

VOLUME 1 of 2

BRISTOL PUBLIC SCHOOLS



FEASIBILITY STUDY, BOARD OF EDUCATION SCHOOLS




D·R·A
DRA ARCHITECTS
12/20/2017

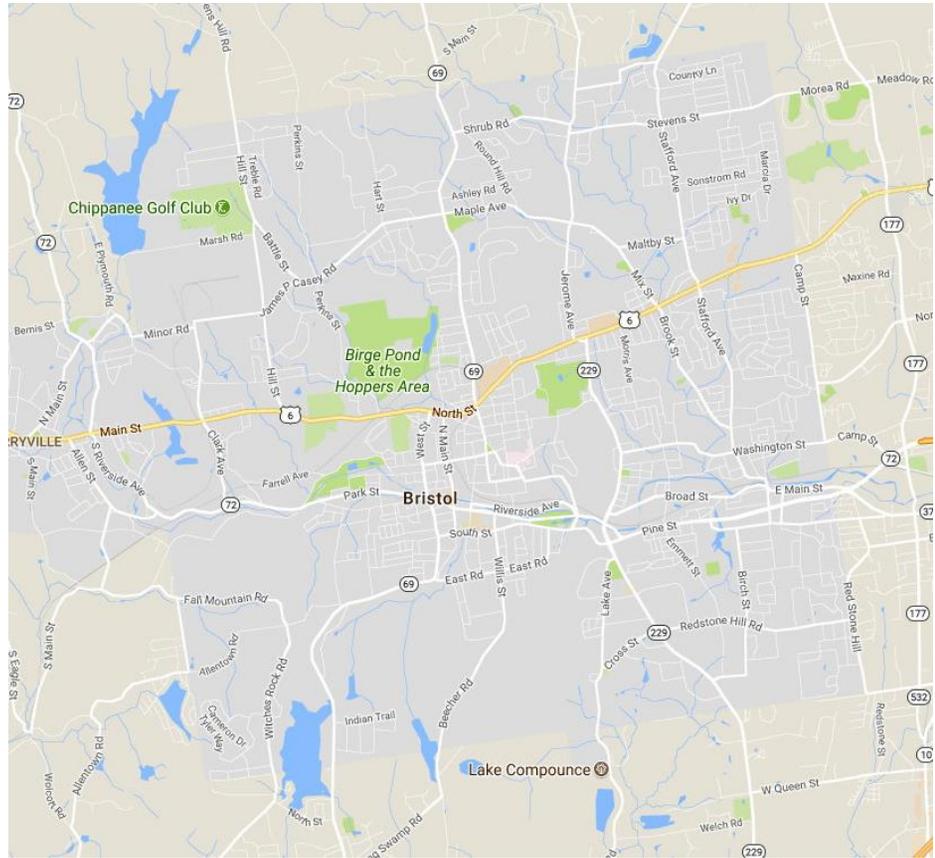
Volume 1 of 2

REPORT

Bristol Feasibility Study, Board of Education Schools

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ACKNOWLEDGEMENTS

Many people have contributed to this study, and we are very grateful for the efforts of the following people in Bristol:

Board of Education

Christopher Wilson, Chair
Karen Vibert, Vice-Chair, Operations Committee
Karen Hintz, Secretary, Operations Committee
Jeffrey Caggiano, Operations Committee
Jennifer Dube
Joseph Grabowski
Thomas O’Brien, Operations Committee
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Michelle LeVasseur

INTRODUCTION

Bristol CT Public Schools Board of Education engaged Drummey Rosane Anderson, Inc. (DRA) in April 2017 to conduct a feasibility study of their schools including updated enrollment projections, existing conditions evaluations, programming, area analysis, and ideal renovations, shuttering, and expansions. DRA and its consultants visited the district’s schools and developed a facility evaluation for each one. Enrollment projections for Bristol were developed for the school years starting in 2017 through 2027. Architects and educational planners reviewed the quantity and quality of school spaces, and worked with the Administration to explore options for the future possible configurations of Bristol’s schools.

