

# Preliminary Enrollment Projection and Facility Utilization Presentation



## **Pelham Union Free School District**

**November 14, 2017**

**by Ross Haber and Associates**

## Executive Summary

### I. Enrollment:

- The total enrollment in the Pelham UFSD grew from 2,820 students in 2012-13 to 2,911 students in 2017-18. This is an increase of 92 students or approximately 3.13%.
- The total enrollment is projected to increase slightly from the current 2,911 to 2,939 in 2022-23. That is an increase of 28 students or approximately 1%.
- The K-5 enrollment declined slightly from 1,296 students in 2012-13 to 1,268 in 2017-18. This is a decrease of 28 students or approximately 2.2%.
- The K-5 enrollment is projected to increase from the current 1,268 to 1,323 in 2022-23. That is an increase of 55 students or approximately 14.2%.
- The middle school enrollment increased from 680 students in 2012-13 to 721 in 2017-18. That is an increase of 41 students or approximately 5.7%.
- The middle school enrollment is projected to remain stable through the 2022-23 school year (a marginal increase of 8 students).
- The high school enrollment increased from 831 students in 2012-13 to 894 in 2017-18. That is an increase of 63 students or approximately 7%.
- The high school enrollment is projected to decrease from the current 894 to 874 in 2022-23. This is a decrease of 20 students or approximately 2.25%.



## Executive Summary

### II. Facilities:

#### Elementary Schools (Overview)

- Although the elementary schools are old (some in excess of 100 years) all of them appear to be well maintained and clean.
- Classrooms are well decorated and the atmosphere in each of the schools appears to create an environment which makes children comfortable and ready to learn.
- In reviewing the floor plans of each building, the survey responses of each elementary school principal and in school visitations (which included speaking with the building principals) it does appear that the buildings are well utilized, every full sized room is used for instruction and most services (resource room, OP/PT, speech, guidance, ESL, SGI (small group instruction) etc. are held in small (and in some cases very small) rooms thus limiting the number of contacts that teachers can have with students due to room size limitations.
- Overall class sizes in the elementary schools are good by any standards. In some cases in some of the schools the actual size of the class is limited by the square footage of the classrooms (older schools tend to have smaller classrooms).



## Executive Summary

### Facilities (Elementary cont'd):

- The projections indicate that each of the elementary schools will continue to need virtually every available classroom during the period of the projections.
- Class sizes are excellent in the District but as enrollment grows the only option is to increase class sizes because of room limitations in the District.
- Services will remain in small rooms.
- Space for music programs in the elementary schools appear to be at a premium and are shared, in some cases, with other programs.
- ***It is important to note that all of these programs are provided to students and the principals are creative in finding space for these programs.***
- There are a few cases where, in order to maintain the level of class sizes as they exist there could be a short fall of 1 room in future years. The full report lays out these short falls.



## Facilities (Elementary(cont'd):

### Concerns

In walking each of the elementary schools with the principals a number of concerns regarding safety and accessibility came to our attention.

- Although due to the age of the buildings the District has managed to obtain ADA waivers it is important to note that the only elementary school with an elevator is Colonial. This means that only Colonial is available to non-ambulatory students in the District. Further, any student who may have an short term issue (i.e.-broken leg) would have an extremely difficult time moving around the schools.
- The lunch periods, although one hour in length District-wide only allow students approximately 20 minutes to eat due to having to feed all of them at once. Due to the fact that there are no multi-purpose rooms in the elementary schools for the most part the gym is used in that period of time for serving lunch. The custodial staff does a good job in readying and cleaning the gym before and after lunch but this is not an ideal situation.



## Facilities (Elementary(cont'd):

### Concerns

- Although the District has done a good job in creating space in the basements of the elementary schools these are below grade level classrooms which are not ideal. We were concerned in that in two of the schools there were escape ladders in the classrooms for emergency exits. While having approval and even having an operational procedure this is less than an optimal situation.
- HVAC-the buildings are not air conditioned and given the fact that approximately 30% of the school year (including State testing times) that buildings are very hot this may not only impact comfort but could potentially hurt student performance (note this is an opinion, not substantiated by data).
- Of all the schools Hutchinson is the one of greatest concern. Since I visited the school it is my understanding that the Board has decided to pursue replacing this school, therefore, it is clear there is an understanding that this building should be replaced.



