

**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: May 23, 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:

In January 2013, the Board of Education directed the Superintendent to develop a plan to address facility utilization and racial balance issues in the District. The attached executive summary and PowerPoint focus on historical background, existing conditions and defining the problem. A second presentation on June 6th will explore possible options for addressing facility utilization and racial balance issues. After opportunities for stakeholder input, the Board of Education will set a sense of direction for further option development at their June 20th meeting.

Recommended Action (if appropriate):

# **Greenwich Public Schools**

## **Comprehensive Enrollment and Facility Utilization Analysis**

In January 2013, the Board of Education directed the Superintendent to develop a plan to address facility utilization and racial balance issues in the District. The following document is intended as a companion to the Power Point presented to the Board of Education on May 23, 2013 at a public meeting. The presentation on May 23<sup>rd</sup> focuses on historical background, existing conditions and defining the problem. A second presentation on June 6<sup>th</sup> will explore possible options for addressing facility utilization and racial balance issues. After opportunities for stakeholder input, the Board of Education will set a sense of direction for further option development at their June 20<sup>th</sup> meeting.

### **BACKGROUND**

While the overall population of Greenwich remained stable over the last 45 years, both the number and the diversity of the students served by the Greenwich Public Schools changed significantly:

- From 1968 to 1986, elementary enrollment declined from 6,177 students to 3,085 students. Three of twelve elementary schools were closed (Byram, Parkway and Dundee) and the neighborhood attendance areas of the remaining nine schools were adjusted.
- From 1987 to 1999, as elementary enrollment increased from 3,085 to 4,432 students, sixth grade was moved into middle school and Parkway and Dundee (I.S.D.) were reopened.
- While elementary enrollment has been relatively stable over the last fifteen years, the student population has become significantly more diverse with that diversity concentrated in particular school attendance areas. The State Board of Education cited first Hamilton Avenue School and then New Lebanon School for racial imbalance under State statute requiring remediation plans. At the same time, shifts in enrollment among the school attendance areas resulted in overcrowding in some schools and underutilization in other schools.
- With the opening of International School at Dundee in 2000, the District implemented a system of partial magnet schools to address facility utilization issues and racial balance while maintaining the existing boundaries of neighborhood schools. Three additional schools (Hamilton Avenue, Julian Curtiss, and New Lebanon) were reconfigured into magnet schools.

### **Board of Education Charge**

In May of 2012, the State Board of Education cited Hamilton Avenue and New Lebanon for continuing racial imbalance. Preliminary analysis conducted by District staff during the summer and fall of 2012 concluded that the current magnet program was insufficient to address racial imbalance at these two schools. In addition, there were early indicators of future overcrowding (primary grade enrollments exceeding projections) at a number of elementary schools (Glenville, Cos Cob and New Lebanon).

# **Greenwich Public Schools**

## **Comprehensive Enrollment and Facility Utilization Analysis**

In January 2013, the Board of Education charged the Superintendent to develop a plan that:

- Increases Academic Achievement
- Accounts for Enrollment Trends and Efficient Use of Facilities
- Improves Racial Balance Among Schools

The plan is to be developed with input from stakeholders and implemented in the 2014-2015 school year. Given the complex nature of accurately defining the problem and developing long term, workable solutions, the District retained a consultant, Milone and MacBroom, to assist in the analysis of existing conditions and the development of a plan.

### **EXISTING CONDITIONS ANALYSIS**

**Milone & MacBroom, Inc.** analyzed demographic and housing trends, characteristics and forecasts because these factors are crucial to the school planning process. Using federal, state, local and private sources of information, the analysis informs enrollment projections and helps the school district to plan accordingly. Key findings are as follows:

#### **Demographics**

- Though population increased through the 1990s, Greenwich's total population was flat from 2000 to 2010 at about 61,100.
- U.S. Census indicates School-aged population (ages 5-17) increased 12.2% from 2000 to 2010; however some elementary districts, such as Riverside, experienced much larger increases in this cohort.
- Women of child-bearing age (ages 18-39) decreased 15% overall, because of this lower birth rates are anticipated to continue.
- Annual births have declined from approximately 700-750 in the early 2000s to around 600 annually.
- Greenwich's population is highly concentrated around the I-95/Route 1 corridors.
- The number of housing units Increased 4.6% from 2000 to 2010.
- Greater increase in housing units versus population indicates shrinking household sizes.

#### **Housing**

- Housing construction in Greenwich is down since the mid-2000s, however, the number of annual housing sales have begun to rebound from 2009 low.
- Areas with rental housing stock are concentrated in Curtiss, Hamilton, and New Lebanon school districts.
- Significant new housing development is not anticipated within the next few years; housing turnover is more important to maintaining enrollment levels.

# **Greenwich Public Schools**

## **Comprehensive Enrollment and Facility Utilization Analysis**

### **Enrollment Trends**

- Enrollments increased significantly through the 1990s, but have remained very stable through the 2000s.
- Total PreK-12 enrollments are down about 1% from average total enrollments of 2005-06 to 2007-08.
- Elementary and high school enrollments have remained stable the last several years, while middle school enrollments have declined about 4% since 2007-08.
- Enrollment in Greenwich's magnet programs has decreased over the last three years.
- Four elementary schools (Hamilton Avenue, New Lebanon, Old Greenwich, and Parkway) expected to be identified by the State Department of Education for 2012-13 racial imbalance.

### **Projected Enrollment**

- Total enrollments are projected to remain very stable at all levels, declining only 2.8% over the next decade.
- Enrollment projections for individual elementary schools show increasing disparities across schools with some increasing significantly (Cos Cob, Glenville, New Lebanon), while others decrease significantly (North Street, Parkway and Riverside).
- The enrollment projections prepared assume that current levels of private school enrollments persist.

### **Facility Utilization**

- District-wide elementary facility utilization is projected to remain between 90% and 95% over the next ten years.
- However, individual school utilization rates are projected to increasingly deviate, both above and below the 95% targeted utilization rate.
- Facility utilization projections assume maintaining the current average class size (19.5 students per class) and program delivery model (dedicated instructional spaces in each elementary school for art, general music, performing music, special education, advanced learners, and English language learners).

### **DEFINING THE PROBLEM**


Over the next five to ten years, it will not be possible to maintain the K-5 educational program and operate within statutory mandates and guidelines without changing the current configuration elementary attendance areas and magnet schools or altering the program delivery model and raising class sizes:

- By 2017-2018, five schools will be operating 10% over targeted utilization (95% of capacity). New Lebanon and Cos Cob are projected to be operating 20%

## **Greenwich Public Schools Comprehensive Enrollment and Facility Utilization Analysis**

above targeted capacity. Our ability to deliver the educational program and maintain current class size in these schools will be significantly compromised.


- Four schools will be operating at 20% below targeted utilization. Parkway is projected to be operating at 50% of targeted utilization. Low utilization rates are inherently inefficient.
- Given the projected increase in minority enrollment within the Hamilton Avenue and New Lebanon attendance areas relative to the District, these schools will continue to be cited as racially imbalanced by the State Department of Education.
- The current magnet school program is insufficient to address overall facility utilization issues and racial imbalance at New Lebanon and Hamilton Avenue.
- Given the projected high overall utilization of the network of eleven elementary schools over the next 5 to 10 years (90.3% to 94.8% of capacity), it is not advisable to close an elementary school.




## Comprehensive Enrollment & Facility Utilization Analysis

# Existing Conditions

Board of Education Meeting  
May 23, 2013






Greenwich Public Schools  
Comprehensive Enrollment and Facility Utilization Analysis

Existing Elementary Districts


- Elm Cove
- North Street
- Old Greenwich
- Parkside
- Rye
- New Rochelle
- North Haven

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## Background, Essential Questions and Guiding Principles

While the overall population of Greenwich remained stable over the last 45 years, both the number and the diversity of the students served by the Greenwich Public Schools changed significantly.

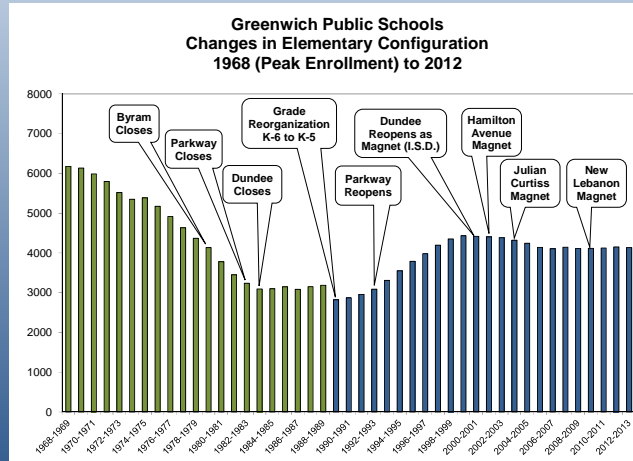


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## Changing Elementary Configuration

- From 1968 to 2000 changes in configuration driven by overall enrollment
- From 2001 to 2012 changes in configuration driven by facility utilization and racial balance
- Changes in program delivery (Special Education, English Language Learners, Gifted Education, Instrumental Music) have affected capacity

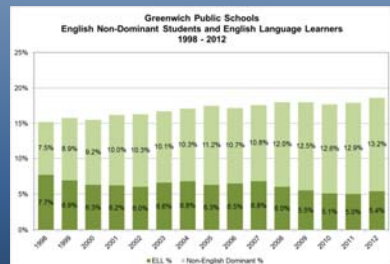
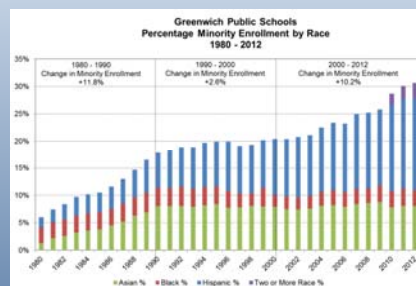


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## Changing Demographic Patterns



MILONE & MACBROOM

- Minority enrollment increased from 6% in 1980 to over 30% in 2012
- Students qualifying for free and reduced price lunch increased from 6.7% in 1998 to 13.0% in 2012.
- By 2012, almost one in five GPS students did not speak English as their first language.

