



Westwood Public Schools, Massachusetts
Facility Planning

February 12, 2020

Introduction

The following document contains a series of tables and maps that depict statistics for current schools and boundaries, as well as initial redistricting options that are being evaluated internally and publicly. This information will help inform all stakeholders on how schools could be potentially impacted as a result of potential redistricting adjustments, along with a comparison to current school information. It is important to understand that this material is a starting point, and additional information will be collected and created as the process matures.

Glossary of Terms

2020 MSBA Capacity - Capacity counts are calculated using the current Massachusetts School Building Authority standards. These are capacity numbers without mobile units. Those capacities reflect the Massachusetts School Building Authority guidelines for new construction projects.

2019-20 Total Enrollment - The total number of students attending a given school as of February 2020. Source is a database export from Westwood Public Schools.

Utilization - Utilization is the enrollment divided by the Option Capacity, described as a percentage.

Live-in Students - Students residing inside of a school attendance boundary, regardless of where that student attends school.

Live and Attend-in Students - Students that live inside a school attendance boundary, and attends that school.

Live-out Attend-in Students - Students that live outside the attendance boundary for the school that they attend.

Estimated Enrollment (ES) - The estimated enrollment is calculated by adding the 2019-20 PK students to their 2019-20 school, plus the K-5th students that “Live Out and Attend In” a 2019-20 school, plus the Unmatched, plus the total number of live in K-5th grade students within each new DRAFT option zone that “Live and Attend In” during the 2019-20 school year.

Enrollment Statistics Assumptions

When estimating enrollment for the redistricting options, a series of assumptions were made. These assumptions help to ensure that Live Out Attend In students are not compromised by any redistricting adjustment, and that actual enrollments will materialize as close to the estimates as possible. The following assumptions were made:

1. Any student living outside of that student’s attending school’s boundary will attend the same school in estimated enrollment projections EXCEPT for the following circumstances:
 - a. In Option 2 (Deerfield ES is closing), the estimated enrollment for Hanlon ES includes the 22 K-5th Live Out Attend In students from Deerfield ES during the 2019-20 school year.
 - b. In Option 3a (Sheehan ES is closing), the estimated enrollment for Hanlon ES includes the 19 K-5th Live Out Attend In students from Sheehan ES during the 2019-20 school year.
 - c. In Option 3b and 3b_V2 (Hanlon ES is closing), the estimated enrollment for Deerfield ES includes the 9 K-5th Live Out Attend In students from Hanlon ES during the 2019-20 school year.

Elementary School Enrollment Statistics

ES Name	Grade Config	2020 MSBA Capacity	PK	KF	01	02	03	04	05	2019-20 Total Headcount PK-5 Grade Enrollment	2019-20 PK-5 Enrollment Utilization		K-5 Live and Attend In	K-5 Live Out Attend In	K-5 Unmatched
											+ / -	%			
DEERFIELD SCHOOL	K-5	218	0	28	26	25	33	42	43	197	-21	90%	175	22	
DOWNEY SCHOOL	PK-5	333	2	43	60	49	44	47	43	288	-45	86%	263	23	
MARTHA JONES SCHOOL	K-5	333	0	31	39	54	45	50	49	268	-65	80%	265	2	1
PAUL HANLON SCHOOL	K-5	218	0	28	30	46	31	33	37	205	-13	94%	196	9	
WILLIAM E. SHEEHAN SCHOOL	K-5	356	0	40	58	42	48	55	67	310	-46	87%	291	19	
Total		1,458	2	170	213	216	201	227	239	1,268	-190	87%	1,190	75	

Counts based on January 2020 Student Enrollment Database

Elementary School Option Enrollment Statistics

ES Name	Grade Config	2020 MSBA Capacity	Option 2 Capacity	Option 3a Capacity	Option 3b Capacity	Option 3b_V2 Capacity	2019-20 Total Headcount PK-5 Grade Enrollment	Option 2 Estimated Enrollment ² (Total Headcount)	Option 3a Estimated Enrollment ² (Total Headcount)	Option 3b Estimated Enrollment ² (Total Headcount)	Option 3b_V2 Estimated Enrollment ² (Total Headcount)
DEERFIELD SCHOOL	K-5	218	0	218	218	218	197	Consolidated	173	178	178
DOWNEY SCHOOL	PK-5	333	333	333	333	333	288	288	288	288	335
MARTHA JONES SCHOOL	K-5	333	333	333	333	333	268	268	272	259	259
PAUL HANLON SCHOOL	K-5	218	560	685	0	0	205	402	535	Consolidated	0
WILLIAM E. SHEEHAN SCHOOL	K-5	356	356	0	685	685	310	310	Consolidated	543	496
Total		1,458	1,582	1,569	1,569	1,569	1,268	1268	1268	1268	1,268

Elementary School Option Utilization Statistics

ES Name	Grade Config	2020 MSBA Capacity	Option 2 Capacity	Option 3a Capacity	Option 3b Capacity	Option 3b_V2 Capacity	2019-20 PK-5 Enrollment Utilization		Option 2 Estimated Utilization ²		Option 3a Estimated Utilization ²		Option 3b Estimated Utilization ²		Option 3b_V2 Estimated Utilization ²	
							+ / -	%	+ / -	%	+ / -	%	+ / -	%	+ / -	%
DEERFIELD SCHOOL	K-5	218	0	218	218	218	-21	90%	0	0%	-45	79%	-40	82%	-40	82%
DOWNEY SCHOOL	PK-5	333	333	333	333	333	-45	86%	-45	86%	-45	86%	-45	86%	2	101%
MARTHA JONES SCHOOL	K-5	333	333	333	333	333	-65	80%	-65	80%	-61	82%	-74	78%	-74	78%
PAUL HANLON SCHOOL	K-5	218	560	685	0	0	-13	94%	-158	72%	-150	78%	0	0%	0	0%
WILLIAM E. SHEEHAN SCHOOL	K-5	356	356	0	685	685	-46	87%	-46	87%	0	0%	-142	79%	-189	72%
Total		1,458	1,582	1,569	1,569	1,569	-190	87%	-314	80%	-301	81%	-301	81%	-301	81%

Counts based on January 2020 Student Enrollment Database

² The estimated enrollment is calculated by adding the 2019-20 PK students to their 2019-20 school, plus the K-5th students that “Live Out and Attend In” a 2019-20 school, plus the Unmatched, plus the total number of live in K-5th grade students within each new DRAFT option zone that “Live and Attend In” during the 2019-20 school year.

[†]It is assumed that in Option 3a, the estimated enrollment for Hanlon ES includes the 19 K-5th Live Out Attend In students from Sheehan ES during the 2019-20 school year. It is assumed that in Option 3b and 3b_V2, the estimated enrollment for Deerfield ES includes the 9 K-5th Live Out Attend In students from Hanlon ES during the 2019-20 school year.

Elementary School Option Impact Statistics

2019-20 ES Boundary	ES Option 2 Boundary	Total K-5 Live and Attend In Students
Deerfield	Hanlon	175
Downey	Downey	265
Hanlon	Hanlon	196
Martha Jones	Martha Jones	265
Sheehan	Sheehan	291

Student Impact Estimates	
Option	Total K-5 Live and Attend In Students Impacted
Option 2	175
Option 3a	464
Option 3b	528
Option 3b_V2	528

2019-20 ES Boundary	ES Option 3a Boundary	Total K-5 Live and Attend In Students
Deerfield	Deerfield	151
Deerfield	Hanlon	24
Downey	Downey	265
Hanlon	Hanlon	196
Martha Jones	Hanlon	149
Martha Jones	Martha Jones	116
Sheehan	Hanlon	138
Sheehan	Martha Jones	153

2019-20 ES Boundary	ES Option 3b Boundary	Total K-5 Live and Attend In Students
Deerfield	Deerfield	32
Deerfield	Sheehan	143
Downey	Downey	265
Hanlon	Deerfield	115
Hanlon	Sheehan	81
Martha Jones	Martha Jones	166
Martha Jones	Sheehan	99
Sheehan	Martha Jones	90
Sheehan	Sheehan	201

2019-20 ES Boundary	ES Option 3b_V2 Boundary	Total K-5 Live and Attend In Students
Deerfield	Deerfield	32
Deerfield	Sheehan	143
Downey	Downey	265
Hanlon	Deerfield	115
Hanlon	Downey	47
Hanlon	Sheehan	34
Martha Jones	Martha Jones	166
Martha Jones	Sheehan	99
Sheehan	Martha Jones	90
Sheehan	Sheehan	201

Middle School Enrollment Statistics

MS Name	MS Zone Name	Grade Config	2020 MSBA Capacity	6	7	8	2019-20 Total Headcount 6-8 Grade Enrollment	2019-20 6-8 Enrollment Utilization		6-8 Live and Attend In	6-8 Live Out Attend In	6-8 Unmatched
								+ / -	%			
EW THURSTON MIDDLE SCHOOL	EW THURSTON MIDDLE SCHOOL	6-8	759	223	232	251	706	-53	93%	688	17	1
Total			759	223	232	251	706	-53	93%	688	17	1

