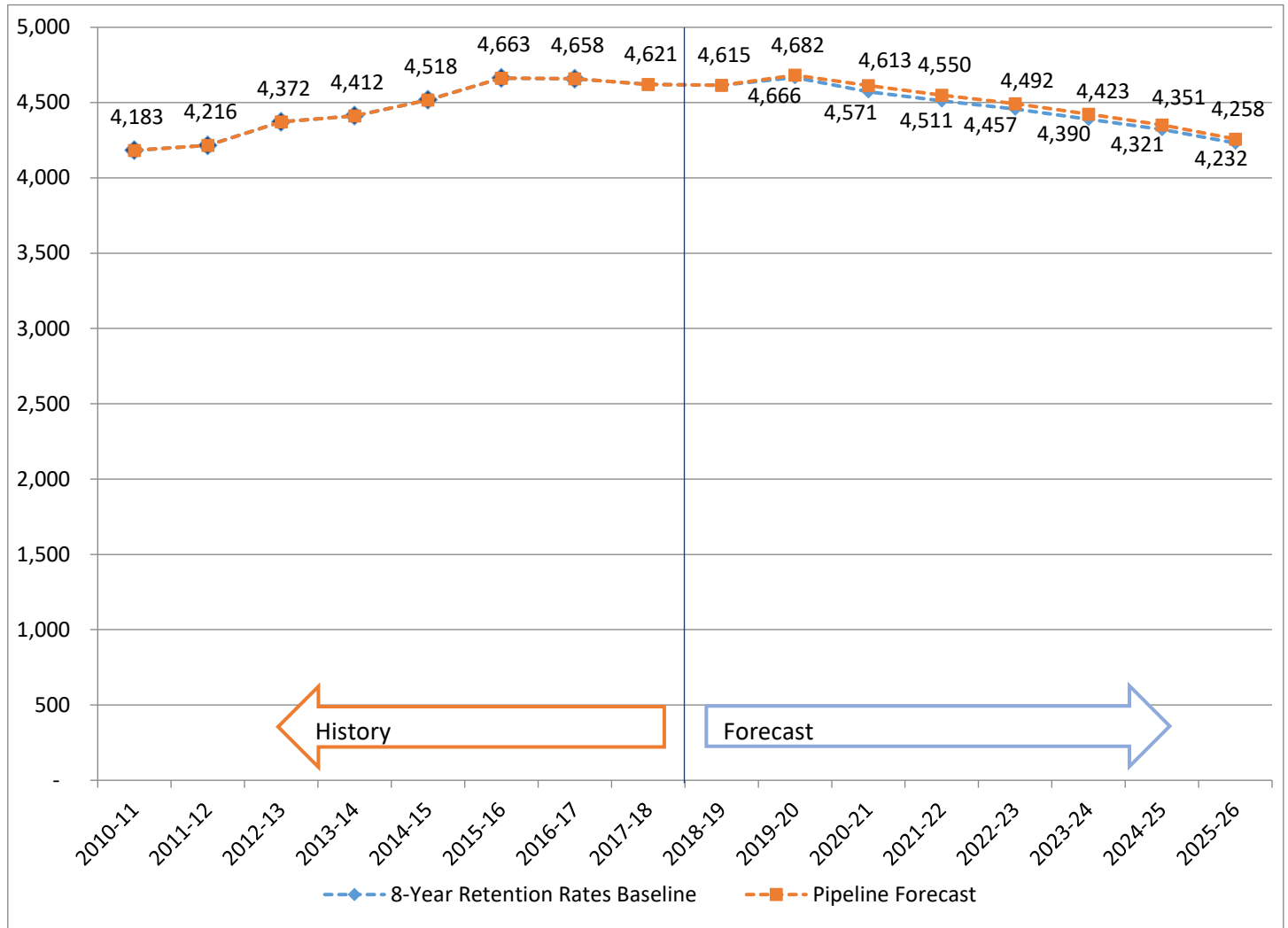


APPENDIX G

PORT CHESTER PUBLIC SCHOOLS OVERCROWDING AND MITIGATION ANALYSIS

PORT CHESTER PUBLIC SCHOOLS

OVERCROWDING AND MITIGATION ANALYSIS



PHASE ONE FINAL REPORT

Prepared for

Village of Port Chester IDA

Submitted by Urbanomics, Inc.

Revision: January 2020

TABLE OF CONTENTS

Introduction 1

Key Findings 1

Analysis of Existing Studies and Forecasts 2

Data Collection and Preparation of Enrollment Forecasts 2

Comparison of 2014 Forecast and Current Enrollment 3

Baseline Forecasts 4

Private School Enrollment 8

School District Data 9

Development of Mitigation Formula 9

PUMS Public School Child Multipliers 10

Comparison of Port Chester Multipliers to Rutgers' 11

Validation of School Child Multipliers 11

Pipeline Projects 12

Quantify Hard/Soft Costs 14

Mitigation Formula Results 15

Spreadsheet Structure 16

Introduction

Since Urbanomics' 2014 report, the Village of Port Chester has continued to prosper from an ongoing construction boom that has favored Westchester County's most urban communities. In response, the new comprehensive plan and consequent zoning changes allow for higher density mixed-use development in strategic areas with the intent of creating additional economic opportunities. There is concern that the already-crowded school system will be stressed beyond capacity by additional children.

To better understand and deal with this challenge, the Port Chester Industrial Development Agency (IDA) retained Urbanomics, Inc. in 2014 to analyze the changing demographics and countervailing child generation rates of Port Chester and to develop a mechanism known as a Public School Child Generation Tool (PSCGT) that allows the Village of Port Chester to accommodate new school children without excessively taxing existing residents. The development of the PSCGT mechanism followed a process of literature review, data collection and forecasting, definition of the costs of education and new school construction, as well as development of a mitigation formula. Regular updates of the multipliers used in the PSCGT were recommended to ensure that the tool reflects current conditions to the greatest extent possible. A description and the results of this update process follow. The final report was submitted in February 2019 and was used to inform the Draft Generic Environmental Impact Statement for the Village of Port Chester's Rezoning.

The 2019 Study accompanied a mitigation calculation tool meant to be used to evaluate individual developments coming before the IDA. In response to comments on the DGEIS, this revision, dated January 2020 further examines the potential soft and hard/construction costs per student as would be seen under full buildout conditions of the Rezoning.