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### Is the Current Elementary and Middle School Configuration Working?

- Enrollment at Cos Cob, Glenville and New Lebanon is increasing rapidly.
- Enrollment at Parkway, Old Greenwich and North Street has declined significantly below building capacity.
- Hamilton Avenue and New Lebanon continue to be cited for racial imbalance. Three additional schools have impending racial imbalances (OG, PK, WMS).
- Due to increasing attendance area enrollment, fewer seats are available in magnet schools (HA, ISD, JC, NL).



### Board of Education Charge

In January 2013, the Board of Education charged the Superintendent to develop a plan that:

- Increases Academic Achievement
- Accounts for Enrollment Trends and Efficient Use of Facilities
- Improves Racial Balance Among Schools

Once a plan is developed and adopted by the Board of Education, it will be implemented in the 2014-2015 school year.





## Guiding Principles

- 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.




## Essential Questions

- Why do we need to consider changes in the configuration of elementary schools now? What has changed?
- To what extent will it be possible to maintain the current program delivery model without revising the neighborhood attendance areas?
- How can we best ensure equal access to educational opportunities for all students and respond to the State citation for racial imbalance at New Lebanon and Hamilton Avenue?
- What role should school choice, such as magnets, play as we consider revising the configuration of elementary schools?
- What effect would closing a school have on district wide efficiency and effectiveness?

## Existing Conditions Analysis


### Demographics

- ✓ Population
- ✓ School-Aged Population
- ✓ Household Sizes
- ✓ Live Births



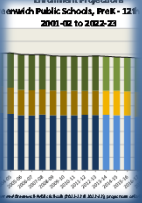
### Housing

- ✓ Change in Number of Units
- ✓ Development Potential
- ✓ Projected Growth




### Enrollment Patterns and Projections

- ✓ Enrollment Trends
- ✓ By Grade



### Classroom Facilities

- ✓ Total Classrooms
- ✓ Maximum Capacities




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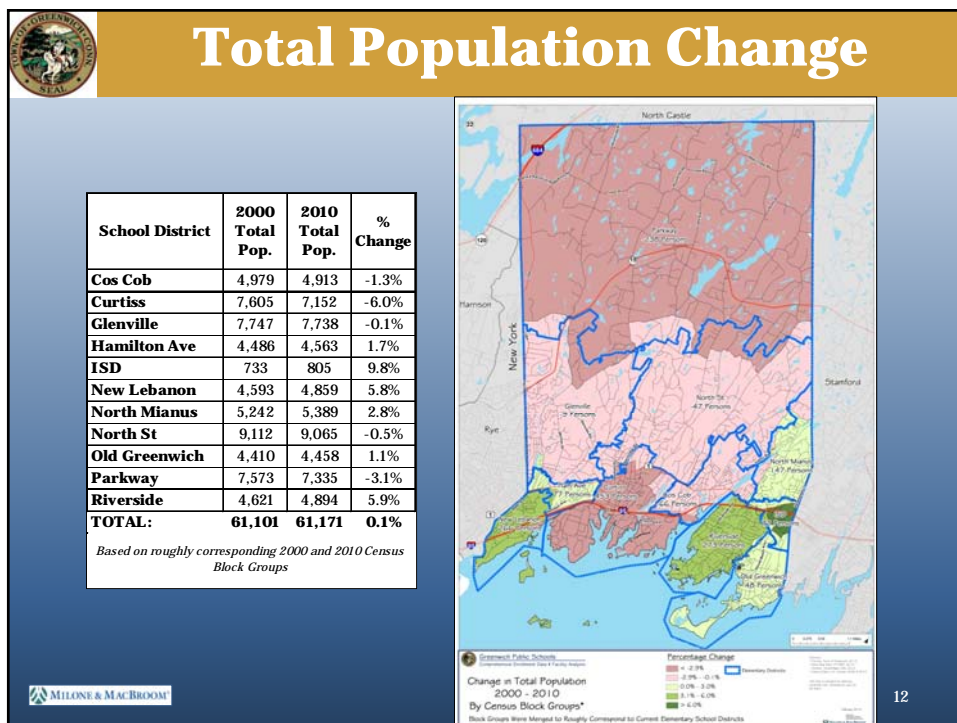
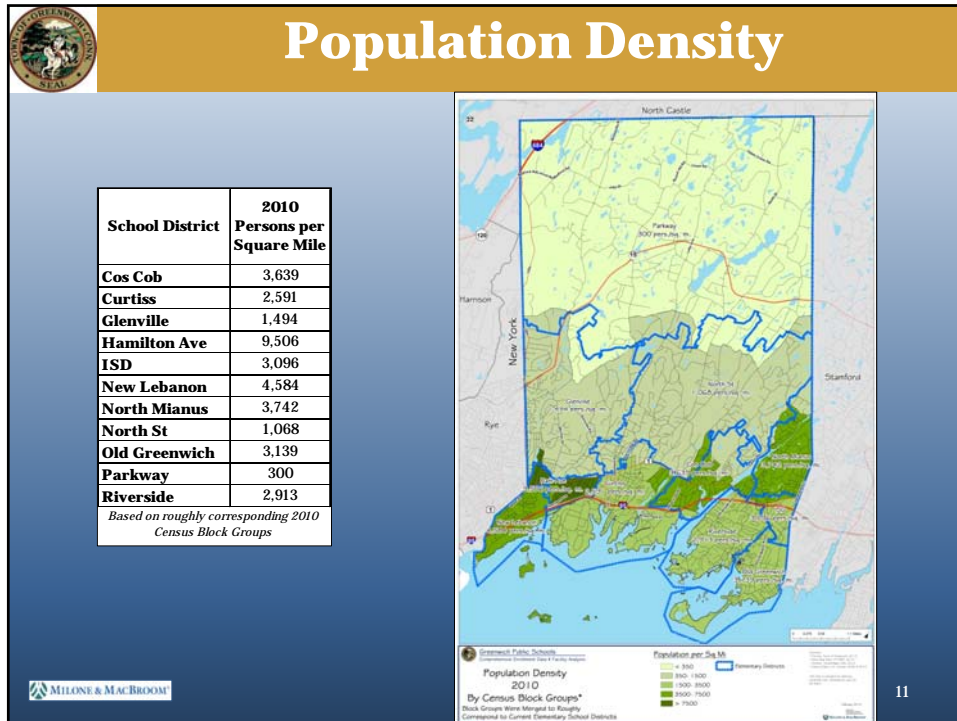
## Demographics at District Level

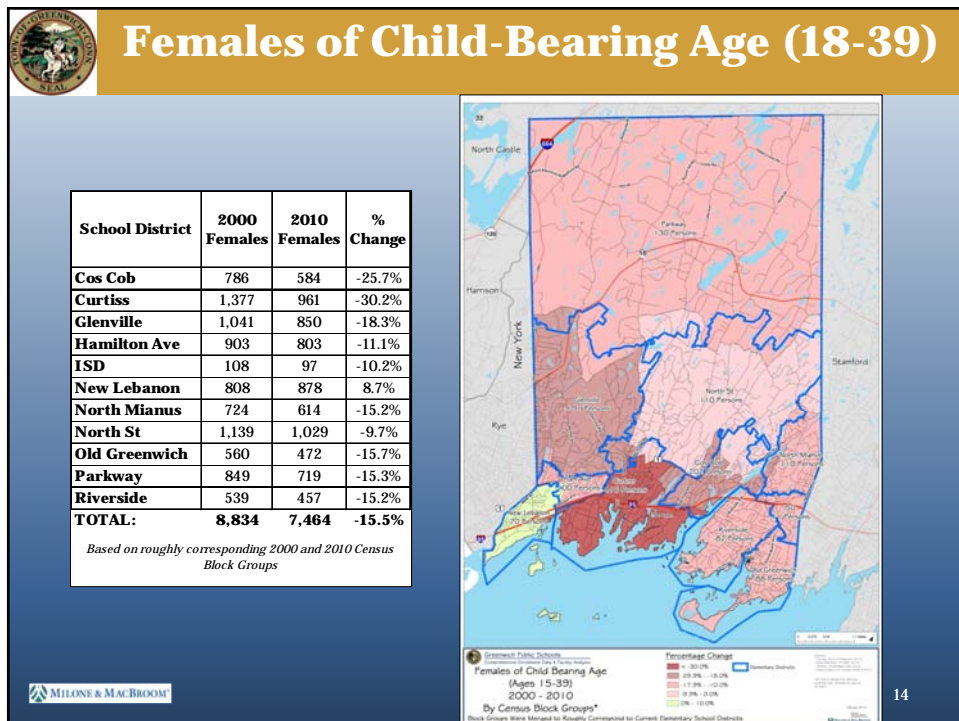
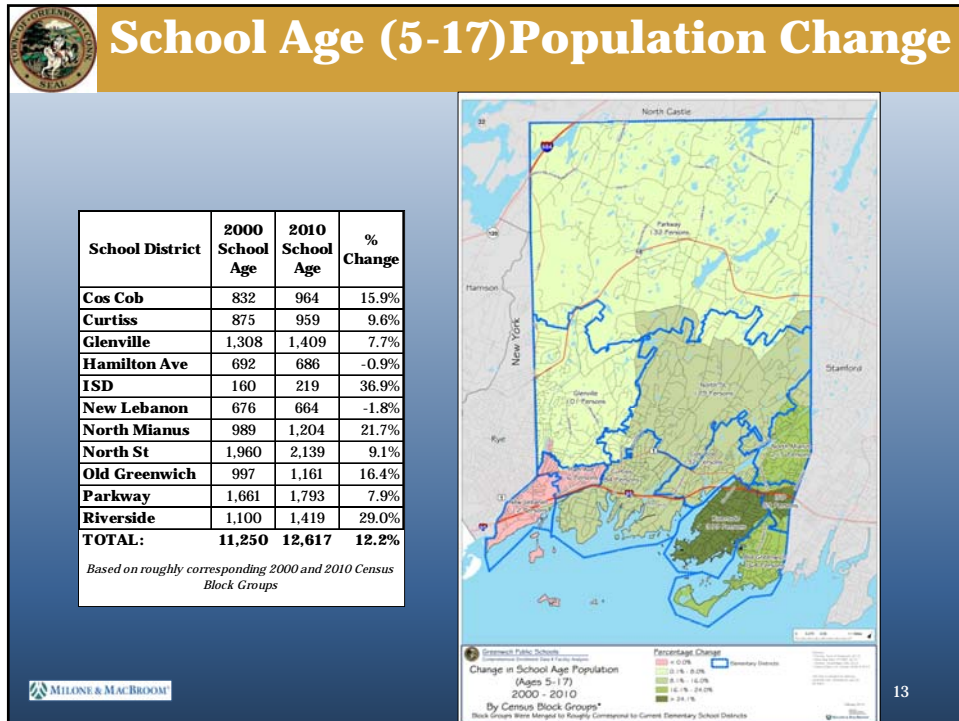
District-Level Demographic Comparisons		
School District	2010 Census Block Groups	
Cos Cob	1070.01	1080.03
	1080.01	1080.04
	1080.02	1090.04
Curtiss	1050.01	1070.03
	1060.01	1070.04
	1060.02	1120.01
	1060.03	1120.02
Glenville	1070.02	
	1010.11	1040.01
	1010.12	1040.02
Ham Ave	1030.03	1040.03
	1030.04	1040.05
	1030.05	
ISD	1040.04	1050.03
	1040.06	1050.04
	1050.02	1050.05
New Lebanon	1100.01	
	1050.06	1130.02
North Mianus	1130.01	1130.03
	1020.23	1090.02
North Street	1090.01	1090.03
	1020.11	1020.22
	1020.12	1020.24
	1020.13	1030.01
Old Greenwich	1020.21	1030.02
	1100.02	1100.04
	1100.03	1100.05
Parkway	1010.13	1010.22
	1010.14	1010.23
	1010.21	
Riverside	1110.01	1110.03
	1110.02	1110.04



