

DEMOGRAPHIC STUDY

FOR THE

SOUTH HUNTERDON

REGIONAL SCHOOL

DISTRICT

March 22, 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.

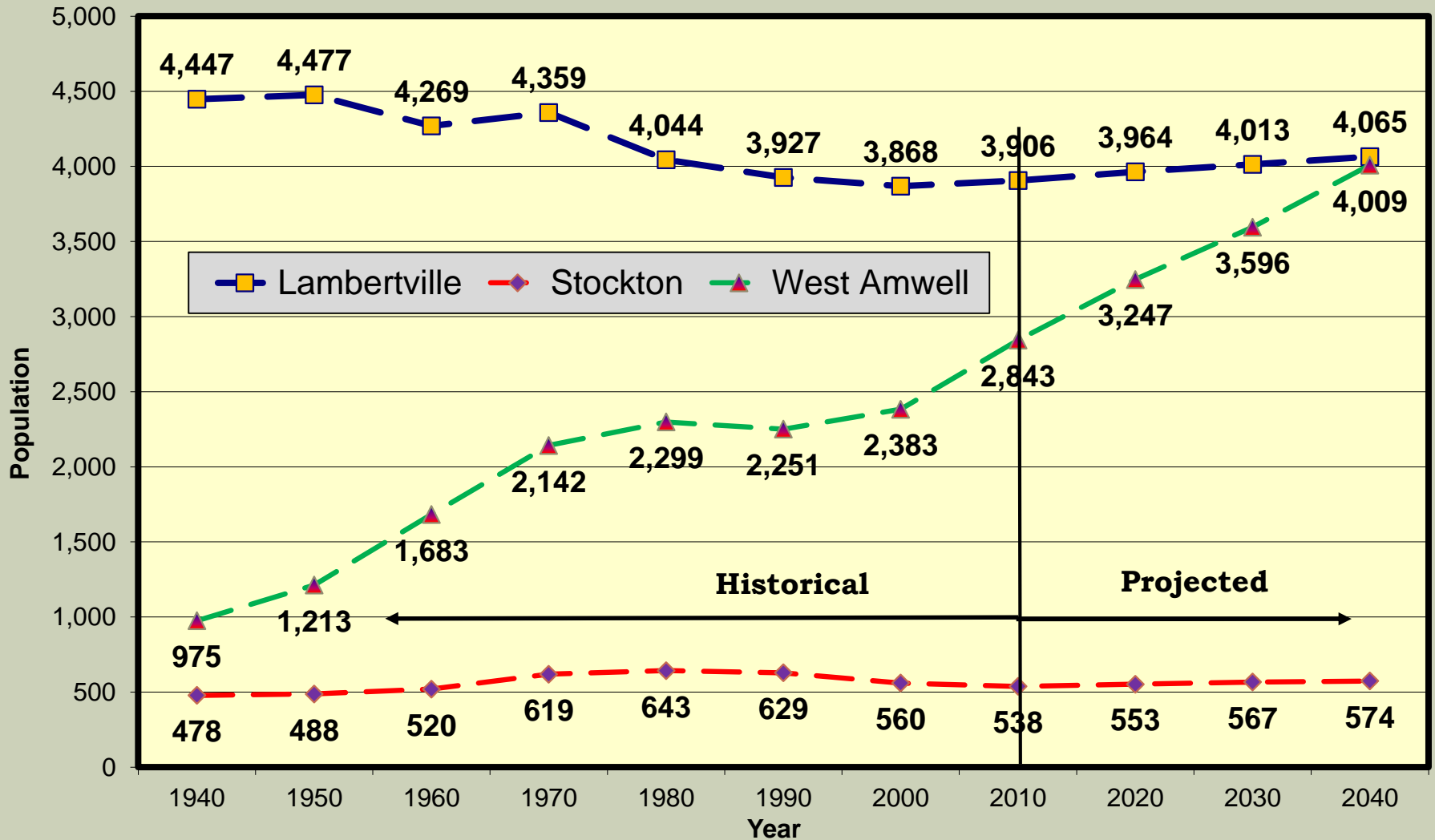
RICHARD S. GRIP ED.D.

- 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 2021-22 through 2025-26, 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-6 and 7-12)
- ❑ Compare current and projected enrollments to building capacities
- ❑ Research new housing starts and the impact on school district
- ❑ Project enrollments based on students yields and housing turnover rates (completely independent analysis)

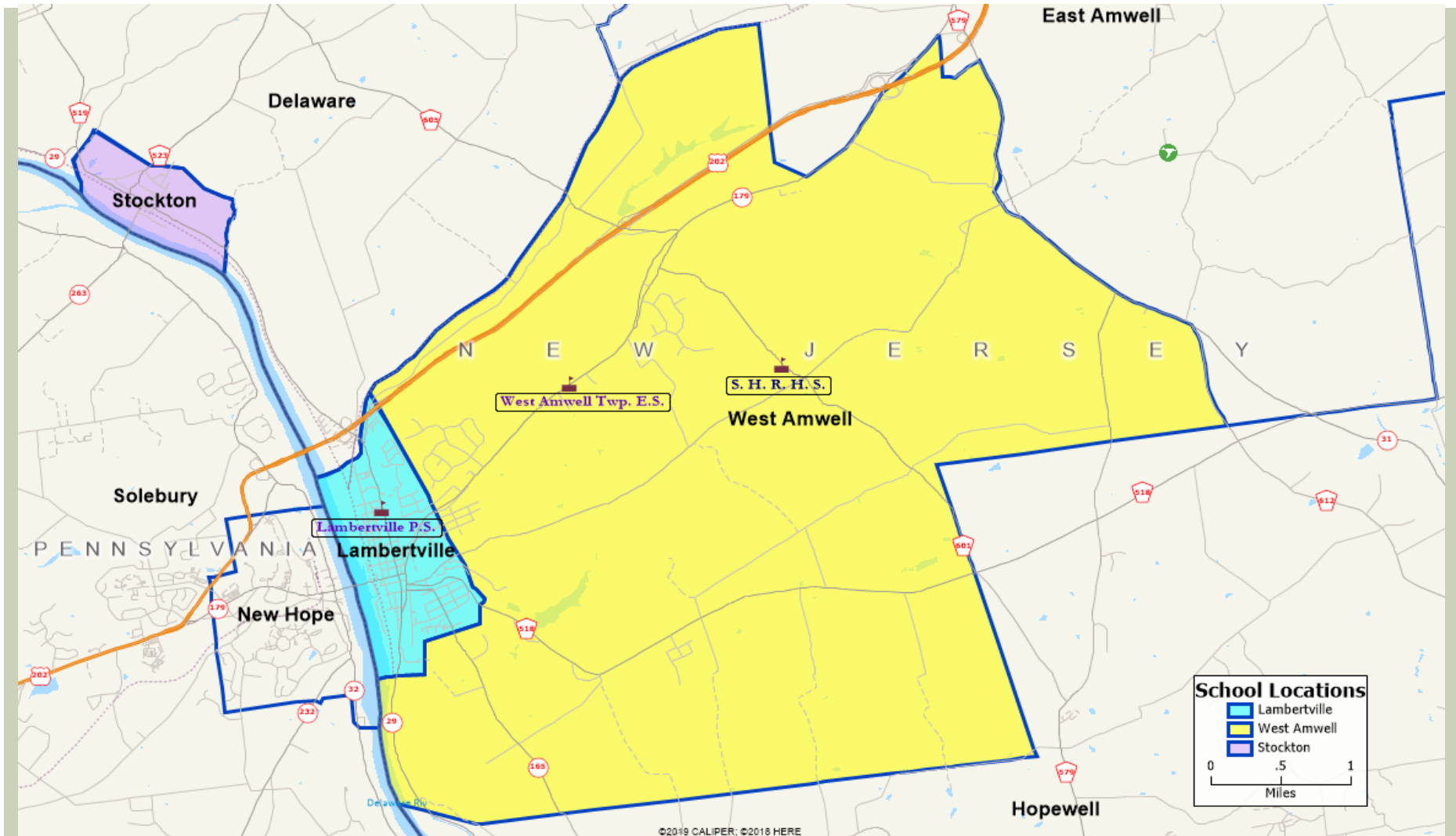
HISTORICAL AND PROJECTED POPULATIONS 1940-2040