Key Findings

- The number of public school children in Port Chester has continued to rise over the last decade unlike the surrounding municipalities in Westchester County due to demographic differences.
- The number of public school children will continue to increase through the 2019-20 school year followed by several years of declining enrollment through the 2025-26 school year.
- Child generation rates in Port Chester are generally lower than State averages for studios and one-bedroom units, and higher than the averages for two or more bedroom units.
- The actual number of school children residing in new developments is far lower than estimated by current child generation rates
- Educational, operational (soft) costs per child are estimated at \$19,323
 - Minus government aid, the soft cost per child is \$13,863.
- Construction (hard) costs per child are estimated at \$25,000
 - Minus government reimbursement, the hard cost per child is \$13,121.25

Analysis of Existing Studies and Forecasts

Urbanomics reviewed several existing studies and forecasts at the outset of the project to provide context. These studies included the Village of Port Chester Housing Study, which provided information on the predominant existing housing by type and income level of residents. The Village of Port Chester's 2012 Comprehensive Plan and Comprehensive Plan EIS provided information on what future housing development will be like in the Village, in particular in the areas rezoned to higher densities. More recent studies were also considered, including the Village's 2017 Local Waterfront Revitalization Plan, which did not propose any significant land use changes along the waterfront but rather provided further support for future land uses proposed in the Comprehensive Plan. The Village is currently working with Town Planning & Urban Design Collaborative to formulate a Form-Based Code to modernize the Village's zoning ordinance. This economic development and community building initiative, known as Plan the Port, recently completed the visioning phase in the Spring of 2018; planning efforts to redevelop several key nodes of Port Chester are currently underway in the Downtown Waterfront, Train Station, Lower Waterfront, Boston Post Road, Fox Island and Gateway Park neighborhoods.

The primary source for School District information was the Port Chester Public Schools 10-Year Enrollment Forecast prepared by Urbanomics in November 2016. Using several alternative methodologies as per industry forecast standards that varied by historic retention rate, the forecast projected continued growth in enrollment through school year 2019-2020 followed by a small decrease in enrollment in following years.

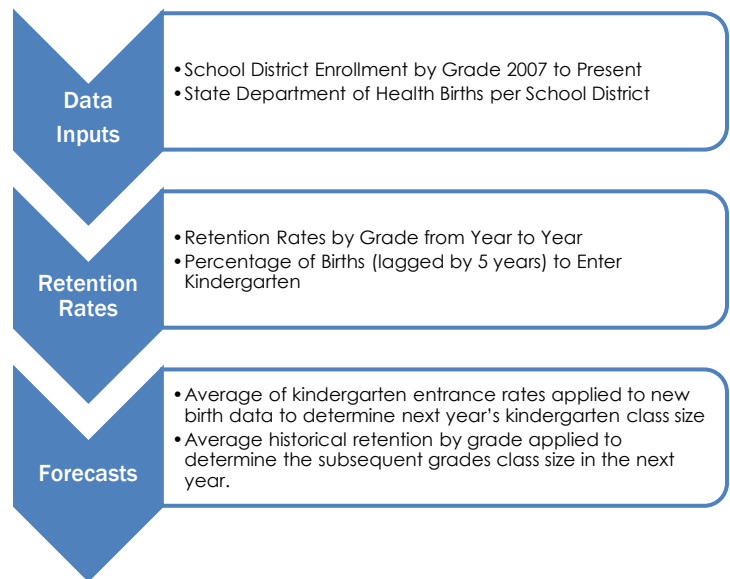
For information on classroom space utilization, Ross Haber Associates' June 2011 Districtwide Enrollment Study was relied on. This study included both a forecast of student enrollment to 2015 as well as a classroom capacity analysis of the District's elementary schools. The capacity analysis showed a district-wide classroom deficit of 3 classrooms in 2011, assuming a maximum class size of 25 students.

The 2014 Overcrowding and Mitigation Analysis report previously prepared by Urbanomics was reviewed further with an evaluation of the reliability of past school child multipliers against actual student enrollment in recently built housing developments.

Data Collection and Preparation of Enrollment Forecasts

The graphic to the right shows the progression of the School District Enrollment Forecasts. Historical data and assumptions for the enrollment forecasts are as follows:

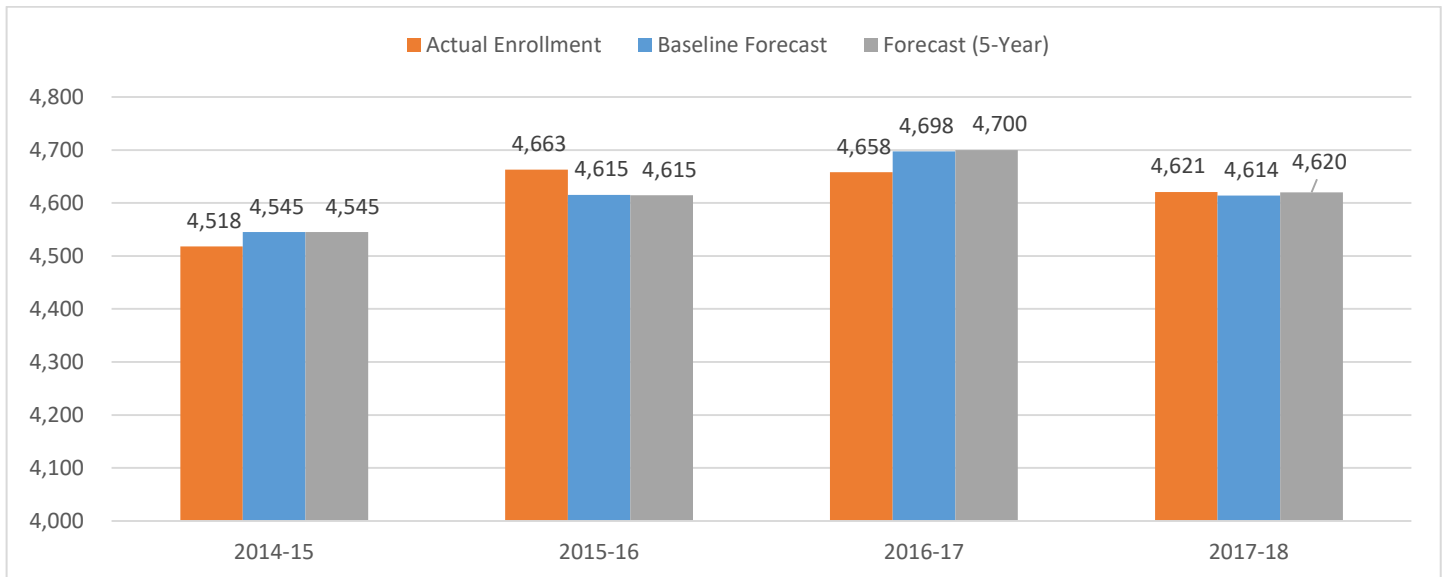
- Births:
 - Historical births for all mothers residing in the Port Chester/Rye School District available from New York State Department of Health for 2005-2015; projected to 2020
 - K enrollment dependent upon annual births of 5 years prior to school year
 - Actuals for calendar years (CY) 2005 to 2012 (historical period school years (SY) 2010-11 to 2017-18)
 - Actuals for CYs 2013 to 2015 (projected period SYs 2018-19 to 2020-21)
 - Linear Trend of Births for CYs 2016 to 2020 (projected period SYs 2022-23 to 2025-26)
- Total Enrollment:
 - Public School enrollment collected for mid-October from NYS Department of Education and the Port Chester Rye School District reports of all students on roll by grade.
- Retention Rates:



- For grades K-12, forecast retention rates are computed as the average of seven year historical survival rates.
- All retention rates are applied to prior year and prior grade enrollment, with the exception of K grade levels for which retention rates are applied to corresponding row birth rates.
- Ungraded (Grades 13 and 14)
 - A ratio of special education students to regular students was computed on an historical basis by year of enrollment for K-12. The ratios were forecasted by a least squares linear regression to provide future school year percentages of special education students to be applied to the regular student forecast.
- Pending Development School Child Generation
 - All housing units proposed and under construction in the forecast period were obtained from the Village of Port Chester Department of Planning by tenure, building type, cost and unit size. The Port Chester Specific PUMS multipliers (as described in the following section) were applied to housing developments on a unit size basis.

