GREENWICH PUBLIC SCHOOLS
Greenwich, Connecticut

Title of Item: Discussion of Enrollment, Facilities and Racial Imbalance

REQUEST FOR BOARD ACTION OR PRESENTATION OF INFORMATIONAL ITEM

By: June 6, 2013

____ Action Required

__X__ Informational Only

Submitted By: Dr. William McKersie

Position: Superintendent of Schools

We will be present at Board meeting to explain if called upon:

__X____ Yes

____ No

Synopsis of Proposal:

Two presentations are attached:

The first presentation addresses questions regarding the calculation of enrollment projections raised by the Board of Education at the May 23rd meeting.

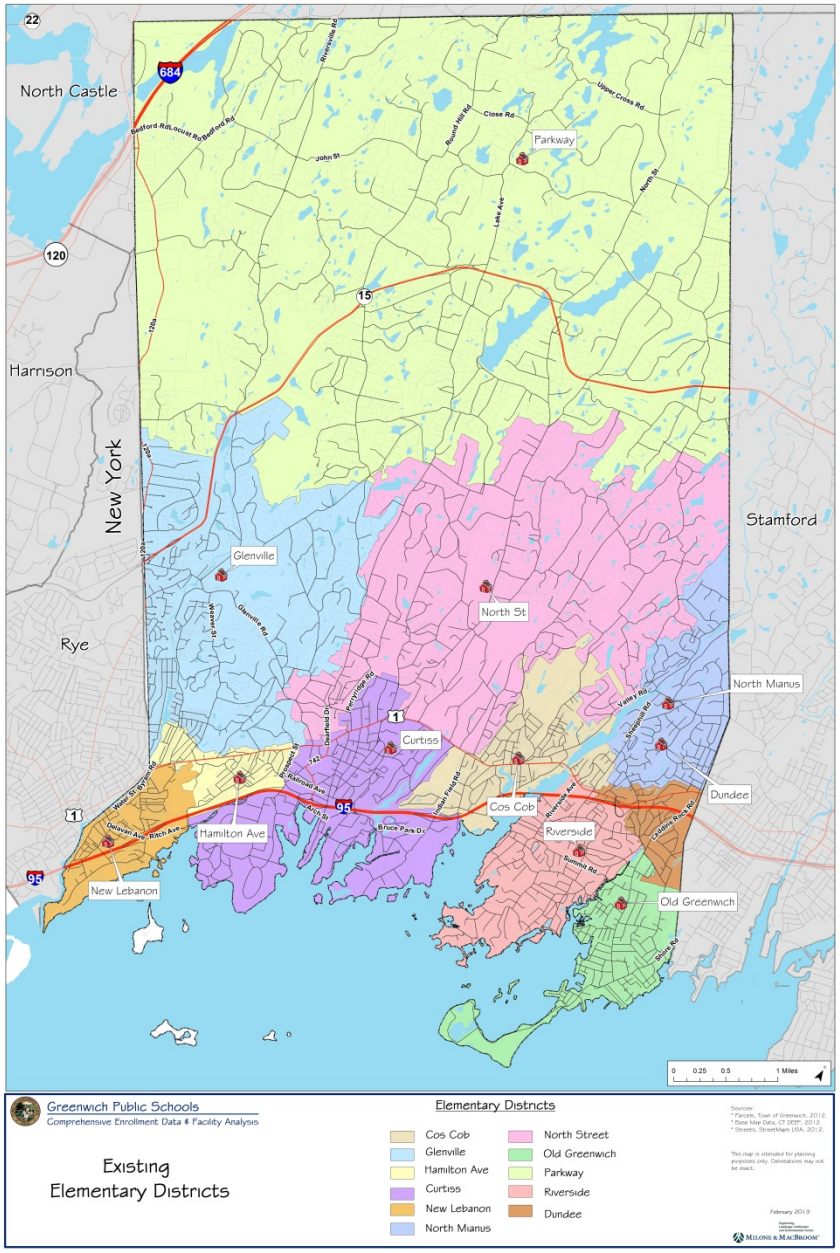
The second presentation explores options for addressing facility utilization and racial balance issues. After opportunities for stakeholder input through scheduled community forums and meetings, the Board of Education will set a sense of direction for further option development at their June 20th meeting. There will be additional opportunities for stakeholder input in the fall of 2013.

Recommended Action (if appropriate):

Comprehensive Enrollment Data & Facility Analysis

Elementary School Persistency Ratios

June 6, 2013



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Introduction

- Enrollment Projections Primer
- Bd. of Ed. Questions and Concerns Regarding Elementary School Projections
- Review of Various Projection Models and Complete By-School Data

Enrollment Projections Primer

- We **Project**, But We Do Not **Predict**
- **Data-Driven Process Informed by Reliable Data**
- Projections are a Planning Tool Relying on Most Recent Reliable Data
- Trends Develop and Anomalies Happen – Recognize and Adjust
- Our Projections are Predicated on Oct 1st Enrollments, Following State Standards
- Enrollment Projections Should Be Reviewed Annually and Adjustments Made

Enrollment Projection Primer

Cohort Survival Method

- Based on Cohort Survival Methodology - Standard Method for Enrollment Projections
- Methodology Accepted by CSDE School Construction Projects (CGS 10-283)
- The Cohort Survival Methodology Relies on **Observed Data from the Recent Past in Order to Predict the Near Future**
- Methodology Works Well for Stable Populations, Including Communities That Are Growing or Declining at a Steady Rate
- Recent Instability in Economic Climate - Difficult Time to Predict Enrollment – Monitor and Adjust

Enrollment Projection Primer

Persistency Ratios

- 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
- Persistency Ratio of 1.0 Means Class Size Remains the Same; 1.05 Means the Class Size Increases by 5%, or a Class of 100 Grows to 105 the Following Year
- Changes in Population, Housing Stock and Tenure, and Economic Conditions Help Explain Persistency Ratios And Inform Projection Model Choice

Enrollment Projection Primer

Projections Building Blocks

- Starting Data Used in Projections Are Critical to Overall Accuracy, as Each Year Builds Upon the Last
  - Students in the System – Progressed Forward
  - CT DPH – Address-Matched Birth Records for Past 10 Years
  - Historic Enrollment Trends
- Develop Several Projection Models Applying Different Persistency Ratios to Building Blocks
- Census, Housing, Economic Data Informs Model Selection
- Correlation Analysis of Various Models at District and Individual School Level

Enrollment Projection Primer

- Individual School Projections Are Normalized to District-wide Projections
- Greatest Accuracy and Longest Horizon at the District-wide Level
- For Individual Schools the Same Modeling Standards and Assumptions Must Be Followed
- At the School Level, Small Numbers Yield Larger Variances (e.g. Loss of 1 Student in a Class of 50 = -2%)
- Local Random Variations are Difficult to Project (e.g. Parent Choice on Entering K at Age 5 or 6)

Enrollment Projection Primer

District-wide Persistency

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
2002-03	0.92346	0.98217	0.97875	1.00000	0.96995	0.96316	0.96051	0.97406	0.99565	1.03859	1.01906	0.95922	0.97574
2003-04	0.97051	0.97283	0.98464	1.00136	0.98199	0.97042	0.93306	1.00000	1.00592	1.06405	1.04799	0.99660	1.02211
2004-05	0.88988	0.95641	0.96788	0.99858	0.99864	0.97461	0.98258	1.00878	0.97651	1.03824	1.00000	0.97489	1.01536
2005-06	0.92330	1.01439	0.98066	0.97835	0.98864	0.94301	0.93198	0.96898	0.96372	1.03158	1.00000	0.96170	0.98182
2006-07	0.92744	1.01231	0.97589	0.99718	0.99705	0.97126	0.95683	0.99068	0.98780	1.02861	1.00875	0.96601	0.99716
2007-08	0.92400	1.04552	1.00760	1.02326	1.00000	0.95562	0.96006	1.00602	1.01411	1.00926	0.99414	0.98555	0.99707
2008-09	0.94266	0.99423	0.97687	1.00000	0.98864	0.94774	0.95666	1.00154	0.99103	0.99691	1.01070	0.99411	1.02053
2009-10	0.94309	1.01780	0.97388	1.00279	0.99246	0.98563	0.94039	1.00324	0.99077	1.07089	1.00775	0.95764	1.03111
2010-11	1.04042	1.00287	1.00000	1.01639	1.00000	0.97720	0.94315	0.99842	1.01613	1.04969	0.99718	0.98462	1.02528
2011-12	0.98804	1.04892	0.98138	0.99563	1.00147	0.97917	0.93157	0.98609	0.98571	1.03651	0.99112	0.98729	1.01719
2012-13	1.15232	0.98941	1.01235	1.00876	1.00293	0.98389	0.93617	0.99332	0.99060	1.06280	1.01225	1.01194	1.00000
Long Term Average	**0.96592**	**1.00335**	**0.98544**	**1.00203**	**0.99289**	**0.96834**	**0.94845**	**0.99374**	**0.99254**	**1.03883**	**1.00809**	**0.97996**	**1.00758**
Last 5-Yr Average	**1.01331**	**1.01065**	**0.98889**	**1.00471**	**0.99710**	**0.97473**	**0.94159**	**0.99652**	**0.99485**	**1.04336**	**1.00380**	**0.98712**	**1.01882**
Last 3-Yr Average	**1.06026**	**1.01373**	**0.99791**	**1.00693**	**1.00146**	**0.98009**	**0.93696**	**0.99261**	**0.99748**	**1.04967**	**1.00019**	**0.99461**	**1.01415**
3-Year Weighted	**1.07891**	**1.01149**	**0.99996**	**1.00565**	**1.00195**	**0.98120**	**0.93580**	**0.99176**	**0.99322**	**1.05185**	**1.00270**	**0.99917**	**1.00994**

- Persistency Ratios Implicitly Include Net Effect of Such Factors as Migration/Transiency, Dropouts, Deaths, Non-Promotion/Retention, and Transfers Between Public/Private
- Birth to K in 2012-13: Significantly Greater Than Recent Trend - Anomaly or New Trend?

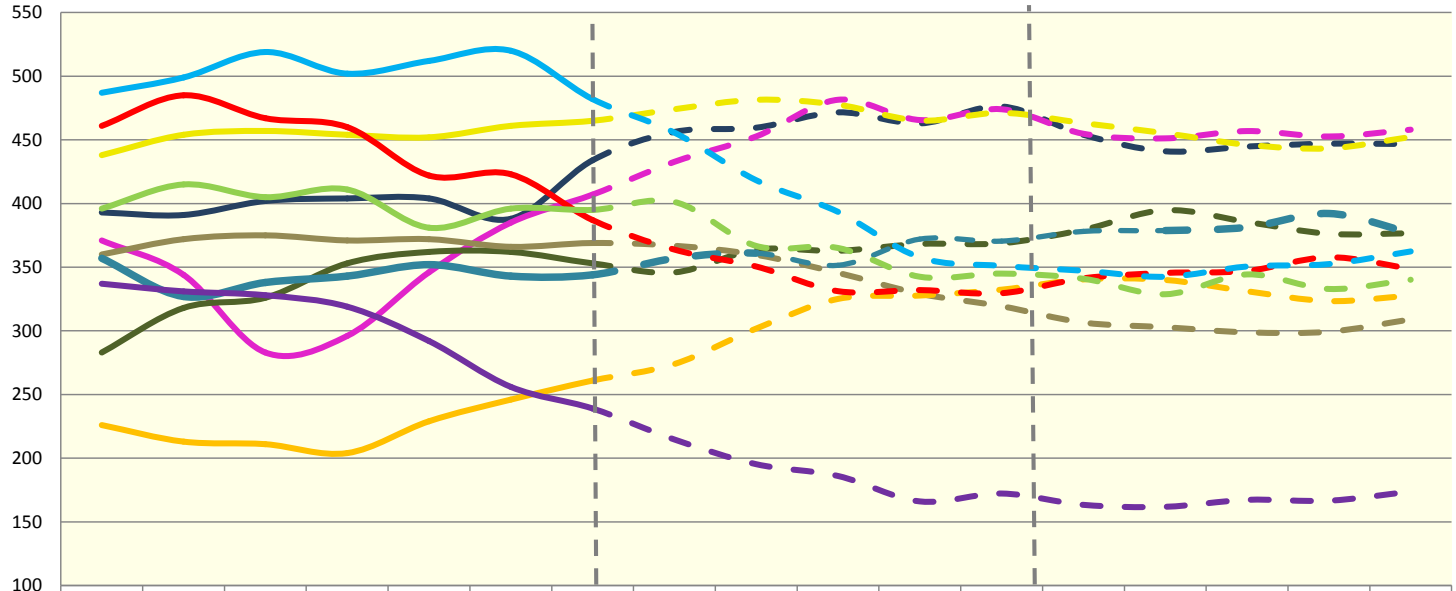
The Projection Models

All Projection Models Normalized to District-Wide by Grade Projections

- **Blend 3-Yr & 5-Yr**: Used individual schools' 3-year average persistency ratios, except for Cos Cob, North Mianus and Parkway, where we used 5-year average ratios
- **3-Yr, CC 5-Yr:** Used individual schools' 3-year average persistency ratios, except for Cos Cob where we used 5-year average ratios
- **3-Yr Wgt Avg:** Used individual schools' 3-year weighted average persistency ratios
- **5-Yr Avg:** Used individual schools' 5-year average persistency ratios
- **3-Yr Avg, Twn B-K:** Used individual schools' 3-year average persistency ratios, except used the 3-year average share of K to town-wide births
- **3-Yr Avg:** Used individual schools' 3-year average persistency ratios*
  *Chosen ratio

Blend 3-Year & 5-Year

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2012-22	2022-23
Cos Cob	393	391	402	404	404	388	434	456	460	472	463	476	454	441	445	447	447
Glenville	371	344	283	296	346	385	407	433	453	481	466	474	455	451	457	453	458
Hamilton Ave	283	318	326	353	362	362	353	346	364	363	368	369	379	395	386	376	377
ISD	360	372	375	371	372	366	369	367	360	346	329	319	307	303	299	299	309
Julian Curtiss	357	327	338	343	352	343	344	357	361	351	372	370	378	379	381	392	377
New Lebanon	226	213	211	204	229	246	261	274	302	325	328	332	340	340	331	323	328
North Mianus	438	454	457	454	452	461	465	474	481	478	465	471	463	455	446	443	452
North Street	461	485	467	460	422	423	387	364	351	331	332	330	341	345	347	358	349
Old Greenwich	396	415	405	411	381	396	395	401	367	365	343	345	341	329	344	333	340
Parkway	337	331	328	319	292	256	239	215	195	186	166	172	163	162	167	167	174
Riverside	487	499	519	502	512	520	482	456	418	393	358	351	347	342	351	352	362

Projections based on individual schools' 3-Year Average Persistency Ratios, except Cos Cob, North Mianus and Parkway used 5-Year Average Persistency Ratios, normalized to district-wide projections.

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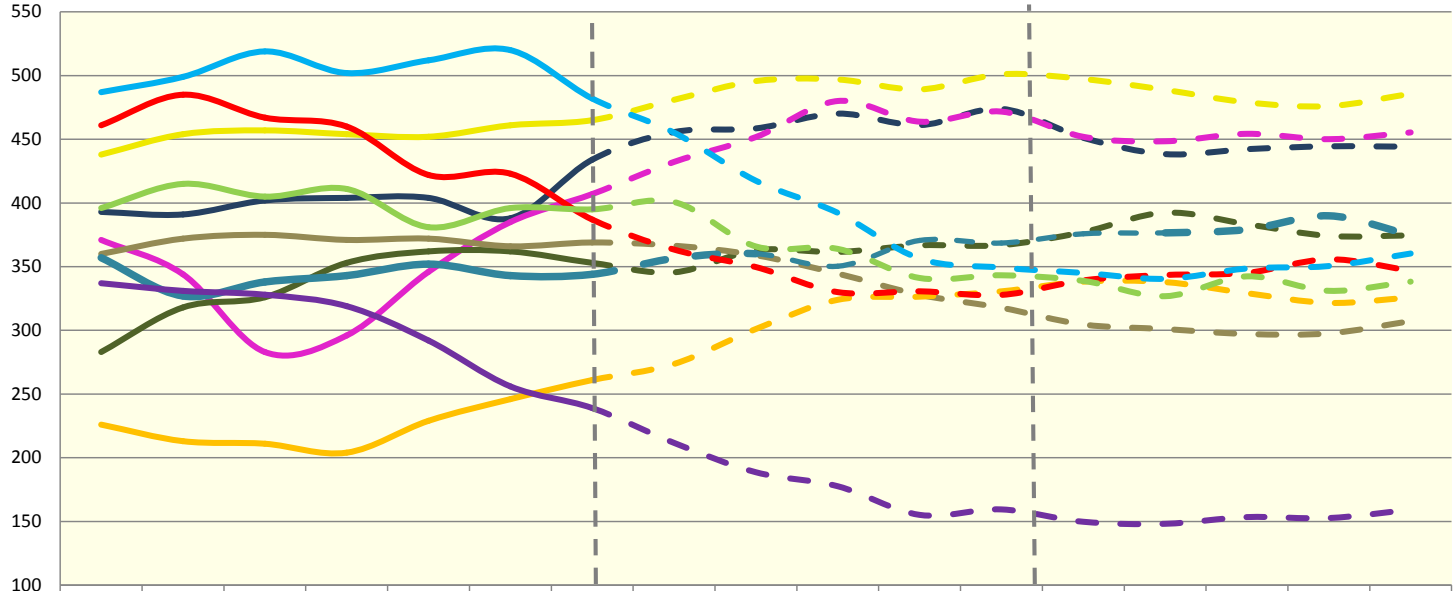
Blend 3-Year & 5-Year

- Trying to Temper Anomalously High 2012-13 Birth-K Ratios at Cos Cob, North Mianus and Parkway

- Variance Between Non-Normalized Projected K Totals and District-Wide Projected K Totals Increased Significantly

3-Year & Cos Cob 5-Year

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2012-22	2022-23
Cos Cob	393	391	402	404	404	388	434	456	459	470	461	474	451	438	442	444	444
Glenville	371	344	283	296	346	385	407	432	452	480	464	472	452	448	454	450	455
Hamilton Ave	283	318	326	353	362	362	353	346	363	362	367	367	377	392	383	374	375
ISD	360	372	375	371	372	366	369	366	359	345	328	318	305	301	297	298	307
Julian Curtiss	357	327	338	343	352	343	344	357	360	350	371	369	376	377	379	390	375
New Lebanon	226	213	211	204	229	246	261	274	301	324	326	331	338	338	329	322	326
North Mianus	438	454	457	454	452	461	465	481	496	497	489	501	497	489	479	476	486
North Street	461	485	467	460	422	423	387	363	350	330	331	328	339	343	345	356	347
Old Greenwich	396	415	405	411	381	396	395	401	366	364	341	343	339	327	342	331	338
Parkway	337	331	328	319	292	256	239	212	189	178	155	159	150	148	153	153	159
Riverside	487	499	519	502	512	520	482	455	417	392	356	349	345	340	349	350	360

Projections based on individual schools' 3-Year Average Persistency Ratios, except Cos Cob used 5-Year Average Persistency Ratios, normalized to district-wide projections.