## Facilities (Secondary Schools);

In general in both buildings there were no serious concerns regarding either facility (High School or Middle School). For the high school there was some concern regarding the age of the science labs and the water and gas pressure (which is being addressed).

For the middle school sharing spaces with the high school was a concern, especially regarding use of the auditorium for orchestra practice.

After reviewing the master room schedules for both the middle school and the high school we found that the high school utilization (percentage of rooms used during the school day) was 97.5%.

The room utilization at the middle school for the current school year is 91.2%.

Both of these percentages represent excellent utilization.



## Methodology

This study used the cohort survival projection method. The cohort survival model tracks students as they move from grade to grade and creates a growth or decline ratio between grades. For example, if in 2011-12 there were 100 children in grade 1 and the same group in the following year grew to 110 in grade 2 that would be a 10% growth ratio or 1.10. This migration ratio is then calculated for years of enrollment history to determine a five-year average which is then the multiplier for the projection based upon average growth per grade.

To project kindergarten the standard that is used calculates the ratio between livebirths to kindergarten enrollment five years later (children born in 2006 become kindergartners in 2011). The relationship between births and kindergarten is calculated for a six-year period to create a birth to kindergarten ratio. The kindergarten ratio is then applied to the births in relation to future kindergartens (example: ratio: 1.1, birth 100, kindergarten yield 110).

The cohort survival ratio is only based upon enrollment history and livebirths and does not consider other enrollment factors.





# Enrollment Projections

## Tables and Charts



## Projected Enrollment Changes 2012-13 to 2022-23

	2012-13	2017-18	Change	Percent	2022-23	Change	Percent
District	2,820	2,911	91	3.23%	2,939	28	4.22%
High School	831	894	63	7.58%	874	-20	5.17%
Middle School	680	721	41	6.03%	713	-8	4.85%
Colonial	321	323	2	0.62%	334	11	4.05%
Hutchinson	352	372	20	5.68%	392	20	11.36%
Prospect Hill	339	317	-22	-6.49%	325	8	-4.13%
Siwanoy	293	284	-9	-3.07%	299	15	2.05%



## Students in Public and Non-Public Schools 2013-14 to 2016-17 \*

	Total SAC	Public	Percent	Non-Public	Percent	PK
2013-14	2954	2797	94.69%	157	5.31%	44
2014-15	2963	2786	94.03%	177	5.97%	45
2015-16	3024	2808	92.86%	216	7.14%	40
2016-17	3028	2871	94.82%	157	5.18%	20

SAC = School Aged Children

\*most current data.



## Numbers of Students Public vs. Non-Public in Selected Towns\*

District	SAC	Public	Percent	Non-Public	Percent
Pelham	3028	2871	94.82%	157	5.18%
Edgemont	1989	1925	96.78%	64	3.22%
Scarsdale	5205	4851	93.20%	354	6.80%
Rye Neck	1741	1552	89.14%	189	10.86%
Bronxville	1874	1716	91.57%	158	8.43%
Byram Hills	2673	2549	95.36%	124	4.64%
Ardsley	2143	2089	97.48%	54	2.52%
Chappaqua	4063	3943	97.05%	120	2.95%
Mamaroneck	2812	2018	71.76%	794	28.24%
Irvington	1896	1769	93.30%	127	6.70%
Harrison	4618	3558	77.05%	1060	22.95%
Blind Brook	1562	1499	95.97%	63	4.03%