Comparison of 2014 Forecast and Current Enrollment

The chart below compares the trend in historic enrollment against the 2014 enrollment forecasts previously prepared by Urbanomics. The previous forecasts are quite close to actual enrollment over the past 4 schools years. The annual average enrollment growth of actual enrollment was marginally greater (+0.75%) than both the baseline (+0.50%) and 5-year forecasts (+0.55%), however the difference is statistically insignificant—an indication that the forecasts are accurately capturing local enrollment trends, including not only students aging through the district, but also students new to Port Chester.



Source: Port Chester Rye UFSD, Urbanomics

Baseline Forecasts

What follows is an image of the Cohort-Survival Forecast worksheet.

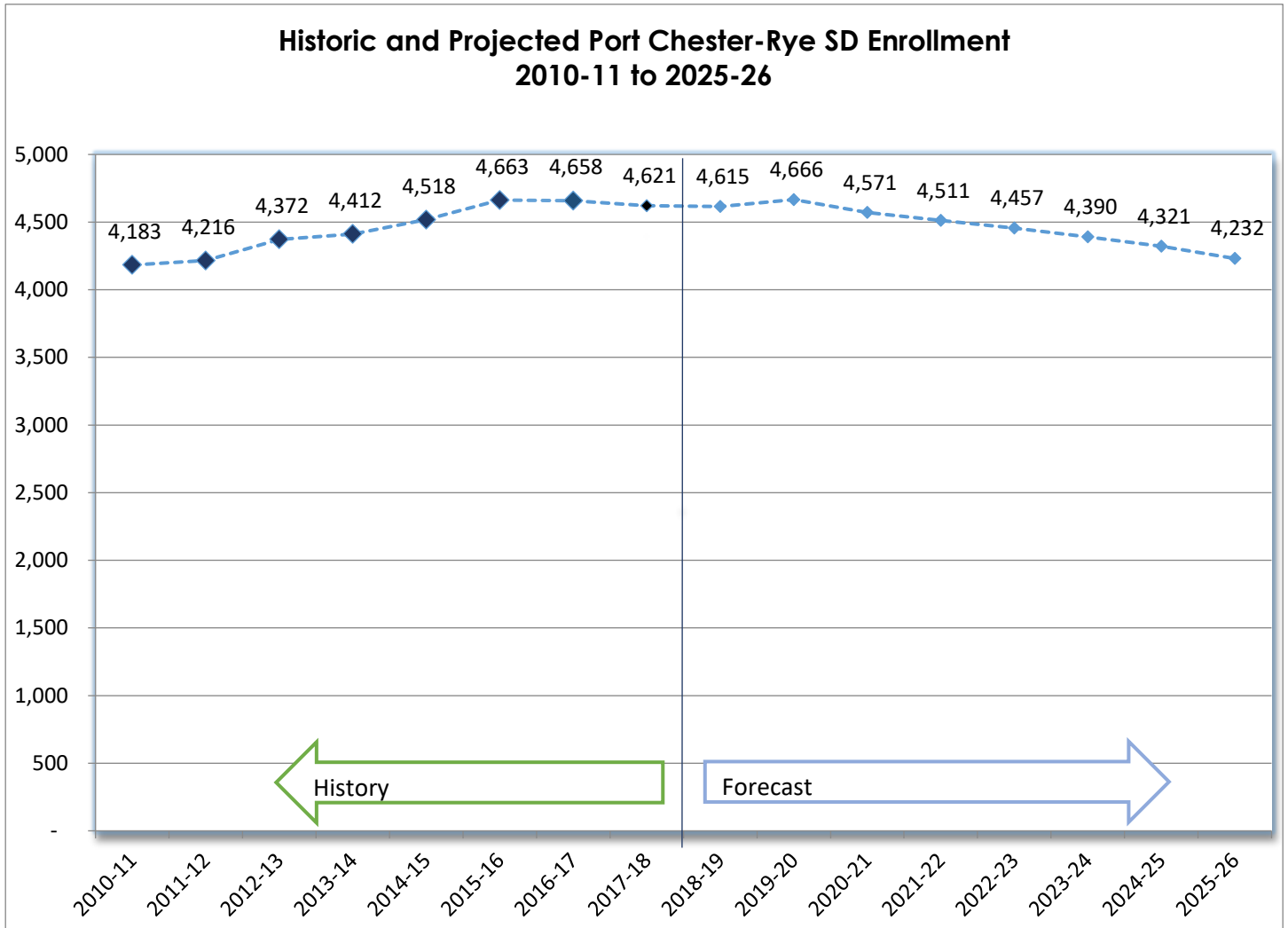
Cohort-Survival Enrollment Projection Worksheet

DISTRICT NAME: PORT CHESTER-RYE UFSD

COUNTY: Westchester

School Year	Births 5 Yrs. Ago	"s"	K	1st Gr.	2nd Gr.	3rd Gr.	4th Gr.	5th Gr.	6th Gr.	7th Gr.	8th Gr.	9th Gr.	10th Gr.	11th Gr.	12th Gr.	Total	13th Gr.	14th Gr.
			"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"	"s"		"s"	"s"
HISTORIC DATA																		
2010-11	529	0.686	363	349	361	365	321	312	285	300	299	310	325	277	266	4,183	45	5
			1003	1023	0.981	1025	0.978	0.971	0.968	1000	1.134	0.919	0.874	0.953		0.019	0.004	
2011-12	491	0.780	373	364	357	354	374	314	303	276	300	339	285	284	264	4,216	18	11
			1019	0.992	0.986	0.980	0.981	0.978	0.997	1025	1.240	0.923	0.986	1028		0.007	0.009	
2012-13	500	0.760	380	380	361	352	347	367	307	302	283	372	313	281	292	4,372	18	17
			1000	0.976	0.970	0.963	0.991	1016	0.967	1026	1.269	0.871	0.974	0.940		0.007	0.014	
2013-14	476	0.754	359	380	371	350	339	344	373	297	310	359	324	305	264	4,412	23	14
			1003	0.966	0.946	0.989	0.994	1023	1024	1000	1.352	0.827	0.963	0.951		0.009	0.011	
2014-15	507	0.702	356	360	367	351	346	337	352	382	297	419	297	312	290	4,518	44	8
			1045	1011	1014	1026	1012	1042	0.974	1016	1.266	0.897	0.939	1016		0.018	0.006	
2015-16	475	0.802	381	372	364	372	360	350	351	343	389	376	376	279	317	4,663	13	20
			0.987	0.962	0.986	0.984	0.983	0.980	1028	1029	1.293	0.902	0.851	0.982		0.005	0.015	
2016-17	484	0.665	322	376	358	359	366	354	343	361	353	503	339	320	274	4,658	9	21
			0.994	0.941	0.972	0.981	0.970	0.986	1023	0.964	1.292	0.843	0.855	1000		0.004	0.015	
2017-18	464	0.696	323	320	354	348	352	355	349	351	348	456	424	290	320	4,621	8	23
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
Average Survival Rate	491	0.728	1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
PROJECTIONS																		
2018-19	447	0.728	326	325	314	347	345	347	355	348	354	440	403	390	285	4,615	23	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2019-20	479	0.728	349	328	319	308	344	341	347	354	351	448	388	371	383	4,666	23	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2020-21	413	0.728	301	351	322	313	305	340	341	346	357	444	395	357	364	4,571	23	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2021-22	433	0.728	315	303	345	315	310	301	339	340	350	451	392	364	351	4,511	22	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2022-23	426	0.728	310	318	297	338	313	306	301	339	343	442	399	361	357	4,457	22	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2023-24	418	0.728	304	312	312	291	335	309	306	300	342	433	390	367	354	4,390	22	13
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2024-25	410	0.728	299	307	306	305	289	331	309	305	303	432	383	359	360	4,321	21	12
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	
2025-26	403	0.728	293	301	301	300	303	285	331	308	308	383	381	352	352	4,232	21	12
			1007	0.982	0.979	0.992	0.987	0.999	0.998	1009	1.264	0.883	0.920	0.981		0.010	0.011	

