



Fairfield Public Schools

Facility Planning Update

April 3, 2018



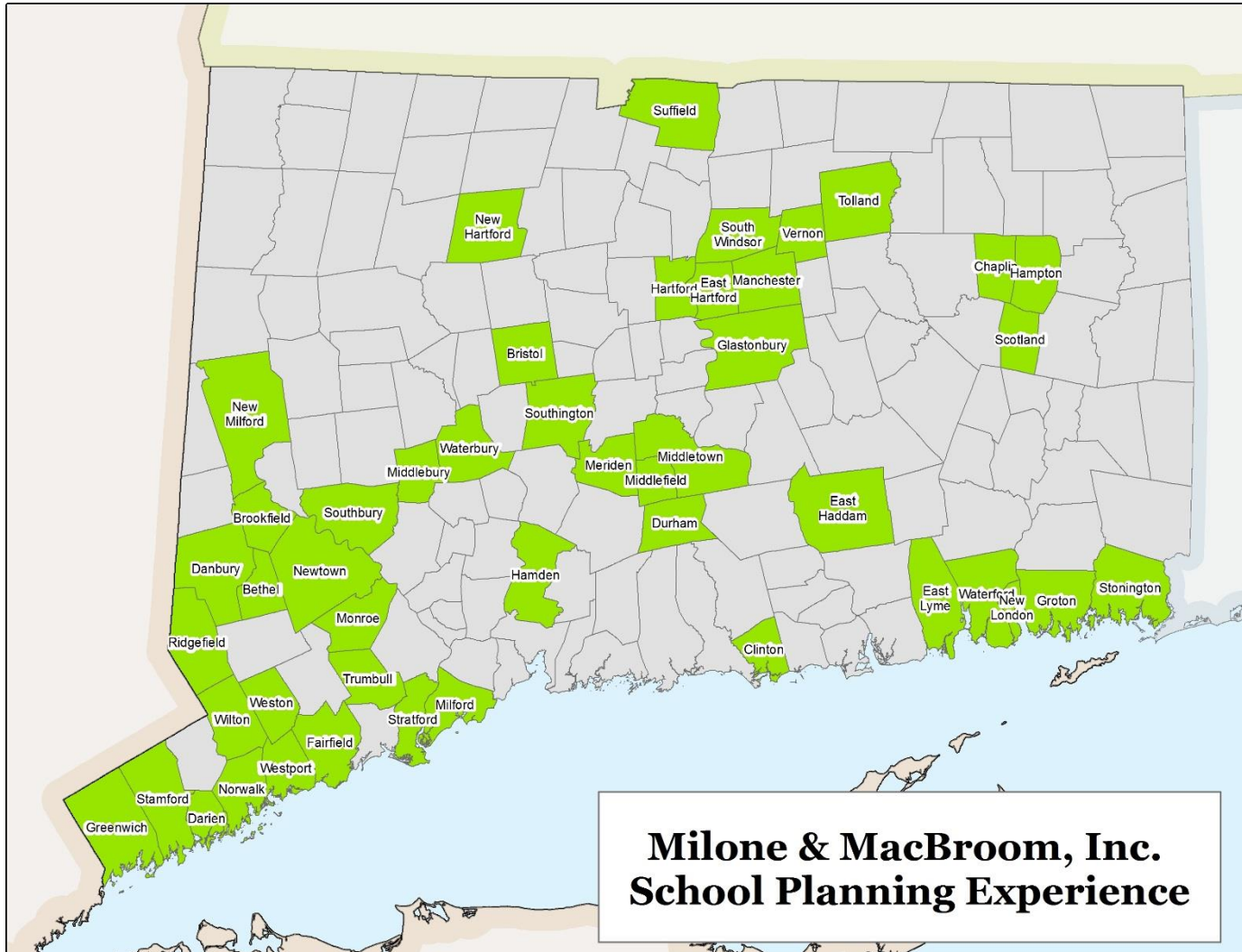
MMI School Planning Experience

Our experience developing enrollment studies in the following areas:

- Comprehensive Enrollment Projections
- Facility Utilization Studies
- Long Range Plans
- Redistricting & Reconfiguration Plans



MMI School Planning Experience





Summary of Previous Efforts



Timeline

2016 Scenario Planning

- District amended its state-mandated Racial Balance Plan in 2016
- Tested several comprehensive redistricting scenarios for long-term viability
 - Tested scenarios with and without school construction projects at Holland Hill and Mill Hill

2017-18 Scenario Planning

- Created additional scenarios that were not investigated as part of the 2016 Scenario Planning
- Assessed potential cost-savings measures in light of state budget including school closures, school paring, pocket redistricting, and grade reconfiguration options



Guiding Principles

Guiding Principles (1) -

- Strive to maintain established neighborhoods and consider natural and manmade boundaries (rivers, highways)
- Consider the impact on busing and walkers
- Safety issues should be considered
- Phase out all temporary solutions (portables)
- Strive for sustained facility utilization at 90%
- Siblings should attend same schools – avoid crossing feeder patterns
- Maintain District Guidelines for class size
- Create the least amount of disruption

(1) *Adhoc Redistricting Committee* - Redistricting: Guiding Principles
(Approved by BOE, November 17, 2015)



Racial Balance

Connecticut's Racial Balance Law

- Outlined in Connecticut General Statutes § 10-226
- Schools whose minority composition varies by 25% or more from the district's minority composition for the same grades are considered racially imbalanced
 - Districts with racial imbalances need to submit a plan to the CSDE addressing how imbalance will be corrected – Fairfield last amended their plan in 2016
 - McKinley has been designated as racially imbalanced for 7 out of the last 8 school years



2016 Scenario Planning

Long-Term Solutions

- Comprehensive redistricting identified as a long-term solution to address overcrowding and alleviate racial imbalance while adhering to District's guiding principles
 - Requires construction of two 504-student schools at Holland Hill and Mill Hill
 - Alleviates racial imbalance at McKinley to less than 20% of the district average
 - Allows the district to address overcrowding and remove portable classrooms at all schools
 - Would require comprehensive redistricting of between 15% and 20% of elementary school students



Conceptual Redistricting Options

No New Construction at Holland Hill or Mill Hill

- Does not get McKinley within 20% of district average for racial balance
- Does not address overcrowding or remove portables
- **Not a viable solution to overcrowding and racial balance**