\*2016-17

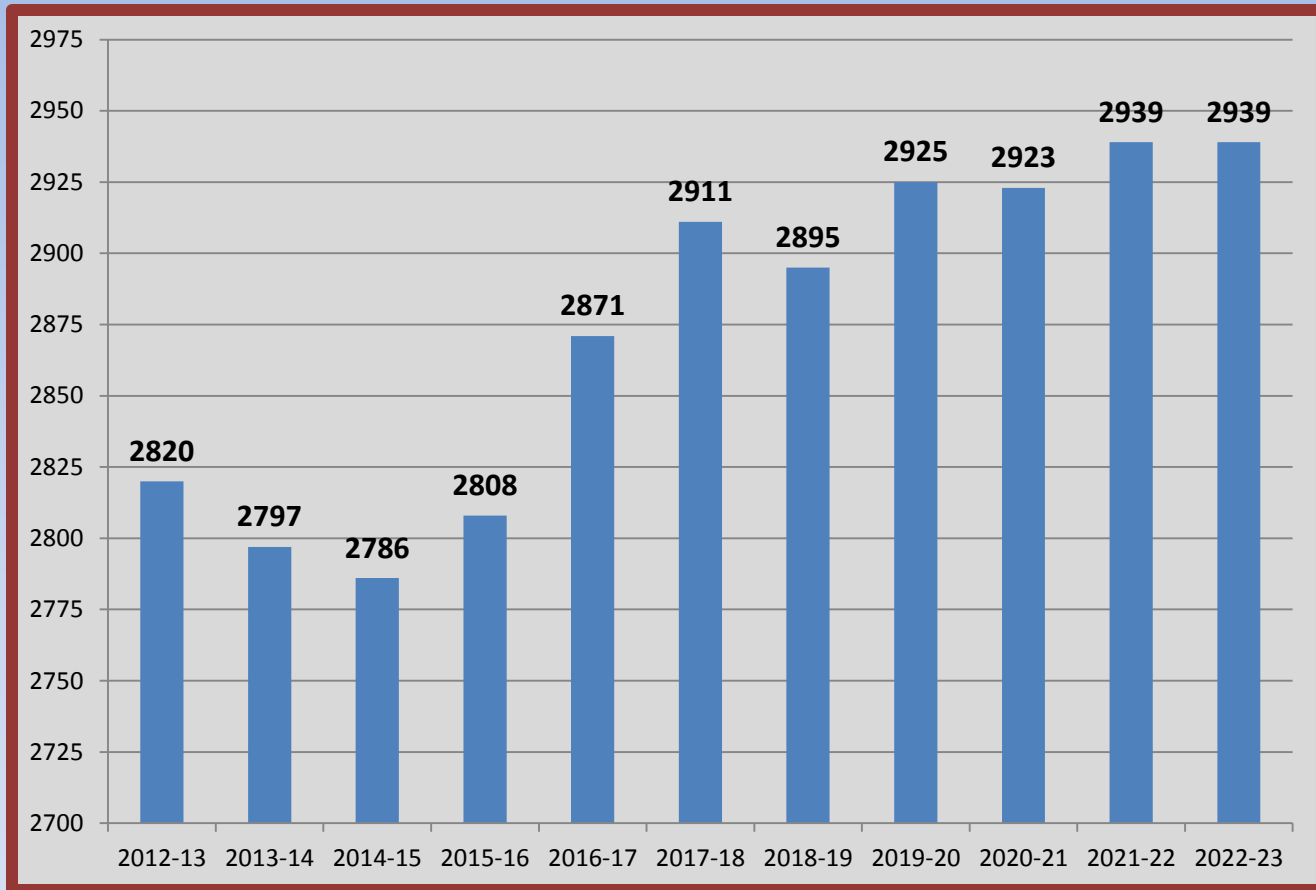


# District-Wide Enrollment History and Projection

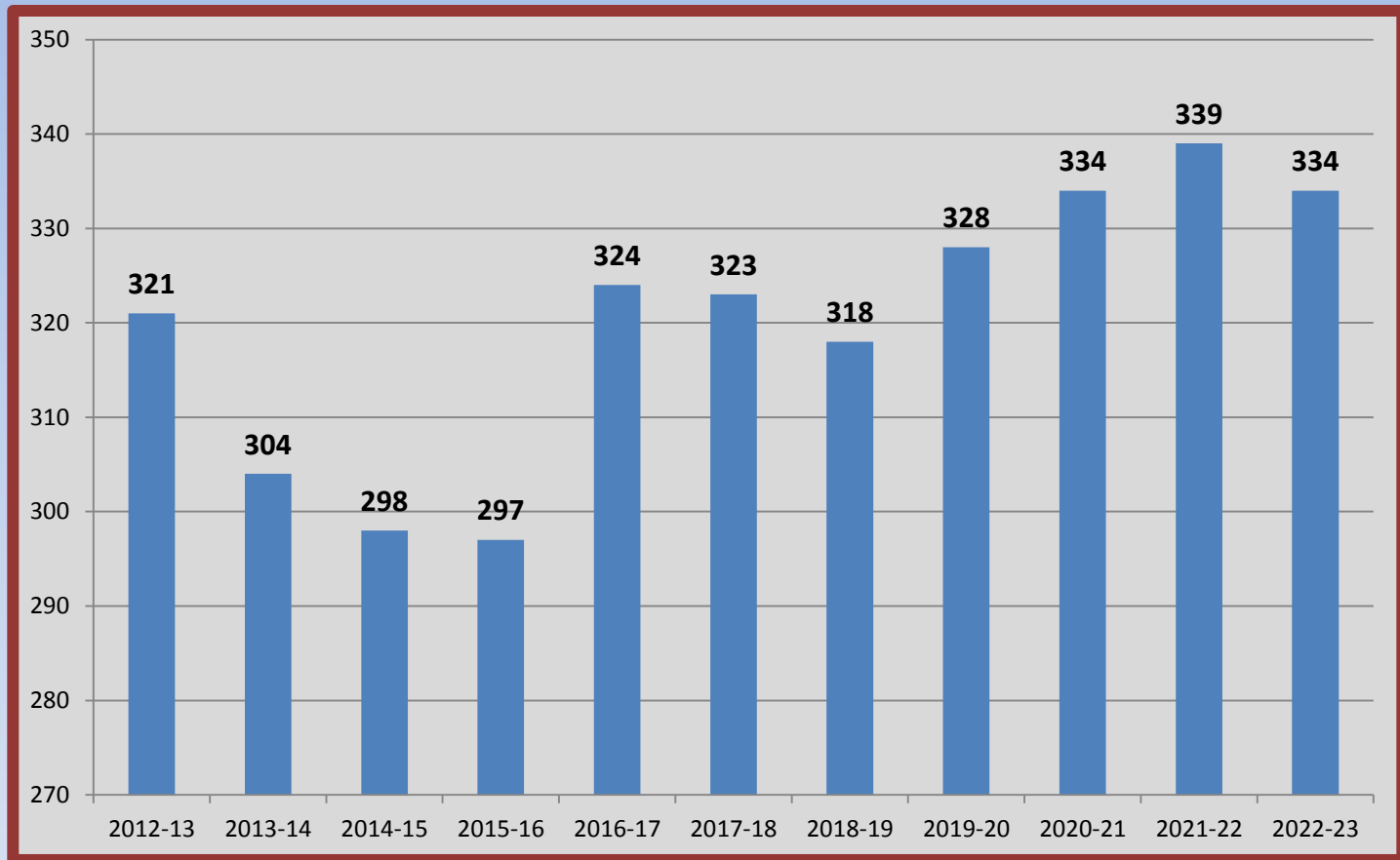
Year	Births		K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	SCSE	6-8	SCSE	9-12	SCSE	TOT
2012-13	146	1.42	190		207		198		232		239		230		226		232		222		222		195		221		193	1296	13	680		831		2820
				1.03		1.04		1.03		1.00		0.99		1.03		1.00		0.97		0.97		0.97		0.98		0.99								
2013-14	113	1.73	182		195		216		203		231		237		237		225		226		216		215		192		218	1264	4	688		841		2797
				1.04		1.06		1.06		1.02		1.04		1.02		1.00		1.04		0.95		0.98		1.00		0.99								
2014-15	99	1.91	161		189		207		229		207		241		242		238		234		214		211		215		190	1234	8	714		830		2786
				1.14		1.04		1.03		1.05		0.99		1.02		0.97		0.97		0.96		1.00		0.98		0.96								
2015-16	121	1.52	192		184		197		214		240		205		245		234		231		225		214		207		207	1232	13	710		853		2808
				1.04		1.04		0.98		1.01		0.99		1.04		1.00		1.00		1.04		0.99		1.01		1.00								
2016-17	107	1.87	222		200		191		194		216		237		213		245		234		240		223		216		208	1260	32	692		887		2871
				1.06		1.05		1.04		1.04		1.03		1.09		1.00		1.02		0.96		1.00		0.97		0.98								
2017-18	111	2.13	200		236		209		199		201		223		258		212		251		224		241		217		212	1268	28	721		894		2911
Av		1.83		1.06		1.05		1.03		1.02		1.01		1.04		0.99		1.00		0.98		0.99		0.99		0.98								
Year			K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	SCSE	6-8	SCSE	9-12	SCSE	TOT
2018-19	99		181		212		248		215		203		203		232		255		212		246		222		239		213	1262	14	699		920		2895
2019-20	114		209		192		223		255		219		205		211		230		255		208		244		220		234	1303	20	696		906		2925
2020-21	109		199		222		202		230		260		221		213		209		230		250		206		242		216	1334	23	652		914		2923
2021-22	109		199		211		233		208		235		263		230		211		209		225		248		204		237	1349	26	650		914		2939
2022-23	110		201		211		222		240		212		237		274		228		211		205		223		246		200	1323	29	713		874		2939