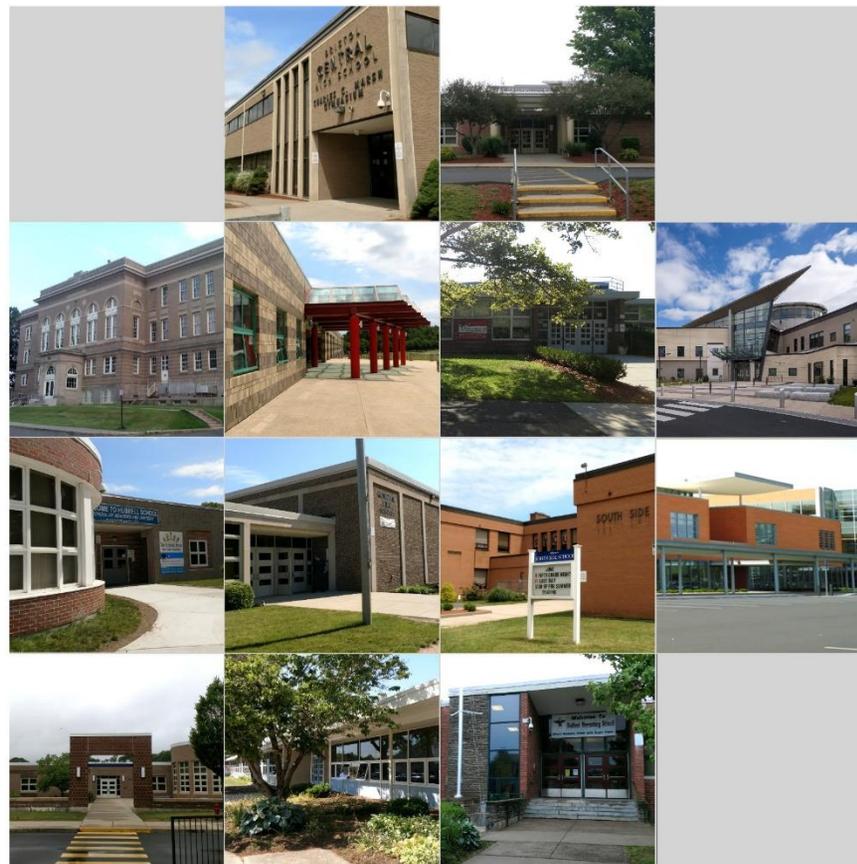
Two issues became the main focus of the study:

- The future of PK-8 schools in Bristol
- Bristol’s two high schools in times of declining enrollments

PK-8—The two newest schools in Bristol house grades PK-8. The city’s Capital Improvement Plan (CIP) forecasts spending will be necessary on several other existing schools. Now is the time to explore if Bristol should plan to have more PK-8 schools, rather than spending money to improve older elementary schools that would be slated for retirement.

HIGH SCHOOLS—Enrollments have been declining in grades 9-12. Will this trend continue, and would Bristol benefit by closing one high school and consolidating their students into a single high school?

See **Chapters 1-5** (Volume 1 of 2) for the report, and **Chapter 6** (Appendices, Volume 2 of 2) for backup material.



BRISTOL PUBLIC SCHOOLS – Feasibility Study, Board of Education Schools
DRA Architects

