



# Ridgefield Public Schools

## Enrollment Projections, Capacity, Utilization, Discussion of Next Steps



# Ridgefield Public Schools



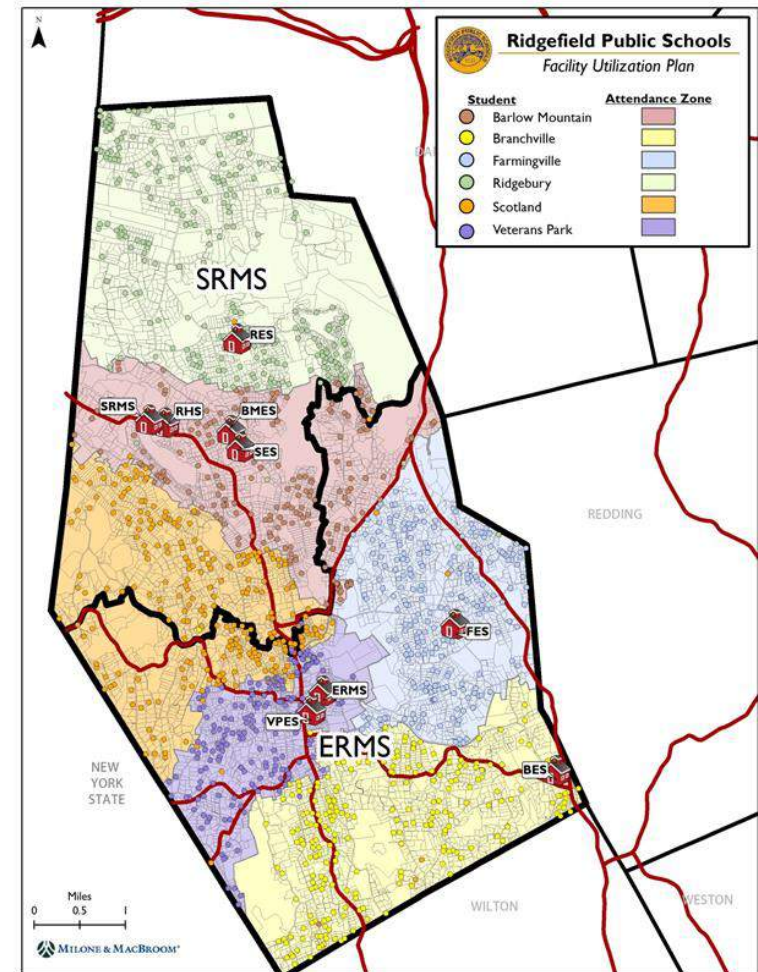
Enrollment Projections



Capacity & Utilization



Discussion





# Enrollment Projections

## Enrollment Projections Summary



# Projection Performance

High Comparison	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2016-17 Proj. (High)	275	289	314	335	359	351	438	407	443	420	419	434	441	4,925
2016-17 Actual	289	291	323	343	378	362	417	411	447	412	427	428	444	4,972
Deviation	-14	-2	-9	-8	-19	-11	21	-4	-4	8	-8	6	-3	-47
% Diff.	-4.8%	-0.7%	-2.8%	-2.3%	-5.0%	-3.0%	5.0%	-1.0%	-0.9%	1.9%	-1.9%	1.4%	-0.7%	-0.9%

Medium Comparison	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2016-17 Proj. (Med)	271	288	315	336	359	351	437	406	442	420	420	436	441	4,922
2016-17 Actual	289	291	323	343	378	362	417	411	447	412	427	428	444	4,972
Deviation	-18	-3	-8	-7	-19	-11	20	-5	-5	8	-7	8	-3	-50
% Diff.	-6.2%	-1.0%	-2.5%	-2.0%	-5.0%	-3.0%	4.8%	-1.2%	-1.1%	1.9%	-1.6%	1.9%	-0.7%	-1.0%

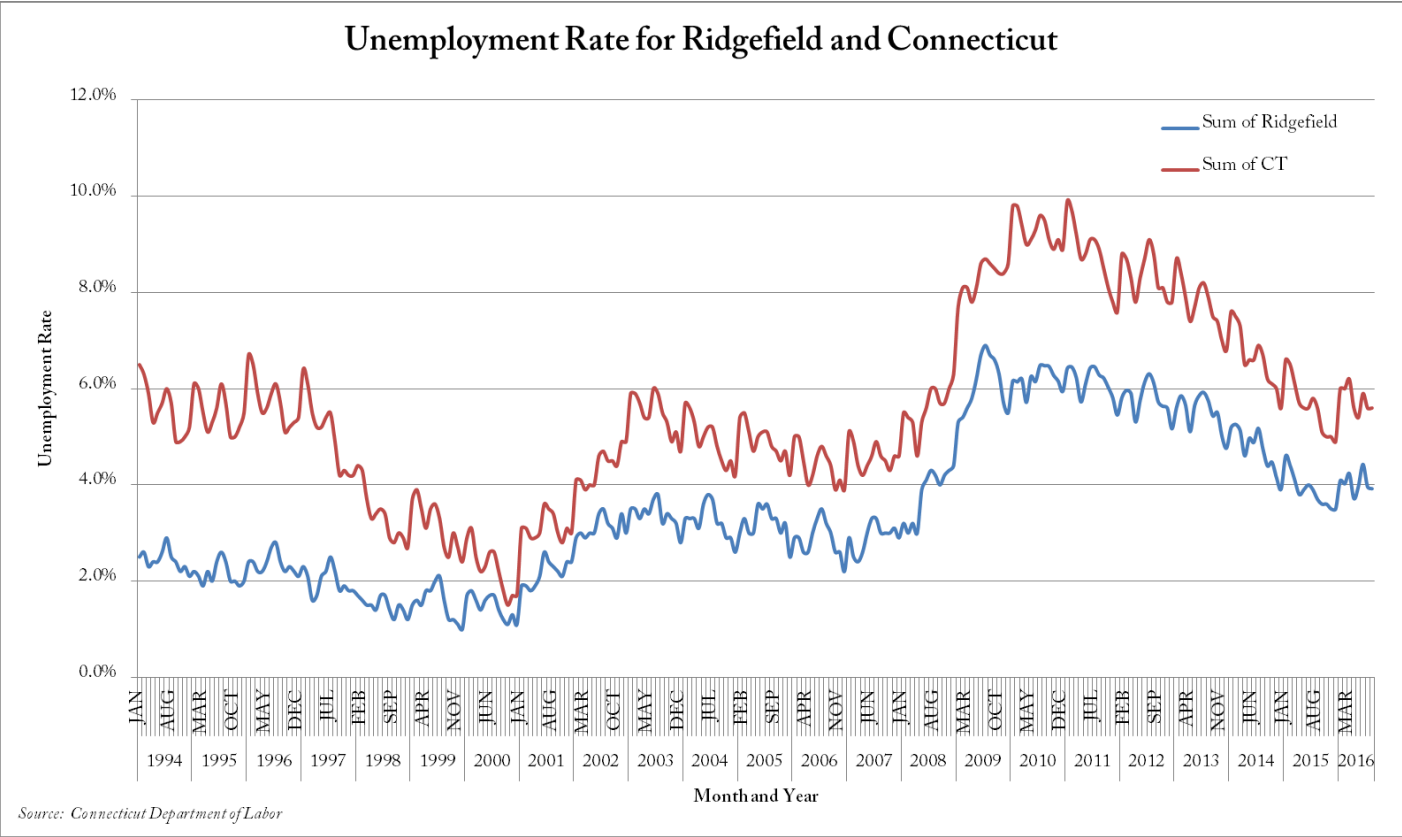
Low Comparison	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2016-17 Proj. (Low)	266	288	315	337	359	352	436	406	442	419	420	438	441	4,919
2016-17 Actual	289	291	323	343	378	362	417	411	447	412	427	428	444	4,972
Deviation	-23	-3	-8	-6	-19	-10	19	-5	-5	7	-7	10	-3	-53
% Diff.	-8.0%	-1.0%	-2.5%	-1.7%	-5.0%	-2.8%	4.6%	-1.2%	-1.1%	1.7%	-1.6%	2.3%	-0.7%	-1.1%

 Projections ranged from 0.9%-1.1% of actual

 Kindergarten projections lower than actual – High Model Closest



# Unemployment Rate Update



Local Unemployment Rate ~ 4%.



