FOR THE NEW PROVIDENCE SCHOOL DISTRICT

STATISTICAL FORECASTING LLC

December 16, 2021

STATISTICAL FORECASTING

- Provide demographic services for school districts in the New York-New Jersey metropolitan area since 1998.
- Performed demographic studies for approximately 175 school districts in NY & NJ.
- Demographic consultant for the NYC Public Schools since 2006.

RICHARD S. GRIP ED.D.

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

PURPOSE OF THE STUDY

- Project grade-by-grade enrollments from 2022-23 through 2026-27, a 5-year period
- Analyze community population trends, demographic characteristics and age structure, birth counts, and fertility rates
- Examine historical enrollments districtwide, by grade configuration (PK-6,7-8, and 9-12), and by school.
- Compare building capacities to current and projected enrollments
- Research new housing starts and the impact on school district

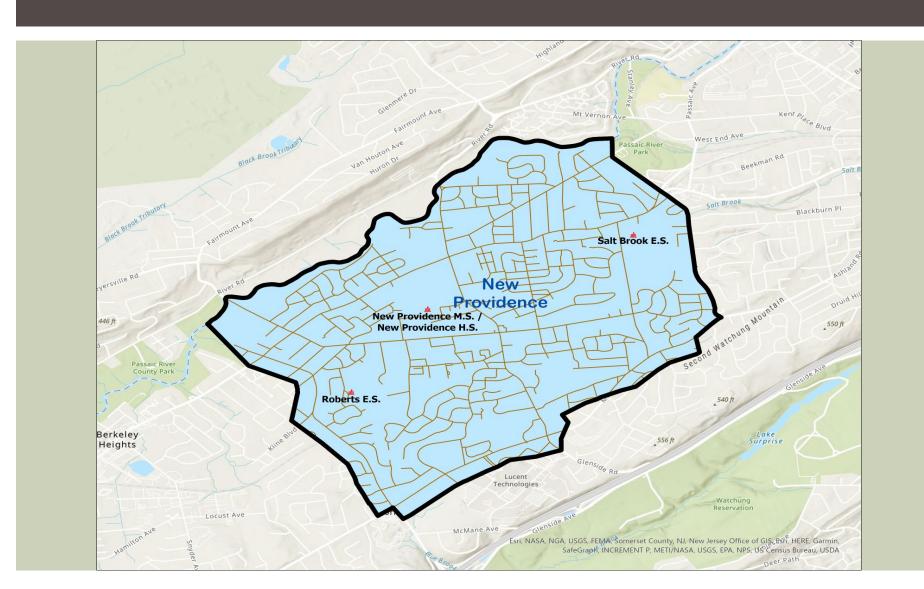
HISTORICAL AND PROJECTED POPULATIONS 1940-2040



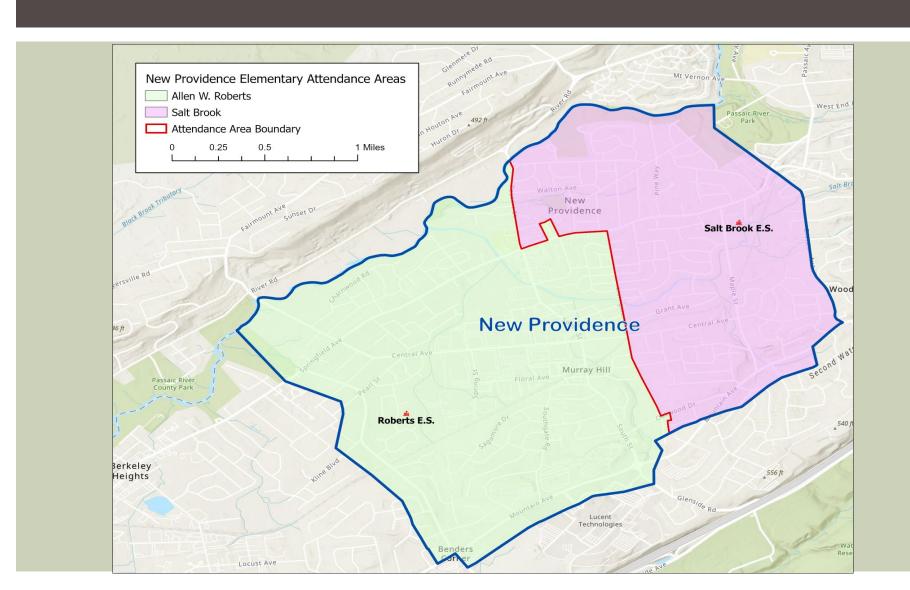
DEMOGRAPHIC PROFILE

- 69% White and 16% Asian in 2020 (81% White and 10% Asian in 2010)
- \square Median age = 40.0 years (NJ = 40.2 years)
- □ 17.4% of population is foreign-born (NJ = 23.4%). India and China are largest sources.
- Bachelor's Degree or Higher = 69% (NJ = 41.2%)
- Median household income = \$144K (NJ = \$86K)
- Approximately 4,700 housing units, of which 73% are SF detached or attached (townhouses)
- 24% of housing units are renter-occupied. (NJ = 36.7%)
- Median value of owner-occupied unit = \$607K

