



Chappaqua Central School District Enrollment and Capacity Analysis



ESI CONSULT
SOLUTIONS INC.



THE
Chazen
COMPANIES®
Proud to be Employee Owned

Chazen
ENGINEERING
CONSULTANTS
A Chazen Company

January 13, 2021

Team Members



Peter Angelides, Ph.D., AICP
President and Principal

Angelides@econsultsolutions.com

Frank Robinson, MBA, Director

Robinson@econsultsolutions.com

Jing Liu, MCP, Associate Director

liu@econsultsolutions.com

Nicola Coakley, Senior Analyst

coakley@econsultsolutions.com



Erik A. Kaeyer, AIA, LEED AP
Design Principal & Vice President

ekaeyer@kgdarchitects.com



Christopher Round, AICP,
Senior Principal, Vice President
round@chazencompanies.com

Table of Contents

- Enrollment History and Live Births Data Overview
- Enrollment Projection – Existing Housing Stock
- Multipliers for Public School Attendees
- Enrollment Projection – New Units Added
- Fiscal Analysis
- Property Tax Analysis
- Capacity Analysis

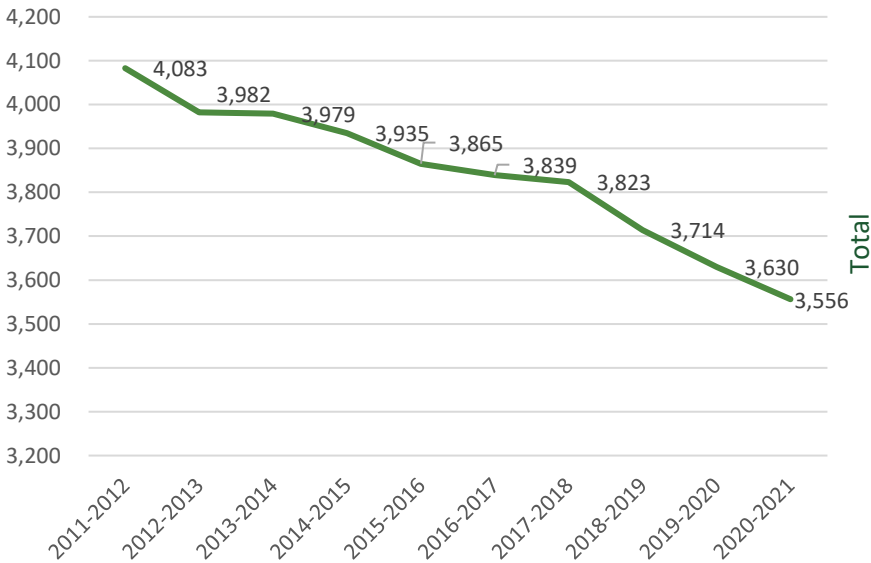
Enrollment History and Live Births Data Overview



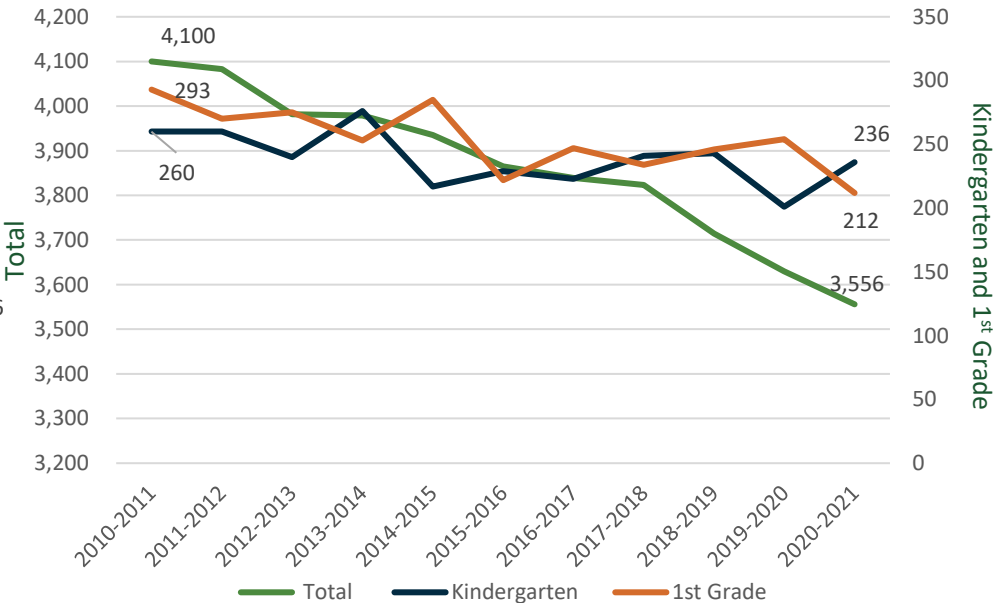
Enrollment History

In District Enrollment Only

Enrollment History of Chappaqua Central School District



Total, Kindergarten and 1st Grade Enrollment History of Chappaqua Central School District

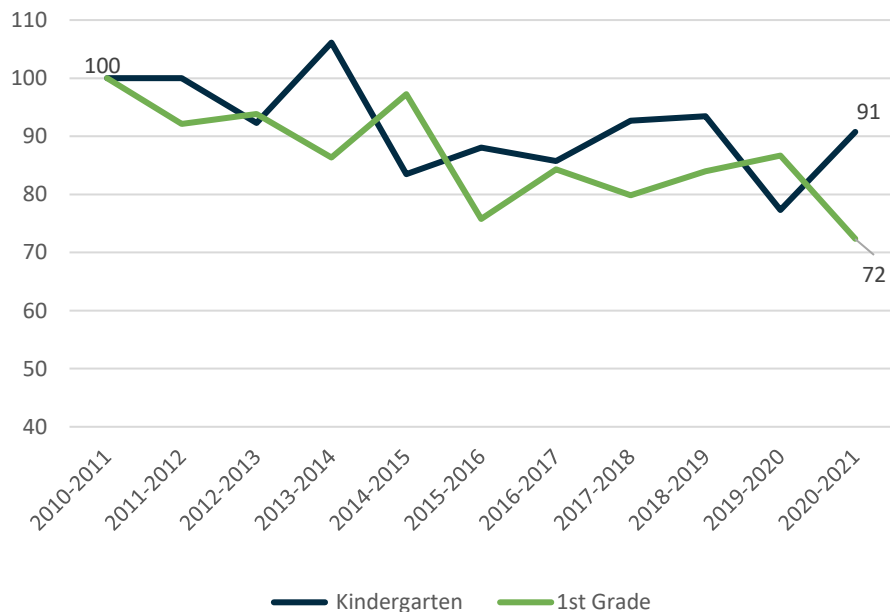




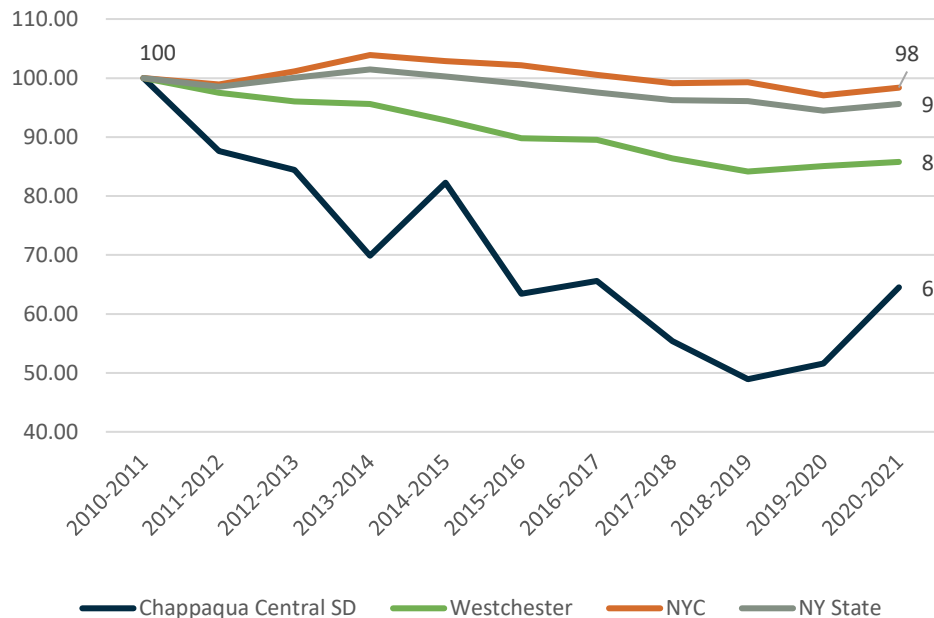
Enrollment History and Live Births Data

In District Enrollment Only

Normalized Kindergarten and 1st Grade Enrollment in Chappaqua Central School District (2010-2011 = 100)



Normalized Births 6 Years Before in Chappaqua Central School District, Westchester, NYC, and NY State (2010-2011 = 100)





Enrollment History and Live Births Data

In District Enrollment Only

Year	Births 6 Years Earlier	K	1	2	3	4	5	6	7	8	9	10	11	12	Total	% Change
2010-2011	186	260	293	293	337	312	347	338	326	357	310	310	319	298	4,100	
2011-2012	163	260	270	294	298	341	311	355	339	329	353	306	308	319	4,083	-0.4%
2012-2013	157	240	275	263	285	301	337	306	353	329	333	348	302	310	3,982	-2.5%
2013-2014	130	276	253	276	282	293	304	342	309	353	322	330	341	298	3,979	-0.1%
2014-2015	153	217	285	265	280	289	295	306	344	302	351	324	333	344	3,935	-1.1%
2015-2016	118	229	222	293	272	289	292	300	308	348	303	353	321	335	3,865	-1.8%
2016-2017	122	223	247	235	308	283	294	297	303	309	355	307	349	329	3,839	-0.7%
2017-2018	103	241	234	258	239	326	291	306	298	303	314	348	305	360	3,823	-0.4%
2018-2019	91	243	246	249	267	245	330	289	306	288	304	310	335	302	3,714	-2.9%
2019-2020	96	201	254	244	253	271	253	330	289	304	276	303	309	343	3,630	-2.3%
2020-2021	120	236	212	280	252	258	281	251	328	282	299	271	292	314	3,556	-2.0%

Enrollment Projection – Existing Housing Stock



Progression Rate Calculation

Progression rate is how many students advance into the next grade from the lower grade one year before. Progression rate for kindergarten is relative to births six years before.