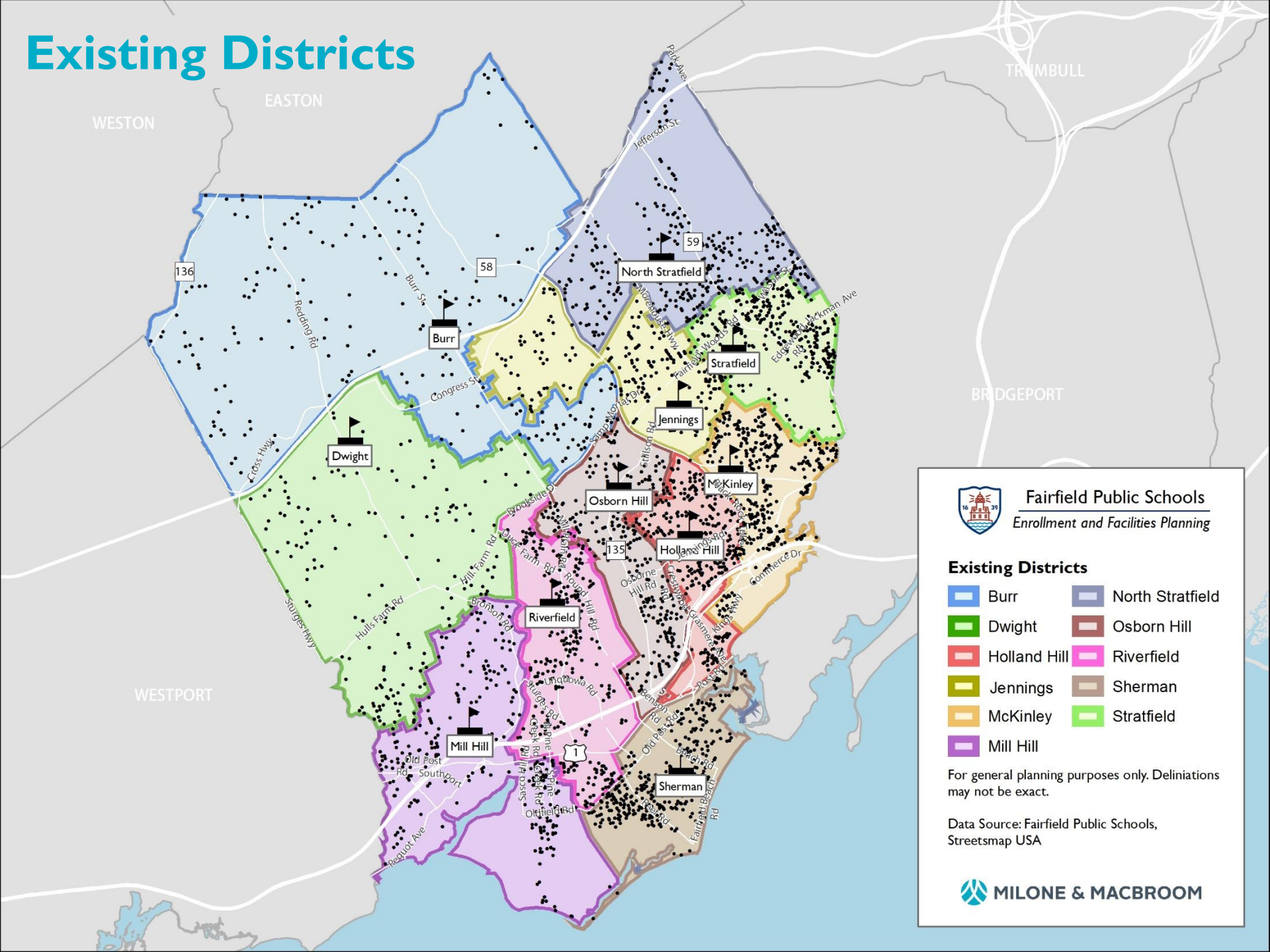
New Construction only at Holland Hill (504)

- Does not get McKinley within 20% of district average for racial balance
- Does not address overcrowding at Sherman or Mill Hill
- Portables can be removed at Holland Hill but remain at Mill Hill
- **Not a viable solution to overcrowding and racial balance**

New Construction at both Holland Hill (504) and Mill Hill (504)

- Gets McKinley under 20% of district average for racial balance
- Addresses overcrowding at Sherman and allows district to remove all portable classrooms
- **Two redistricting scenarios identified as being viable solutions to overcrowding and racial balance**

Existing Districts



Fairfield Public Schools
Enrollment and Facilities Planning

Existing Districts

	Burr		North Stratfield
	Dwight		Osborn Hill
	Holland Hill		Riverfield
	Jennings		Sherman
	McKinley		Stratfield
	Mill Hill		

For general planning purposes only. Delineations may not be exact.

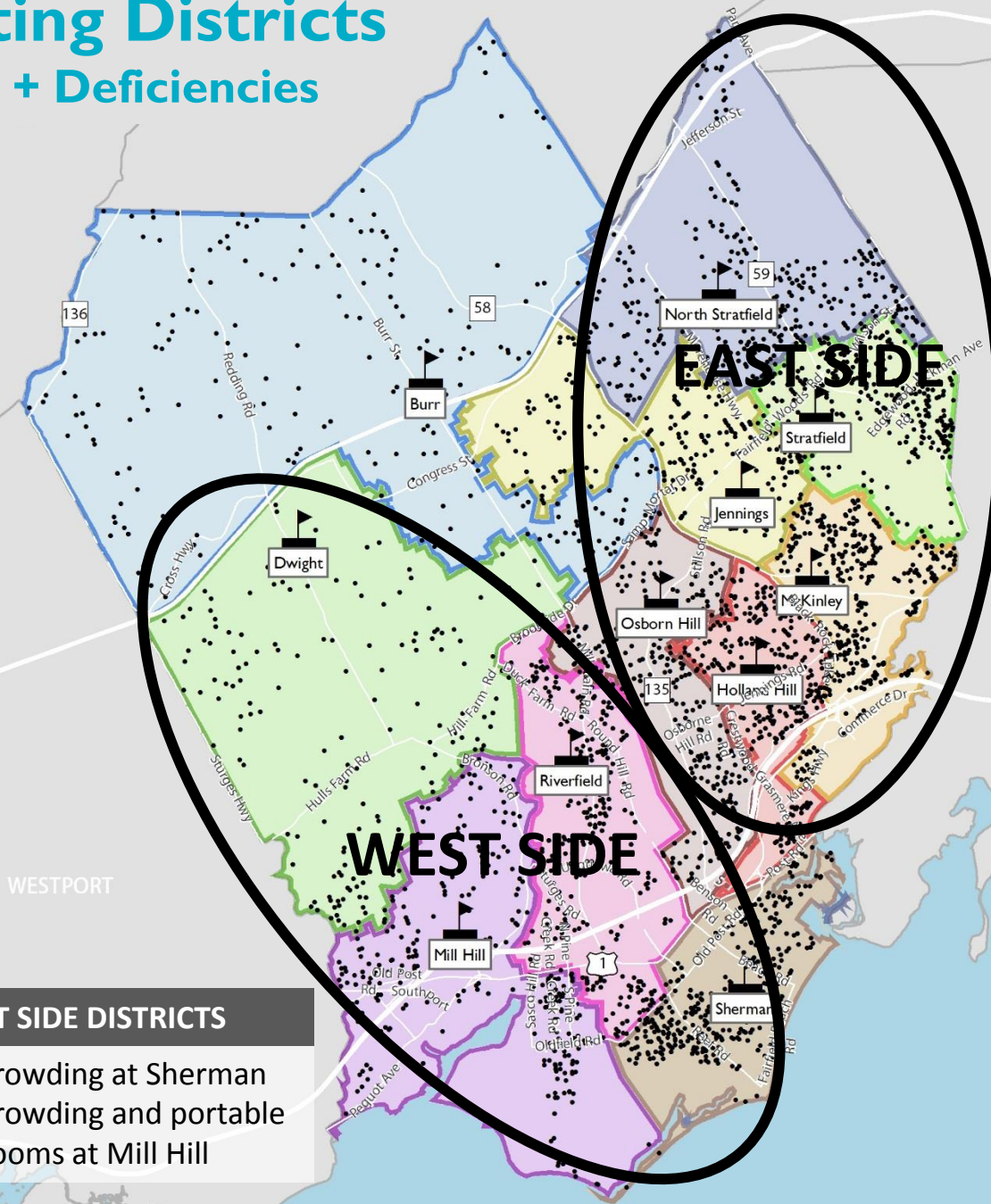
Data Source: Fairfield Public Schools, Streetsmap USA