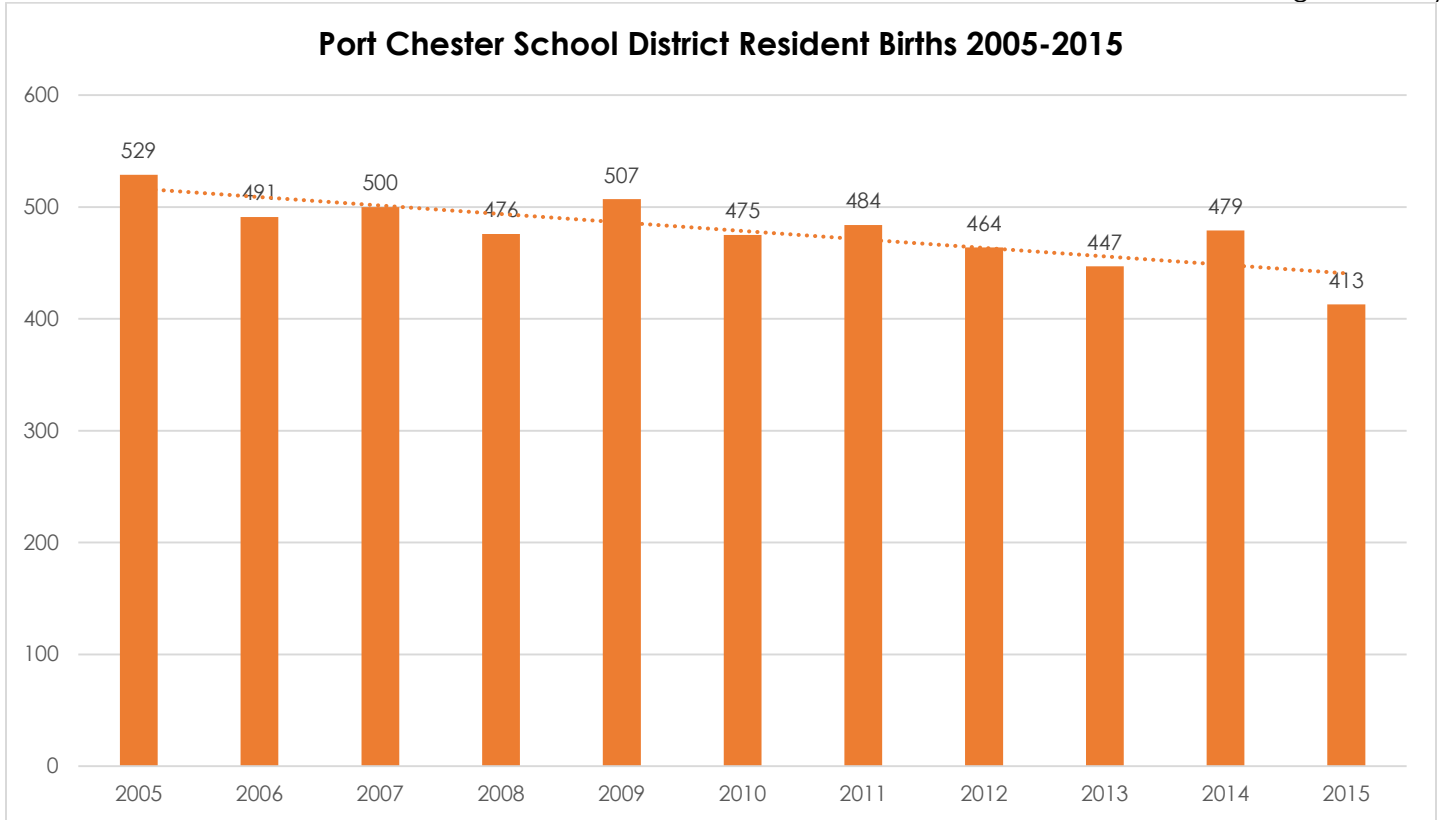
As shown in the preceding table and charted below, between 2010-11 and 2017-18 the number of public school children in the Port Chester Rye UFSD increased from 4,183 to 4,621 or by 10.5 percent (+438 students) or by 1.4 percent on average each year.