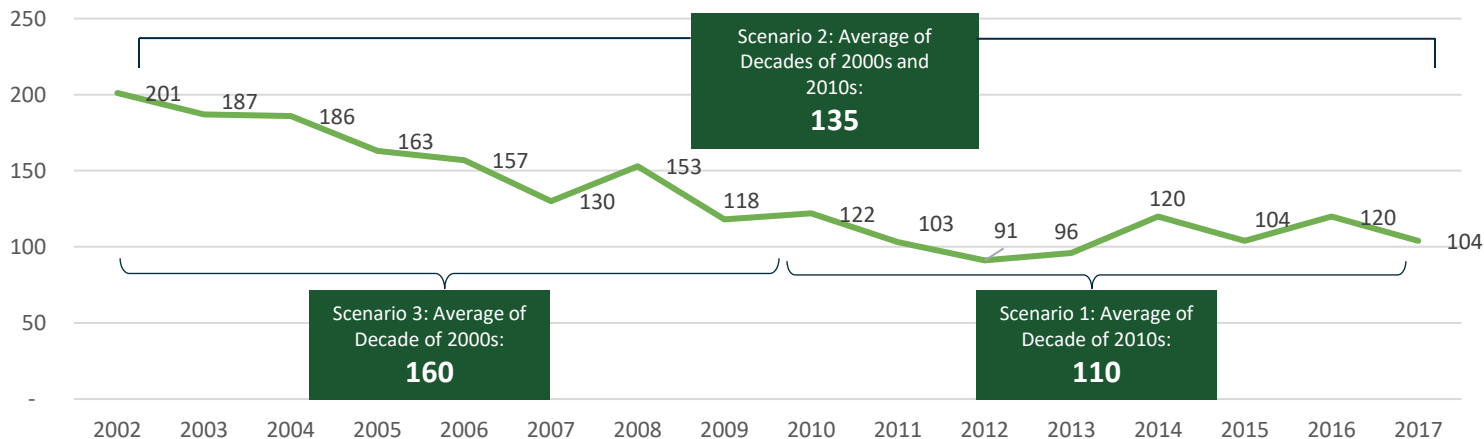
Year	K	1	2	3	4	5	6	7	8	9	10	11	12
2011-2012	1.40	1.04	1.00	1.02	1.01	1.00	1.02	1.00	1.01	0.99	0.99	0.99	1.00
2012-2013	1.47	1.06	0.97	0.97	1.01	0.99	0.98	0.99	0.97	1.01	0.99	0.99	1.01
2013-2014	1.76	1.05	1.00	1.07	1.03	1.01	1.01	1.01	1.00	0.98	0.99	0.98	0.99
2014-2015	1.67	1.03	1.05	1.01	1.02	1.01	1.01	1.01	0.98	0.99	1.01	1.01	1.01
2015-2016	1.50	1.02	1.03	1.03	1.03	1.01	1.02	1.01	1.01	1.00	1.01	0.99	1.01
2016-2017	1.89	1.08	1.06	1.05	1.04	1.02	1.02	1.01	1.00	1.02	1.01	0.99	1.02
2017-2018	1.98	1.05	1.04	1.02	1.06	1.03	1.04	1.00	1.00	1.02	0.98	0.99	1.03
2018-2019	2.36	1.02	1.06	1.03	1.03	1.01	0.99	1.00	0.97	1.00	0.99	0.96	0.99
2019-2020	2.21	1.05	0.99	1.02	1.01	1.03	1.00	1.00	0.99	0.96	1.00	1.00	1.02
2020-2021	2.46	1.05	1.10	1.03	1.02	1.04	0.99	0.99	0.98	0.98	0.98	0.96	1.02
5 Year Avg	2.18	1.05	1.05	1.03	1.03	1.03	1.01	1.00	0.99	1.00	0.99	0.98	1.02

Three Scenarios Based on Number of Births Assumptions

Assumptions for Number of New Births per Year for Years after 2017 when Births Data is not Available

- The most updated births data from New York State Department of Health for Chappaqua Central School District is up to 2017;
- Assumptions for the future years need to be made for the enrollment projection;
- Three scenarios are developed based on the assumptions below:

Number of Births in Chappaqua Central School District in 2000s and 2010s



Source: Chappaqua Central School District (2020); New York State Department of Health(2017); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



In District Enrollment Projection with Existing Housing Stock

Number of Births Assumption for Years after 2024 when Births Data is not Available: Scenario 1 – Number of Births per Year - 110

Year	Births 6 Years Earlier	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2020 - 2021 (Actual)	120	236	212	280	252	258	281	251	328	282	299	271	292	314	3,556
2021 - 2022	104	261	248	223	289	260	265	283	251	324	281	297	266	297	3,545
2022 - 2023	120	227	274	261	230	298	267	267	283	248	323	279	291	271	3,519
2023 - 2024	104	261	238	288	269	237	306	269	267	280	247	320	274	296	3,552
2024 - 2025	110	227	274	250	297	278	243	309	269	264	279	245	314	279	3,528
2025 - 2026	110	240	238	288	258	306	285	245	309	266	263	277	240	319	3,534
2026 - 2027	110	240	252	250	297	266	314	287	245	305	265	261	272	244	3,498
2027 - 2028	110	240	252	265	258	306	273	317	287	242	304	263	256	277	3,540
2028 - 2029	110	240	252	265	273	266	314	275	317	283	241	302	258	260	3,546
2029 - 2030	110	240	252	265	273	282	273	317	275	313	282	239	296	262	3,569
2030 - 2031	110	240	252	265	273	282	289	275	317	272	312	280	234	301	3,592
2031 - 2032	110	240	252	265	273	282	289	291	275	313	271	309	275	238	3,573
2032 - 2033	110	240	252	265	273	282	289	291	291	272	312	269	303	280	3,619
2033 - 2034	110	240	252	265	273	282	289	291	291	287	271	309	264	308	3,622
2034 - 2035	110	240	252	265	273	282	289	291	291	287	286	269	303	269	3,597

Source: Chappaqua Central School District (2020); New York State Department of Health(2017); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



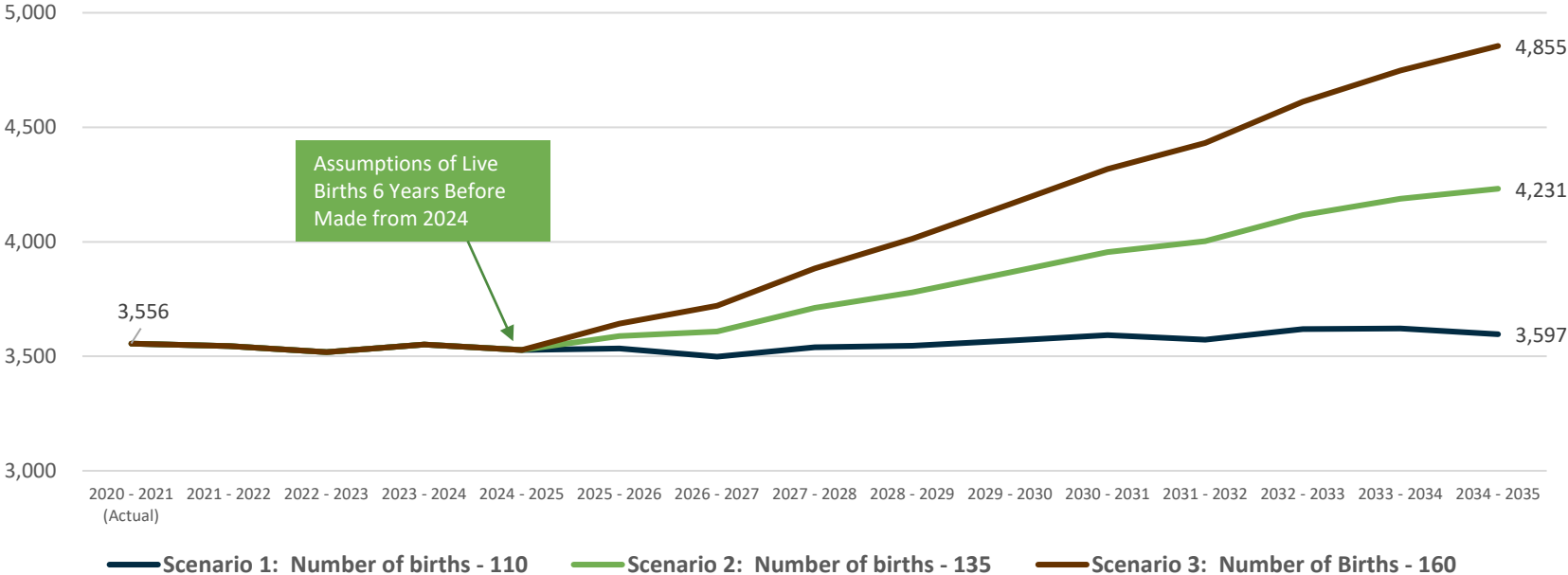
In District Enrollment Projection with Existing Housing Stock – Three Scenarios

Scenarios	Assumptions	Number of New Births per Year after 2017	
Scenario 1	Average Number of Births per Year in the Decade of 2010s	110	
Scenario 2	Average Number of Births per Year in the Decade of 2010s and 2000s	135	
Scenario 3	Average Number of Births per Year in the Decade of 2000s	160	
Year	Scenario 1: Number of births - 110	Scenario 2: Number of births - 135	Scenario 3: Number of Births - 160
2020 - 2021 (Actual)	3,556	3,556	3,556
2021 - 2022	3,545	3,545	3,545
2022 - 2023	3,519	3,519	3,519
2023 - 2024	3,552	3,552	3,552
2024 - 2025	3,528	3,528	3,528
2025 - 2026	3,534	3,588	3,643
2026 - 2027	3,498	3,609	3,721
2027 - 2028	3,540	3,711	3,883
2028 - 2029	3,546	3,779	4,013
2029 - 2030	3,569	3,866	4,164
2030 - 2031	3,592	3,955	4,318
2031 - 2032	3,573	4,003	4,432
2032 - 2033	3,619	4,117	4,612
2033 - 2034	3,622	4,188	4,748
2034 - 2035	3,597	4,231	4,855



In District Enrollment Projection with Existing Housing Stock – Three Scenarios

Enrollment Projection Under Three Scenarios with Existing Housing Stock



Multipliers for Public School Attendees



Multipliers for Public School Attendees – CDA Approach

ESI's Community Data Analytics (CDA) approach:

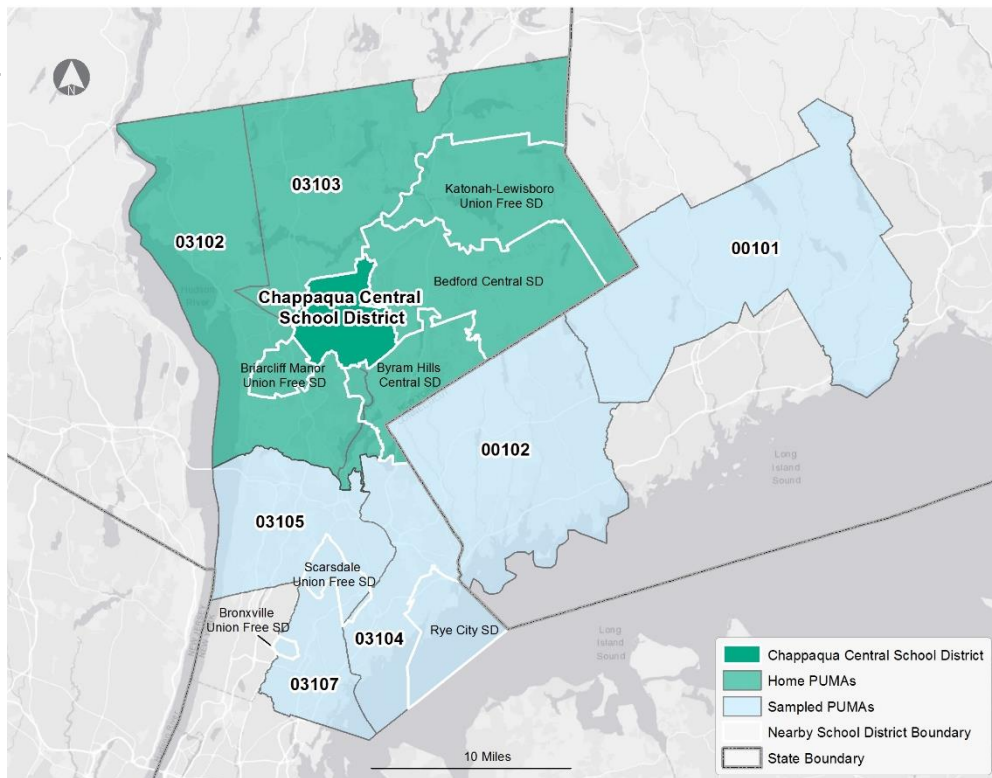
- Generates customized multipliers for the Chappaqua Central School District
- Uses the most recent available (2014-2018) 5-Year American Community Survey Public Use Microdata Sample (ACS-PUMS) data from the Census Bureau
- Uses a customized geography
 - Surrounding sample selected based on demographic and housing characteristics
 - Based on Public Use Microdata Areas (PUMAs)
 - Accounts for local public-school participation
- Yields multipliers for each type of housing configuration
- Rutgers multipliers are not preferred because they are
 - Based on data that are more than 20 years old and
 - State-wide averages

Geography Used to Generate Public School Multipliers

	PUMA	PUMA Name	Median HH Income	Median Value*	Gross Rent**
Home PUMAs	3102	Westchester County (Northwest) PUMA, NY	\$111,251	\$479,000	\$1,742
	3103	Westchester County (Northeast) PUMA, NY	\$146,877	\$609,200	\$1,811
Surrounding PUMAs Included in Analysis	3105	Westchester County (Central)--White Plains City PUMA, NY	\$135,351	\$640,800	\$1,735
	3104	Westchester County (Southeast) PUMA, NY	\$131,995	\$708,100	\$1,824
	3107	Westchester County (South Central)--New Rochelle & Mount Vernon Cities PUMA, NY	\$81,199	\$564,200	\$1,459
	102	Stamford & Greenwich Towns PUMA, CT	\$115,365	\$687,300	\$1,894
	101	Fairfield, New Canaan, Wilton, Weston & Easton Towns PUMA; CT	\$185,864	\$740,100	\$2,076

* Owner-Occupied Units; ** Occupied Units Paying Rent

Source: U.S. Census Bureau 2018 Estimates (2020); Econsult Solutions (2020)



Source: Econsult Solutions (2020); ArcMap (2020)

Multipliers for Public School Attendees by Housing Type

- Multipliers represent the number of “Public School Attendees” per unit for each housing type
- Distinct multipliers were developed for affordable housing units and market-rate housing units, using income thresholds for each unit type per the county’s affordable housing guidelines

Structure Type	Unit Detail / Tenure	# Bedrooms	PSA Multipliers		Rutgers Multiplier*
			Affordable Units	Market Rate Units	
Single-Family	Detached Units, Owner-Occupied	3	0.62	0.47	0.64
	Attached Units (Townhome & Two-Family), Owner-Occupied	2	0.32	0.14	0.17
	Attached Units (Townhome & Two-Family), Owner-Occupied	3	0.53	0.26	0.52
Multi-Family	Owner-Occupied Apartments	1	0.00	0.08	0.15
		2	0.11	0.18	0.09
		3	0.08	0.22	0.49
	Renter-Occupied Apartments	1	0.14	0.04	0.15
		2	0.68	0.33	0.43
		3	1.03	0.52	1.07

* Included for comparison purposes only; represent multipliers for multifamily structures with 5+ units rather than all multifamily structures

Source: Community Data Analytics (2020) and Burchell et al. (2006)

Enrollment Projection – New Units Added



New Housing Development

Building Name	Tenure Type	Single Family and Two Family				Multi-Family				Total Number of Units	Assumed Completion Date
		Detached Units - 3Bed	Attached Units - 2Bed	Two-Family - 2Bed	Total	1-bed	2-bed	3-bed	Total		
Conifer Building	Rental	0	0	0	0	11	17	0	28	28	2021
91 Bedford Road, Chappaqua, NY	Rental	0	0	0	0	6	8	0	14	14	2021
Townhouses at Chappaqua Crossing	Ownership	0	0	0	0	0	62	29	91	91	2022
Chappaqua Hamlet (Net New)	Rental	-4	-1	-4	-9	665	332	0	997	988	2023-2030

Source: Town of New Castle, Development Department (2020)

Multiplier Calculation for Chappaqua Hamlet

Chappaqua Hamlet	Number of Net New Units	Public School Attendees Multiplier	Number of Public School Attendees
Market Rate Units			
Single Family Detached - 3 Bedroom	-4	0.47	-2
Single Family Attached and Two-Family - 2 Bedroom	-5	0.14	-1
Multifamily - 1 Bedroom (Rental)	599	0.04	24
Multifamily - 2 Bedroom (Rental)	299	0.33	98
Affordable Units			
Single Family Detached - 3 Bedroom	0	0.62	0
Single Family Attached and Two-Family - 2 Bedroom	0	0.32	0
Multifamily - 1 Bedroom (Rental)	66	0.14	9
Multifamily - 2 Bedroom (Rental)	33	0.68	22
Total	988		150



New Students Added due to New Unit Construction

School Year	Conifer Building	91 Bedford Road, Chappaqua, NY	Townhouses at Chappaqua Crossing	Chappaqua Hamlet		Total Public School Attendees	Total Accumulative Public School Attendees
				Private Land	Public Land		
2021 - 2022	13	3				16	16
2022 - 2023			17			17	33
2023 - 2024				25		25	58
2024 - 2025				25		25	83
2025 - 2026				25		25	108
2026 - 2027				25		25	133
2027 - 2028					17	17	150
2028 - 2029					17	17	167
2029 - 2030					16	16	183
Total	13	3	17	100	50	-	183



In District Enrollment Projection with New Units – Scenario 1

Year	Births 6 Years Earlier	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2020 - 2021 (Actual)	120	236	212	280	252	258	281	251	328	282	299	271	292	314	3,556
2021 - 2022	104	265	249	224	290	261	266	284	252	325	282	298	267	298	3,561
2022 - 2023	120	224	277	264	233	301	270	270	286	251	326	282	294	274	3,552
2023 - 2024	104	271	242	292	273	241	310	273	271	284	251	324	278	300	3,610
2024 - 2025	110	238	280	256	303	284	249	315	275	270	285	251	320	285	3,611
2025 - 2026	110	252	246	296	266	314	293	253	317	274	271	285	248	327	3,642
2026 - 2027	110	253	262	260	307	276	324	297	255	315	275	271	282	254	3,631
2027 - 2028	110	246	264	277	270	318	285	329	299	254	316	275	268	289	3,690
2028 - 2029	110	251	265	278	286	279	327	288	330	296	254	315	271	273	3,713
2029 - 2030	110	255	266	279	287	296	287	331	289	327	296	253	310	276	3,752
2030 - 2031	110	255	266	279	287	296	303	289	331	286	326	294	248	315	3,775
2031 - 2032	110	255	266	279	287	296	303	305	289	327	285	323	289	252	3,756
2032 - 2033	110	255	266	279	287	296	303	305	305	286	326	283	317	294	3,802
2033 - 2034	110	255	266	279	287	296	303	305	305	301	285	323	278	322	3,805
2034 - 2035	110	255	266	279	287	296	303	305	305	301	300	283	317	283	3,780

Source: Chappaqua Central School District (2020); New York State Department of Health(2020); Econsult Solutions (2020)



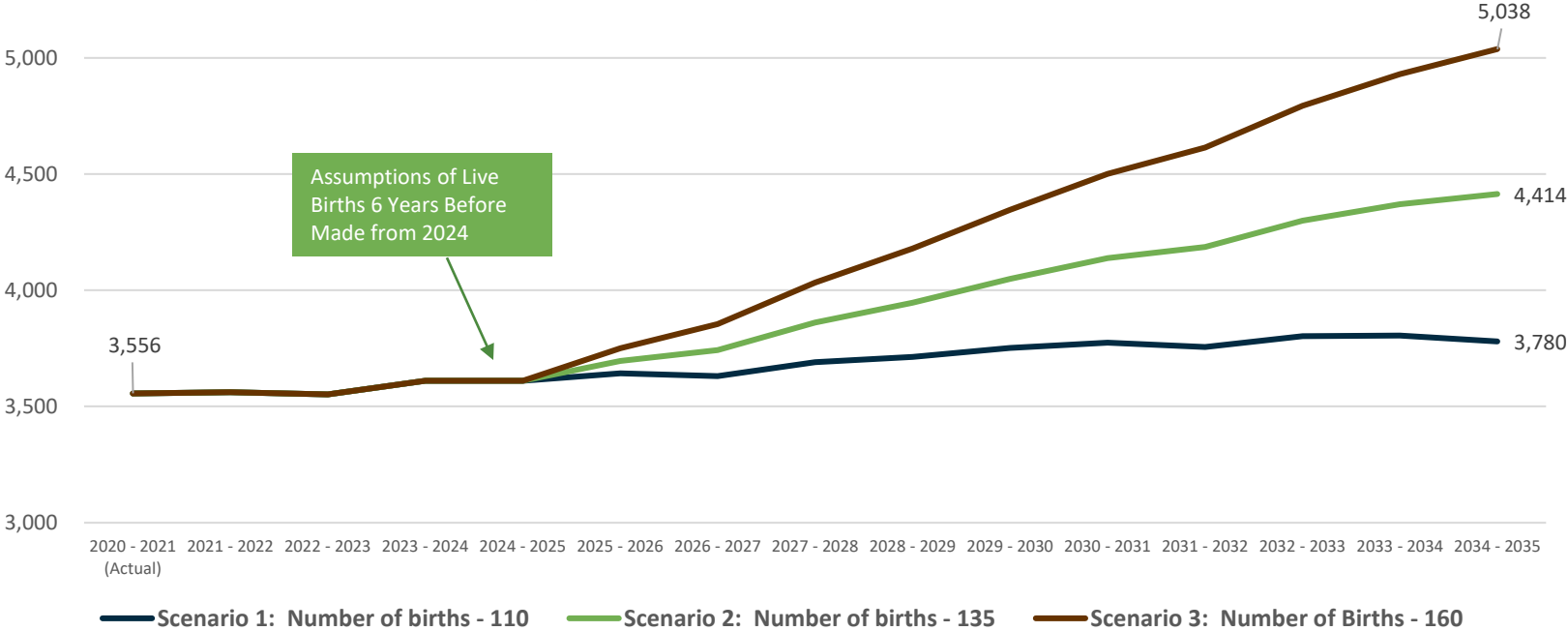
In District Enrollment Projection without and with New Units