MILONE & MACBROOM

Existing Districts

Needs + Deficiencies



EAST SIDE DISTRICTS

- **Racial imbalance** at McKinley
- Possible **impending racial imbalance** at Holland Hill
- Overcrowding and portables at existing Holland Hill



Fairfield Public Schools
Enrollment and Facilities Planning

Existing Districts

	Burr		North Stratfield
	Dwight		Osborn Hill
	Holland Hill		Riverfield
	Jennings		Sherman
	McKinley		Stratfield
	Mill Hill		

For general planning purposes only. Delineations may not be exact.

Data Source: Fairfield Public Schools, Streetsmap USA

WEST SIDE DISTRICTS

- Overcrowding at Sherman
- Overcrowding and portable classrooms at Mill Hill

Viable Scenario (from 2016)

HOLLAND HILL (504 STUDENTS)

- Infusion of space from the Holland Hill construction project enables the redistricting of east-side districts to address racial imbalance at McKinley.
- Holland Hill construction project alone not enough to reduce McKinley racial imbalance to under 20% of district average

BRIDGEPORT



Fairfield Public Schools
Enrollment and Facilities Planning

Scenario F (2016)

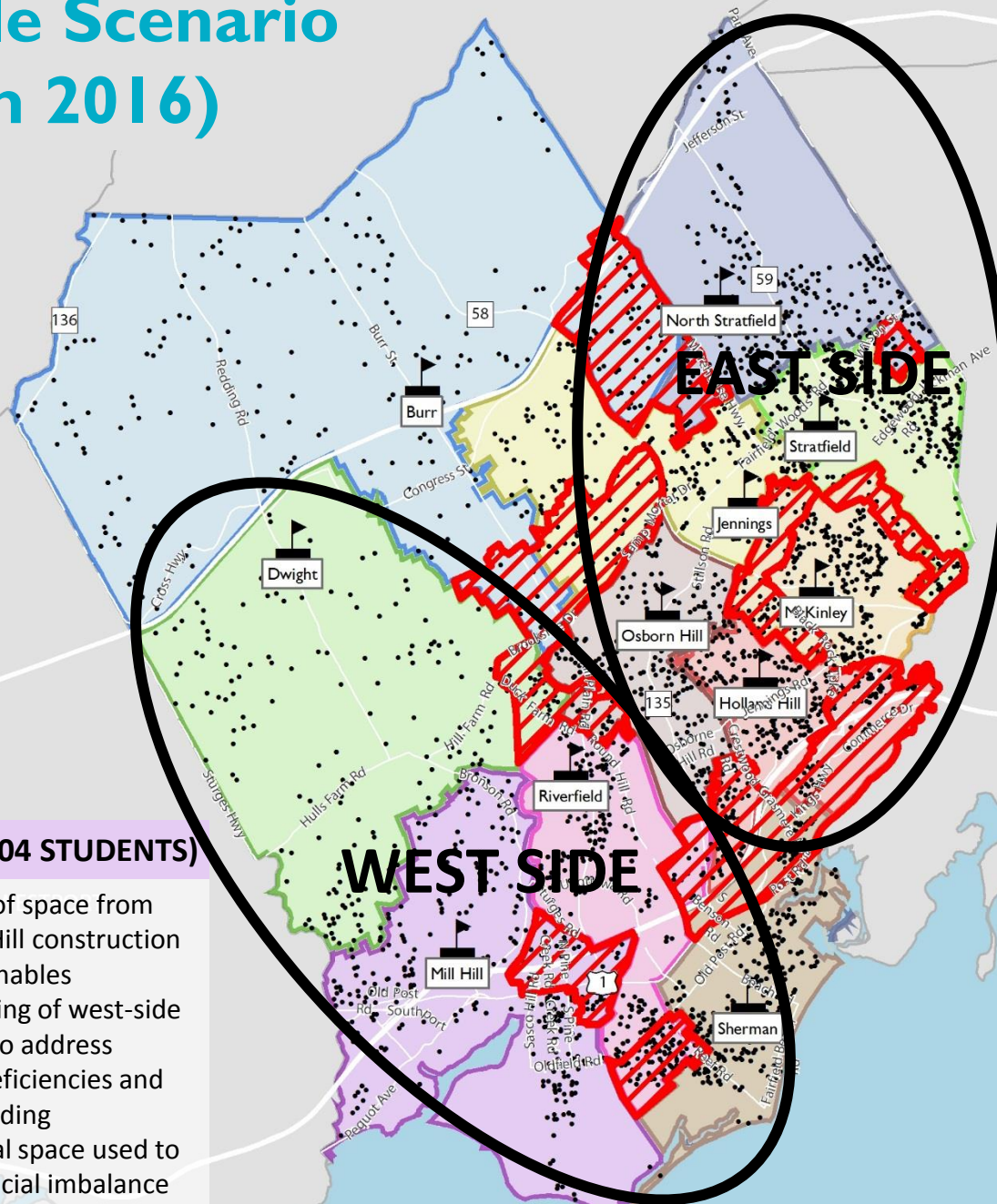
	Burr		North Stratfield
	Dwight		Osborn Hill
	Holland Hill		Riverfield
	Jennings		Sherman
	McKinley		Stratfield
	Mill Hill		Area of Change

For general planning purposes only. Delineations may not be exact.