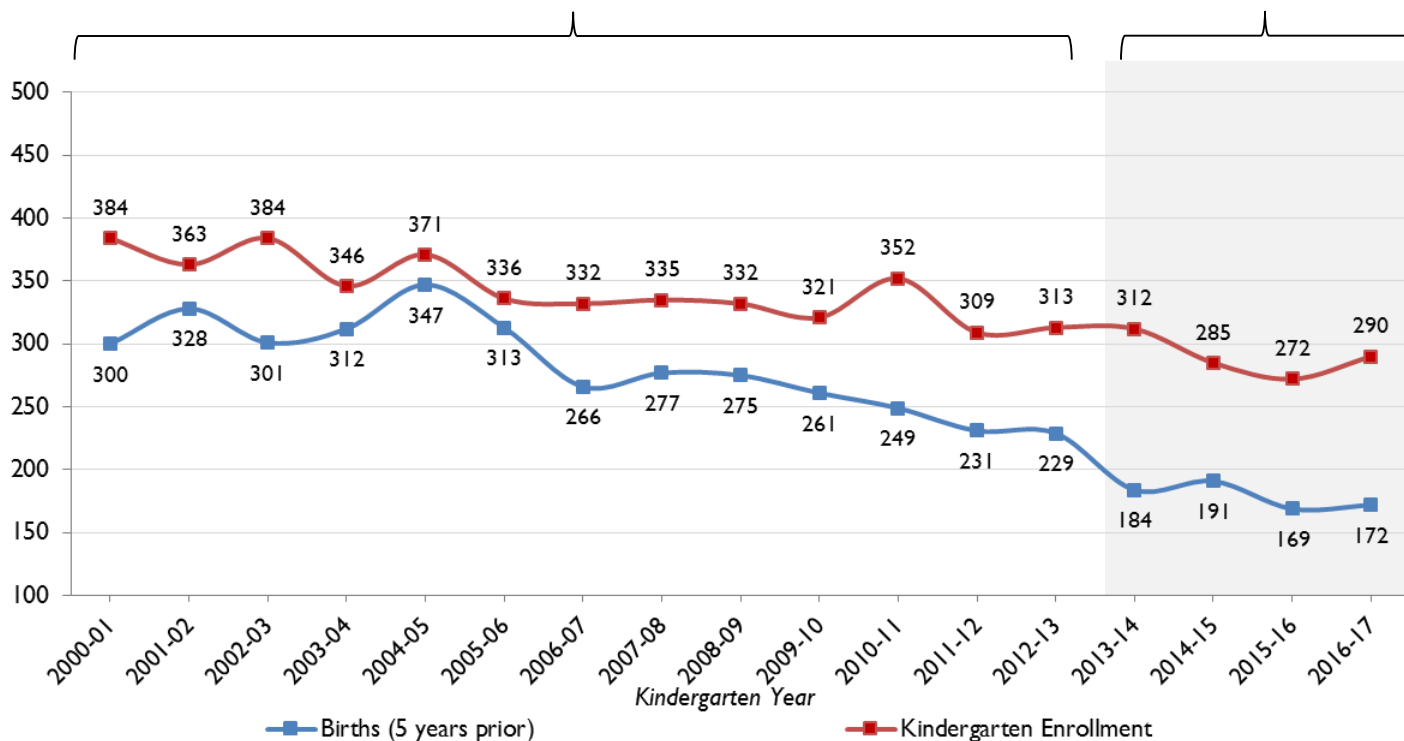
# Birth and Kindergarten Trends

## 2000-01 to 2012-13

Birth-to-K ratio averages 1.22. Large birth cohorts and modest in-migration lead to large kindergarten classes (ranging from 300 to 400 students)

## 2013-14 to Present

Birth-to-K ratio averages 1.62. Despite small birth cohorts, Kindergarten classes have been larger than expected due to increasing in-migration of families with young children



Recent study by U.S. Census Bureau shows Connecticut ranks 49<sup>th</sup> in fertility rate – low births expected to continue in near future  
Birth projections model assumptions for Ridgefield to be changed – birth projections to be lowered



# Birth and Kindergarten Trends

Kindergarten Sources	School (K) Year					5-Year Total
	2012-13	2013-14	2014-15	2015-16	2016-17	
<i>Kindergarteners matched to home sale address (during previous 6 years)</i>	136	159	143	154	149	741
<i>Kindergarteners matched to birth address (5 and 6 years prior)</i>	130	87	99	75	88	479
<i>Not matched to birth or home sale</i>	67	66	43	44	52	272
<b>Total K Enrollment</b>	<b>333</b>	<b>312</b>	<b>285</b>	<b>273</b>	<b>289</b>	<b>1,492</b>

About half of kindergarteners were matched to a home sale during the 5-6 years prior to enrolling in school.

Only one-third of kindergarteners were matched to a birth at the same address 5-6 years prior – **birth data alone cannot be relied upon to accurately project future kindergarten classes**



# Birth-K Trends Fairfield County

Town	School Year									
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Darien	1.2351	1.2305	1.2597	1.2591	1.3345	1.4212	1.5249	1.5432	1.6380	-
Easton	1.4634	1.2895	1.4127	1.1134	1.4286	1.2319	1.7292	1.4464	1.7273	-
Fairfield	1.0839	1.0370	1.1334	1.1017	1.1747	1.1197	1.2090	1.1726	1.2602	1.2792
Greenwich	0.9253	0.9413	0.9431	1.0404	0.8759	1.1523	1.0987	1.1162	1.0969	-
Monroe	1.1809	1.1620	1.2189	1.0529	1.2156	1.1353	1.2933	1.2372	1.2158	-
New Canaan	1.2778	1.5024	1.2647	1.3460	1.4211	1.8462	1.6981	2.1884	2.0070	-
Redding	1.1633	1.0680	1.3256	1.2436	1.3125	1.4375	1.3710	1.3404	1.0943	-
Ridgefield	1.2094	1.2073	1.2299	1.4137	1.3377	1.3668	1.6957	1.4921	1.6095	1.6802
Trumbull	1.0773	1.1773	1.2347	1.1506	1.1823	1.1500	1.3282	1.3579	1.5000	-
Weston	1.9342	1.7292	1.6289	1.5143	1.8837	1.5972	1.9155	1.9718	2.0328	-
Westport	1.2534	1.3555	1.4556	1.5019	1.5570	1.9058	1.6667	2.0417	1.7813	-
Wilton	1.4450	1.5116	1.6140	1.6497	1.5714	1.5952	1.7063	1.7945	1.8015	1.8900
Total	1.1554	1.1744	1.2085	1.2200	1.2319	1.3169	1.3805	1.4104	1.4311	-

As births have declined (-6.5% last 5-yrs), birth-K ratios in Fairfield County have been on the rise

Kindergarten enrollments have not declined as much as births – means that other factors (such as housing market) are driving the Birth-K ratio and Kindergarten enrollments.

**Relying solely on past birth data likely to underestimate future Kindergarten enrollments**





# Birth Trends and Projections



Reported births averaged 263/yr from 2000-07



~30% drop since 2007



Historic Low reported in 2014 – small uptick in 2015, but still well below historic levels



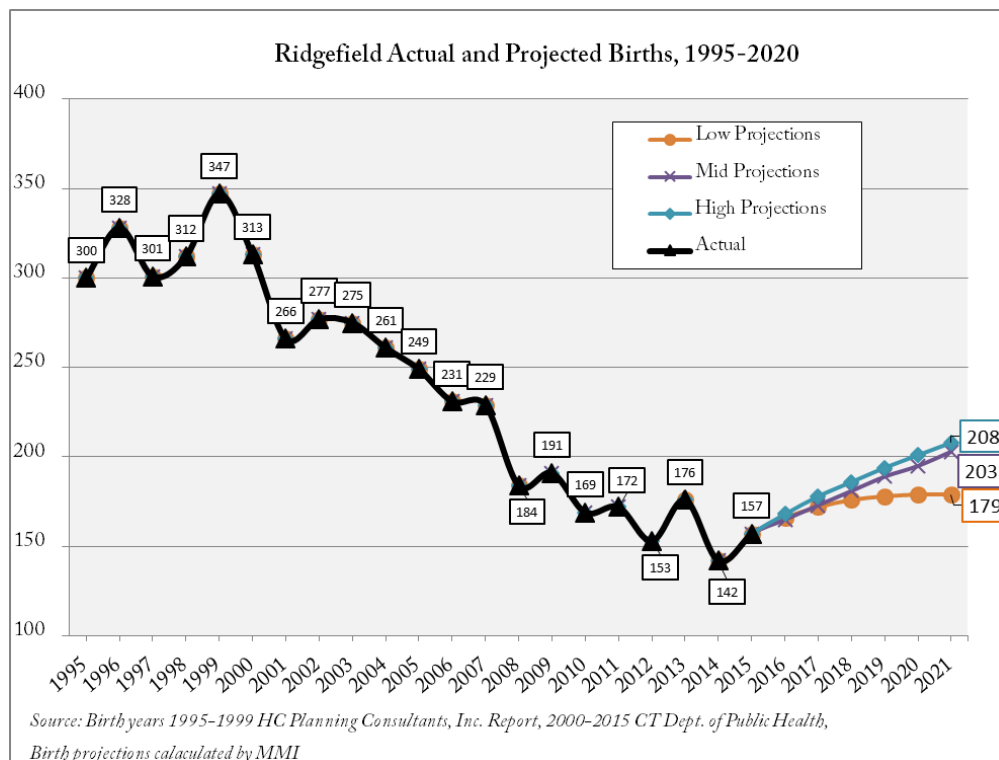
Based on demographic analysis births have reached their cyclical low and are expected to increase