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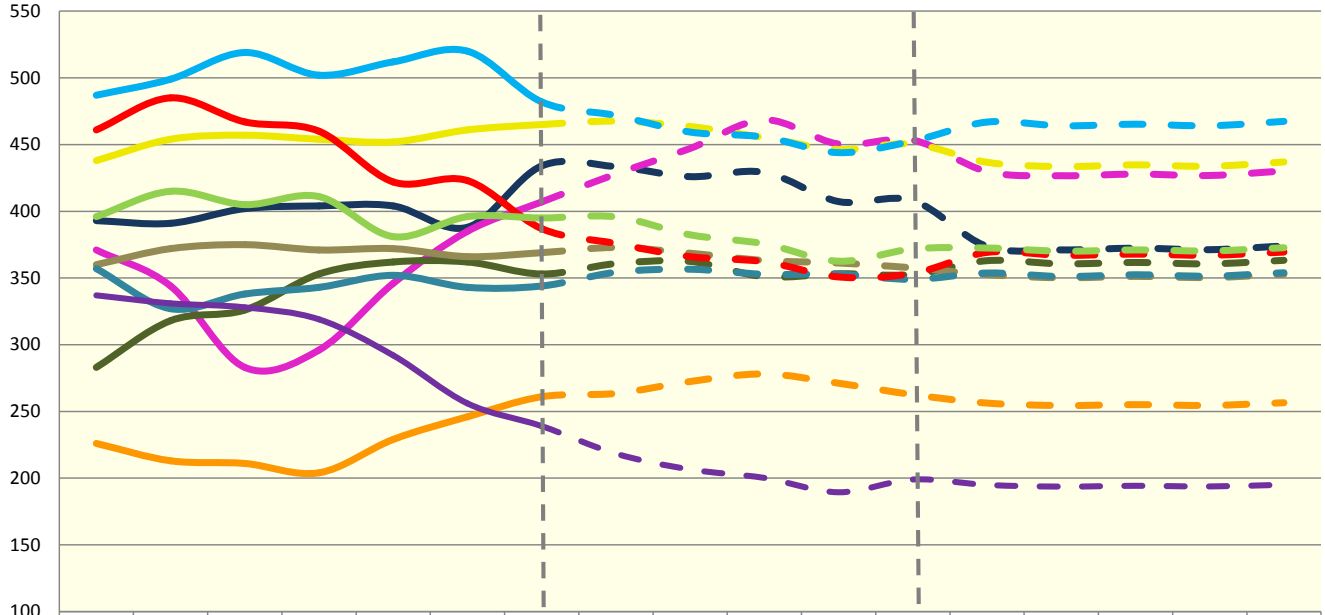
3-Year & Cos Cob 5-Year

- Trying to Temper Unusual Single-Year Birth-K Ratio at Cos Cob

- Distributes Remainder, Resulting in Insignificant Difference to Parkway or Riverside

3-Year with Town Birth-K

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



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Cos Cob	393	391	402	404	404	388	434	433	426	429	407	408	374	371	372	371	374
Glenville	371	344	283	296	346	385	407	428	447	469	450	453	430	427	428	427	430
Hamilton Ave	283	318	326	353	362	362	353	361	362	351	353	353	363	361	362	361	363
ISD	360	372	375	371	372	366	369	373	369	363	361	358	353	350	351	350	353
Julian Curtiss	357	327	338	343	352	343	344	354	357	353	353	349	354	351	352	351	354
New Lebanon	226	213	211	204	229	246	261	263	272	278	271	263	256	254	255	255	257
North Mianus	438	454	457	454	452	461	465	468	464	455	446	450	437	434	435	434	437
North Street	461	485	467	460	422	423	387	376	366	362	351	353	369	367	368	367	369
Old Greenwich	396	415	405	411	381	396	395	396	382	376	363	372	372	370	371	370	373
Parkway	337	331	328	319	292	256	239	218	207	200	189	199	195	194	194	194	195
Riverside	487	499	519	502	512	520	482	472	459	456	444	453	467	464	465	464	467

Projections based on individual schools' 3-Year Persistency Ratios and 3-Year Town Birth -K normalized to district-wide projections.

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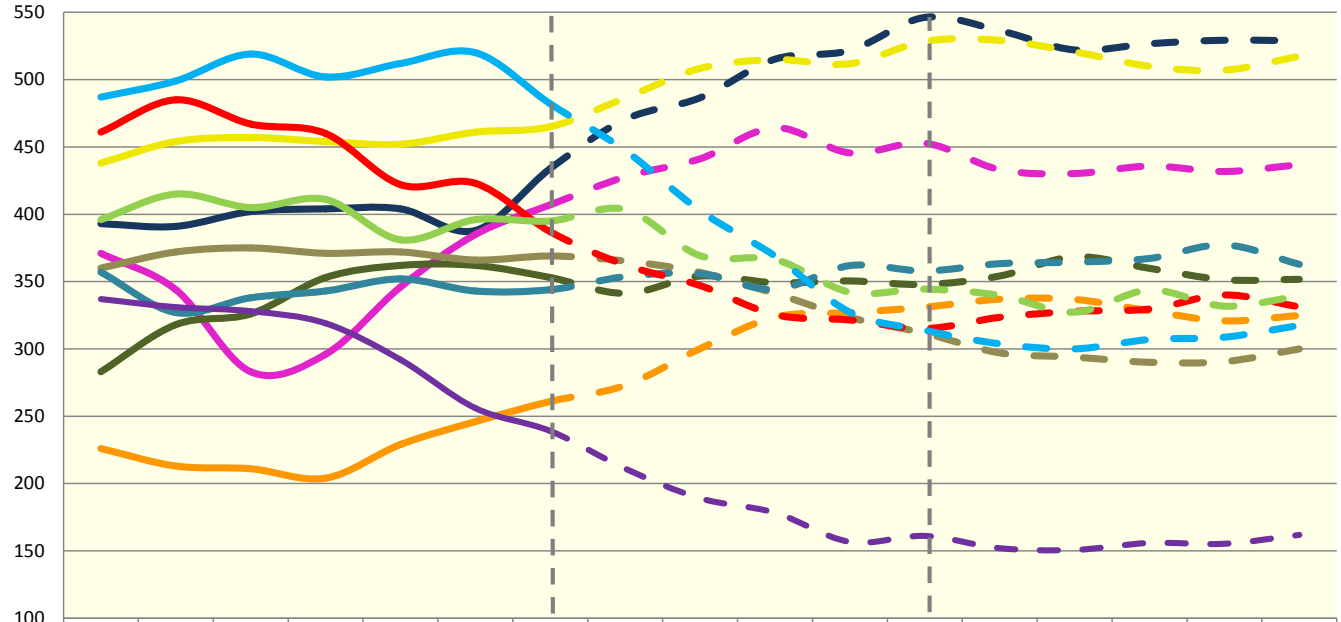
3-Year with Town Birth-K

- Trying to Temper Unusual Birth-K Individual School Ratios by Using 3-Year Average of Town Birth-K
- Increases Parkway and Riverside Projections
- Flattens New Lebanon, Where Increasing Birth-K Ratios and Two Known High Birth Years Yet to Enter
- Diminished Confidence in 5- to 10- Year Projection Horizon Due to Generalized Data (Each School Projection Flatlines)

3-Year Weighted Averages

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



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Cos Cob	393	391	402	404	404	388	434	470	487	515	522	546	536	522	527	529	529
Glenville	371	344	283	296	346	385	407	428	441	464	446	453	433	430	436	432	437
Hamilton Ave	283	318	326	353	362	362	353	341	354	349	350	348	354	368	360	351	352
ISD	360	372	375	371	372	366	369	365	357	341	323	312	297	294	290	291	300
Julian Curtiss	357	327	338	343	352	343	344	354	356	344	362	358	363	364	367	377	363
New Lebanon	226	213	211	204	229	246	261	273	300	324	327	331	337	337	328	321	325
North Mianus	438	454	457	454	452	461	465	486	508	515	512	528	529	521	510	507	517
North Street	461	485	467	460	422	423	387	362	347	325	321	315	323	328	330	340	331
Old Greenwich	396	415	405	411	381	396	395	404	369	366	342	344	340	327	344	332	339
Parkway	337	331	328	319	292	256	239	211	189	178	157	161	152	151	156	155	162
Riverside	487	499	519	502	512	520	482	447	403	369	327	314	304	300	307	309	317

Projections based on individual schools' 3-Year Weighted Average Persistency Ratios, normalized to district-wide projections.

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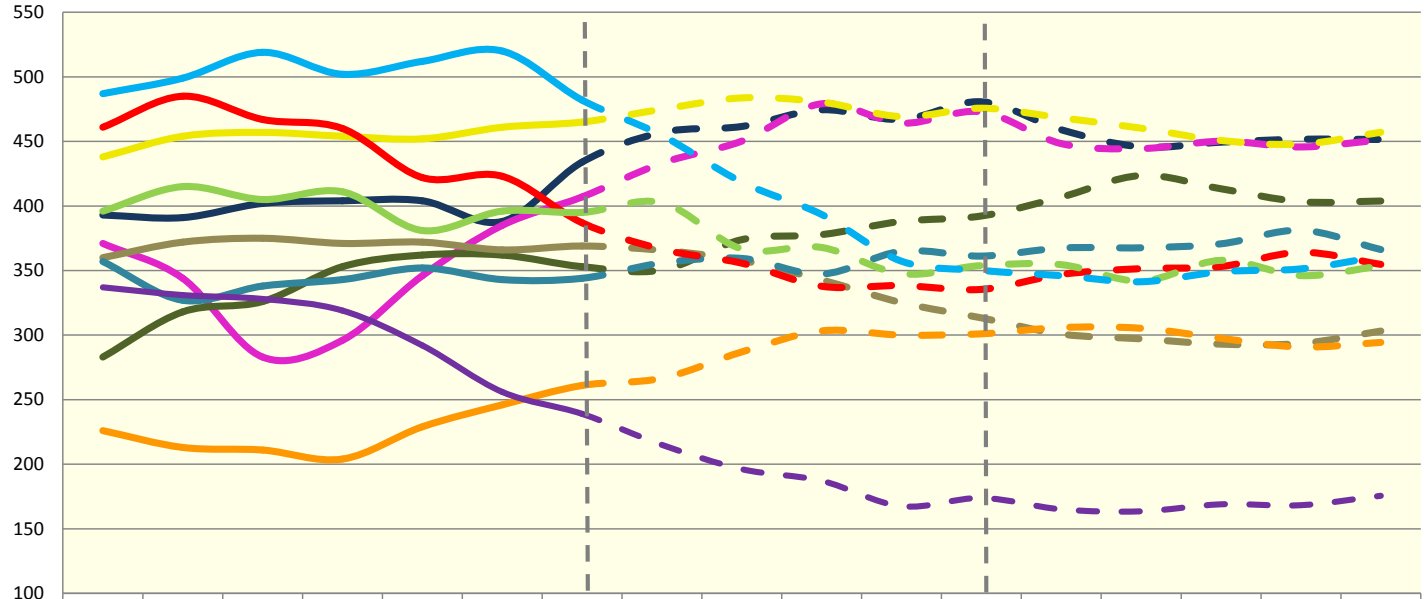
3-Year Weighted Averages

- Emphasizes Most Recent Trends
- Increases Cos Cob and North Mianus Significantly
- Decreases Riverside
- Too Much Reliance on One Year of Ratios

5-Year Average

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



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Cos Cob	393	391	402	404	404	388	434	457	462	474	467	481	459	446	449	452	452
Glenville	371	344	283	296	346	385	407	433	450	479	464	473	448	444	450	446	451
Hamilton	283	318	326	353	362	362	353	350	374	378	388	392	407	424	413	403	404
ISD	360	372	375	371	372	366	369	366	358	343	325	313	301	297	293	294	303
Curtiss	357	327	338	343	352	343	344	356	359	347	365	361	367	368	371	381	366
New Leb	226	213	211	204	229	246	261	267	287	303	300	301	306	305	297	291	294
No. Mianus	438	454	457	454	452	461	465	475	484	481	469	476	468	460	451	448	457
North St.	461	485	467	460	422	423	387	366	356	338	338	335	347	351	353	364	355
Old Green.	396	415	405	411	381	396	395	403	367	368	348	354	355	342	358	346	354
Parkway	337	331	328	319	292	256	239	215	196	187	167	174	165	164	169	168	176
Riverside	487	499	519	502	512	520	482	455	418	393	357	350	346	341	349	351	361

Projections based on individual schools' 5-Year Average Persistency Ratios, normalized to district-wide projections.

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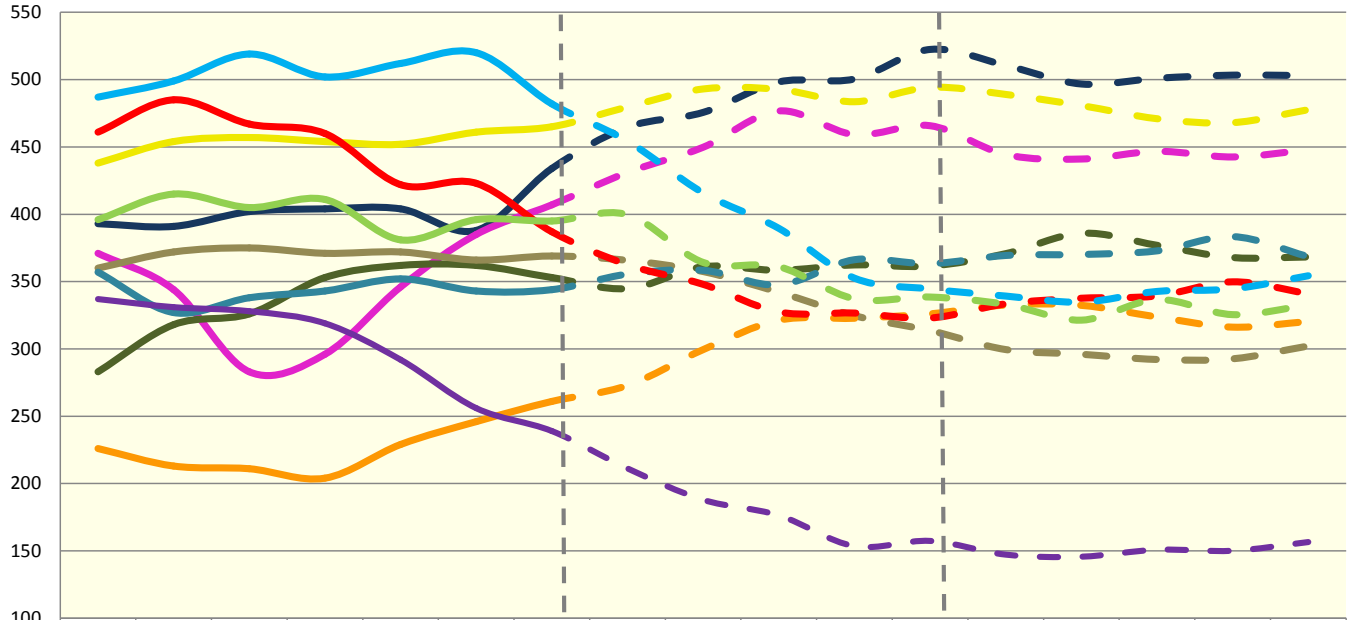
5-Year Average

- Smoother Projections
- Glenville Renovation Completed in 2009 Impacted Early Persistency Ratios on Which Average Based
- Given Relative Stability of Births in New Lebanon, Underestimate of Growth

Chosen Model (3-Year Avg)

Greenwich Elementary Actual and Projected Enrollments
2006-07 to 2022-23



	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2012-22	2022-23
Cos Cob	393	391	402	404	404	388	434	465	476	498	500	522	511	497	501	503	503
Glenville	371	344	283	296	346	385	407	431	450	477	459	466	444	441	447	443	448
Hamilton Ave	283	318	326	353	362	362	353	345	361	358	362	362	371	386	377	368	368
ISD	360	372	375	371	372	366	369	366	357	342	325	314	300	296	292	293	302
Julian Curtiss	357	327	338	343	352	343	344	356	358	348	366	363	369	370	373	383	369
New Lebanon	226	213	211	204	229	246	261	273	299	321	323	326	333	332	324	316	320
North Mianus	438	454	457	454	452	461	465	480	493	493	484	494	489	481	471	468	478
North Street	461	485	467	460	422	423	387	363	348	327	327	323	333	338	339	350	341
Old Greenwich	396	415	405	411	381	396	395	400	364	361	337	339	333	321	337	325	333
Parkway	337	331	328	319	292	256	239	211	188	176	153	157	147	146	151	150	157
Riverside	487	499	519	502	512	520	482	454	416	390	353	345	339	335	343	345	354

Projections based on individual schools' 3-Year Average Persistency Ratios, normalized to district-wide projections.

