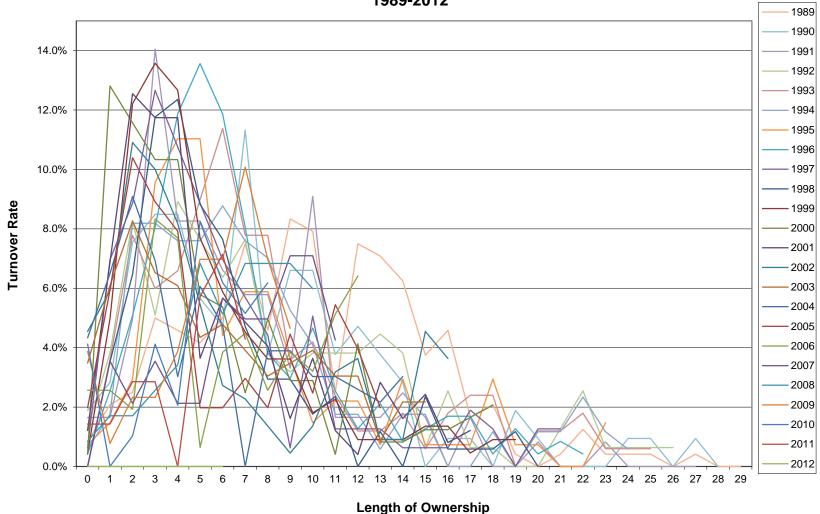


Figure 42
Flemington and Raritan Turnover Rates by Length of Ownership
3-Year Moving Average for Townhouses/Condominums
1991-2012

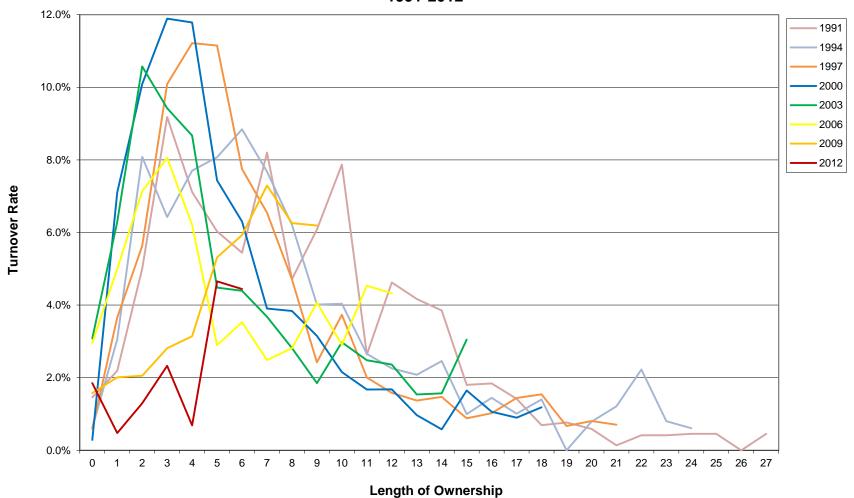


Figure 43
Historical Weighted Average of Flemington and Raritan
Turnover Rates by Length of Ownership
Townhouses/Condominiums

