# FOR THE FAIRFIELD PUBLIC SCHOOLS



September 20,2022

#### STATISTICAL FORECASTING

- Provide demographic services for school districts in the New York-New Jersey metropolitan area since 1998.
- Performed demographic studies for approximately 200 school districts in NY & NJ.
- Demographic consultant for the NYC Public Schools since 2006.

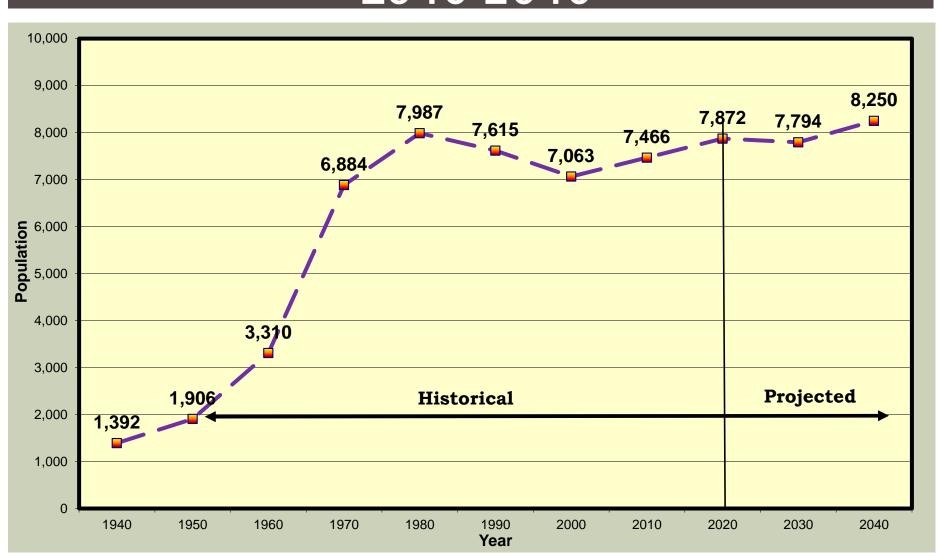
#### RICHARD S. GRIP ED.D.

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

### PURPOSE OF THE STUDY MAY 2022

- □ Project grade-by-grade enrollments from 2022-23 through 2026-27, a 5-year period.
- Analyze community population trends and age structure, birth, and fertility rates
- Examine historical enrollment trends, both districtwide and by grade configuration (PK-3 and 4-6)
- Research new housing starts and the impact on school district
- Compare building capacities to current and projected enrollments
- Electronically "pin-map" student addresses from the 2016-17 and 2021-22 school years to show the relative concentrations of where students live

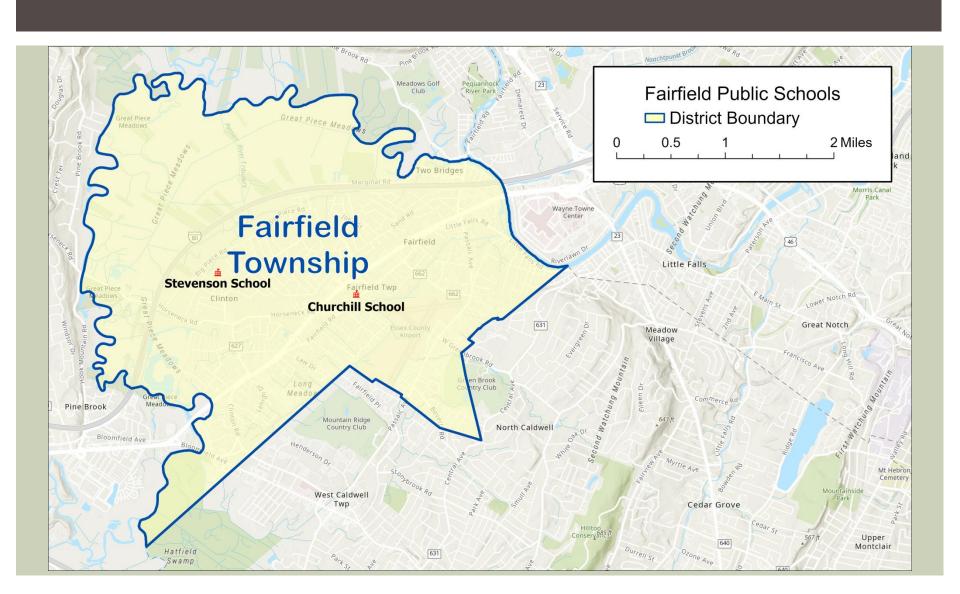
# FAIRFIELD HISTORICAL AND PROJECTED POPULATIONS 1940-2040



# FAIRFIELD DEMOGRAPHIC PROFILE

- 83.4% White, 9.3% Hispanic, & 4.5% Asian in 2020 (increasing Hispanic and Asian populations and decreasing White population from 2010)
- $\square$  Median age = 49.7 years (NJ = 40.0 years)
- □ 16.0% of population is foreign-born (NJ=22.7%). Poland and Italy are largest sources.
- Bachelor's Degree or Higher = 50.8% (NJ = 40.7%)
- Median household income = \$96K (NJ = \$85K)
- 2,950 housing units, of which 88% are 1-unit homes (attached or detached)
- 16% of housing units are renter-occupied (NJ = 36.0%).
- Median value of owner-occupied unit = \$501K