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Chosen Model (3-Year Avg)

- Standard Enrollment Projection Methodology
- Overall, Correlated Well with Various Individual School Projection Models – Outliers Minimized
- Renovated Glenville Open Entire Period from Which Average Ratios Derive
- Tighter Relationship Between Non-Normalized Grade Projections and District-Wide Grade Projections

Additional Data for Board

- By-Grade Enrollment and Birth Histories for Each School
- Each School's Persistency Ratios
- Comparison of Each School's Projections Under Various Models with Calculation of Standard Deviation

Glenville

Glenville										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		75	83	80	66	90	85	**479**
2002-03	1997	797		65	78	76	81	64	80	**444**
2003-04	1998	780		77	65	71	75	81	60	**429**
2004-05	1999	781		75	70	61	74	70	80	**430**
2005-06	2000	704		55	73	70	56	66	64	**384**
2006-07	2001	758	81	64	53	68	68	51	67	**371**
2007-08	2002	750	70	48	65	52	63	69	47	**344**
2008-09	2003	715	91	36	41	58	43	46	59	**283**
2009-10	2004	738	81	57	46	43	60	39	51	**296**
2010-11	2005	668	85	81	57	54	48	69	37	**346**
2011-12	2006	669	85	65	82	57	59	55	67	**385**
2012-13	2007	604	76	86	64	84	53	61	59	**407**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0911	#DIV/0!	1.0400	0.9157	1.0125	0.9697	0.8889
2003-04	0.0816	#DIV/0!	1.0000	0.9103	0.9868	1.0000	0.9375
2004-05	0.0987	#DIV/0!	0.9091	0.9385	1.0423	0.9333	0.9877
2005-06	0.0960	#DIV/0!	0.9733	1.0000	0.9180	0.8919	0.9143
2006-07	0.0781	0.7901	0.9636	0.9315	0.9714	0.9107	1.0152
2007-08	0.0844	0.6857	1.0156	0.9811	0.9265	1.0147	0.9216
2008-09	0.0640	0.3956	0.8542	0.8923	0.8269	0.7302	0.8551
2009-10	0.0503	0.7037	1.2778	1.0488	1.0345	0.9070	1.1087
2010-11	0.0772	0.9529	1.0000	1.1739	1.1163	1.1500	0.9487
2011-12	0.1213	0.7647	1.0123	1.0000	1.0926	1.1458	0.9710
2012-13	0.0972	1.1316	0.9846	1.0244	0.9298	1.0339	1.0727
Long-Term Average	**0.0855**	**0.7749**	**1.0028**	**0.9833**	**0.9871**	**0.9716**	**0.9656**
3-YR Average	**0.0986**	**0.9497**	**0.9990**	**1.0661**	**1.0462**	**1.1099**	**0.9975**
4-YR AVERAGE	**0.0865**	**0.8882**	**1.0687**	**1.0618**	**1.0433**	**1.0592**	**1.0253**
3-Yr Weighted	**0.1019**	**0.9795**	**0.9964**	**1.0412**	**1.0152**	**1.0906**	**1.0182**

Known District Births

2008 – 73

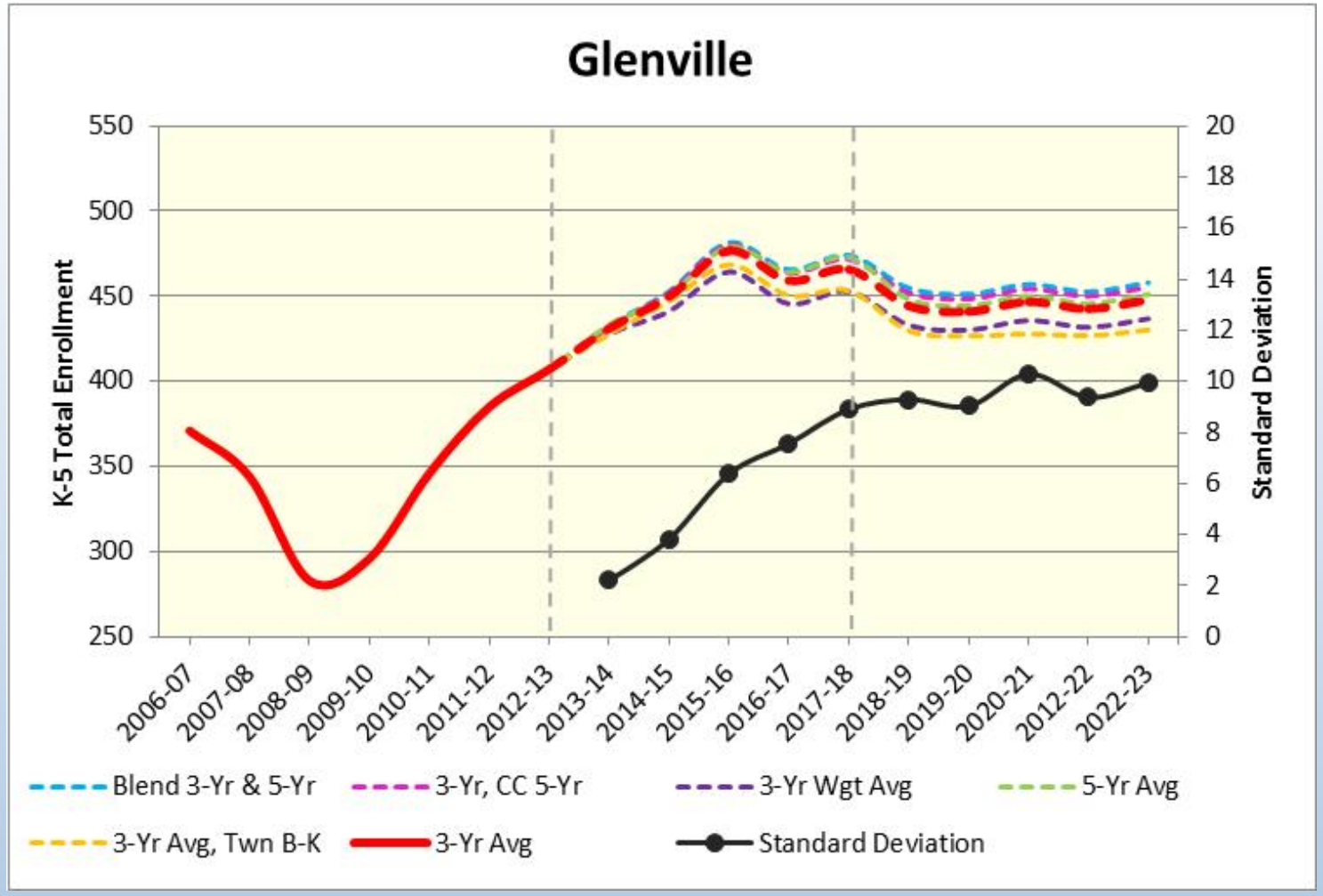
2009 – 65

2010 – 74

2011 - 74

MILONE & MACBROOM®

Glenville


Glenville
K-5 Total Enrollment
Standard Deviation
550
500
450
400
350
300
250
20
18
16
14
12
10
8
6
4
2
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

ISD

The International School at Dundee

School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		57	60	58	61	42	40	**318**
2002-03	1997	797		37	56	54	62	58	41	**308**
2003-04	1998	780		39	56	60	55	63	58	**331**
2004-05	1999	781		55	56	55	62	58	59	**345**
2005-06	2000	704		57	58	55	58	64	57	**349**
2006-07	2001	758	**37**	56	63	57	58	62	64	**360**
2007-08	2002	750	**35**	61	59	64	62	64	62	**372**
2008-09	2003	715	**36**	62	58	61	69	62	63	**375**
2009-10	2004	738	**36**	59	58	61	63	70	60	**371**
2010-11	2005	668	**29**	53	62	59	63	67	68	**372**
2011-12	2006	669	**22**	**61**	**56**	**64**	**61**	**59**	**65**	**366**
2012-13	2007	604	**34**	**61**	**62**	**58**	**66**	**64**	**58**	**369**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0693	#DIV/0!	0.9825	0.9000	1.0690	0.9508	0.9762
2003-04	0.0464	#DIV/0!	1.5135	1.0714	1.0185	1.0161	1.0000
2004-05	0.0500	#DIV/0!	1.4359	0.9821	1.0333	1.0545	0.9365
2005-06	0.0704	#DIV/0!	1.0545	0.9821	1.0545	1.0323	0.9828
2006-07	0.0810	#DIV/0!	1.1053	0.9828	1.0545	1.0690	1.0000
2007-08	0.0739	1.5135	1.0536	1.0159	1.0877	1.1034	1.0000
2008-09	0.0813	1.7429	0.9508	1.0339	1.0781	1.0000	0.9844
2009-10	0.0867	1.7222	0.9355	1.0517	1.0328	1.0145	0.9677
2010-11	0.0799	1.6389	1.0508	1.0172	1.0328	1.0635	0.9714
2011-12	0.0793	1.8276	1.0566	1.0323	1.0339	0.9365	0.9701
2012-13	0.0912	1.7941	1.0164	1.0357	1.0313	1.0492	0.9831
Long-Term Average	**0.0736**	**1.7065**	**1.1050**	**1.0096**	**1.0479**	**1.0263**	**0.9793**
3-YR Average	**0.0835**	**1.7535**	**1.0413**	**1.0284**	**1.0326**	**1.0164**	**0.9749**
5-YR Average	**0.0837**	**1.7451**	**1.0020**	**1.0342**	**1.0418**	**1.0127**	**0.9753**
3-Yr Weighted	**0.0854**	**1.7794**	**1.0355**	**1.0315**	**1.0324**	**1.0140**	**0.9768**

Known District Births

2008 – 28

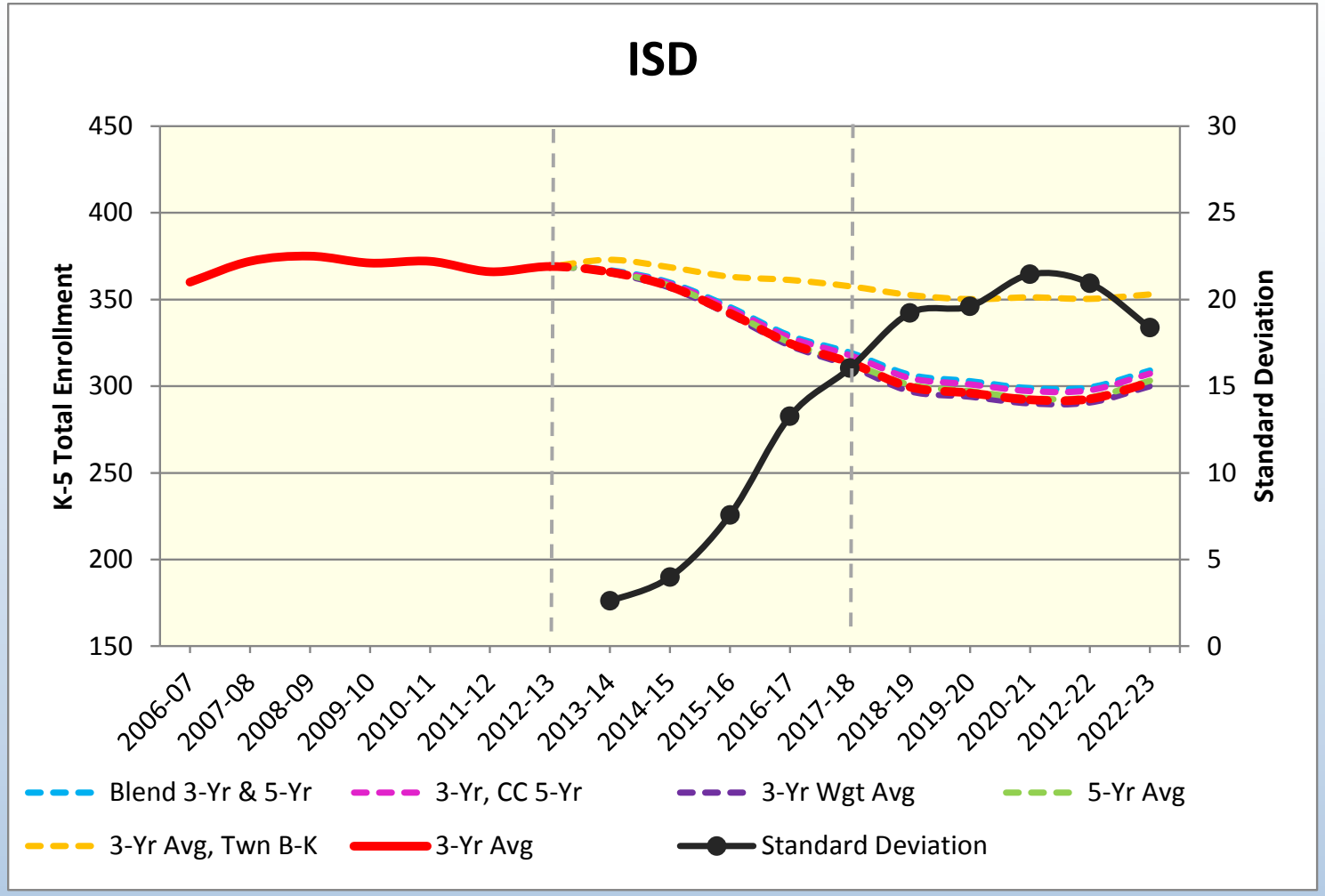
2009 – 28

2010 – 26

2011 - 21

MILONE & MACBROOM®

ISD


ISD
K-5 Total Enrollment
Standard Deviation
450
400
350
300
250
200
150
30
25
20
15
10
5
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

Riverside

Riverside										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		89	75	79	72	86	56	**457**
2002-03	1997	797		78	78	76	68	68	82	**450**
2003-04	1998	780		100	73	77	74	65	71	**460**
2004-05	1999	781		85	101	70	81	68	66	**471**
2005-06	2000	704		81	83	104	71	80	60	**479**
2006-07	2001	758	73	82	81	82	98	68	76	**487**
2007-08	2002	750	59	87	91	81	81	95	64	**499**
2008-09	2003	715	58	83	89	96	78	84	89	**519**
2009-10	2004	738	64	82	86	84	97	77	76	**502**
2010-11	2005	668	50	86	83	89	85	96	73	**512**
2011-12	2006	669	56	75	93	91	86	84	91	**520**
2012-13	2007	604	56	64	72	90	82	87	87	**482**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.1081	#DIV/0!	0.8764	1.0133	0.8608	0.9444	0.9535
2003-04	0.0979	#DIV/0!	0.9359	0.9872	0.9737	0.9559	1.0441
2004-05	0.1282	#DIV/0!	1.0100	0.9589	1.0519	0.9189	1.0154
2005-06	0.1088	#DIV/0!	0.9765	1.0297	1.0143	0.9877	0.8824
2006-07	0.1151	1.1233	1.0000	0.9880	0.9423	0.9577	0.9500
2007-08	0.1082	1.4746	1.1098	1.0000	0.9878	0.9694	0.9412
2008-09	0.1160	1.4310	1.0230	1.0549	0.9630	1.0370	0.9368
2009-10	0.1161	1.2813	1.0361	0.9438	1.0104	0.9872	0.9048
2010-11	0.1111	1.7200	1.0122	1.0349	1.0119	0.9897	0.9481
2011-12	0.1287	1.3393	1.0814	1.0964	0.9663	0.9882	0.9479
2012-13	0.1121	1.1429	0.9600	0.9677	0.9011	1.0116	1.0357
Long-Term Average	**0.1137**	**1.3589**	**1.0019**	**1.0068**	**0.9712**	**0.9771**	**0.9600**
3-YR Average	**0.1173**	**1.4007**	**1.0179**	**1.0330**	**0.9598**	**0.9965**	**0.9772**
5-YR Average	**0.1168**	**1.3829**	**1.0225**	**1.0196**	**0.9705**	**1.0028**	**0.9547**
3-Yr Weighted	**0.1175**	**1.3045**	**1.0092**	**1.0218**	**0.9413**	**1.0002**	**0.9918**

Known District Births

2008 – 44

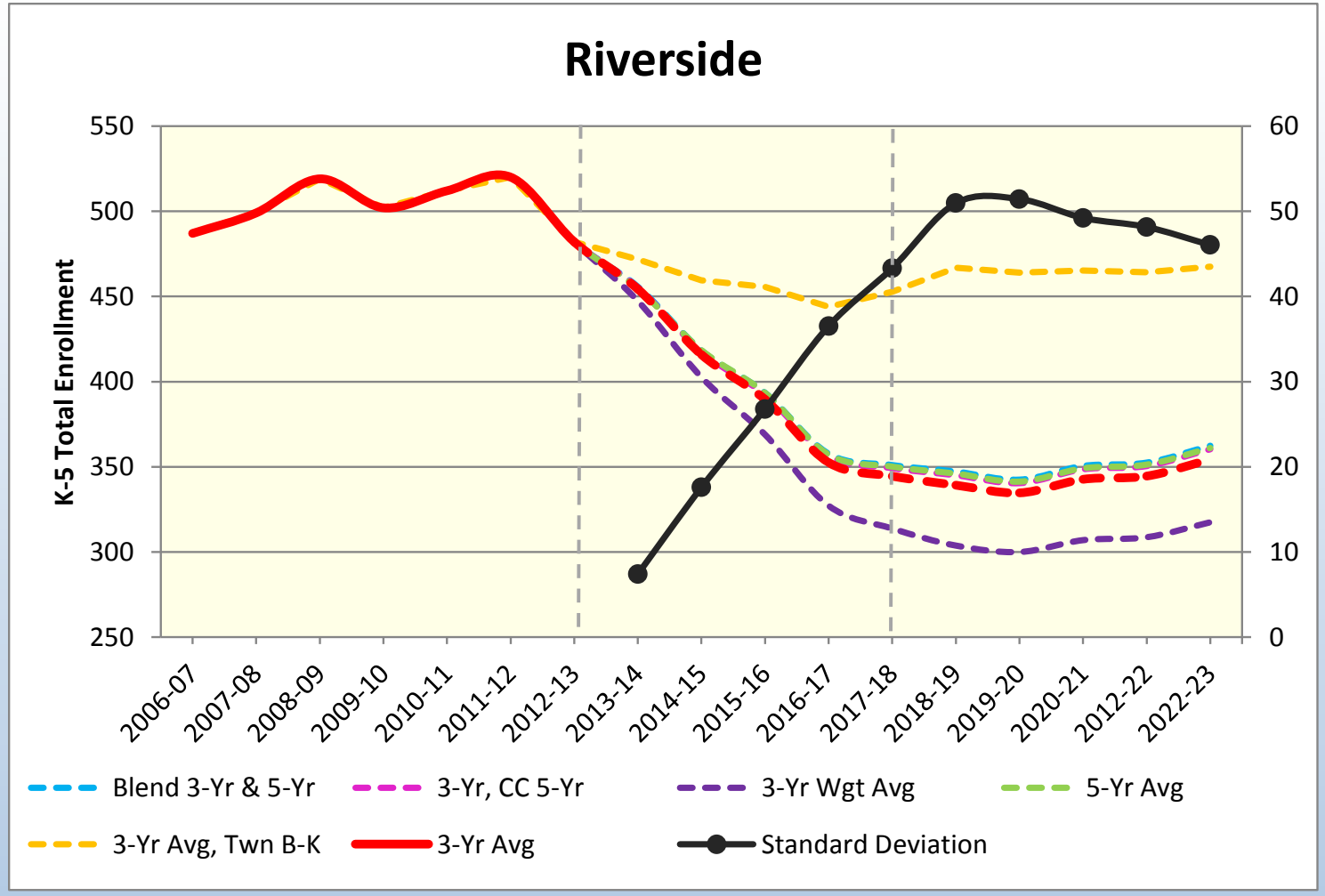
2009 – 35

2010 – 40

2011 - 34

MILONE & MACBROOM®

Riverside


Riverside
K-5 Total Enrollment
550
500
450
400
350
300
250
60
50
40
30
20
10
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