Source: Port Chester Rye UFSD, NYS Department of Health, Urbanomics

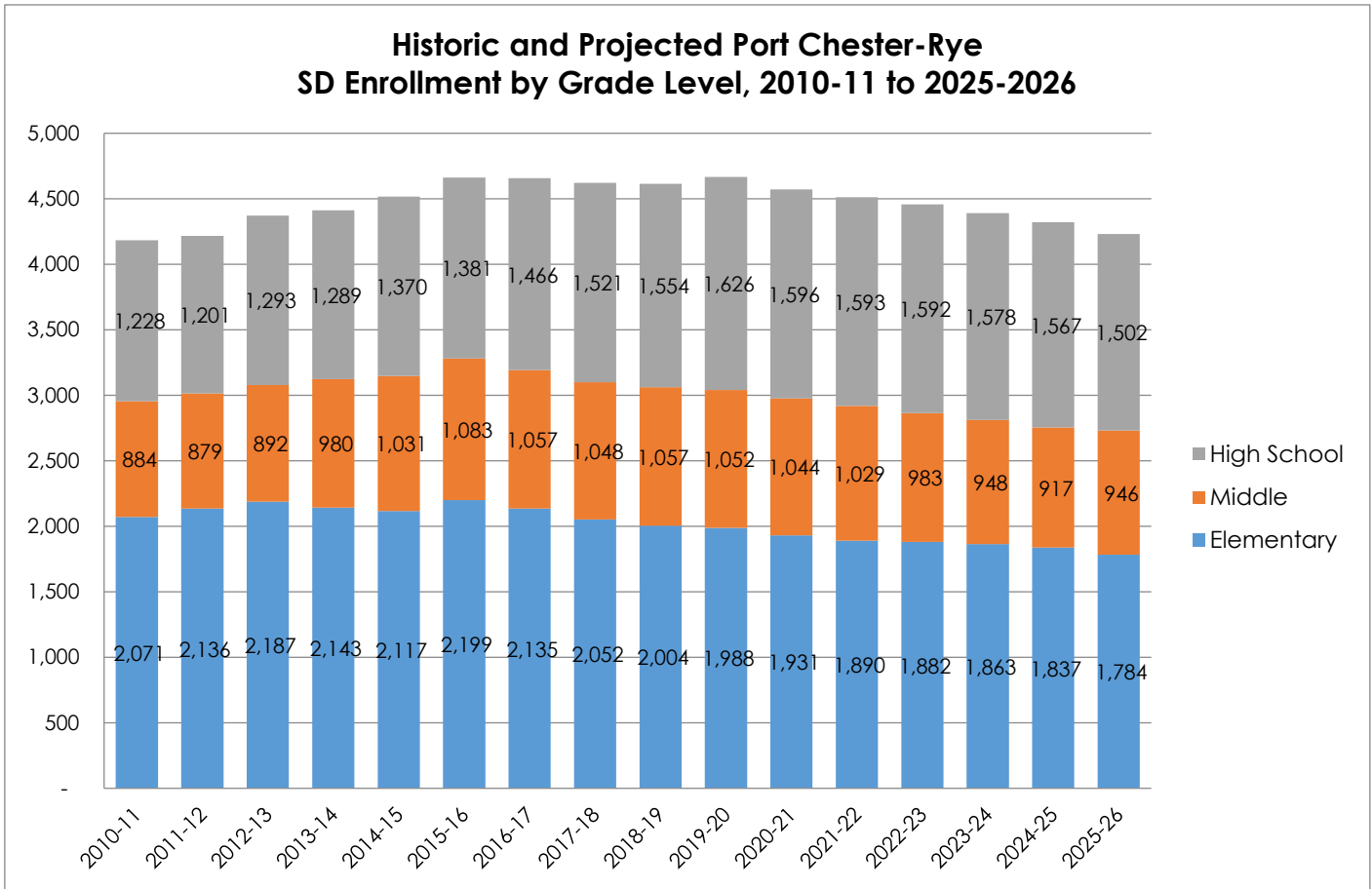
The number of public school children is expected to continue to rise through school year 2019-20, when it will peak at 4,666 students. This is an increase of 45 students or 1.0 percent over the 2017-18 school year. This increase averages to roughly 0.5 percent each year. After SY 2019-20, the number of school children enrolled in the Port Chester Rye UFSD will begin to slowly decrease.

The relatively slow growth to 2019 and the subsequent decrease in the number of students will be due to an overall declining birth rate in the District. As shown in the chart below, the number of District births peaked in 2005 at 529 live births. These children entered public school in the 2010-2011 school year. The projection of births used to extend the enrollment forecasts to the year 2025-26 reflects this trend.



Source: New York State Department of Health

In terms of grade levels, the forecasts show that enrollment at the elementary, middle and high school levels are all projected to decline from recent historic highs through the duration of the forecast period; middle school enrollment peaked with 1,057 students in 2015-16, high school enrollment reached its peak in 2016-17 with 1,590 students and elementary enrollment topped out in 2014-15. Enrollment at all three levels will slowly decline throughout the forecast period as shown in the chart that follows.



Source: Port Chester Rye UFSD, NYS Department of Health, Urbanomics

It should be noted that these forecasts reflect only Public School Enrollment. Only 88 percent of Port Chester children enrolled in school in grades K-12, attend public school. There are an additional 644 children who attend private school, who could potentially end up in the Public School System due to parochial school closures or changes in family economic circumstance.

This is further evidenced by the fact that the student retention rate between 8th and 9th grade increases to 1.264, demonstrating that many children enter the public school system for the first time as high school students, likely after attending parochial and other private elementary schools or as new residents to Port Chester. In addition, some of the new students enter the system requiring additional time to adapt and catch up therefore may repeat that first year of high school. Nearly one in every five 9th graders either did not come through the public school feeder system or entered the system unprepared to progress to the next grade. If private elementary schools were to close, the demand for space in the public schools would increase greatly.