COMMUNITY DEMOGRAPHIC PROFILES

- Aggregated population of 3 communities - 7,052. Lambertville has the greatest population (3,801), accounting for 54% of total.
- Majority race is White in each town. Hispanics are the second-largest race in Lambertville and Stockton, Asians are the second-largest race in West Amwell.
- West Amwell has the lowest median age (47.0 years) while Stockton has the highest (54.9 years), all are much higher than that NJ (40.2 years).
- The foreign-born percentage is low and ranges from 5.4%-9.5%.
- The percentage of persons with a bachelor's degree or higher is fairly similar, ranging from 47.4%-51.6%.
- West Amwell has the highest median family income (\$130,688) and median value of an owner-occupied unit (\$462,800).
- West Amwell has the highest percentage (95.4%) of one-unit homes, either detached or attached. Lambertville has the lowest (61.9%).
- Lambertville has the highest percentage (47.6%) of renter-occupied units. West Amwell has the lowest (11.5%).

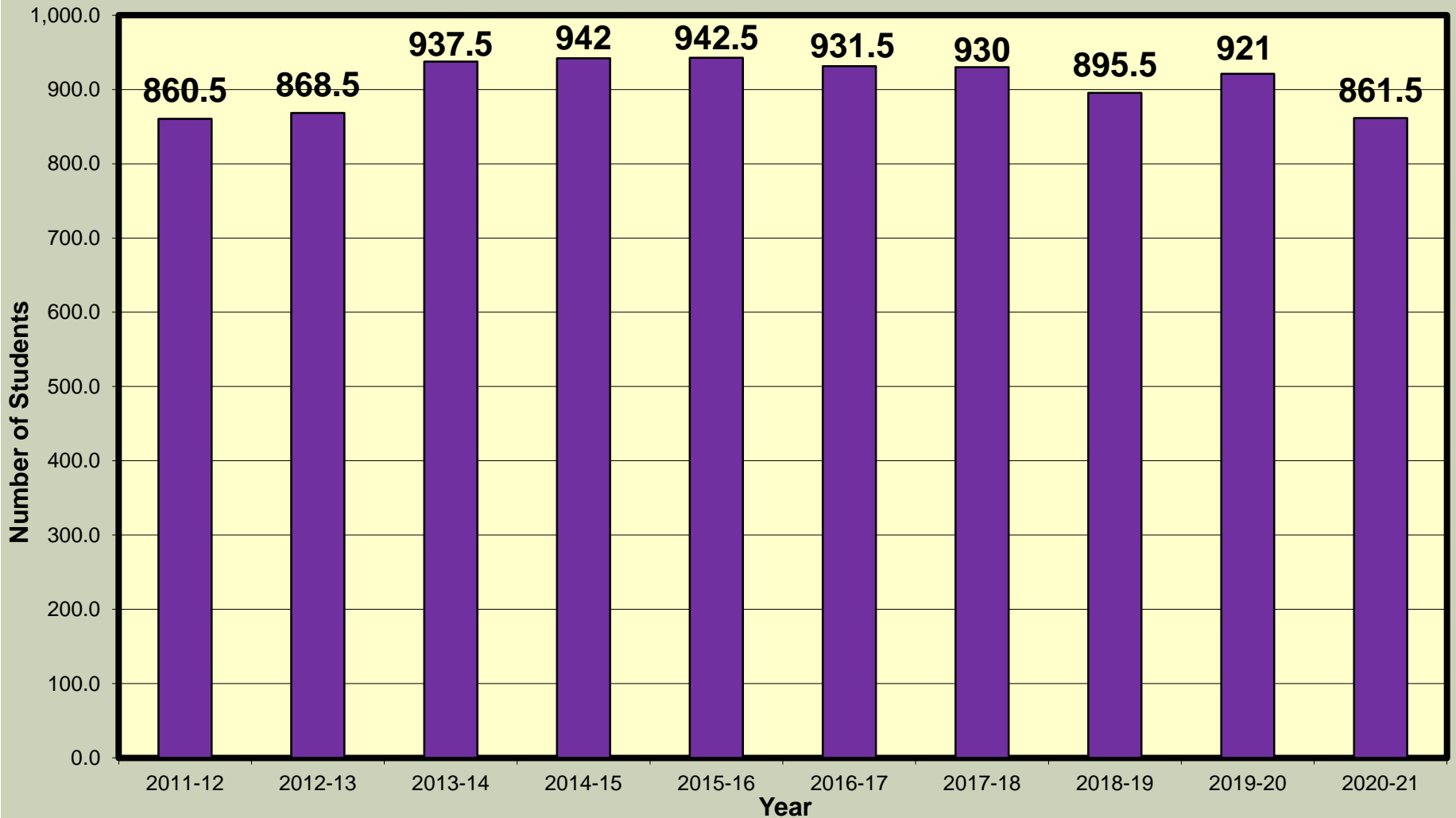
SCHOOL LOCATIONS



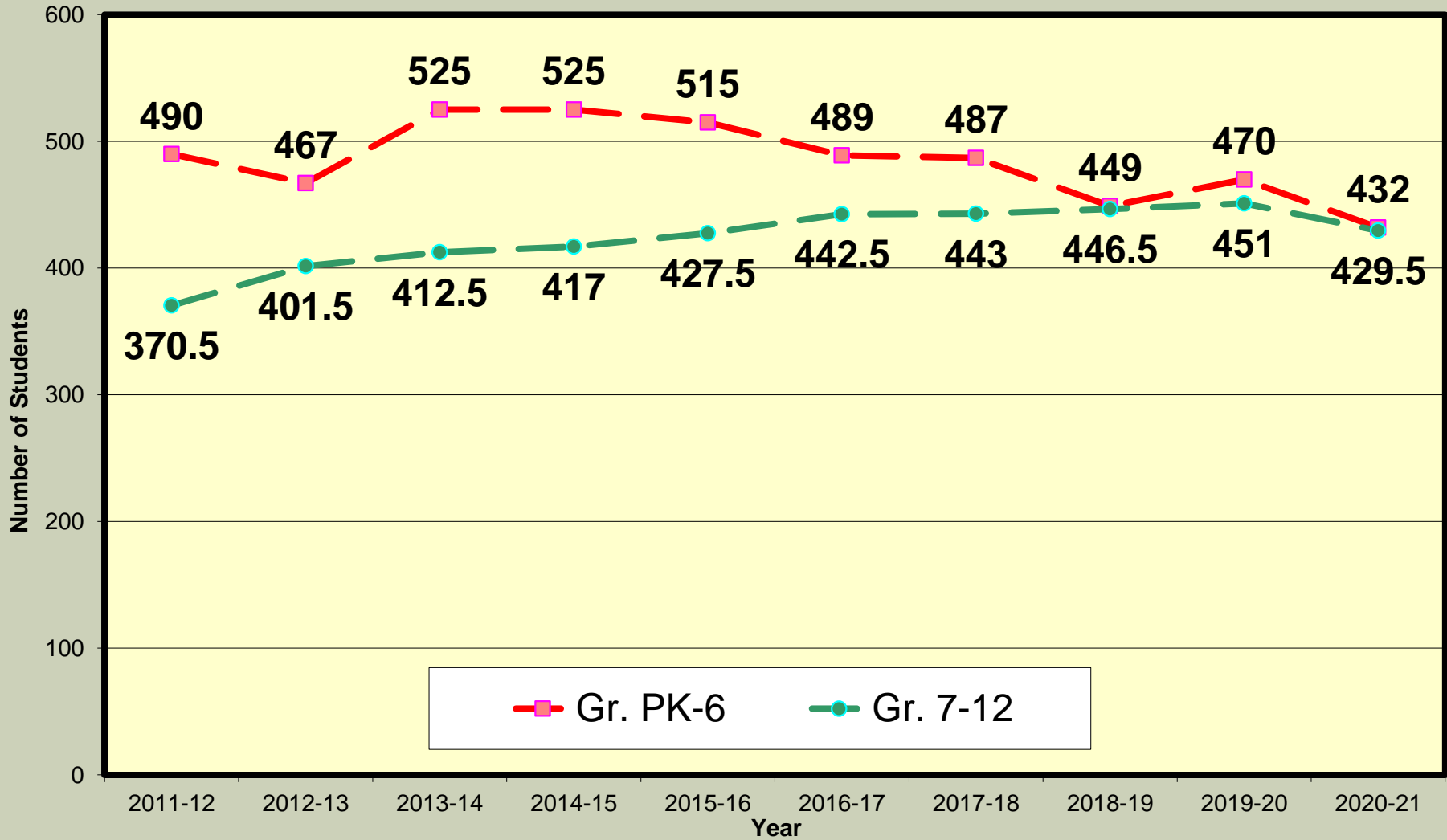