Curtiss

Julian Curtiss

School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		53	67	52	55	62	71	360
2002-03	1997	797		61	55	57	52	51	56	332
2003-04	1998	780		64	65	54	62	56	45	346
2004-05	1999	781		61	55	56	61	66	52	351
2005-06	2000	704		55	59	55	58	65	65	357
2006-07	2001	758	97	58	58	54	62	55	70	357
2007-08	2002	750	107	52	62	58	56	54	45	327
2008-09	2003	715	78	51	53	57	66	57	54	338
2009-10	2004	738	92	61	49	54	57	68	54	343
2010-11	2005	668	77	54	64	50	56	54	74	352
2011-12	2006	669	99	65	55	63	58	51	51	343
2012-13	2007	604	70	54	63	56	66	55	50	344

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0644	#DIV/0!	1.0377	0.8507	1.0000	0.9273	0.9032
2003-04	0.0765	#DIV/0!	1.0656	0.9818	1.0877	1.0769	0.8824
2004-05	0.0821	#DIV/0!	0.8594	0.8615	1.1296	1.0645	0.9286
2005-06	0.0781	#DIV/0!	0.9672	1.0000	1.0357	1.0656	0.9848
2006-07	0.0781	0.5979	1.0545	0.9153	1.1273	0.9483	1.0769
2007-08	0.0765	0.4860	1.0690	1.0000	1.0370	0.8710	0.8182
2008-09	0.0693	0.6538	1.0192	0.9194	1.1379	1.0179	1.0000
2009-10	0.0713	0.6630	0.9608	1.0189	1.0000	1.0303	0.9474
2010-11	0.0827	0.7013	1.0492	1.0204	1.0370	0.9474	1.0882
2011-12	0.0808	0.6566	1.0185	0.9844	1.1600	0.9107	0.9444
2012-13	0.0972	0.7714	0.9692	1.0182	1.0476	0.9483	0.9804
Long-Term Average	**0.0779**	**0.6472**	**1.0064**	**0.9610**	**1.0727**	**0.9825**	**0.9595**
3-YR Average	**0.0869**	**0.7098**	**1.0123**	**1.0077**	**1.0816**	**0.9355**	**1.0044**
5-YR Average	**0.0803**	**0.6892**	**1.0034**	**0.9922**	**1.0765**	**0.9709**	**0.9921**
3-Yr Weighted	**0.0893**	**0.7215**	**0.9990**	**1.0073**	**1.0833**	**0.9356**	**0.9864**

Known District Births

2008 – 84

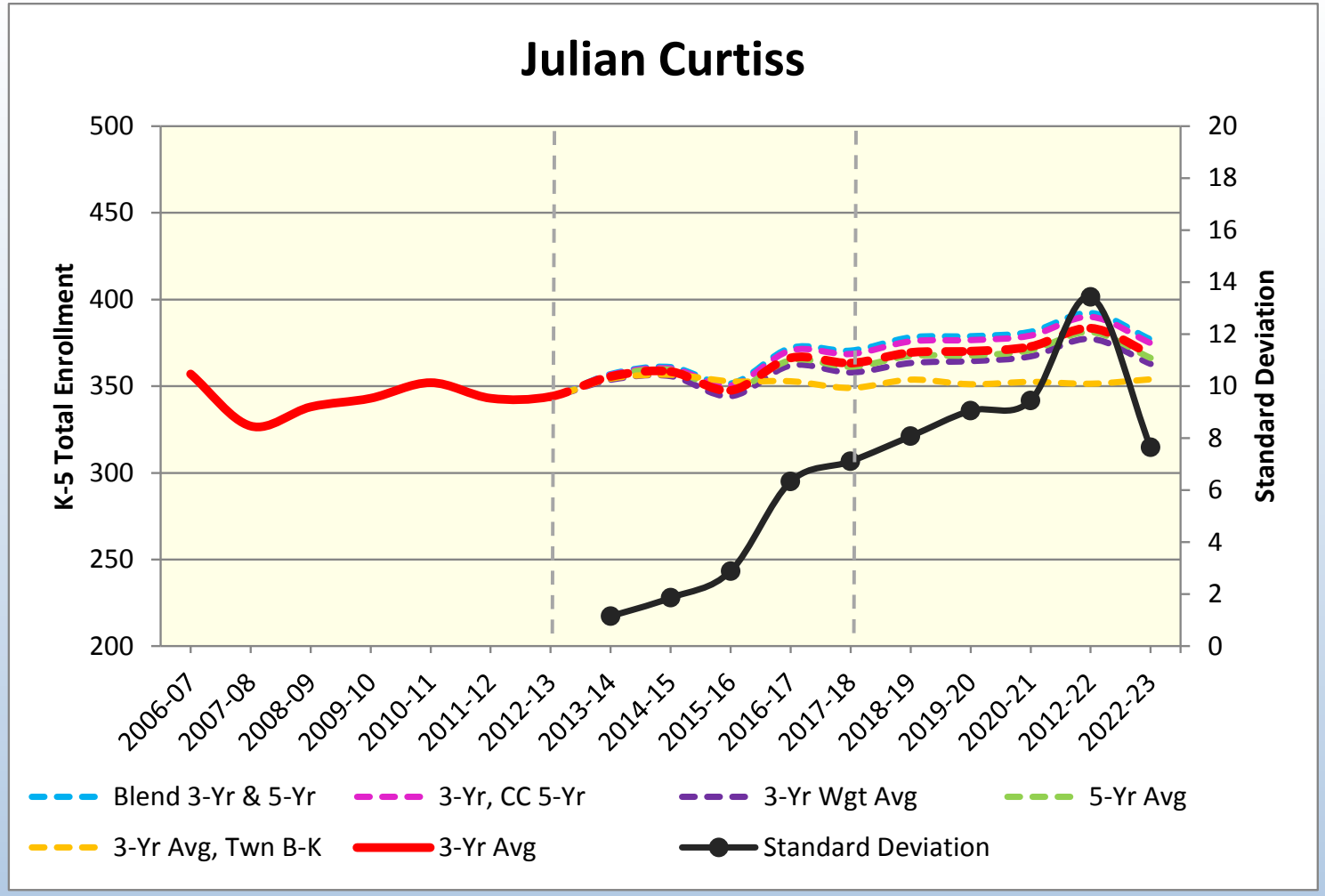
2009 – 78

2010 – 71

2011 - 100

MILONE & MACBROOM®

Curtiss


Julian Curtiss
K-5 Total Enrollment
Standard Deviation
500
450
400
350
300
250
200
20
18
16
14
12
10
8
6
4
2
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

Cos Cob

Cos Cob

School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		79	71	82	70	84	86	**472**
2002-03	1997	797		82	65	67	79	67	81	**441**
2003-04	1998	780		71	77	65	70	72	72	**427**
2004-05	1999	781		60	68	79	67	67	75	**416**
2005-06	2000	704		60	61	63	74	67	68	**393**
2006-07	2001	758	65	68	59	62	63	74	67	**393**
2007-08	2002	750	77	61	70	62	65	60	73	**391**
2008-09	2003	715	101	74	61	72	66	66	63	**402**
2009-10	2004	738	63	54	78	58	72	73	69	**404**
2010-11	2005	668	63	70	59	77	59	67	72	**404**
2011-12	2006	669	62	62	68	57	74	61	66	**388**
2012-13	2007	604	63	94	62	81	62	68	67	**434**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0960	#DIV/0!	0.8228	0.9437	0.9634	0.9571	0.9643
2003-04	0.1029	#DIV/0!	0.9390	1.0000	1.0448	0.9114	1.0746
2004-05	0.0910	#DIV/0!	0.9577	1.0260	1.0308	0.9571	1.0417
2005-06	0.0768	#DIV/0!	1.0167	0.9265	0.9367	1.0000	1.0149
2006-07	0.0852	1.0462	0.9833	1.0164	1.0000	1.0000	1.0000
2007-08	0.0897	0.7922	1.0294	1.0508	1.0484	0.9524	0.9865
2008-09	0.0813	0.7327	1.0000	1.0286	1.0645	1.0154	1.0500
2009-10	0.1035	0.8571	1.0541	0.9508	1.0000	1.1061	1.0455
2010-11	0.0732	1.1111	1.0926	0.9872	1.0172	0.9306	0.9863
2011-12	0.1048	1.0000	0.9714	0.9661	0.9610	1.0339	0.9851
2012-13	0.0927	1.4921	1.0000	1.1912	1.0877	0.9189	1.0984
Long-Term Average	**0.0906**	**1.0045**	**0.9879**	**1.0079**	**1.0141**	**0.9803**	**1.0225**
3-YR Average	**0.0902**	**1.2011**	**1.0213**	**1.0482**	**1.0220**	**0.9611**	**1.0232**
5-YR Average	**0.0911**	**1.0386**	**1.0236**	**1.0248**	**1.0261**	**1.0010**	**1.0330**
3-Yr Weighted	**0.0935**	**1.2646**	**1.0059**	**1.0822**	**1.0337**	**0.9592**	**1.0419**

Known District Births

2008 – 76

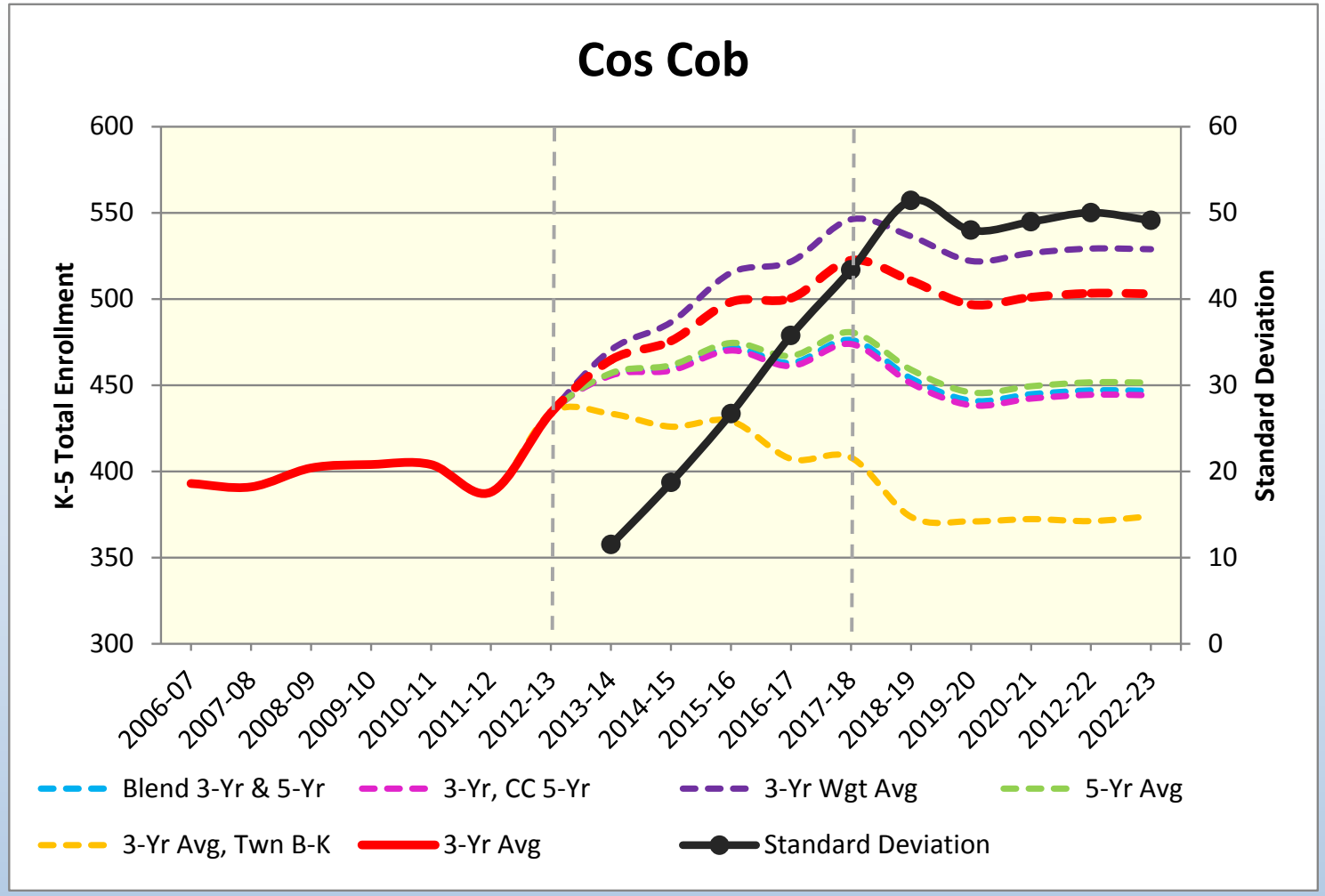
2009 – 62

2010 – 64

2011 - 64

MILONE & MACBROOM®

Cos Cob


Cos Cob
K-5 Total Enrollment
Standard Deviation
600
550
500
450
400
350
300
60
50
40
30
20
10
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

Hamilton Ave

Hamilton Av

School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		55	40	35	33	50	58	**271**
2002-03	1997	797		45	55	43	42	39	49	**273**
2003-04	1998	780		58	41	48	47	43	42	**279**
2004-05	1999	781		43	52	32	37	45	46	**255**
2005-06	2000	704		41	44	51	37	41	46	**260**
2006-07	2001	758	58	52	44	49	49	44	45	**283**
2007-08	2002	750	56	67	54	46	51	53	47	**318**
2008-09	2003	715	45	60	66	59	42	48	51	**326**
2009-10	2004	738	66	79	57	61	59	44	53	**353**
2010-11	2005	668	53	65	71	59	60	58	49	**362**
2011-12	2006	669	55	62	59	71	53	57	60	**362**
2012-13	2007	604	57	55	64	56	70	54	54	**353**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0668	#DIV/0!	1.0000	1.0750	1.2000	1.1818	0.9800
2003-04	0.0565	#DIV/0!	0.9111	0.8727	1.0930	1.0238	1.0769
2004-05	0.0744	#DIV/0!	0.8966	0.7805	0.7708	0.9574	1.0698
2005-06	0.0551	#DIV/0!	1.0233	0.9808	1.1563	1.1081	1.0222
2006-07	0.0582	#DIV/0!	1.0732	1.1136	0.9608	1.1892	1.0976
2007-08	0.0686	0.8966	1.0385	1.0455	1.0408	1.0816	1.0682
2008-09	0.0893	1.1964	0.9851	1.0926	0.9130	0.9412	0.9623
2009-10	0.0839	1.3333	0.9500	0.9242	1.0000	1.0476	1.1042
2010-11	0.1070	1.1970	0.8987	1.0351	0.9836	0.9831	1.1136
2011-12	0.0973	1.2264	0.9077	1.0000	0.8983	0.9500	1.0345
2012-13	0.0927	0.9649	1.0323	0.9492	0.9859	1.0189	0.9474
Long-Term Average	**0.0773**	**1.1358**	**0.9742**	**0.9881**	**1.0002**	**1.0439**	**1.0433**
3-YR Average	**0.0990**	**1.1294**	**0.9462**	**0.9947**	**0.9559**	**0.9840**	**1.0318**
5-YR Average	**0.0941**	**1.1836**	**0.9548**	**1.0002**	**0.9562**	**0.9881**	**1.0324**
3-Yr Weighted	**0.0966**	**1.0908**	**0.9685**	**0.9804**	**0.9563**	**0.9899**	**1.0041**

