

Wayland Public Schools

Elementary School Reconfiguration and Redistricting

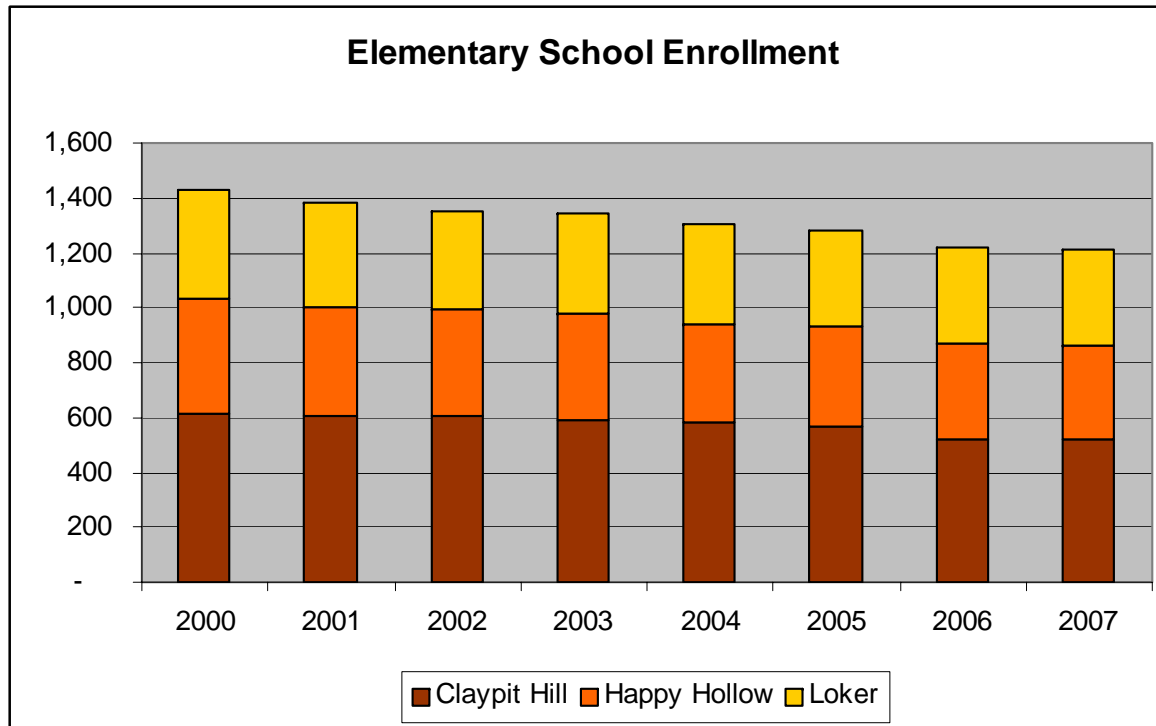
April 28, 2008



Why reconfigure and redistrict?



Elementary enrollment has been steadily declining



Elementary enrollment has been steadily declining

October 1 Enrollment

Year	Total	Claypit Hill	Happy Hollow	Loker
2000	1427	613	423	391
2001	1381	604	398	379
2002	1350	605	388	357
2003	1347	589	386	372
2004	1304	579	363	362
2005	1283	570	361	352
2006	1221	517	350	354
2007	1213	524	337	352



Enrollment projections show continued steady decline

PROJECTIONS

		FY09	FY10	FY11	FY12
Oct. 1	2007	3 Yr. CSR	Using 3-Yr. CSR ('04-'06)		
<u>Totals</u>					
K-5	1,213	1,182	1,123	1,080	1,052
6-8	680	665	644	623	613
9-12	903	877	880	848	816



**What was involved in
redistricting?**



Plan Parameters

Plan Development

Plan Evaluation

Plan Comparison

Plan Recommendation



Plan Parameters



Plan Parameters

1. Achieve approximate distribution of 400 students at Happy Hollow and 600 students at Claypit Hill



Plan Parameters

2. Achieve distribution of students within each school so as not to exceed class size guidelines at each grade level

- 20 Students in Grade 1
- 23 Students in Grades 2 & 3
- 25 Students in Grades 4 & 5