Year	Scenario 1: 110 Births per Year		Scenario 2: 135 Births per Year		Scenario 3: 160 Births per Year	
	Enrollment without New Units	Enrollment with New Units	Enrollment without New Units	Enrollment with New Units	Enrollment without New Units	Enrollment with New Units
2020 - 2021 (Actual)	3,556	3,556	3,556	3,556	3,556	3,556
2021 - 2022	3,545	3,561	3,545	3,561	3,545	3,561
2022 - 2023	3,519	3,552	3,519	3,552	3,519	3,552
2023 - 2024	3,552	3,610	3,552	3,610	3,552	3,610
2024 - 2025	3,528	3,611	3,528	3,611	3,528	3,611
2025 - 2026	3,534	3,642	3,588	3,696	3,643	3,751
2026 - 2027	3,498	3,631	3,609	3,742	3,721	3,854
2027 - 2028	3,540	3,690	3,711	3,861	3,883	4,033
2028 - 2029	3,546	3,713	3,779	3,946	4,013	4,180
2029 - 2030	3,569	3,752	3,866	4,049	4,164	4,347
2030 - 2031	3,592	3,775	3,955	4,138	4,318	4,501
2031 - 2032	3,573	3,756	4,003	4,186	4,432	4,615
2032 - 2033	3,619	3,802	4,117	4,300	4,612	4,795
2033 - 2034	3,622	3,805	4,188	4,371	4,748	4,931
2034 - 2035	3,597	3,780	4,231	4,414	4,855	5,038
Number of Increase between Current and 2029 - 2030	41	224	675	858	1,299	1,482
% Increase between Current and 2029 - 2030	1.2%	6.3%	19.0%	24.1%	36.5%	41.7%



In District Enrollment Projection with New Units – Three Scenarios

Enrollment Projection Under Three Scenarios - With New Units





Enrollment Projection Adding Out of District Placement

Assuming the ratio of out of district placement and in district placement is 1:100 based on enrollment history data

Year	Scenario 1: Number of births - 110						Scenario 2: Number of births - 135						Scenario 3: Number of Births - 160					
	Enrollment without New Units			Enrollment with New Units			Enrollment without New Units			Enrollment with New Units			Enrollment without New Units			Enrollment with New Units		
	In District	Out of District	Total	In District	Out of District	Total	In District	Out of District	Total	In District	Out of District	Total	In District	Out of District	Total	In District	Out of District	Total
2020 - 2021 (Actual)	3,556	34	3,590	3,556	34	3,590	3,556	34	3,590	3,556	34	3,590	3,556	34	3,590	3,556	34	3,590
2021 - 2022	3,545	34	3,579	3,561	34	3,595	3,545	34	3,579	3,561	34	3,595	3,545	34	3,579	3,561	34	3,595
2022 - 2023	3,519	34	3,553	3,552	34	3,586	3,519	34	3,553	3,552	34	3,586	3,519	34	3,553	3,552	34	3,586
2023 - 2024	3,552	34	3,586	3,610	35	3,645	3,552	34	3,586	3,610	35	3,645	3,552	34	3,586	3,610	35	3,645
2024 - 2025	3,528	34	3,562	3,611	35	3,646	3,528	34	3,562	3,611	35	3,646	3,528	34	3,562	3,611	35	3,646
2025 - 2026	3,534	34	3,568	3,642	35	3,677	3,588	34	3,622	3,696	35	3,731	3,643	35	3,678	3,751	36	3,787
2026 - 2027	3,498	33	3,531	3,631	35	3,666	3,609	35	3,644	3,742	36	3,778	3,721	36	3,757	3,854	37	3,891
2027 - 2028	3,540	34	3,574	3,690	35	3,725	3,711	35	3,746	3,861	37	3,898	3,883	37	3,920	4,033	39	4,072
2028 - 2029	3,546	34	3,580	3,713	36	3,749	3,779	36	3,815	3,946	38	3,984	4,013	38	4,051	4,180	40	4,220
2029 - 2030	3,569	34	3,603	3,752	36	3,788	3,866	37	3,903	4,049	39	4,088	4,164	40	4,204	4,347	42	4,389
2030 - 2031	3,592	34	3,626	3,775	36	3,811	3,955	38	3,993	4,138	40	4,178	4,318	41	4,359	4,501	43	4,544
2031 - 2032	3,573	34	3,607	3,756	36	3,792	4,003	38	4,041	4,186	40	4,226	4,432	42	4,474	4,615	44	4,659
2032 - 2033	3,619	35	3,654	3,802	36	3,838	4,117	39	4,156	4,300	41	4,341	4,612	44	4,656	4,795	46	4,841
2033 - 2034	3,622	35	3,657	3,805	36	3,841	4,188	40	4,228	4,371	42	4,413	4,748	45	4,793	4,931	47	4,978
2034 - 2035	3,597	34	3,631	3,780	36	3,816	4,231	40	4,271	4,414	42	4,456	4,855	46	4,901	5,038	48	5,086
Number of Increase between Current and 2029-2029	41		41	224		226	675		681	858		866	1,299		1,311	1,482		1,496
% Increase between Current and 2029-2030	1.2%		1.1%	6.3%		6.3%	19.0%		19.0%	24.1%		24.1%	36.5%		36.5%	41.7%		41.7%

Source: Chappaqua Central School District (2020); New York State Department of Health(2020); Econsult Solutions (2020)

Fiscal Analysis



School District Budget 2020-2021

Per Student Expenditure and Revenue

Total Enrollment (Including Out of District Placement): 3,590

Category	Total	Per Student
Expenditure		
Instruction	\$70,839,542	\$19,732
Employee Benefits	\$27,437,388	\$7,643
General Support	\$14,238,039	\$3,966
Transportation	\$6,979,969	\$1,944
Interfund Transfers	\$250,000	\$70
Community Services	\$22,747	\$6
Debt Service	\$8,469,483	\$2,359
Total	\$128,237,168	\$35,721
Revenue		
Real Property Tax	\$111,663,231	\$31,104
State Sources	\$9,945,871	\$2,770
Tax Revenues	\$1,325,000	\$369
Appropriation of Fund Balance	\$3,542,865	\$987
Use of Money and Property	\$775,000	\$216
Miscellaneous Revenues	\$575,000	\$160
Charges for Services	\$410,201	\$114
Total	\$128,237,168	\$35,721

Projecting Budget 2021-2022

Year	2020-2021 (Actual)	Per Student	Number of Students	Inflation	2021 - 2022	
Expenditure						
Instruction	\$70,839,542	\$19,732	3,595	2%	\$72,356,968	
Employee Benefits	\$27,437,388	\$7,643		2%	\$28,025,114	
General Support	\$14,238,039	\$3,966		2%	\$14,543,027	
Transportation	\$ 6,979,969	\$1,944		2%	\$7,129,484	
Interfund Transfers	\$250,000	\$70		2%	\$255,355	
Community Services	\$22,747	\$6		2%	\$23,234	
Debt Service	\$8,469,483	Assuming same as 2020-2021	3,595	No Inflation	\$8,469,483	
Total	\$128,237,168					\$130,802,665
Revenue						
Real Property Tax	\$111,663,231	Set as Balance	3,595	No Inflation	\$119,347,760	
State Sources	\$9,945,871	Assuming \$9.0M for 2021-2022, \$2,770 per student onwards		2%	\$9,000,000	
Tax Revenues	\$1,325,000	Assuming \$1.2M for 2021-2022, \$369 per student onwards		2%	\$1,200,000	
Appropriation of Fund Balance	\$3,542,865	Assuming \$0		No Inflation	\$0	
Use of Money and Property	\$775,000	Assuming \$250,000 for 2021-2022		2%	\$250,000	
Miscellaneous Revenues	\$575,000	Assuming same as 2020-2021		2%	\$586,500	
Charges for Services	\$410,201	\$35,721		2%	\$418,405	
Total	\$128,237,168				\$130,802,665	



Take-Aways from Budget Projection

Projected Budget through 2029-2030 – Scenario 1 without Chappaqua Hamlet New Units

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,619	3,595	3,601	3,565	3,607	3,613	3,636	3,660	3,640	3,687	3,690	3,665
% Growth of Budget		2.0%	1.6%	2.8%	1.2%	2.0%	0.9%	3.0%	2.0%	2.5%	2.5%	1.4%	3.1%	2.0%	1.2%
% Growth of Property Tax		6.9%	0.5%	2.7%	1.2%	2.0%	0.9%	3.0%	2.0%	2.5%	2.5%	1.4%	3.1%	2.0%	1.2%

Projected Budget through 2029-2030 – Scenario 1 with Chappaqua Hamlet New Units

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,645	3,646	3,677	3,666	3,725	3,749	3,788	3811	3792	3838	3841	3816
% Growth of Budget		2.0%	1.6%	3.4%	1.9%	2.7%	1.6%	3.4%	2.5%	2.9%	2.5%	1.4%	3.1%	2.0%	1.3%
% Growth of Property Tax		6.9%	0.5%	3.4%	1.9%	2.7%	1.6%	3.4%	2.5%	2.9%	2.5%	1.4%	3.1%	2.0%	1.3%



Projected Budget through 2029-2030 – Scenario 1 without Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,619	3,595	3,601	3,565	3,607	3,613	3,636	3,660	3,640	3,687	3,690	3,665
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$75,782,756	\$76,785,794	\$78,452,227	\$79,221,281	\$81,757,695	\$83,531,568	\$85,744,588	\$88,036,770	\$89,306,808	\$92,269,145	\$94,191,106	\$95,424,014
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,351,981	\$29,740,475	\$30,385,913	\$30,683,781	\$31,666,179	\$32,353,230	\$33,210,372	\$34,098,174	\$34,590,082	\$35,737,446	\$36,481,855	\$36,959,382
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,231,576	\$15,433,176	\$15,768,112	\$15,922,685	\$16,432,479	\$16,789,009	\$17,233,804	\$17,694,510	\$17,949,775	\$18,545,175	\$18,931,470	\$19,179,272
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,467,034	\$7,565,866	\$7,730,063	\$7,805,839	\$8,055,758	\$8,230,541	\$8,448,594	\$8,674,448	\$8,799,588	\$9,091,473	\$9,280,848	\$9,402,329
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$267,445	\$270,985	\$276,866	\$279,580	\$288,531	\$294,791	\$302,601	\$310,691	\$315,173	\$325,627	\$332,410	\$336,761
Community Services	\$22,747	\$23,234	\$23,640	\$24,334	\$24,656	\$25,191	\$25,438	\$26,253	\$26,822	\$27,533	\$28,269	\$28,677	\$29,628	\$30,245	\$30,641
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$141,107,856	\$142,408,088	\$146,696,378	\$149,695,445	\$153,436,975	\$157,312,344	\$159,459,585	\$164,467,977	\$167,717,417	\$169,801,881
% Growth of Expenditure		2.0%	1.6%	2.8%	1.2%	2.0%	0.9%	3.0%	2.0%	2.5%	2.5%	1.4%	3.1%	2.0%	1.2%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$123,231,648	\$124,741,775	\$127,267,425	\$128,418,130	\$132,275,155	\$134,963,728	\$138,324,327	\$141,805,594	\$143,720,772	\$148,227,249	\$151,139,690	\$152,996,163
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,639,898	\$10,780,725	\$11,014,692	\$11,122,667	\$11,478,780	\$11,727,831	\$12,038,539	\$12,360,362	\$12,538,675	\$12,954,587	\$13,224,430	\$13,397,531
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,417,459	\$1,436,220	\$1,467,390	\$1,481,774	\$1,529,216	\$1,562,395	\$1,603,788	\$1,646,661	\$1,670,416	\$1,725,824	\$1,761,773	\$1,784,834
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$141,107,856	\$142,408,088	\$146,696,378	\$149,695,445	\$153,436,975	\$157,312,344	\$159,459,585	\$164,467,977	\$167,717,417	\$169,801,881
% Growth of Revenue		2.0%	1.6%	2.8%	1.2%	2.0%	0.9%	3.0%	2.0%	2.5%	2.5%	1.4%	3.1%	2.0%	1.2%
% Growth of Property Tax		6.9%	0.5%	2.7%	1.2%	2.0%	0.9%	3.0%	2.0%	2.5%	2.5%	1.4%	3.1%	2.0%	1.2%