## District-Wide Enrollment History and Projection



## Colonial Elementary School Enrollment History and Projection



## Colonial Elementary School Utilization Summary

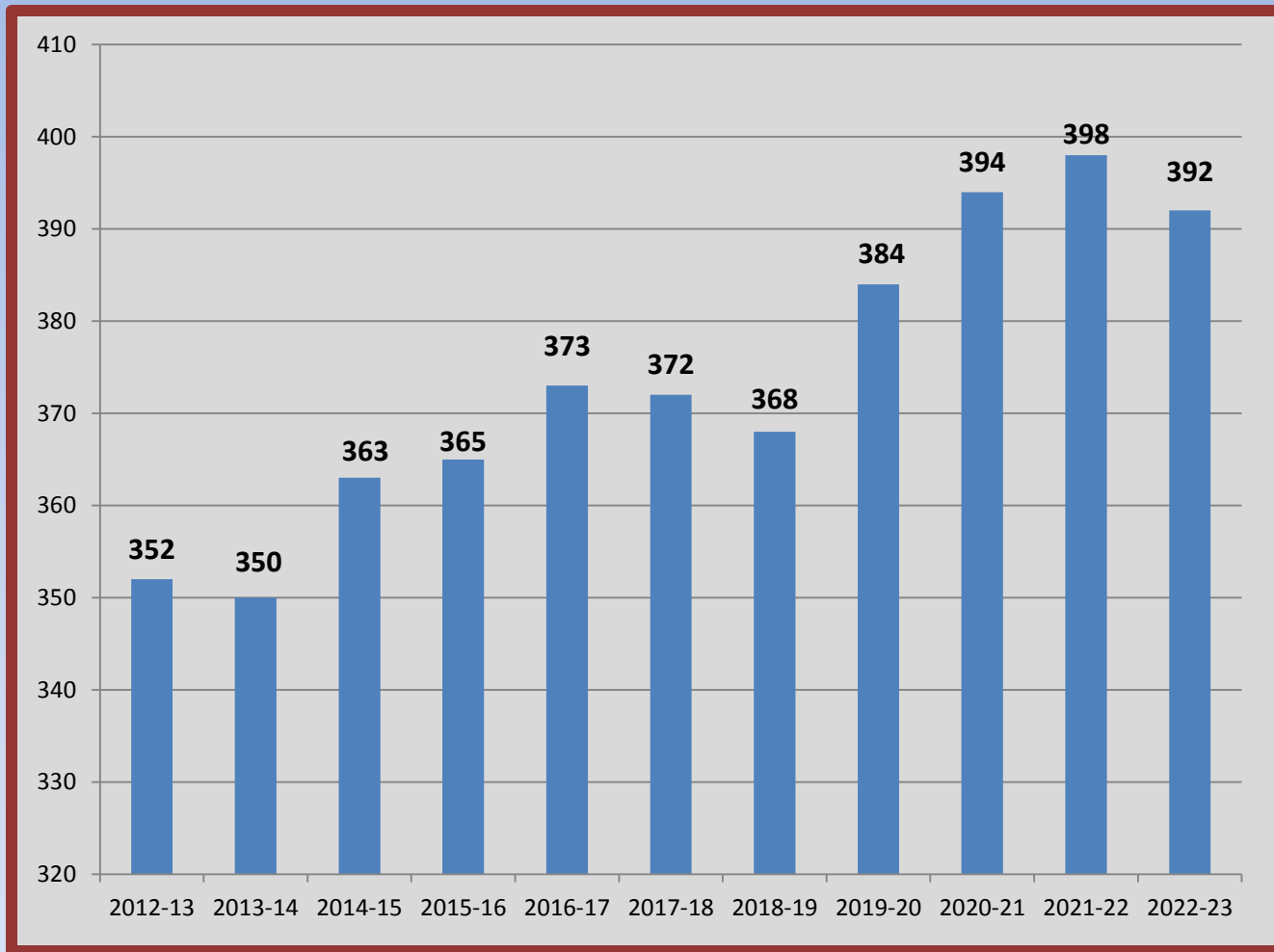
<b>Colonial</b>		<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Capacity	<b>341</b>					
Enrollment		327	344	344	346	350
Rooms	20	19	20	19	20	20
Difference		1	0	1	0	0
Av Cl Sz		19	19	19	19	19
Other*						
Special Ed		1	1	1	1	1
Inst Supp**		2	2	2	2	2
<b>* Included in total of full sized rooms</b>						
<b>**Additional Supplemental Services in small or split rooms</b>						