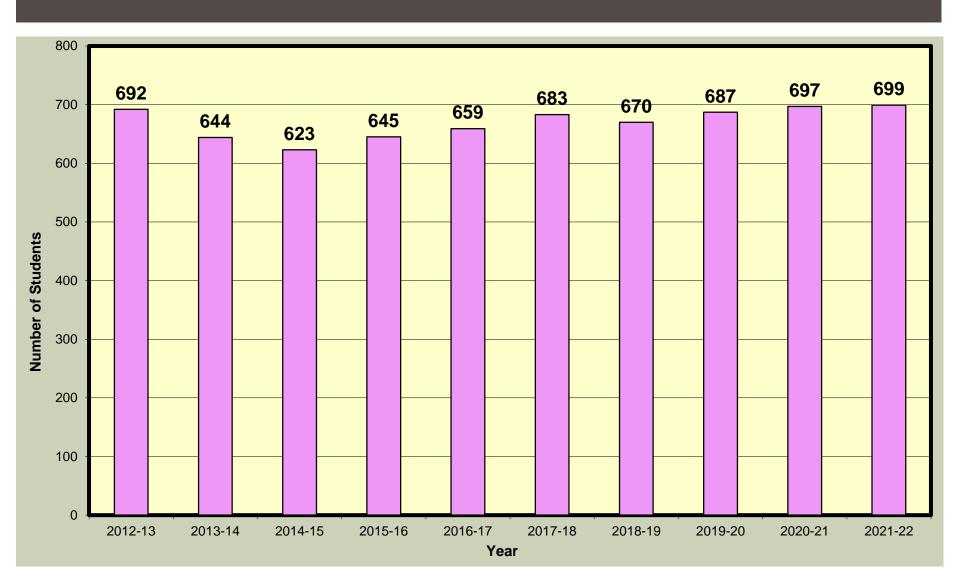
#### **SCHOOL LOCATIONS**



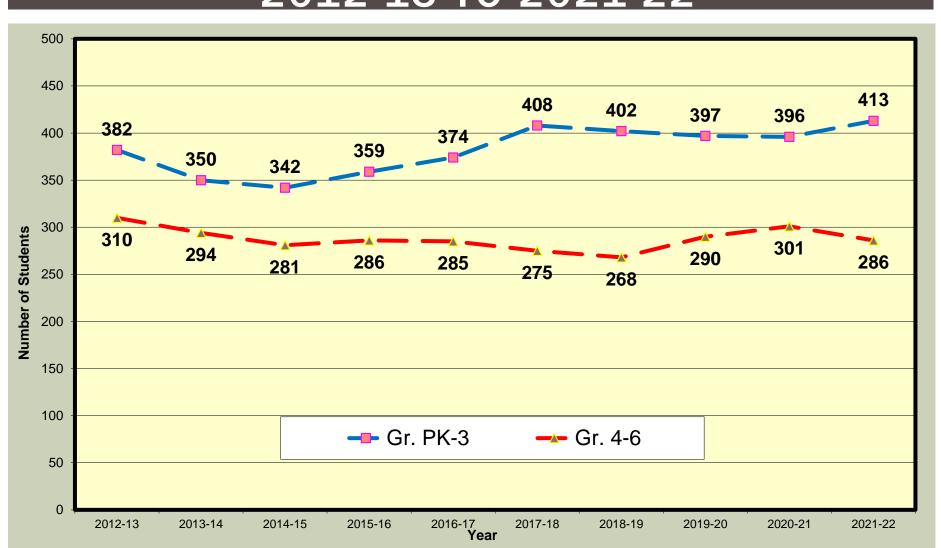
#### HISTORICAL ENROLLMENT TRENDS

- □ District's 2021-22 enrollment (10/15/21) was 699.
- Enrollments slowly increased in last 7 years.
- 2012-13 enrollment = 692
- □ Cohort-Survival Ratio Method (CSR) was used to project enrollments five years into the future.

#### HISTORICAL ENROLLMENTS (PK-6) 2012-13 TO 2021-22



# HISTORICAL ENROLLMENTS BY GRADE CONFIGURATION 2012-13 TO 2021-22



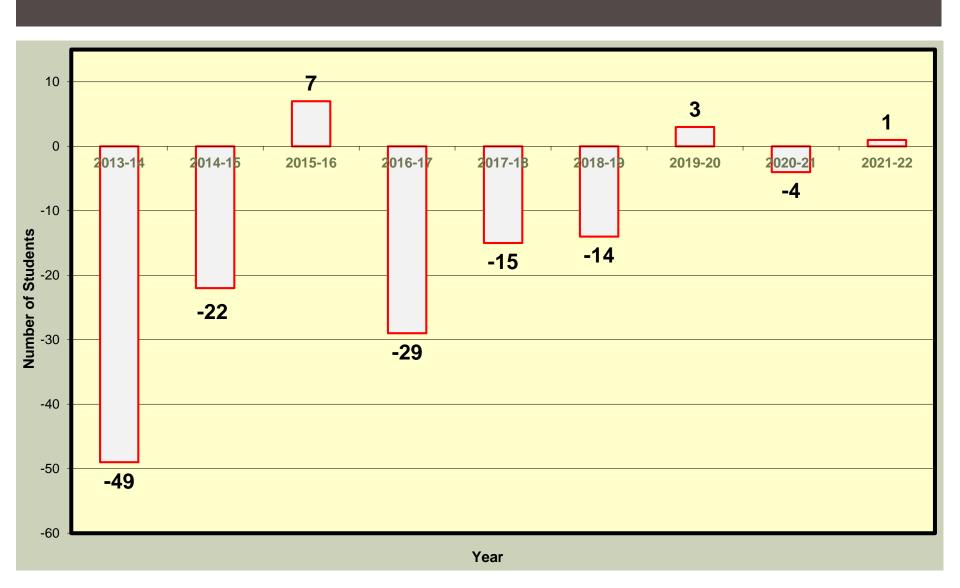
### ENROLLMENT PROJECTION METHOD COHORT SURVIVAL RATIO

- Ratios are calculated for each grade progression. (Ex. 100 1<sup>st</sup> graders in 2020-21 become 95 2<sup>nd</sup> graders in 2021-22 = 0.95)
- □ Ratios above 1.000 = inward migration, below 1.000 = outward migration
- Survival ratios were computed for ten historical years. All 7 average ratios (5-year or 6-year trends) were <u>above</u> 1.000, indicating net inward migration.
- Average ratios were applied to current enrollments to project future enrollments.