SCHOOL LOCATIONS



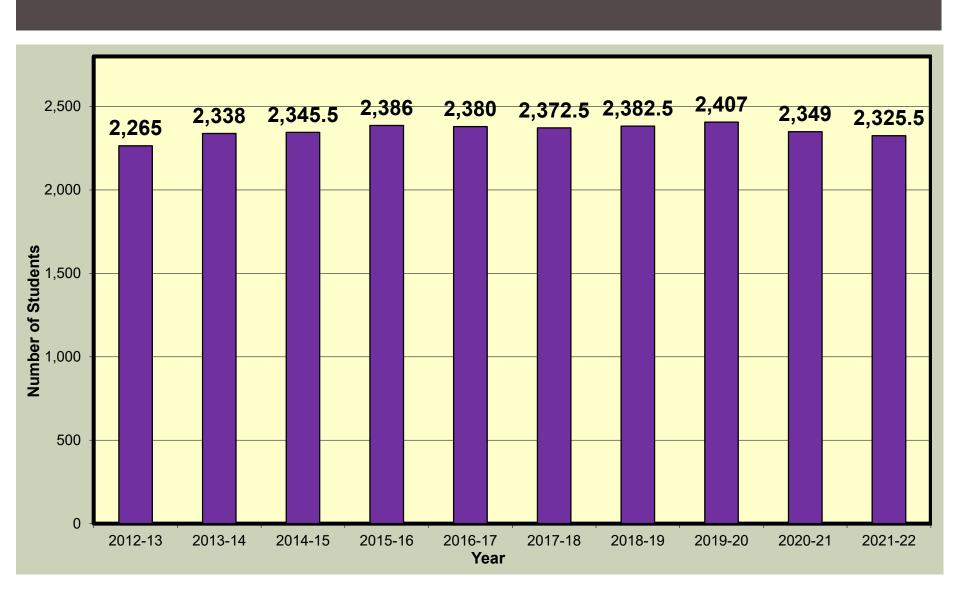
ELEMENTARY ATTENDANCE AREAS



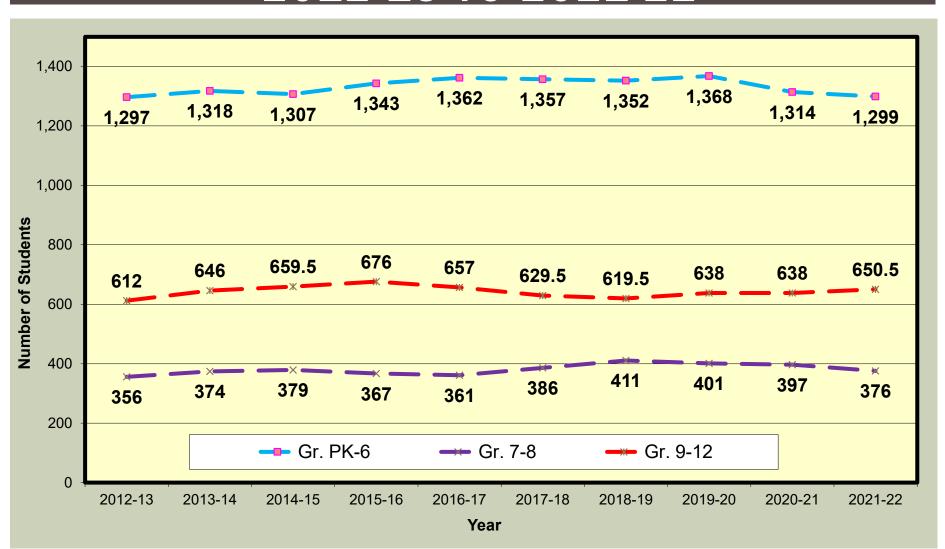
HISTORICAL ENROLLMENT TRENDS

- □ District's 2021-22 enrollment (10/15/21) is 2,325.5.
- \square 2012-13 enrollment = 2,265 (+60.5)
- After a period of stability, enrollments declined in last two years (partially due to COVID?).
- ☐ Cohort-Survival Ratio Method (CSR) was used to project enrollments five years into the future.