Plan Parameters

3. Achieve distribution of students within each school so as not to exceed a total of 29 classroom sections at Claypit Hill and a total of 20 classroom sections at Happy Hollow



Plan Parameters

4. Achieve distribution of students within each school so as to minimize the reassignment of students already attending Claypit Hill and Happy Hollow



Plan Parameters

5. Achieve distribution of students within each school so as to avoid splitting families between Claypit Hill and Happy Hollow and to minimize splitting geographic neighborhoods



Plan Parameters

6. Using cohort survival ratios, project student enrollment and class sizes for four years to ensure enrollment at both schools remains balanced and class sizes do not exceed current policy guidelines



Plan Parameters

7. Determine the number of students eligible for transportation for plans meeting these parameters, using GIS data showing addresses within $1\frac{1}{2}$ mile travel distance from each elementary school



Plan Parameters

8. Develop transportation estimates for plans meeting these parameters



Plan Development



Plan Development

- ✓ Downloaded current student data (name, home address, grade) from iPass
- ✓ Gathered similar data for K-eligible preschoolers
- ✓ “Graduated” current 5th graders and moved all others up one grade for baseline enrollment numbers for September 2008



Plan Development

Baseline Enrollment Data Used for All Plans

FY09 Baseline Numbers			
	CH	HH	LO
K	69	43	52
1	85	40	50
2	80	65	63
3	88	57	56
4	85	53	56
5	<u>98</u>	<u>64</u>	<u>69</u>
Subtotal	505	322	346
Total K-5			1177



Plan Development

- ✓ Integrated this data with GIS parcel mapping information
- ✓ Used street maps of Wayland and baseline enrollment information for September 2008 to develop possible options that fit within the parameters for planning

How was this done?



Plan Development

- ✓ Multiplied grade-level 2008 baseline enrollment data by the 3-year cohort survival ratios used for annual enrollment projections to derive the total number of students we could expect at each grade level in September 2008



Plan Development

- ✓ Using street maps, drew new district lines for Grade 1-5 schools
- ✓ "Assigned" resident students to a school based on their street address
- ✓ "Assigned" non-resident students to balance enrollment and class sizes at the two schools



Plan Development

- ✓ Tallied up the total number of students by grade that were assigned to each school
- ✓ Determined the total number of classrooms needed for 2008 - 2009



Plan Development

- ✓ Plans exceeding the maximum number of class sections that could be housed at Claypit Hill (29) and Happy Hollow (20) for September 2008 were deemed *"not feasible"*
- ✓ No further analysis was done on these plans



Plan Development

- ✓ Plans that met these criteria moved to the next step in evaluation to ensure sustainability of the plan

How was this done?



Plan Development

- ✓ Performed enrollment projections for FY10, FY11 and FY12 using cohort survival ratios
- ✓ Calculated the number of students who might reasonably be expected in each grade at Claypit Hill and Happy Hollow
- ✓ Used class size guidelines to determine the number of sections needed at each grade level in both schools



Plan Development

- ✓ Plans exceeding the maximum number of class sections that could be housed at Claypit Hill and Happy Hollow for FY10, FY11 and FY12 were deemed *"not feasible"*
- ✓ No further analysis was done on these plans.



Plan Development



26

different
redistricting
plans were
developed
using this
process



Plan Evaluation



Plan Evaluation

✓ **24** plans were deemed "*not feasible*" even with minor adjustments to district lines or assignment of non-resident students

Why?



Plan Evaluation

- ✓ Enrollment exceeded target building capacity by more than 10%
- ✓ Number of sections at one or both schools exceeded maximum number of classrooms available in FY10, FY11 or FY12
- ✓ Class size guidelines were exceeded in one or more grade levels



Plan Evaluation

- ✓ Unacceptable numbers of Claypit Hill and Happy Hollow students were reassigned from their current school
- ✓ Unacceptable splitting of neighborhoods



Plan Evaluation

- ✓ Only **2** plans were determined to be feasible and worthy of further review and consideration
- ✓ Developed these 2 plans further by estimating number of buses needed for transportation of students living more than 1½ miles from their assigned school

How was this done?