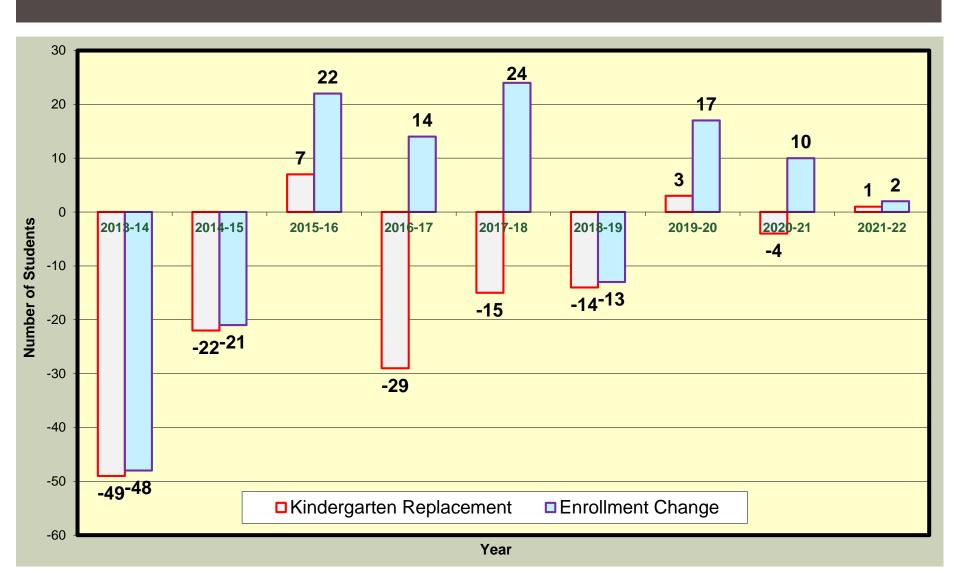
#### KINDERGARTEN REPLACEMENT

- Negative kindergarten replacement (KR) has occurred in 6 of last 9 years.
- Negative KR- Number of entering kindergarten students is less than number of graduating 6<sup>th</sup> grade students from prior year.
- □ Positive KR- Number of entering kindergarten students is greater than number of graduating 6<sup>th</sup> grade students from prior year.
- ☐ In last 3 years, KR magnitudes have been fairly small indicating sizes of entering and exit grades are fairly similar.

# HISTORICAL KINDERGARTEN REPLACEMENT



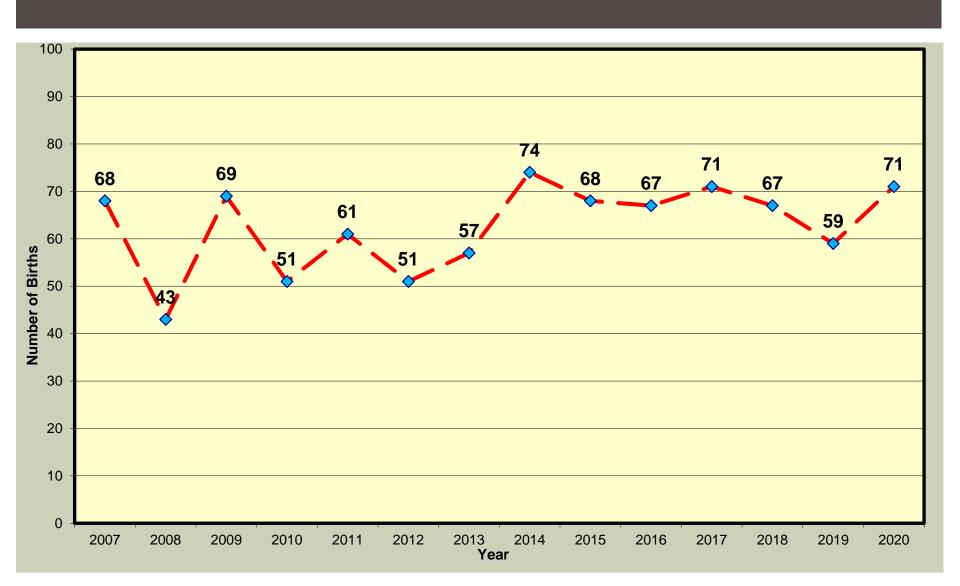
### TOTAL ENROLLMENT CHANGE VS. KINDERGARTEN REPLACEMENT



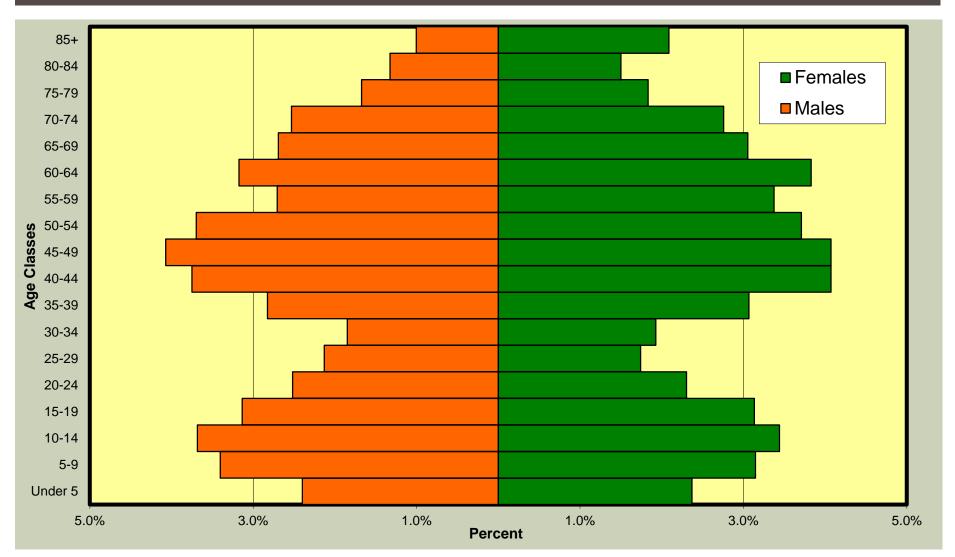
# BIRTH COUNTS AND BIRTH-TO-KINDERGARTEN SURVIVAL RATIOS