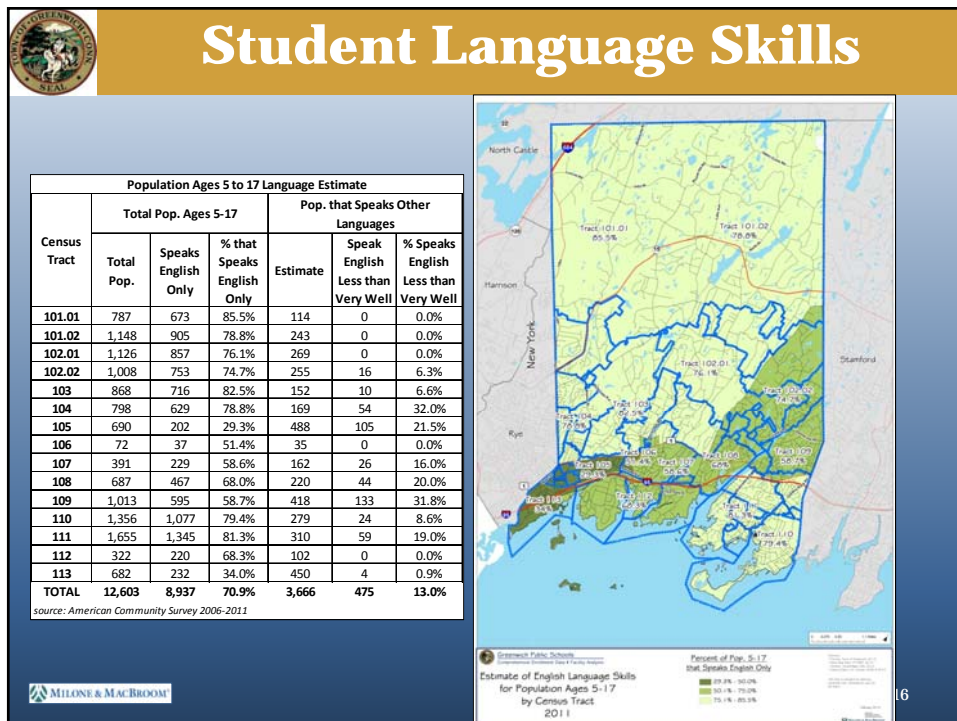
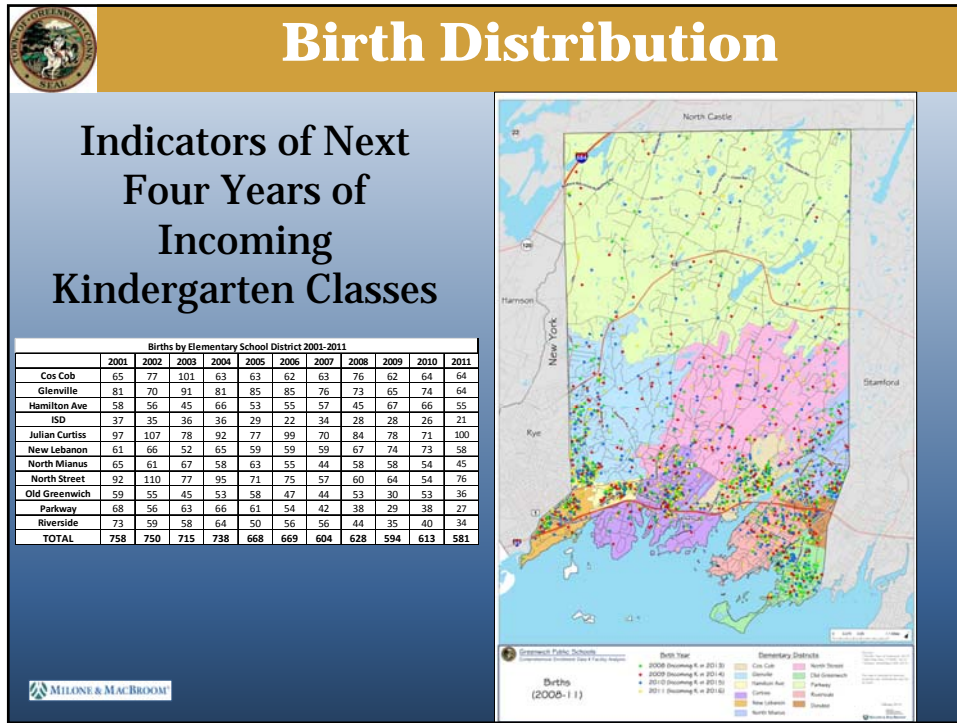
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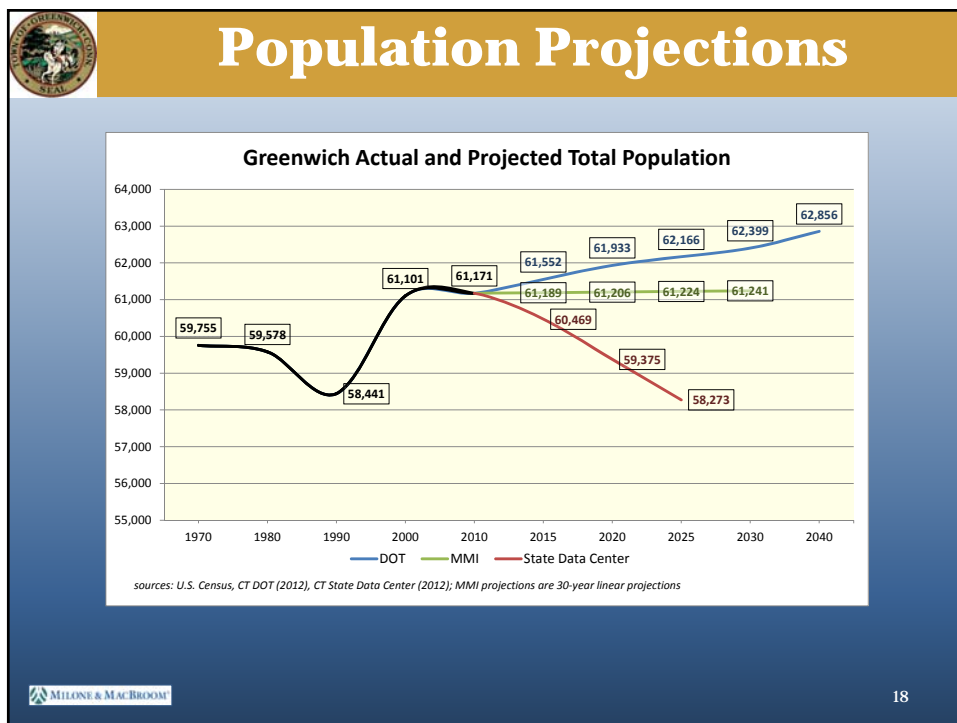
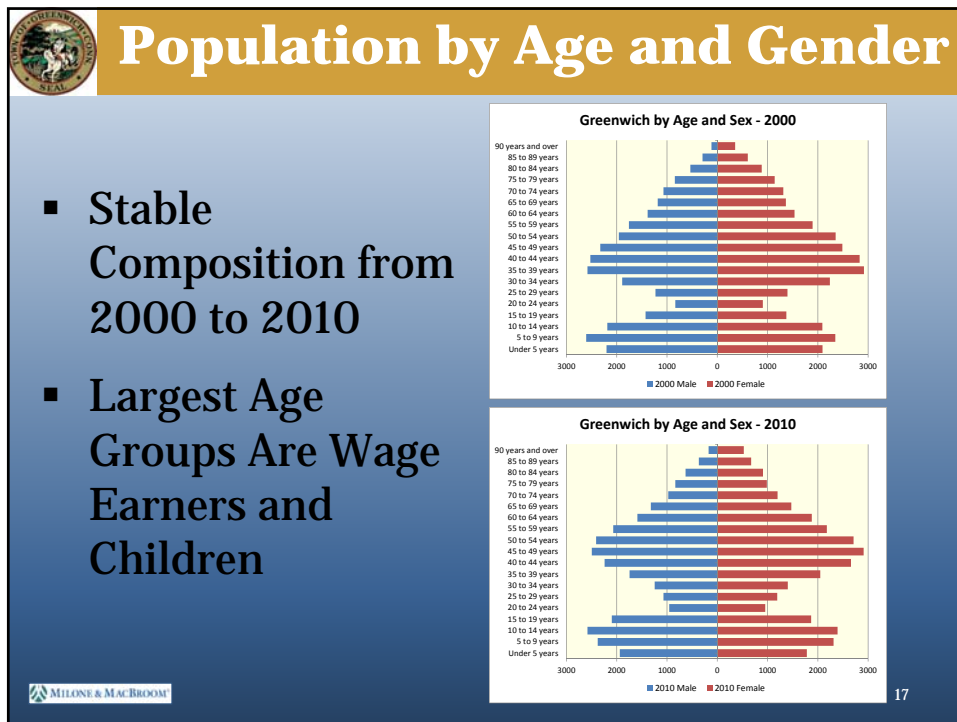
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## Population Change Summary