HISTORICAL ENROLLMENT TRENDS

- ❑ District's 2020-21 enrollment (10/15/20) is 861.5.
- ❑ Enrollment has been generally declining over last five years.
- ❑ 2011-12 enrollment = 860.5 (4 districts combined before regional was formed in 2014-15).
- ❑ Loss of 59.5 students in past year, partially due to COVID.
- ❑ Cohort-Survival Ratio Method (CSR) was used to project enrollments five years into the future.

HISTORICAL ENROLLMENTS (PK-12) 2011-12 TO 2020-21



HISTORICAL ENROLLMENTS BY GRADE CONFIGURATION 2011-12 TO 2020-21



ENROLLMENT PROJECTION METHOD

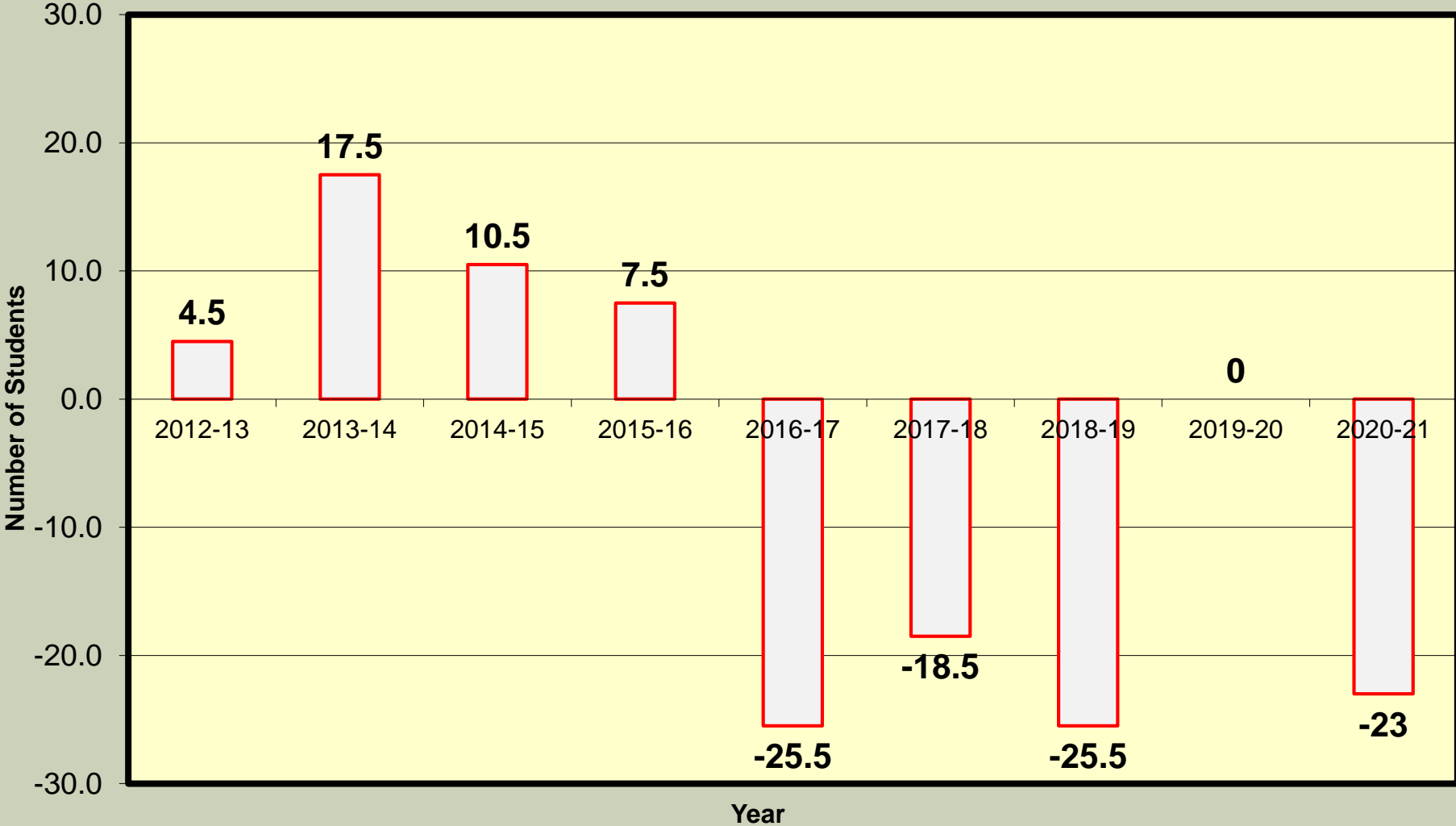
COHORT SURVIVAL RATIO

- ❑ Ratios are calculated for each grade progression. (Ex. 100 1st graders in 2019-20 become 95 2nd graders in 2020-21 = 0.95)
- ❑ Ratios above 1.000 = inward migration, below 1.000 = outward migration
- ❑ Survival ratios were computed for ten historical years.
- ❑ 8 of 13 average ratios were below 1.000 indicating slight net outward migration.
- ❑ 4 ratios in 2020-21 were lowest in last decade, likely due to COVID.
- ❑ Averages were then computed and used to project future enrollments.