| Birth Year         Number of Births Fairfield Township         Kindergarten Students Five Years Later         Birth-to-Kindergarter Survival Ratio           2007         68         82         1.206           2008         43         64         1.488           2009         69         75         1.087           2010         51         102         2.000           2011         61         71         1.164           2012         51         80         1.569           2013         57         92         1.614           2014         74         100         1.351           2015         68         76         1.118           2016         67         97         1.448           2017         71         N/A         N/A           2018         67         N/A         N/A           2019         59         N/A         N/A           2020         71         N/A         N/A |            |    |     |   |
|--|------------|----|-----|---|
| 2008       43       64       1.488         2009       69       75       1.087         2010       51       102       2.000         2011       61       71       1.164         2012       51       80       1.569         2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A   | Birth Year |    |     | Birth-to-Kindergarten<br>Survival Ratio |
| 2009       69       75       1.087         2010       51       102       2.000         2011       61       71       1.164         2012       51       80       1.569         2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A  | 2007       | 68 | 82  | 1.206                                   |
| 2010       51       102       2.000         2011       61       71       1.164         2012       51       80       1.569         2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A   | 2008       | 43 | 64  | 1.488                                   |
| 2011       61       71       1.164         2012       51       80       1.569         2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A   | 2009       | 69 | 75  | 1.087                                   |
| 2012       51       80       1.569         2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A  | 2010       | 51 | 102 | 2.000                                   |
| 2013       57       92       1.614         2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A   | 2011       | 61 | 71  | 1.164                                   |
| 2014       74       100       1.351         2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A  | 2012       | 51 | 80  | 1.569                                   |
| 2015       68       76       1.118         2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A  | 2013       | 57 | 92  | 1.614                                   |
| 2016       67       97       1.448         2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A   | 2014       | 74 | 100 | 1.351                                   |
| 2017       71       N/A       N/A         2018       67       N/A       N/A         2019       59       N/A       N/A  | 2015       | 68 | 76  | 1.118                                   |
| 2018       67       N/A       N/A         2019       59       N/A       N/A  | 2016       | 67 | 97  | 1.448                                   |
| 2019 59 N/A N/A  | 2017       | 71 | N/A | N/A                                     |
|  | 2018       | 67 | N/A | N/A                                     |
| 2020 71 N/A N/A  | 2019       | 59 | N/A | N/A                                     |
|  | 2020       | 71 | N/A | N/A                                     |

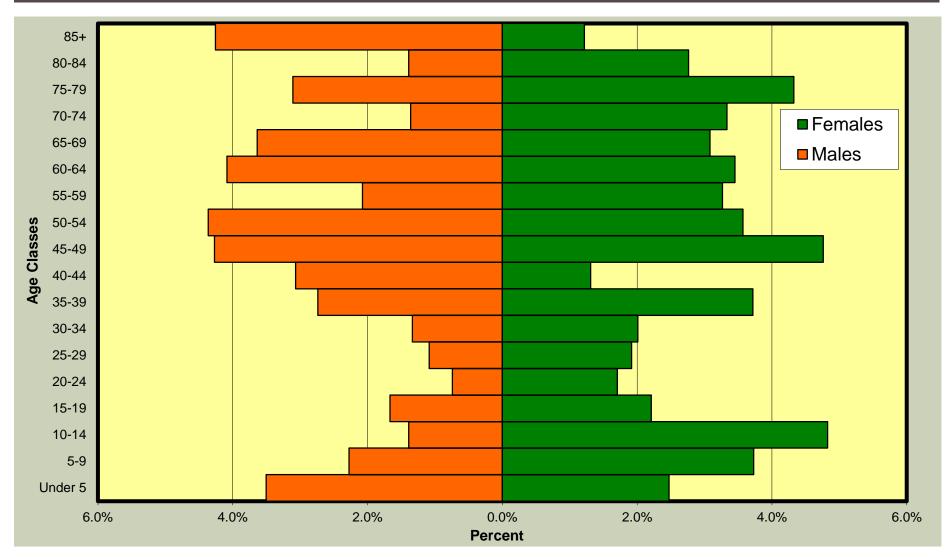
# HISTORICAL BIRTH COUNTS 2007-2020



# AGE PYRAMID FAIRFIELD 2010 CENSUS



# AGE PYRAMID FAIRFIELD 2016-2020 ACS



# CHANGE IN MALES AND FEMALES 2010 TO 2016-2020 FAIRFIELD

|           | Males            |                            | Females          |                            |  |
|-----------|------------------|----------------------------|------------------|----------------------------|--|
| Age Group | Numerical Change | Percentage Point<br>Change | Numerical Change | Percentage Point<br>Change |  |
| Under 5   | +86              | +1.1                       | +10              | +0.1                       |  |
| 5-9       | -82              | -1.1                       | +47              | +0.6                       |  |
| 10-14     | -170             | -2.3                       | +108             | +1.4                       |  |
| 15-19     | -108             | -1.5                       | -67              | -0.9                       |  |
| 20-24     | -132             | -1.8                       | -43              | -0.6                       |  |
| 25-29     | -77              | -1.0                       | +15              | +0.2                       |  |
| 30-34     | -37              | -0.5                       | +8               | +0.1                       |  |
| 35-39     | -4               | -0.1                       | +52              | +0.6                       |  |
| 40-44     | -48              | -0.7                       | -205             | -2.8                       |  |
| 45-49     | +19              | +0.2                       | +56              | +0.7                       |  |
| 50-54     | +54              | +0.7                       | -7               | -0.1                       |  |
| 55-59     | -45              | -0.6                       | -5               | -0.1                       |  |
| 60-64     | +72              | +0.9                       | -25              | -0.4                       |  |
| 65-69     | +74              | +0.9                       | +5               | 0.0                        |  |
| 70-74     | -86              | -1.2                       | +46              | +0.6                       |  |
| 75-79     | +110             | +1.4                       | +190             | +2.5                       |  |
| 80-84     | +6               | +0.1                       | +97              | +1.3                       |  |
| 85+       | +247             | +3.3                       | -64              | -0.9                       |  |