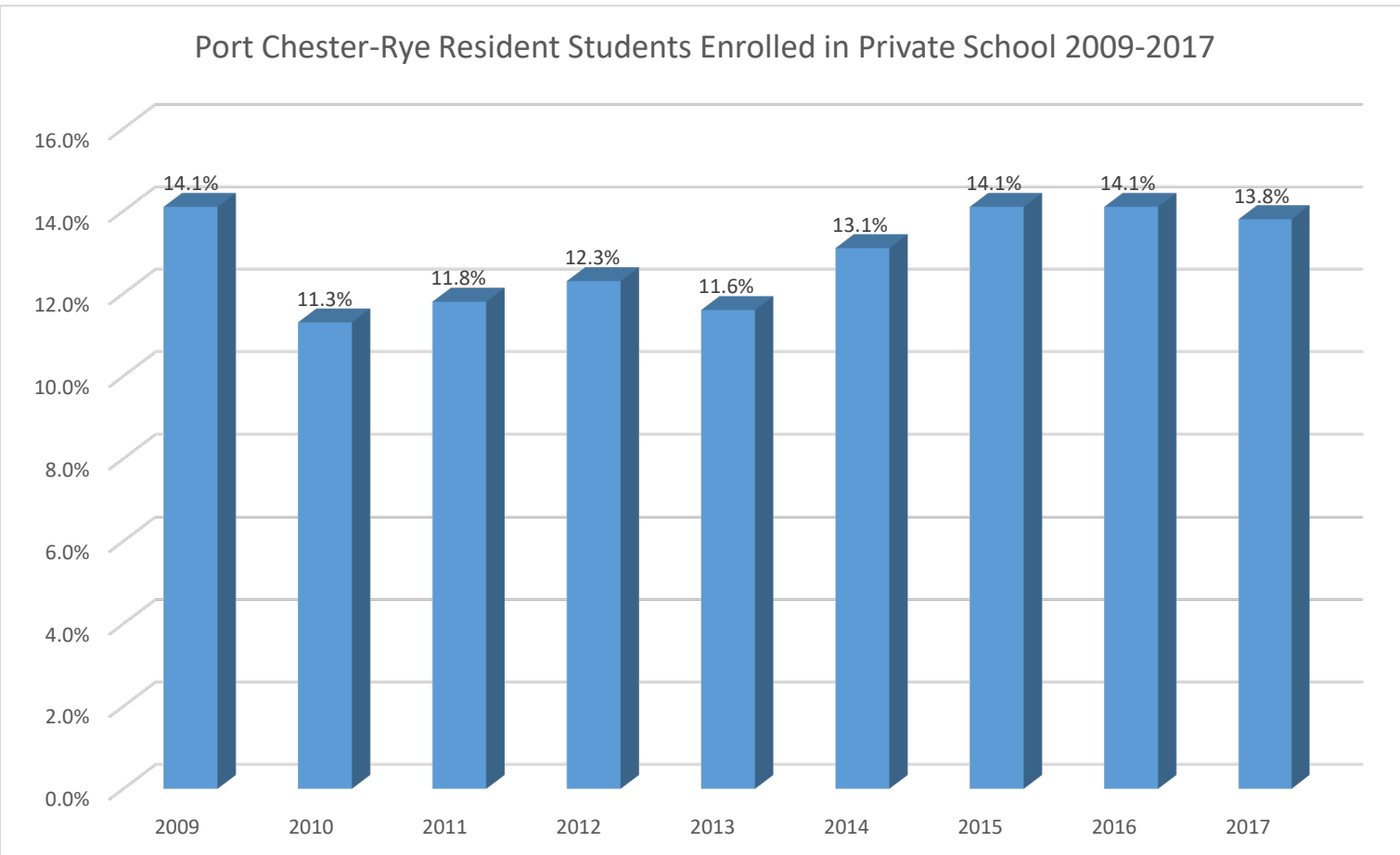
Private School Enrollment

While public school enrollment forecasts in the past have been quite accurate, these forecasts only account for a share of total students living within the District. Data from the 2017 ACS indicate that there are 784 children attending private school living in the Port Chester-Rye UFSD. This is 13.8 percent of enrolled children overall, ranging from only 3.6 percent of children in grades 1 to 4, up to 20.4 percent of middle school students.

Grade	Enrolled Children			Percent in Private School
	Total	Public	Private	
Total	5,683	4,899	784	13.8%
Kindergarten	521	460	61	11.7%
1 to 4	1,626	1,567	59	3.6%
5 to 8	1,936	1,541	395	20.4%
9 to 12	1,600	1,331	269	16.8%

Source: US Bureau of the Census 2017 ACS: Table S1401

As shown in the following chart, from 2009 to 2017, between 11.3 percent and 14.1 percent of students living in the District have attended private school instead of being enrolled in the Port Chester-Rye UFSD. The share of enrolled students has fluctuated from a 9-year high of 14.1 percent in 2009, and again in 2015 and 2016, to a low of 11.3 percent in 2010—a lagged reflection of the economic downturn.



Source: US Bureau of the Census ACS 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017: Table S1401

If there were to be another economic downturn, it could be assumed based on historic differentials that an additional 3 percent of total students (roughly 170 based on 2017 data) could return to the public school system, primarily in the middle and high schools. If such a change were to occur, total enrollment would hold steady beyond the 2019-2020 forecasted peak.

School District Data

Urbanomics and representatives of the Village Planning Department and IDA met with Superintendent Klizus, Deputy Superintendent Durney, Administrator Clohessy and members of the School Board on October 23, 2018 to provide an overview of our scope of work and discuss current conditions and expectations of capacity demand. The School District representatives were very receptive and forthcoming.

Through follow-up emails, additional data were received:

- Before leaving her post in 2018, former Deputy Superintendent McAward provided a revised copy of the soft cost assumptions updated for the 2017-2018 school year.
- Child generation: In order to check the generation rates, the District provided an electronic copy of their enrollment by address for 2018.
- Data on children migrating in to the District.
- Information on the number of school children in the Mariner enrolled in private schools

Development of Mitigation Formula

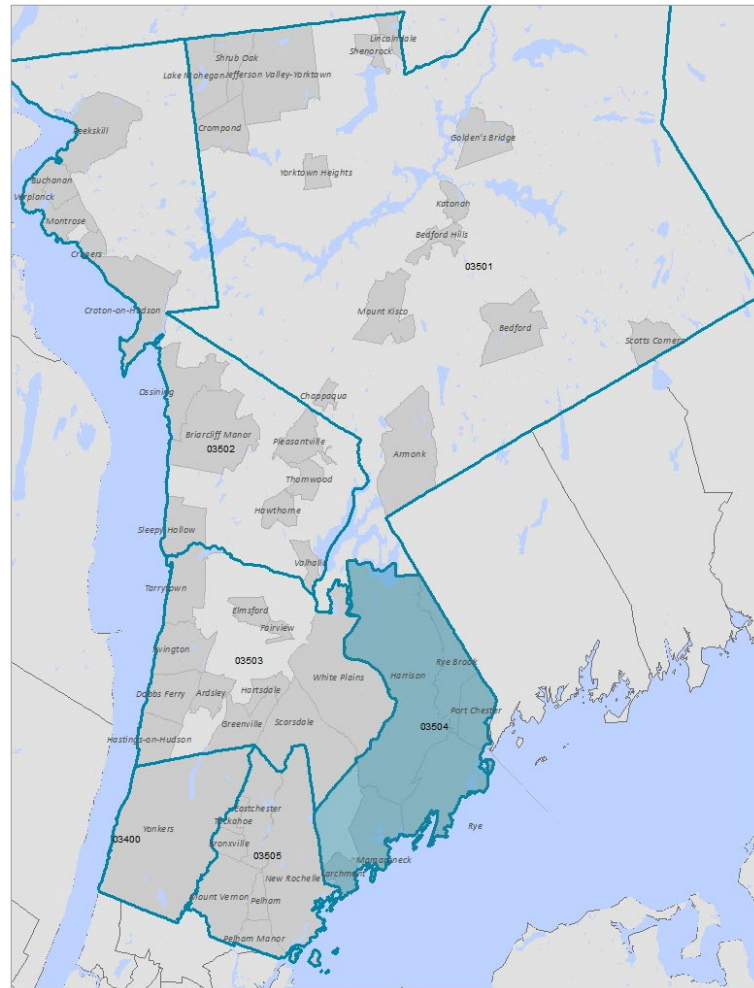
It details the key components and assumptions used to create the Mitigation Formula spreadsheet as well as the current status of the project. The key components of the formula are the public school child multipliers and school costs per student. In preparing the analysis for the Village and the IDA, it is important to take into consideration the changes likely to occur not only in the short term from the children in the new developments, but also in the long term from the changing socioeconomic patterns in the Village. The child generation patterns of the new market rate housing will be different than that of the more affordable housing traditionally in Port Chester—so as current residents with children age in place and the area becomes more affluent, it is likely that the number of children may start to decline in Port Chester as it has throughout the majority of Westchester County.

PUMS Public School Child Multipliers

The child generation rate standard for developers is the New York State Multipliers prepared in 2006 by Drs. Robert Burchell and David Listokin for the Rutgers Center for Urban Policy Research. These multipliers are an excellent body of work based on the 2000 US Census 5% Sample Public Use Microdata (PUMS); however, as Urbanomics was told throughout the research process, "Port Chester is different." This holds true both economically and demographically and in terms of recent development patterns.

To prepare the best possible new public school child generation rates for the various cost levels, as well as tenure, structure and unit types of Port Chester, Urbanomics ran many iterations of cross-tabulations.

The public school child multipliers are based on the 2013-2017 American Community Survey Microdata for the PUMA 3504 that includes Port Chester, Rye Brook, Rye, Mamaroneck and Harrison for households living in units built in 1990 or later. While it is quite true that Port Chester is demographically quite different from the surrounding areas, new construction is likely to mirror that of the more affluent neighbors.