HISTORICAL ENROLLMENTS (PK-12) 2012-13 TO 2021-22



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



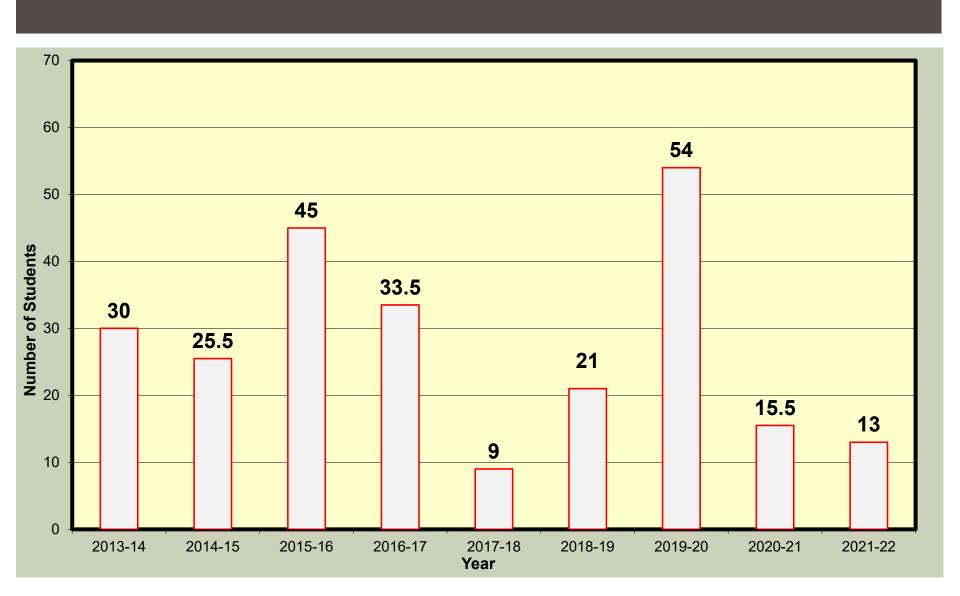
ENROLLMENT PROJECTION METHOD COHORT SURVIVAL RATIO

- □ Ratios are calculated for each grade progression. (Ex. 100 1st graders in 2020-21 become 95 2nd graders in 2021-22 = 0.95)
- Survival ratios were computed for ten historical years.
- 8 of 13 average ratios were <u>below</u> 1.000 indicating slight net outward migration.
- Averages were then computed and used to project future enrollments.

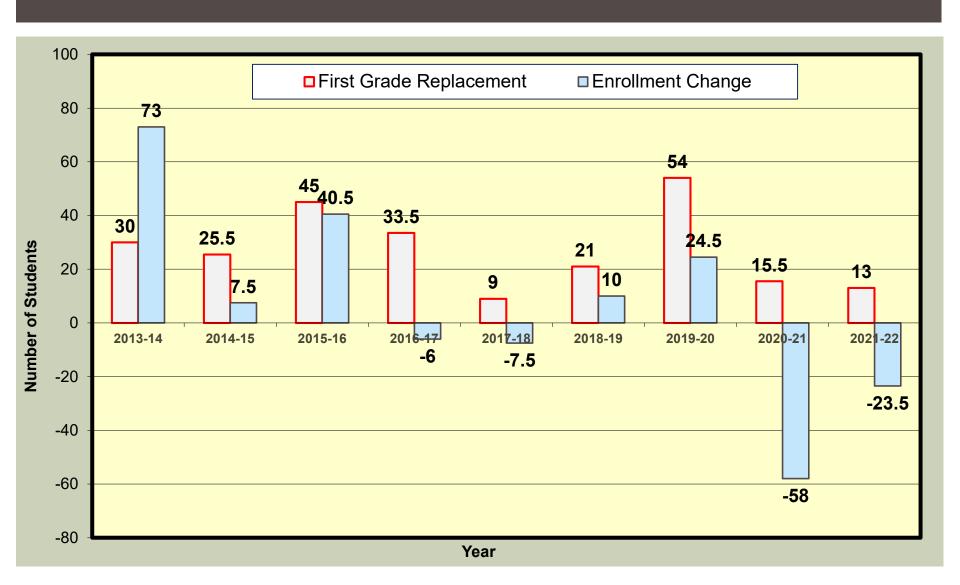
FIRST GRADE REPLACEMENT

- □ Positive first grade replacement (FGR)
 has occurred in each of last 9 years.
 Usually compared to kindergarten classes
 but district has half-day program.
- □ Positive FGR- Number of entering first grade students is greater than number of graduating 12th grade students from prior year.
- □ District has gained an average of 23 students in last 5 years due to first grade replacement.