Source: Chappaqua Central School District (2020); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



Projected Budget through 2029-2030 – Scenario 1 with Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,645	3,646	3,677	3,666	3,725	3,749	3,788	3811	3,792	3,838	3,841	3,816
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$76,327,202	\$77,875,105	\$80,107,981	\$81,465,699	\$84,432,330	\$86,675,850	\$89,329,070	\$91,668,888	\$93,036,104	\$96,048,000	\$98,045,539	\$99,355,535
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,562,854	\$30,162,384	\$31,027,216	\$31,553,084	\$32,702,112	\$33,571,066	\$34,598,704	\$35,504,956	\$36,034,503	\$37,201,063	\$37,974,744	\$38,482,129
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,341,004	\$15,652,117	\$16,100,902	\$16,373,790	\$16,970,053	\$17,420,978	\$17,954,249	\$18,424,529	\$18,699,326	\$19,304,687	\$19,706,172	\$19,969,468
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,520,680	\$7,673,198	\$7,893,208	\$8,026,987	\$8,319,295	\$8,540,354	\$8,801,781	\$9,032,328	\$9,167,043	\$9,463,811	\$9,660,633	\$9,789,710
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$269,367	\$274,829	\$282,709	\$287,501	\$297,970	\$305,888	\$315,251	\$323,509	\$328,334	\$338,963	\$346,013	\$350,636
Community Services	\$22,747	\$23,234	\$23,640	\$24,509	\$25,006	\$25,723	\$26,159	\$27,112	\$27,832	\$28,684	\$29,435	\$29,874	\$30,842	\$31,483	\$31,904
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$143,907,222	\$146,202,702	\$151,218,355	\$155,011,451	\$159,497,223	\$163,453,129	\$165,764,667	\$170,856,849	\$174,234,066	\$176,448,864
% Growth of Expenditure		2.0%	1.6%	3.4%	1.9%	2.7%	1.6%	3.4%	2.5%	2.9%	2.5%	1.4%	3.1%	2.0%	1.3%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$124,065,515	\$126,410,149	\$129,803,354	\$131,855,648	\$136,371,587	\$139,779,465	\$143,814,268	\$147,368,493	\$149,432,506	\$154,014,889	\$157,043,083	\$159,017,625
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,716,338	\$10,933,664	\$11,247,160	\$11,437,783	\$11,854,298	\$12,169,289	\$12,541,801	\$12,870,311	\$13,062,268	\$13,485,138	\$13,765,593	\$13,949,516
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,427,643	\$1,456,595	\$1,498,359	\$1,523,754	\$1,579,243	\$1,621,206	\$1,670,833	\$1,714,597	\$1,740,170	\$1,796,505	\$1,833,868	\$1,858,370
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$143,907,222	\$146,202,702	\$151,218,355	\$155,011,451	\$159,497,223	\$163,453,129	\$165,764,667	\$170,856,849	\$174,234,066	\$176,448,864
% Growth of Revenue		2.0%	1.6%	3.4%	1.9%	2.7%	1.6%	3.4%	2.5%	2.9%	2.5%	1.4%	3.1%	2.0%	1.3%
% Growth of Property Tax		6.9%	0.5%	3.4%	1.9%	2.7%	1.6%	3.4%	2.5%	2.9%	2.5%	1.4%	3.1%	2.0%	1.3%

Source: Chappaqua Central School District (2020); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



Projected Budget through 2029-2030 – Scenario 2 without Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection															
(Including Out of District Placement)	3,590	3,595	3,586	3,619	3,595	3,656	3,677	3,780	3,848	3,936	4,026	4,075	4,190	4,261	4,305
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$75,782,756	\$76,785,794	\$79,650,470	\$81,710,140	\$85,678,982	\$88,964,703	\$92,819,224	\$96,840,447	\$99,979,463	\$104,856,988	\$108,766,477	\$112,087,416
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,351,981	\$29,740,475	\$30,850,014	\$31,647,760	\$33,184,962	\$34,457,578	\$35,950,501	\$37,507,991	\$38,723,787	\$40,612,937	\$42,127,150	\$43,413,408
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,231,576	\$15,433,176	\$16,008,947	\$16,422,920	\$17,220,618	\$17,881,015	\$18,655,735	\$19,463,961	\$20,094,871	\$21,075,205	\$21,860,973	\$22,528,449
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,467,034	\$7,565,866	\$7,848,128	\$8,051,072	\$8,442,130	\$8,765,879	\$9,145,673	\$9,541,893	\$9,851,187	\$10,331,780	\$10,716,990	\$11,044,209
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$267,445	\$270,985	\$281,095	\$288,363	\$302,370	\$313,966	\$327,569	\$341,760	\$352,838	\$370,051	\$383,848	\$395,568
Community Services	\$22,747	\$23,234	\$23,640	\$24,334	\$24,656	\$25,576	\$26,238	\$27,512	\$28,567	\$29,805	\$31,096	\$32,104	\$33,670	\$34,926	\$35,992
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$143,133,713	\$146,615,977	\$153,326,057	\$158,881,191	\$165,397,990	\$172,196,630	\$177,503,732	\$185,750,115	\$192,359,848	\$197,974,524
% Growth of Expenditure		2.0%	1.6%	2.8%	1.2%	3.5%	2.4%	4.6%	3.6%	4.1%	4.1%	3.1%	4.6%	3.6%	2.9%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$123,231,648	\$124,741,775	\$129,102,637	\$132,230,031	\$138,280,941	\$143,285,039	\$149,159,737	\$155,289,178	\$160,066,854	\$167,506,607	\$173,463,118	\$178,517,588
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,639,898	\$10,780,725	\$11,182,925	\$11,472,103	\$12,029,328	\$12,490,643	\$13,031,818	\$13,596,398	\$14,037,116	\$14,721,920	\$15,270,812	\$15,737,072
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,417,459	\$1,436,220	\$1,489,802	\$1,528,326	\$1,602,560	\$1,664,017	\$1,736,113	\$1,811,327	\$1,870,040	\$1,961,271	\$2,034,395	\$2,096,510
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$143,133,713	\$146,615,977	\$153,326,057	\$158,881,191	\$165,397,990	\$172,196,630	\$177,503,732	\$185,750,115	\$192,359,848	\$197,974,524
% Growth of Revenue		2.0%	1.6%	2.8%	1.2%	3.5%	2.4%	4.6%	3.6%	4.1%	4.1%	3.1%	4.6%	3.6%	2.9%
% Growth of Property Tax		6.9%	0.5%	2.7%	1.2%	3.5%	2.4%	4.6%	3.6%	4.1%	4.1%	3.1%	4.6%	3.6%	2.9%

Source: Chappaqua Central School District (2020); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



Projected Budget through 2029-2030 – Scenario 2 with Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,645	3,646	3,731	3,778	3,898	3,984	4,088	4,178	4,226	4,341	4,413	4,456
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$76,327,202	\$77,875,105	\$81,284,437	\$83,954,558	\$88,353,617	\$92,108,986	\$96,403,706	\$100,496,619	\$103,684,223	\$108,635,844	\$112,646,436	\$116,018,937
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,562,854	\$30,162,384	\$31,482,878	\$32,517,062	\$34,220,894	\$35,675,414	\$37,338,834	\$38,924,090	\$40,158,705	\$42,076,554	\$43,629,926	\$44,936,154
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,341,004	\$15,652,117	\$16,337,358	\$16,874,026	\$17,758,193	\$18,512,984	\$19,376,180	\$20,198,815	\$20,839,491	\$21,834,717	\$22,640,806	\$23,318,645
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,520,680	\$7,673,198	\$8,009,126	\$8,272,219	\$8,705,668	\$9,075,692	\$9,498,860	\$9,902,143	\$10,216,224	\$10,704,118	\$11,099,290	\$11,431,590
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$269,367	\$274,829	\$286,861	\$296,284	\$311,809	\$325,062	\$340,219	\$354,663	\$365,912	\$383,387	\$397,541	\$409,443
Community Services	\$22,747	\$23,234	\$23,640	\$24,509	\$25,006	\$26,101	\$26,958	\$28,371	\$29,577	\$30,956	\$32,270	\$33,294	\$34,884	\$36,171	\$37,254
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$145,896,245	\$150,410,591	\$157,848,034	\$164,197,198	\$171,458,237	\$178,378,082	\$183,767,333	\$192,138,987	\$198,919,654	\$204,621,507
% Growth of Expenditure		2.0%	1.6%	3.4%	1.9%	4.1%	3.1%	4.9%	4.0%	4.4%	4.0%	3.0%	4.6%	3.5%	2.9%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$124,065,515	\$126,410,149	\$131,605,198	\$135,667,549	\$142,377,373	\$148,100,777	\$154,649,678	\$160,888,917	\$165,741,012	\$173,294,248	\$179,405,606	\$184,539,049
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,716,338	\$10,933,664	\$11,412,334	\$11,787,219	\$12,404,847	\$12,932,101	\$13,535,079	\$14,109,724	\$14,557,264	\$15,252,471	\$15,815,559	\$16,289,058
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,427,643	\$1,456,595	\$1,520,364	\$1,570,306	\$1,652,588	\$1,722,829	\$1,803,158	\$1,879,713	\$1,939,335	\$2,031,951	\$2,106,966	\$2,170,046
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$145,896,245	\$150,410,591	\$157,848,034	\$164,197,198	\$171,458,237	\$178,378,082	\$183,767,333	\$192,138,987	\$198,919,654	\$204,621,507
% Growth of Revenue		2.0%	1.6%	3.4%	1.9%	4.1%	3.1%	4.9%	4.0%	4.4%	4.0%	3.0%	4.6%	3.5%	2.9%
% Growth of Property Tax		6.9%	0.5%	3.4%	1.9%	4.1%	3.1%	4.9%	4.0%	4.4%	4.0%	3.0%	4.6%	3.5%	2.9%

Source: Chappaqua Central School District (2020); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