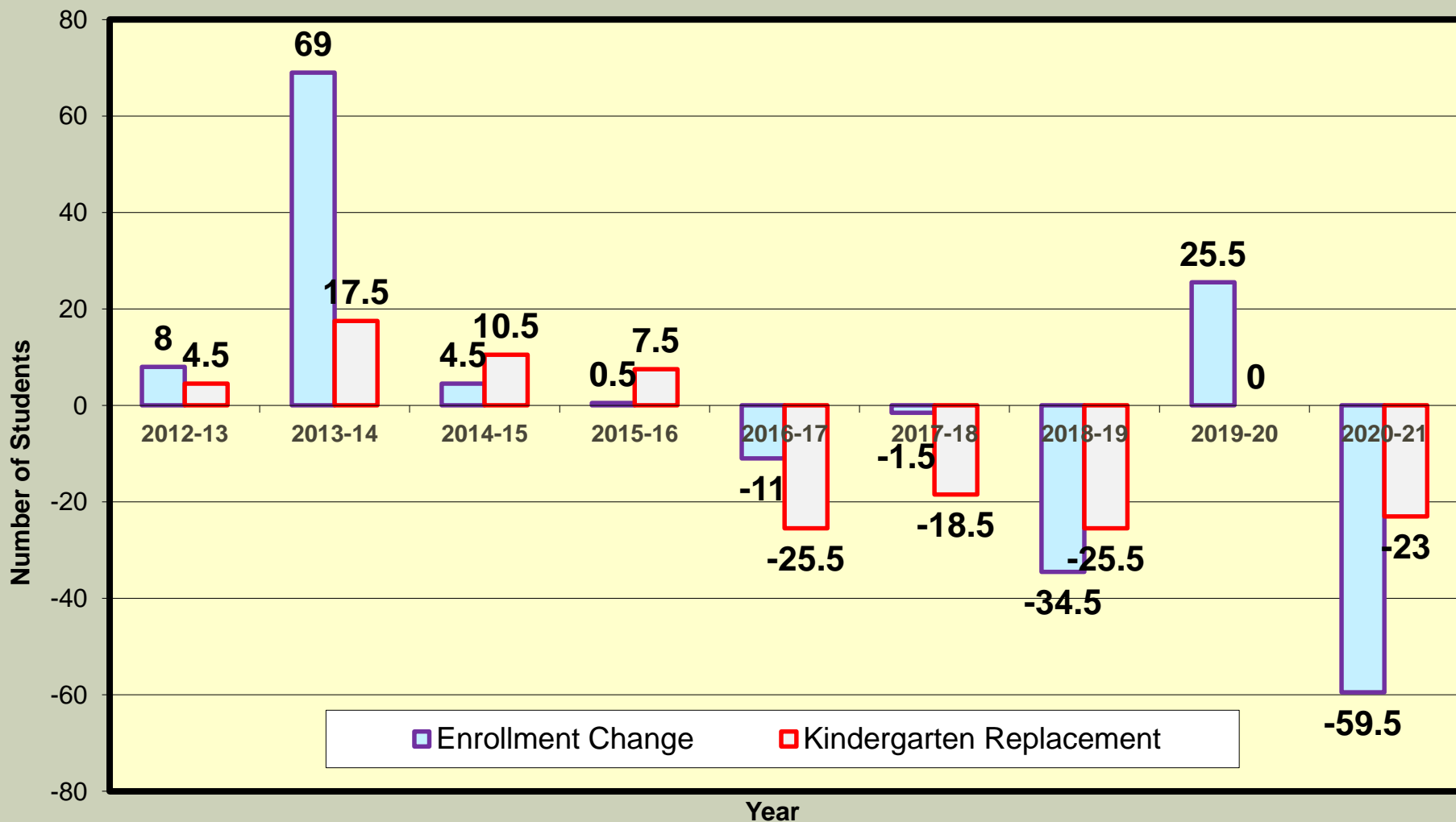
KINDERGARTEN REPLACEMENT

- ❑ Negative kindergarten replacement (KR) in 4 of last 5 years, ranging from 18.5-25.5 students per year.
- ❑ Positive KR four years prior, ranging from 4.5-17.5 students per year.
- ❑ Negative KR- Number of kindergarten students entering district is less than graduating 12th grade students from prior year.
- ❑ Negative KR in district is result of smaller kindergarten cohorts entering the district.

HISTORICAL KINDERGARTEN REPLACEMENT



TOTAL ENROLLMENT CHANGE VS. KINDERGARTEN REPLACEMENT



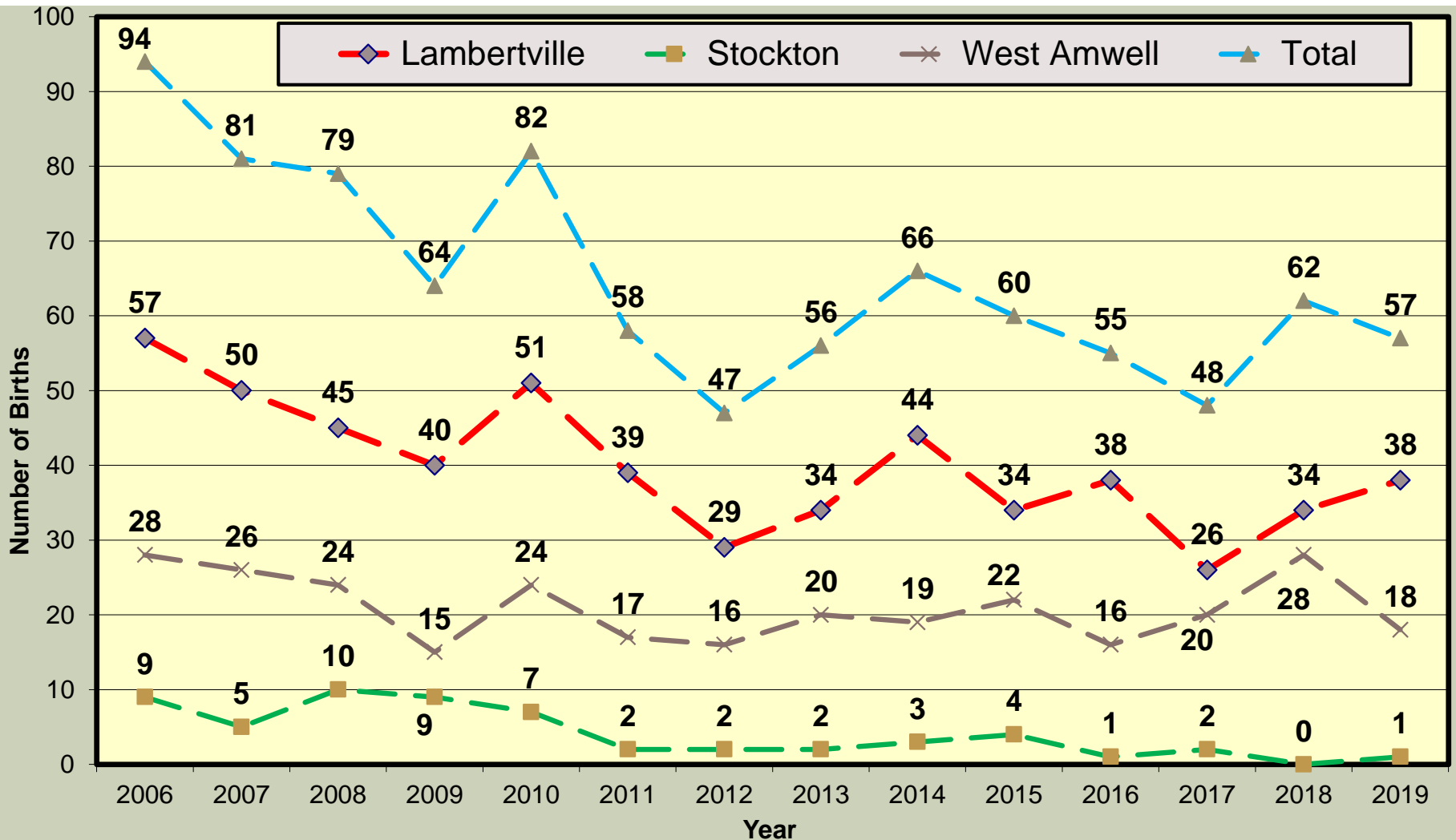
BIRTH COUNTS

- ❑ Births are used to project kindergarten students 5 years later.
- ❑ Analyzed birth data from 2006-2019. Aggregated births declined from high of 94 in 2006 to 48 in 2017.
- ❑ As a result, kindergarten declined from 80 in 2011-12 to 48 in 2020-21.