Counts based on January 2020 Student Enrollment Database

High School Enrollment Statistics

HS Name	HS Zone Name	Grade Config	2020 MSBA Capacity	9	10	11	12	2019-20 Total Headcount 9-12 Grade Enrollment	2019-20 9-12 Enrollment Utilization		9-12 Live and Attend In	9-12 Live Out Attend In	9-12 Unmatched
									+ / -	%			
WESTWOOD HIGH SCHOOL	WESTWOOD HIGH SCHOOL	9-12	N/A	257	258	247	236	998	N/A	N/A	967	30	1
Total			0	257	258	247	236	998	N/A	N/A	967	30	1

Counts based on January 2020 Student Enrollment Database

Westwood Public Schools, MA Elementary School Zones 2019-20 Zones and Planning Blocks



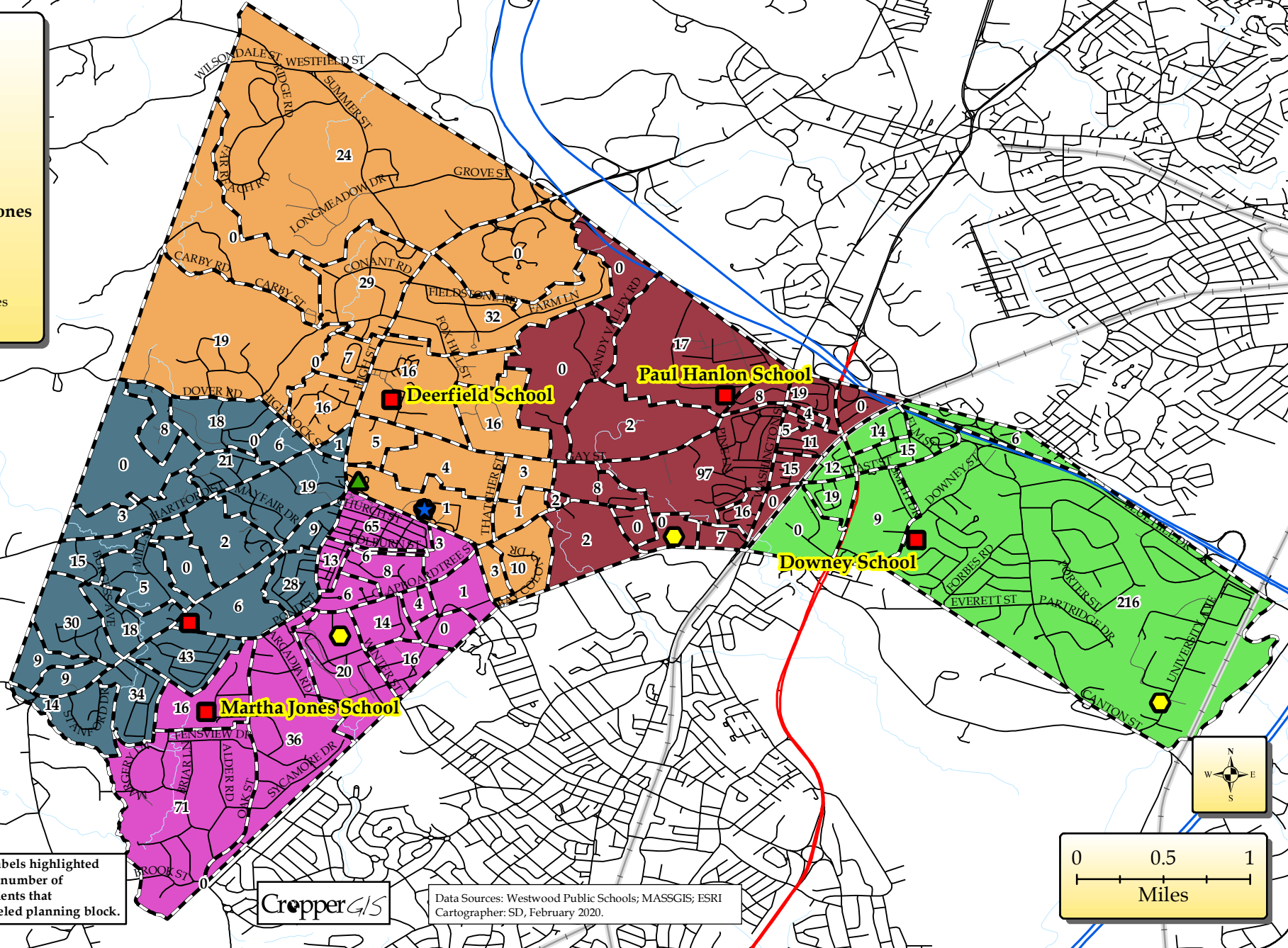
Legend

School Type

- Elementary
- Middle
- High
- Other

2019-20 ES Zones

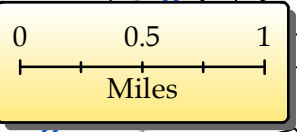
- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan



Black numerical labels highlighted in white show the number of K-5th WPS students that live inside the labeled planning block.

CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: SD, February 2020.



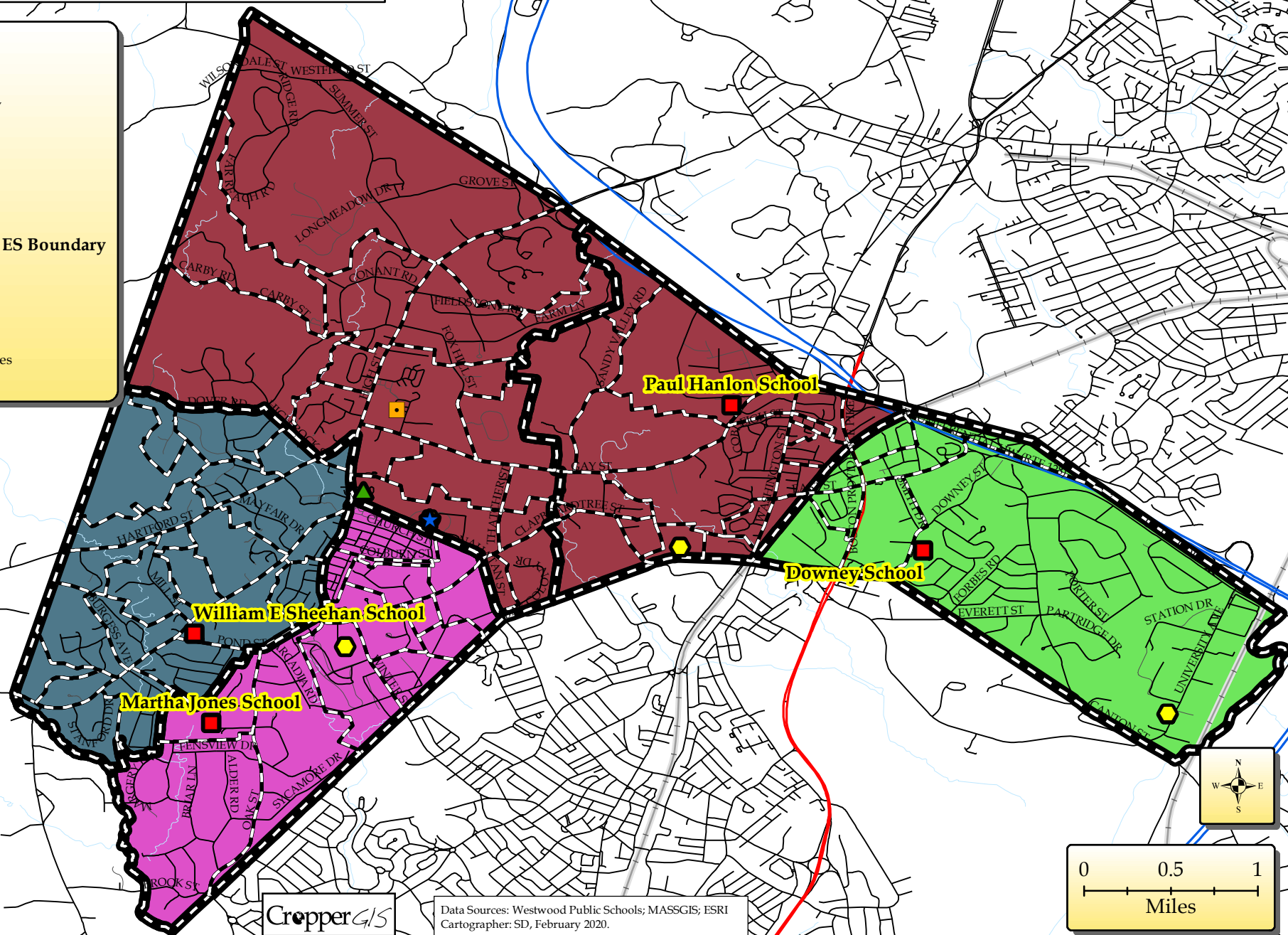
Westwood Public Schools, MA

Elementary School Zones

ES Option 2



- Legend**
- School Type**
- Elementary
 - Middle
 - High
 - Other
 - Closed
- 2019-20 ES Boundary**
- ES Option 2**
- Deerfield
 - Downey
 - Hanlon
 - Martha Jones
 - Sheehan



CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: SD, February 2020.