***Note: Class sizes and numbers of sections are sometimes the function of the actual size of the rooms. Older schools tend to have smaller rooms.***





# Hutchinson Elementary School Enrollment History and Projection

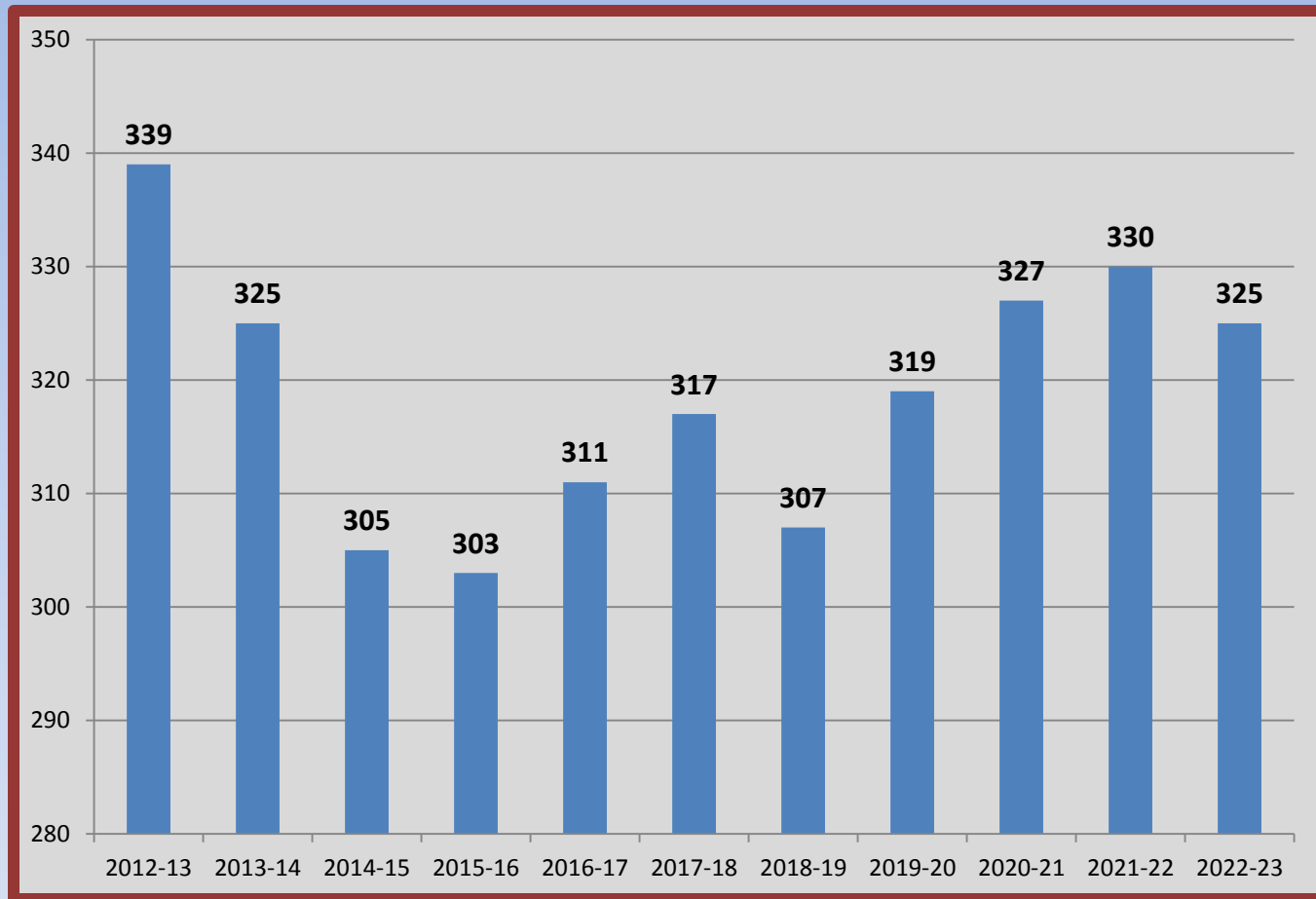


## Hutchinson Elementary School Utilization Summary

<b>Hutchinson</b>		<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Capacity	<b>439</b>					
Enrollment		365	389	388	394	382
Rooms	22	22	22	22	22	21
Difference		0	0	0	0	1
Av Cl Sz		20	20	20	20	21
Other*						
Inst Supp**		3	3	3	3	3
<b>* Included in total of full sized rooms</b>						
<b>**Additional Supplemental Services in small or split rooms</b>						