Speed of increase is highly dependent on economic and market conditions



Birth projections lowered from previous years due to low fertility rates in Connecticut and stagnant economic conditions statewide





# Birth Trends and Projections

School District	Births by Elementary School District: 2001-2015															Projections - HIGH					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014p	2015p	2016	2017	2018	2019	2020	2021
Barlow Mountain	56	47	48	38	39	38	39	29	35	34	28	29	35	27	28	30	31	33	34	35	37
Branchville	44	61	46	56	47	49	35	32	27	31	32	27	38	28	31	31	33	34	35	37	38
Farmingville	41	39	41	38	41	39	34	32	22	29	20	22	22	19	22	25	26	28	29	30	31
Ridgebury	54	44	48	52	42	39	35	32	24	29	40	24	29	18	24	28	29	31	32	33	34
Scotland	41	45	50	38	43	36	53	27	41	30	28	34	30	28	29	31	33	34	36	37	38
Veterans Park	30	42	42	39	37	31	35	34	42	18	25	17	18	22	23	25	26	27	29	30	31

2014 and 2015 birth data is preliminary and does not include out-of-state births to Ridgefield residents. The 2014 and 2015 data includes an estimate of out-of-state births based on historic proportions of in-state to out-of-state births

Your next 4 Kindergarten Classes



Live Births by Address from CTDPH Mapped & Aggregated by Elementary Attendance Zone Birth Projections by Elementary School based on historic share and local demographics



# Housing Sales & Permits



Marked uptick of sales in 2013 and 2014 has leveled off over the last three years



Analysis of YTD for 2016 shows slower home sales than previous three years



Single-family homes sales down from previous two years, but still well above 2008-12 levels



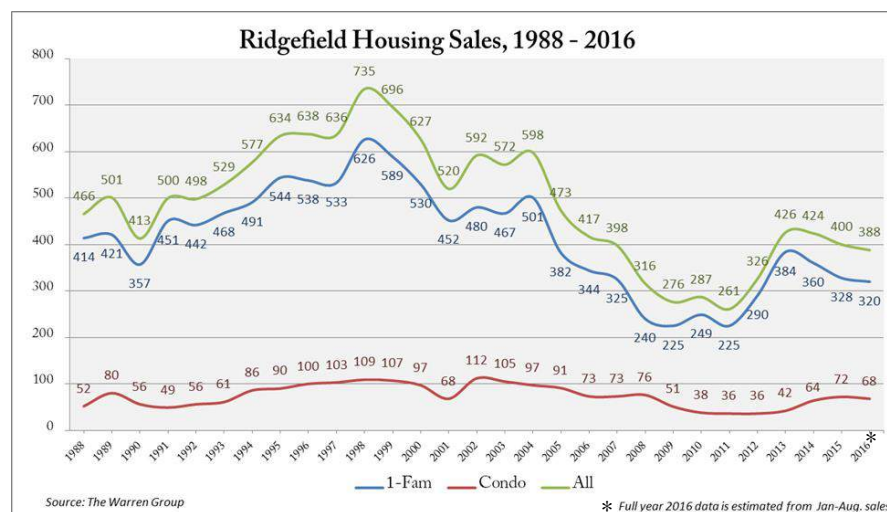
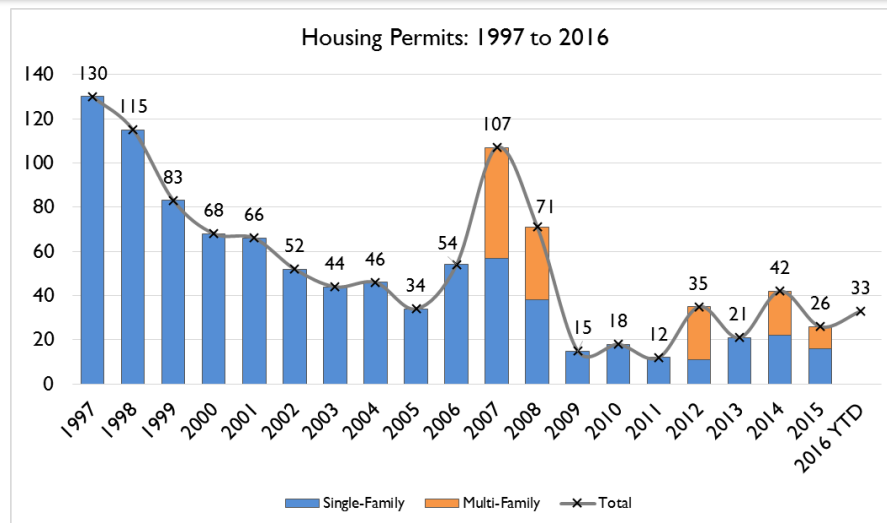
Housing Starts continue slow rebound



Multi-family units leading the way.



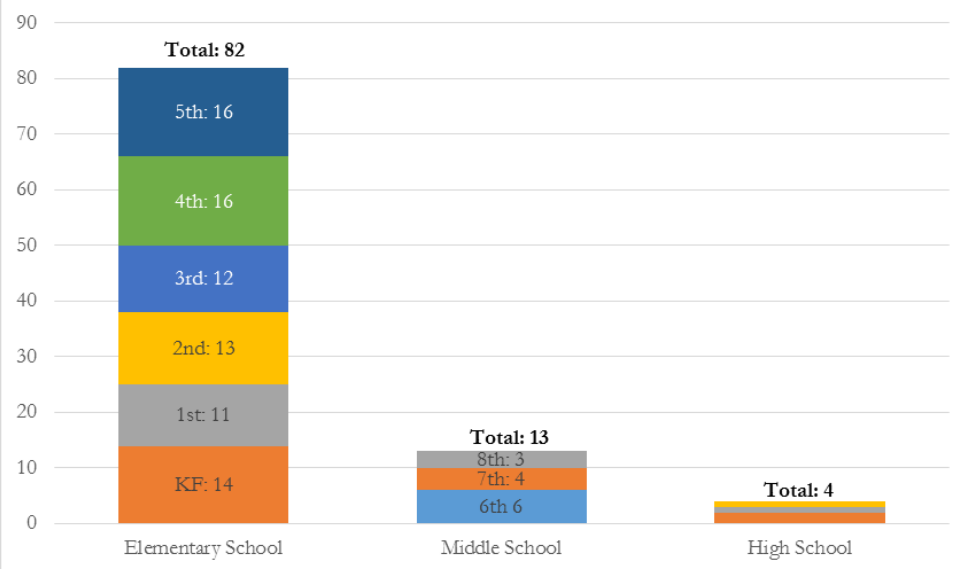
Single-family permitting still very slow





# Students & Housing Sales

Students Generated from Home Sales: Jan. to Sept. 2016



Clear indication of in-migration of families with school age children



82 of 99 (83%) are elementary students



Fewer overall students generated from sales this year, but higher number of K-5 students than in recent years



281 Home Sales between Jan. 1 and Sept. 1 Yielded 99 New Students for 2016-17



0.35 Students per Housing Sale for 2016.



Historic 3-yr yield avg – 0.45



Lower number of new students entering system



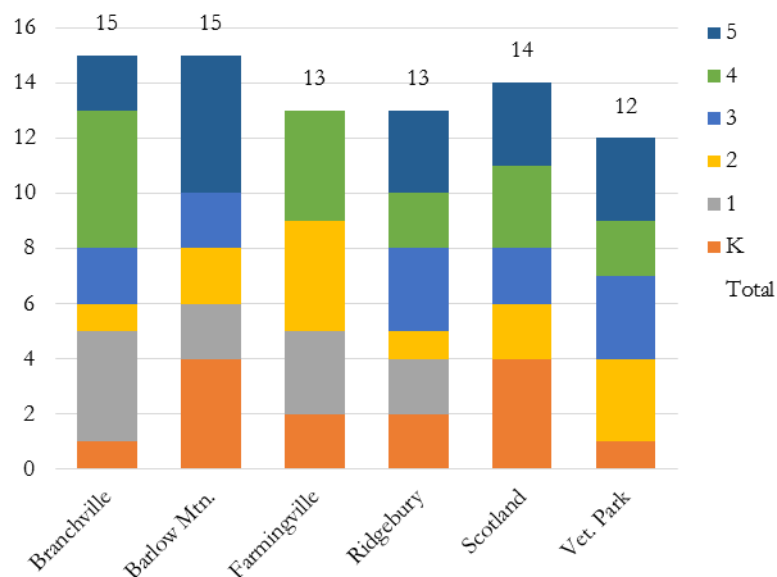
68 Sales (24%) yielded students enrolled in RPS of these:

- 1 Sales = 4 students per
- 1 Sales = 4 student per
- 26 Sales = 2 students per
- 40 Sales = 1 student per



# Students & Housing Sales

Students Generated from Home Sales: Jan. to Sept. 2016



Percentage of Total Home Sales, by District: 2008 to 2016

School District	Percent of Home Sales							
	2009	2010	2011	2012	2013	2014	2015	2016
Barlow Mountain	22.9%	18.0%	22.1%	20.5%	21.0%	17.8%	17.7%	18.0%
Branchville	15.3%	18.0%	16.8%	17.5%	16.8%	18.2%	17.4%	12.7%
Farmingville	14.9%	15.4%	11.1%	14.8%	12.0%	16.0%	18.2%	11.7%
Ridgebury	17.8%	15.0%	13.9%	12.5%	15.3%	12.2%	12.7%	16.6%
Scotland	10.9%	19.9%	12.9%	17.5%	15.3%	14.7%	14.2%	19.1%
Veterans Park	18.2%	13.7%	23.2%	17.2%	19.5%	21.1%	19.8%	21.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* Data for 2016 is only up to September 2016



Even distribution of students generated from home sales across all elementary schools








Barlow Mountain has the largest number of students generated from home sales (15) and highest yield (0.42)



Lowest yields in Veterans Park (0.19), Scotland (0.26), and Ridgebury (0.28)



# Enrollment Projection Primer

-  The Cohort Survival Methodology Relies on Observed Data from the Recent Past in Order to Project the Near Future
-  Persistency Ratios Calculated From Historic Enrollment Data to Determine Growth or Loss in a Class as It Progresses Through School System
-  Persistency Ratios Account for the Various External Factors Affecting Enrollments: Housing Characteristics, Residential Development, Economic Conditions, Student Transfers In and Out of System, and Student Mobility
-  Changes in Population, Housing Stock and Tenure, and Economic Conditions Help Explain Persistency Ratios
-  Recent Instability in Economic Climate - Difficult Time to Predict Enrollment



# Historic Enrollments

School Year	Birth Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK
2000-01	1995	300	384	405	418	425	436	424	416	371	350	349	344	289	286	0
2001-02	1996	328	363	415	419	427	433	442	418	418	386	358	360	339	288	22
2002-03	1997	301	384	432	429	444	438	460	468	426	431	401	358	347	325	42
2003-04	1998	312	346	428	441	424	448	451	464	469	436	443	391	345	340	57
2004-05	1999	347	371	394	421	453	416	459	456	468	467	441	430	386	332	66
2005-06	2000	313	336	417	414	420	456	421	459	454	461	467	436	426	374	71
2006-07	2001	266	332	373	423	408	429	458	430	447	450	456	453	426	413	77
2007-08	2002	277	335	379	394	426	417	431	453	419	449	444	447	434	426	81
2008-09	2003	275	332	377	376	416	428	426	443	466	431	446	450	442	443	62
2009-10	2004	261	321	376	373	374	426	424	438	452	461	437	445	432	439	44
2010-11	2005	249	352	358	394	375	388	426	436	444	444	463	419	444	431	45
2011-12	2006	231	309	369	374	404	380	395	430	437	438	447	459	422	444	41
2012-13	2007	229	313	327	376	386	416	393	411	429	438	452	450	462	419	44
2013-14	2008	184	312	332	338	390	393	428	404	418	442	450	446	449	467	41
2014-15	2009	191	285	328	338	346	408	404	440	408	414	447	453	443	448	41
2015-16	2010	169	272	305	335	351	344	417	400	445	410	424	426	435	432	44
2016-17	2011	172	289	291	323	343	378	362	417	411	447	412	427	428	444	44

Source: Connecticut State Department of Education, enrollment statistics – 2000-01 to 2015-16; Ridgefield Public Schools 2016-17



# Persistency Ratios

Year	Birth-K	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Est. Migration <sup>1</sup>
2001-02	1.10671	1.08073	1.03457	1.02153	1.01882	1.01376	0.98585	1.00481	1.04043	1.02286	1.03152	0.98547	0.99654	1.35%
2002-03	1.27575	1.19008	1.03373	1.05967	1.02576	1.06236	1.05882	1.01914	1.03110	1.03886	1.00000	0.96389	0.95870	4.12%
2003-04	1.10897	1.11458	1.02083	0.98834	1.00901	1.02968	1.00870	1.00214	1.02347	1.02784	0.97506	0.96369	0.97983	1.00%
2004-05	1.06916	1.13873	0.98364	1.02721	0.98113	1.02455	1.01109	1.00862	0.99574	1.01147	0.97065	0.98721	0.96232	0.81%
2005-06	1.07348	1.12399	1.05076	0.99762	1.00662	1.01202	1.00000	0.99561	0.98504	1.00000	0.98866	0.99070	0.96891	-0.07%
2006-07	1.24812	1.11012	1.01439	0.98551	1.02143	1.00439	1.02138	0.97386	0.99119	0.98915	0.97002	0.97706	0.96948	-0.08%
2007-08	1.20939	1.14157	1.05630	1.00709	1.02206	1.00466	0.98908	0.97442	1.00447	0.98667	0.98026	0.95806	1.00000	0.00%
2008-09	1.20727	1.12537	0.99208	1.05584	1.00469	1.02158	1.02784	1.02870	1.02864	0.99332	1.01351	0.98881	1.02074	2.68%
2009-10	1.22989	1.13253	0.98939	0.99468	1.02404	0.99065	1.02817	1.02032	0.98927	1.01392	0.99776	0.96000	0.99321	0.78%
2010-11	1.41365	1.11526	1.04787	1.00536	1.03743	1.00000	1.02830	1.01370	0.98230	1.00434	0.95881	0.99775	0.99769	1.03%
2011-12	1.33766	1.04830	1.04469	1.02538	1.01333	1.01804	1.00939	1.00229	0.98649	1.00676	0.99136	1.00716	1.00000	0.85%
2012-13	1.36681	1.05825	1.01897	1.03209	1.02970	1.03421	1.04051	0.99767	1.00229	1.03196	1.00671	1.00654	0.99289	2.14%
2013-14	1.69565	1.06070	1.03364	1.03723	1.01813	1.02885	1.02799	1.01703	1.03030	1.02740	0.98673	0.99778	1.01082	2.59%
2014-15	1.49215	1.05128	1.01807	1.02367	1.04615	1.02799	1.02804	1.00990	0.99043	1.01131	1.00667	0.99327	0.99777	2.02%
2015-16	1.60947	1.07018	1.02134	1.03846	0.99422	1.02206	0.99010	1.01136	1.00490	1.02415	0.95302	0.96026	0.97517	0.97%
2016-17	1.68023	1.06985	1.05902	1.02388	1.07692	1.05233	1.00000	1.02750	1.00449	1.00488	1.00708	1.00469	1.02069	2.80%

Uptick  
Continues



Marked increase in Birth-K over last 5 years; corresponds with low birth years – to stabilize K enrollment



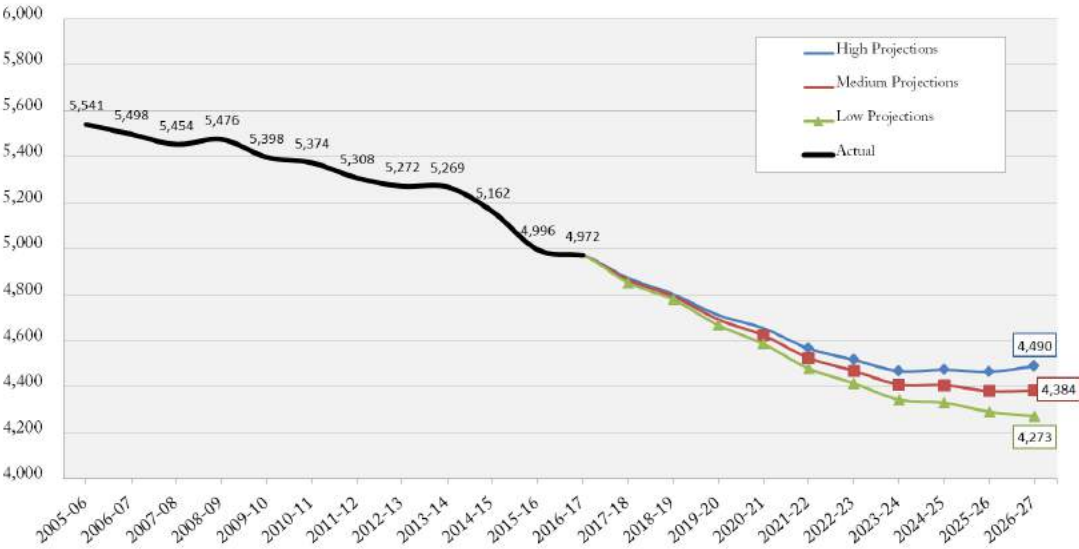
Cohort Survival Analysis recognized & emphasized housing market uptick – higher over all persistency ratios across all grade cohorts





# District-Wide Projections & Assumptions

Historic and Projected Enrollment, Ridgefield Public Schools (K-12),  
2005-06 to 2026-27



Sources: CT Dept. of Ed. CoDur 2001-2012; HC Planning Consultants (2000-01, 2012-13); Ridgefield Public Schools, 2014-15 through 2016-17



~220 student spread for K-12 Projections (-9.7% (high) to -14.1% (low)) loss for projection models



High & Medium – indicate trough is likely



Low – slowing of decline.