Projected Budget through 2029-2030 – Scenario 3 without Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,619	3,595	3,711	3,790	3,953	4,085	4,237	4,393	4,508	4,689	4,827	4,935
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$75,782,756	\$76,785,794	\$80,848,713	\$84,221,222	\$89,600,269	\$94,444,078	\$99,917,442	\$105,668,177	\$110,603,047	\$117,344,730	\$123,214,219	\$128,490,452
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,351,981	\$29,740,475	\$31,314,114	\$32,620,346	\$34,703,744	\$36,579,836	\$38,699,765	\$40,927,125	\$42,838,486	\$45,449,657	\$47,723,012	\$49,766,589
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,231,576	\$15,433,176	\$16,249,782	\$16,927,623	\$18,008,757	\$18,982,315	\$20,082,406	\$21,238,246	\$22,230,106	\$23,585,116	\$24,764,825	\$25,825,295
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,467,034	\$7,565,866	\$7,966,194	\$8,298,494	\$8,828,503	\$9,305,774	\$9,845,076	\$10,411,708	\$10,897,951	\$11,562,223	\$12,140,556	\$12,660,434
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$267,445	\$270,985	\$285,323	\$297,225	\$316,209	\$333,303	\$352,619	\$372,914	\$390,329	\$414,122	\$434,836	\$453,456
Community Services	\$22,747	\$23,234	\$23,640	\$24,334	\$24,656	\$25,961	\$27,044	\$28,771	\$30,327	\$32,084	\$33,931	\$35,515	\$37,680	\$39,565	\$41,259
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$145,159,570	\$150,861,436	\$159,955,736	\$168,145,114	\$177,398,874	\$187,121,584	\$195,464,917	\$206,863,011	\$216,786,495	\$225,706,969
% Growth of Expenditure		2.0%	1.6%	2.8%	1.2%	5.0%	3.9%	6.0%	5.1%	5.5%	5.5%	4.5%	5.8%	4.8%	4.1%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$123,231,648	\$124,741,775	\$130,937,848	\$136,075,967	\$144,286,727	\$151,677,170	\$160,031,265	\$168,809,602	\$176,337,782	\$186,632,651	\$195,591,069	\$203,640,241
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,639,898	\$10,780,725	\$11,351,158	\$11,824,659	\$12,579,877	\$13,259,948	\$14,028,408	\$14,835,811	\$15,528,667	\$16,475,199	\$17,299,275	\$18,040,058
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,417,459	\$1,436,220	\$1,512,214	\$1,575,294	\$1,675,905	\$1,766,505	\$1,868,880	\$1,976,443	\$2,068,746	\$2,194,844	\$2,304,629	\$2,403,317
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$136,594,609	\$138,290,435	\$145,159,570	\$150,861,436	\$159,955,736	\$168,145,114	\$177,398,874	\$187,121,584	\$195,464,917	\$206,863,011	\$216,786,495	\$225,706,969
% Growth of Revenue		2.0%	1.6%	2.8%	1.2%	5.0%	3.9%	6.0%	5.1%	5.5%	5.5%	4.5%	5.8%	4.8%	4.1%
% Growth of Property Tax		6.9%	0.5%	2.7%	1.2%	5.0%	3.9%	6.0%	5.1%	5.5%	5.5%	4.5%	5.8%	4.8%	4.1%

Source: Chappaqua Central School District (2020); Econsult Solutions (2020)

Chappaqua Central School District Enrollment and Capacity Analysis



Projected Budget through 2029-2030 – Scenario 3 with Chappaqua Hamlet New Units

Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Year	2020-2021 (Actual)	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028	2028 - 2029	2029 - 2030	2030 - 2031	2031 - 2032	2032 - 2033	2033 - 2034	2034 - 2035
Enrollment Projection (Including Out of District Placement)	3,590	3,595	3,586	3,645	3,646	3,787	3,891	4,072	4,220	4,389	4544	4,659	4,841	4,978	5,086
Expenditure															
Instruction	\$70,839,542	\$72,356,968	\$73,619,341	\$76,327,202	\$77,875,105	\$82,504,466	\$86,465,639	\$92,297,570	\$97,565,241	\$103,501,924	\$109,300,296	\$114,307,808	\$121,148,611	\$127,068,652	\$132,421,974
Employee Benefits	\$27,437,388	\$28,025,114	\$28,514,053	\$29,562,854	\$30,162,384	\$31,955,416	\$33,489,648	\$35,748,456	\$37,788,716	\$40,088,097	\$42,333,908	\$44,273,404	\$46,922,966	\$49,215,901	\$51,289,336
General Support	\$14,238,039	\$14,543,027	\$14,796,751	\$15,341,004	\$15,652,117	\$16,582,572	\$17,378,728	\$18,550,888	\$19,609,637	\$20,802,851	\$21,968,266	\$22,974,725	\$24,349,658	\$25,539,527	\$26,615,491
Transportation	\$6,979,969	\$7,129,484	\$7,253,868	\$7,520,680	\$7,673,198	\$8,129,339	\$8,519,641	\$9,094,274	\$9,613,308	\$10,198,262	\$10,769,588	\$11,262,989	\$11,937,027	\$12,520,341	\$13,047,815
Interfund Transfers	\$250,000	\$255,355	\$259,810	\$269,367	\$274,829	\$291,167	\$305,146	\$325,728	\$344,318	\$365,269	\$385,732	\$403,404	\$427,546	\$448,438	\$467,331
Community Services	\$22,747	\$23,234	\$23,640	\$24,509	\$25,006	\$26,493	\$27,765	\$29,637	\$31,329	\$33,235	\$35,097	\$36,705	\$38,902	\$40,803	\$42,521
Debt Service	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483	\$8,469,483
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$147,958,936	\$154,656,050	\$164,516,035	\$173,422,032	\$183,459,121	\$193,262,368	\$201,728,518	\$213,294,194	\$223,303,145	\$232,353,952
% Growth of Expenditure		2.0%	1.6%	3.4%	1.9%	5.6%	4.5%	6.4%	5.4%	5.8%	5.3%	4.4%	5.7%	4.7%	4.1%
Revenue															
Real Property Tax	\$111,663,231	\$119,347,760	\$119,943,793	\$124,065,515	\$126,410,149	\$133,473,776	\$139,513,484	\$148,417,874	\$156,457,498	\$165,521,206	\$174,372,501	\$182,011,940	\$192,458,620	\$201,494,462	\$209,661,702
State Sources	\$9,945,871	\$9,000,000	\$10,336,155	\$10,716,338	\$10,933,664	\$11,583,626	\$12,139,775	\$12,958,578	\$13,698,159	\$14,531,669	\$15,345,760	\$16,048,815	\$17,009,264	\$17,840,437	\$18,592,044
Tax Revenues	\$1,325,000	\$1,200,000	\$1,376,994	\$1,427,643	\$1,456,595	\$1,543,184	\$1,617,274	\$1,726,356	\$1,824,884	\$1,935,925	\$2,044,379	\$2,138,041	\$2,265,993	\$2,376,723	\$2,476,853
Appropriation of Fund Balance	\$3,542,865	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Money and Property	\$775,000	\$250,000	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020	\$281,541	\$287,171	\$292,915	\$298,773	\$304,749	\$310,844	\$317,060	\$323,402
Miscellaneous Revenues	\$575,000	\$586,500	\$598,230	\$610,195	\$622,398	\$634,846	\$647,543	\$660,494	\$673,704	\$687,178	\$700,922	\$714,940	\$729,239	\$743,824	\$758,700
Charges for Services	\$410,201	\$418,405	\$426,773	\$435,309	\$444,015	\$452,895	\$461,953	\$471,192	\$480,616	\$490,228	\$500,033	\$510,033	\$520,234	\$530,639	\$541,252
Total	\$128,237,168	\$130,802,665	\$132,936,945	\$137,515,099	\$140,132,123	\$147,958,936	\$154,656,050	\$164,516,035	\$173,422,032	\$183,459,121	\$193,262,368	\$201,728,518	\$213,294,194	\$223,303,145	\$232,353,952
% Growth of Revenue		2.0%	1.6%	3.4%	1.9%	5.6%	4.5%	6.4%	5.4%	5.8%	5.3%	4.4%	5.7%	4.7%	4.1%
% Growth of Property Tax		6.9%	0.5%	3.4%	1.9%	5.6%	4.5%	6.4%	5.4%	5.8%	5.3%	4.4%	5.7%	4.7%	4.1%

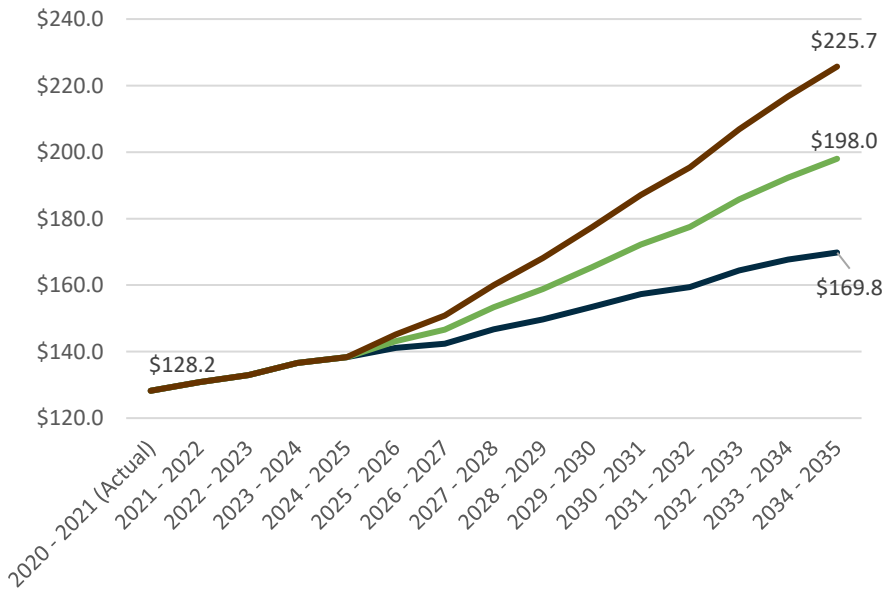


Projected Budget through 2029-2030 – Three Scenarios

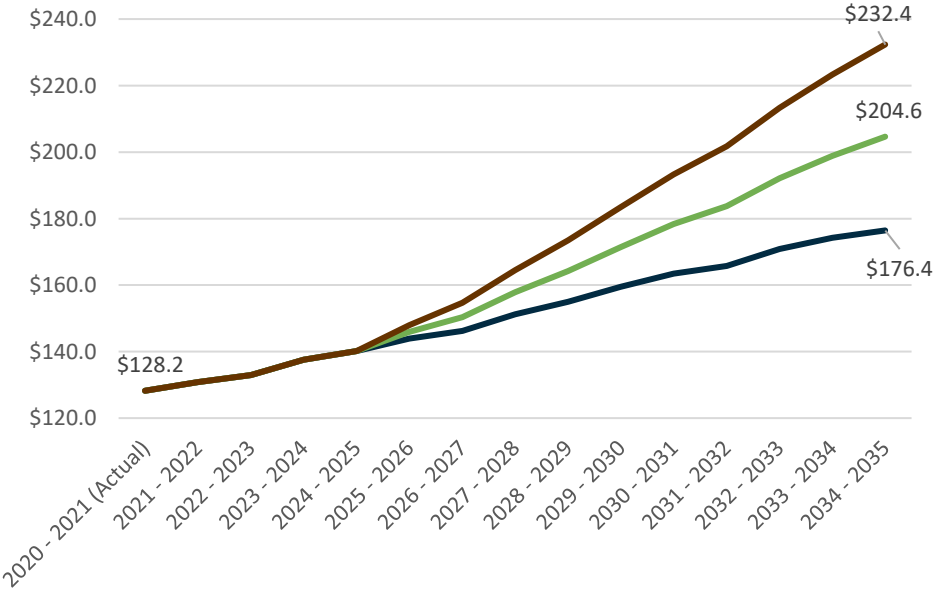
Assumed Inflation Rate: 2%

Assuming No Major Capital Investment

Total Projected Budget Without Chappaqua Hamlet (\$M)