## Prospect Hill Enrollment History and Projection

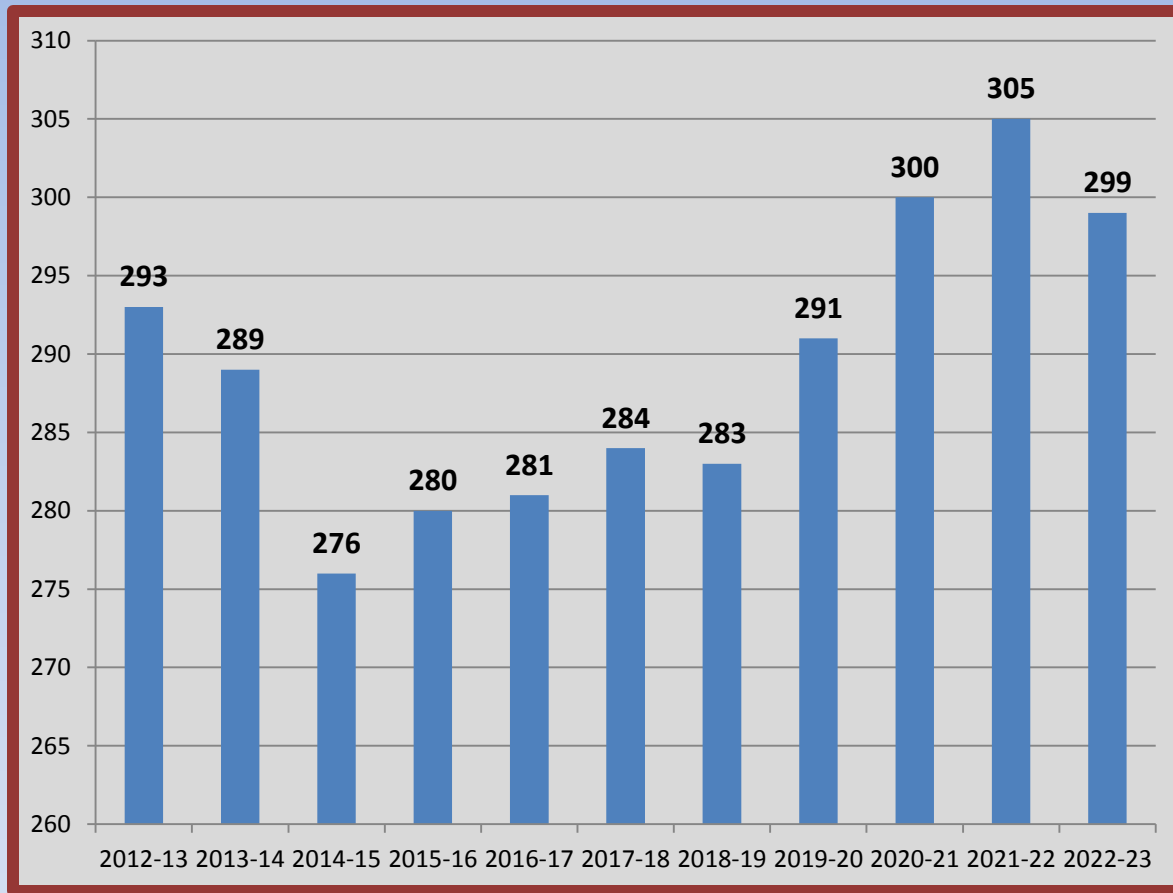


## Prospect Hill Utilization Summary

<b>Prospect Hill</b>		<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Capacity	<b>352</b>					
Enrollment		315	321	348	353	344
Rooms	20	19	18	21	20	21
Difference		1	2	-1	0	-1
Av Cl Sz		18	22	19	21	19
Other*						
Special Ed		1	1	1	1	1
Inst Supp**		2	2	2	2	2
<b>* Included in total of full sized rooms</b>						
<b>**Supplemental Services are in small or split rooms</b>						