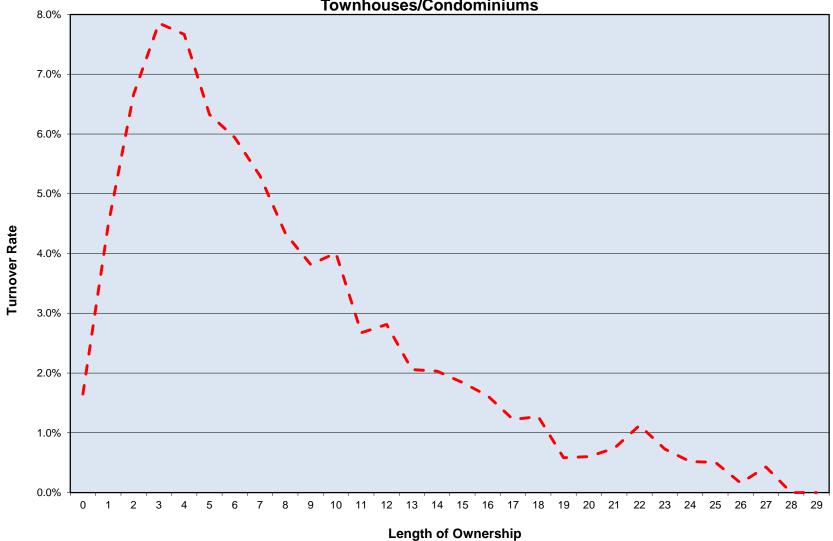
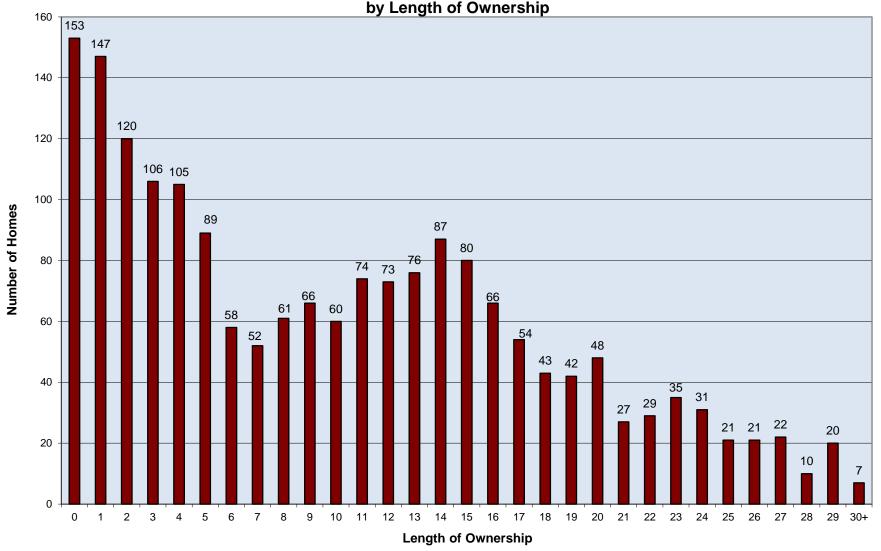


Figure 44
Flemington and Raritan Current Number of Townhouses/Condominiums by Length of Ownership



Student Yields by Length of Ownership

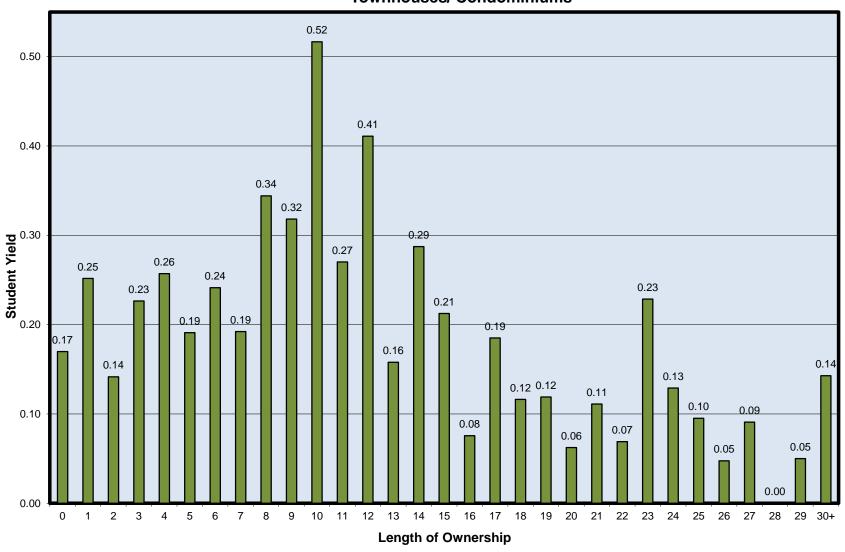
The third variable, student yields by length of ownership for townhouses/condominiums, was determined by linking the Flemington and Raritan parcel-level property databases with 2019-20 student address data, which was provided by the school district. Table 32 shows the student yields by length of ownership for the PK-8 student population. It is expected that longer-held homes will have fewer children, as they would have graduated from the district. We were able to match 401 Flemington and Raritan resident students in 2019-20 to an address in the Flemington and Raritan property databases that was a townhouse/condominium.