Total Projected Budget With Chappaqua Hamlet (\$M)



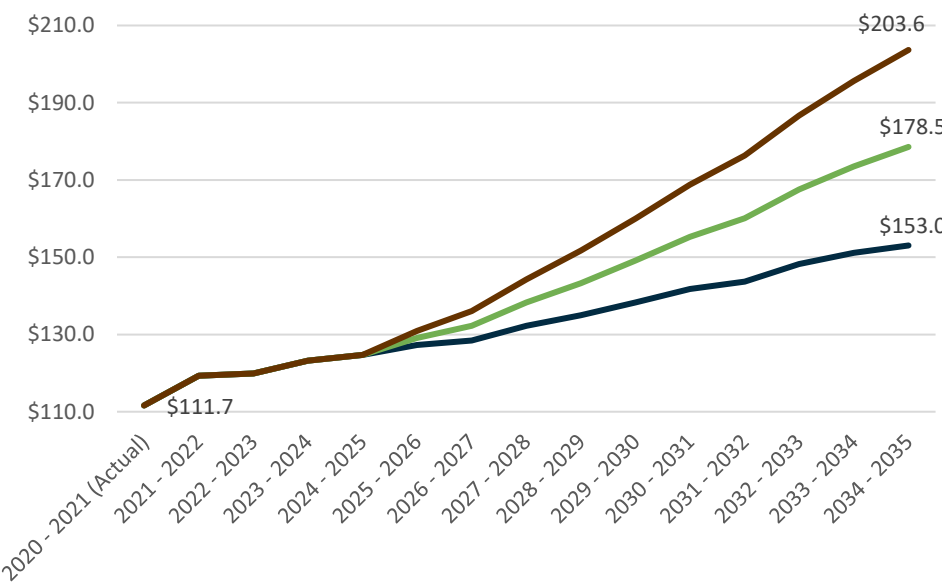
Scenario 1: Number of births - 110 Scenario 2: Number of births - 135 Scenario 3: Number of Births - 160



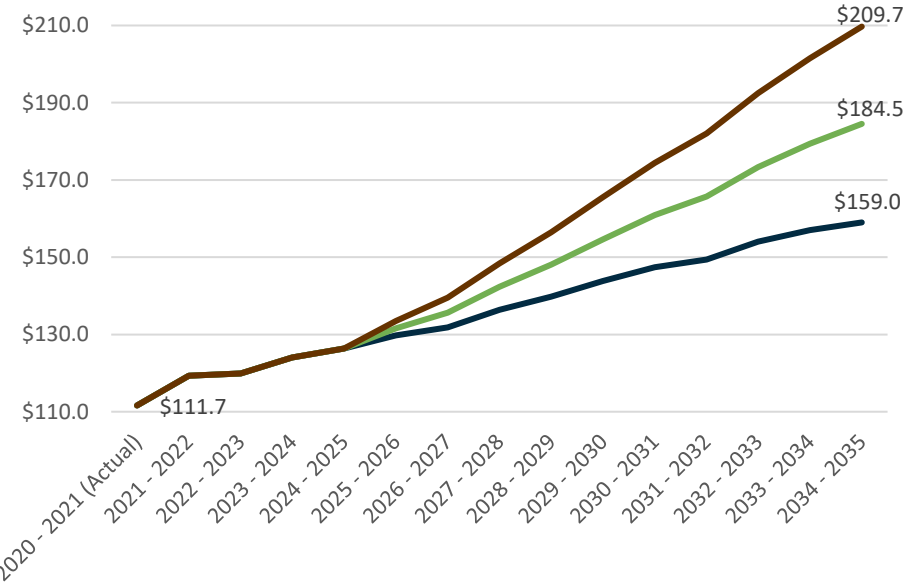
Projected Property Tax through 2029-2030 – Three Scenarios

Assumed Inflation Rate: 2%
Assuming No Major Capital Investment

Total Projected Property Tax Without Chappaqua Hamlet (\$M)



Total Projected Property Tax With Chappaqua Hamlet (\$M)



Scenario 1: Number of births - 110 Scenario 2: Number of births - 135 Scenario 3: Number of Births - 160

Issues and Discussions

- There will be some consideration for impact of real estate (sales, backfill, etc.);
- We do not know the full effects of COVID on the economy and live births;
- The change in housing mix will have an impact;
 - Some properties convert 1-bedroom unit to be units with 1 bedroom and 1 den;
 - These units might effectively have public school student multipliers of 2-bedroom unit.

If X Percentage of 1-Bed Units Converted to be 2-Bed	New Students Added
0%	183
30%	228
50%	255
80%	300

Source: Econsult Solutions (2020)

Capacity Analysis

CCSD retained KG+D Architects to perform a **School Capacity Study**

- **Assessed the capacity of six (6) schools**
- **Evaluated future enrollment increases** due to planned downtown development in collaboration with Chazen/ESI
- **Applied NYS-SED standards** to room capacity and utilization rates.
- **Consulted district administrators** to factor in unique education specifications

District Overview - operates a K-4, 5-8, 9-12 grade configuration.

- | | | |
|--|----------------------------------|-----------------|
| • Roaring Brook Elementary School | (K-4) – 102,457sf built in 1951 | (4 renovations) |
| • Westorchard Elementary School | (K-4) – 92,354sf built in 1971 | (3 renovations) |
| • Grafflin Elementary School | (K-4) – 96,620sf built in 1962 | (3 renovations) |
| • Seven Bridges Middle School | (5-8) – 159,170sf built in 2003 | (1 renovation) |
| • Bell Middle School | (5-8) – 156,150sf built in 1925 | (5 renovations) |
| • Horace Greeley High School | (9-12) - 277,435sf built in 1957 | (5 renovations) |



Historical Enrollment Data - Population Range / Fluctuation

- Current - 3,556 students (historical low)
- Peak - 4,254 students in 2007-08 (historical high)
- Decline of 700 students in the past 13 years attributed to:
 - regular ebbs and flows in population
 - 2008 recession – altered family planning / property sales/transfers
- **Elementary** has 1,238 students compared to 1606 in 2006-07 (30% decline)
- **Middle School** has 1,142 students compared to 1,368 in 2010-11 (20% decline)
- **Horace Greeley** has 1,176 students compared to 1,352 in 2014-15 (15% decline)
- Data shows existing housing has accommodated a larger student population

Capacity Study Process

- **Analyzed existing floor plans** for all six school buildings.
- **Met with school principals** to verify:
 - instructional room use, room numbers, and planned capacity for instructional space
- **Confirmed all required model program spaces** are provided.
- **Reviewed max/preferred class sizes** with District leadership for all grade levels.
- **Created physical space inventory spreadsheet** of all rooms including:
 - number of rooms, square foot (sf) area of each and current use
- **Calculated capacity for each school** accounting for:
 - programming efficiencies at all grade levels
 - room utilization rates at the secondary school levels



Capacity Analysis - Elementary Schools (grades K-4)

- **Established Target Capacity**
 - multiplied number of 'home rooms' per grade by the target class size.
- **Reduced target capacity using an efficiency factor - 85%**
 - accounts for the annual fluctuation in grade level size / 'set districting'
- **Totaled all classroom counts** utilizing this method for the '**Functional Capacity**'
 - The functional capacity for each elementary school is 521 students.
- **Confirmed that all common spaces** such as gyms, cafeterias, libraries, and auditoriums as well as special subject rooms meet the functional capacity



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521

School Name + Room # (Location)



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521

Room Use – Classroom Type



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521

Target Class Size – Ed Specs



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521

Efficiency Factor of 0.85



Capacity Analysis Spreadsheet - Elementary School (grades K-4)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Functional Capacity 1
Roaring Brook ES	121	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	122	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	123	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	124	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	125	Instructional	Kindergarten	2	850	20	85%	45	17
Roaring Brook ES	126	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	128	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	129	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	130	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	131	Instructional	1st Gr. Classroom	3	820	23	85%	33	20
Roaring Brook ES	201	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	202	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	203	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Roaring Brook ES	204	Instructional	3rd Gr. Classroom	4	825	25	85%	31	21
Subtotal					38,280				521

Functional Capacity @ ES = 521

521 = 5 Grades; 5 Sections/Grade + 1 flex classroom; x Target Class size



Capacity Analysis - Middle Schools (5-8) & High School (9-12)

- **Established Target Capacity**
 - more complex than elementary calculations as it accounts for student movement
- **Counted all instructional spaces** for the capacity analysis.
- **Multiple methodologies for calculating capacity** at MS/HS – we utilized:
 - CCSD target class size per room and -
 - Multiplied by both Efficiency Factor (85%) and Room Use Rate (# of periods/day)
- **Totaled all classroom counts** utilizing this method for the ‘**Functional Capacity**’
- **Confirmed that all common spaces** such as gyms, cafeterias, libraries, and auditoriums as well as special subject rooms meet the functional capacity



Capacity Analysis Spreadsheet – Middle/High School (5-12)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Room Use Rate	Functional Capacity 1
Seven Bridges MS	200	Instructional	5A Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	201	Instructional	5A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	202	Instructional	5A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	203	Instructional	Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	204	Instructional	Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	205	Instructional	6A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	206	Instructional	6A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	207	Instructional	6A Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	208	Instructional	Resource Room	13	720	8	85%	69	0.56	4
Seven Bridges MS	209	Instructional	6A Science	6	1060	24	85%	50	0.56	11
Seven Bridges MS	210	Instructional	5A Science	6	1060	24	85%	50	0.56	11
Seven Bridges MS	211	Instructional	5B Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	212	Instructional	5B Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	213	Instructional	5B Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	214	Instructional	Classroom	4	810	25	85%	31	0.78	17
Subtotal					86,741					774