Plan Evaluation

- ✓ Using school assignment, students' street addresses, and GIS maps, determined students' eligibility for bus transportation at their assigned school based on 1½ mile distance from school to home via commonly traveled roads
- ✓ Tallied the number of students eligible for transportation at each school



Plan Evaluation

- ✓ Divided the total number of eligible riders at each school by 60 (*85% of bus capacity*) to estimate the total number of buses for plan-to-plan comparison



Plan Comparison



Plan Comparison

- ✓ Compared gross student enrollment for September 2008 at both schools under both plans
- ✓ Compared number of classroom sections required at both schools under both plans
- ✓ Compared available seats at each grade level at both schools under both plans



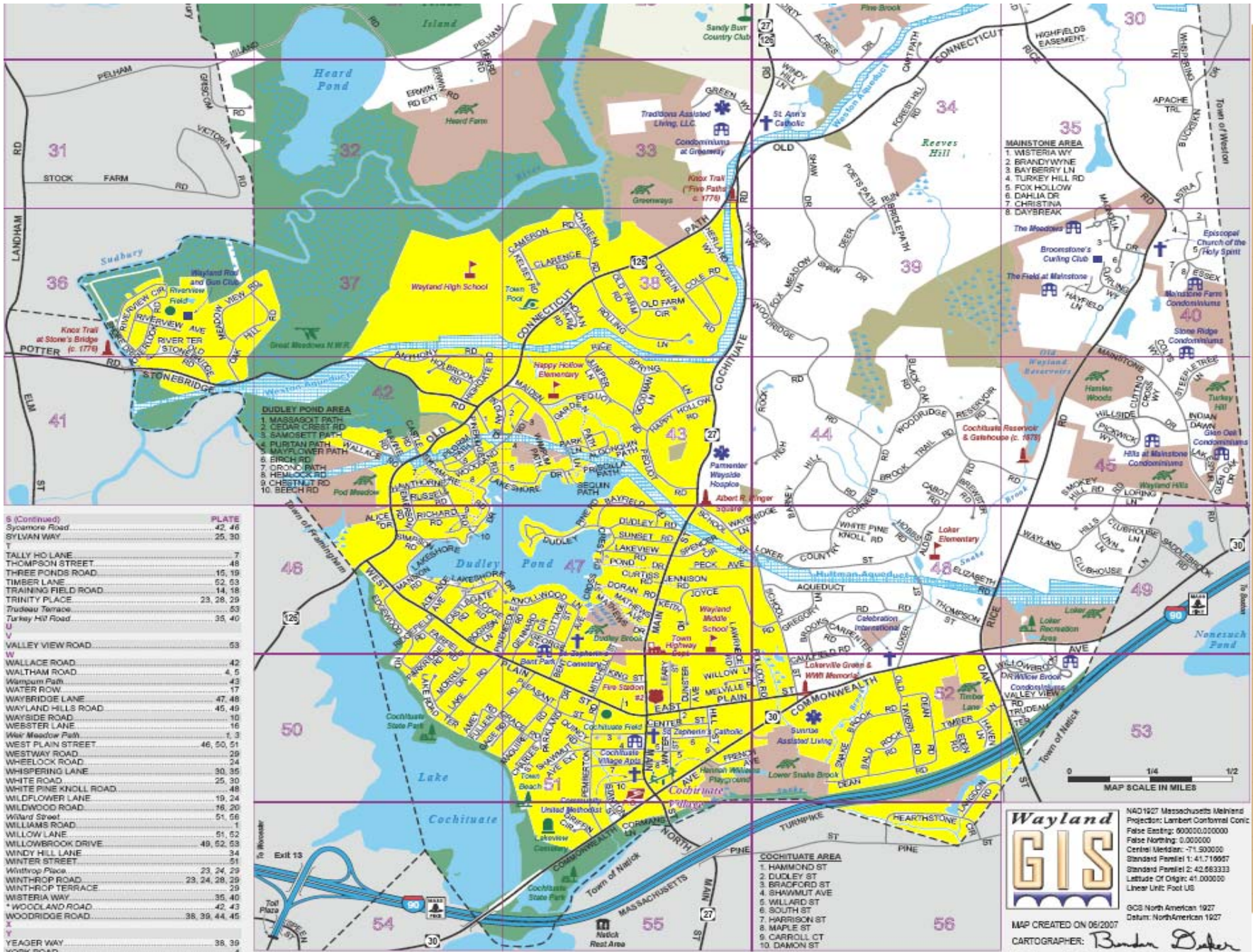
Plan Comparison

- ✓ Compared projections for student enrollment and number of classroom sections for FY10, FY11 and FY12
- ✓ Compared estimated number of buses needed for both plans for FY09
- ✓ Examined redistricting lines for both plans



Plan Recommendation





Street Name	Plate
S (Continued)	
Sycamore Road	42, 46
SYLVAN WAY	25, 30
T	
TALLY HO LANE	7
THOMPSON STREET	48
THREE PONDS ROAD	15, 19
TIMBER LANE	52, 53
TRAINING FIELD ROAD	14, 18
TRINITY PLACE	23, 28, 29
Trudeau Terrace	53
Turkey Hill Road	35, 40
U	
VALLEY VIEW ROAD	53
W	
WALLACE ROAD	42, 46
WALTHAM ROAD	4, 5
Wampum Path	43
WATER ROW	17
WAYBRIDGE LANE	47, 48
WAYLAND HILLS ROAD	45, 49
WAYSIDE ROAD	16