HISTORICAL FIRST GRADE REPLACEMENT



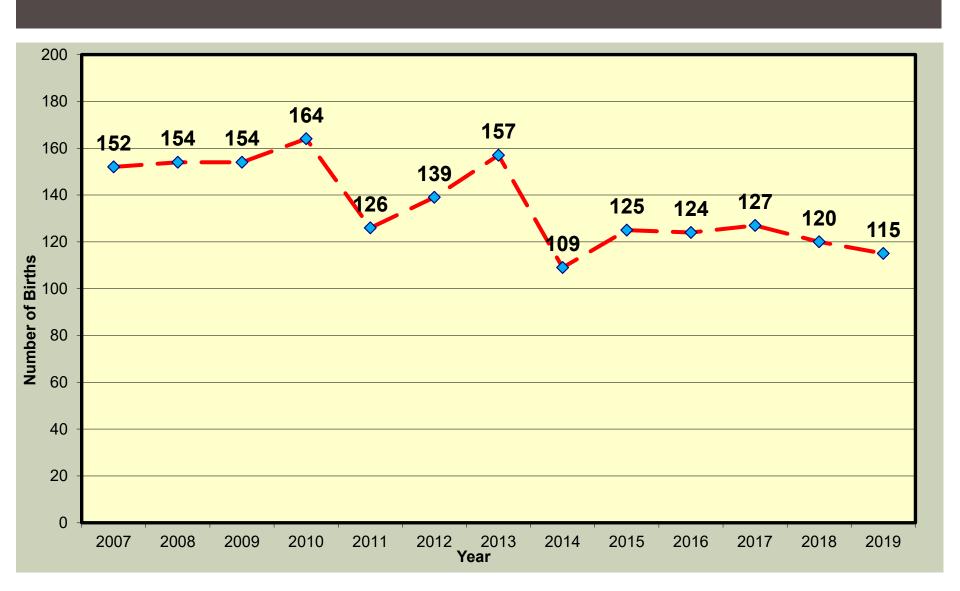
TOTAL ENROLLMENT CHANGE VS. FIRST GRADE REPLACEMENT



BIRTH COUNTS

- Births are used to project kindergarten students 5 years later.
- Birth counts had been trending lower but have appeared to stabilize.
- □ 115 births in 2019. Last 5 years, birth count is 115-127.