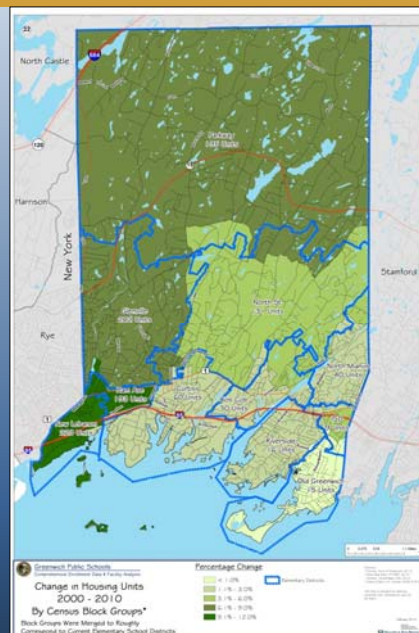
- Total Population Was Flat From 2000 to 2010
- School-Aged Population Increased 12.2% from 2000 to 2010; However Some Districts Experienced Much Larger Increases
- Women of Child-Bearing Age Decreased 15% Overall – Anticipate Continued Lower Birth Rates
- Population Concentrated Around I-95/Rt. 1 Corridors



## Total Housing Unit Change

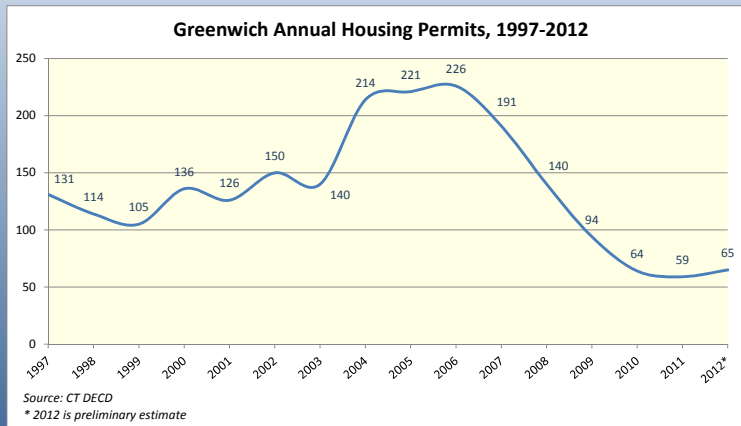
School District	2000 Housing Units	2010 Housing Units	% Change
Cos Cob	2,026	2,056	1.5%
Curtiss	3,983	4,043	1.5%
Glenville	3,163	3,365	6.4%
Hamilton Ave	1,878	2,071	10.3%
ISD	262	271	3.4%
New Lebanon	2,041	2,270	11.2%
North Mianus	2,088	2,128	1.9%
North St	3,206	3,337	4.1%
Old Greenwich	1,625	1,640	0.9%
Parkway	2,645	2,840	7.4%
Riverside	1,594	1,610	1.0%
<b>TOTAL:</b>	<b>24,511</b>	<b>25,631</b>	<b>4.6%</b>

*Based on roughly corresponding 2000 and 2010 Census Block Groups*





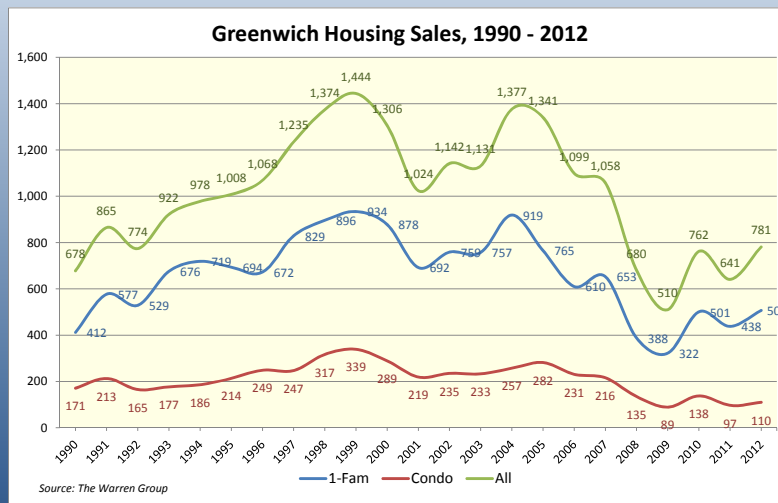
## Housing Permits



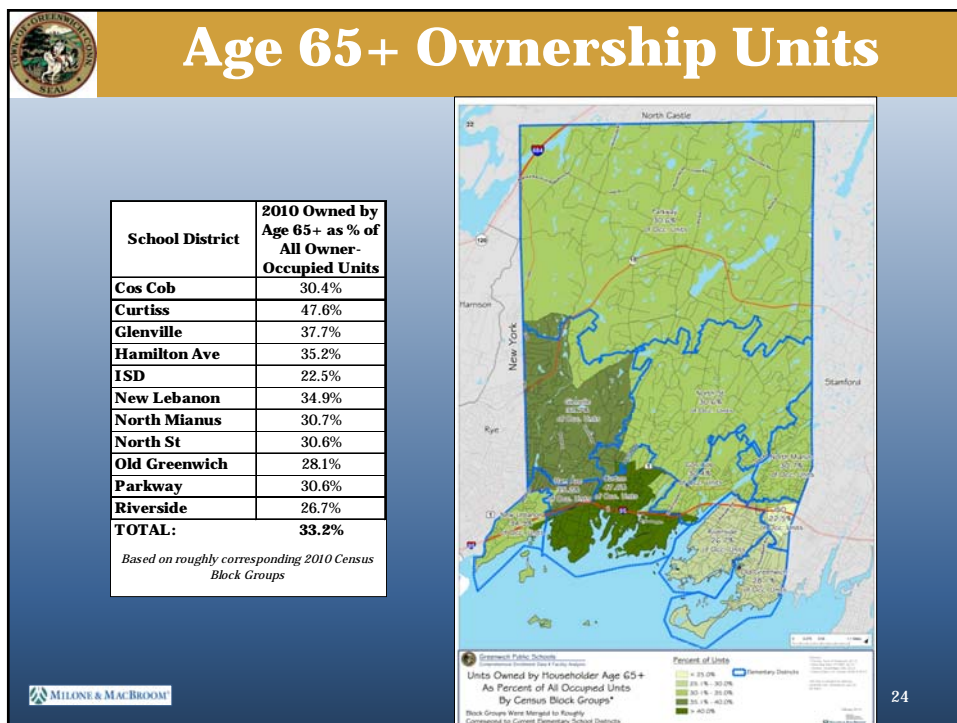
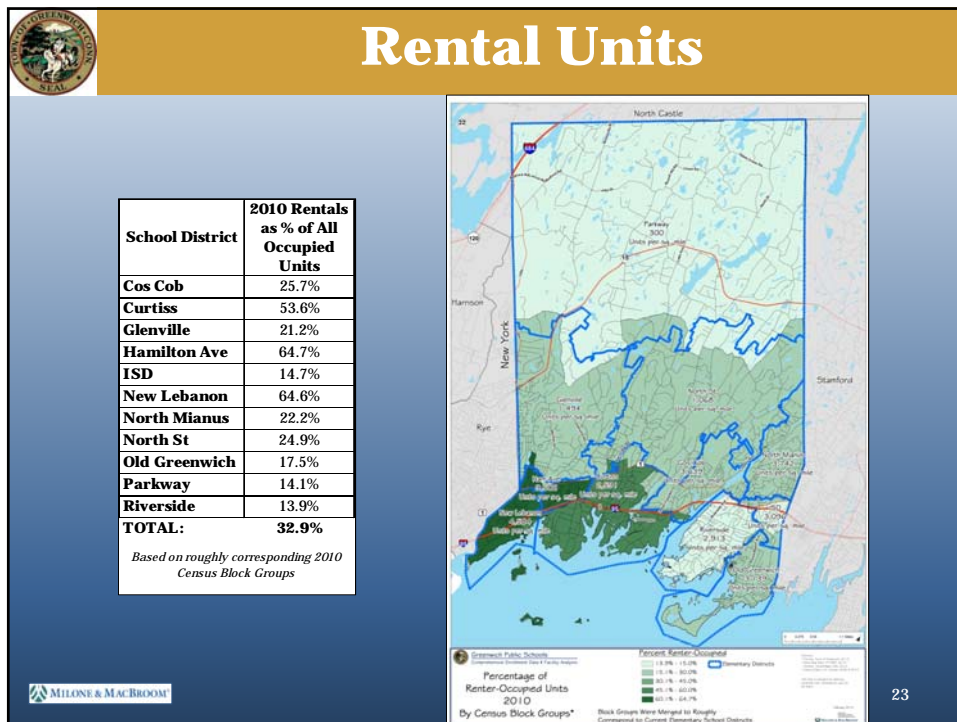
**Annual New Residential Construction Permits  
Significantly Below Long-Term Average**