Figure 45 shows that, in general, student yields increase with length of ownership, peaking at 0.52 children per home at ten years of ownership, which is lower than the peak student yield for detached single-family homes (0.75). Student yields then slowly decline, in general, as length of ownership increases. After 15 years of ownership, student yields are substantially lower as many students would have graduated from the school district. After 15 years of ownership, student yields are typically below 0.20 children per home. While there are several spikes in the student yield at longer lengths of ownership, this is misleading as yields can rise (or fall) quite significantly with the addition (or subtraction) of just a few students.

Table 32
Student Yields by Current Length of Ownership in Flemington and Raritan
Townhouses/Condominiums

Years of Ownership	Housing Units	Students 2019-20	Student Yield
0	153	26	0.17
1	147	37	0.25
2	120	17	0.14
3	106	24	0.23
4	105	27	0.26
5	89	17	0.19
6	58	14	0.24
7	52	10	0.19
8	61	21	0.34
9	66	21	0.32
10	60	31	0.52
11	74	20	0.27
12	73	30	0.41
13	76	12	0.16
14	87	25	0.29
15	80	17	0.21
16	66	5	0.08
17	54	10	0.19
18	43	5	0.12
19	42	5	0.12
20	48	3	0.06
21	27	3	0.11
22	29	2	0.07
23	35	8	0.23
24	31	4	0.13
25	21	2	0.10
26	21	1	0.05
27	22	2	0.09
28	10	0	0.00
29	20	1	0.05
30+	7	1	0.14
Total	1,883	401	0.21

Figure 45
Flemington and Raritan Student Yields by Length of Ownership
Townhouses/ Condominiums



Enrollment Projections Based on Housing Turnover

Projecting enrollment based on housing turnover is a process very similar to the Cohort-Survival Ratio ("CSR") method, which is often used by demographers to project future student enrollments. As discussed previously, when using CSR, enrollments are projected based on historical "survival" ratios of students from one grade to the next. Average survival ratios are used to advance the current number of students into future grades. In the housing turnover method ¹¹, instead of students, the current length of home ownership distribution and historical turnover rates are used to project the future number of homes by either advancing homes to one more year of ownership, or if they are sold, returning them to zero years of ownership. For example, if there are 100 homes with eight years of ownership and the historical turnover rate for this length of ownership is 3%, 97 homes will gain another year of ownership while three homes will be sold and will have zero years of ownership in the next year. In the forthcoming section, this process of aging homes based on historical turnover rates was completed for a five-year period.

Table 33 shows the process in greater detail. The Flemington and Raritan historical average turnover rates by length of ownership for detached single-family homes are shown along with the current length of ownership distribution. The projected number of turnovers is computed (Column D) by multiplying the turnover rate at a length of ownership (Column B) by the number of homes at that same length of ownership (Column C). The number of homes that "survive" to be one year older is shown in Column E. Column F is identical to Column E except that the projected total number of homes sold in 2019, 127 from Column D, becomes the number of homes with zero years of ownership in the following year. However, if the average turnover rates are used in this analysis, the predicted annual number of home sales (127 as shown in the table) would be much lower than the number of homes with zero years of ownership (n = 370), which reflects the number of homes sold in 2018. The turnover rates reflect home selling patterns from an older historical period that may not be reflective of the current housing market. Therefore, the turnover rates were modified in the model to increase the number of sales to current levels.

¹¹The rationale behind this method was taken from *An Alternate K-12 Enrollment Forecast Method for Older Neighborhoods* by Shelley Lapkoff Ph.D. of Lapkoff and Gobalet Demographic Research, Inc.