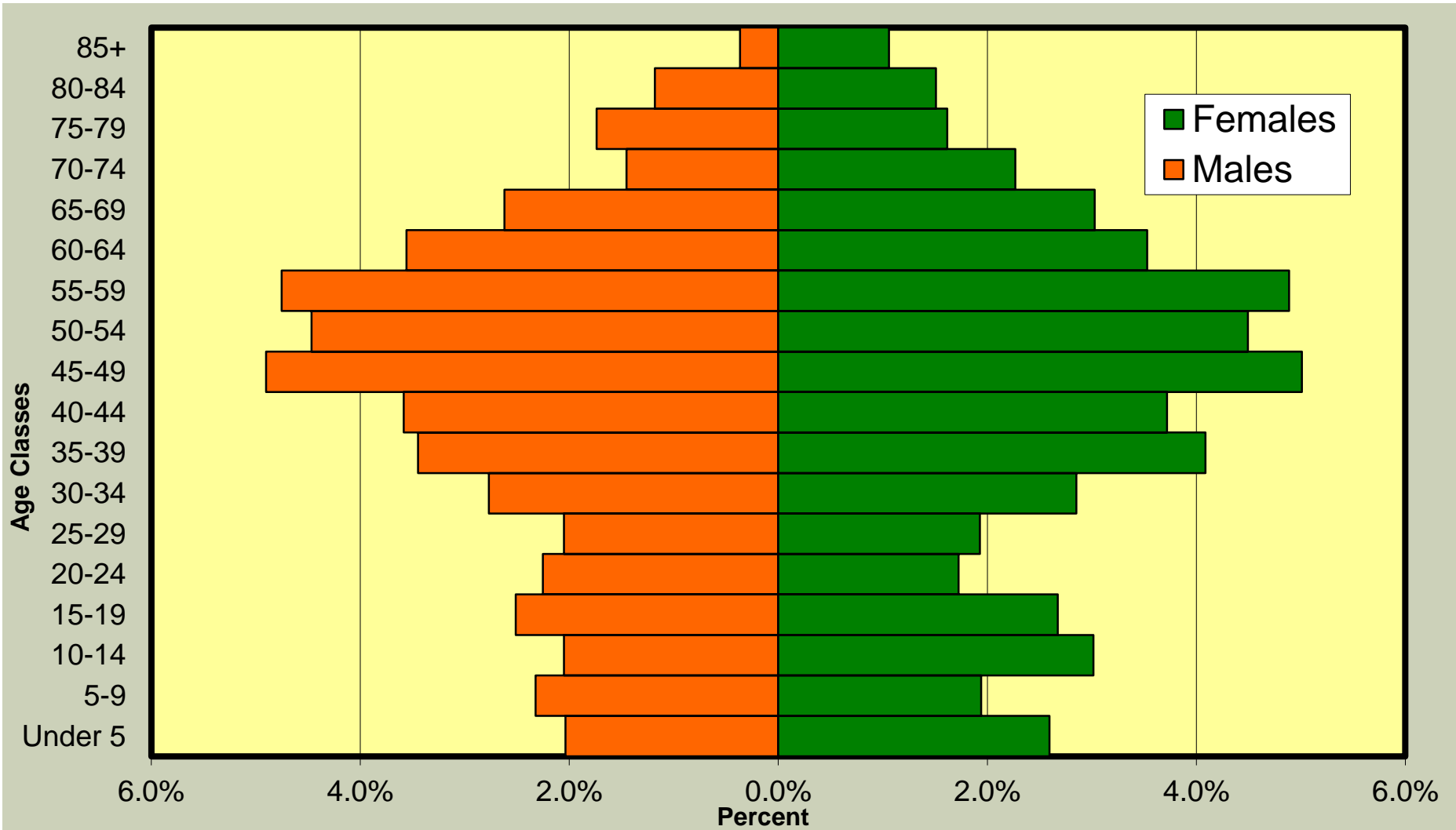
BIRTH COUNTS AND BIRTH-TO-KINDERGARTEN SURVIVAL RATIOS

Birth Year	Lambertville Births	Stockton Births	West Amwell Births	Total Number of Births	Kindergarten Students Five Years Later	Birth-to-Kindergarten Survival Ratio
2006	57	9	28	94	80	0.851
2007	50	5	26	81	58	0.716
2008	45	10	24	79	64	0.810
2009	40	9	15	64	55	0.859
2010	51	7	24	82	75	0.915
2011	39	2	17	58	44	0.759
2012	29	2	16	47	53	1.128
2013	34	2	20	56	41	0.732
2014	44	3	19	66	66	1.000
2015	34	4	22	60	48	0.800
2016	38	1	16	55	N/A	N/A
2017	26	2	20	48	N/A	N/A
2018	34	0	28	62	N/A	N/A
2019	38	1	18	57	N/A	N/A