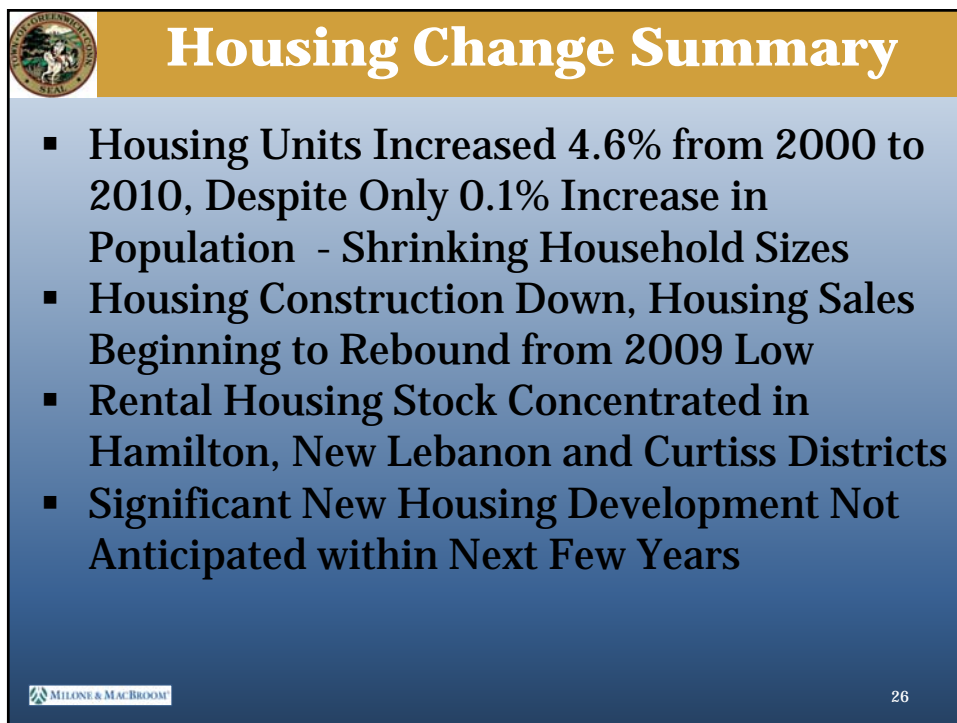
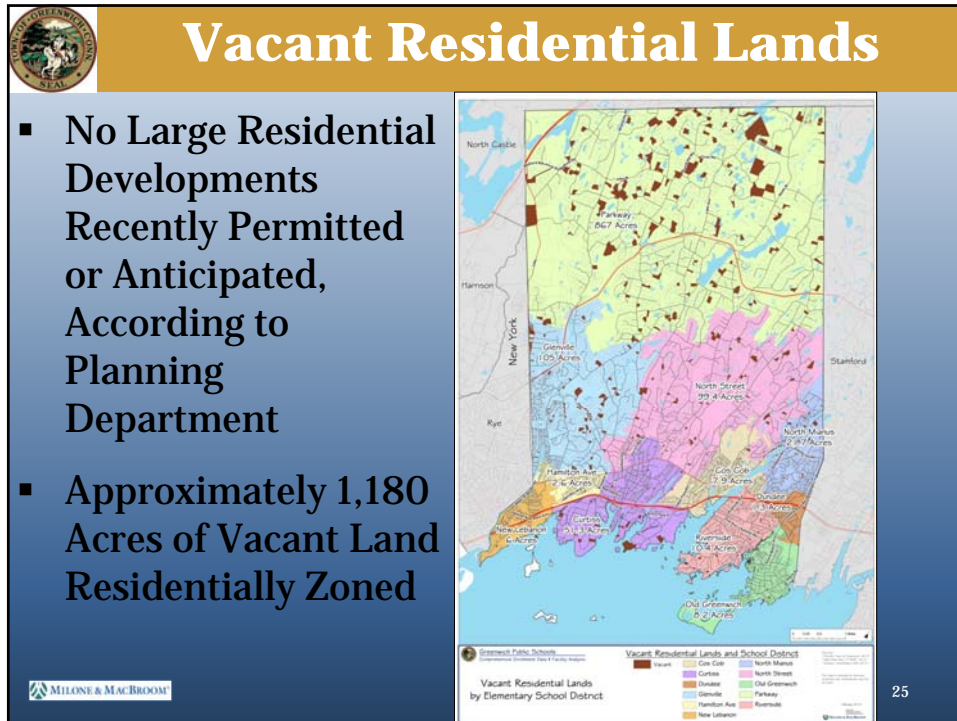


## Housing Sales





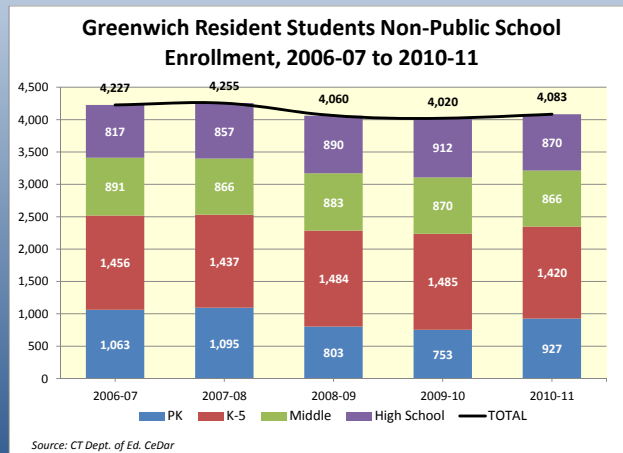




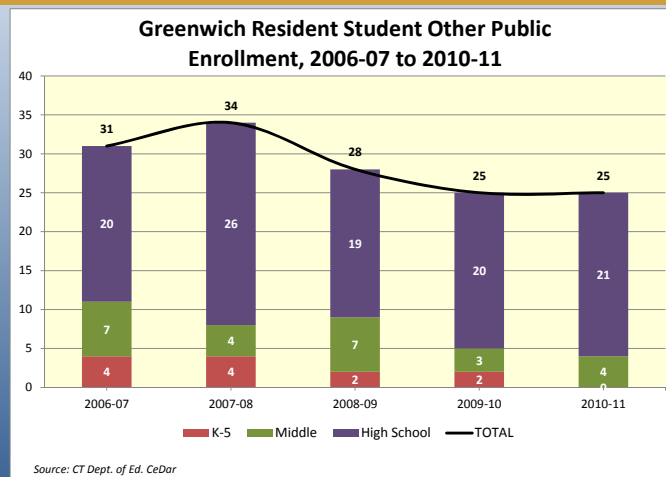


## Non-Public Enrollments

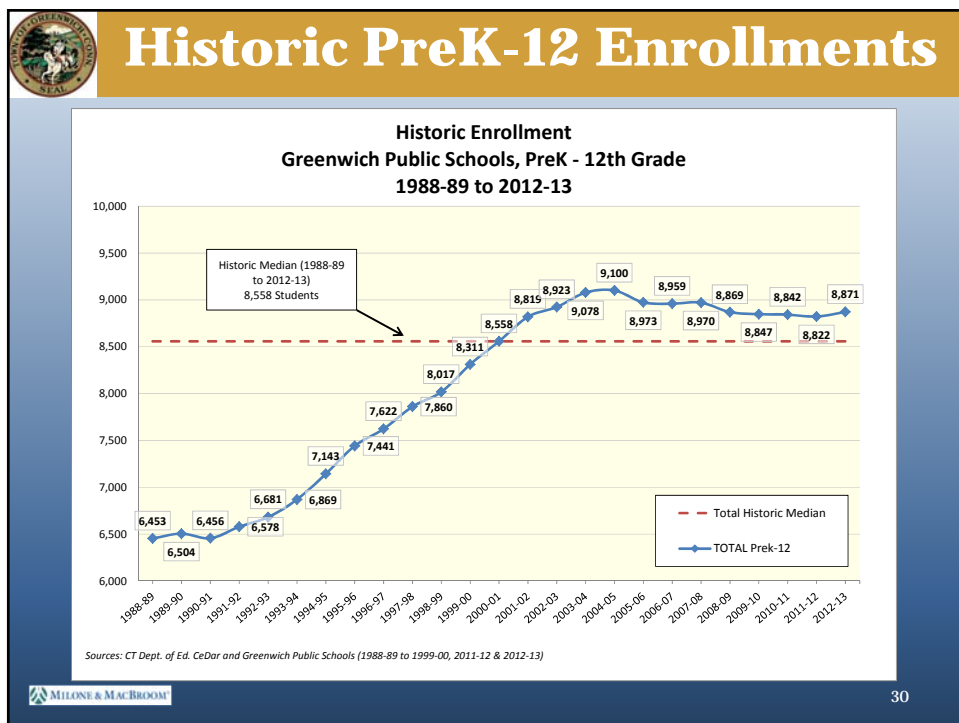
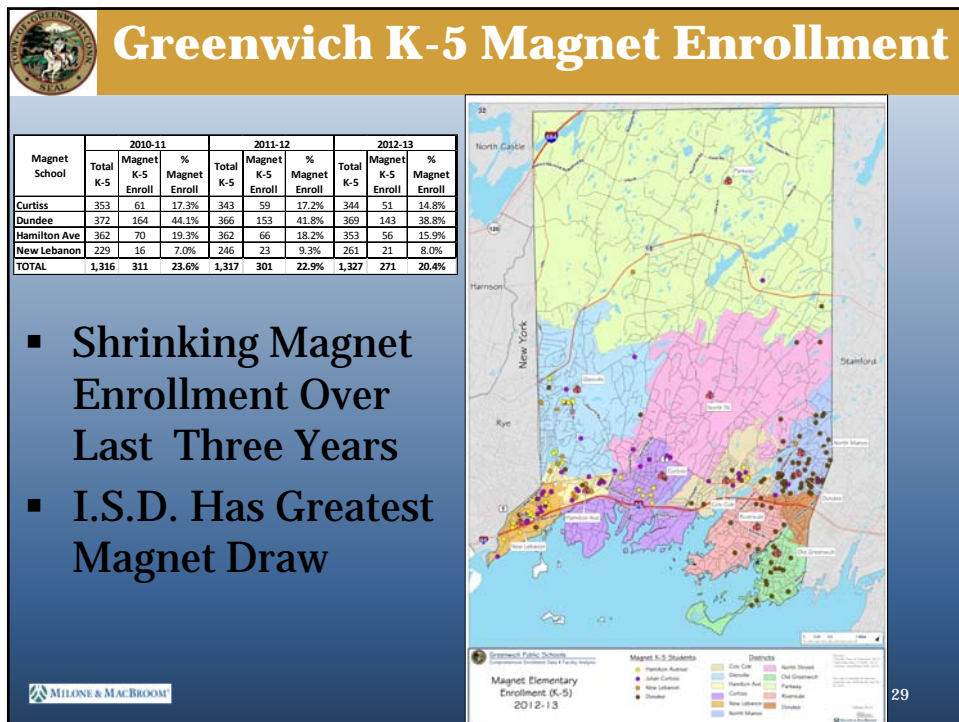
- On Average, 32% of Greenwich Students Attend Private School (PreK -12)
- Does Not Reflect Out-of-State Private Enrollment