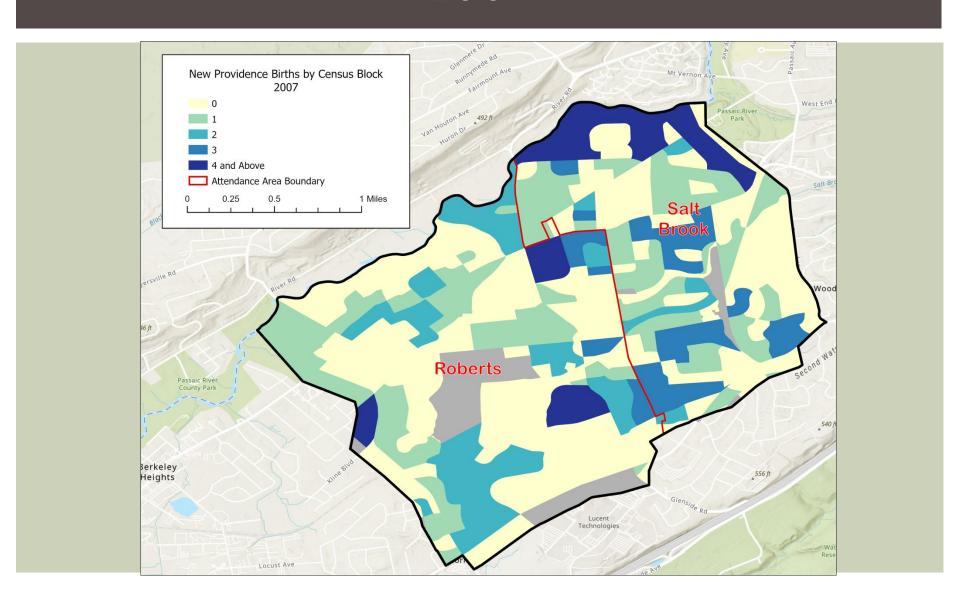
HISTORICAL BIRTH COUNTS 2007-2019



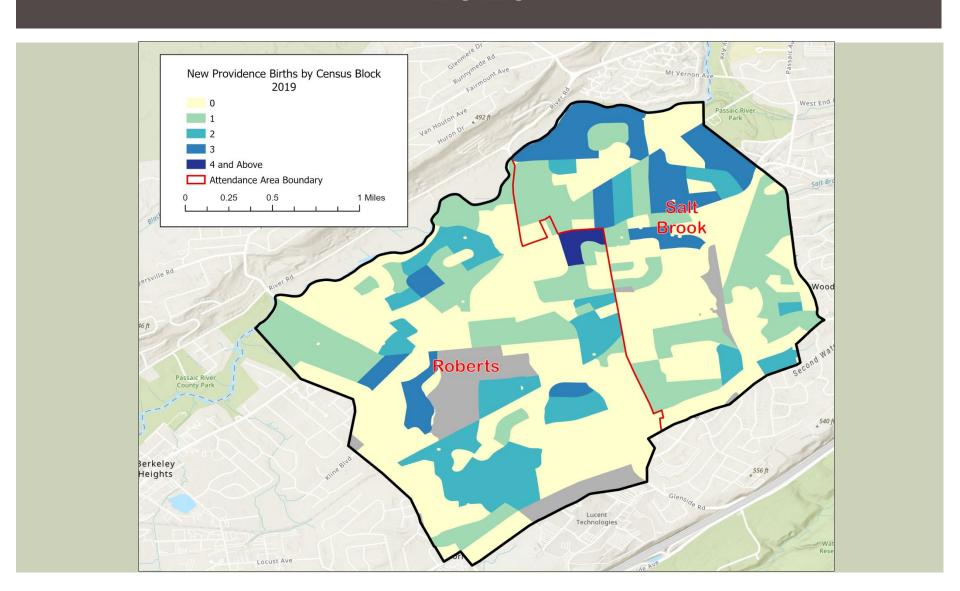
BIRTHS BY ATTENDANCE AREA 2007-2019

Birth Year	Roberts	Salt Brook	Unknown
2007	82	67	3
2008	71	80	3
2009	66	82	6
2010	78	78	8
2011	70	53	3
2012	71	63	5
2013	90	65	2
2014	60	44	5
2015	64	53	8
2016	74	45	5
2017	65	56	6
2018	74	46	0
2019	58	51	6
Total 2007-2019	923	783	
Difference 2007-2019	-24	-16	