Known District Births

2008 – 45

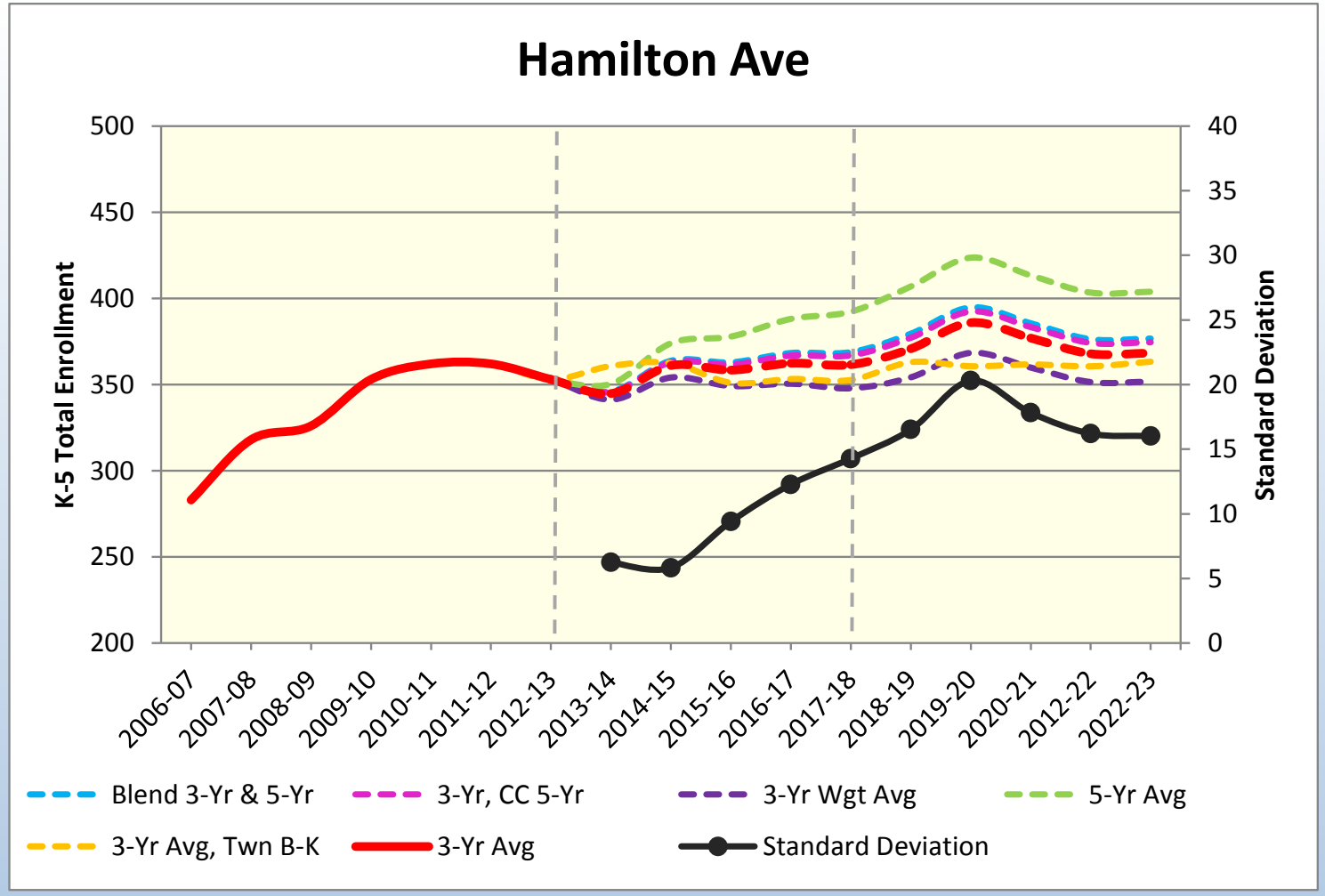
2009 – 67

2010 – 66

2011 - 55

MILONE & MACBROOM®

Hamilton Ave



New Lebanon

New Lebanon										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		45	40	32	49	50	43	**259**
2002-03	1997	797		41	47	36	31	48	53	**256**
2003-04	1998	780		44	35	48	35	36	50	**248**
2004-05	1999	781		36	46	36	50	39	30	**237**
2005-06	2000	704		35	36	45	36	44	38	**234**
2006-07	2001	758	61	40	32	31	45	32	46	**226**
2007-08	2002	750	66	43	37	29	27	46	31	**213**
2008-09	2003	715	52	35	47	31	26	28	44	**211**
2009-10	2004	738	65	35	38	43	35	26	27	**204**
2010-11	2005	668	59	39	36	39	45	43	27	**229**
2011-12	2006	669	59	42	43	35	36	48	42	**246**
2012-13	2007	604	59	43	49	47	38	38	46	**261**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0547	#DIV/0!	1.0444	0.9000	0.9688	0.9796	1.0600
2003-04	0.0514	#DIV/0!	0.8537	1.0213	0.9722	1.1613	1.0417
2004-05	0.0564	#DIV/0!	1.0455	1.0286	1.0417	1.1143	0.8333
2005-06	0.0461	#DIV/0!	1.0000	0.9783	1.0000	0.8800	0.9744
2006-07	0.0497	0.6557	0.9143	0.8611	1.0000	0.8889	1.0455
2007-08	0.0528	0.6515	0.9250	0.9063	0.8710	1.0222	0.9688
2008-09	0.0573	0.6731	1.0930	0.8378	0.8966	1.0370	0.9565
2009-10	0.0490	0.5385	1.0857	0.9149	1.1290	1.0000	0.9643
2010-11	0.0474	0.6610	1.0286	1.0263	1.0465	1.2286	1.0385
2011-12	0.0584	0.7119	1.1026	0.9722	0.9231	1.0667	0.9767
2012-13	0.0628	0.7288	1.1667	1.0930	1.0857	1.0556	0.9583
Long-Term Average	**0.0533**	**0.6601**	**1.0236**	**0.9582**	**0.9940**	**1.0395**	**0.9834**
3-YR Average	**0.0902**	**0.7006**	**1.0993**	**1.0305**	**1.0184**	**1.1169**	**0.9912**
5-YR Average	**0.0550**	**0.6626**	**1.0953**	**0.9689**	**1.0162**	**1.0776**	**0.9789**
3-Yr Weighted	**0.0588**	**0.7119**	**1.1223**	**1.0416**	**1.0250**	**1.0881**	**0.9778**

Known District Births

2008 – 67

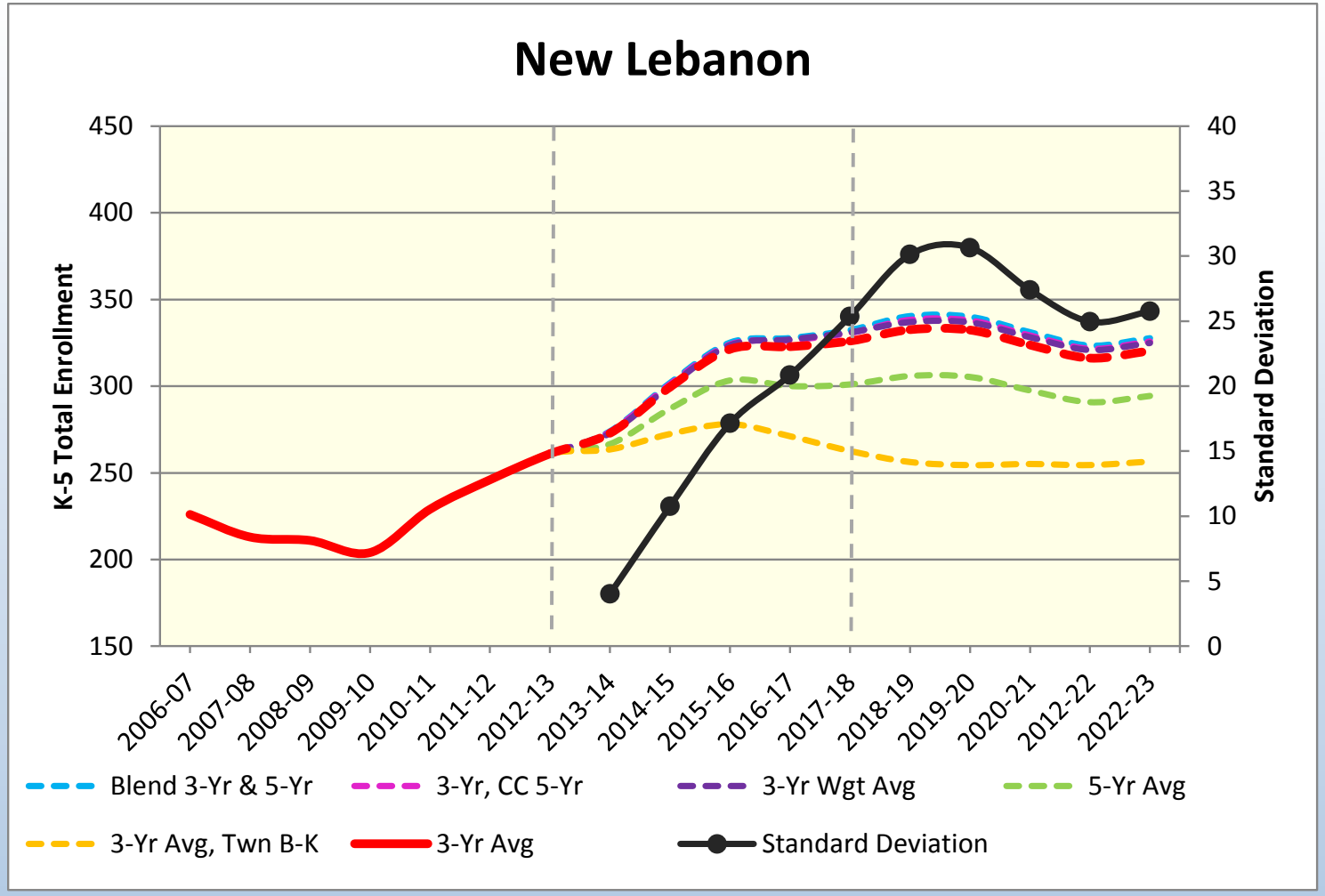
2009 – 74

2010 – 73

2011 - 58

MILONE & MACBROOM®

New Lebanon


New Lebanon
K-5 Total Enrollment
Standard Deviation
450
400
350
300
250
200
150
40
35
30
25
20
15
10
5
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

North Mianus

North Mianus										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		65	71	79	70	68	73	**426**
2002-03	1997	797		87	68	74	77	66	64	**436**
2003-04	1998	780		92	74	73	71	77	62	**449**
2004-05	1999	781		63	87	72	72	69	73	**436**
2005-06	2000	704		71	67	77	74	73	66	**428**
2006-07	2001	758	65	73	74	70	78	71	72	**438**
2007-08	2002	750	61	73	80	78	72	84	67	**454**
2008-09	2003	715	67	70	76	75	80	70	86	**457**
2009-10	2004	738	58	80	70	77	78	81	68	**454**
2010-11	2005	668	63	67	84	65	76	79	81	**452**
2011-12	2006	669	55	71	77	79	73	81	80	**461**
2012-13	2007	604	44	84	71	76	81	77	76	**465**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0790	#DIV/0!	1.0462	1.0423	0.9747	0.9429	0.9412
2003-04	0.1092	#DIV/0!	0.8506	1.0735	0.9595	1.0000	0.9394
2004-05	0.1179	#DIV/0!	0.9457	0.9730	0.9863	0.9718	0.9481
2005-06	0.0807	#DIV/0!	1.0635	0.8851	1.0278	1.0139	0.9565
2006-07	0.1009	1.1231	1.0423	1.0448	1.0130	0.9595	0.9863
2007-08	0.0963	1.1967	1.0959	1.0541	1.0286	1.0769	0.9437
2008-09	0.0973	1.0448	1.0411	0.9375	1.0256	0.9722	1.0238
2009-10	0.0979	1.3793	1.0000	1.0132	1.0400	1.0125	0.9714
2010-11	0.1084	1.0635	1.0500	0.9286	0.9870	1.0128	1.0000
2011-12	0.1003	1.2909	1.1493	0.9405	1.1231	1.0658	1.0127
2012-13	0.1061	1.9091	1.0000	0.9870	1.0253	1.0548	0.9383
Long-Term Average	**0.0995**	**1.2868**	**1.0259**	**0.9890**	**1.0173**	**1.0076**	**0.9692**
3-YR Average	**0.1049**	**1.4212**	**1.0664**	**0.9520**	**1.0451**	**1.0445**	**0.9836**
5-YR Average	**0.1020**	**1.3375**	**1.0481**	**0.9613**	**1.0402**	**1.0236**	**0.9892**
3-Yr Weighted	**0.1046**	**1.5621**	**1.0581**	**0.9618**	**1.0515**	**1.0515**	**0.9734**

Known District Births

2008 – 58

2009 – 58

2010 – 54

2011 - 45

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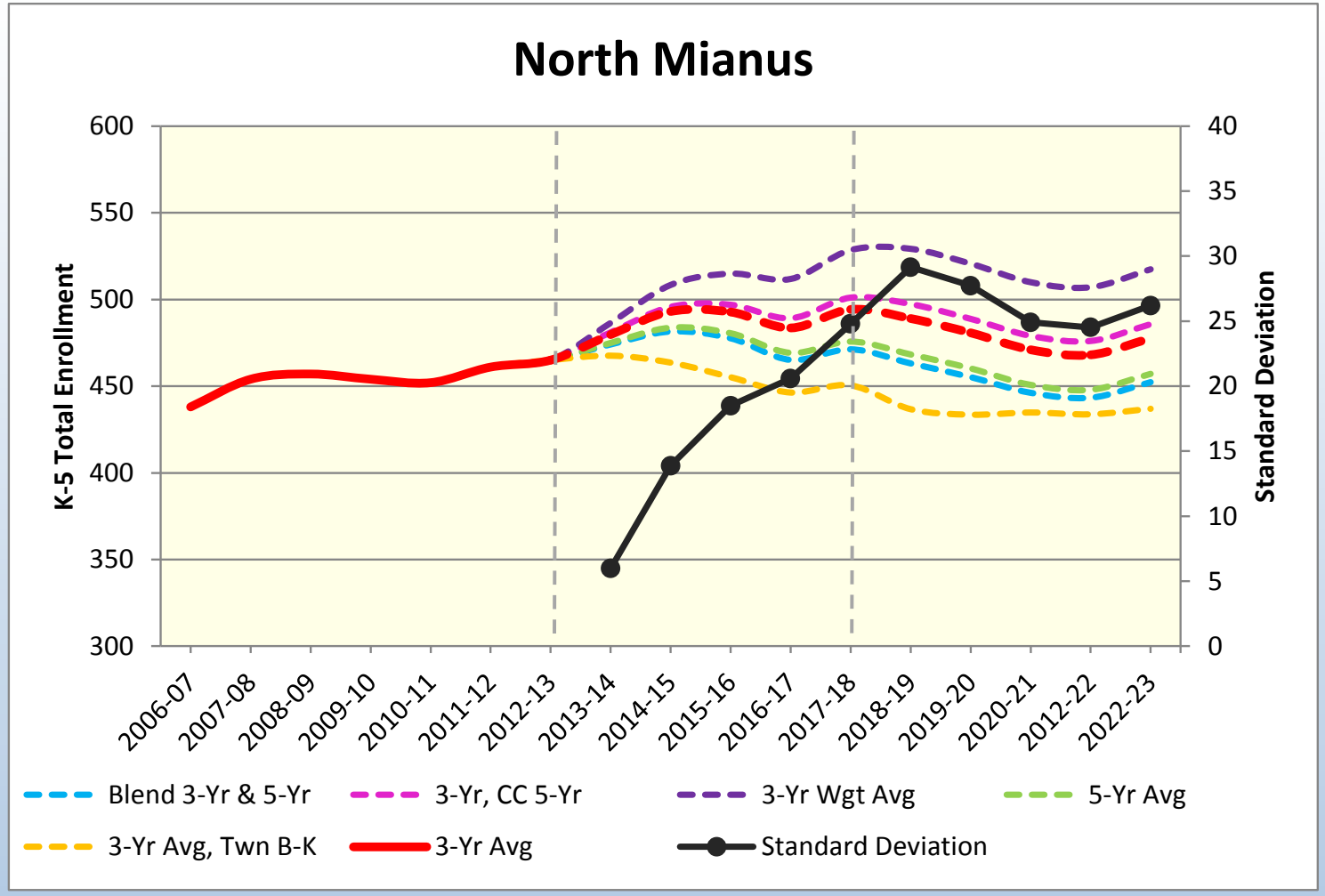
North Mianus



North Street

North Street										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		72	90	84	91	81	70	488
2002-03	1997	797		94	76	95	83	91	83	522
2003-04	1998	780		81	91	70	88	77	83	490
2004-05	1999	781		73	73	95	67	91	75	474
2005-06	2000	704		71	78	78	94	68	80	469
2006-07	2001	758	92	82	70	76	76	95	62	461
2007-08	2002	750	110	79	88	71	79	76	92	485
2008-09	2003	715	77	79	77	86	77	80	68	467
2009-10	2004	738	95	72	83	73	80	74	78	460
2010-11	2005	668	71	73	66	76	67	73	67	422
2011-12	2006	669	75	72	77	63	70	70	71	423
2012-13	2007	604	57	50	67	73	64	66	67	387

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0875	#DIV/0!	1.0556	1.0556	0.9881	1.0000	1.0247
2003-04	0.1179	#DIV/0!	0.9681	0.9211	0.9263	0.9277	0.9121
2004-05	0.1038	#DIV/0!	0.9012	1.0440	0.9571	1.0341	0.9740
2005-06	0.0935	#DIV/0!	1.0685	1.0685	0.9895	1.0149	0.8791
2006-07	0.1009	0.8913	0.9859	0.9744	0.9744	1.0106	0.9118
2007-08	0.1082	0.7182	1.0732	1.0143	1.0395	1.0000	0.9684
2008-09	0.1053	1.0260	0.9747	0.9773	1.0845	1.0127	0.8947
2009-10	0.1105	0.7579	1.0506	0.9481	0.9302	0.9610	0.9750
2010-11	0.0976	1.0282	0.9167	0.9157	0.9178	0.9125	0.9054
2011-12	0.1093	0.9600	1.0548	0.9545	0.9211	1.0448	0.9726
2012-13	0.1076	0.8772	0.9306	0.9481	1.0159	0.9429	0.9571
Long-Term Average	**0.1038**	**0.8941**	**0.9982**	**0.9838**	**0.9768**	**0.9874**	**0.9432**
3-YR Average	**0.1048**	**0.9551**	**0.9673**	**0.9394**	**0.9516**	**0.9667**	**0.9451**
5-YR Average	**0.1061**	**0.9298**	**0.9855**	**0.9487**	**0.9739**	**0.9748**	**0.9410**
3-Yr Weighted	**0.1065**	**0.9300**	**0.9697**	**0.9448**	**0.9679**	**0.9718**	**0.9537**