Table 33
Sample of Process in Forecasting Length of Ownership

Α	В	С	D	E	F
Years of Ownership	Turnover Rate	Current Number of Homes by Length of Ownership In Year Y	Turnovers During Year Y (D = B*C)	Unsold Homes During Year Y Homes Now Have One More Year of Ownership (E = C-D)	Forecasted Length of Ownership Distribution (Year Y + 1)
0	2.0%	370	8		127 127
1	3.6%	303	11	362	362
2	4.3%	320	14	292	292
3	5.0%	257	13	306	/ 306
4	4.4%	215	10	244	244
5	4.4%	228	10	205	205
6	3.5%	192	7	218	218
7	3.6%	120	4	185	185
8	2.5%	144	4	116	116
9	3.0%	148	4	140	140
10	2.3%	132	3	144	144
11	2.1%	164	3	129	129
12	2.0%	197	4	161	161
13	1.6%	193	3	193	193
14	1.4%	282	4	190	190
15	1.4%	265	4	27/8	278
16	1.0%	231	2	2/ 61	261
17	1.1%	218	2	229	229
18	1.2%	162	2	/ 216	216
19	1.0%	180	2	/ 160	160
20	0.6%	188	1	/ 178	178
21	1.6%	164	3	187	187
22	0.5%	121	1	161	161
23	0.6%	122	1	120	120
24	0.9%	92	1	121	121
25	0.7%	100	1	91	91
26	0.7%	127	1	99	99
27	0.6%	106	1	126	126
28	0.5%	77	0	105	105
29	0.3%	74	0	77	77
30 and up	0.3%1	845	3	916	916
Total		6,337	127		6,337

Note: ¹Homes not sold since 1989 were assumed to have a future turnover rate of 0.3%.

Figure 46 shows the minimum, maximum, and average turnover rates for detached singlefamily homes in Flemington and Raritan for the last 29 years. While it is not likely that the communities will experience the maximum historical turnover rates at each length of ownership simultaneously going forward, it is likely it will experience turnover rates in between the average and maximum values. Figure 46 also shows a modified turnover rate, which reflects an increase of the historical average turnover rate by a constant so that each turnover rate is above the historical average turnover rate, yet is below the historical maximum turnover rate. In addition, one of the key variables affecting future enrollments in the housing turnover model is the number of long-held homes (20 or more years). As shown previously, student yields for detached single-family homes with 20 or more years of ownership in Flemington and Raritan were very low and typically less than 0.10. The greater the number of long-held homes in a district, the greater the probability that enrollment will decline since yields are low for long-held homes. For enrollments to be stable (or to increase), turnover rates would need to be higher for homes with 20 or more years of ownership. Therefore, the turnover rate for homes with 20-29 years of ownership was increased to 6.5% while the turnover rate was increased to 10.3% for homes that were never sold (30+ years). The higher turnover rate also simulates a greater percentage of baby boomers/empty nesters selling their homes than experienced currently. In this model, the predicted annual number of home sales ranges from 368-382, which is similar to the number of sales that occurred in 2018.

Figure 46
Historical Housing Turnover Rates in Flemington and Raritan
Detached Single-Family Homes
1989-2018

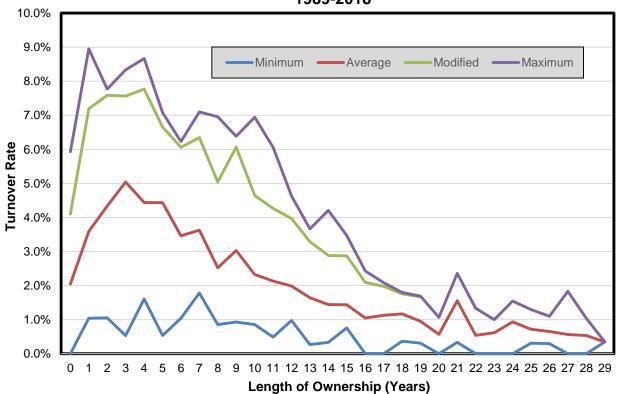


Table 34 shows the projected number of homes by length of ownership for detached single-family homes in Flemington and Raritan for 2019-2023 using the method described above, assuming that the turnover rates presented in the table will continue into the future.