The final cross-tabulations¹ include the number of public school children 18 and under by tenure, structure type, number of bedrooms, by household income level of all units as meet the following definitions:

Tenure

- Own
- Rent

Structure type

- Single Family
- Townhouse (2-4 units in structure)
- 5+ units

Bedrooms:

- Studios
- One
- Two
- Three or more

Income level²

- Affordable (80% of median income or less)
- Workforce (80-120% of median income)
- Market (120% of median income or more)

Comparison of Port Chester Multipliers to Rutgers'

The resulting multipliers differ from the off-used Rutgers' 2006 estimates as highlighted in the table below. Generally, the customized multipliers yield greater numbers of public school children in Multi-Unit structures containing 5+ housing units with 2 and 3 bedrooms, but lower numbers in such buildings with single bedrooms, regardless of tenure. Among units in buildings with 2-4 units, the customized multipliers yielded higher public school children than the Rutgers multipliers among all bedroom and tenure types except for one and two bedroom rental units.

	2-4 Unit Market Rate				5+ Unit Market Rate			
	Renter		Owner		Renter		Owner	
	Formula	Rutgers	Formula	Rutgers	Formula	Rutgers	Formula	Rutgers
1 Bdrm	0.15	0.30	NA	0.30	0.05	0.07	0.09	0.10
2 Bdrms	0.26	0.36	0.91	0.36	0.39	0.16	0.07	0.05
3+ Bdrms	0.86	0.62	0.85	0.62	1.00	0.63	0.54	0.49

Source: Urbanomics, Rutgers CUPR

Validation of School Child Multipliers

Because the Village of Port Chester is notably different from surrounding communities, it was desirable to test the multipliers, both Rutgers and the different geographic iterations of Urbanomics work, against real case studies. Several recently constructed housing developments were compared, including The Castle, The Mariner and 120 North Pearl, for which the unit mix as well as the number of school children enrolled in the Port Chester Rye UFSD were known.

¹ Other factors considered but discarded due to small sample size included year built and housing costs.

² Income level was used instead of rents/values because programmatic designations are based on income.

Applying the formula multipliers produced an estimate of 34 public school children in the three new developments, however data from the school district on students by place of residence for the most recent school year indicated that a total of 2 enrolled students lived in the three sites containing 270 units, well below the estimated level. It is notable that in the 2014-2015 school year, there were **18** children living in the Mariner who were enrolled in the Port Chester-Rye UFSD as per data received from the School District in that year—so the potential for the projected number of students is there, it is just not realized at this time.

	Unit Mix			Applied Multipliers			Resident Children		
	Studios	1-BD	2-BD	Children in Studios (x 0.00)	Children in 1-BD (x 0.05)	Children in 2-BD (x 0.39)	Formula Projections	Children Enrolled PCRSD 2018	Children Enrolled PCRSD 2014
Castle	21	83	16	0	4	6	10	1	NA
120 N Pearl	15	26	9	0	1	4	5	1	NA
Mariner	0	60	40	0	3	13	19	0	18
Total	36	169	65	0	8	23	34	2	18

Source: Village of Port Chester, Urbanomics, Rutgers CUPR, ACS PUMS data

The relatively small number of children currently enrolled in the District may be due several factors including a strong preference for private schools or current resident families have children not yet old enough to attend school.³

Pipeline Projects

The total number of units in the pipeline was provided by the Village of Port Chester Planning Department and The Journal News as shown in the table below. All of these units are market-rate rental housing in structures with 5 or more units proposed to reflect current market conditions. There are a total of 36 studios, 169 1-bedrooms, and 65 2-bedrooms that are not age-restricted. The Port Chester-specific formula multipliers were applied to determine the number of school children likely to be generated by each development.

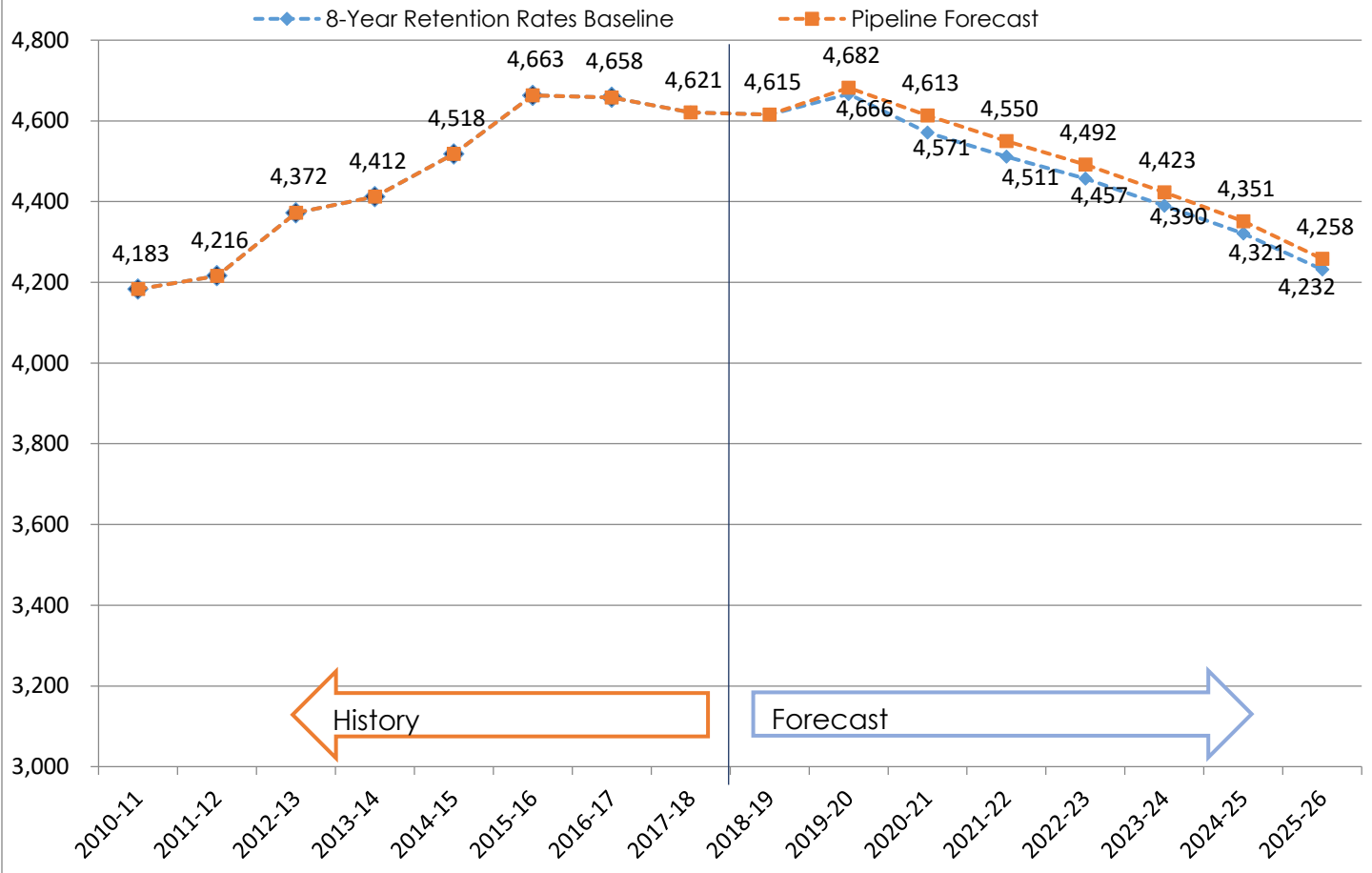
	Unit Mix			Applied Multipliers			Total Estimated Children
	Studios	One Bedroom	Two Bedrooms	Children in Studios (x 0.00)	Children in One Bedroom (x 0.05)	Children in Two Bedrooms (x 0.39)	
North Main Street & Westchester Ave	7	56	16	0	3	6	9
16-18 North Main Street	0	6	0	0	0	0	0
The Station Lofts	44	73	63	0	4	25	28
The Complex		63	9	0	3	4	7
Pipeline Total							44

Source: Village of Port Chester, The Journal News, Urbanomics, ACS PUMS data

Using the formula multipliers, the projects currently in the pipeline would yield 44 additional public school students, effecting the school enrollment forecasts as shown in the chart below.