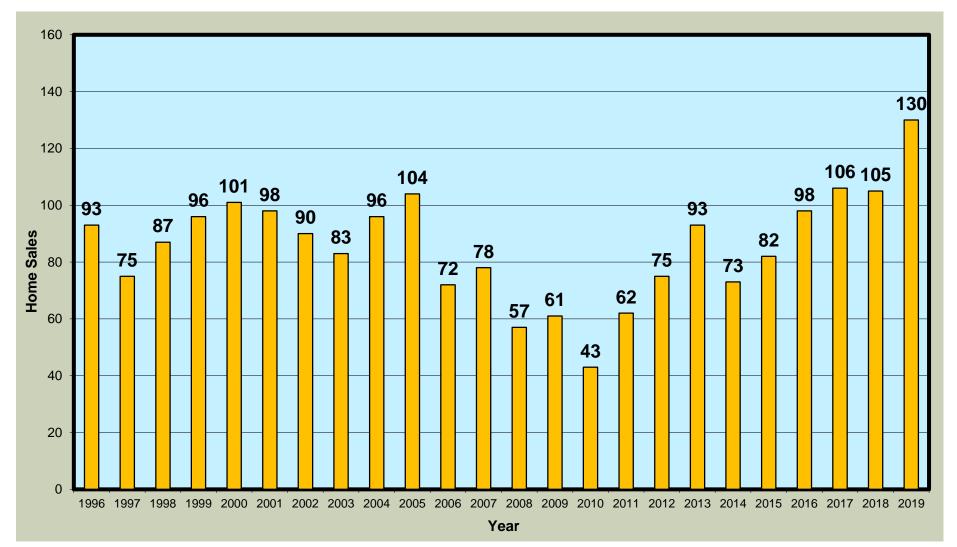
#### **NEW HOUSING**

| Development<br>(Location)                     | Number<br>of Units | Bedroom<br>Distribution      | Housing Type                                 | Notes/Project Status   |
|---|--------------------|------------------------------|--|--|
| Fairkings<br>(12 Kingsbridge Road)            | 99                 | 41 1-BR<br>56 2-BR<br>2 3-BR | Apartment<br>(Market-Rate and<br>Affordable) | 33 units have been completed but are not occupied as of yet. Will consist of 89 market-rate units and 10 affordable units.   |
| 202 Fairfield Road                            | 29                 | 8 1-BR<br>21 2-BR            | Apartment<br>(Market-Rate and<br>Affordable) | Approved but construction has not started. Three units will be set aside for Low-Moderate Income households. There is a possibility that the project will not get constructed.                     |
| 170 Fairfield Road                            | 28                 | 2 1-BR<br>24 2-BR<br>2 3-BR  | Townhouse<br>(Market-Rate and<br>Affordable) | Under construction. Four units have been completed. Will consist of 25 market-rate units and 3 affordable units.   |
| 404 Fairfield Road                            | 35                 | 29 1-BR<br>5 2-BR<br>1 3-BR  | Apartment<br>(Market-Rate and<br>Affordable) | Approved but construction has not started. 10% of units will be set aside for Low-Moderate Income households.  |
| The View at Fairfield<br>(6 Kingsbridge Road) | 34                 | 3 1-BR<br>30 2-BR<br>1 3-BR  | Apartment<br>(Market-Rate and<br>Affordable) | Under construction but no units have been completed. Former Kingsbridge Office Park. Approved but construction has not started. 15% of units will be set aside for Low-Moderate Income households. |
| Total   | 225                |                              |  |  |

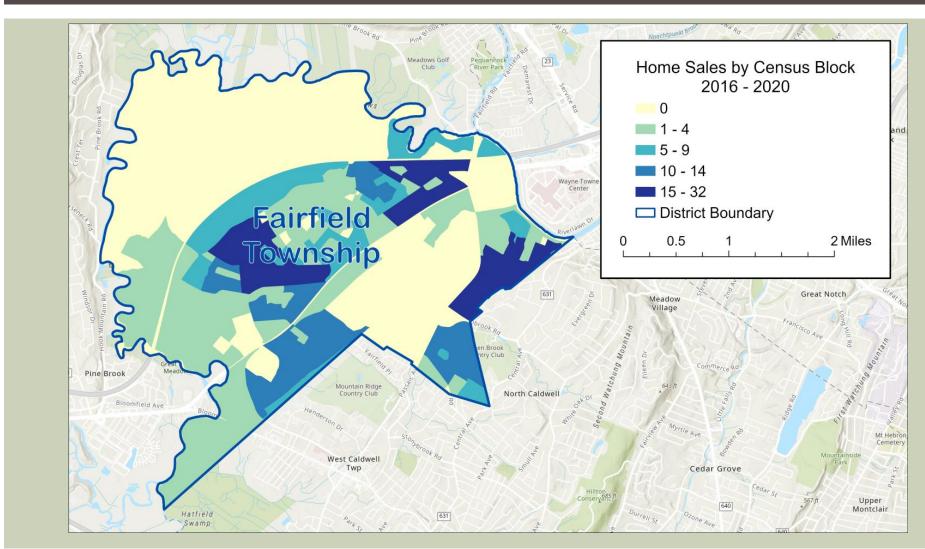
#### STUDENT YIELDS

- Student yields (K-6) were computed by housing type in April 2021 demographic study to determine impact of new developments.
- Student yields do not change much over time and were used in this study.
- 35 public school children (K-6) projected
- Additional children are projected for grades 7-12 but are not considered here.