		High Enroll Projections	Medium Enrollment Projections	Low Enrollment Projections
Assumptions	Births Model >	Medium Births Regression	Town ASFR	Low Births Regression
Annual Births		168-208	165-203	166-179
Annual Avg. Unemployment Rate		3.9%-3.0%	N/A	3.9%-4.0%
Annual Housing Sales		350-375		~300
Annual Housing Permits		25-35		15-20



# District-wide 10-Yr Projections (High)



The high projection scenario produces the set of projections that most likely will adequately encompass and effectively model the impacts of a strengthening housing market and economy.



Despite the increased in-migration, the historically low reported births and the continued loss of larger grade cohorts at the middle/high school levels will lead to a continued decline in overall enrollment over the next 10 yrs.



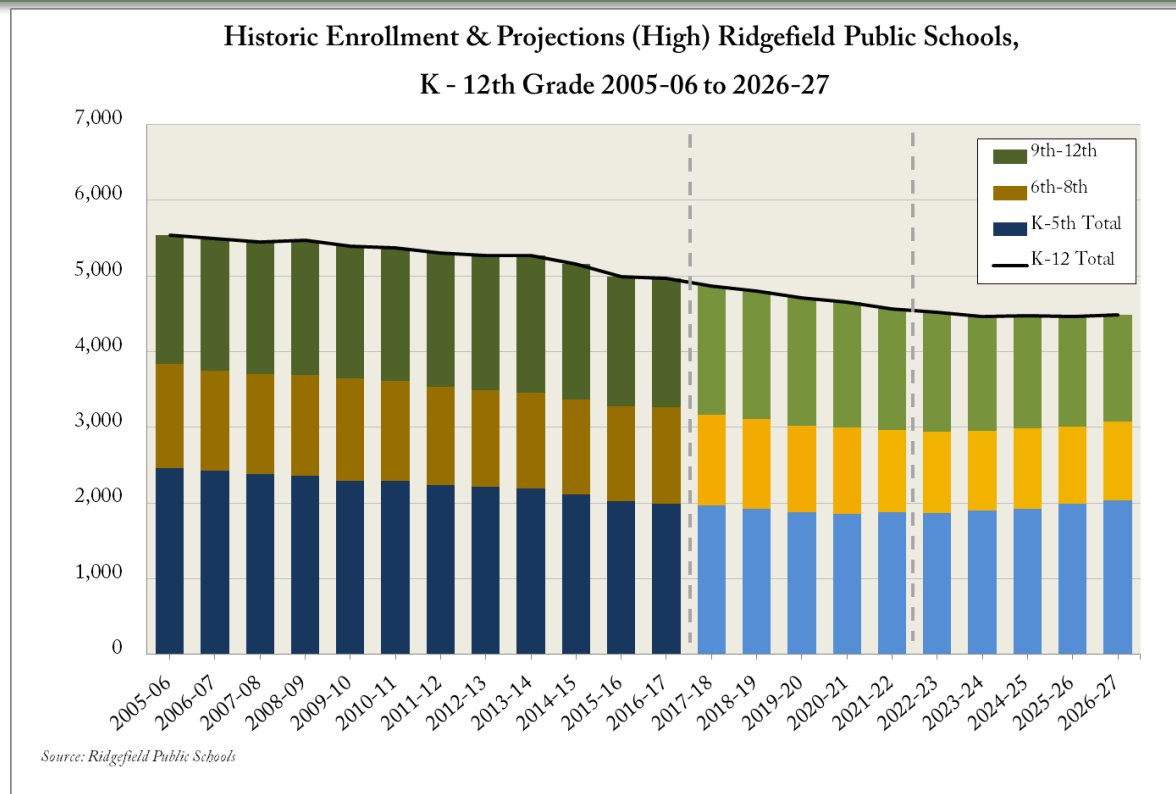
# District-Wide Projections

## Ridgefield Public Schools Actual and Projected Enrollment: 2004-05 to 2026-27

Ten-Year Enrollment Projections (High)																	
School Year	Birth Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	Total K-12
2004-05	1999	347	371	394	421	453	416	459	456	468	467	441	430	386	332	66	5,494
2005-06	2000	313	336	417	414	420	456	421	459	454	461	467	436	426	374	71	5,541
2006-07	2001	266	332	373	423	408	429	458	430	447	450	456	453	426	413	77	5,498
2007-08	2002	277	335	379	394	426	417	431	453	419	449	444	447	434	426	81	5,454
2008-09	2003	275	332	377	376	416	428	426	443	466	431	446	450	442	443	62	5,476
2009-10	2004	261	321	376	373	374	426	424	438	452	461	437	445	432	439	44	5,398
2010-11	2005	249	352	358	394	375	388	426	436	444	444	463	419	444	431	45	5,374
2011-12	2006	231	309	369	374	404	380	395	430	437	438	447	459	422	444	41	5,308
2012-13	2007	229	313	327	376	386	416	393	411	429	438	452	450	462	419	44	5,272
2013-14	2008	184	312	332	338	390	393	428	404	418	442	450	446	449	467	41	5,269
2014-15	2009	191	285	328	338	346	408	404	440	408	414	447	453	443	448	41	5,162
2015-16	2010	169	272	305	335	351	344	417	400	445	410	424	426	435	432	44	4,996
2016-17	2011	172	289	291	323	343	378	362	417	411	447	412	427	428	444	44	4,972
2017-18	2012	153	270	308	303	332	358	392	362	425	412	453	407	422	429	50	4,873
2018-19	2013	176	286	288	320	312	347	372	393	369	426	417	448	402	423	50	4,803
2019-20	2014	142	260	305	299	329	326	360	373	401	370	431	412	443	403	50	4,712
2020-21	2015	157	277	277	317	308	344	338	360	380	402	375	426	407	444	50	4,655
2021-22	2016	168	285	296	288	326	322	357	338	367	381	407	371	421	408	50	4,567
2022-23	2017	178	289	304	308	296	340	334	357	344	368	386	403	367	422	50	4,518
2023-24	2018	186	302	308	316	317	309	353	334	364	345	373	382	398	368	50	4,469
2024-25	2019	194	304	322	320	325	331	321	353	340	365	349	369	377	399	50	4,475
2025-26	2020	201	315	324	335	329	339	344	321	360	341	370	345	365	378	50	4,466
2026-27	2021	208	326	336	337	345	344	352	344	327	361	345	366	341	366	51	4,490



# District-Wide Projections



~9.7% Decline over next decade to 4,490 for K-12



Elementary Trough and slow rebound



Decline to be felt at Middle and High Schools



# District-Wide Projections

<u>High Projections</u>	<u>K-12th Total</u>		<u>K-5th</u>		<u>6th-8th</u>		<u>9th-12th</u>	
School Year	K-12 Total	% Change	K-5 Total	% Change	6-8 Total	% Change	9-12 Total	% Change
2017-18	4,873	-2.0%	1,963	-1.2%	1,199	-6.3%	1,711	0.0%
2018-19	4,803	-1.5%	1,925	-2.0%	1,188	-0.9%	1,690	-1.2%
2019-20	4,712	-1.9%	1,879	-2.4%	1,144	-3.8%	1,689	-0.1%
2020-21	4,655	-1.2%	1,861	-1.0%	1,142	-0.2%	1,652	-2.2%
2021-22	4,567	-1.9%	1,874	0.7%	1,086	-5.2%	1,607	-2.8%
2022-23	4,518	-1.1%	1,871	-0.2%	1,069	-1.6%	1,578	-1.8%
2023-24	4,469	-1.1%	1,905	1.8%	1,043	-2.5%	1,521	-3.7%
2024-25	4,475	0.1%	1,923	0.9%	1,058	1.4%	1,494	-1.8%
2025-26	4,466	-0.2%	1,986	3.2%	1,022	-3.5%	1,458	-2.5%
2026-27	4,490	0.5%	2,040	2.6%	1,032	1.0%	1,418	-2.8%
1st 5-YR Percent Change	-8.1%		-5.6%		-14.8%		-6.1%	
2nd 5-YR Percent Change	-0.6%		9.0%		-3.5%		-10.1%	
10-YR Percent Change	-9.7%		2.7%		-19.1%		-17.1%	