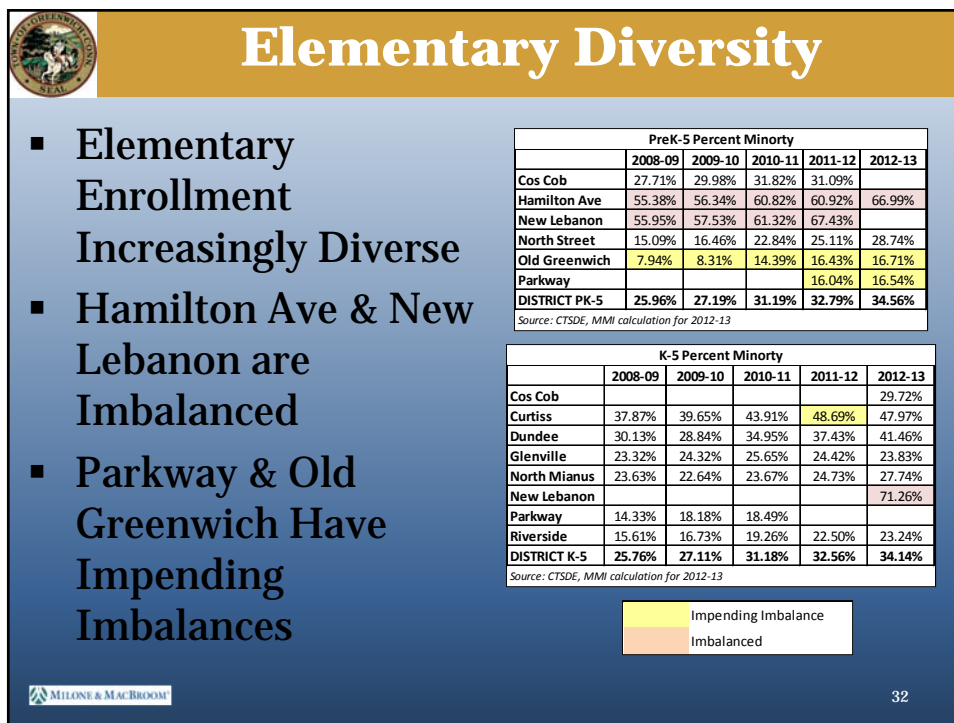
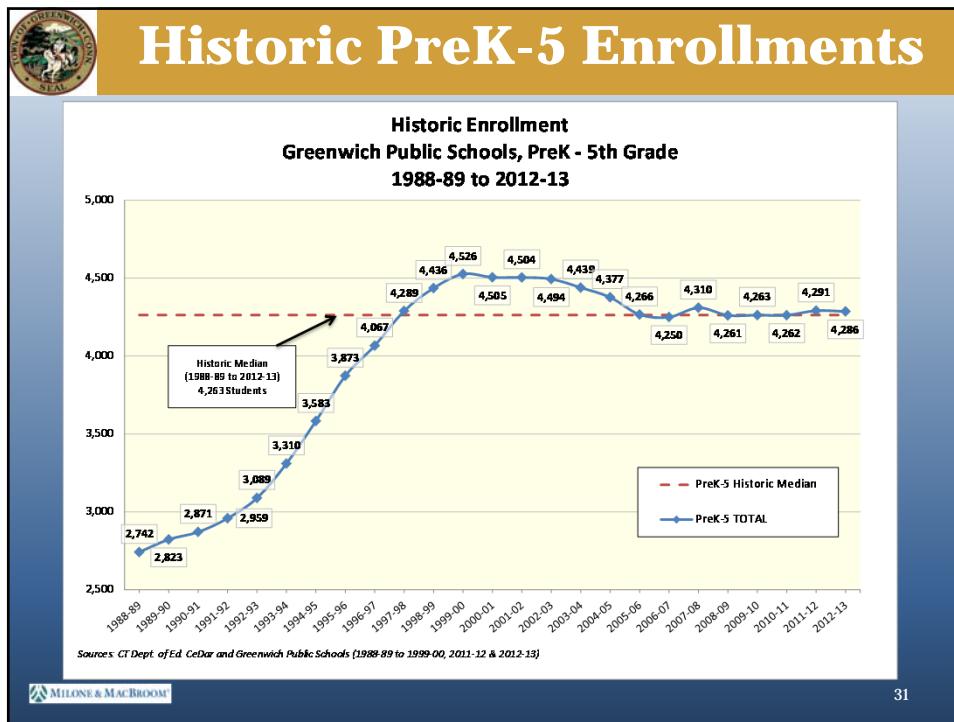


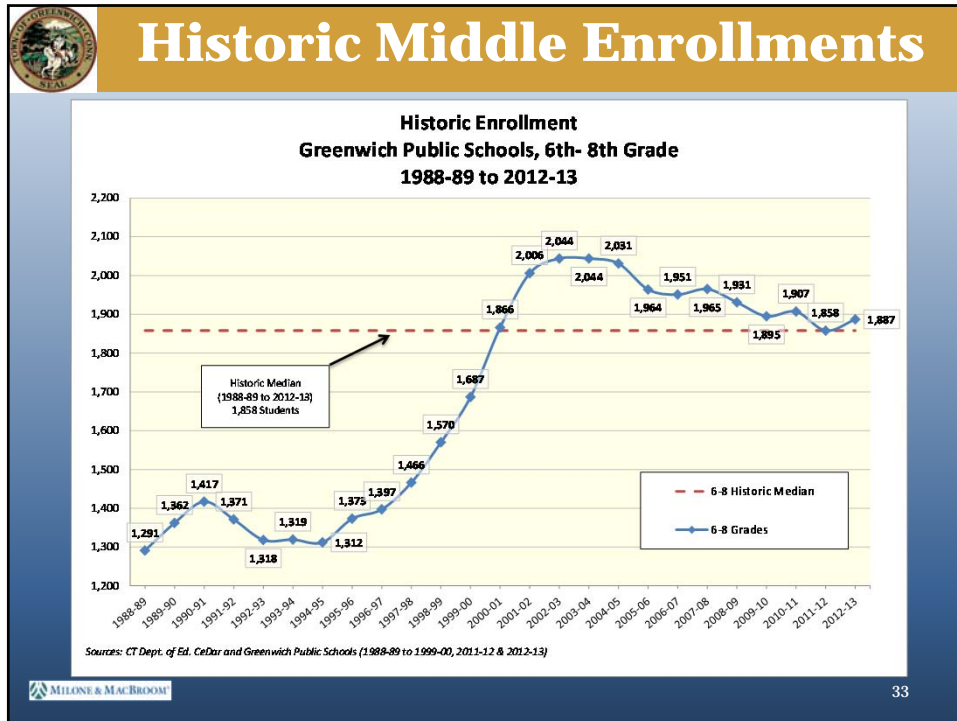
## Other Public Enrollments



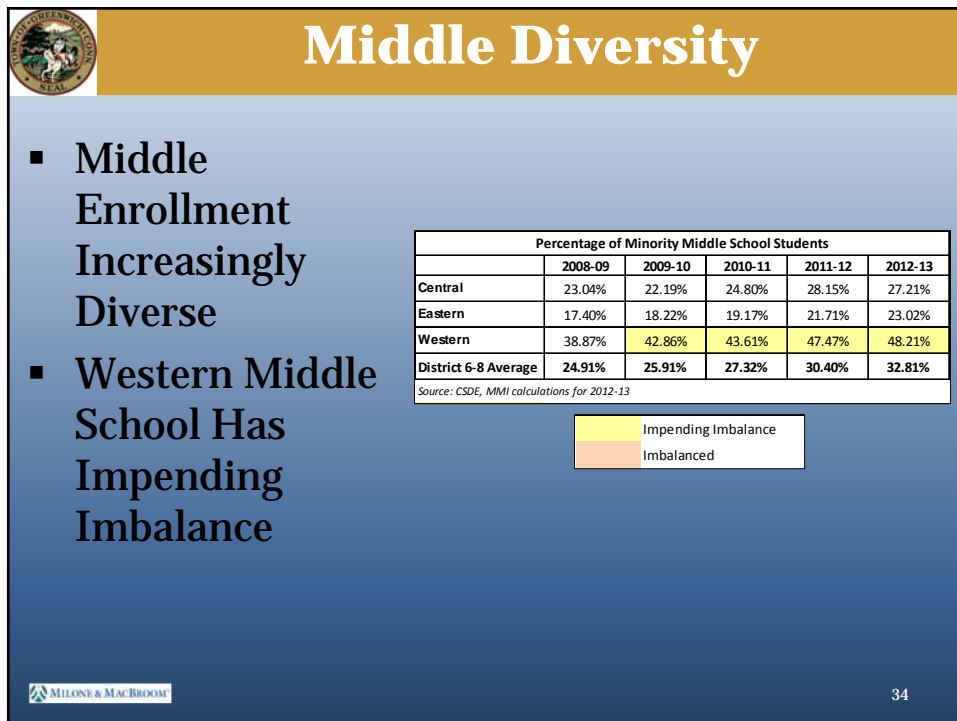
**Very Few Students Attend Other Public Schools**