Data Source: Fairfield Public Schools, Streetsmap USA

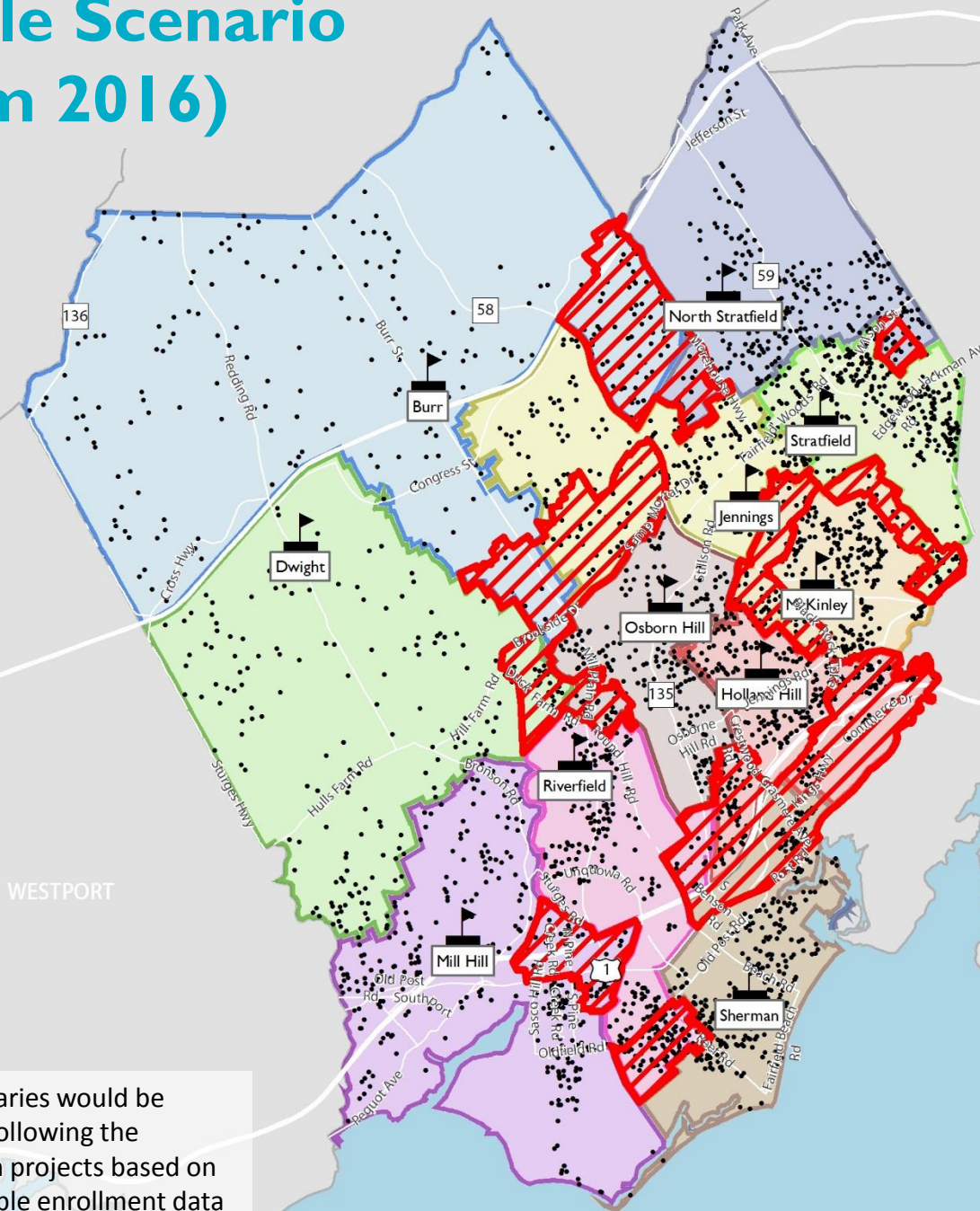
MILL HILL (504 STUDENTS)

- Infusion of space from the Mill Hill construction project enables redistricting of west-side districts to address facility deficiencies and overcrowding
- Additional space used to reduce racial imbalance at McKinley



Viable Scenario (from 2016)

~20% of elementary
school students
would be redistricted
under this scenario



Final boundaries would be developed following the construction projects based on latest available enrollment data



Fairfield Public Schools
Enrollment and Facilities Planning

Scenario F (2016)

Burr	North Stratfield
Dwight	Osborn Hill
Holland Hill	Riverfield
Jennings	Sherman
McKinley	Stratfield
Mill Hill	Area of Change

For general planning purposes only. Delineations may not be exact.

Data Source: Fairfield Public Schools, Streetsmap USA



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2017 Scenario Planning

Tested additional scenarios that were not examined in the 2016 conceptual redistricting options – focus was on testing structural changes

- Assessed potential cost-savings measures in light of state budget including school closures, school paring, pocket redistricting, and grade reconfiguration options
- School-pairing of McKinley with Jennings (K-2, 3-5) was identified as a sustainable long-term solution to racial imbalance
 - Deviates from current K-5 neighborhood based educational model
 - Requires further architectural study
- Three other options were determined to be feasible at achieving cost savings or addressing school overcrowding, but **did not address racial imbalance at McKinley**