Table 34

<u>Projected Number of Flemington and Raritan Homes by Length of Ownership</u>

<u>Detached Single-Family</u>

Years of Ownership	Average Turnover Rate	Turnover Rate Used	2018 (Actual)	2019	2020	2021	2022	2023
0	2.0%	4.1%	370	370	368	374	376	382
1	3.6%	7.2%	303	355	355	353	359	361
2	4.3%	7.6%	320	281	329	329	328	333
3	5.0%	7.6%	257	296	260	304	304	303
4	4.4%	7.8%	215	238	274	240	281	281
5	4.4%	6.7%	228	198	220	253	221	259
6	3.5%	6.1%	192	213	185	205	236	206
7	3.6%	6.3%	120	180	200	174	193	222
8	2.5%	5.0%	144	112	169	187	163	181
9	3.0%	6.1%	148	137	106	160	178	155
10	2.3%	4.6%	132	139	129	100	150	167
11	2.1%	4.3%	164	126	133	123	95	143
12	2.0%	4.0%	197	157	121	127	118	91
13	1.6%	3.3%	193	189	151	116	122	113
14	1.4%	2.9%	282	187	183	146	112	118
15	1.4%	2.9%	265	274	182	178	142	109
16	1.0%	2.1%	231	257	266	177	173	138
17	1.1%	2.0%	218	226	252	260	173	169
18	1.2%	1.8%	162	214	222	247	255	170
19	1.0%	1.7%	180	159	210	218	243	251
20	0.6%	6.5%	188	177	156	206	214	239
21	1.6%	6.5%	164	176	165	146	193	200
22	0.5%	6.5%	121	153	165	154	137	180
23	0.6%	6.5%	122	113	143	154	144	128
24	0.9%	6.5%	92	114	106	134	144	135
25	0.7%	6.5%	100	86	107	99	125	135
26	0.7%	6.5%	127	93	80	100	93	117
27	0.6%	6.5%	106	119	87	75	93	87
28	0.5%	6.5%	77	99	111	81	70	87
29	0.3%	6.5%	74	72	93	104	76	65
30 and up	0.3%	10.3%	845	827	809	813	826	812
Total			6,337	6,337	6,337	6,337	6,337	6,337

Table 35 shows the projected number of Flemington and Raritan students by length of ownership for detached single-family homes from 2019-2023. This was computed by multiplying the projected number of homes by length of ownership with the student yields by length of ownership. After summing the projected number of students at each length of ownership, the output is the total number of students residing in detached single-family homes in each year. As the

table shows, the total number of students is projected to slowly increase throughout the five-year projection period.

Table 35

Projected Number of Flemington and Raritan Students

Based on Length of Ownership and Student Yields

Detached Single-Family Homes

Years of Ownership	Student Yield	2019	2020	2021	2022	2023
0	0.47	175	174	177	178	181
1	0.51	182	182	181	184	185
2	0.57	160	187	187	187	189
3	0.56	166	146	170	170	170
4	0.63	149	172	151	176	176
5	0.56	110	123	141	123	144
6	0.56	120	104	115	133	116
7	0.49	89	98	86	95	109
8	0.75	84	127	140	122	136
9	0.67	92	71	107	119	104
10	0.61	84	78	61	91	101
11	0.46	58	61	56	43	65
12	0.39	61	47	49	46	35
13	0.35	66	52	40	42	39
14	0.23	42	42	33	25	27
15	0.28	78	52	50	40	31
16	0.16	40	41	28	27	22
17	0.14	32	36	37	25	24
18	0.15	33	34	38	39	26
19	0.14	23	30	31	35	36
20	0.06	10	9	12	13	14
21	0.06	11	10	9	12	12
22	0.04	6	7	6	6	7
23	0.11	13	16	18	17	15
24	0.03	4	3	4	5	4
25	0.04	3	4	4	5	5
26	0.09	8	7	9	8	10
27	0.02	2	2	1	2	2
28	0.06	6	7	5	5	6
29	0.00	0	0	0	0	0
30 and up	0.07	59	57	58	59	58
Total		1,966	1,979	2,004	2,032	2,049