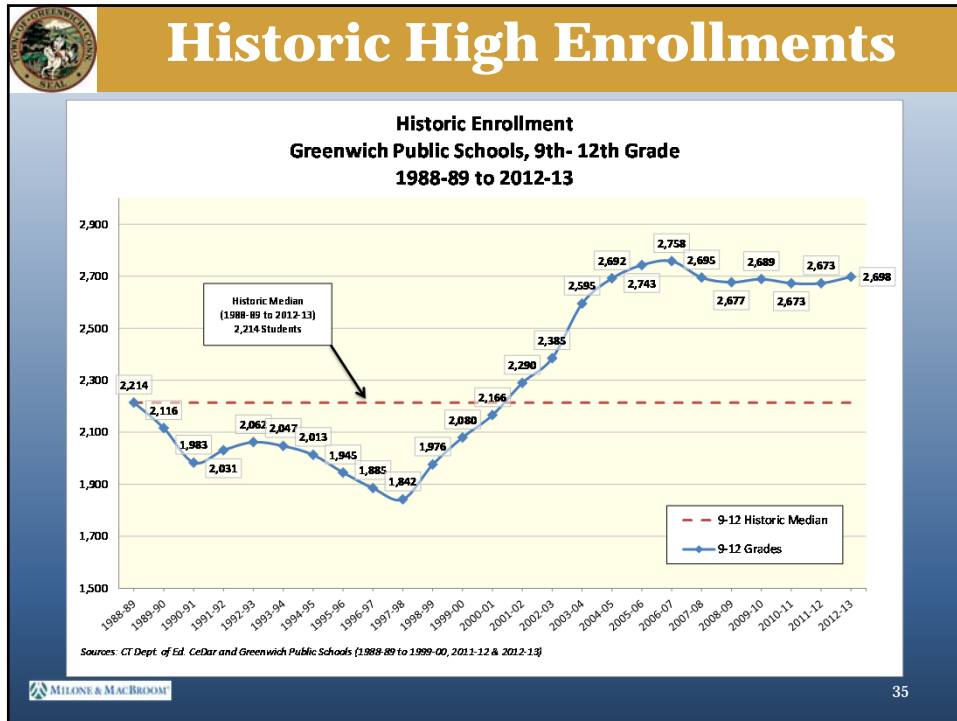




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## Persistency Ratios

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
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	0.97718	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 Above 1 = in-migration; student moved in, transferred in, or was retained
- Persistency Below 1 = out-migration; student moved out or transferred out

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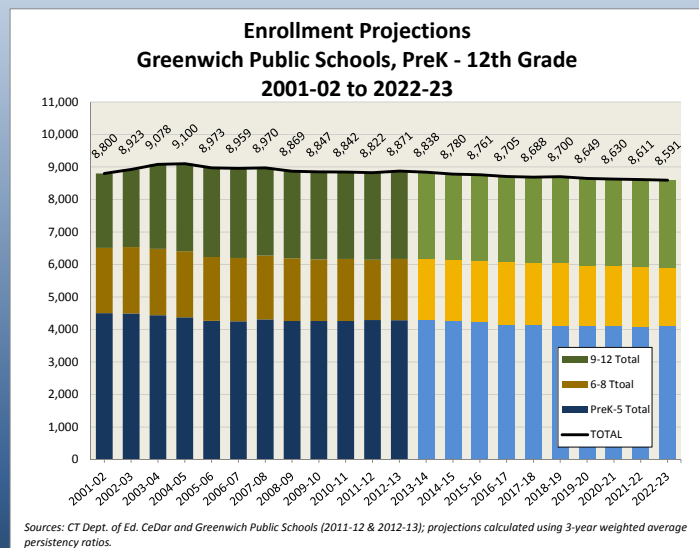


## Projections Assumptions

- PreK Classes Remain at 150 Students per Year
- Recent Private School Enrollment Trends Remain
- Slight Uptick in Housing Market and Economy Resulting in Higher Estimates of In-Migration
- Births Projected to Remain Just Over 600 Annually



## PreK-12<sup>th</sup> Enrollment Projections





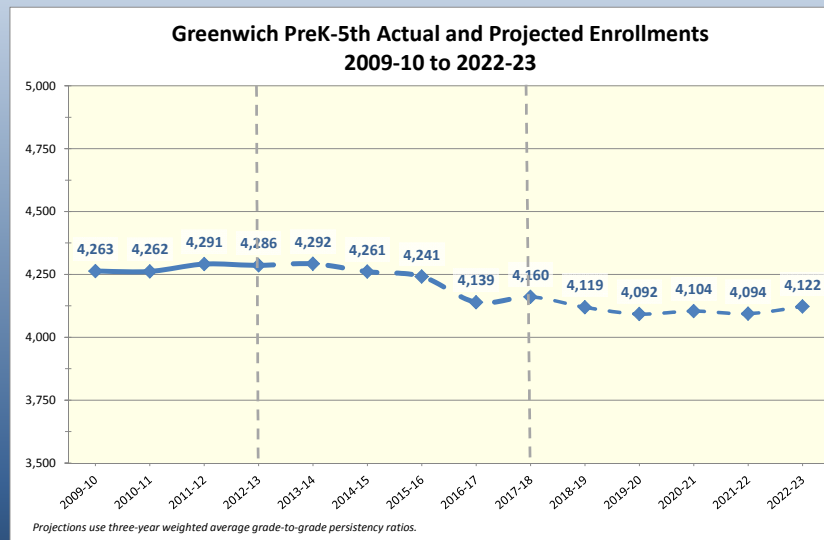


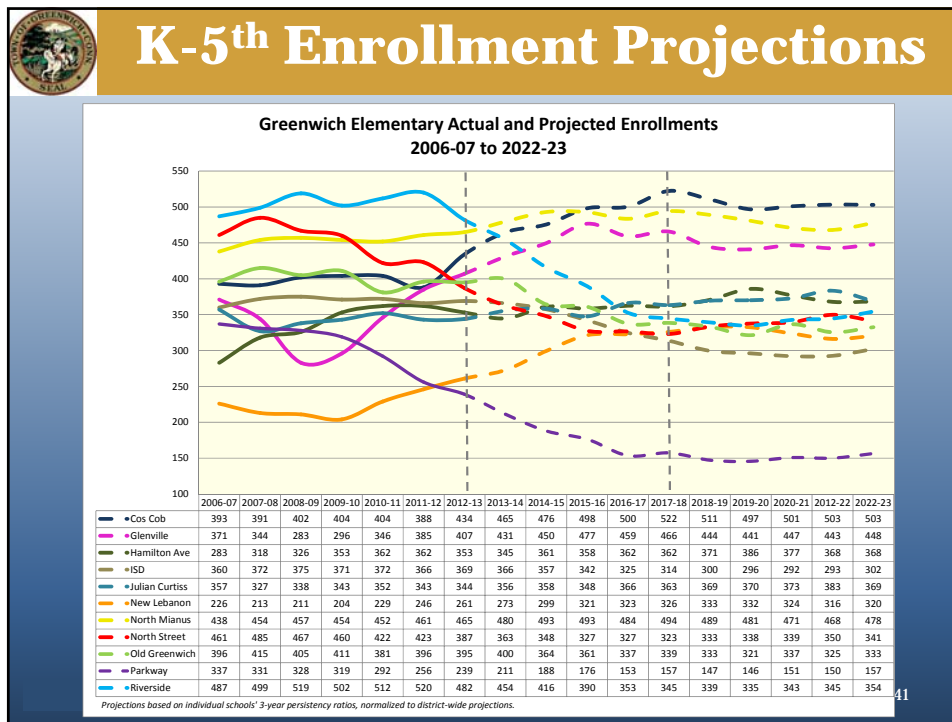
## PreK-12<sup>th</sup> Enrollment Projections

School Year	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	TOTAL
2012-13	696	654	738	691	685	672	660	595	632	660	661	678	699	150	8,871
2013-14	678	704	654	742	692	672	629	655	591	665	662	660	685	150	8,838
2014-15	641	685	704	658	744	679	629	624	650	622	667	661	667	150	8,780
2015-16	661	648	685	708	659	730	636	624	619	684	623	666	668	150	8,761
2016-17	627	669	648	689	709	647	683	630	620	652	686	623	673	150	8,705
2017-18	669	634	669	652	691	696	605	677	626	652	653	685	629	150	8,688
2018-19	655	677	634	673	653	678	651	600	673	659	653	653	692	150	8,700
2019-20	651	663	677	638	674	641	634	646	596	707	660	653	659	150	8,649
2020-21	653	658	663	680	639	661	600	629	642	627	709	660	659	150	8,630
2021-22	651	660	658	666	682	627	619	595	625	675	629	709	666	150	8,611
2022-23	656	658	660	662	668	669	587	614	591	657	677	628	716	150	8,591