Westwood Public Schools, MA

Elementary School Zones

ES Option 3a



Legend

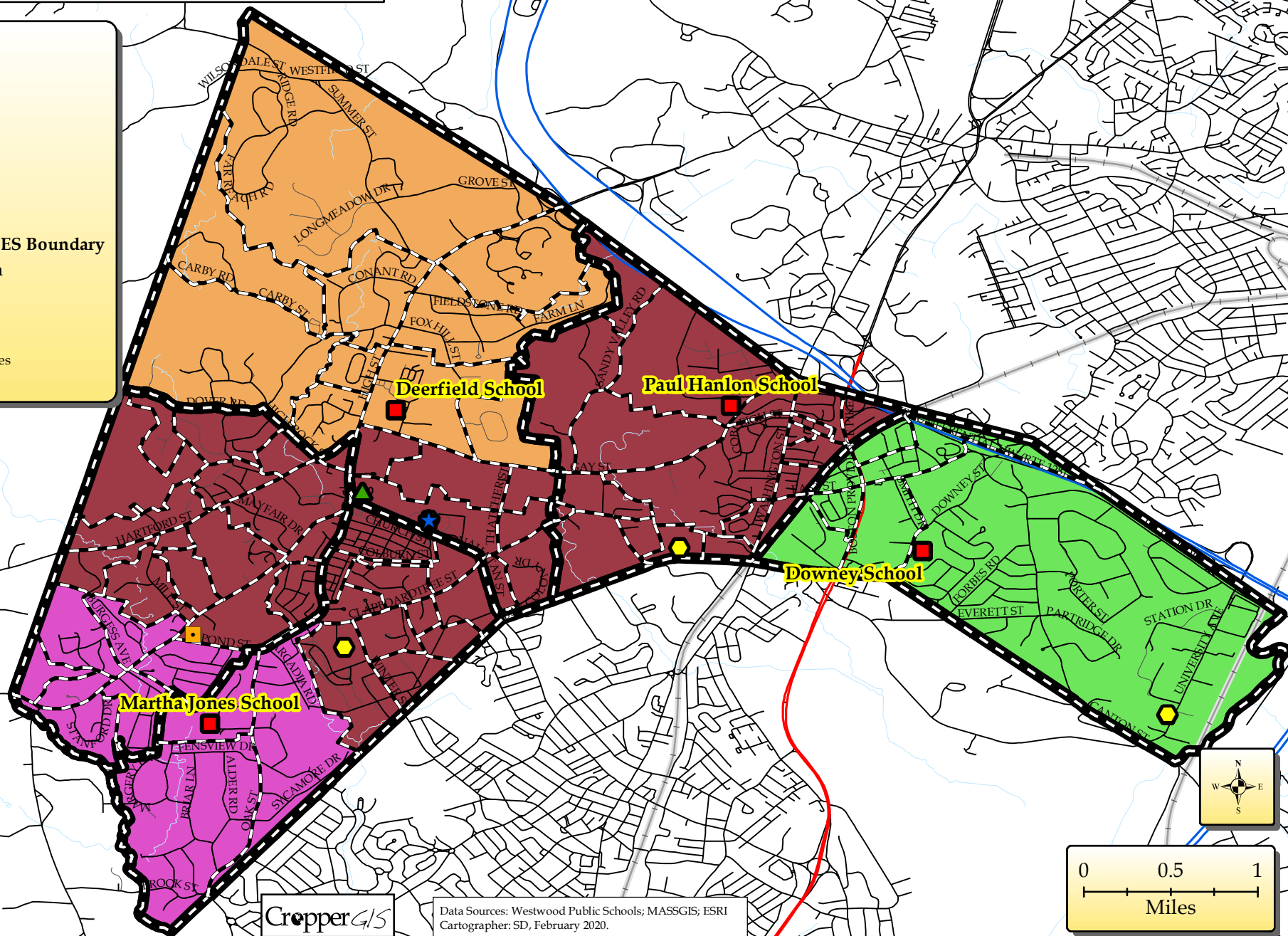
School Type

- Elementary (Red square)
- Middle (Green triangle)
- High (Blue star)
- Other (Yellow hexagon)
- Closed (Orange square)

2019-20 ES Boundary

ES Option 3a

- Deerfield (Orange)
- Downey (Green)
- Hanlon (Maroon)
- Martha Jones (Purple)
- Sheehan (Blue)

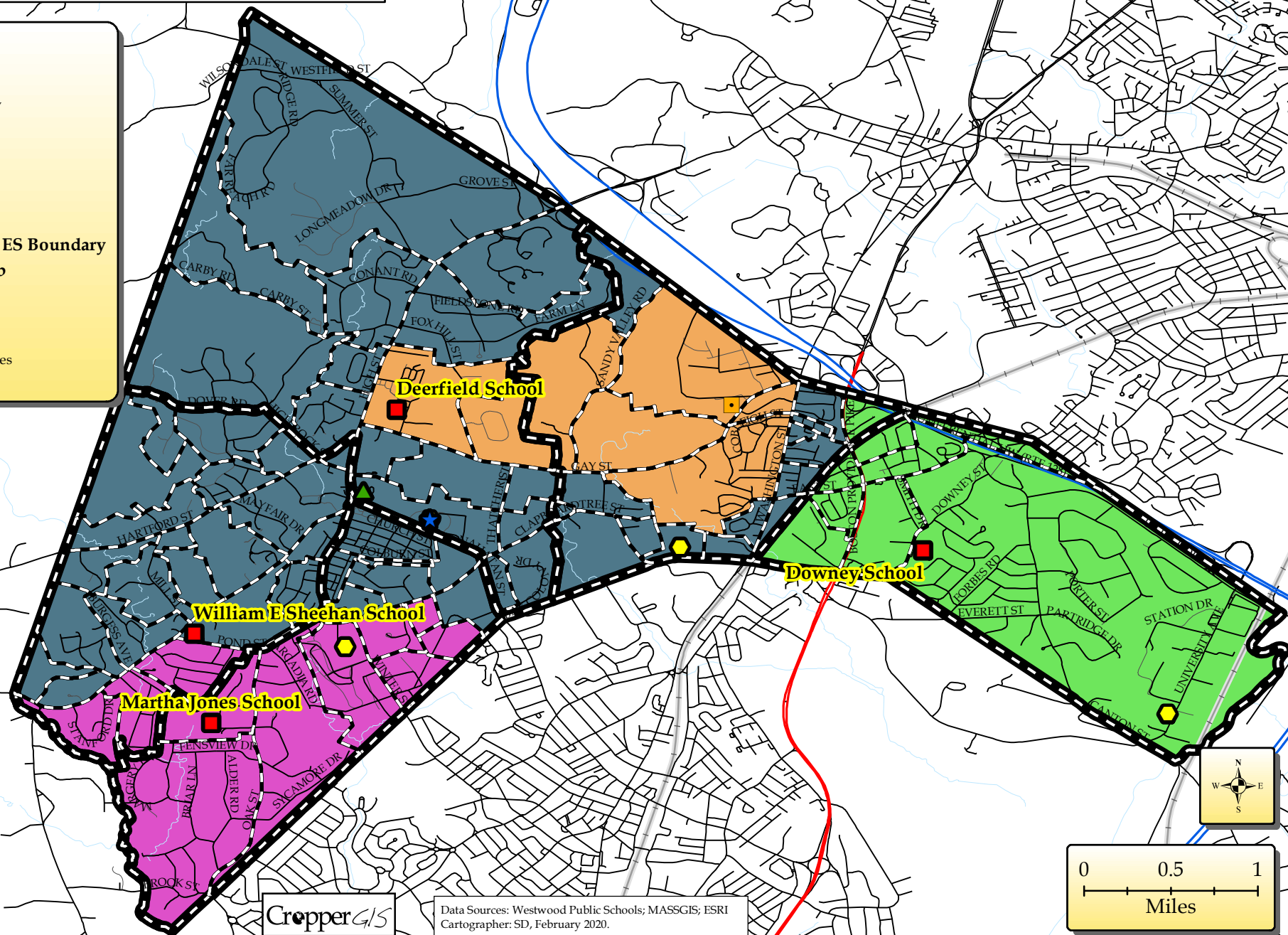


Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: SD, February 2020.