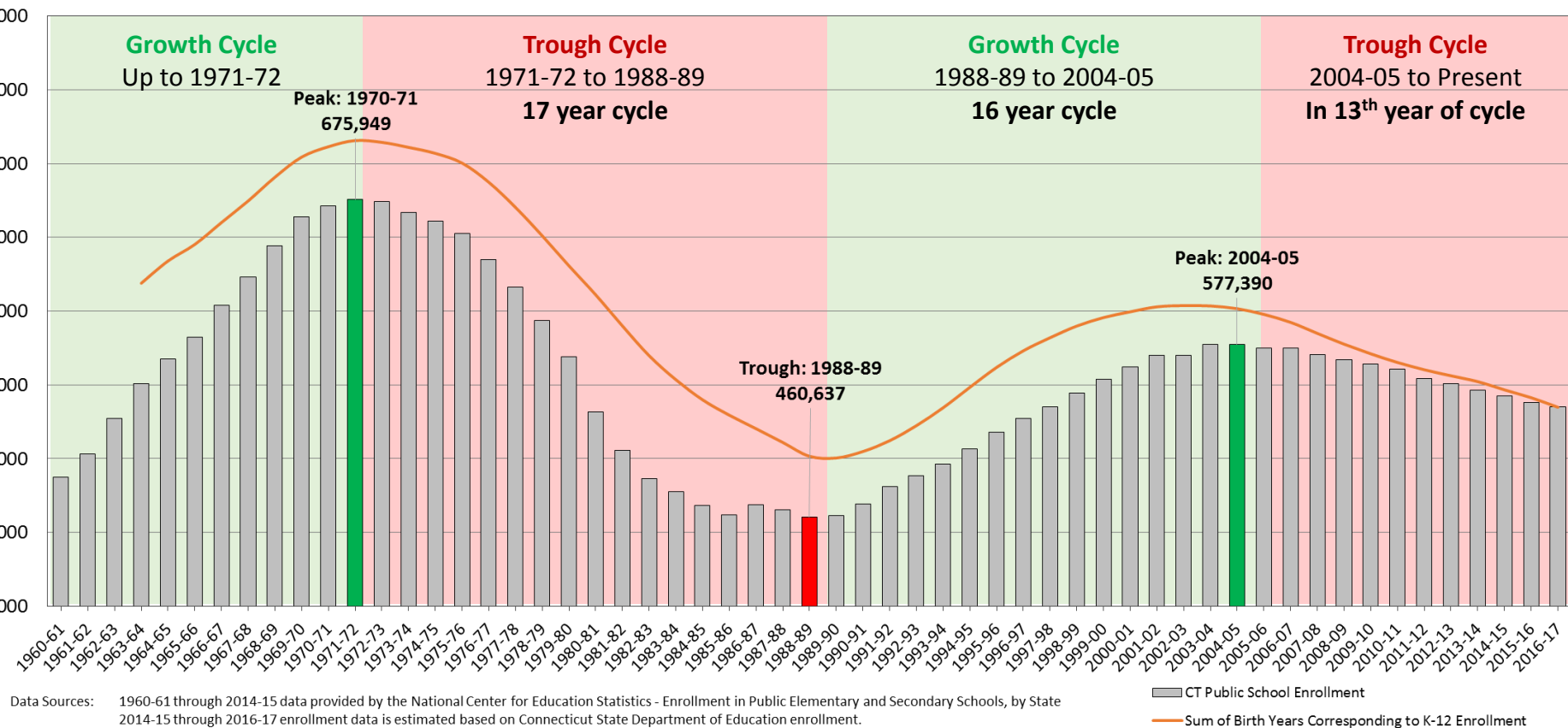


Enrollment Trends and Projections



State Enrollment Trends

Public School Enrollment in Connecticut: 1960 to 2016



“Baby Boom” enters school – enrollments surge in the 1960s

“Baby Bust” of the late 1960s and 1970s enters school and leads to enrollment declines

“Echo Boom” (millennials) begin entering school, leading to another growth cycle

“Echo Bust” in 13th year of cycle – are we nearing the end of a cycle?



Projections Comparison

Elementary School Projections Comparison

Grade	K	1	2	3	4	5	K-5 Total
Actual Enrollment	631	674	697	719	771	743	4,235
Projected Enrollment	637	668	681	715	778	741	4,220
Difference	(6)	6	16	4	(7)	2	15

0.3% deviation

Enrollment data provided by Fairfield Public Schools as of October 1, 2017

Middle School Projections Comparison

Grade	6	7	8	6-8 Total
Actual Enrollment	893	778	787	2,458
Projected Enrollment	890	781	772	2,443
Difference	3	(3)	15	15

0.6% deviation

Enrollment data provided by Fairfield Public Schools as of October 1, 2017

High School Projections Comparison

Grade	9	10	11	12	9-12 Total
Actual Enrollment	762	721	775	803	3,061
Projected Enrollment	746	720	777	783	3,026
Difference	16	1	(2)	20	35

1.2% deviation

Enrollment data provided by Fairfield Public Schools as of October 1, 2017



Projections Buildings Blocks

Starting Data

Critical to the overall accuracy of the projections, as each year builds upon the last

District Projections

**Town of
Fairfield
Births**

*Obtained from CT
DPH*

**Historic
Enrollment
Trends**

*Obtained from FPS
and CT SDE*

Individual School Projections

**Geolocated
Birth Data**

*Obtained from CT
DPH and address
matched*

**Geolocated
Enrollment
Data**

*Obtained from FPS
and address matched*

Projection Assumptions

Several projection models are developed by applying different persistency ratios to building blocks

**5-Year
Average**

**3-Year
Average**

**3-Year
Weighted**

Blended

Demographic and Housing Data

Used to inform model selection and birth projections

**Unemployment
(Town, Region)**

**Housing Permit
Activity**

**Home Sales
(1-family,
condos)**

**Women of Child-
Bearing Age +
Fertility Rates**

**Population
Projections &
Development
Capacity**



Persistency Ratios

- Persistency ratios are 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, including housing characteristics, residential development, economic conditions, student transfers in and out of the system, and student mobility
- Persistency Ratio of 1.0 means cohort size remains the same; 1.05 means the cohort size increases by 5%, or a cohort of 100 grows to 105 the following year
- Changes in population, housing stock and tenure, and economic conditions help explain persistency ratios

School Year	K	1	2	3	4	5	6
2011-12	800	785	735	810	763	851	843
2012-13	803	841	774	742	820	770	863
2013-14	723	763	858	778	749	824	780
2014-15	686	751	714	870	782	756	808
2015-16	649	693	759	759	873	774	765
2016-17	641	676	702	775	757	886	787
2017-18	631	674	697	719	771	743	893

The table to the left shows how a grade cohort grows from year to year, indicating persistency ratios over 1.0. This accounts for the variety of external factors that affect enrollments, including home sales, residential development and student transfers into and out of the system