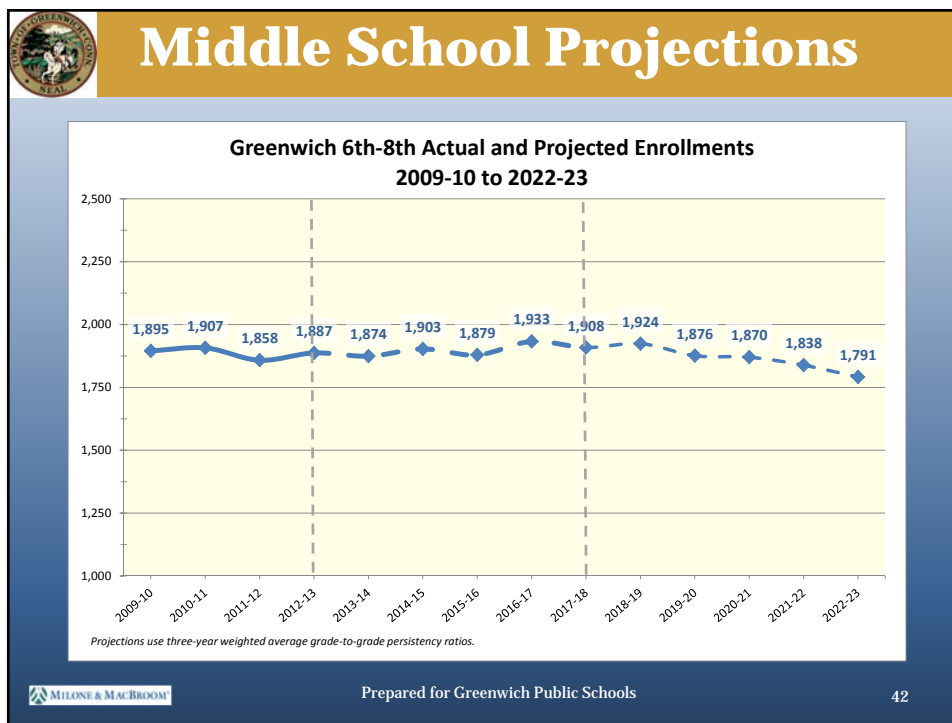


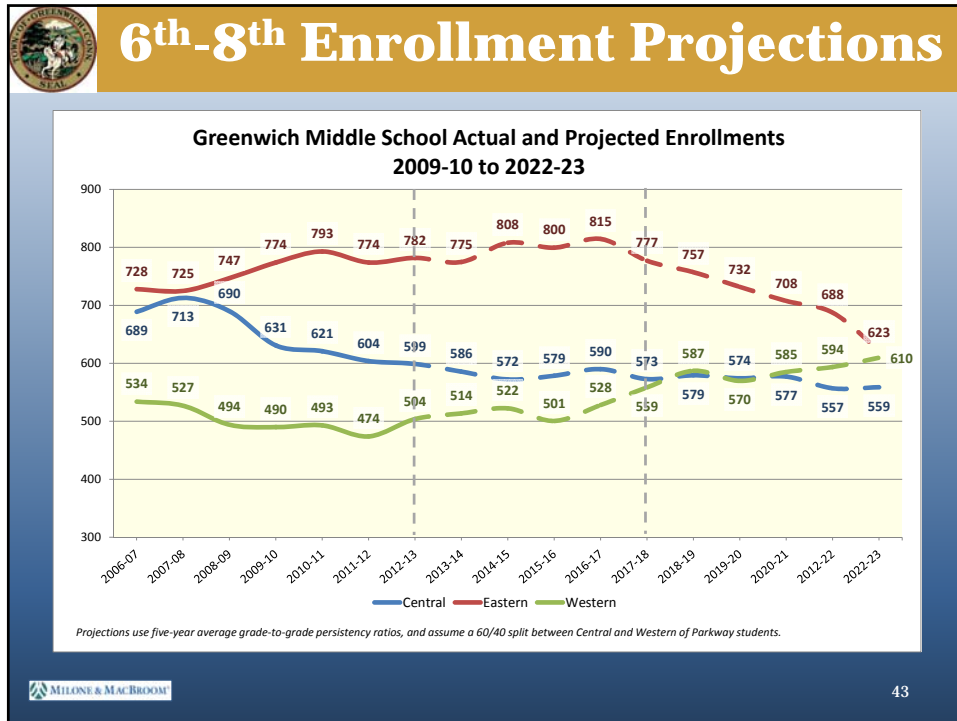
## PreK-5<sup>th</sup> Enrollment Projections



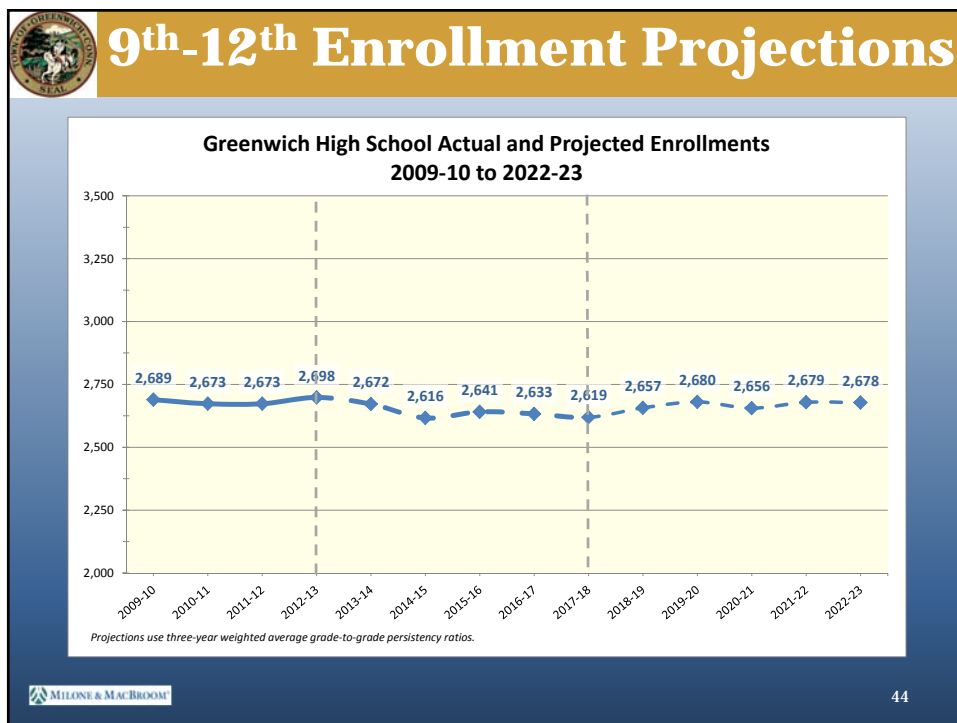


41





43



44



## Enrollment Patterns Summary

- Total Enrollments Down About 1% from 2005-06 to 2007-08 Average
- Elementary and High School Enrollments Have Remained Stable the Last Several Years
- Middle School Enrollments Have Declined About 4% Since 2007-08
- Enrollment in Greenwich Magnets Has Decreased Over the Last Three Years



## Elementary Facilities Capacities

Based on:

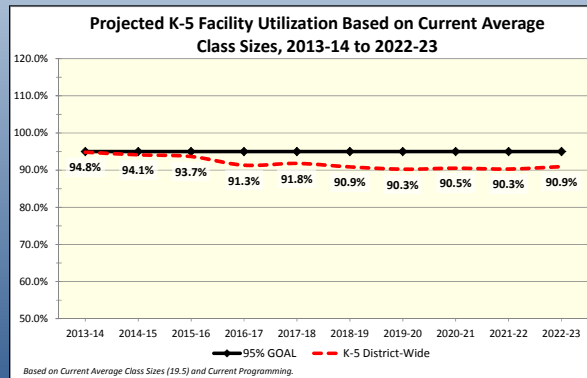
- Current Instructional Room Usage
- Does not include Science or Computer Labs
- Does Not Include PreK Rooms

Elementary Capacities			
School	Total Instruction Rooms	Total Students	
		Current Average Class Sizes (19.5)	Mid-Point Policy Sizes (22)
Cos Cob	23	449	506
Glenville	22	429	484
Hamilton Ave	20	390	440
ISD	18	351	396
Julian Curtiss	18	351	396
New Lebanon	14	273	308
North Mianus	23	449	506
North Street	23	449	506
Old Greenwich	23	449	506
Parkway	16	312	352
Riverside	24	468	528



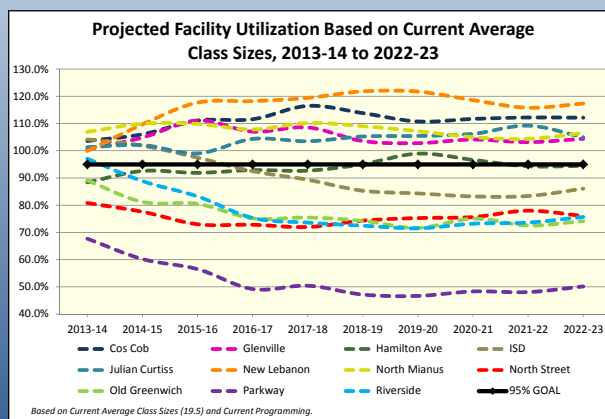
## Projected K-5 District Utilization

- Does Not Include PreK Rooms
- Assumes Current Programming Continues
- Assumes Current Average Class Sizes Continues



## Projected Elem. School Utilization

- Does Not Include PreK Rooms
- Assumes Current Programming Continues
- Assumes Current Average Class Sizes Continues





## Facilities Summary

- Under Current Programming, Current Class Sizes and with Current Facilities, Projected to Remain within 5% of Goal Utilization Rate for District-Wide Elementary
- Projected Increasing Deviation from Goal and Disparities Among Individual Schools Because of Changing Neighborhood Demographics



## Defining the Problem

- It will not be possible to maintain the current K-5 educational program in as many as five schools without changing the elementary configuration, altering the program delivery model and/or raising class sizes.
- The current system of magnet schools and elementary attendance areas is insufficient to address overall facility utilization issues and racial imbalance at New Lebanon and Hamilton Avenue.
- Given the projected high utilization of the eleven elementary schools over the next 5 to 10 years, it is not advisable to close an elementary school.



## Developing Options

In addition to charging the Superintendent with developing a plan addressing facility utilization and racial balance issues, the Board of Education identified acceptable and unacceptable approaches to developing options:

### Acceptable

- Full magnet schools
- Partial magnet schools
- Local autonomous schools
- Full or partial redistricting
- Grade Reorganization
- Controlled Choice
- Provide transportation to magnet or choice students

### Unacceptable

- State authorized charter school
- Interdistrict magnet school
- Choice or magnet guidelines that identify any "protected class or clearly defined subgroup"
- Out of district tuition students



## Options to be Presented on June 6th

- Full Redistricting (for Enrollment Balancing and/or Racial Balancing)
- District-Wide Choice with Partial Magnet Schools
- Partial Magnet Schools with Magnet System Zones and Redistricting
- Full Magnet Schools with Grade Reconfiguration and Redistricting



## Next Steps

- Preliminary Options Analysis – June 6 BOE Meeting
- Sense of Direction on Concept(s) to Pursue for Deeper Analysis and Planning – June 20 BOE Meeting
- Summer Work Plan to Refine and Revise Option(s)
- Public Discussion of Proposed Option (Sep)
- Board of Education adopts Option (Oct)



## Stakeholder Engagement

- Focus groups and public hearings between May 23<sup>rd</sup> and June 20<sup>th</sup>
- Participation in summer option development
- Public hearings in fall prior to adoption by the Board of Education and presentation to the State Board of Education





# Questions?