BIRTHS BY CENSUS BLOCK 2007



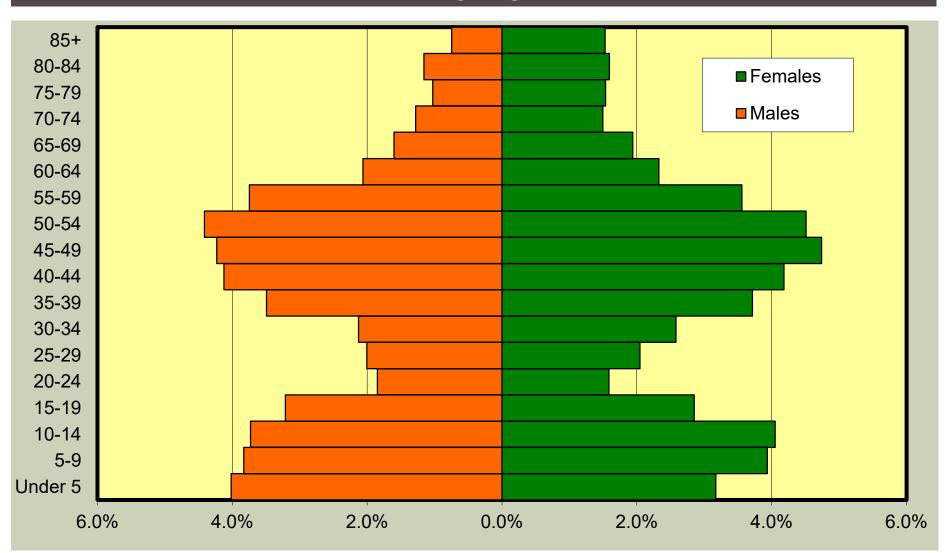
BIRTHS BY CENSUS BLOCK 2019



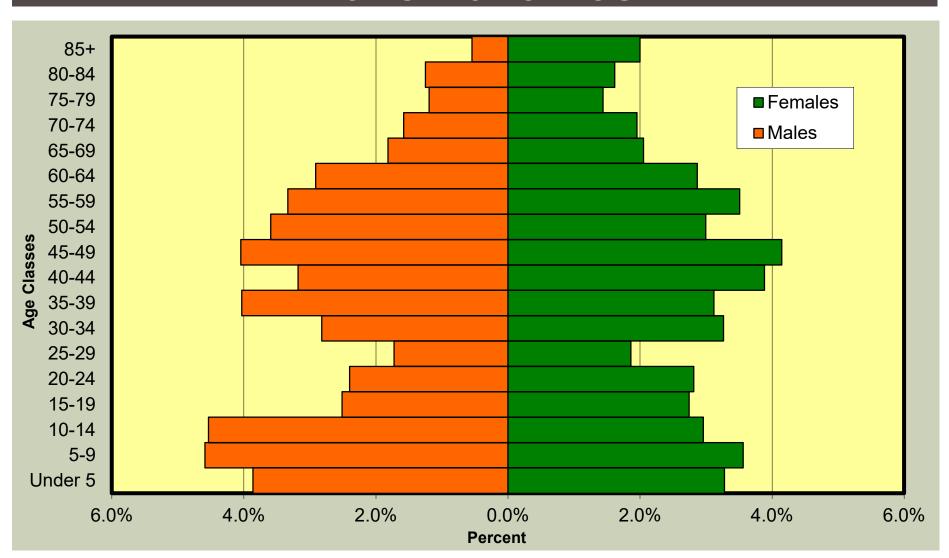
BIRTH COUNTS AND BIRTH-TO-KINDERGARTEN SURVIVAL RATIOS

Birth Year	Number of Births New Providence	Kindergarten Students 5 Years Later	Birth-to- Kindergarten Survival Ratio	First Grade Students 6 Years Later	Birth-to-First Survival Ratio
2007	152	126	0.829	171	1.125
2008	154	151	0.981	183	1.188
2009	154	131	0.851	187	1.214
2010	164	143	0.872	199	1.213
2011	126	116	0.921	180	1.429
2012	139	120	0.863	179	1.288
2013	157	151	0.962	219	1.395
2014	109	113	1.037	165	1.514
2015	125	132	1.056	157	1.256
2016	124	113	0.911	N/A	N/A
2017	127	N/A	N/A	N/A	N/A
2018	120	N/A	N/A	N/A	N/A
2019	115	N/A	N/A	N/A	N/A

AGE PYRAMID NEW PROVIDENCE 2010



AGE PYRAMID NEW PROVIDENCE 2015-2019 ACS



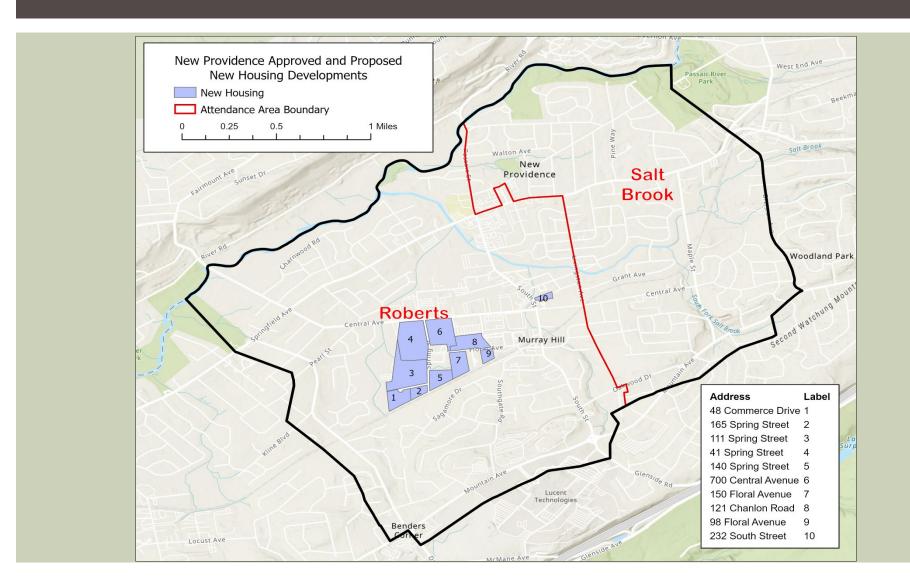
CHANGE IN MALES AND FEMALES 2010 TO 2015-2019 NEW PROVIDENCE

	Males		Females		
Age Group	Numerical Change	Percentage Point Change	I Numerical Change		
Under 5	+15	-0.2	+42	+0.1	
5-9	+133	+0.8	-14	-0.4	
10-14	+138	+0.8	-107	-1.1	
15-19	-63	-0.7	+11	-0.1	
20-24	+88	+0.5	+174	+1.2	
25-29	-19	-0.3	-6	-0.2	
30-34	+109	+0.7	+112	+0.7	
35-39	+101	+0.5	-45	-0.6	
40-44	-87	-0.9	-2	-0.3	
45-49	+13	-0.2	-36	-0.6	
50-54	-68	-0.8	-158	-1.5	
55-59	-21	-0.4	+25	0.0	
60-64	+129	+0.8	+91	+0.5	
65-69	+42	+0.2	+32	+0.1	
70-74	+50	+0.3	+73	+0.5	
75-79	+31	+0.2	+1	-0.1	
80-84	+22	+0.1	+17	0.0	
85+	-20	-0.2	+75	+0.5	