Known District Births

2008 – 60

2009 – 64

2010 – 54

2011 - 76

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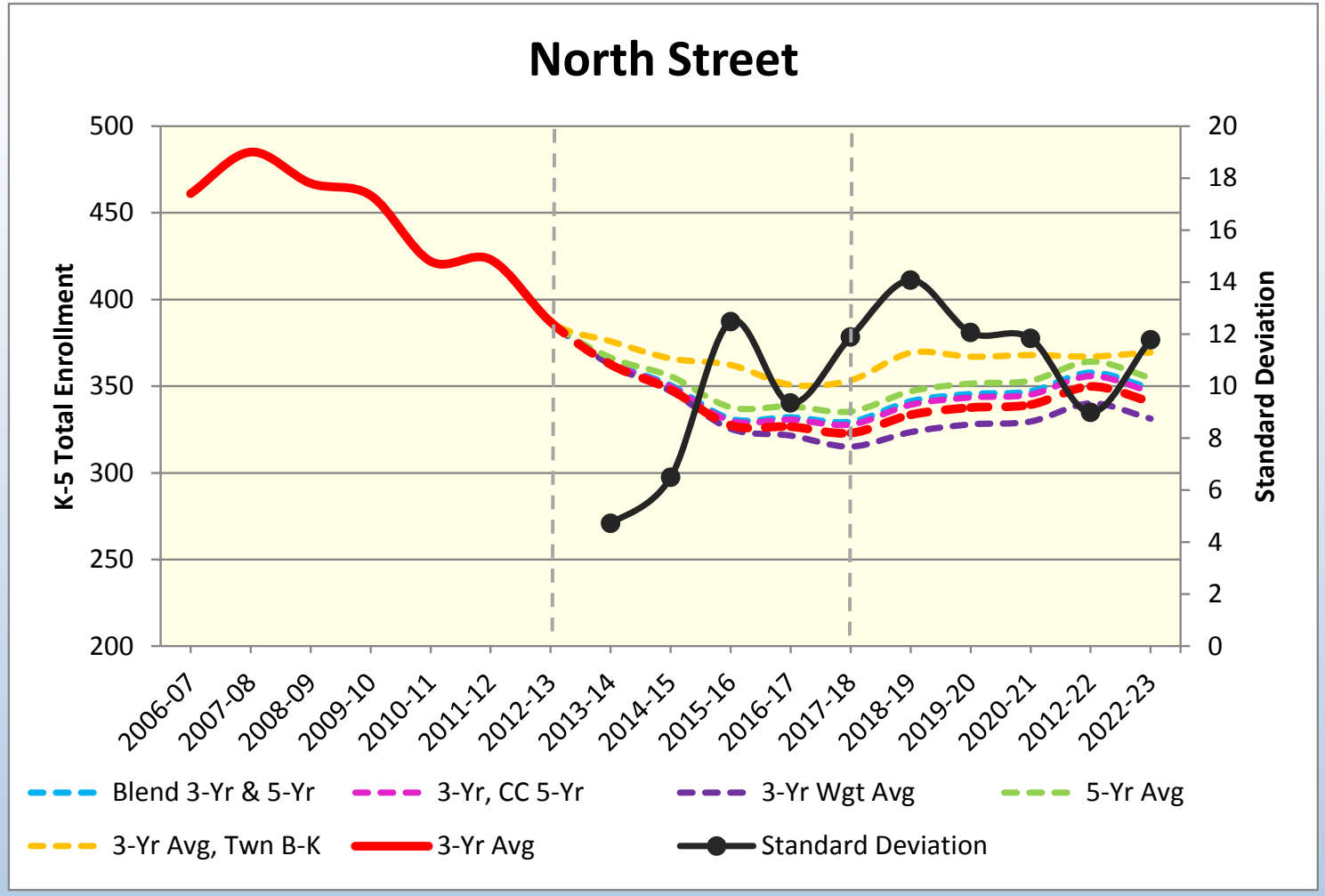
North Street



Old Greenwich

Old Greenwich										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		61	78	70	83	64	60	**416**
2002-03	1997	797		79	60	76	70	76	58	**419**
2003-04	1998	780		72	74	58	79	61	73	**417**
2004-05	1999	781		82	61	76	54	78	62	**413**
2005-06	2000	704		63	81	60	67	57	69	**397**
2006-07	2001	758	59	78	59	82	59	68	50	**396**
2007-08	2002	750	55	65	78	60	87	59	66	**415**
2008-09	2003	715	45	76	66	70	55	86	52	**405**
2009-10	2004	738	53	72	75	60	67	50	87	**411**
2010-11	2005	668	58	66	73	74	63	66	39	**381**
2011-12	2006	669	47	58	79	65	70	59	65	**396**
2012-13	2007	604	44	63	57	74	69	74	58	**395**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0741	#DIV/0!	0.9836	0.9744	1.0000	0.9157	0.9063
2003-04	0.0991	#DIV/0!	0.9367	0.9667	1.0395	0.8714	0.9605
2004-05	0.0923	#DIV/0!	0.8472	1.0270	0.9310	0.9873	1.0164
2005-06	0.1050	#DIV/0!	0.9878	0.9836	0.8816	1.0556	0.8846
2006-07	0.0895	1.3220	0.9365	1.0123	0.9833	1.0149	0.8772
2007-08	0.1029	1.1818	1.0000	1.0169	1.0610	1.0000	0.9706
2008-09	0.0867	1.6889	1.0154	0.8974	0.9167	0.9885	0.8814
2009-10	0.1063	1.3585	0.9868	0.9091	0.9571	0.9091	1.0116
2010-11	0.0976	1.1379	1.0139	0.9867	1.0500	0.9851	0.7800
2011-12	0.0988	1.2340	1.1970	0.8904	0.9459	0.9365	0.9848
2012-13	0.0867	1.4318	0.9828	0.9367	1.0615	1.0571	0.9831
Long-Term Average	**0.0945**	**1.3364**	**0.9898**	**0.9638**	**0.9843**	**0.9747**	**0.9324**
3-YR Average	**0.0944**	**1.2679**	**1.0645**	**0.9379**	**1.0192**	**0.9929**	**0.9160**
5-YR Average	**0.0952**	**1.3702**	**1.0392**	**0.9241**	**0.9863**	**0.9753**	**0.9282**
3-Yr Weighted	**0.0925**	**1.3169**	**1.0594**	**0.9296**	**1.0211**	**1.0049**	**0.9498**

Known District Births

2008 – 53

2009 – 30

2010 – 53

2011 - 36

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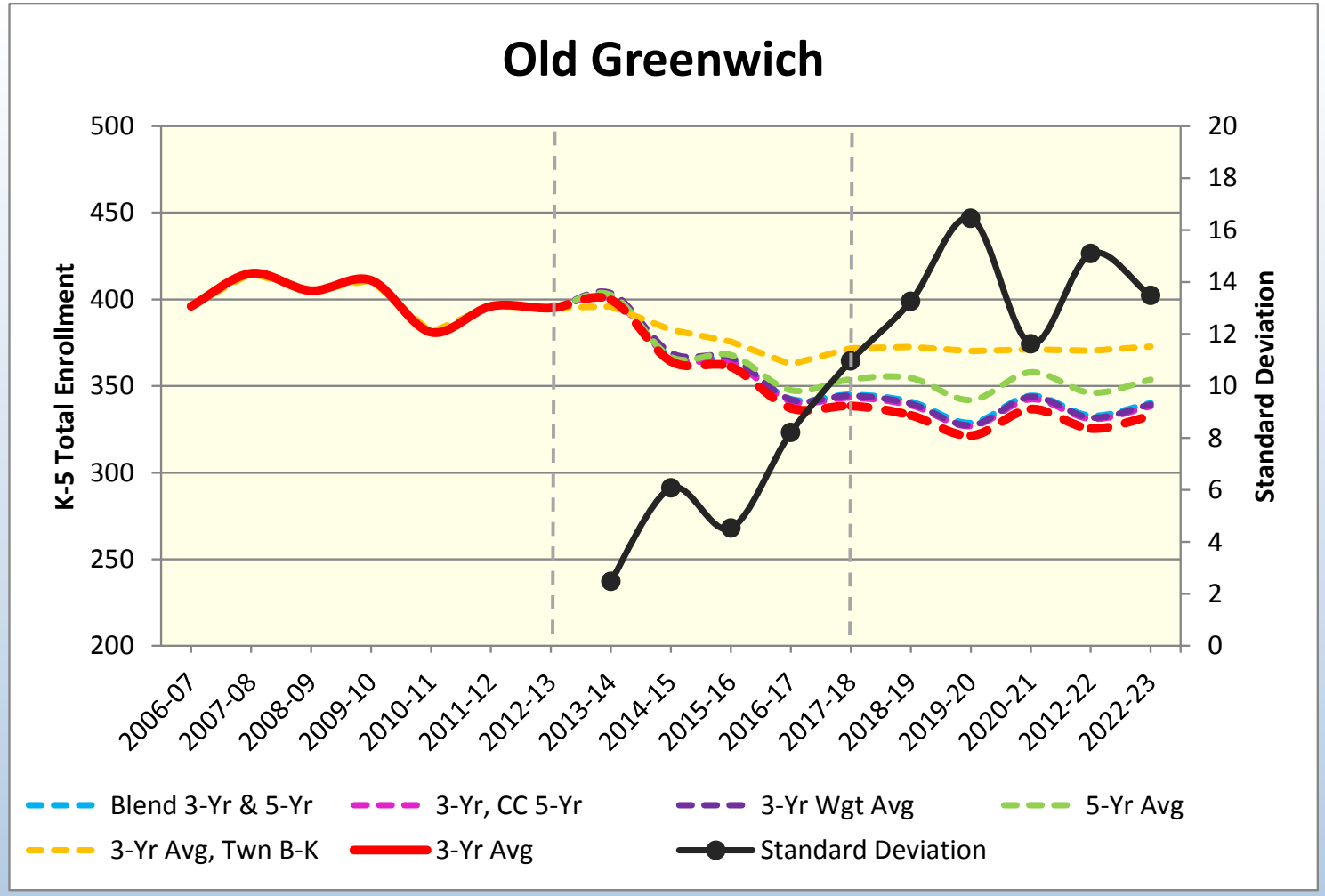
Old Greenwich



Parkway

Parkway										
School Year	Birth Year	Town Births	School Births	K	1	2	3	4	5	TOTAL K-5
2001-02	1996	823		78	78	71	82	83	67	**459**
2002-03	1997	797		67	78	83	77	82	85	**472**
2003-04	1998	780		59	65	81	82	78	73	**438**
2004-05	1999	781		62	55	61	79	86	73	**416**
2005-06	2000	704		61	65	52	53	71	82	**384**
2006-07	2001	758	**68**	50	65	57	52	56	57	**337**
2007-08	2002	750	**56**	57	51	62	61	48	52	**331**
2008-09	2003	715	**63**	48	55	53	61	69	42	**328**
2009-10	2004	738	**66**	45	46	57	52	56	63	**319**
2010-11	2005	668	**61**	41	43	44	60	48	56	**292**
2011-12	2006	669	**54**	**28**	**40**	**40**	**43**	**58**	**47**	**256**
2012-13	2007	604	**42**	**42**	**23**	**43**	**40**	**41**	**50**	**239**

Year	Town Birth-K	School Birth-K	K-1	1-2	2-3	3-4	4-5
2002-03	0.0948	#DIV/0!	1.0000	1.0641	1.0845	1.0000	1.0241
2003-04	0.0841	#DIV/0!	0.9701	1.0385	0.9880	1.0130	0.8902
2004-05	0.0756	#DIV/0!	0.9322	0.9385	0.9753	1.0488	0.9359
2005-06	0.0794	#DIV/0!	1.0484	0.9455	0.8689	0.8987	0.9535
2006-07	0.0866	#DIV/0!	1.0656	0.8769	1.0000	1.0566	0.8028
2007-08	0.0660	0.7353	1.0200	0.9538	1.0702	0.9231	0.9286
2008-09	0.0760	1.0179	0.9649	1.0392	0.9839	1.1311	0.8750
2009-10	0.0671	0.7619	0.9583	1.0364	0.9811	0.9180	0.9130
2010-11	0.0610	0.6818	0.9556	0.9565	1.0526	0.9231	1.0000
2011-12	0.0614	0.6721	0.9756	0.9302	0.9773	0.9667	0.9792
2012-13	0.0419	1.0000	0.8214	1.0750	1.0000	0.9535	0.8621
Long-Term Average	**0.0722**	**0.8115**	**0.9738**	**0.9868**	**0.9983**	**0.9848**	**0.9240**
3-YR Average	**0.0547**	**0.7846**	**0.9175**	**0.9873**	**1.0100**	**0.9477**	**0.9471**
5-YR Average	**0.0615**	**0.8267**	**0.9352**	**1.0075**	**0.9990**	**0.9785**	**0.9259**
3-Yr Weighted	**0.0515**	**0.8377**	**0.8952**	**1.0070**	**1.0012**	**0.9528**	**0.9241**

Known District Births

2008 – 38

2009 – 29

2010 – 38

2011 - 27

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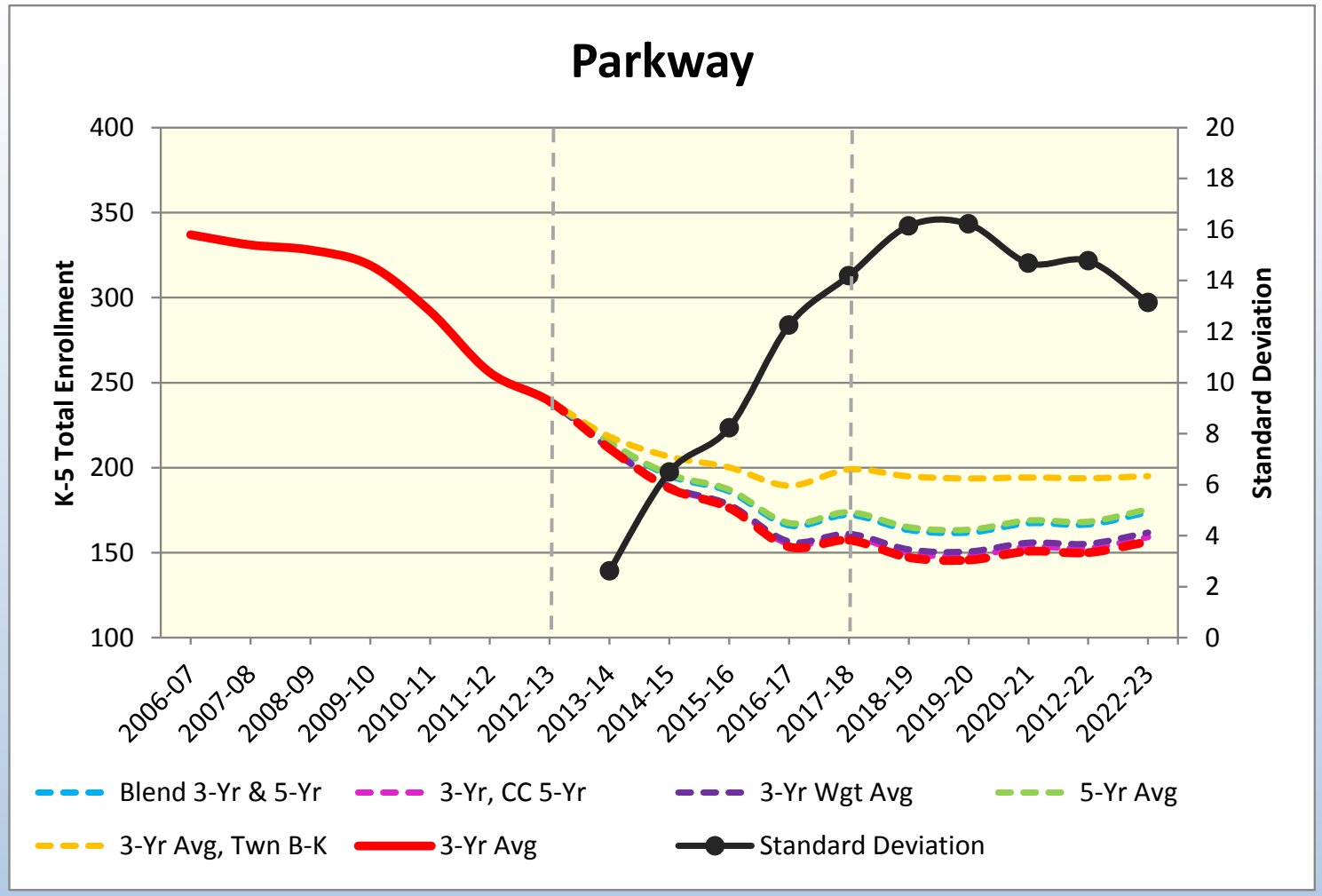
Parkway


Parkway
K-5 Total Enrollment
Standard Deviation
400
350
300
250
200
150
100
20
18
16
14
12
10
8
6
4
2
0
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2012-22
2022-23
Blend 3-Yr & 5-Yr
3-Yr, CC 5-Yr
3-Yr Wgt Avg
5-Yr Avg
3-Yr Avg, Twn B-K
3-Yr Avg
Standard Deviation

Preliminary Review of Alternative Options

June 6, 2013

Milone & MacBroom, Inc.

School Planning Work in Past Two Years:

- Stamford CT Public Schools – 10-Year Enrollment & Space Utilization Study (ongoing)
- Milford Public Schools – Long Range Plan (ongoing)
- New Milford Public Schools – Long Range Plan & Redistricting (ongoing)
- Region 15 Schools - Long Range Plan & Redistricting (adopted)
- Groton CT Public Schools – System-wide Redistricting & Racial Balance Plan (adopted)
- Bristol CT Public Schools - System-wide Redistricting (adopted & implemented)
- Manchester CT Public Schools – Consolidation & Elementary Redistricting (adopted & implemented
- Hamden CT Public Schools – "Pocket" Redistricting & Racial Balance Plan (adopted & implemented)
- Hartford CT Public Schools – Enrollment Projections through 2019-20
- Waterbury CT Public Schools – Enrollment Projections through 2018-19

Guiding Principles Review

- Provide the best possible education to every student enrolled in the Greenwich Public Schools.
- Maintain the current elementary program delivery model and average class size.
- Operate the school system as efficiently as possible within statutory mandates and guidelines.
- Minimize changes to the neighborhood attendance areas and the amount of time it takes to transport students to and from school.