Persistence Ratios

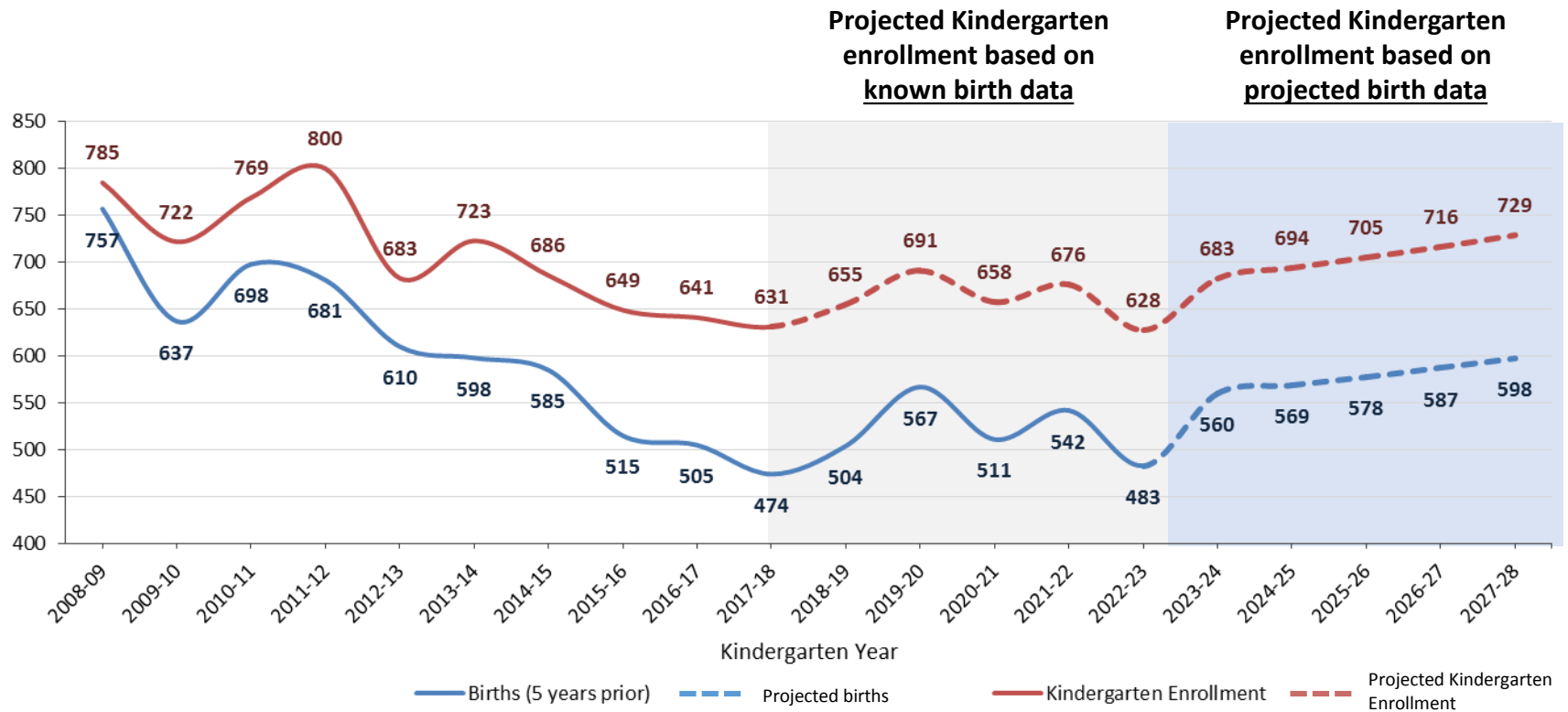
Kindergarten through 12th Grade Persistence Ratios by School Year
2002-2003 to 2017-18

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. of Migration
2002-03		1.0367	1.0127	1.0056	1.0030	1.0000	1.0123	0.9958	1.0000	0.9213	0.9715	0.9728	1.0109	0.27%
2003-04		1.0388	1.0105	0.9972	0.9834	0.9760	0.9871	1.0046	0.9789	0.9485	0.9984	0.9780	0.9795	-1.22%
2004-05		1.0013	1.0097	1.0013	0.9734	1.0154	1.0108	1.0174	1.0015	0.9497	0.9885	0.9836	1.0150	0.31%
2005-06	0.9558	1.0577	0.9899	0.9822	0.9948	0.9899	1.0097	1.0061	1.0043	0.9849	0.9652	0.9750	0.9799	-0.23%
2006-07	1.0579	1.0062	0.9839	1.0281	1.0209	1.0013	1.0174	0.9945	1.0000	0.9986	0.9508	1.0047	0.9778	1.06%
2007-08	1.0839	1.0328	1.0037	1.0366	1.0409	1.0233	1.0078	1.0114	1.0152	0.9985	0.9957	0.9919	0.9922	2.30%
2008-09	1.0370	1.0204	0.9929	1.0087	0.9951	1.0072	1.0094	1.0065	1.0282	0.9620	0.9803	0.9772	1.0163	0.87%
2009-10	1.1334	1.0166	1.0027	1.0119	1.0123	1.0024	1.0118	1.0146	1.0128	0.9822	0.9746	0.9969	1.0190	1.09%
2010-11	1.1017	1.0263	1.0125	1.0093	0.9941	1.0048	1.0049	0.9883	1.0026	0.9861	0.9832	0.9957	1.0233	0.04%
2011-12	1.1747	1.0208	0.9919	1.0025	1.0039	1.0035	1.0157	0.9951	1.0166	0.9727	0.9576	0.9986	1.0087	0.63%
2012-13	1.1197	1.0513	0.9860	1.0095	1.0123	1.0092	1.0141	1.0166	1.0085	0.9709	0.9906	1.0214	1.0242	1.18%
2013-14	1.2090	1.0293	1.0202	1.0052	1.0094	1.0049	1.0130	0.9873	1.0093	0.8936	0.9436	0.9932	0.9974	0.46%
2014-15	1.1726	1.0387	1.0114	1.0140	1.0064	1.0093	0.9806	1.0128	0.9988	0.9225	1.0014	1.0089	0.9959	0.35%
2015-16	1.2602	1.0102	1.0107	1.0267	1.0034	0.9885	1.0119	1.0087	1.0063	0.9201	0.9662	0.9919	0.9761	0.72%
2016-17	1.2693	1.0416	1.0130	1.0211	1.0068	1.0149	1.0168	1.0078	0.9877	0.9258	0.9949	1.0104	1.0313	0.91%
2017-18	1.3312	1.0515	1.0311	1.0242	0.9948	1.0109	1.0079	0.9886	1.0208	0.9466	0.9796	0.9949	1.0308	0.75%

- Relatively stable in-migration of between 0% and 1% over the last decade
- Decreasing number of births over the last decade, but a growing birth-to-k ratio
 - Indicates a greater proportion of kindergarteners are being born outside of Fairfield than in the past



Birth and Kindergarten Trends



- Kindergarten enrollment has declined by about 20% over the last ten years
- Corresponding birth cohorts have declined by 37% over the same time period
- Rising Birth-to-K ratio indicates that a growing proportion of kindergarteners who enroll in Fairfield Public Schools were born elsewhere