Westwood Public Schools, MA Elementary School Zones ES Option 3b

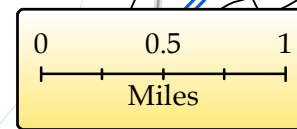


- Legend**
- School Type**
- Elementary
 - Middle
 - High
 - Other
 - Closed
- 2019-20 ES Boundary**
- ES Option 3b**
- Deerfield
 - Downey
 - Hanlon
 - Martha Jones
 - Sheehan



CropperGIS

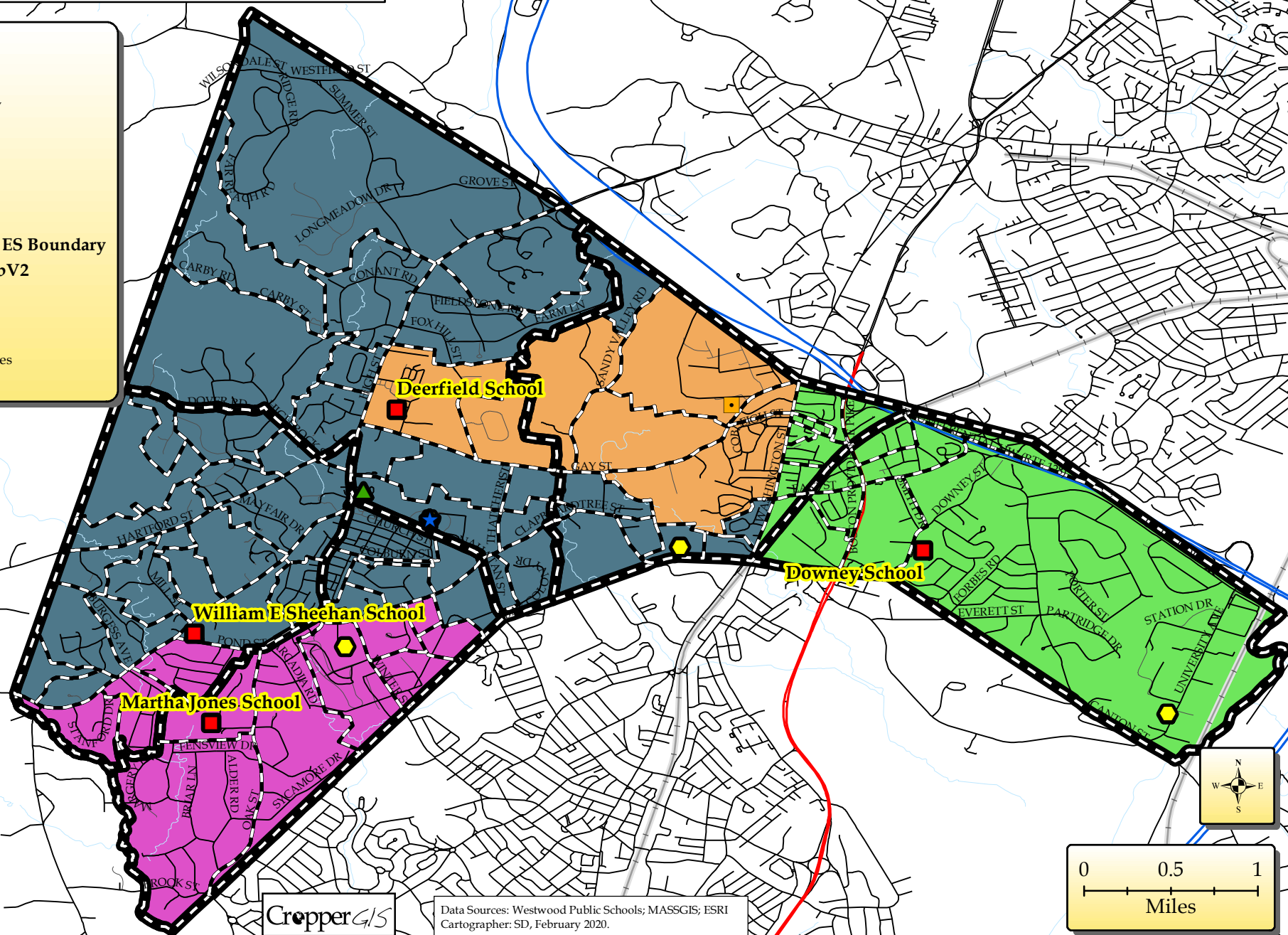
Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: SD, February 2020.



Westwood Public Schools, MA Elementary School Zones ES Option 3bV2

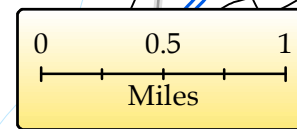


- Legend**
- School Type**
- Elementary
 - Middle
 - High
 - Other
 - Closed
- 2019-20 ES Boundary**
- ES Option 3bV2**
- Deerfield
 - Downey
 - Hanlon
 - Martha Jones
 - Sheehan



CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: SD, February 2020.



Live-Attend and Map Analysis

Live Attend Matrix

The table below gives details on the schools that students attend and the school zones where they live. The schools of attendance are listed on the left while the zones where students live are listed on the top line. The numbers highlighted in green are counts of students who attend the assigned schools for the zones where they live. This student data is from February 2020, Westwood Public Schools student database.

		Where K-5 Students Live								
		Deerfield	Downey	Martha Jones	Hanlon	Sheehan	Out of District	Unmatched	Live Out, Attend In (K-5)	
Where K-5 Students Attend	DEERFIELD SCHOOL	186	291	279	213	298	1	1	75	22
	DOWNEY SCHOOL	4	263	3	9	6	1			23
	MARTHA JONES SCHOOL	2		265				1		2
	PAUL HANLON SCHOOL		9		196					9
	WILLIAM E. SHEEHAN SCHOOL	5	3	7	4	291				19
	ATTEND OUT OF DISTRICT	3		1	2					
	Live In, Attend Out (K-5)	77	11	28	14	17	7			

Enrolled counts (points to the first column of the table)

Live-in counts (points to the 'Live Out, Attend In (K-5)' column)

Live out and attend in totals per school. Total is shown at the top in the orange-colored cell. (points to the orange cell with value 75)

Green-colored numbers represent number of students who live in the zone and attend their zoned school. All other numbers represent students who attend school outside of the zone that they live in. (points to the green cell with value 196)

Live in and attend out totals per school. Total is shown at the left in the blue-colored cell. (points to the blue cell with value 77)

		Where K-5 Students Live							
		Deerfield	Downey	Martha Jones	Hanlon	Sheehan	Out of District	Unmatched	Live Out, Attend In (K-5)
Where K-5 Students Attend		186	291	279	213	298	1	1	75
	DEERFIELD SCHOOL	197	175	15	2	4	1		22
	DOWNEY SCHOOL	286	4	263	3	9	6	1	23
	MARTHA JONES SCHOOL	268	2		265			1	2
	PAUL HANLON SCHOOL	205		9		196			9
	WILLIAM E. SHEEHAN SCHOOL	310	5	3	7	4	291		19
	ATTEND OUT OF DISTRICT	3		1	2				
	Live In, Attend Out (K-5)	77	11	28	14	17	7		

Where 6-8 Students Live

Where 6-8 Students Attend			Where 6-8 Students Live			
			EW THURSTON MIDDLE SCHOOL			
			Out of District			
			Unmatched			
Where 6-8 Students Attend			Live Out, Attend In (6-8)			
			689	17	1	17
	EW THURSTON MIDDLE SCHOOL	706	688	17	1	17
	ATTEND OUT OF DISTRICT	1	1			
Where 6-8 Students Attend			1	1		
	Live In, Attend Out (6-8)		1	1		

Where 9-12 Students Live

Where 9-12 Students Attend			Where 9-12 Students Live			
			WESTWOOD HIGH SCHOOL			
			Out of District			
			Unmatched			
Where 9-12 Students Attend			Live Out, Attend In (9-12)			
			971	30	1	30
	WESTWOOD HIGH SCHOOL	998	967	30	1	30
	ATTEND OUT OF DISTRICT	4	4			
Where 9-12 Students Attend			4	4		
	Live In, Attend Out (9-12)		4	4		

Map Analysis

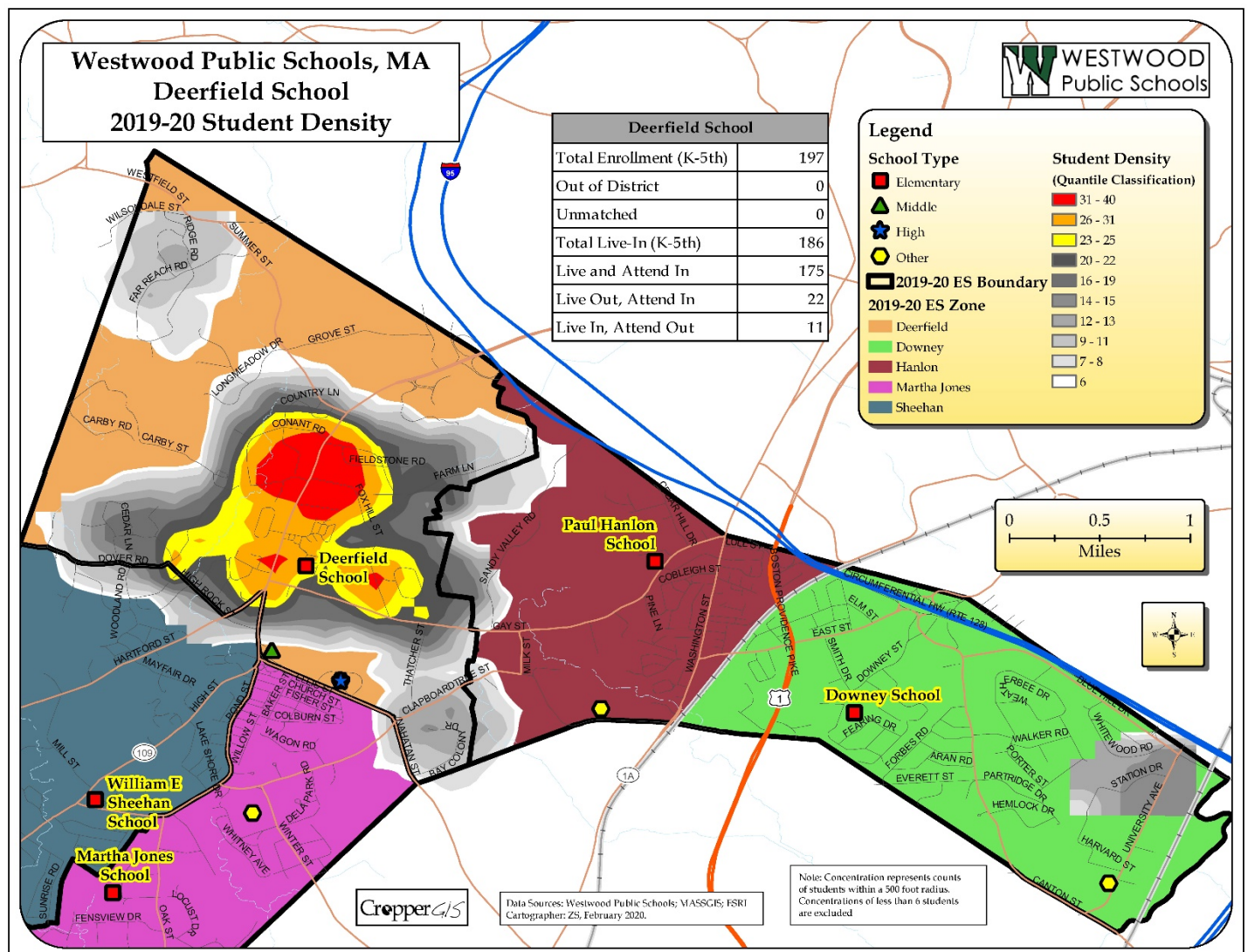
This map series focuses on illustrating the geographic distribution of 2019-20 Westwood Public School students in relation to school attendance boundaries.