#### HOME SALES FAIRFIELD 1996-2019



#### HOME SALES FAIRFIELD 2016-2020



#### **ENROLLMENT PROJECTIONS**



# ENROLLMENT PROJECTIONS BY GRADE CONFIGURATION

| Historical    | PK               | <b>(-3</b>       | 4-6             |                 |
|---------------|------------------|------------------|-----------------|-----------------|
| 2021-22       | 413              |                  | 286             |                 |
| Projected     | PK-3<br>CSR 5-YR | PK-3<br>CSR 6-YR | 4-6<br>CSR 5-YR | 4-6<br>CSR 6-YR |
| 2022-23       | 424              | 426              | 275             | 275             |
| 2023-24       | 427              | 430              | 297             | 299             |
| 2024-25       | 433              | 437              | 307             | 310             |
| 2025-26       | 436              | 441              | 311             | 317             |
| 2026-27       | 430              | 435              | 320             | 327             |
| 5-year Change | +17              | +22              | +34             | +41             |

#### **CAPACITY ANALYSIS**

| School                                  | Capacity | Current<br>Enrollment<br>2021-22 | Difference | Projected<br>Enrollment<br>2026-27 | Difference |
|---|----------|----------------------------------|------------|------------------------------------|------------|
| Adlai E.<br>Stevenson School<br>(PK-3)  | 415      | 413                              | +2         | 435                                | -20        |
| Winston S.<br>Churchill School<br>(4-6) | 238      | 286                              | -48        | 327                                | -89        |

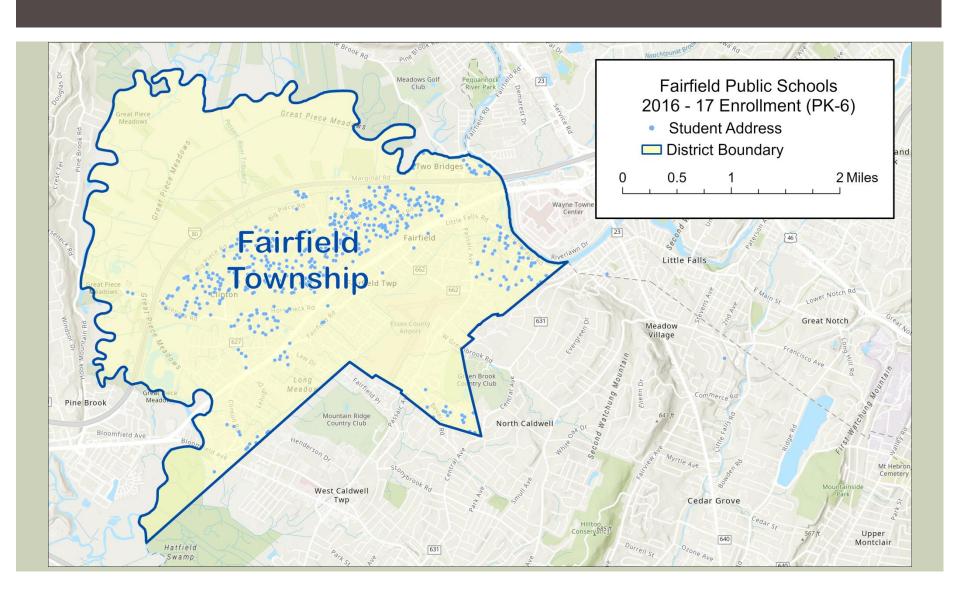
#### COVID-19

- Effects of COVID-19 on enrollment are varied across the country.
- Vermont has had an increase after years of enrollment decline (15% increase in some towns).
- Big declines in large school districts- L.A (-11,000), Broward County (-8,500), Orange County (-8,000), Charlotte-Mecklenburg (-5,000).
- People are leaving large metro areas to live in rural areas, either in 2nd homes or a purchased home. Will they return?

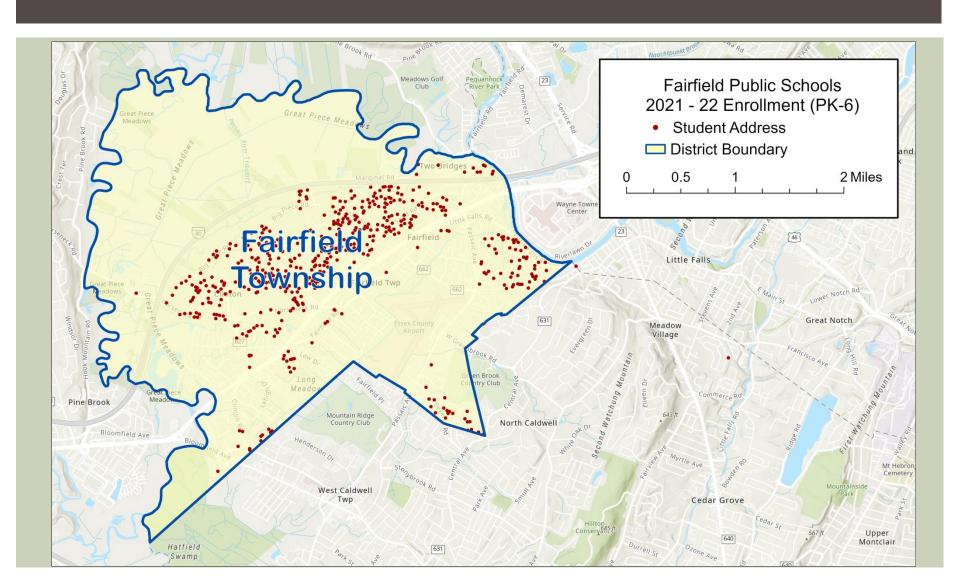
#### **MAPPING**

- Maps were created to compare student residential locations at two different times: 2016-17 and 2021-22.
- Student counts by census block
- Student density by census block
- Student yield by census block