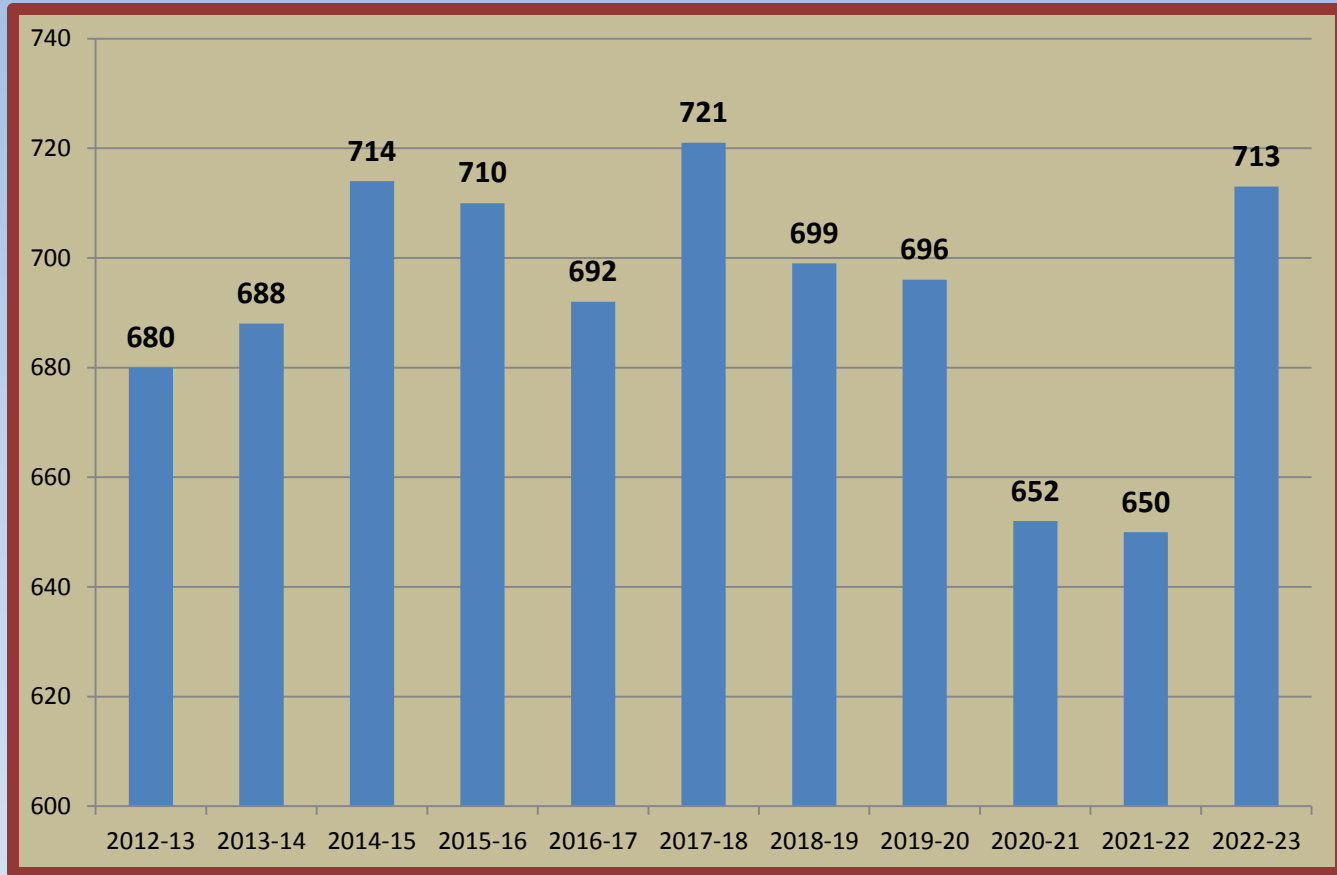
## Siwanoy Enrollment History and Projection



## Siwanoy Utilization Summary

<b>Siwanoy</b>		<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Capacity	<b>321</b>					
Enrollment		258	268	270	275	274
Rooms	18	16	16	16	17	16
Difference		2	2	2	1	2
Av Cl Sz		22	22	22	23	23
Other*						
Special Ed		1	1	1	1	1
Inst Supp**		3	3	3	3	3
<b>* Included in total of full sized rooms</b>						
<b>**Additional Supplemental Services are in small or split rooms</b>						

## Pelham Middle School Enrollment History and Projection



## Pelham High School Enrollment History and Projection