Below is an example of a map from this series.

Basic Map Elements

The legend explains how different features are represented, either by a point (e.g. schools), quantile area (student density), or by an area/polygon (e.g. attendance boundaries). The scale bar references the distance ratio of the map in relation to the real world.

Please note that each quantile area reflects the count of enrolled students within a 500-foot radius. Concentrations of students 5 or less were excluded. Therefore, enrollment for a given school may have students that are outside of those quantile areas of density shown.



Live-Attend Tables

Each map has a table listing various statistics about the student data in this region. Here is a guide for reading this table:

DEERFIELD ES	
Total Enrollment (K-5th)	197
Out of District	0
Unmatched	0
Total Live-In (K-5th)	186
Live and Attend In	175
Live Out, Attend In	22
Live In, Attend Out	11

Total Enrollment - the number of students attending Deerfield Elementary School.

Out of District - the number of students who live outside any of the Westwood Publics School District attendance zone boundaries, for each level, yet attend this school.

Unmatched - the number of students attending Deerfield Elementary School whose addresses were not located by the GIS.

Total Live-In - number of students who live within the school's attendance boundary, who are in the K-5th grade cohort. The 'total-live in' statistic here indicates there are 186 K-5th grade students living within the Deerfield Elementary School attendance boundary.

Live and Attend In - number of K-5th students who live within the attendance boundary, and also attend that school. In this example, 175 K-5th grade students who live within the Deerfield Elementary School attendance boundary also attend Deerfield Elementary School.

Live Out, Attend In - number of K-5th students who live outside of the Deerfield Elementary School attendance boundary, but attend Deerfield Elementary School.

Live In, Attend Out - number of K-5th students who live inside the Deerfield Elementary School attendance boundary, yet attend a different elementary school.

Westwood Public Schools, MA Elementary School Zones 2019-20



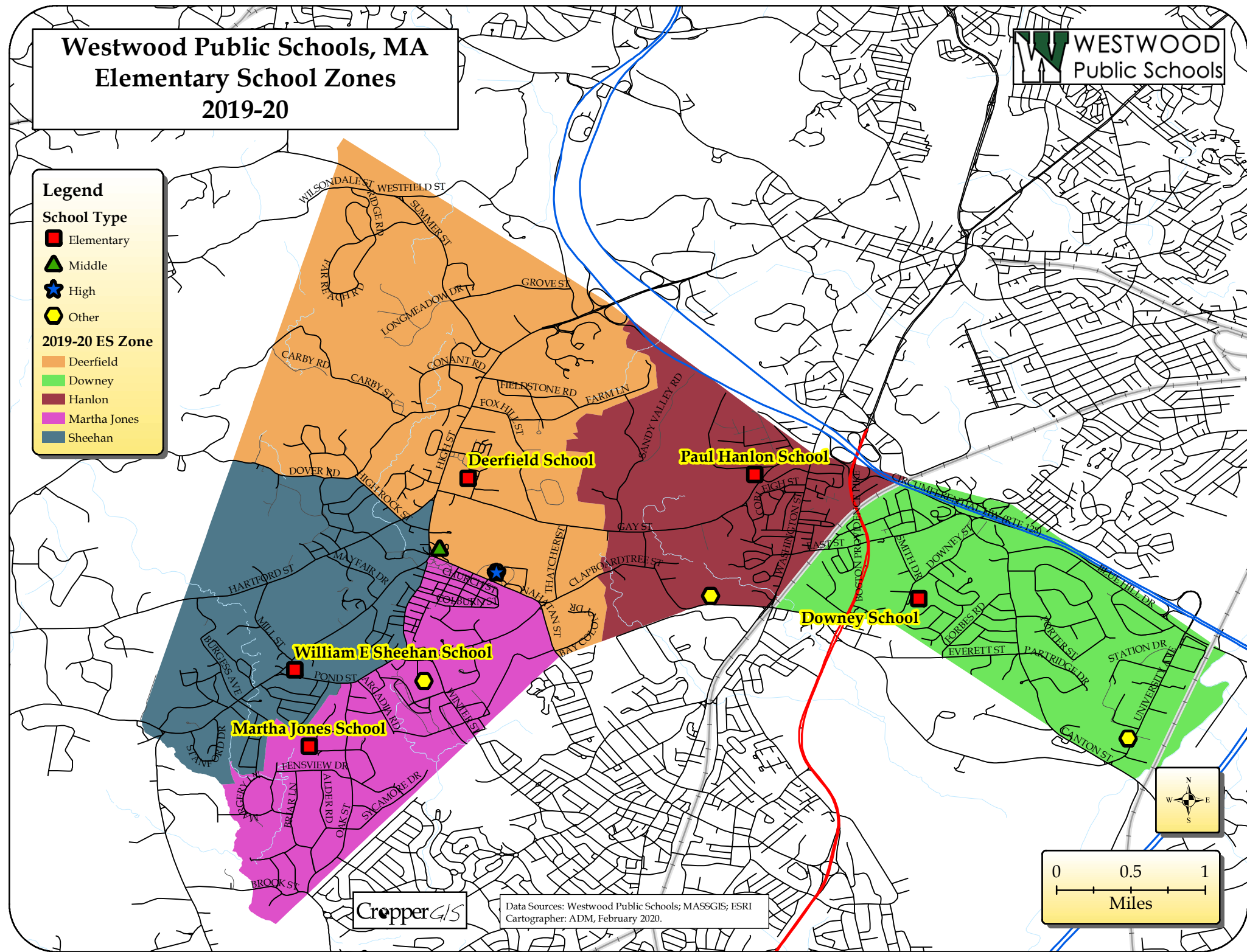
Legend

School Type

- Elementary
- Middle
- High
- Other

2019-20 ES Zone

- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan



Deerfield School

Paul Hanlon School

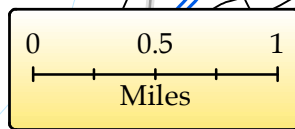
Downey School

William E Sheehan School

Martha Jones School

CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ADM, February 2020.