Room Use Rate – Periods/day



Capacity Analysis Spreadsheet – Middle/High School (5-12)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Room Use Rate	Functional Capacity 1
Seven Bridges MS	200	Instructional	5A Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	201	Instructional	5A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	202	Instructional	5A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	203	Instructional	Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	204	Instructional	Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	205	Instructional	6A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	206	Instructional	6A Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	207	Instructional	6A Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	208	Instructional	Resource Room	13	720	8	85%	69	0.56	4
Seven Bridges MS	209	Instructional	6A Science	6	1060	24	85%	50	0.56	11
Seven Bridges MS	210	Instructional	5A Science	6	1060	24	85%	50	0.56	11
Seven Bridges MS	211	Instructional	5B Classroom	4	810	25	85%	31	0.78	17
Seven Bridges MS	212	Instructional	5B Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	213	Instructional	5B Classroom	4	800	25	85%	31	0.78	17
Seven Bridges MS	214	Instructional	Classroom	4	810	25	85%	31	0.78	17
Subtotal					86,741					774

Functional Capacity @ Seven Bridges = 774



Capacity Analysis Spreadsheet – Middle/High School (5-12)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Room Use Rate	Functional Capacity 1
Bell Middle School	100	Common	Cafeteria		2580					-
Bell Middle School	101	Instructional	Resource Room	13	710	8	85%	69	0.56	4
Bell Middle School	103	Instructional	Resource Room	13	530	8	85%	69	0.56	4
Bell Middle School	104	Instructional	Music/Chorus	11	1550	25	85%	47	0.56	12
Bell Middle School	104A	Common	Game Room		510					-
Bell Middle School	110	Instructional	5: SS/Language	4	660	25	85%	31	0.78	17
Bell Middle School	112	Instructional	5: SS/Language	4	660	25	85%	31	0.78	17
Bell Middle School	114	Instructional	5: Math	4	650	25	85%	31	0.78	17
Bell Middle School	116	Instructional	5: Sci/Health	4	660	25	85%	31	0.78	17
Bell Middle School	118	Instructional	Classroom-not in use	4	1800	25	85%	31	0.78	17
Bell Middle School	202	Instructional	Learning Lab	9	2070	25	85%	31	0.78	17
Bell Middle School	210	Instructional	Foreign Language	4	660	25	85%	31	0.78	17
Bell Middle School	212	Instructional	5: Science/Math	4	660	25	85%	31	0.78	17
Bell Middle School	214	Instructional	5: Math	4	640	25	85%	31	0.78	17
Subtotal					66,645					701

Functional Capacity @ Bell = 701



Capacity Analysis Spreadsheet – Middle/High School (5-12)

School Site	Local Space #	Space Category	Use - 2020	Capacity Type	NSF	Target Class Size	Efficiency Factor 85	SF per student	Room Use Rate	Functional Capacity 1
Horace Greeley HS	A101	Common	Gymnasium A/B/C	10	11470	84	85%	106	0.83	59
Horace Greeley HS	A102	Common	Gymnasium D	10	4890	28	85%	106	0.83	20
Horace Greeley HS	A103	Common	Fitness Center	10	4890	28	85%	106	0.83	20
Horace Greeley HS	A104	Common	Wellness Studio	10	2950	28	85%	106	0.83	20
Horace Greeley HS	A105	Common	Classroom	5	700	22	85%	31	0.83	16
Horace Greeley HS	B217	Instructional	Music	11	365	15	85%	47	0.50	6
Horace Greeley HS	B218	Instructional	Choral	11	995	28	85%	47	0.50	12
Horace Greeley HS	B231	Instructional	Band	11	1690	50	85%	47	0.17	7
Horace Greeley HS	B232	Instructional	Orchestra	11	1600	50	85%	47	0.17	7
Horace Greeley HS	B237	Common	Auditorium	5	4250	28	85%	31	0.50	12
Horace Greeley HS	C3	Instructional	Classroom	5	640	28	85%	31	0.83	20
Horace Greeley HS	C4	Instructional	Classroom	5	650	28	85%	31	0.83	20
Horace Greeley HS	C5	Instructional	Classroom	5	645	28	85%	31	0.83	20
Horace Greeley HS	C6	Instructional	Classroom	5	900	28	85%	31	0.83	20
Subtotal					139,560					1,480

Functional Capacity @ Horace Greeley = 1,480



District-wide Functional Capacity

Roaring Brook Elementary School	521
Douglas Grafflin Elementary School	521
Westorchard Elementary School	521
Seven Bridges Middle School	774
Robert E. Bell Middle School	701
<u>Horace Greeley High School</u>	<u>1,480</u>
Total	4,518



Enrollment to Capacity Spreadsheet – Elementary Schools

Year	K-4 Functional Capacity	SCENARIO 1A NO NEW HOUSING		SCENARIO 1B W/NEW HOUSING		SCENARIO 2A NO NEW HOUSING		SCENARIO 2B W/NEW HOUSING		SCENARIO 3A NO NEW HOUSING		SCENARIO 3B W/NEW HOUSING	
		K-4 Total	K-4 Available Capacity	K-4 Total	K-4 Available Capacity	K-4 Total	K-4 Available Capacity	K-4 Total	K-4 Available Capacity	K-4 Total	K-4 Available Capacity	K-4 Total	K-4 Available Capacity
2010-2011	1563	1495	68										
2020-2021	1563	1238	325	1238	325	1238	325	1238	325	1238	325	1238	325
2021 - 2022	1563	1281	282	1286	277	1281	282	1286	277	1281	282	1286	277
2022 - 2023	1563	1290	273	1304	259	1290	273	1304	259	1290	273	1304	259
2023 - 2024	1563	1293	270	1316	247	1293	270	1316	247	1293	270	1316	247
2024 - 2025	1563	1326	237	1358	205	1326	237	1358	205	1326	237	1358	205
2025 - 2026	1563	1330	233	1371	192	1384	179	1425	60/60/19	1439	124	1480	83
2026 - 2027	1563	1305	258	1355	208	1416	147	1466	49/49/-1	1528	35	1578	-15
2027 - 2028	1563	1321	242	1380	183	1492	24/24/24	1551	24/24/-35	1664	-101	1723	-160
2028 - 2029	1563	1296	267	1356	207	1529	11/11/11	1589	11/11/-49	1763	-200	1823	-260
2029-2030	1563	1312	251	1380	183	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412
2030-2031	1563	1312	251	1380	183	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412
2031-2032	1563	1312	251	1380	183	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412
2032-2033	1563	1312	251	1380	183	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412
2033-2034	1563	1312	251	1380	183	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412
2034-2035	1563	1312	251	1380	84/84/14	1609	-15/-15/-15	1677	-15/-15/-83	1907	-344	1975	-412

* - Based on Scenario 2 Grafflin will exceed capacity in 6-9 years; WO/RB will be slightly over capacity.

** - Maximum population between 2000-2020 = 1606



Enrollment to Capacity Spreadsheet – Middle Schools

Year	5-8 Functional Capacity	SCENARIO 1A NO NEW HOUSING		SCENARIO 1B W/NEW HOUSING		SCENARIO 2A NO NEW HOUSING		SCENARIO 2B W/NEW HOUSING		SCENARIO 3A NO NEW HOUSING		SCENARIO 3B W/NEW HOUSING	
		5-8 Total	5-8 Available Capacity	5-8 Total	5-8 Available Capacity	5-8 Total	5-8 Available Capacity	5-8 Total	5-8 Available Capacity	5-8 Total	5-8 Available Capacity	5-8 Total	5-8 Available Capacity
2010-2011	1475	1368	107										
2020-2021	1475	1142	333	1142	333	1142	333	1142	333	1142	333	1142	333
2021 - 2022	1475	1123	352	1127	348	1123	352	1127	348	1123	352	1127	348
2022 - 2023	1475	1065	410	1073	402	1065	410	1073	402	1065	410	1073	402
2023 - 2024	1475	1122	353	1138	337	1122	353	1138	337	1122	353	1138	337
2024 - 2025	1475	1085	390	1109	366	1085	390	1109	366	1085	390	1109	366
2025 - 2026	1475	1105	370	1137	338	1105	370	1137	338	1105	370	1137	338
2026 - 2027	1475	1151	324	1191	284	1151	324	1191	284	1151	324	1191	284
2027 - 2028	1475	1119	356	1163	312	1119	356	1163	312	1119	356	1163	312
2028 - 2029	1475	1189	286	1241	234	1189	286	1241	234	1189	286	1241	234
2029-2030	1475	1178	297	1234	241	1178	297	1234	241	1178	297	1234	241
2030-2031	1475	1153	322	1209	266	1219	256	1275	200	1284	191	1340	135
2031-2032	1475	1168	307	1224	251	1301	174	1357	95/23	1432	43	1488	-13
2032-2033	1475	1143	332	1199	276	1344	102/29	1400	74/2	1541	-66	1597	-122
2033-2034	1475	1158	317	1214	261	1427	60/-12	1483	28/-44	1689	-214	1745	-270
2034-2035	1475	1158	317	1214	261	1427	60/-12	1483	28/-44	1689	-214	1745	-270

*- Based on Scenario 2 Bell will exceed capacity in 12-14 years.

** - Maximum population between 2000-2020 = 1368



Enrollment to Capacity Spreadsheet – Horace Greeley High School

Year	9-12 Functional Capacity	SCENARIO 1A NO NEW HOUSING		SCENARIO 1B W/NEW HOUSING		SCENARIO 2A NO NEW HOUSING		SCENARIO 2B W/NEW HOUSING		SCENARIO 3A NO NEW HOUSING		SCENARIO 3B W/NEW HOUSING	
		9-12 Total	9-12 Available Capacity	9-12 Total	9-12 Available Capacity	9-12 Total	9-12 Available Capacity	9-12 Total	9-12 Available Capacity	9-12 Total	9-12 Available Capacity	9-12 Total	9-12 Available Capacity
2010-2011	1480	1237	243										
2020-2021	1480	1176	304	1176	304	1176	304	1176	304	1176	304	1176	304
2021 - 2022	1480	1141	339	1145	335	1141	339	1145	335	1141	339	1145	335
2022 - 2023	1480	1164	316	1172	308	1164	316	1172	308	1164	316	1172	308
2023 - 2024	1480	1137	343	1153	327	1137	343	1153	327	1137	343	1153	327
2024 - 2025	1480	1117	363	1141	339	1117	363	1141	339	1117	363	1141	339
2025 - 2026	1480	1099	381	1131	349	1099	381	1131	349	1099	381	1131	349
2026 - 2027	1480	1042	438	1082	398	1042	438	1082	398	1042	438	1082	398
2027 - 2028	1480	1100	380	1144	336	1100	380	1144	336	1100	380	1144	336
2028 - 2029	1480	1061	419	1113	367	1061	419	1113	367	1061	419	1113	367
2029-2030	1480	1079	401	1135	345	1079	401	1135	345	1079	401	1135	345
2030-2031	1480	1127	353	1183	297	1127	353	1183	297	1127	353	1183	297
2031-2032	1480	1093	387	1149	331	1093	387	1149	331	1093	387	1149	331
2032-2033	1480	1164	316	1220	260	1164	316	1220	260	1164	316	1220	260
2033-2034	1480	1152	328	1208	272	1152	328	1208	272	1152	328	1208	272
2034-2035	1480	1127	353	1183	297	1195	285	1251	229	1259	221	1315	165

* - Based on Scenario 2 Horace Greeley will not exceed capacity in the next 15 years.

** - Maximum population between 2000-2020 = 1352

THANK YOU!

ESI ECONSULT
SOLUTIONS INC.