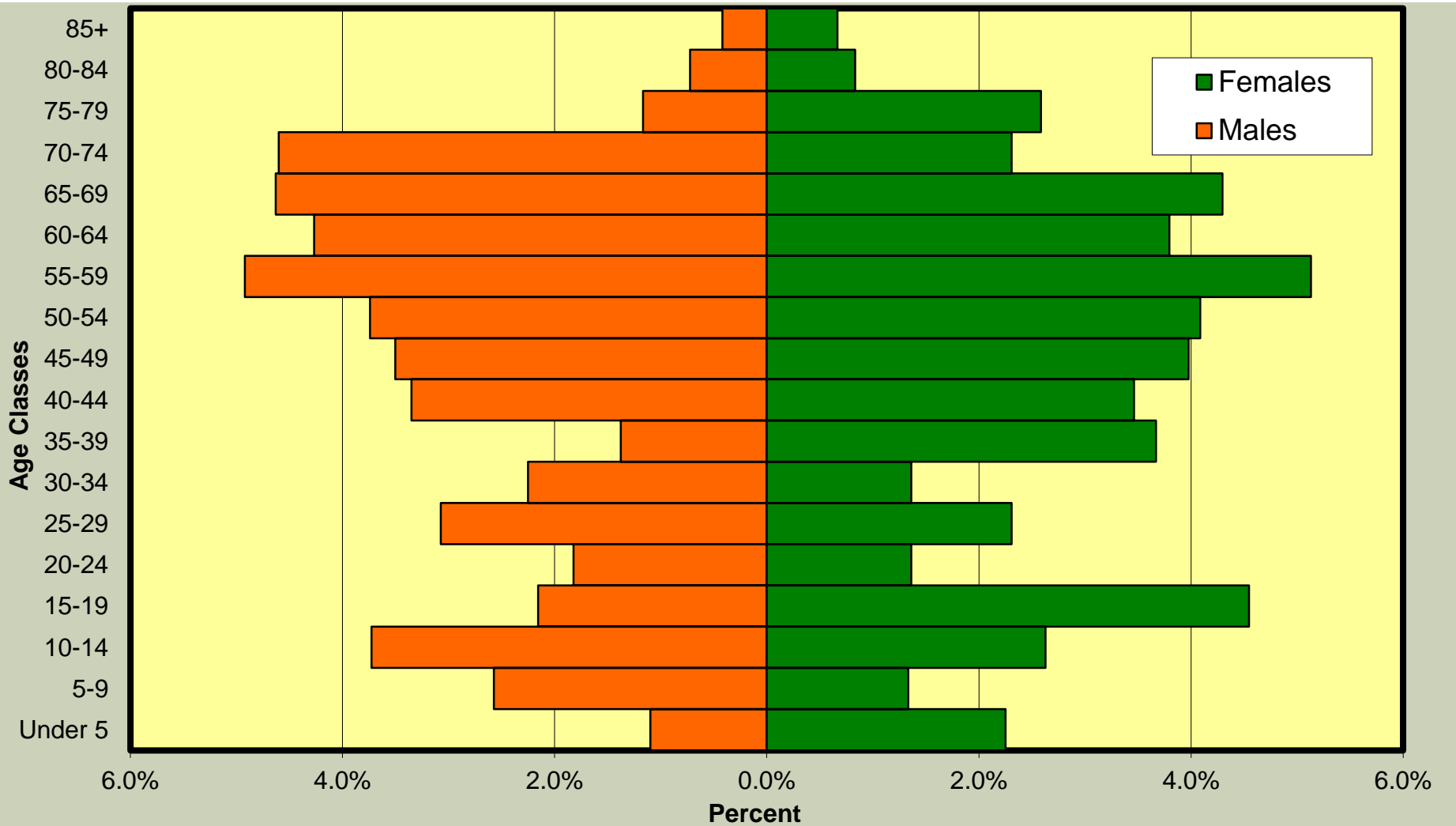
HISTORICAL BIRTH COUNTS 2006-2019



SOUTH HUNTERDON REGIONAL AGE PYRAMID 2010 CENSUS



SOUTH HUNTERDON REGIONAL AGE PYRAMID 2015-2019 ACS



CHANGE IN MALES AND FEMALES 2010 TO 2015-2019 SOUTH HUNTERDON REGIONAL

Age Group	Males		Females	
	Numerical Change	Percentage Point Change	Numerical Change	Percentage Point Change
Under 5	-71	-0.9	-29	-0.3
5-9	+14	+0.3	-47	-0.6
10-14	+117	+1.7	-33	-0.4
15-19	-30	-0.4	+130	+1.9
20-24	-35	-0.4	-29	-0.4
25-29	+70	+1.0	+24	+0.4
30-34	-42	-0.5	-112	-1.5
35-39	-155	-2.1	-37	-0.4
40-44	-23	-0.2	-25	-0.3
45-49	-109	-1.4	-83	-1.0
50-54	-60	-0.7	-37	-0.4
55-59	+4	+0.2	+9	+0.2
60-64	+45	+0.7	+13	+0.3
65-69	+140	+2.0	+86	+1.3
70-74	+224	+3.1	-1	0.0
75-79	-44	-0.6	+67	+1.0
80-84	-35	-0.5	-51	-0.7
85+	+3	+0.1	-30	-0.4

NEW HOUSING

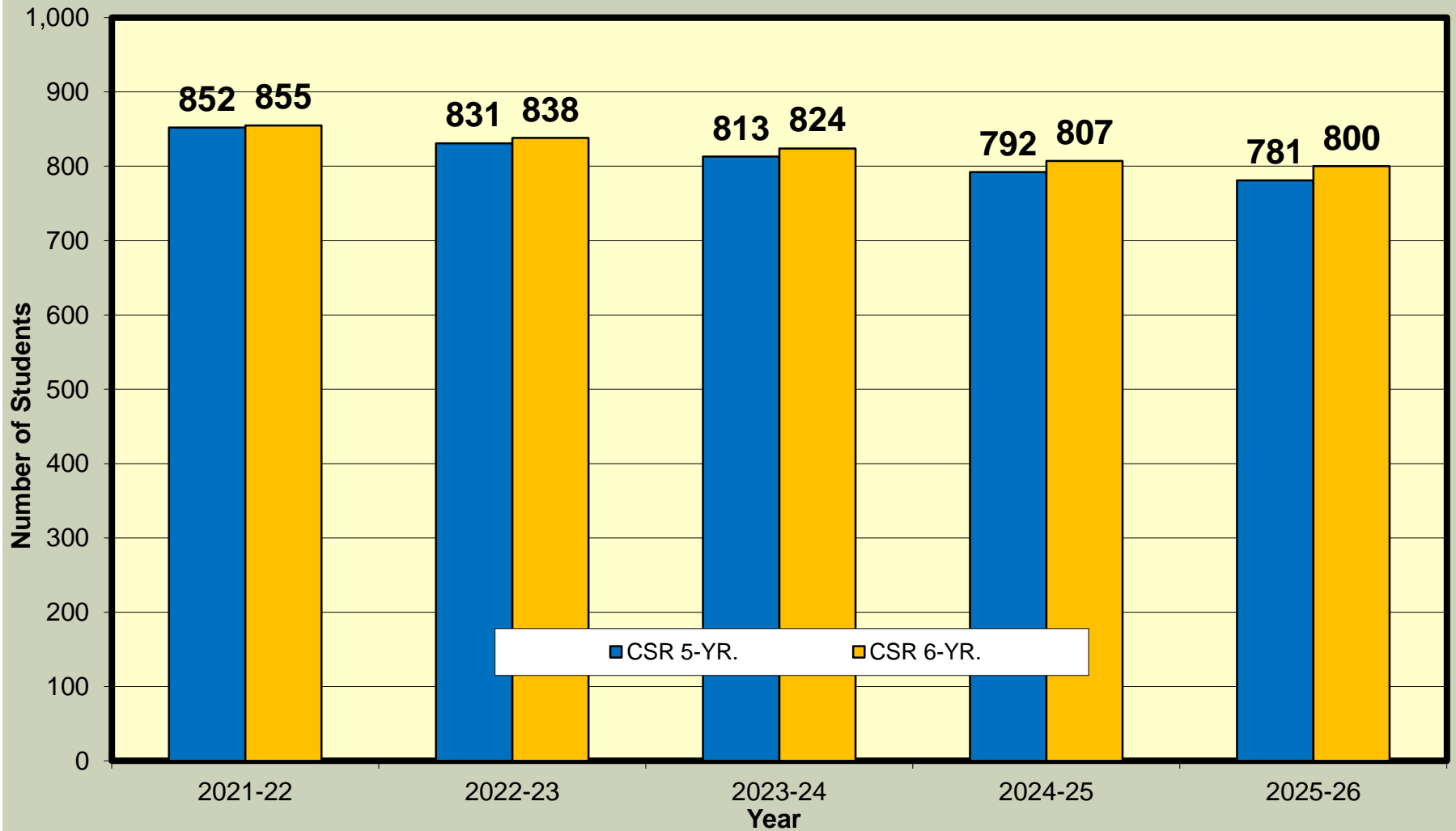
- Municipal representatives contacted in each community.
- Lambertville- 16-17 non age-restricted housing units, most of which are townhouse units.
- Stockton and West Amwell - there are no residential developments under construction, nor are there applications for residential subdivisions before the respective planning boards.
- In total, seven (7) public school children (K-12) are projected to be generated from the new housing developments in Lambertville.