APPROVED AND PROPOSED NEW HOUSING NEW PROVIDENCE

Property Location	Attendance Area	Number of Units	Bedrooms	Housing Type	Notes
111 Spring Street (a.k.a. Bard Property)	Roberts	184	Market-Rate (154) 64 2-BR 90 3-BR Affordable (30) 6 1-BR 24 2-BR	Apartment Market-Rate and Affordable	Development will have 154 market-rate units and 30 affordable units. Applying for building permits in November 2021. Completion is projected to occur 18 months thereafter.
41 Spring Street	Roberts	143	N/A	Multi-Family Market-Rate and Affordable	Development will have 114 market-rate units and 29 affordable units (20% of units).
165 Spring Street	Roberts	22	N/A	Multi-Family Market-Rate and Affordable	Development will have 17 market-rate units and 5 affordable units (20% of units).
48 Commerce Drive	Roberts	38	N/A	Multi-Family Market-Rate and Affordable	Development will have 30 market-rate units and 8 affordable units (20% of units).
98 Floral Avenue	Roberts	32	N/A	Multi-Family Market-Rate and Affordable	Development will have 25 market-rate units and 7 affordable units (20% of units).
150 Floral Avenue	Roberts	85	N/A	Multi-Family Market-Rate and Affordable	Development will have 68 market-rate units and 17 affordable units (20% of units).
140 Spring Street	Roberts	48	N/A	Multi-Family Market-Rate and Affordable	Development will have 38 market-rate units and 10 affordable units (20% of units).
700 Central Avenue	Roberts	150	N/A	Multi-Family Market-Rate and Affordable	Development will have 120 market-rate units and 30 affordable units (20% of units).
121 Chanlon Road	Roberts	104	N/A	Multi-Family Market-Rate and Affordable	Development will have 83 market-rate units and 21 affordable units (20% of units).
232 South Street	Roberts	11	3-BR	Apartments Market-Rate	Former garden center. Under construction.
Total		817			660 Market-rate Units 157 Affordable Units

NEW HOUSING LOCATIONS



STUDENT YIELDS

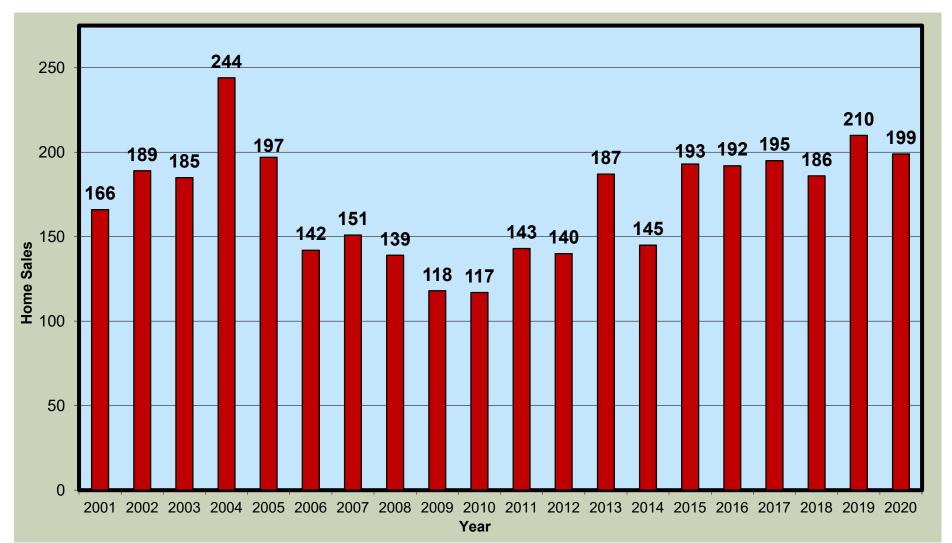
Student yields were computed in May 2019 report.