A similar process was used to project the number of homes by length of ownership for townhouses/condominiums from 2019-2023. Like the detached single-family homes, if the average turnover rates were used, the predicted annual number of home sales (approximately 55-66 per year) would be much lower than that which occurred in 2018 (153). To increase the number of sales to current levels, and to reduce the number of homes with 20 or more years of ownership that have low student yields, a constant was added to the average turnover rate for 0-19 years of ownership so that the turnover rate approached the maximum turnover rate but did not exceed it. In addition, the turnover rate for homes with 20-29 years of ownership was increased to 9.5% while the turnover rate was increased to 7.0% for homes that were never sold (30+ years). Figure 47 shows the minimum, maximum, and average turnover rates for townhouses/condominiums in Flemington and Raritan for the last 29 years.

Figure 47
Historical Housing Turnover Rates in Flemington and Raritan
Townhouse/Condominiums
1989-2018

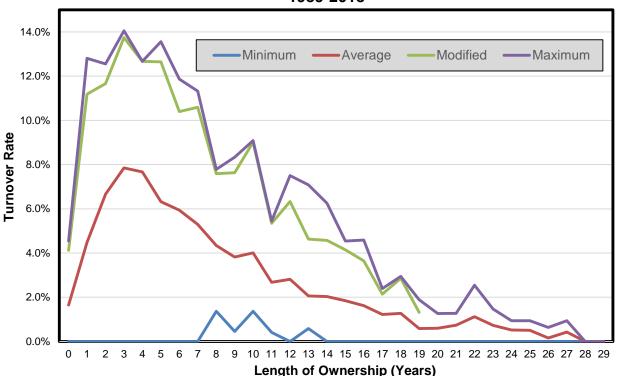


Table 36 shows the projected number of homes by length of ownership for townhouses/condominiums in Flemington and Raritan for 2019-2023, assuming that the turnover rates presented in the table will continue into the future.

Table 37 shows the projected number of Flemington and Raritan students for townhouses/condominiums by length of ownership from 2019-2023. Unlike the projections for detached single-family homes, enrollment for townhouses/condominiums is projected to slowly decline throughout the five-year period.

Table 36
Projected Number of Flemington and Raritan Homes by Length of Ownership
<u>Townhouses/Condominiums</u>

Years of Ownership	Average Turnover Rate	Turnover Rate Used	2018 (Actual)	2019	2020	2021	2022	2023
0	1.6%	4.1%	153	153	152	153	152	153
1	4.5%	11.2%	147	147	147	146	147	146
2	6.7%	11.7%	120	131	131	131	130	131
3	7.9%	13.7%	106	106	116	116	116	115
4	7.7%	12.7%	105	91	91	100	100	100
5	6.3%	12.7%	89	92	79	79	87	87
6	5.9%	10.4%	58	78	80	69	69	76
7	5.3%	10.6%	52	52	70	72	62	62
8	4.3%	7.6%	61	46	46	63	64	55
9	3.8%	7.6%	66	56	43	43	58	59
10	4.0%	9.0%	60	61	52	40	40	54
11	2.7%	5.3%	74	55	56	47	36	36
12	2.8%	6.3%	73	70	52	53	44	34
13	2.1%	4.6%	76	68	66	49	50	41
14	2.0%	4.6%	87	72	65	63	47	48
15	1.8%	4.1%	80	83	69	62	60	45
16	1.6%	3.6%	66	77	80	66	59	58
17	1.2%	2.1%	54	64	74	77	64	57
18	1.3%	2.9%	43	53	63	72	75	63
19	0.6%	1.3%	42	42	51	61	70	73
20	0.6%	9.5%	48	41	41	50	60	69
21	0.7%	9.5%	27	43	37	37	45	54
22	1.1%	9.5%	29	24	39	33	33	41
23	0.7%	9.5%	35	26	22	35	30	30
24	0.5%	9.5%	31	32	24	20	32	27
25	0.5%	9.5%	21	28	29	22	18	29
26	0.2%	9.5%	21	19	25	26	20	16
27	0.4%	9.5%	22	19	17	23	24	18
28	0.0%	9.5%	10	20	17	15	21	22
29	0.0%	9.5%	20	9	18	15	14	19
30 and up	0.0%	7.0%	7	25	31	45	56	65
Total			1,883	1,883	1,883	1,883	1,883	1,883