WEBSTER LANE	16
Weir Meadow Path	1, 3
WEST PLAIN STREET	46, 50, 51
WESTWAY ROAD	29
WHEELOCK ROAD	24
WHISPERING LANE	30, 35
WHITE ROAD	25, 30
WHITE PINE KNOLL ROAD	48
WILDFLOWER LANE	14
WILDWOOD ROAD	18, 20
Willard Street	51, 56
WILLIAMS ROAD	1
WILLOW LANE	51, 52
WILLOWBROOK DRIVE	49, 52, 53
WINDY HILL LANE	34
WINTER STREET	51
Withrop Place	23, 24, 29
WINTROP ROAD	23, 24, 28, 29
WINTROP TERRACE	29
WISTERIA WAY	35, 40
* WOODLAND ROAD	42, 43
WOODRIDGE ROAD	38, 39, 44, 45
X	
YEAGER WAY	38, 39
YORK ROAD	4

Wayland GIS

MAP CREATED ON 06/2007
 CARTOGRAPHER: *Bonnie Baker*

NAD 1983 Massachusetts Mainland Projection: Lambert Conformal Conic
 False Easting: 000000.000000
 False Northing: 0.000000
 Central Meridian: -71.500000
 Standard Parallel 1: 41.710007
 Standard Parallel 2: 42.833333
 Latitude Of Origin: 41.000000
 Linear Units: Foot US

CGCS North American 1987
 Datum: North American 1987

Why is this plan preferred?

- ✓ One less classroom section required in FY09 at Happy Hollow (19 vs. 20)
- ✓ Fewer total number of students at Happy Hollow (401 vs. 421)
- ✓ Provides for more available seats at each grade level to allow for unanticipated growth at all grade levels (107 vs. 84)



Why is this plan preferred?

- ✓ Assigns a greater number of students living in the southernmost end of town to Happy Hollow, the Grade 1-5 school closer to their homes
- ✓ Limits involuntary reassignment of children currently attending Claypit Hill or Happy Hollow (only 3 children)



Why is this plan preferred?