~ -1% to -2% annual decrease through 2023-24



2024-25 through 2026-27 projects modest increases of less than 1%



Elementary enrollment declines by -5.6% during 1<sup>st</sup> 5-year period before rebounding



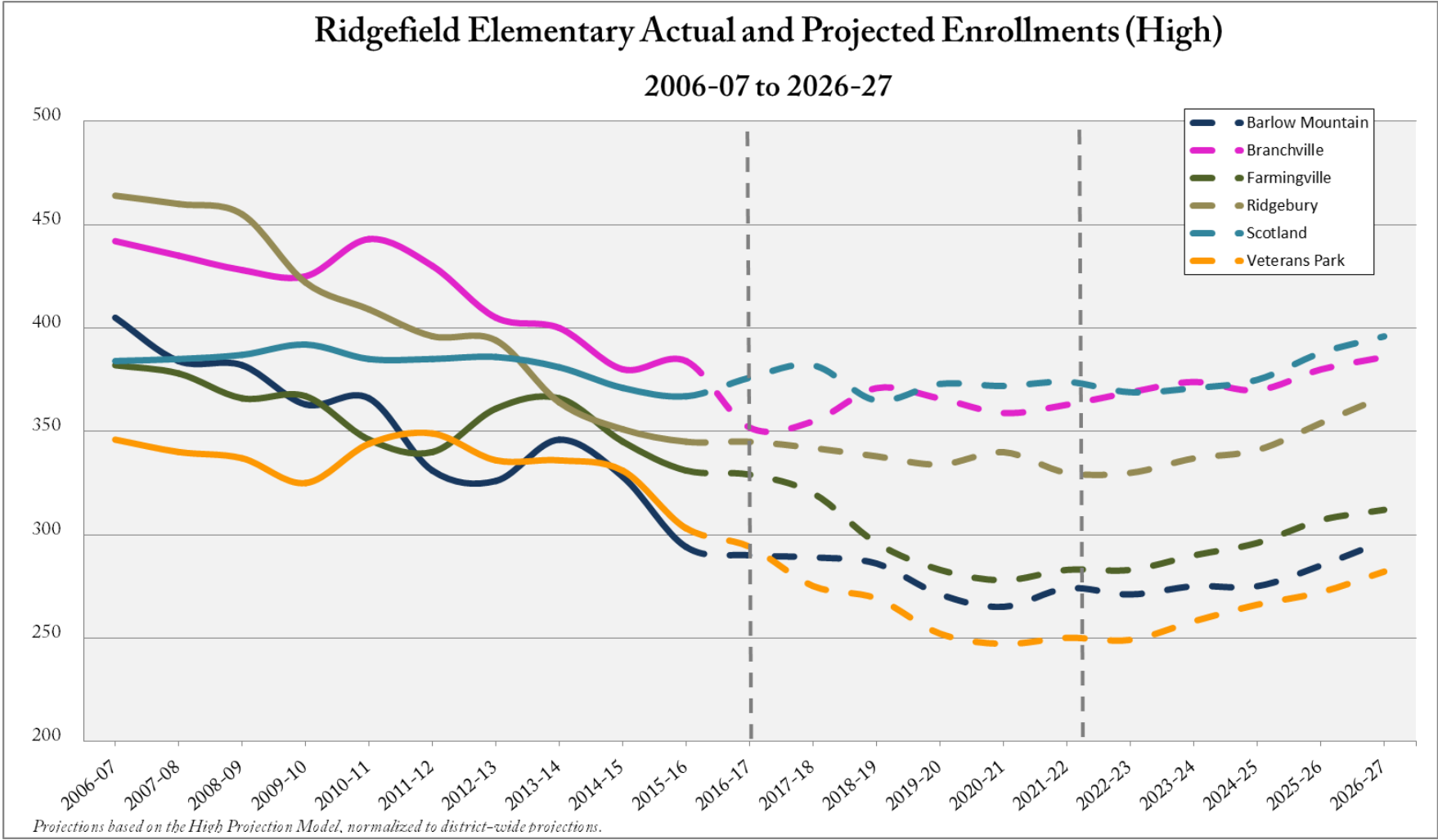
MS experiences largest decline in the 10-year horizon (-19% overall)



HS largest decline (-10%) over the second 5-year period



# Elementary by School Projections





# Elementary by School Projections

Elementary by School Ten-Year Enrollment Projections (High)												
Elementary School	2017-18		2018-19		2019-20		2020-21		2021-22		1st Five Year	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
Barlow Mnt	289	-0.3%	286	-1.0%	271	-5.2%	265	-2.2%	274	3.4%	-15	-5.2%
Branchville	355	0.9%	371	4.5%	366	-1.3%	359	-1.9%	363	1.1%	8	2.3%
Farmingville	320	-2.7%	296	-7.5%	283	-4.4%	278	-1.8%	283	1.8%	-37	-11.6%
Ridgebury	342	-0.9%	338	-1.2%	334	-1.2%	340	1.8%	330	-2.9%	-12	-3.5%
Scotland	382	1.6%	365	-4.5%	373	2.2%	372	-0.3%	374	0.5%	-8	-2.1%
Veterans Park	275	-6.5%	269	-2.2%	252	-6.3%	247	-2.0%	250	1.2%	-25	-9.1%
Elementary School	2022-23		2023-24		2024-25		2025-26		2026-27		2nd Five Year	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
Barlow Mnt	271	-1.1%	275	1.5%	275	0.0%	285	3.6%	297	4.2%	26	9.6%
Branchville	369	1.7%	374	1.4%	370	-1.1%	380	2.7%	386	1.6%	17	4.6%
Farmingville	283	0.0%	290	2.5%	296	2.1%	307	3.7%	312	1.6%	29	10.2%
Ridgebury	330	0.0%	337	2.1%	341	1.2%	354	3.8%	367	3.7%	37	11.2%
Scotland	369	-1.3%	371	0.5%	375	1.1%	388	3.5%	396	2.1%	27	7.3%
Veterans Park	249	-0.4%	258	3.6%	266	3.1%	272	2.3%	282	3.7%	33	13.3%



1<sup>st</sup> 5 yrs all schools except Branchville experience significant declines



Largest declines felt at FES, VPES, & BMES



2<sup>nd</sup> 5 yrs- All Schools begin to Flatten & rebound



Rebound begins with 2021-2022 enrollments



# Middle School Proj. by School

Middle by School Ten-Year Enrollment Projections (High)												
	2017-18		2018-19		2019-20		2020-21		2021-22		1st Five Year	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
East Ridge	747	-5.4%	733	-1.9%	702	-4.2%	699	-0.4%	666	-4.7%	-81	-10.8%
Scotts Ridge	452	-6.8%	455	0.7%	442	-2.9%	443	0.2%	420	-5.2%	-32	-7.1%
	2022-23		2023-24		2024-25		2025-26		2026-27		2nd Five Year	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
East Ridge	654	-1.8%	638	-2.4%	647	1.4%	626	-3.2%	633	1.1%	-21	-3.2%
Scotts Ridge	415	-1.2%	405	-2.4%	411	1.5%	396	-3.6%	399	0.8%	-16	-3.9%



1<sup>st</sup> 5 yrs East Ridge declines -10.8% & Scotts Ridge -7.1%



2<sup>nd</sup> 5 yrs East Ridge declines -3.2% & Scotts Ridge -3.9%



Lag from elementary schools and reflects historic low births from last 5 years





# Projections Update: Takeaways

- Elementary enrollments once again exceed high projections - Kindergarten class about 5% larger than expected
  - Rising birth-to-K (BK) ratio over the last five years indicates that Kindergarten enrollments are being increasingly driven by home sales
  - With new information on birth rates, birth estimates have been revisited
- Middle and High School enrollments in line with projections
- Discussion with school principals indicates that there is a lot of movement of elementary school students within town (switching schools).
  - Movement of twins and triplets responsible for some of the spikes in individual school enrollments