Table 37

Projected Number of Flemington and Raritan Students

Based on Length of Ownership and Student Yields

Townhouses/Condominiums

Years of Ownership	Student Yield	2019	2020	2021	2022	2023
0	0.17	26	26	26	26	26
1	0.25	37	37	37	37	37
2	0.14	19	19	19	18	19
3	0.23	24	26	26	26	26
4	0.26	23	23	26	26	26
5	0.19	18	15	15	17	17
6	0.24	19	19	17	17	18
7	0.19	10	13	14	12	12
8	0.34	16	16	22	22	19
9	0.32	18	14	14	18	19
10	0.52	32	27	21	21	28
11	0.27	15	15	13	10	10
12	0.41	29	21	22	18	14
13	0.16	11	10	8	8	6
14	0.29	21	19	18	14	14
15	0.21	18	15	13	13	10
16	0.08	6	6	5	4	4
17	0.19	12	14	14	12	11
18	0.12	6	7	8	9	7
19	0.12	5	6	7	8	9
20	0.06	3	3	3	4	4
21	0.11	5	4	4	5	6
22	0.07	2	3	2	2	3
23	0.23	6	5	8	7	7
24	0.13	4	3	3	4	3
25	0.10	3	3	2	2	3
26	0.05	1	1	1	1	1
27	0.09	2	2	2	2	2
28	0.00	0	0	0	0	0
29	0.05	0	1	1	1	1
30 and up	0.14	4	4	6	8	9
Total		395	377	377	372	371

Table 38 combines the projected number of students from detached single-family homes and townhouses/condominiums with the number of resident students living in apartments, non-resident students, resident students living in mixed-use units, and those resident students that were unmatched to derive the school district's total enrollment. It was also assumed these latter values would be constant throughout the projection period. The sum of the students in these different categories yields the district's total enrollment. As the table shows, the total number of students is projected to slowly increase over the five-year projection period, gaining approximately 60 students, with the assumption that the turnover rates of long-held homes would be much higher than experienced historically.

Table 38

<u>Projected Number of Students</u>

<u>Based on Length of Ownership and Student Yields</u>
2019-2023

	2019	2020	2021	2022	2023
Detached Single-Family Homes	1,966	1,979	2,004	2,032	2,049
Townhouses/Condominiums	395	377	377	372	371
Apartments (constant)	415	415	415	415	415
Mixed-Use, Non-Residents, Unmatched (constant)	286	286	286	286	286
Total	3,062	3,057	3,082	3,105	3,121

The results assume that student yields and turnover rates by length of ownership will remain constant over the five-year projection period. As previously stated, student yields are likely to change over time, but there is no way of projecting what they might be. Similarly, the model assumes that turnover rates by length of ownership will remain constant over the five-year projection period. However, previous figures have showed the variability in the turnover rates with length of ownership.

It should be clearly stated that the purpose of this analysis is <u>not</u> to use the projections for future planning since the CSR method is the most accurate method available. Rather, it is an independent process to see whether future enrollments may be affected by housing turnover. In this analysis, it appears enrollment is likely to increase due to housing turnover, controlling for all other factors, such as fertility rates, births, inward migration, or new residential construction. However, it should be noted that the model utilized assumed turnover rates that were significantly higher than the average turnover rates and therefore may be considered as a "worst case scenario."