Westwood Public Schools, MA

Deerfield School

2019-20 Student Density



Deerfield School	
Total Enrollment (K-5th)	197
Out of District	0
Unmatched	0
Total Live-In (K-5th)	186
Live and Attend In	175
Live Out, Attend In	22
Live In, Attend Out	11

Legend

School Type

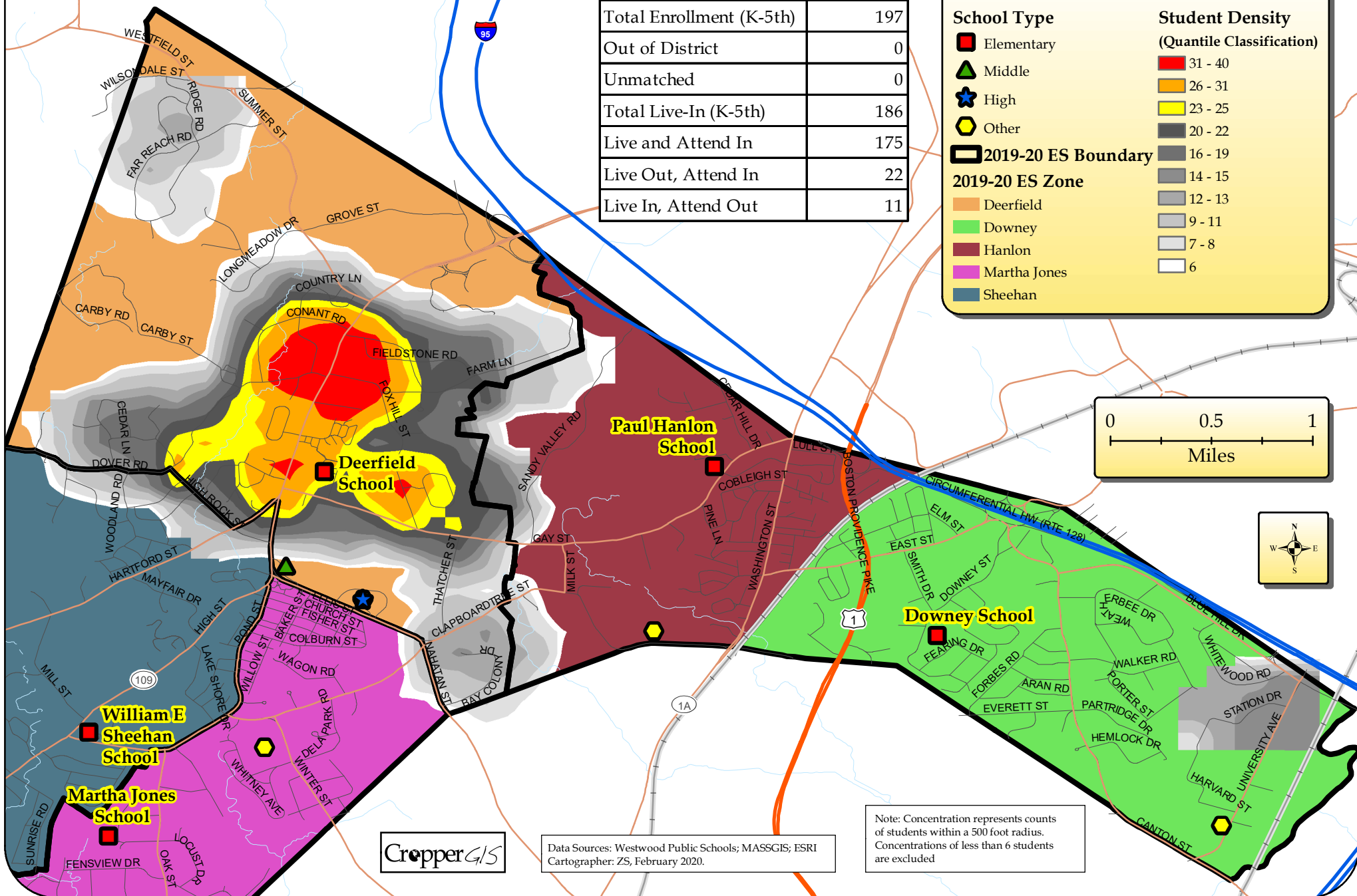
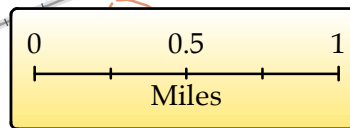
- Elementary
- ▲ Middle
- ★ High
- Other

2019-20 ES Boundary

- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan

Student Density (Quantile Classification)

- 31 - 40
- 26 - 31
- 23 - 25
- 20 - 22
- 16 - 19
- 14 - 15
- 12 - 13
- 9 - 11
- 7 - 8
- 6



CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.

Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

Westwood Public Schools, MA Downey School 2019-20 Student Density



Legend

School Type

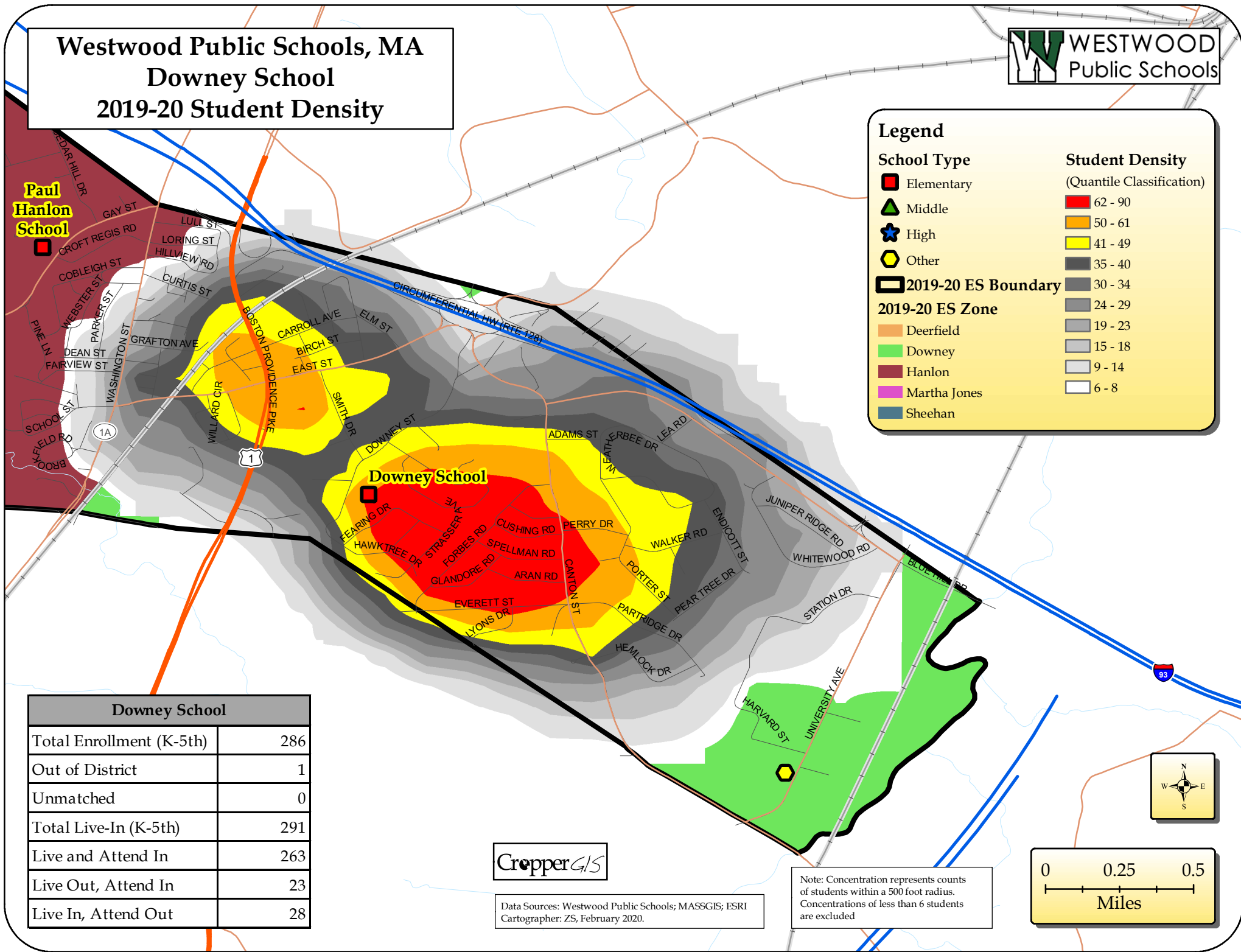
- Elementary
- ▲ Middle
- ★ High
- ⬡ Other

2019-20 ES Boundary

- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan

Student Density (Quantile Classification)

- 62 - 90
- 50 - 61
- 41 - 49
- 35 - 40
- 30 - 34
- 24 - 29
- 19 - 23
- 15 - 18
- 9 - 14
- 6 - 8

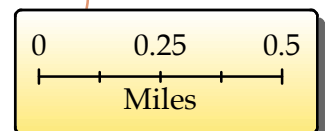


Downey School	
Total Enrollment (K-5th)	286
Out of District	1
Unmatched	0
Total Live-In (K-5th)	291
Live and Attend In	263
Live Out, Attend In	23
Live In, Attend Out	28

CropperGIS

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.