# Facility Utilization

## School Facility Capacity & Projected Utilization

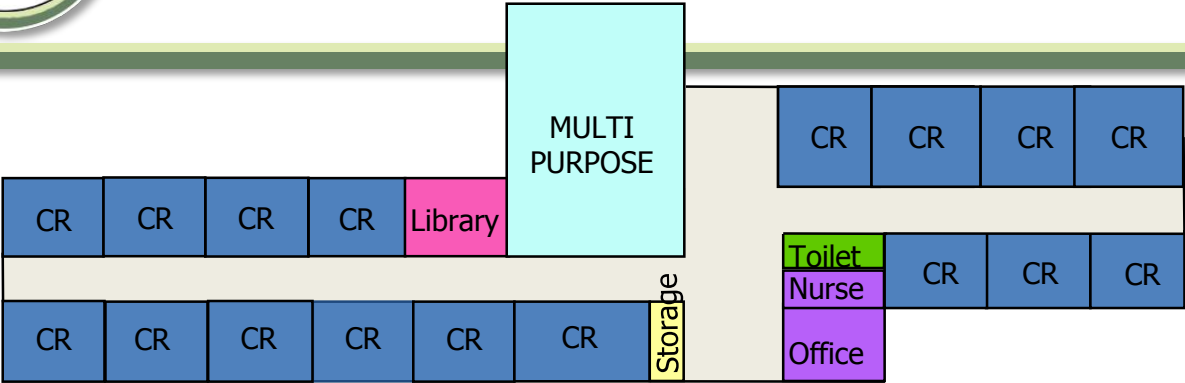


# Capacity: Process Overview

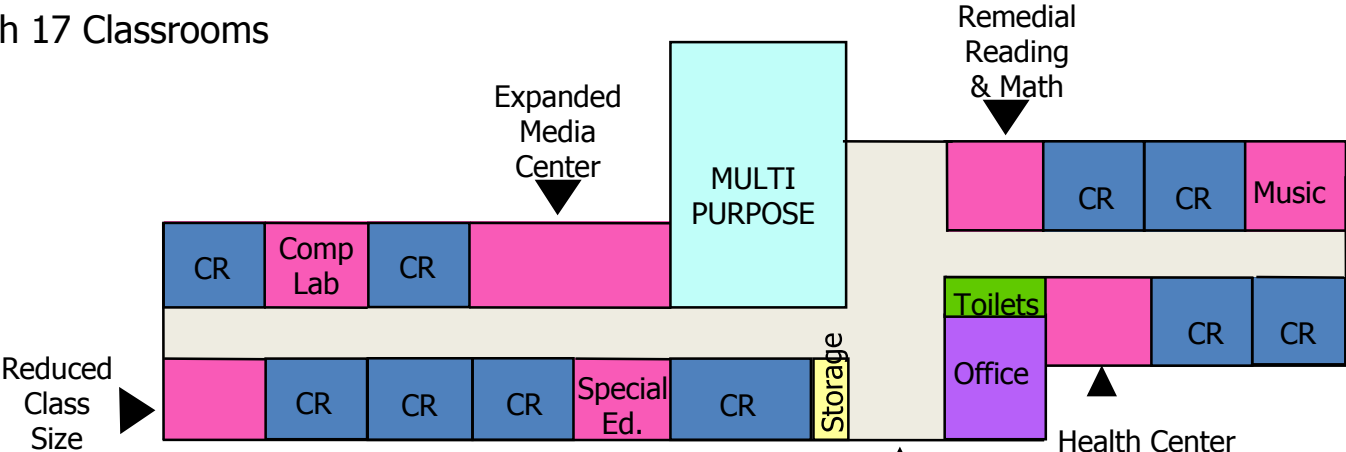
- Data collection from RPS in the form of floor plans and corresponding room utilization information
- Classroom use by grade level/ subject
- Classrooms used for special education programs
- Specialty use classrooms/ labs
- Presence of shared spaces(Gym, Cafeteria, Library, Art, Music, other)
- Accessibility (presence of elevator, barriers)



# Where Have All the Classrooms Gone?



1966:  
New School with 17 Classrooms  
(500 Students)

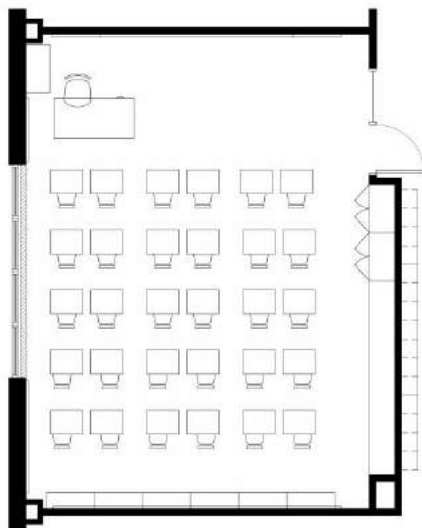


2000:  
Same School 34 Years Later with Only  
10 Classrooms (250 Students)



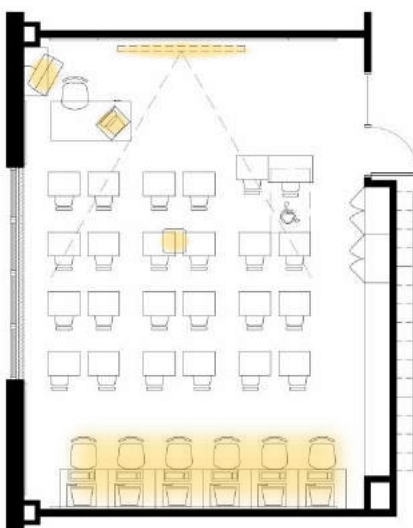
# Evolution of Classroom Space Primary Grades

1960's...



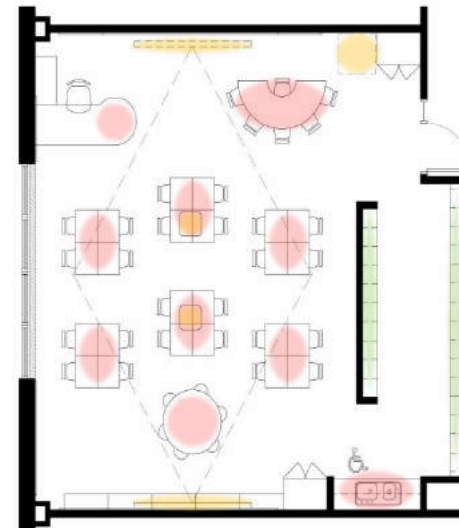
30 Seat Classroom  
660 NSF  
**22 NSF/seat**

1980's...



24 Seat Classroom  
660 NSF  
**28 NSF/seat**

Yesterday...



24 Seat Classroom  
835 NSF  
**35 NSF/seat**

**Instructor-Directed Learning**

**Collaborative / Active Learning**



MILONE & MACBROOM

**SLAM**



# Capacity: Process Overview

- Room area takeoff:
  - Scaled PDF's
  - CAD files



Branchville Elementary School				Grades K-5				Existing Room Inventory / Utilization																									
Field Room #	Floor Plan #	Room Type	Grade Level	Room Area (NSF)	Current NSF per Seat	Recom'd NSF per seat	Existing Room Inventory / Utilization (Note: lavatory reflects space use as a lavatory)	Recom'd Seats by Space	ACADEMIC SPACES																								
									PK	K	1	2	3	4	5	6	7	8	9	10	11	12	English	Math	Social Studies	History	Science	Language	Special	Classroom	Verbatim	Classroom	Other
1	1	CLASSROOM	K	880		48.0	18	100%	18	18																							
2	2	TUTOR ROOM * (ELL/ LITERACY)		863			15	18																									
3	3	CLASSROOM	K	874		48.0	16	18	18																								
4	4	CLASSROOM	K	846		48.0			18																								
5	5	ART CLASSROOM	ALL	790		40.0																											
6	6	CLASSROOM	2	793		34.0	23	23				23																					
7	7	CLASSROOM	2	857		34.0	22	25				25																					
8	8	SPECIALIST OT/PT		645																													
9	9	CLASSROOM	1	763		34.0	18	22				22																					
10	10	CLASSROOM	1	753		34.0	19	22				22																					

11/14/2016



- [illegible]



# Capacity: Assumptions & Clarifications

- Capacities represent an average of a capacity range for the program (+/- 2%)
- School utilization based on an operating efficiency of 90% (Contract and Space) - leaves headroom for scheduling and enrollment bubbles
- Spaces excluded from capacity calculations:
  - Shared spaces (i.e. Gym, Cafeteria, Library, Art, Music, Computer Labs) – Grades K-8
  - SPED Integrated Classrooms, Resource Rooms,
  - Related Service Rooms (Tutor, Literacy, Speech)
  - Science classrooms in MS facilities unless specifically assigned to a grade level. Otherwise counted as shared.
  - Specialty program spaces shared across grade levels
- Unassigned classrooms within a building counted with capacity.





# Capacity: By Teacher Contract Limit

- Calculate school capacity based on teacher contract limits
- Class Size Guidelines (students per class)
  - PreK-1: 21
  - 2: 24
  - 3-5: 25
  - 6-8: 26



# Capacity: By Physical Space

- Calculate capacity based on space guidelines
  - Industry standard educational design guidelines

	Number of Seats	NSF / Seat	Notes:
<i>by Individual Space</i>			
Pre-K Classroom	18-20	35-55	<i>Bathrooms not included.</i>
Kindergarten Classroom	18-24	40-48	<i>Bathrooms not included.</i>
Classroom	20-28	30-38	
Science Lab	20-28	45-55	
Gymnasium	24/station	105-130	
Music Room (Choral)	35-60	22-30	
Music Room (Instrumental)	18-28	30-40	
Visual Arts	24-28	40-55	
Computer Lab	20-30	32-40	
Cafeteria Seating	145-245	19-24	

- Connecticut School Construction Grant's (CT DAS) guidelines



# Space Inventory Process

- Conducted Separate Focus Group Meetings with Building Leadership to verify space usage, needs and impediments.
  - Understanding of the uniqueness of each building and how it is being programmed.
- Categorized Rooms into Academic, Shared, Special Ed. and Related Services Spaces.
- Academic Spaces drive capacity of each building
- On site visits are planned to fill gaps and verify spaces.
- Final capacities vetted with administration and school leadership prior to utilization analysis.