K-12 Student Yield		
0.893		
0.207		
0.206		

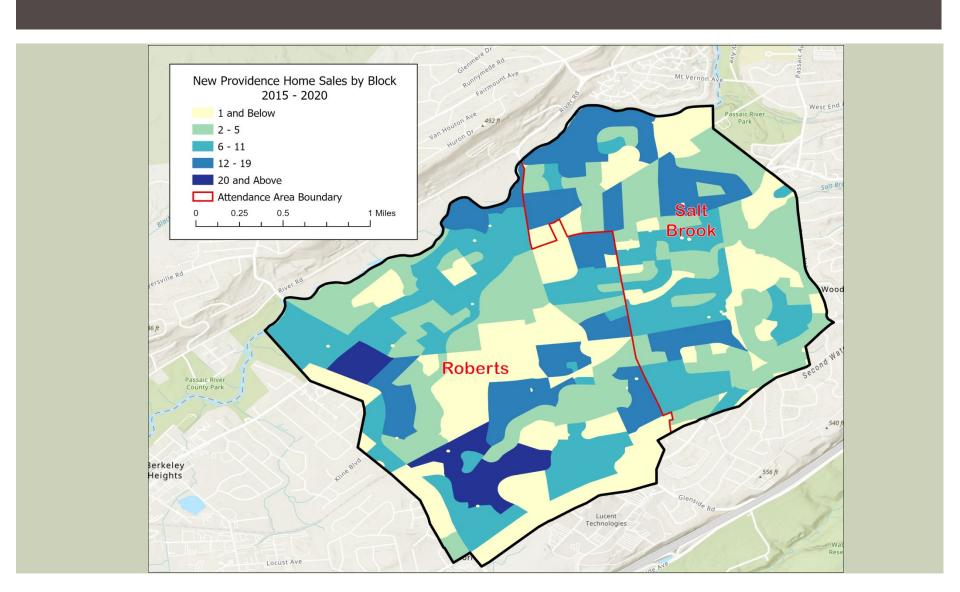
ESTIMATED NUMBER OF STUDENTS

- Estimate of students from approved developments and those under construction only.
- 80 children are projected from new developments.
- 111 Spring Street 74 (47 K-6, 12 7-8, 15 9-12)
- 232 South Street 6 (4 K-6, 1 7-8, 1 9-12).
- Enrollment projections were modified to account for additional children from new developments.

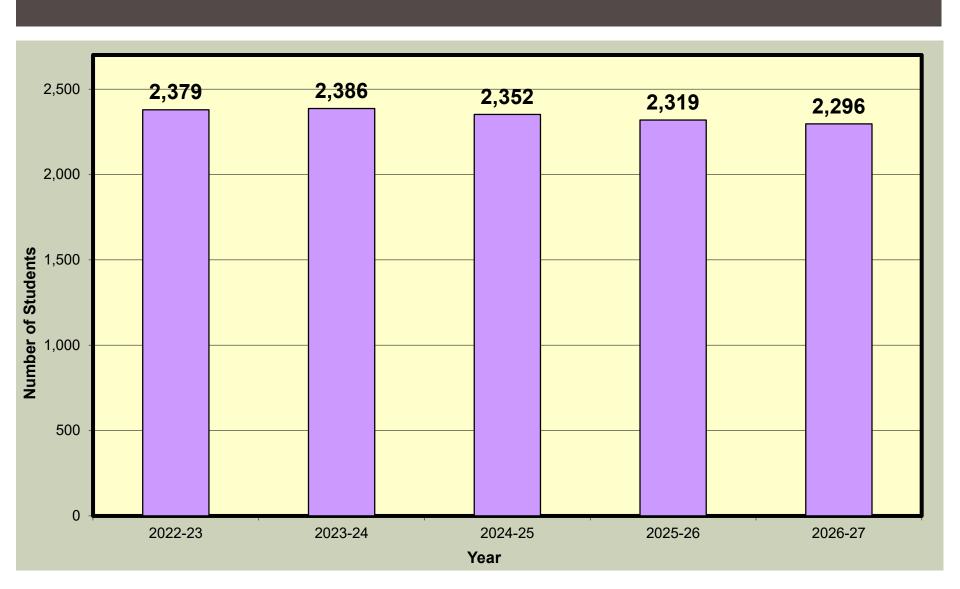
HOME SALES NEW PROVIDENCE 2001-2020



HOME SALES



ENROLLMENT PROJECTIONS (PK-12)



ENROLLMENT PROJECTIONS BY GRADE CONFIGURATION

Historical	PK-6	7-8	9-12
2021-22	1,299	376	650.5
Projected	PK-6	7-8	9-12
2022-23	1,306	398	675
2023-24	1,307	411	668
2024-25	1,281	393	678
2025-26	1,237	410	672
2026-27	1,224	403	669
5-year Change	-75	+27	+18.5

CAPACITY ANALYSIS

School	Capacity	Current Enrollment 2021-22	Difference	Projected Enrollment 2026-27	Difference
Allen W. Roberts E.S. (PK-6)	689	693	-4	675	+14
Salt Brook E.S. (K-6)	689	606	+83	549	+140
New Providence M.S. (7-8)	1 21 4	376	+187.5	403	+142
New Providence H.S. (9-12)	1,214	650.5		669	T142

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- Los Angeles (-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?
- Student withdrawals highly concentrated in lower elementary grades (NJ district: 40 of 124 withdrawals were kindergarten).
- Most student withdrawals were students going to private school or being homeschooled.
- 2 working parents likely to place child in a private school. Will they return back to public school?

SUMMARY

- Enrollments (PK-12) are projected to increase for next two years (due to new home construction) before reversing trend.
- Enrollments have declined in last two years at ES level and last three in MS.
- Slight net outward migration of students present in the district.
- If not for new proposed housing, PK-12 enrollments would continue to decline. New housing offsets much of the enrollment decline that would have occurred.