Birth and Kindergarten Trends

Birth-to-K Ratios in Fairfield and other Fairfield County Districts

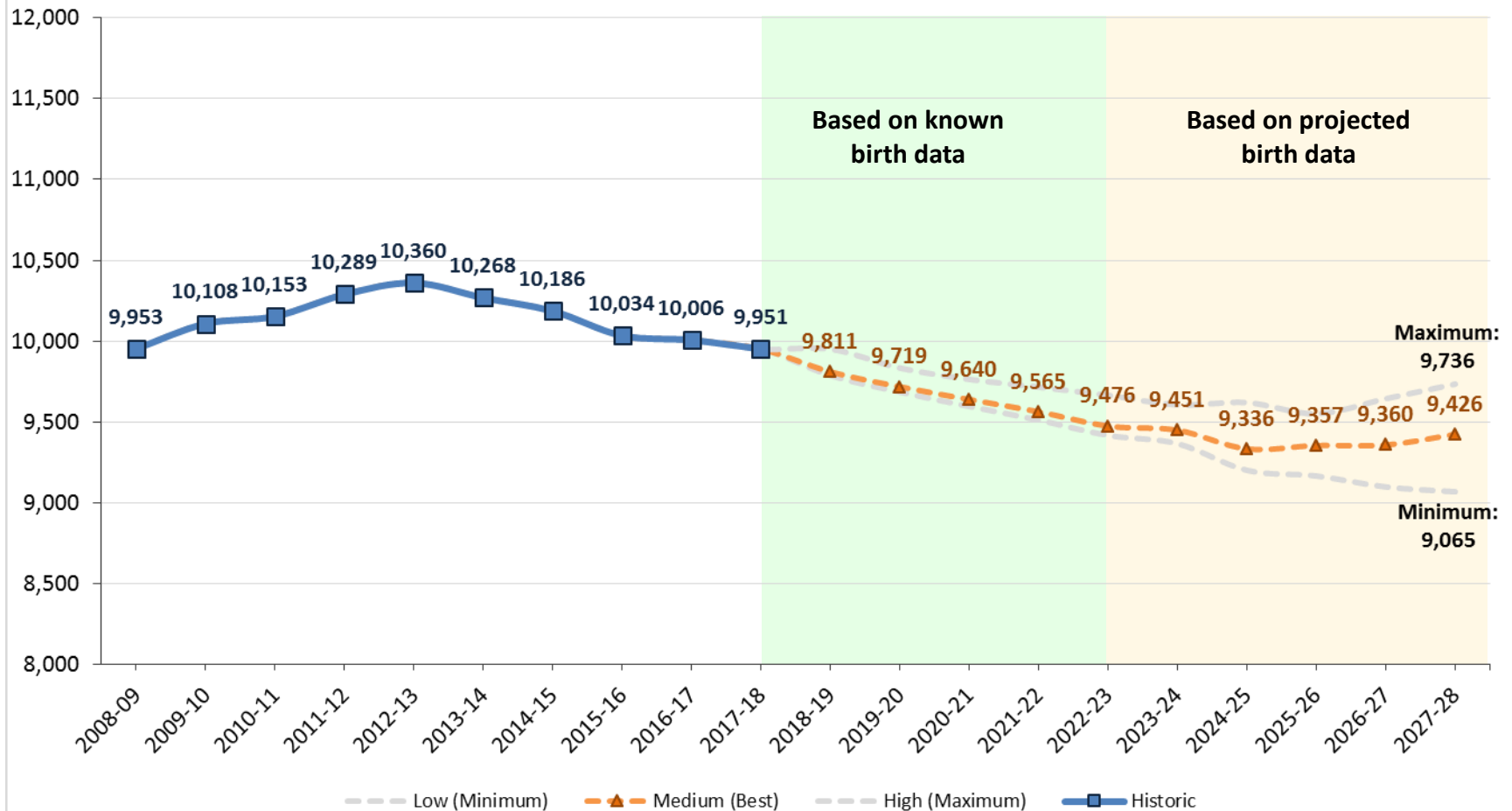
School Year	Fairfield	Ridgefield	Trumbull	Weston	Wilton
2008-09	1.0370	1.2073	1.1663	1.7292	1.5046
2009-10	1.1334	1.2299	1.2025	1.6289	1.6429
2010-11	1.1017	1.4137	1.1473	1.5143	1.6404
2011-12	1.1747	1.3377	1.1629	1.8837	1.5714
2012-13	1.1197	1.3668	1.1381	1.5972	1.6048
2013-14	1.2090	1.6957	1.3415	1.9155	1.7063
2014-15	1.1726	1.4921	1.3474	1.9718	1.7945
2015-16	1.2602	1.6095	1.5106	2.0328	1.8015
2016-17	1.2693	1.6802	1.5669	2.6122	1.8926
2017-18	1.3312	1.9216	1.5495	1.7937	1.9537

- Rising birth-to-kindergarten ratio documented in districts across Fairfield County
- Direct correlation between size of birth cohort and birth-to-K ratio. As the number of births has decreased, the birth-to-K ratio has increased
- Indicates that a growing proportion of kindergarteners were born elsewhere and moved prior to enrolling in Kindergarten



District Projections

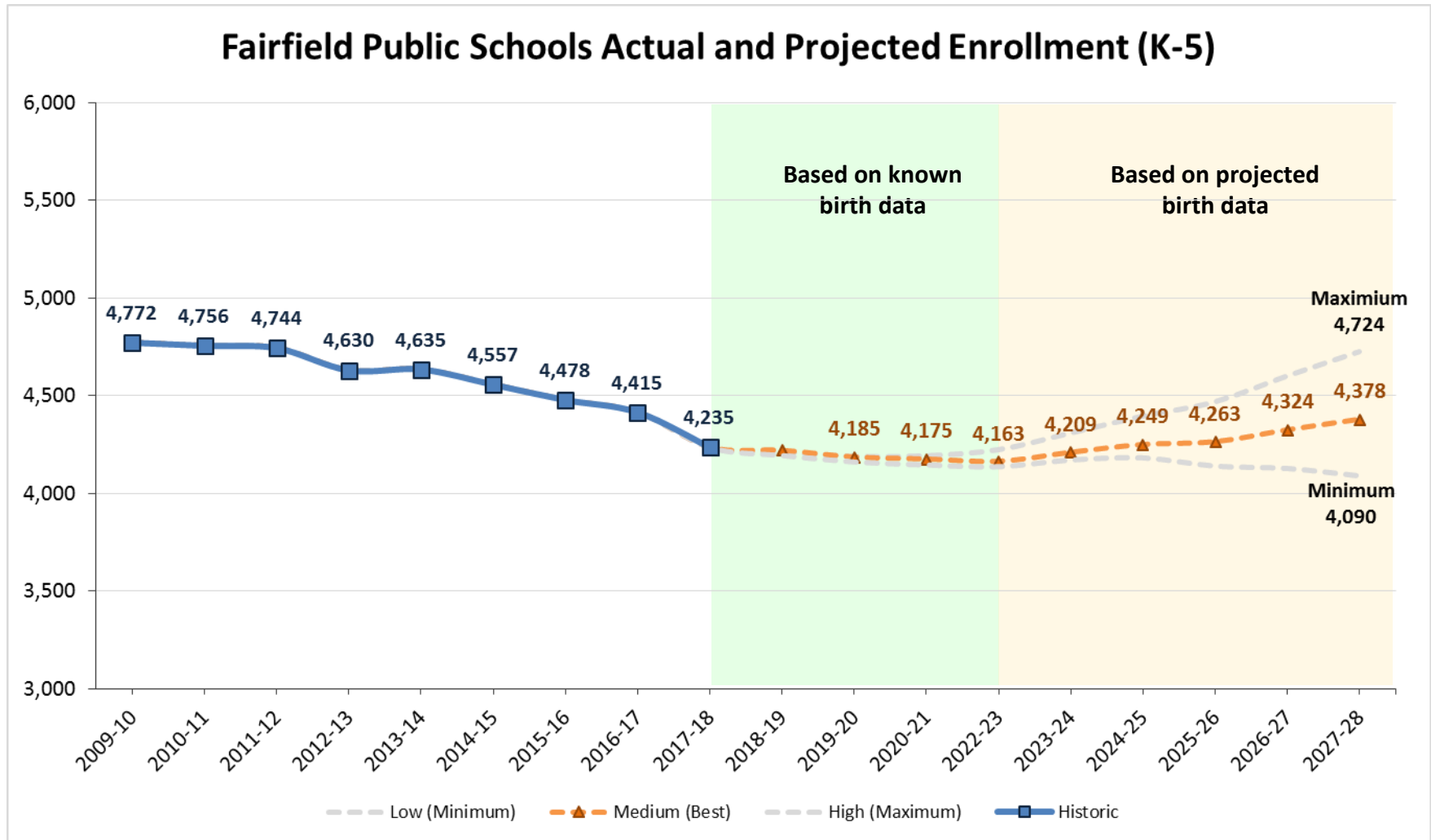
Fairfield Public Schools Actual and Projected Enrollment (PK-12)