- ✓ Does not require construction of a classroom from the Happy Hollow library in FY09
- ✓ Balances the reductions in the total number of sections at both schools as projected enrollment declines over the next four years
- ✓ Allows for enrollment growth in future years from housing construction in both districts



Recommended Plan

For September 2008

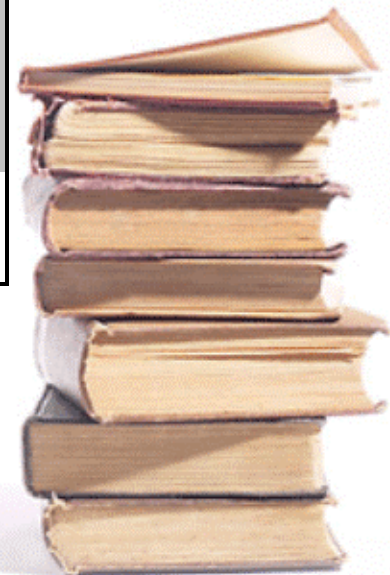
- ✓ Projected Enrollment
 - 621 at Claypit Hill
 - 401 at Happy Hollow

- ✓ Sections Needed
 - 29 at Claypit Hill
 - 19 at Happy Hollow



Recommended Plan

FY09	Projected Students by School			
	Gr. Total	Claypit	Happy Hollow	Loker
K	164	96	68	
1	187	116	72	
2	214	121	92	
3	205	128	78	
4	189	121	68	
5	<u>228</u>	<u>136</u>	<u>92</u>	
	1186	621	401	164



Recommended Plan

FY09	Sections Needed		
	Claypit	Happy Hollow	Loker
K			8.2
1	6	4	
2	6	4	
3	6	4	
4	5	3	
5	<u>6</u>	<u>4</u>	
	29	19	9
		Total	57

- ✓ Projections show an equitable decrease in the number of sections at both schools over the next four years, down to a total of 51 sections needed in FY12



Recommended Plan

FY09	Class Size			Available Seats
	Claypit	Happy Hollow	Loker	
K			18.2	16
1	19.3	17.9		14
2	20.2	23.0		18
3	21.3	19.4		24
4	24.2	22.7		12
5	22.7	22.9		23
			Total	107

- ✓ Class sizes in both schools and at all grade levels fall at or below School Committee guidelines



Transportation Estimates

	<u>School</u>	<u>Bus Eligible</u>	<u>Estimated Buses</u>	<u>Within 1.5 Miles</u>
Grades 1-5 AM/PM Routes	Claypit Hill	381	7	199
	Happy Hollow	<u>139</u>	<u>3</u>	<u>230</u>
		520	10	429
Kindergarten Noontime Routes	Claypit Hill	76	2	31
	Happy Hollow	<u>44</u>	<u>1</u>	<u>37</u>
		120	3	68

- ✓ Total number of buses needed will be predicated on final decisions about transportation of kindergarteners to Loker in the morning and on the length of bus routes. Routes will be developed over the summer.



Transportation Estimates

- ✓ Actual transportation costs cannot be known until a contract for student transportation services has been awarded for FY09
- ✓ Factors such as maximum passenger load and optimal travel time will ultimately influence the total number of routes serving each school



Current Transportation

Based on September 2007 counts

Claypit Hill	Happy Hollow	Loker
7 AM/PM routes	2 AM/PM routes	3 AM/PM routes
291 riders	53 riders	122 riders
2 Kindy routes	1 Kindy route	1 Kindy route
77 riders	33 riders	43 riders



School Hours for September 2008

- ✓ The start time of the two Grade 1-5 schools will change by 15 minutes
 - Allows parents who wish to drive their elementary age and kindergarten age children to/from school sufficient time to travel from one school to another
 - Allows district to maintain a two-tiered system for both morning and afternoon bus routes



School Hours for September 2008

- ✓ **High School**

No change

- ✓ **Middle School**

No change

- ✓ **Claypit Hill & Happy Hollow**

8:30 AM to 2:45 PM

- ✓ **Loker Kindergarten**

8:45 AM to 12:05 PM