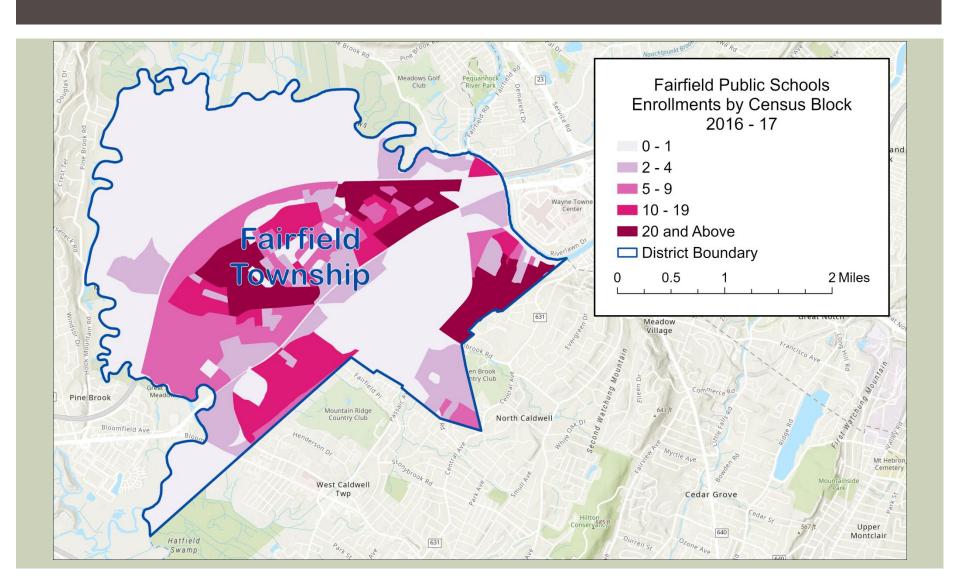
#### **2016-17 STUDENTS**



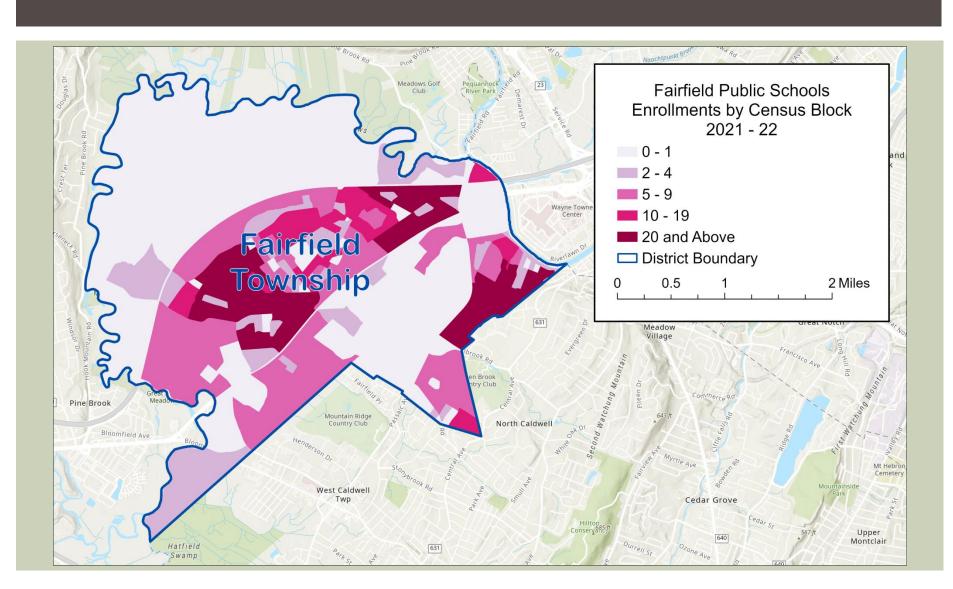
#### **2021-22 STUDENTS**



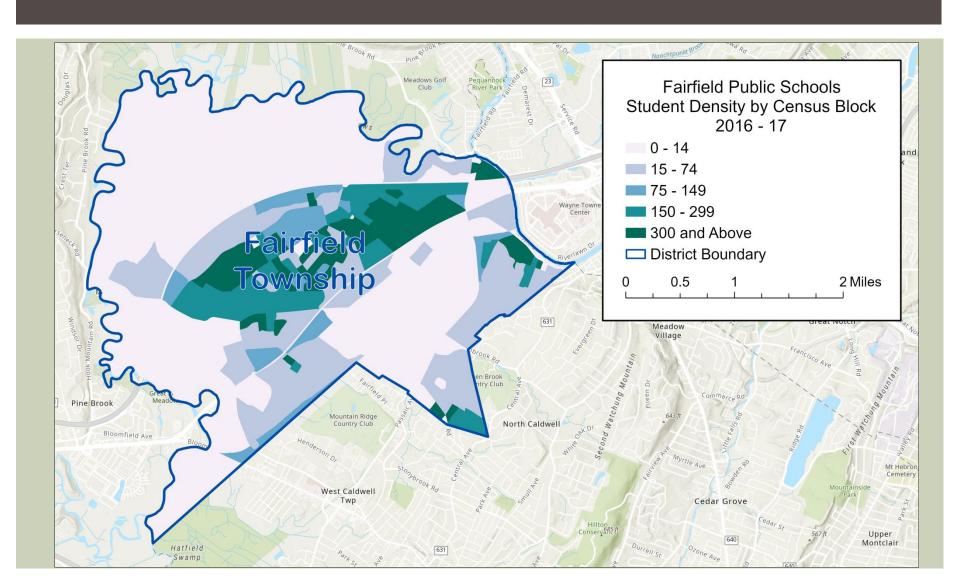
# STUDENT COUNTS BY CENSUS BLOCK 2016-17