# Elementary School -Capacity

## Elementary School Capacity

School	2016-17 Enrollment (**)	Study Capacity	
		Capacity	Utilization
Barlow Mountain (*)	330	423	78.0%
Branchville	352	366	96.2%
Farmingville	329	361	91.1%
Ridgebury	349	439	79.5%
Scotland (+)	376	373	100.8%
Veterans Park (+)	294	324	90.7%
<b>Total PK-5</b>	<b>2,030</b>	<b>2,286</b>	<b>88.8%</b>

(\*) Numbers shown exclude classrooms for Children's Corner (CC). CC occupies space for approximately 160-175 students.

(\*\*) BMES enrollment Includes 40 PreK Students and RES enrollment includes 4 PreK students

(+) Includes 1 Portable at each school



# Elementary School -Utilization

## Elementary Utilization Projections (High)

School	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Barlow Mountain <sup>(*, **)</sup>	330	335	332	317	311	320	317	321	321	331	343
Branchville	352	355	371	366	359	363	369	374	370	380	386
Farmingville	329	320	296	283	278	283	283	290	296	307	312
Ridgebury <sup>(**)</sup>	349	346	342	338	344	334	334	341	345	358	371
Scotland <sup>(+)</sup>	376	382	365	373	372	374	369	371	375	388	396
Veterans Park <sup>(+)</sup>	294	275	269	252	247	250	249	258	266	272	282
<b>PK-5 Enrollment</b>	<b>2,030</b>	<b>2,013</b>	<b>1,975</b>	<b>1,929</b>	<b>1,911</b>	<b>1,924</b>	<b>1,921</b>	<b>1,955</b>	<b>1,973</b>	<b>2,036</b>	<b>2,090</b>
<b>PK-5 Capacity</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>	<b>2,286</b>
<b>Seat Surplus/Deficit</b>	<b>+256</b>	<b>+273</b>	<b>+311</b>	<b>+357</b>	<b>+375</b>	<b>+362</b>	<b>+365</b>	<b>+331</b>	<b>+313</b>	<b>+250</b>	<b>+196</b>

(\*) Numbers shown exclude classrooms for Children's Corner (CC). CC occupies space for approximately 160-175 students.

(\*\*) BMES enrollment Includes 46 PreK Students and Ridgebury includes 4 PreK Students

(+) Includes 1 Portable at each school

## Elementary Utilization Projections (High)

School	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Barlow Mountain <sup>(*)</sup>	78.0%	79.2%	78.5%	74.9%	73.5%	75.7%	74.9%	75.9%	75.9%	78.3%	81.1%
Branchville	96.2%	97.0%	101.4%	100.0%	98.1%	99.2%	100.8%	102.2%	101.1%	103.8%	105.5%
Farmingville	91.1%	88.6%	82.0%	78.4%	77.0%	78.4%	78.4%	80.3%	82.0%	85.0%	86.4%
Ridgebury	79.5%	78.8%	77.9%	77.0%	78.4%	76.1%	76.1%	77.7%	78.6%	81.5%	84.5%
Scotland <sup>(+)</sup>	100.8%	102.4%	97.9%	100.0%	99.7%	100.3%	98.9%	99.5%	100.5%	104.0%	106.2%
Veterans Park <sup>(+)</sup>	90.7%	84.9%	83.0%	77.8%	76.2%	77.2%	76.9%	79.6%	82.1%	84.0%	87.0%
<b>Total</b>	<b>88.8%</b>	<b>88.1%</b>	<b>86.4%</b>	<b>84.4%</b>	<b>83.6%</b>	<b>84.2%</b>	<b>84.0%</b>	<b>85.5%</b>	<b>86.3%</b>	<b>89.1%</b>	<b>91.4%</b>

(\*) Numbers shown exclude classrooms for Children's Corner (CC). CC occupies space for approximately 160-175 students.

(\*\*) BMES enrollment Includes 46 PreK Students and Ridgebury includes 4 PreK Students

(+) Includes 1 Portable at each school



# Elem. Utilization: Takeaways

## Elementary Schools

- PK-5 enrollment projected to decline up to 2020-21 before flattening and rebounding later in the projections horizon
- Enrollment projected to increase beginning in 2023-24, reaching 2,040 students by 2026-27
- Utilization to remain between 80% and 90% throughout the projections horizon
  - Scotland and Branchville to operate near or at capacity over the next 10 years
- Enrollment projected to drop under 2,000 students in the short-term, but projected to surpass that mark beginning in 2026-27 school year.
- High projections show a seat surplus of +362 seats in 2021-22 drops to surplus of +192 seats by 2026-27



# Elem. Utilization: Takeaways

- High projections show a seat surplus of +362 seats in 2021-22 drops to surplus of +196 seats by 2026-27
  - Medium Projections: have a surplus of 411 seats in 2021-22 dropping to surplus of 263 seats in 2026-27
  - Low Projections: have a surplus of 450 seats in 2021-22 dropping to surplus of 331 seats in 2026-27
- Based on the capacity & utilization analysis and current operation— closing an elementary school is not feasible for the 10-yr horizon



# Middle School Capacity & Utilization

## Middle School Capacity

School	2016-17 Enrollment	Study Capacity	
		Capacity	Utilization
East Ridge Middle School	790	950	83.2%
Scotts Ridge Midlde School	485	703	69.0%
<b>Total 6th-8th</b>	<b>1,275</b>	<b>1,653</b>	<b>77.1%</b>

## Middle School Utilization Projections (High)

School	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
East Ridge Middle School	83.2%	78.6%	77.2%	73.9%	73.6%	70.1%	68.8%	67.2%	68.1%	65.9%	66.6%
Scotts Ridge Midlde School	69.0%	64.3%	64.7%	62.9%	63.0%	59.7%	59.0%	57.6%	58.5%	56.3%	56.8%
<b>Total</b>	<b>77.1%</b>	<b>72.5%</b>	<b>71.9%</b>	<b>69.2%</b>	<b>69.1%</b>	<b>65.7%</b>	<b>64.7%</b>	<b>63.1%</b>	<b>64.0%</b>	<b>61.8%</b>	<b>62.4%</b>
<b>6-8 Capacity</b>	1,653	1,653	1,653	1,653	1,653	1,653	1,653	1,653	1,653	1,653	1,653
<b>Seat Surplus/Deficit</b>	378	454	465	509	511	567	584	610	595	631	621





# Utilization: Takeaways

## Middle Schools

- Enrollment projected to decline substantially over the next 10 years as smaller grade cohorts begin matriculating
- Utilization at the Middle School level under 65% during the last 5 years of projection horizon.



# High School Capacity

School	2016-17 Enrollment	Seat Capacity by Contract	Recommended Seat Capacity by Space	Study Capacity (90%)
Ridgefield High School (9-12)	1,711	2,184	1,776	1,727

## Study Capacity Calculations (example)

Ridgefield High School

Capacity by Contract: 2,184

Capacity by Space: 1,776

Difference:  $2,184 - 1,776 = 408$

35% of Difference:  $408 \times 0.35 = 143$

Add 35% of difference back  
To Capacity by Space

$1,776 + 143 = 1,919$  (Study Capacity)

$1,919 \times 0.9 = 1,727$  (Study Capacity 90%)



# High School Capacity & Utilization

## Ridgefield High School Capacity

School	2016-17 Enrollment	Study Capacity	
		Capacity	Utilization
Ridgefield High School	1,711	1,727	99.1%

## High School Utilization Projections (High)

School	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Ridgefield HS Enrollment	1,711	1,711	1,690	1,689	1,652	1,607	1,578	1,521	1,494	1,458	1,418
Ridgefield HS Utilization	99.1%	99.1%	97.9%	97.8%	95.7%	93.1%	91.4%	88.1%	86.5%	84.4%	82.1%

## Takeaways

- High School to operate near capacity up to 2020-21 (greater than 95% utilization)
- Beginning in 2021-22, enrollment projected to drop significantly as smaller classes begin matriculating into High School
  - Utilization to drop to 82.1% by 2026-27



# Discussion on Presentation

- Based on the information presented tonight we would like to hear your thoughts.
- We are developing options for presentation 11/28.
- What Criteria/ Outcome is important to the BOE to help us generate and evaluate options?