STUDENT WITHDRAWALS

2020-21

School	Grade														Total
	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	
Lambertville P.S. (PK-6)	4	0	3	0	1	0	1	1							10
West Amwell Twp. E.S. (K-6)		1	1	1	4	3	1	0							11
South Hunterdon Regional H.S. (7-12)									1	1	0	0	0	0	2
Total	4	1	4	1	5	3	2	1	1	1	0	0	0	0	23

ENROLLMENT PROJECTIONS



ENROLLMENT PROJECTIONS BY GRADE CONFIGURATION

Historical	PK-6		7-12	
2020-21	432		429.5	
Projected	PK-6 CSR 5-YR	PK-6 CSR 6-YR	7-12 CSR 5-YR	7-12 CSR 6-YR
2021-22	443	443	409	412
2022-23	409	409	422	429
2023-24	413	413	400	411
2024-25	411	413	381	394
2025-26	415	418	366	382
5-year Change	-17	-14	-63.5	-47.5

CAPACITY ANALYSIS

Grade Configuration	Capacity	Current Enrollment 2020-21	Difference	Projected Enrollment 2025-26	Difference
Elementary (PK-6)	575	432	+143	418	+157
South Hunterdon Regional H.S. (7-12)	434	429.5	+4.5	382	+52

HOUSING TURNOVER ANALYSIS

Completely independent analysis using houses, not students, to project enrollment. Completed for 1-4 family homes.

Should not be used for yearly enrollment projections. Use those from CSR.

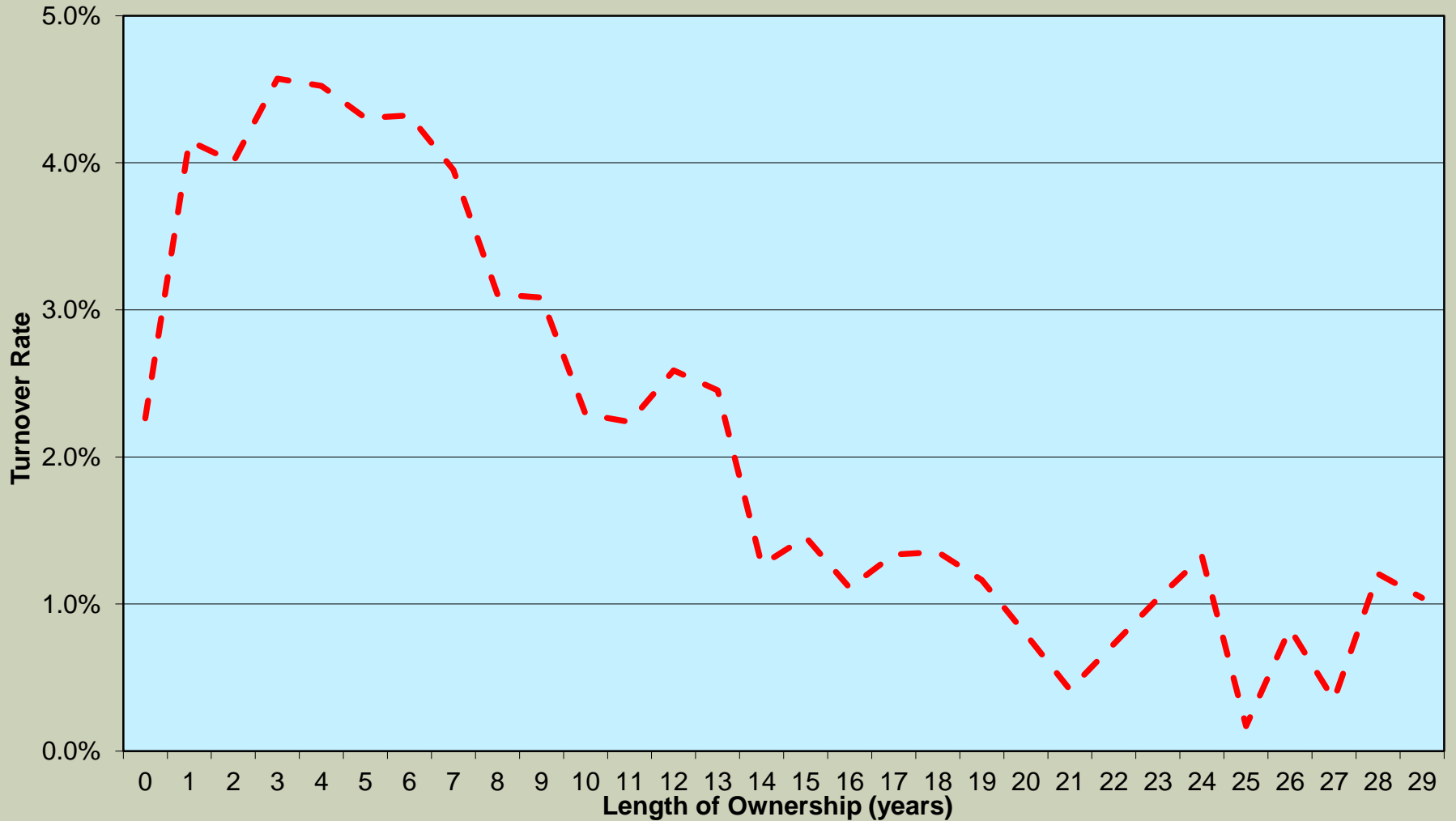
Three inputs:

- 1.** Housing turnover rates by length of ownership
- 2.** Current distribution of homes by length of ownership
- 3.** Student yields by length of ownership