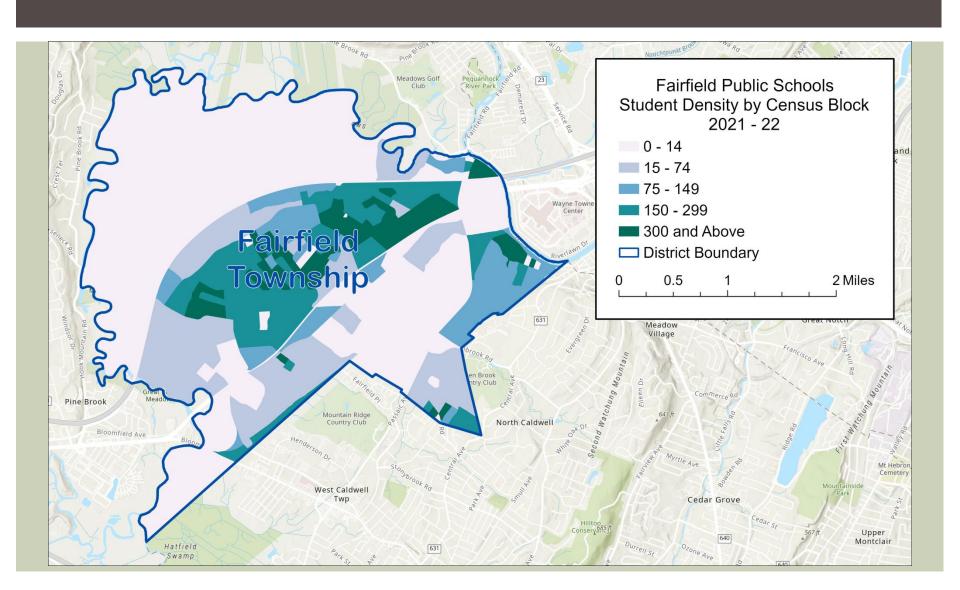
# STUDENT COUNTS BY CENSUS BLOCK 2021-22



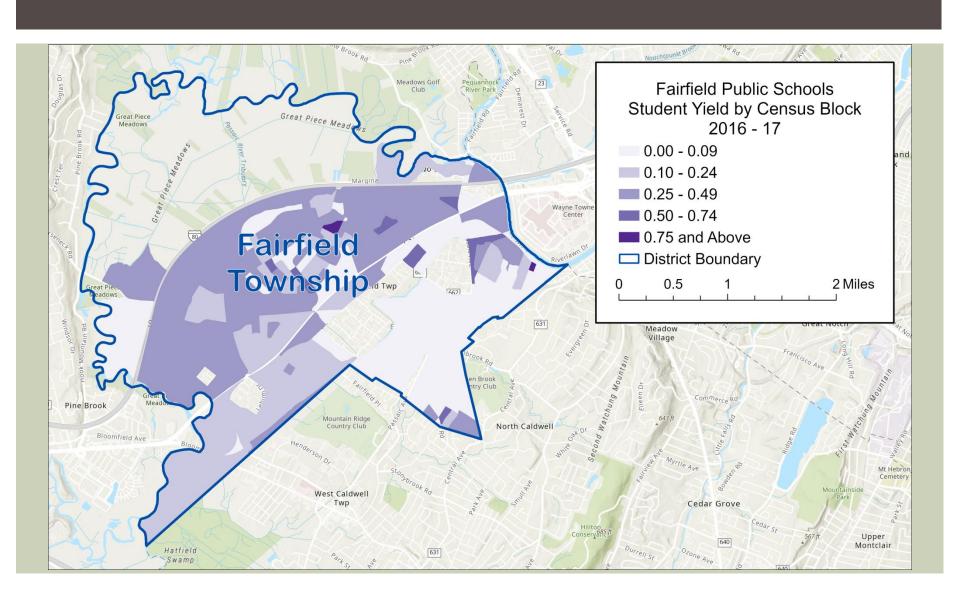
# STUDENT DENSITY BY CENSUS BLOCK 2016-17



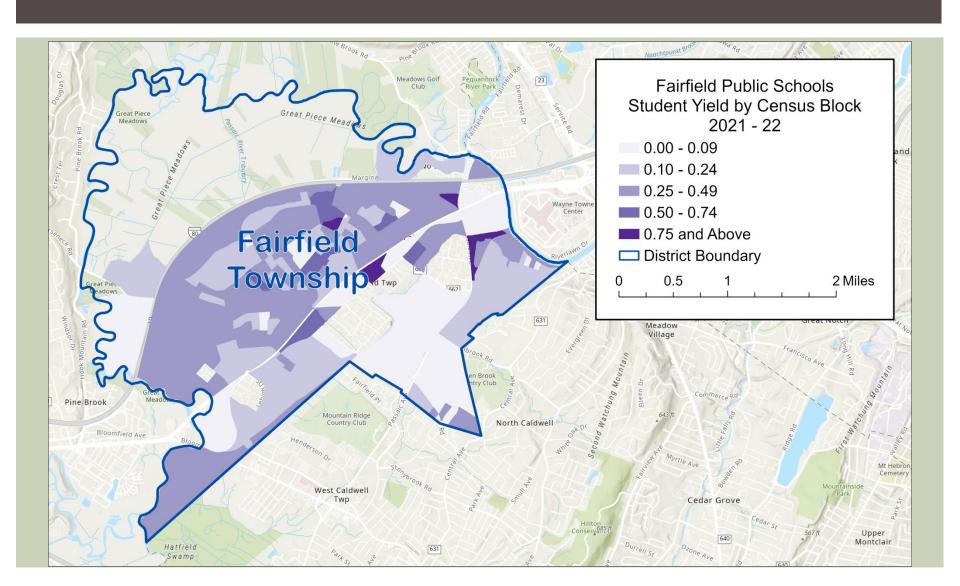
# STUDENT DENSITY BY CENSUS BLOCK 2021-22



# STUDENT YIELD BY CENSUS BLOCK 2016-17



# STUDENT YIELD BY CENSUS BLOCK 2021-22



#### **SUMMARY**

- Enrollments are projected to increase (51-63 students) in the next five years due to strong inward migration of children.
- All 7 grade-level average survival ratios were above 1.000.