Medium Projections are supported by demographic, housing, and economic data



K-5 Projections



Medium Projections are supported by demographic, housing, and economic data



Facilities

School	Total Full-Size Classrooms ²	Total Full-Size Instructional Classrooms	K-5 Grade Level Instruction	CLC	Pre-K ³	K-5 Operational Capacity
Burr	28	24	22	1	1	470
Dwight	21	18	17	1	0	365
Holland Hill ¹	28	24	24	0	0	504
Jennings	23	18	17	1	0	365
McKinley	30	24	24	0	0	504
Mill Hill (without portables) ²	20	13	13	0	0	273
North Stratfield	28	24	24	0	0	504
Osborn Hill	30	24	22	2	0	478
Riverfield	27	24	24	0	0	504
Roger Sherman	24	22	22	0	0	462
Stratfield	27	24	22	0	2	462
Total All Schools	286	239	231	5	3	4,891

1. Based on the planned capacity from the new Holland Hill Ed Spec

2. The five portable classrooms were deducted from the capacity at Mill Hill

3. Pre-K classrooms are deducted from the K-5 operational capacity

- Operational capacity is educationally driven – aligns with district Ed. Spec. with all portable classrooms removed
- Portable classrooms were deducted from the operational capacity at Mill Hill
- Takes into account the placement of district-wide programs such as CLC and Pre-K



Facility Utilization

K-5 Utilization Projections (Operational Capacity) *

School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Operational capacity
Burr	80.4%	78.1%	77.4%	77.4%	75.5%	76.0%	76.2%	76.4%	78.5%	78.5%	470
Dwight	91.2%	92.3%	89.3%	85.2%	84.7%	87.9%	85.2%	85.5%	89.9%	96.2%	365
Holland Hill ¹	74.4%	76.4%	77.0%	76.2%	78.8%	80.0%	80.8%	79.8%	79.4%	80.2%	504
Jennings	81.4%	81.4%	78.9%	79.2%	79.7%	82.2%	83.0%	81.4%	81.9%	83.3%	365
McKinley	85.7%	84.1%	82.3%	83.3%	78.4%	81.0%	81.0%	81.3%	82.5%	82.9%	504
Mill Hill (Operational Capacity)	124.9%	127.1%	132.2%	134.4%	134.1%	134.8%	137.0%	140.7%	139.9%	139.9%	273
Mill Hill (Functional Capacity)	90.2%	91.8%	95.5%	97.1%	96.8%	97.4%	98.9%	101.6%	101.1%	101.1%	378
North Stratfield	75.2%	74.2%	74.0%	76.6%	77.2%	76.2%	77.6%	77.4%	77.4%	77.8%	504
Osborn Hill	83.9%	79.7%	77.4%	78.7%	79.1%	77.8%	79.3%	80.3%	82.8%	83.5%	478
Riverfield	82.7%	83.3%	84.5%	87.5%	90.3%	90.3%	91.5%	91.5%	93.1%	91.7%	504
Roger Sherman	101.5%	101.9%	105.2%	102.4%	98.1%	100.6%	101.5%	100.6%	101.9%	104.3%	462
Stratfield	85.9%	82.7%	81.8%	82.0%	81.2%	81.4%	84.0%	86.4%	87.4%	89.8%	462
Total	86.3%	85.6%	85.4%	85.7%	85.1%	86.1%	86.9%	87.2%	88.4%	89.5%	4,891

1. Based on the capacity of the New Holland Hill School (504 students)

* Operational capacity assumes all portable classrooms are removed

- Utilization based on operational capacity and enrollment projections
- High utilization projected to continue at Mill Hill and Roger Sherman over the next ten years.
- Using Mill Hill's functional capacity (378) rather than operational capacity, utilization would still be over 95% for eight of the next ten years, and over 100% for the final three years of the projections horizon



Mill Hill Construction Project

“No Build” Alternatives *

In order to meet the Ed. Spec. without new construction, Mill Hill would need to:

1. Replace portable classrooms with new trailers
2. Utilize hallways and common areas (stage, etc.) to make up for the lack of support spaces in the main building – remove portables
3. Redistrict ~100 students out of Mill Hill – remove portables

** If done in isolation, none of the above alternatives would address racial imbalance at McKinley or overcrowding at Roger Sherman*



Mill Hill Construction Project

Construction Project

- If comprehensive redistricting is undertaken to address overcrowding and racial imbalance, a 504 student school is needed at Mill Hill
- Maintains current K-5 neighborhood-based model, but would redistrict between 15% and 20% of students



Mill Hill Construction Project

Other Considerations

- In order to maximize reimbursement from the State for the School Construction Grant, District needs to hit the target capacity for the new school
- Additional students need to be moved into Mill Hill District in order to support a 504 student school



Questions?