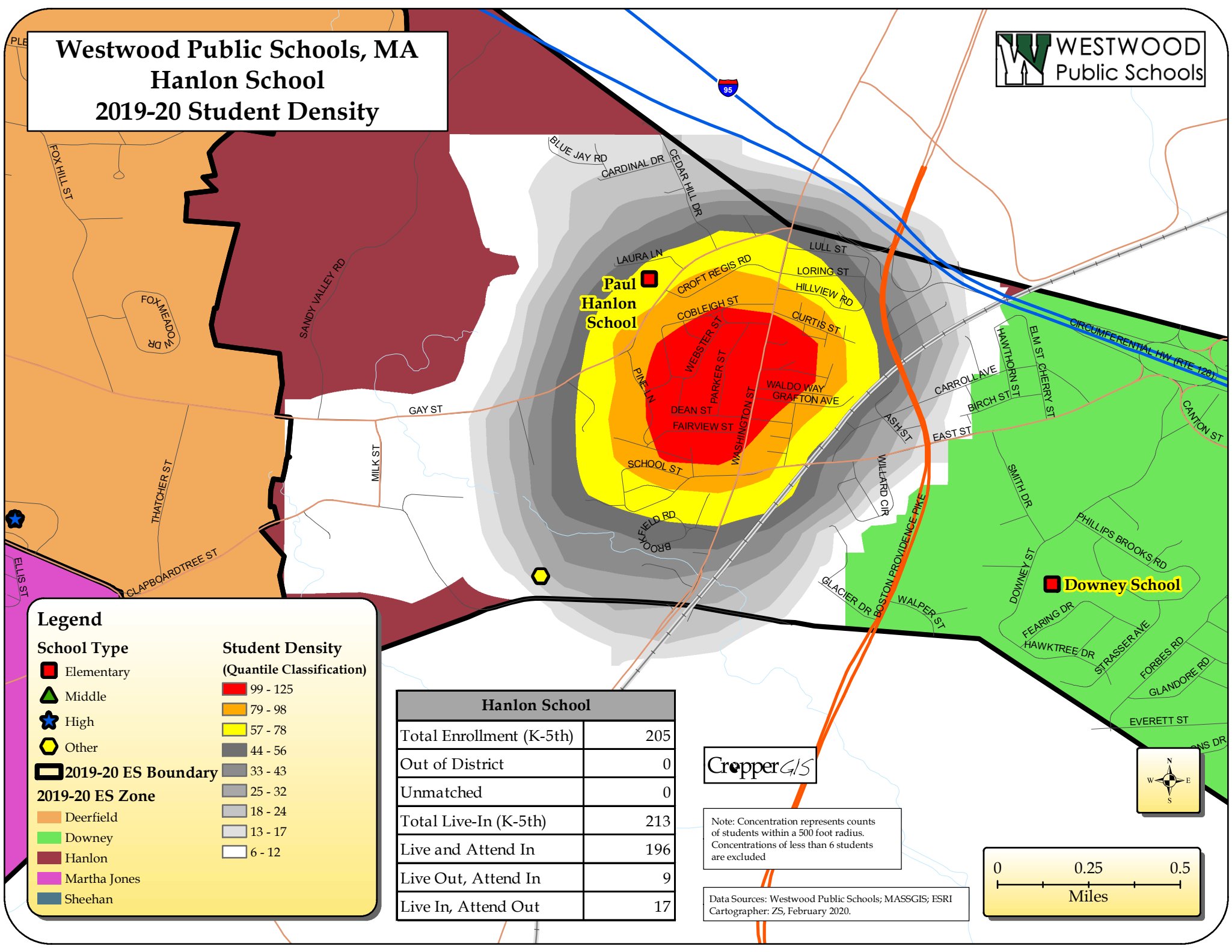
Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded



Westwood Public Schools, MA

Hanlon School

2019-20 Student Density



Legend

School Type

- Elementary
- Middle
- High
- Other
- 2019-20 ES Boundary
- 2019-20 ES Zone**
 - Deerfield
 - Downey
 - Hanlon
 - Martha Jones
 - Sheehan

Student Density

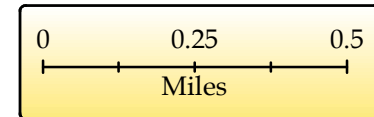
- (Quantile Classification)
- 99 - 125
 - 79 - 98
 - 57 - 78
 - 44 - 56
 - 33 - 43
 - 25 - 32
 - 18 - 24
 - 13 - 17
 - 6 - 12

Hanlon School	
Total Enrollment (K-5th)	205
Out of District	0
Unmatched	0
Total Live-In (K-5th)	213
Live and Attend In	196
Live Out, Attend In	9
Live In, Attend Out	17

CropperGIS

Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

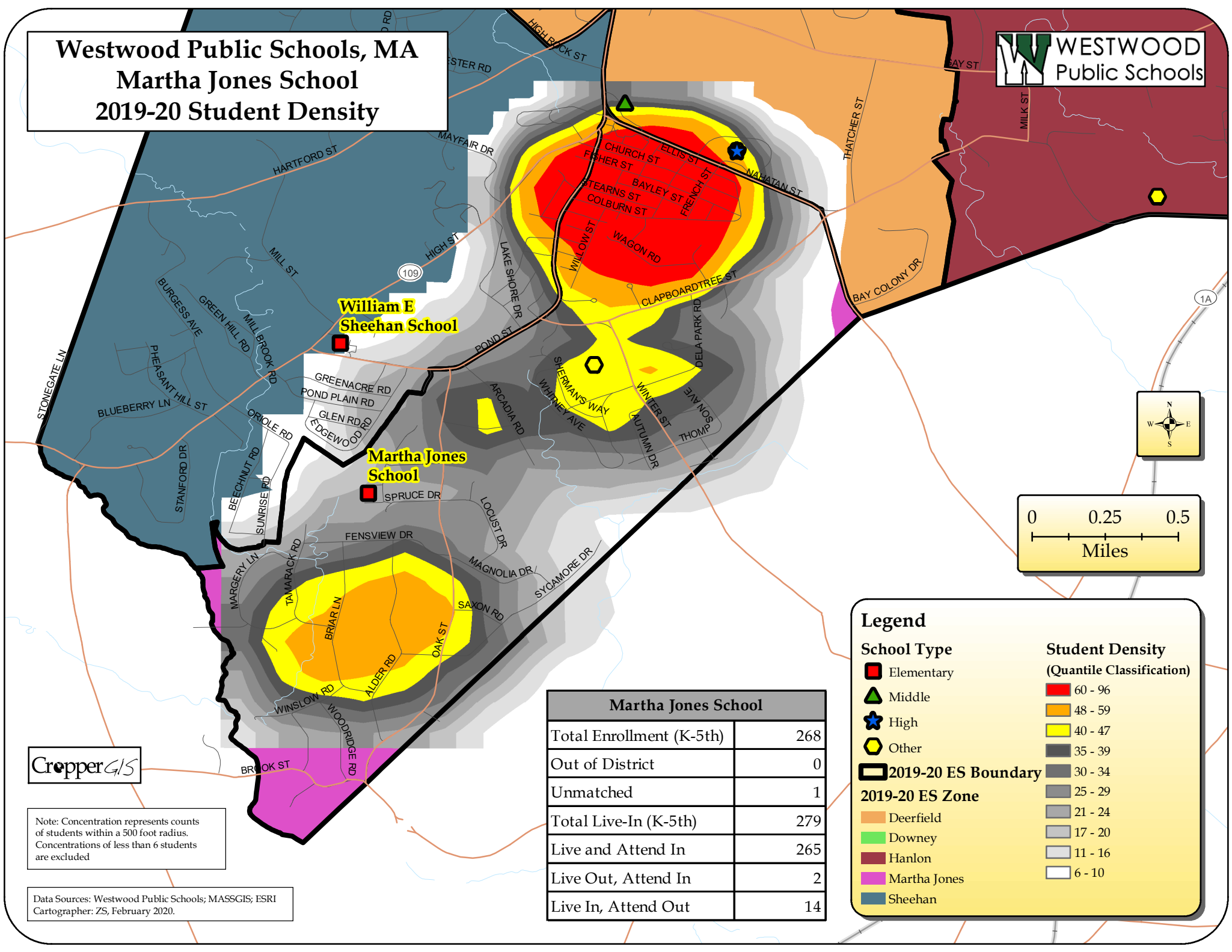
Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.



Westwood Public Schools, MA

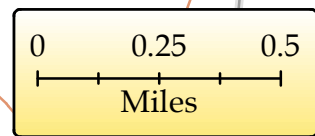
Martha Jones School

2019-20 Student Density



William E Sheehan School

Martha Jones School



Legend

School Type

- Elementary
- ▲ Middle
- ★ High
- ⬡ Other

2019-20 ES Boundary

- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan

Student Density (Quantile Classification)

- 60 - 96
- 48 - 59
- 40 - 47
- 35 - 39
- 30 - 34
- 25 - 29
- 21 - 24
- 17 - 20
- 11 - 16
- 6 - 10

Martha Jones School	
Total Enrollment (K-5th)	268
Out of District	0
Unmatched	1
Total Live-In (K-5th)	279
Live and Attend In	265
Live Out, Attend In	2
Live In, Attend Out	14

CropperGIS

Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.