Introduction to Alternatives

NOT A PROPOSAL OR PLAN

- Conceptual Review and Evaluation of Four Potential Options

Introduction to Alternatives

- Intended to Guide Discussion, and Obtain Feedback and Direction from the Board of Ed
  - Focus on Mechanism of Option and Potential for Meeting Objectives
  - Specific Plans to Be Explored Later, If Board Decides to Further Pursue An Option

Option 1: Full Redistricting

Criteria Provided by Administration:

- 95% Targeted Utilization in Each Elementary Building
- Racial Balance Within +/- 15% of District
- Minimal Number of Students Moved
- Contiguous Attendance Areas and Logical Boundaries

Option 1: Full Redistricting

- Prepared Two Different Scenarios to Gauge Potential of Mechanism
  - How Many Students Affected
  - How Difficult to Maintain Contiguous Boundaries
  - Potential Enrollment Balancing Performance

Option 1: Full Redistricting

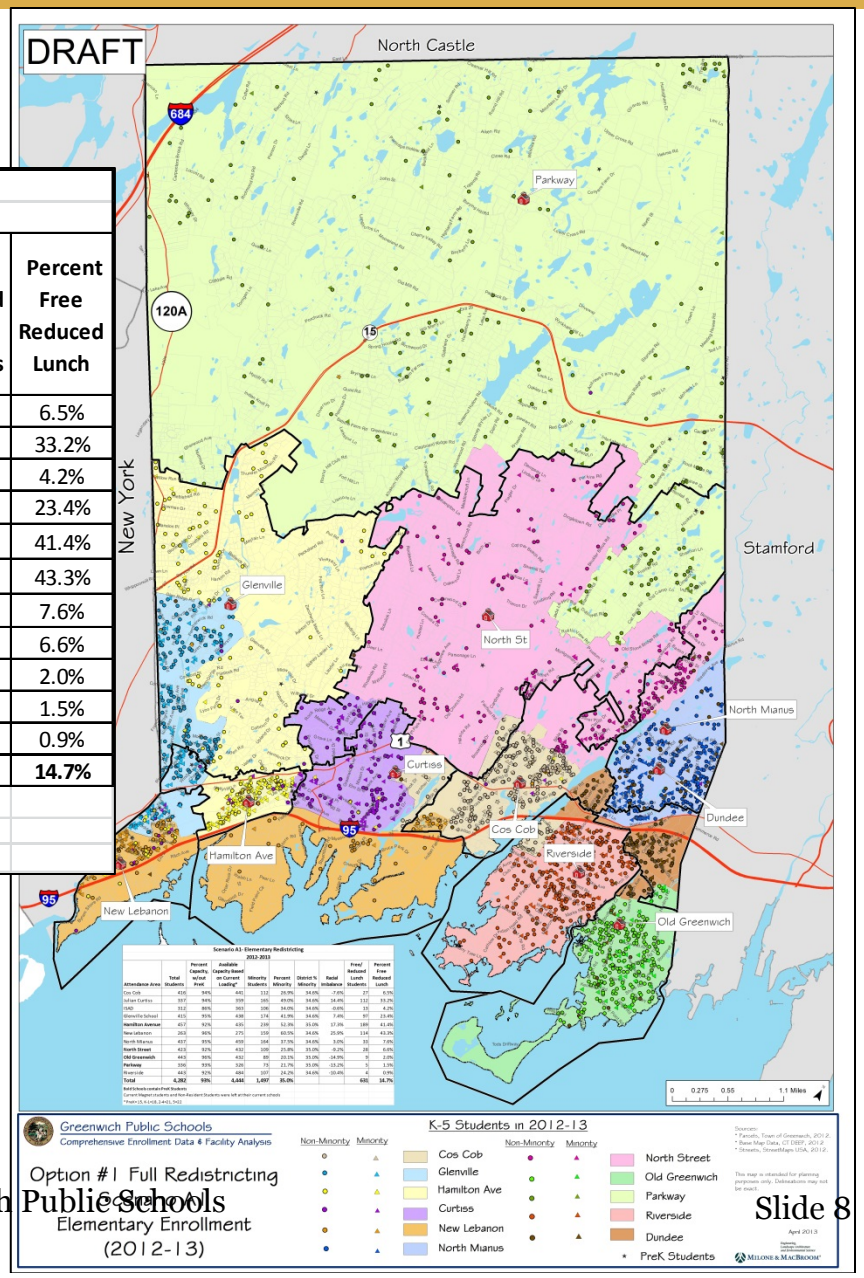
Scenario A

Scenario A1- Elementary Redistricting 2012-2013									
Attendance Area	Total Students	Percent Capacity, w/out PreK	Available Capacity Under Current Loading*	Minority Students	Percent Minority	District % Minority	Racial Imbalance	Free/ Reduced Lunch Students	Percent Free Reduced Lunch
Cos Cob	416	94%	441	112	26.9%	34.6%	-7.6%	27	6.5%
Julian Curtiss	337	94%	359	165	49.0%	34.6%	14.4%	112	33.2%
ISAD	312	86%	363	106	34.0%	34.6%	-0.6%	13	4.2%
Glenville School	415	95%	438	174	41.9%	34.6%	7.4%	97	23.4%
Hamilton Avenu	457	92%	435	239	52.3%	35.0%	17.3%	189	41.4%
New Lebanon	263	96%	275	159	60.5%	34.6%	25.9%	114	43.3%
North Mianus	437	95%	459	164	37.5%	34.6%	3.0%	33	7.6%
North Street	423	92%	432	109	25.8%	35.0%	-9.2%	28	6.6%
Old Greenwich	443	96%	432	89	20.1%	35.0%	-14.9%	9	2.0%
Parkway	336	93%	326	73	21.7%	35.0%	-13.2%	5	1.5%
Riverside	443	92%	484	107	24.2%	34.6%	-10.4%	4	0.9%
Total	**4,282**	**93%**	**4,444**	**1,497**	**35.0%**			**631**	**14.7%**

Bold Schools contain PreK Students

Current Magnet students and Non-Resident Students were left at their current schools

* PreK= 15, K-1=18, 2-4=21, 5=22



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Option 1: Full Redistricting

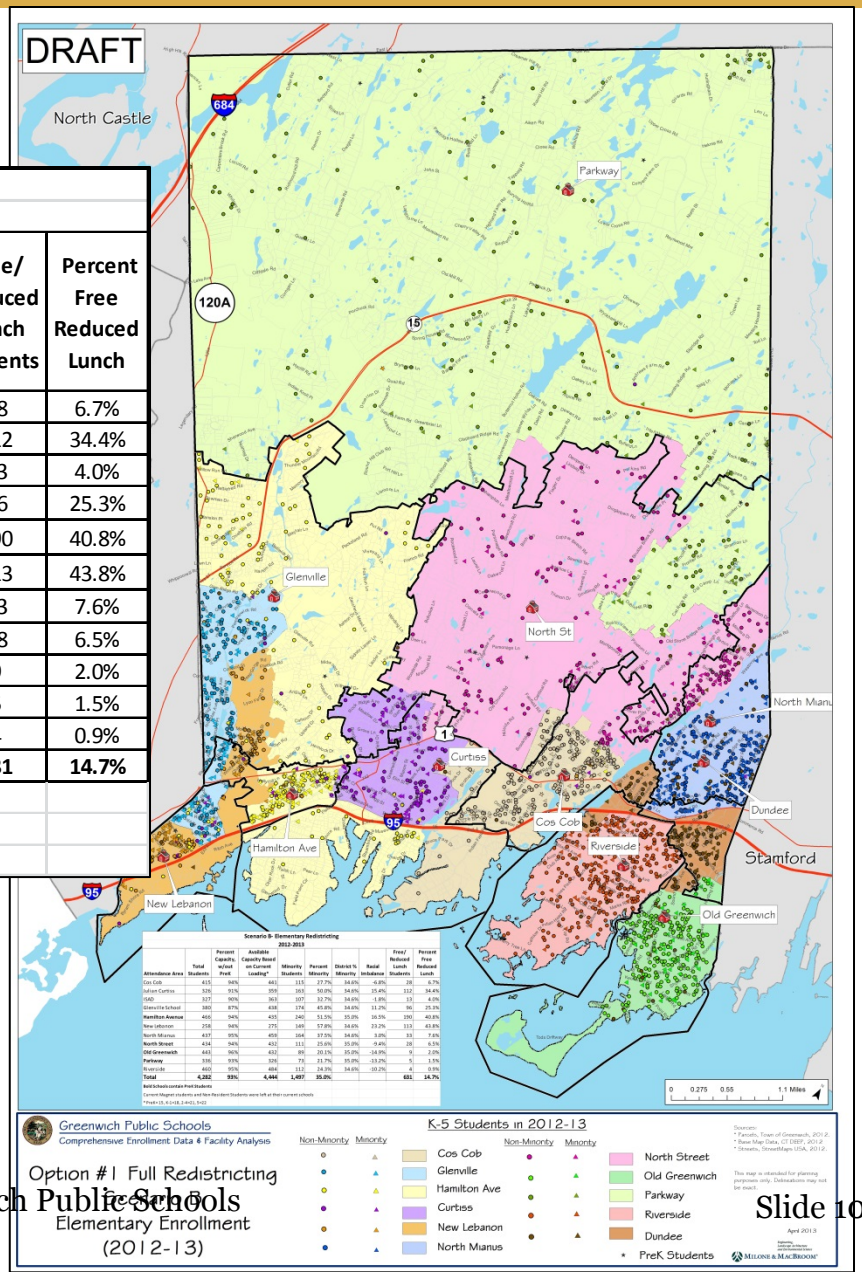
Scenario A

- Approximately 850 Elementary Students Moved
- Achieves Better Overall Enrollment Balancing
- Hamilton Ave no longer imbalanced
- Does Not Achieve Racial Balance at New Lebanon

Option 1: Full Redistricting

Scenario B

Scenario B- Elementary Redistricting 2012-2013									
Attendance Area	**Total Students**	**Percent Capacity, w/out PreK**	**Available Capacity Based on Current Loading***	**Minority Students**	**Percent Minority**	**District % Minority**	**Racial Imbalance**	**Free/ Reduced Lunch Students**	**Percent Free Reduced Lunch**
Cos Cob	415	94%	441	115	27.7%	34.6%	-6.8%	28	6.7%
Julian Curtiss	326	91%	359	163	50.0%	34.6%	15.4%	112	34.4%
ISAD	327	90%	363	107	32.7%	34.6%	-1.8%	13	4.0%
Glenville School	380	87%	438	174	45.8%	34.6%	11.2%	96	25.3%
Hamilton Avenue	466	94%	435	240	51.5%	35.0%	16.5%	190	40.8%
New Lebanon	258	94%	275	149	57.8%	34.6%	23.2%	113	43.8%
North Mianus	437	95%	459	164	37.5%	34.6%	3.0%	33	7.6%
North Street	434	94%	432	111	25.6%	35.0%	-9.4%	28	6.5%
Old Greenwich	443	96%	432	89	20.1%	35.0%	-14.9%	9	2.0%
Parkway	336	93%	326	73	21.7%	35.0%	-13.2%	5	1.5%
Riverside	460	95%	484	112	24.3%	34.6%	-10.2%	4	0.9%
Total	**4,282**	**93%**	**4,444**	**1,497**	**35.0%**			**631**	**14.7%**
Bold Schools contain PreK Students									
Current Magnet students and Non-Resident Students were left at their current schools									
* PreK= 15, K-1=18, 2-4=21, 5=22									



MILONE & MACBROOM

Option 1: Full Redistricting

Scenario B

- Approximately 900 Elementary Students Moved
- Improves Enrollment Balancing
- Hamilton Ave no longer imbalanced
- Racial Balance at New Lebanon 1.8% below threshold – may not be sustainable.

Option 1 Considerations

- Difficult to Achieve Sustainable Racial Balance with Current Facility Locations and Capacities
- Significant Numbers of Students Would Be Impacted (21%)
- Analysis Does Not Include Impact of Parents Opting Out of System Due to Redistricting

Option 2: District-Wide Choice

Criteria Provided by Administration:

- Upon Registration, Parents Choose 1st, 2nd and 3rd Choice Schools
- Students Assigned, Or Win Seat in Choice School Through Lottery
- Students Not Placed in Choice School, Randomly Assigned Based on Space

Option 2: District-Wide Choice

- Full Exploration of This Option Requires Extensive Survey Work to Understand Potential:
  - Magnet Theme Preferences
  - Geographic Preferences

Option 2 Considerations

- Community Likely to Have Strong Geographic Preference for Neighborhood Schools
- Would Require Development of Highly Attractive Magnet Programs
- May Rely on Administration to Place Significant Numbers of Children to Achieve Enrollment Balance
- Significant Transportation Impacts
- May Not Result in Racial Balance

Option 3: Partial Magnets

Criteria Provided by Administration:

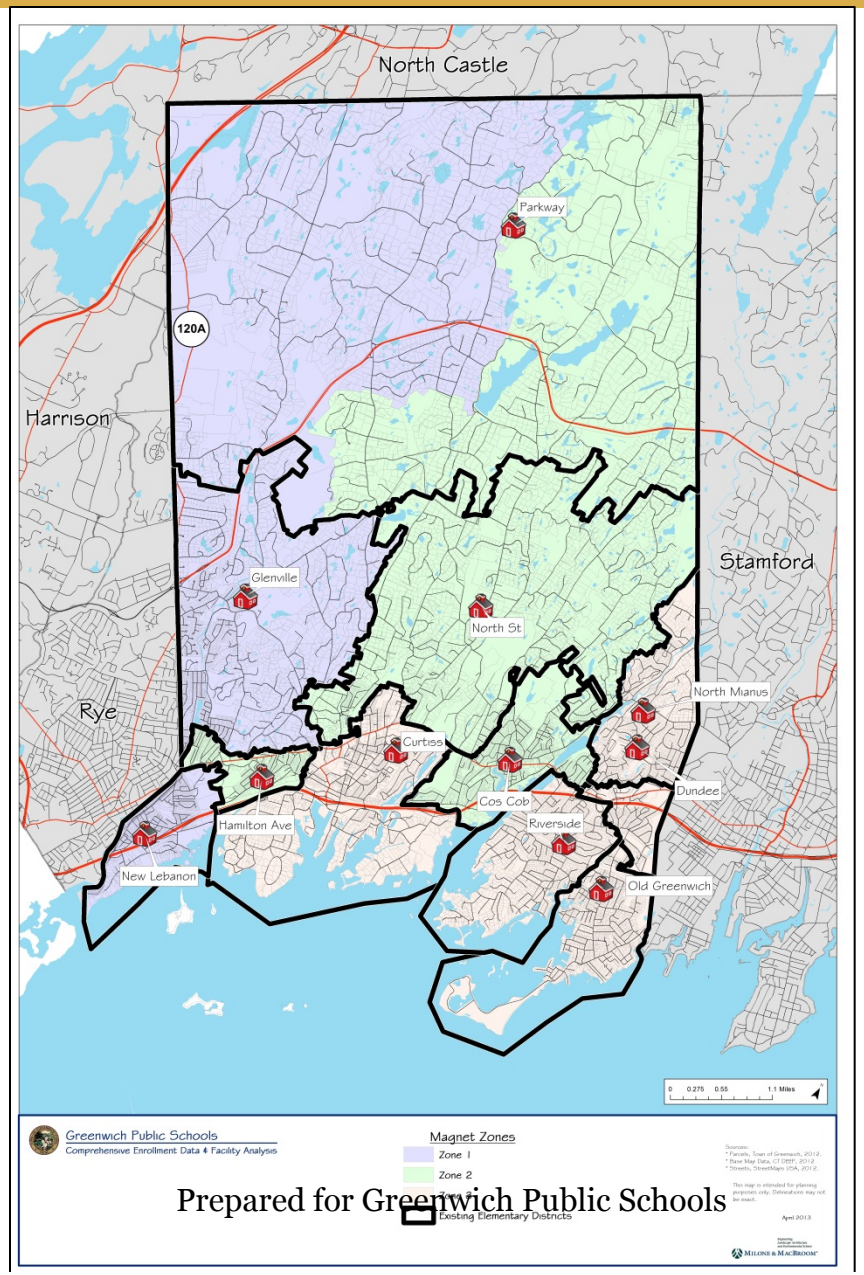
- Options for Either Neighborhood School, Magnet School
- Revise current magnet school model based on an evaluation of the effectiveness of the current model
- Parent Selection, Lottery and/or Administrative Placement Based on Space Considerations

* Added "Zonal Choice" Option to Criteria

Option 3: Partial Magnets

- Three Partial Magnets: New Lebanon, North Street and ISD
- One in Each of Three Elementary Magnet Zones Based on Enrollment Patterns, Capacity and Geography
- Assume PK Sited at One School per Zone
- Depends on Creating a "Draw" Through Magnet Programming
- Will Need to Examine Cross-Zone Placement and Policies

Potential Magnet Zones



Prepared for Greenwich Public Schools

Potential Zones for Three Magnets

ZONE 1	ZONE 2	ZONE 3
New Leb Glenville Western Part of Parkway (Follows Middle School Split)	Ham Ave North Cos Cob Eastern Part of Parkway (Follows Middle School Split)	Curtiss Riverside Old Greenwich ISD North Mianus
Total Students: 855 Total Minority: 330 % Minority: 38.60%	Total Students: 1,259 Total Minority: 480 % Minority: 38.13%	Total Students: 1,948 Total Minority: 587 % Minority: 30.13%

Includes placement of K-5 only – requires siting of PK.
Does not include cross-zone attendance options.