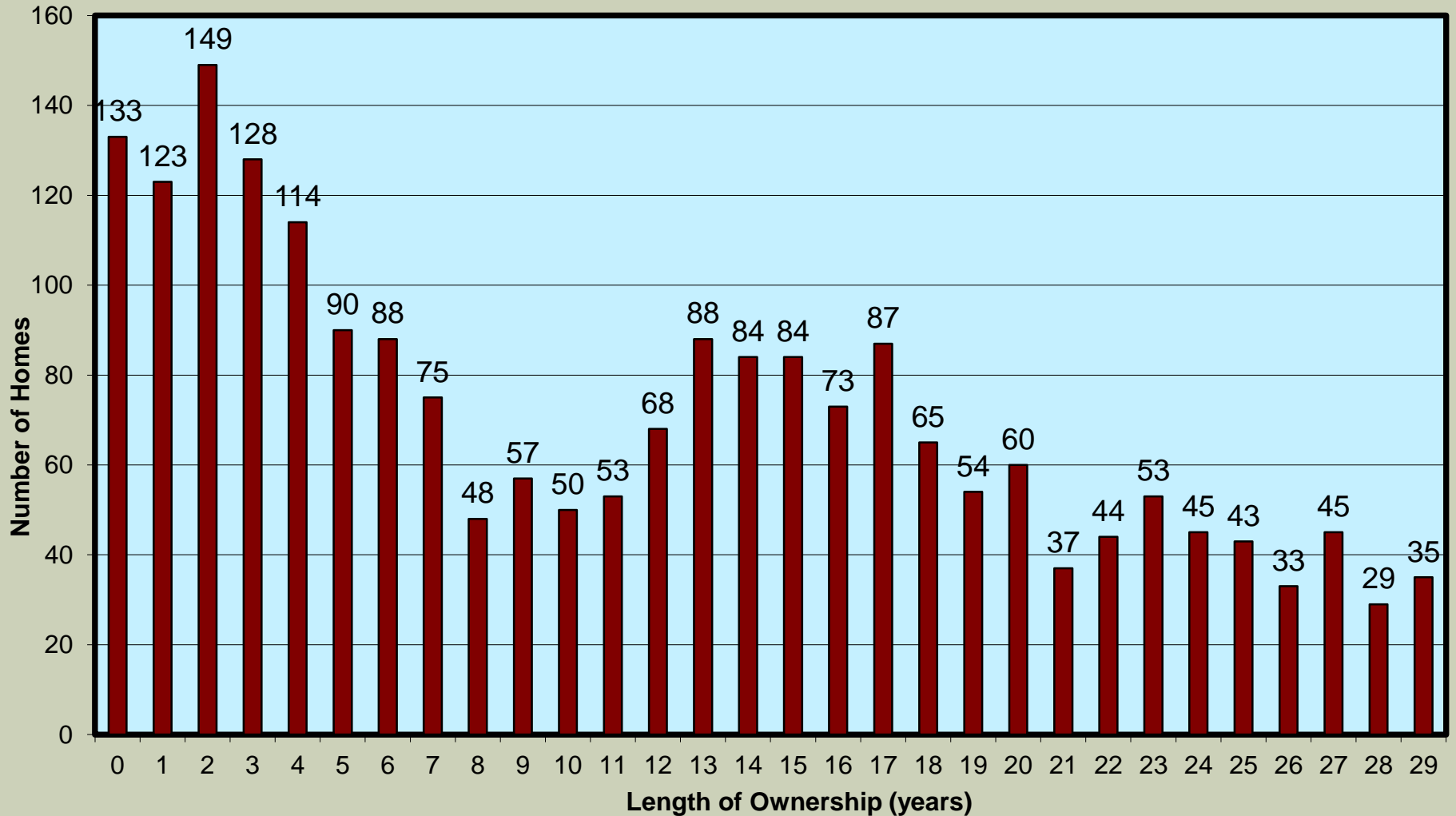
TURNOVER RATES

- Used parcel-level data to track each home through its “lifecycle”. Data contained sale dates, sale prices, and year home was built.
- Sales data were collected from 1990-2019.
- Follow each year’s cohort of homes beginning in 1990 to see when they sell.
- Ex. Home built in 1980 sold in 2002, 2008, and 2012 (part of three cohorts). First length of ownership is 6 years, second length of ownership is 4 years, current length of ownership is 7 years.

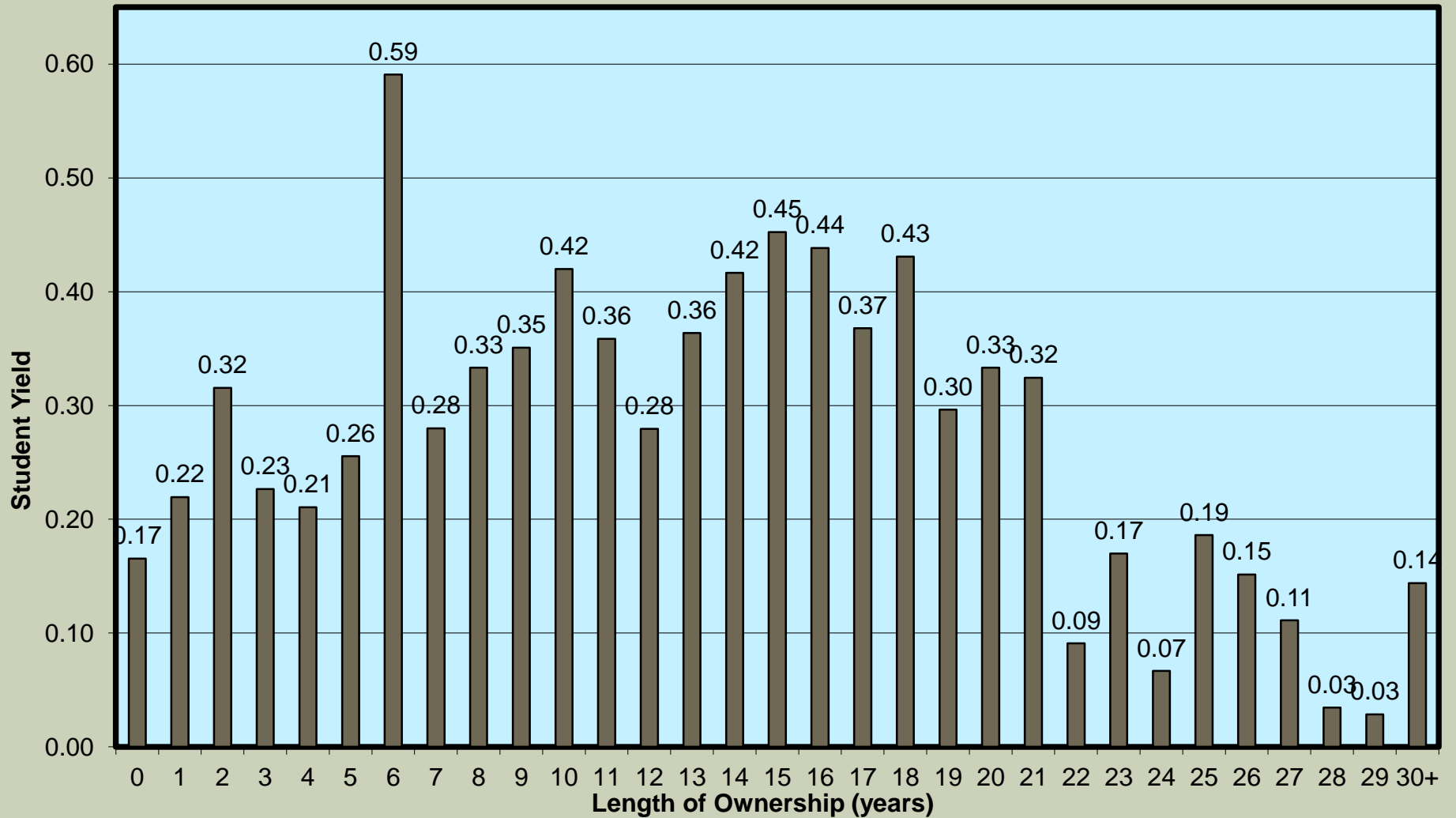
WEIGHTED-AVERAGE TURNOVER RATES BY LENGTH OF OWNERSHIP



CURRENT NUMBER OF HOMES BY LENGTH OF OWNERSHIP



STUDENT YIELDS BY LENGTH OF OWNERSHIP



HOUSING TURNOVER PROJECTION METHODOLOGY

- Use current length of home ownership distribution and historical turnover rates to either a) advance homes to next year of ownership or b) sell home and have it return to zero years of ownership.
- Number of homes at each length of ownership is multiplied by student yield at each length of ownership.

SCENARIO 1

	2020	2021	2022	2023	2024
Students from One- to Four-Family Homes	719	721	729	730	716
Students from mixed-use units, apartments, out of town, no address, or unmatched (constant)	280	280	280	280	280
Total	999	1,001	1,009	1,010	996

SCENARIO 2

	2020	2021	2022	2023	2024
Students from One- to Four-Family Homes	711	709	713	704	682
Students from mixed-use units, apartments, out of town, no address, or unmatched (constant)	280	280	280	280	280
Total	991	989	993	984	962

COVID-19

- Effects of COVID-19 on enrollment are varied across the country.
- Vermont has 2-5% increase this year 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 COVID-free 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). Kindergarten redshirting?
- Most student withdrawals are students going to private school or being homeschooled. Rate of withdrawal seems to be linked to whether district is 100% virtual learning, hybrid, or full in-person instruction.
- 2 working parents likely to place child in a private school. Will they return back to public school?

SUMMARY

- Enrollments are projected to decline in the next five years, mostly in the middle/high school.
 1. Declining birth rate
 2. Net outward migration of students
- Smaller kindergarten cohorts from declining births result in smaller elementary, middle, and, eventually, high school grades as they move through the system.