3. Follow-up data from the School District indicate that there are 2 students living in the Mariner, who are enrolled in private school. The costs of bussing private school students was explored, but the students live within the mileage limitation—no students were bussed out of the District.

Historic and Projected Port Chester-Rye SD Enrollment 2010-11 to 2025-26



Quantify Hard/Soft Costs

The next step in the developing the mitigation formula is to determine the education and new construction costs per student. Urbanomics used the previously established methodology to determine the share of operational costs that are applicable on a per student basis (soft costs) as meets the standards of a fiscal cost-benefit analysis.⁴ Port Chester IDA at their January 2019 meeting, it was decided that using “Transfer to Debt Service” per student would be a more accurate way of determining actual capital costs, as opposed to attempting to predict passage of future school bonds.

This update of the mitigation study returns the capital cost estimate to the mitigation because it reflects the impacts of not just a single development, but the full buildout of the Village-wide rezoning.

A line item depiction of applicable within the 2018-19 school budget is shown in the table below.

	2018-19 Budget	Estimated Students	Cost Per Student	Minus State Aid
Total Soft Costs	\$89,175,749	4615	\$19,323	\$13,863
Legal Services	\$55,375			
Operations of Plant	\$3,644,618			
Maintenance of Plant	\$1,735,156			
Insurance	\$50,439			
Other Special Items	\$546,822			
Curriculum and Development	\$582,346			
Supervision-Regular School	\$4,843,395			
Instruction	\$55,056,115			
Other District Transportation	\$500			
Contract Transportation	\$223,438			
Community Service	\$57,000			
Employee Benefits	\$22,130,545			
Transfer to Special Aid	\$250,000			

Source: Port Chester Rye UFSD Budget 2018-19

Total budget soft costs were divided by the official count of students for that school year. The total cost per student was then reduced by the amount of State Aid received per, yielding soft costs of \$13,863 per student.

⁴ A fiscal cost-benefit analysis is the methodology generally used to determine development mitigations and reflects only those costs directly and proportionately attributable to students. E.g., teacher salaries and benefits reflect numbers of students, while Central Administration costs and benefits remain roughly the same regardless of the number of children in the district. In terms of legal services and insurance, only portions of these cover student liability.

Hard/New Construction Costs

The School District is completing a construction project that alleviates the space deficit for current students. However, the implications of the Village rezoning could yield another 1,077 students, for which additional facility space would be necessitated. That is, each additional child is estimated to require new construction.

A construction cost estimate from the 2018 Turner/Townsend construction cost survey, puts the cost per square foot for school construction at \$250 for a new school building⁵ and State Building Aid Unit (BAU) requirements of a minimum of 100 sf per student in K-12 institutions. The new construction cost per student on this basis is \$25,000.⁶

Estimating State Aid in construction is problematic. State reimbursement varies widely based upon a number of external and internal factors, some of which are impossible to quantify without a building plan. However, the School District has provided information that the current State reimbursement percentage for new construction stands at 55.9 percent of 85 percent of total construction costs. Therefore, for a cost of \$25,000, reimbursement would apply to only \$21,250 of total costs and at 55.9%, reimbursement would stand at \$11,878.75. Following this logic, the construction cost per student minus state aid would be \$13,121.25.

Mitigation Formula Results

Applying the school costs assumptions to the 1,077 children likely to be generated given full buildout of the Village Rezoning, these additional students will result in \$20,810,871 in operating/soft expenses, or \$14,397,366 minus State Aid. Hard/Construction costs would total \$14,433,375, minus State Aid.

Spreadsheet Structure

The spreadsheet was designed so that it is best to enter the number of units by tenure, physical characteristics, and income level. However, if the income distribution is not available, one can enter the total units by number of bedrooms and get school child projection based solely on tenure, structure type, and number of bedrooms or even tenure and structure type alone.

The tax revenue-supported costs per child are also built in to the spreadsheet. The estimated mitigation amounts are shown both itemized by type and in total.

⁵ This is slightly higher than the regional elementary average of \$216 psf, but is in line with the State's assessment that school construction in Westchester County has a multiplier of 1.5618 (compared with 1.8414 in NYC and 1.0 statewide).

⁶ The 2015 study estimated construction costs at \$350 per square foot, reflecting the District's estimates of costs for additions to existing facilities, which are more expensive than new construction.

Owner Units

	Units			
	High	Workforce	Low	Total
Single Family	Total			
				-
				-
Two-4 Family	Total			
	Studio			-
	1 Bedroom			-
	2 Bedrooms			-
	3+ Bedrooms			-
5+ Family	Total			
	Studio			-
	1 Bedroom			-
	2 Bedrooms			-
	3+ Bedrooms			-
Total Owner Units				-

Multipliers		
High	Workforce	Low
0.67	0.53	0.19
0.42	0.22	0.12
0.68	0.59	0.22
0.87	0.42	0.12
0.00	0.00	0.00
0.00	0.00	0.20
0.91	0.25	0.25
0.85	0.56	0.21
0.17	0.08	0.02
0.00	0.00	0.00
0.09	0.00	0.00
0.07	0.26	0.05
0.54	0.15	0.00

Public School Children			
High	Workforce	Low	Total
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Total Owner Children			-

Renter Units

	Market			
	Workforce	Affordable	Total	
Single Family	Total			
				-
				-
Two-4 Family	Total			
	Studio			-
	1 Bedroom			-
	2 Bedrooms			-
	3+ Bedrooms			-
5+ Family	Total			
	Studio			-
	1 Bedroom			-
	2 Bedrooms			-
	3+ Bedrooms			-
Total Rental Units				-

High	Workforce	Low
0.56	0.55	0.58
0.20	0.67	0.61
0.66	0.46	0.77
0.51	0.58	0.60
0.00	0.00	0.00
0.15	0.10	0.10
0.26	0.56	0.75
0.86	0.67	0.77
0.14	0.30	0.34
0.00	0.00	0.12
0.05	0.14	0.05
0.39	0.29	0.66
1.00	1.46	0.99

High	Workforce	Low	Total
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Total Renter Children			-

Fill in only if bedroom mix is unknown.

Soft Costs per Child	\$ 13,863
New Construction Cost per Child	\$ 13,121

Tax Revenue Supported*	
Soft Cost mitigation	\$ -
Hard Cost mitigation	\$ -
Total Mitigation	\$ -

*Expenditures - State Aid