Westwood Public Schools, MA

Sheehan School

2019-20 Student Density



Legend

School Type

- Elementary
- ▲ Middle
- ★ High
- Other

2019-20 ES Boundary

2019-20 ES Zone

- Deerfield
- Downey
- Hanlon
- Martha Jones
- Sheehan

Student Density

(Quantile Classification)

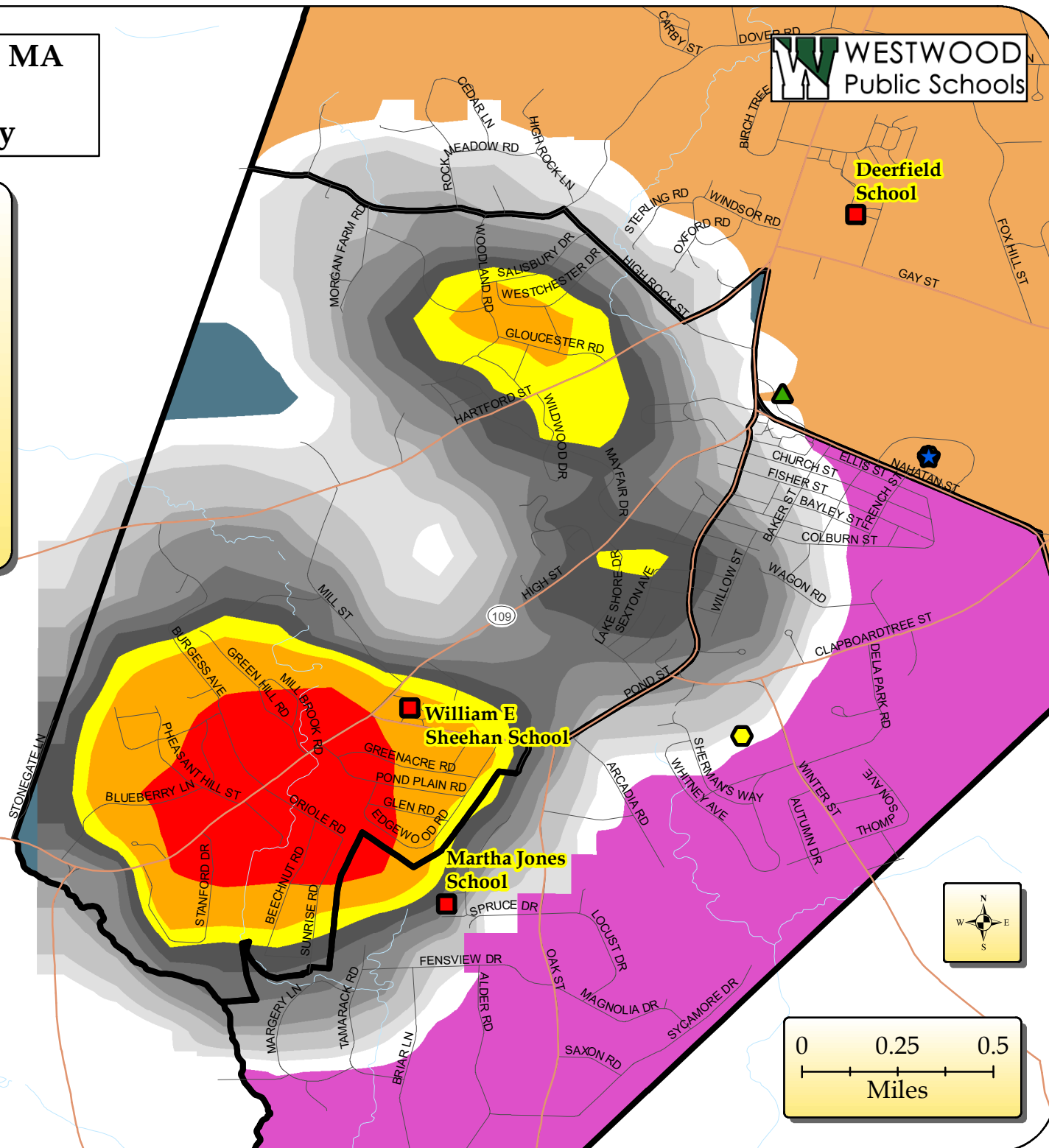
- 64 - 88
- 48 - 63
- 42 - 47
- 37 - 41
- 32 - 36
- 25 - 31
- 22 - 24
- 15 - 21
- 11 - 14
- 6 - 10

Sheehan School	
Total Enrollment (K-5th)	310
Out of District	0
Unmatched	0
Total Live-In (K-5th)	298
Live and Attend In	291
Live Out, Attend In	19
Live In, Attend Out	7



Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.



Westwood Public Schools, MA

Thurston Middle School

2019-20 Student Density



Legend

School Type

- Elementary
- ▲ Middle
- ★ High
- ⬡ Other

Westwood PS District Boundary

Student Density

(Quantile Classification)

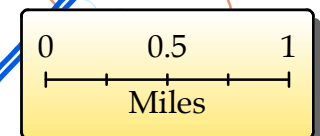
- 42 - 74
- 34 - 41
- 29 - 33
- 24 - 28
- 20 - 23
- 17 - 19
- 13 - 16
- 11 - 12
- 8 - 10
- 6 - 7

Thurston Middle School	
Total Enrollment (6-8th)	706
Out of District	17
Unmatched	1
Total Live-In (6-8th)	689
Live and Attend In	688
Live Out, Attend In	17
Live In, Attend Out	1

CropperGIS

Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.



Westwood Public Schools, MA

Westwood High School

2019-20 Student Density



Legend

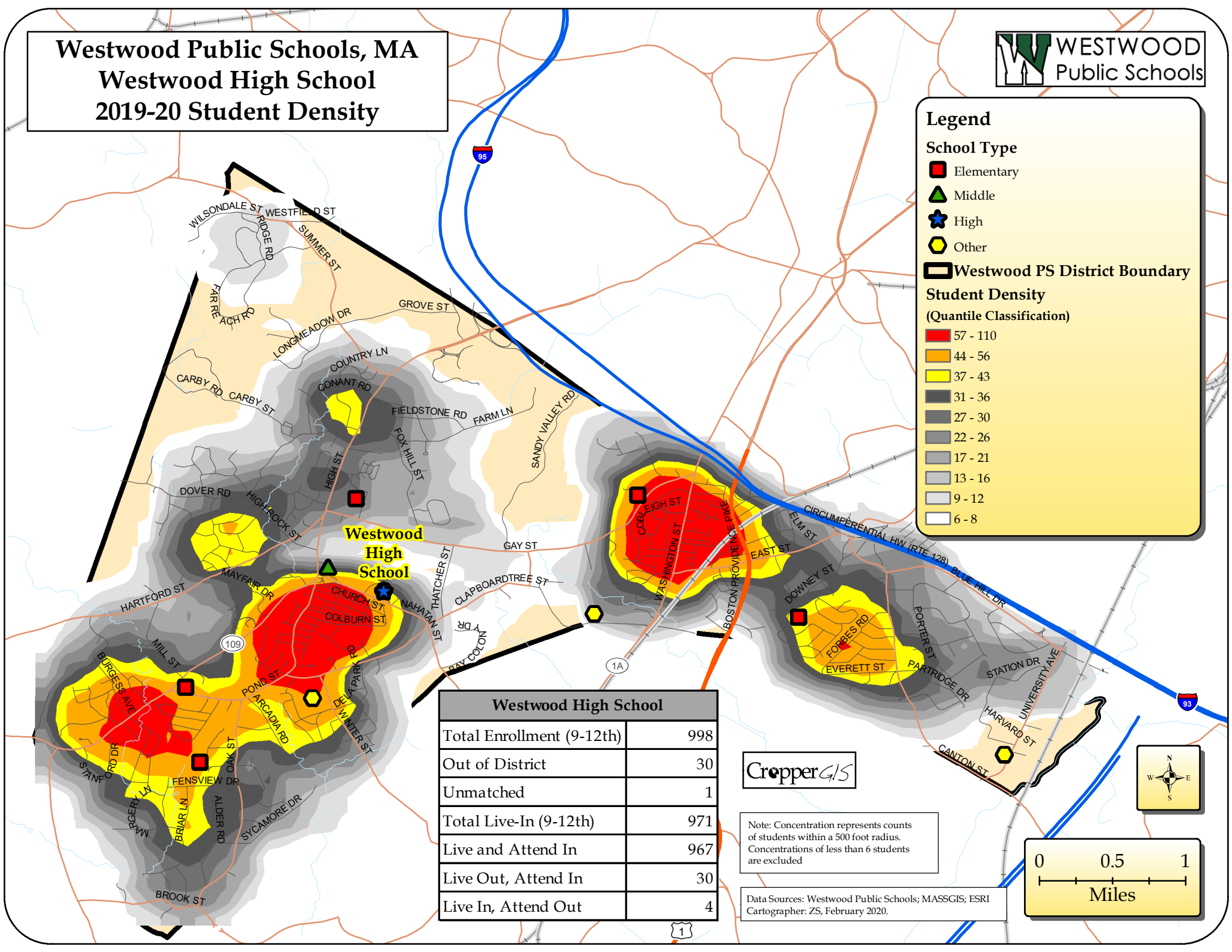
School Type

- Elementary (Red square)
- Middle (Green triangle)
- High (Blue star)
- Other (Yellow hexagon)

Westwood PS District Boundary (Thick black line)

Student Density (Quantile Classification)

- 57 - 110 (Red)
- 44 - 56 (Orange)
- 37 - 43 (Yellow)
- 31 - 36 (Light Gray)
- 27 - 30 (Medium Gray)
- 22 - 26 (Dark Gray)
- 17 - 21 (Very Dark Gray)
- 13 - 16 (Black)
- 9 - 12 (Dark Blue)
- 6 - 8 (Light Blue)



Westwood High School	
Total Enrollment (9-12th)	998
Out of District	30
Unmatched	1
Total Live-In (9-12th)	971
Live and Attend In	967
Live Out, Attend In	30
Live In, Attend Out	4

CropperGIS

Note: Concentration represents counts of students within a 500 foot radius. Concentrations of less than 6 students are excluded

Data Sources: Westwood Public Schools; MASSGIS; ESRI
Cartographer: ZS, February 2020.