Magnet Zone 1

New Lebanon Magnet

Schools Retain Neighborhood District Boundaries

Parkway Splits Magnet Zones

100 Seats at New Lebanon to Be Filled by Zone 1 Magnet Students

Preference Areas for Magnet Students from Northern Glenville District and Parkway

Magnet's Neighborhood District: 302 Total K-5 Students, 203 Minority (67.22%)

Students in Magnet Preference Areas: 201 Total K-5, 27 Minority (13.43%)

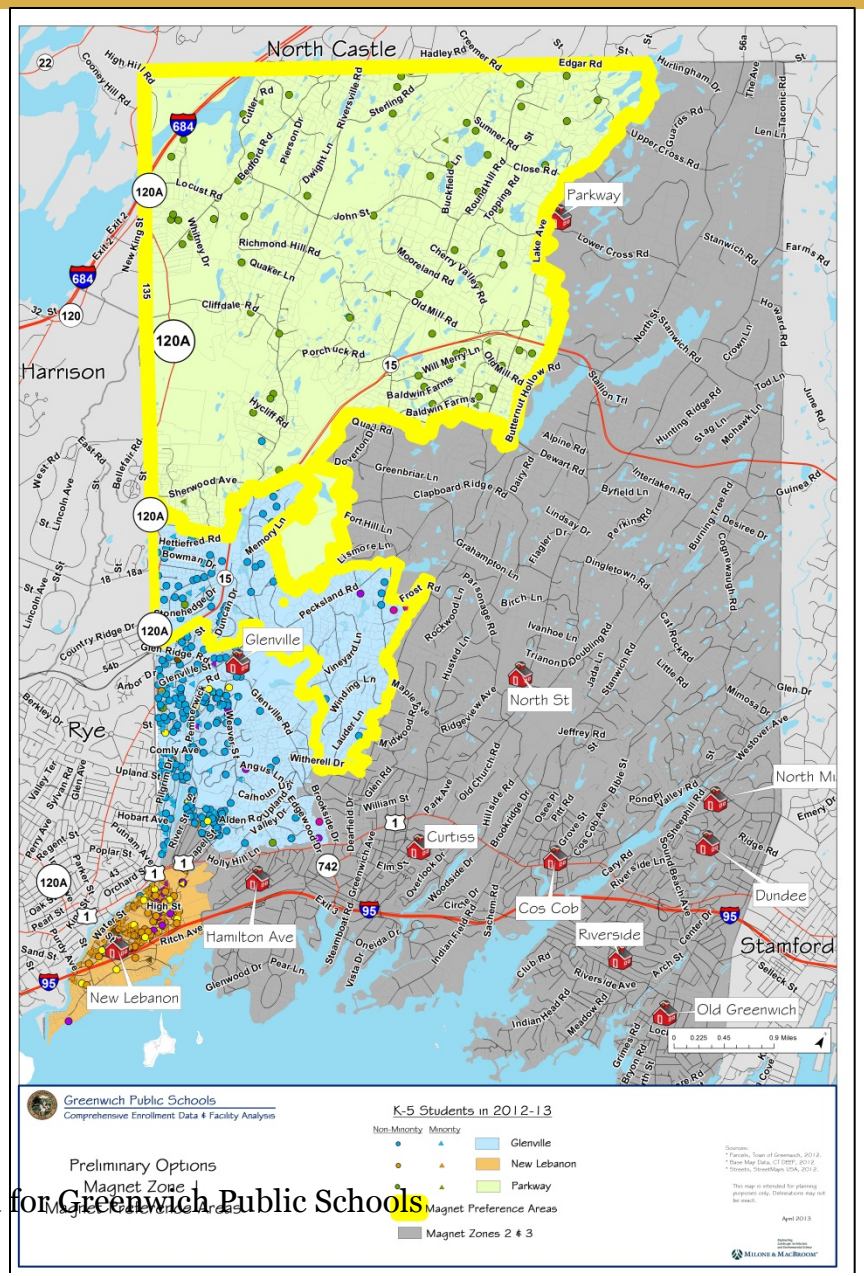
Would Require 129 New Lebanon Students to Opt for "Zonal Choice" or Be Placed Into Glenville or Parkway

*May Want to Consider Glenville as Zone Magnet (Higher Capacity and Central in Zone) and Change Magnet Preference Areas

Zone 1 Magnet Preference Areas

New Lebanon is Zone Magnet

201 Total K-5 Students
27 Minority (13.43%)
In Magnet Preference Areas



Magnet Zone 2

North Street Magnet

Schools Retain Neighborhood District Boundaries, But Parkway Splits Magnet Zones
235 Seats at North Street to Be Filled by Zone 2 Magnet Students
Preference Given to Magnet Students from Hamilton Ave and Cos Cob

Magnet's Neighborhood District: 393 Total K-5 Students, 103 Minority (26.21%)

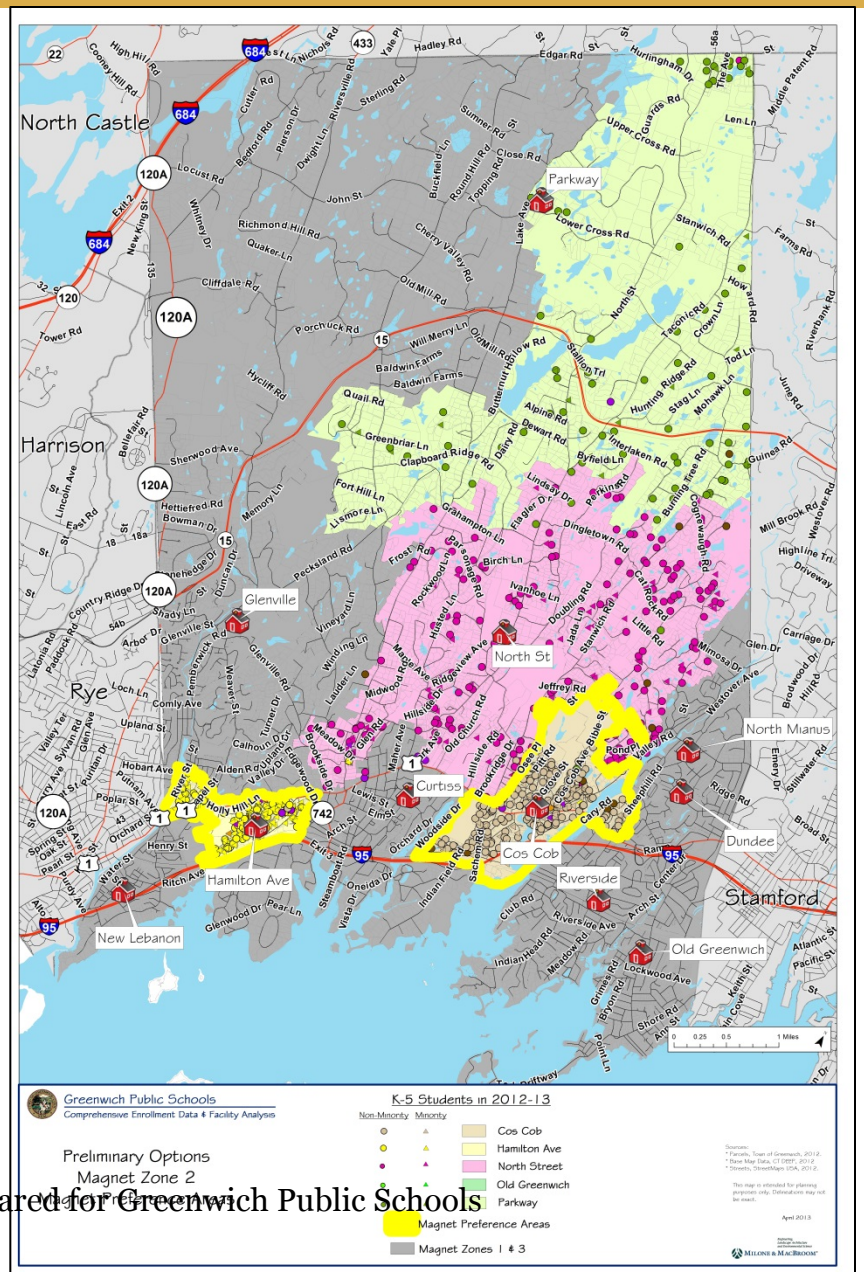
Students in Preference Areas: 753 Total K-5, 355 Minority (47.14%)

Would Require 179 North Street Students to Opt for Zonal Choice or Be Placed In Other Zone 2 Schools, Preferably Parkway

Zone 2 Magnet Preference Areas

North Street is Zone Magnet

753 Total K-5 Students
355 Minority (47.14%)
In Magnet Preference Areas



Magnet Zone 3

ISD Magnet

115 Seats at ISD to Be Filled by Zone 3 Magnet Students
Preference Given to Magnet Students from Old Greenwich

Neighborhood District: 224 Total K-5 Students, 110 Minority (49.11%)

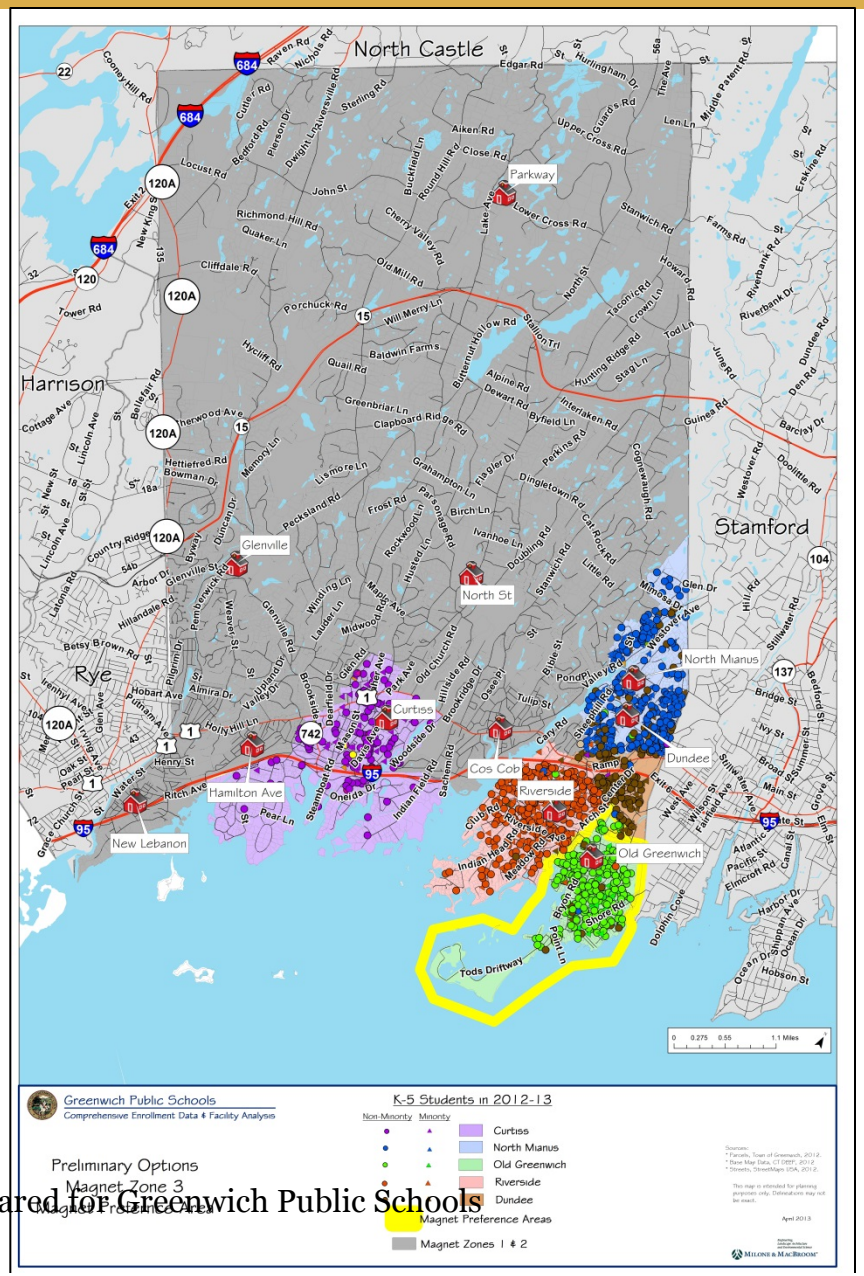
Students in Preference Area: 293 Total K-5, 73 Minority (24.91%)

Would Require Some Movement of Students from Curtiss Into Old Greenwich, Riverside Or North Mianus Through "Zonal Choice"

Zone 3 Magnet Preference Area

Dundee is Zone Magnet

293 Total K-5 Students
73 Minority (24.91%)
In Magnet Preference Area



Option 3 Considerations

- Requires Highly Attractive Magnet Programming in Appropriate Locations with Adequate Capacity
- No Neighborhood School Redistricting Required
- Onus on Administration to Assign Students If Magnet and Choice Options Are Not Attractive to Parents
- Able to Achieve Better Enrollment and Racial Balance Through Larger, More Successful Magnets

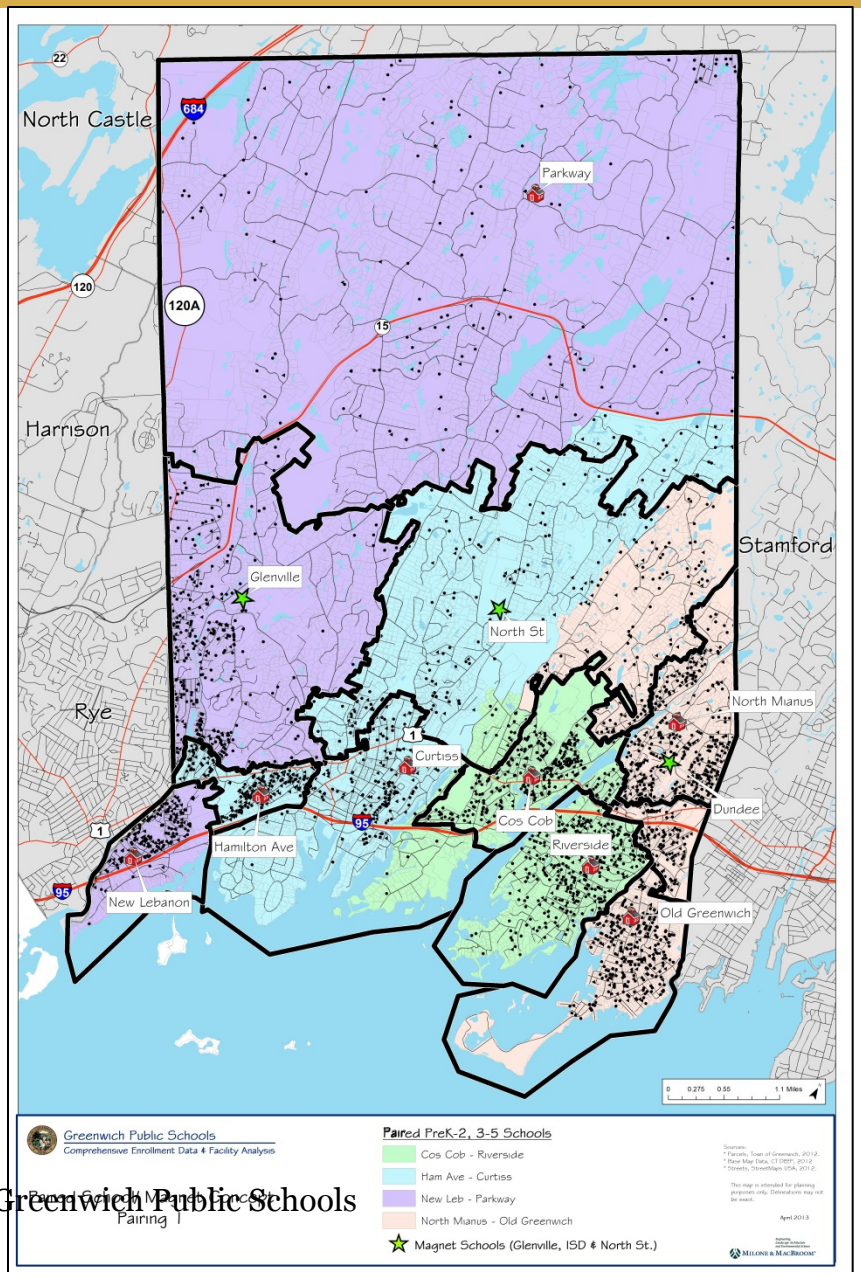
Option 4: Reconfiguration

Additional Option Developed by Consultant

- Three K-5 Intradistrict Magnets
- Remaining Schools Reconfigured to PreK-2nd and 3rd-5th Grades
- Redistricting to Better Balance Enrollments and Reflect Paired School Districts
- Relies on Highly Attractive Magnet Programming

Reconfiguration/Pairing A

- K-5 Full Magnets:
  - Glenville
  - ISD
  - North Street
- Sister School Pairings:
  - Cos Cob-Riverside
  - Hamilton-Curtiss
  - New Lebanon-Parkway
  - North Mianus-Old Greenwich



Pairing A: 2012-13 Enrollments

2012-13 Enrollment Snapshot - Pairing Option 1										
Paired Schools	Total Students Residing in Paired District	District Capacity			Minority Students		Free/Reduced Lunch Students		Excess Enrollment	
		PreK-2	3-5	Total	#	%	#	%	#	% of Total
Riverside (PreK-2)	517	468	449	917	137	26.50%	29	5.61%	49	9.48%
Cos Cob (3-5)	494				130	26.32%	25	5.06%	45	9.11%
Ham Ave (PreK-2)	455	390	351	741	237	52.09%	147	32.31%	65	14.29%
Curtiss (3-5)	426				205	48.12%	153	35.92%	75	17.61%
Parkway (PreK-2)	540	312	273	585	214	39.63%	107	19.81%	228	42.22%
New Lebanon (3-5)	445				147	33.03%	99	22.25%	172	38.65%
Old Greenwich (PreK-2)	726	449	449	898	228	31.40%	33	4.55%	277	38.15%
North Minaus (3-5)	683				183	26.79%	29	4.25%	234	34.26%
TOTAL	4,286			2,224					1,096	25.57%

Districtwide PreK-2 % Minority: 36.46%
Districtwide 3-5 % Minority: 32.47%

K-5 Magnet Schools	Capacity
Glenville	429
ISD	351
North Street	449
TOTAL	1,229

Option 4 Considerations

- Requires Highly Attractive Magnet Programming in Appropriate Locations with Adequate Capacity
- Less Reliance on Administrative Placement of Students, Provided Successful Magnet Programs
- Paired Districts Facilitates Achieving Sustainable Racial Balance by Enlarging Districts

Discussion