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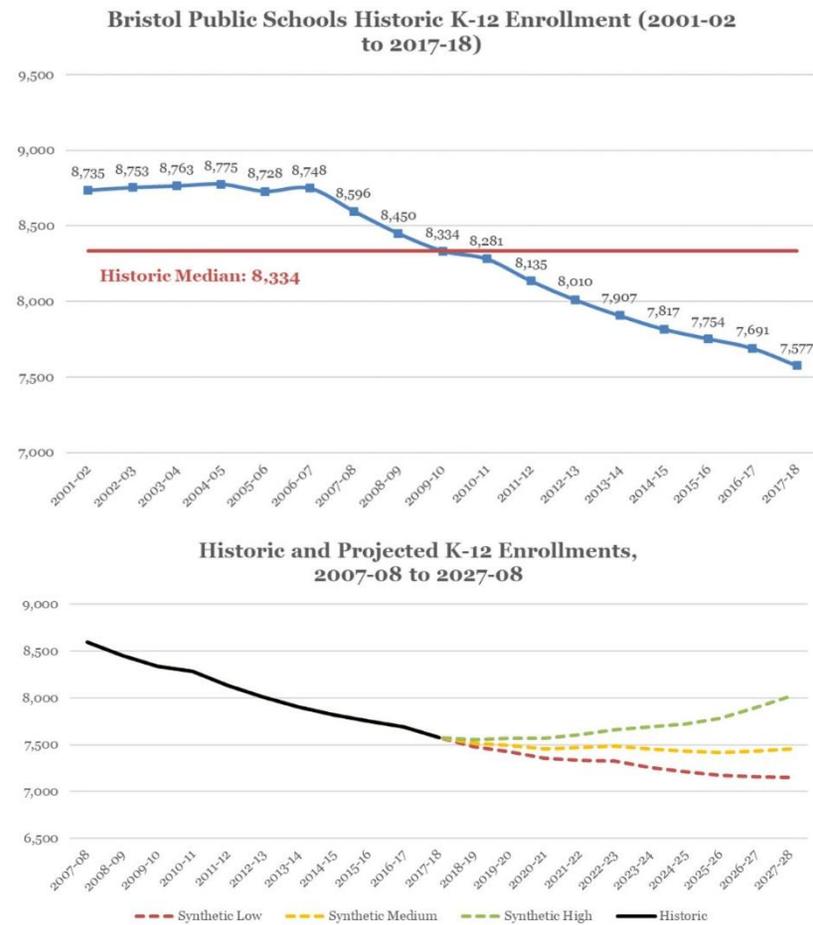
Bristol Feasibility Study, Board of Education Schools

1 EXECUTIVE SUMMARY

Enrollments for grades K-12 in Bristol have been declining for several years. The following trends influence Bristol school enrollments:

- **Demographics**—the population is stable overall, but they have grown older, reducing the number of school age children in Bristol.
- **Unemployment**—Bristol unemployment rate remains slightly higher than Connecticut’s, although steadily recovering from the unemployment peak in 2010.
- **Housing Market Trends**—Sales declined steeply during the Great Recession, reaching a low point in 2011, but have recovered steadily since then. Median sales prices have stabilized around \$175,000, but permitting activity for single-family houses has remained quite low.
- **Birth Trends**—“Bristol’s births have recently experienced a period of substantial decline, with impacts on the town’s population and school enrollment that will be felt for years to come.” The Greene-Hills and West Bristol districts have experienced the greatest number of births historically.

The medium projection was used in this report to predict enrollments for the options that were considered, leading to a leveling of total enrollments near the current levels for the next 10 years.



Existing Conditions of the school facilities are summarized in the following table:

School Name	Grades Served	Year Built	Year Reno	Building Area (square feet)	Site Area (acres)	Facility Condition--1 to 4 (Excellent/Good/Fair/Poor)
Stafford	K-5	1950	1954 (1987 windows)	61,000	22	4 Poor
Edgewood	PK-5	1957	1992	44,000	15	4 Poor
Hubbell	PK-5	1961	1992	63,000	20	2 Good
Ivy Drive	PK-5	1967	2007	59,000	17	1 Excellent
Mountain View	PK-5	1967	2007	53,000	11	1 Excellent
South Side	K-5	1973	2016, minor	61,000	17	3 Fair
Northeast Middle	6-8	1961	1983 (2017 roof)	74,000	31	4 Poor
Chippens Hill	6-8	1993	--	166,000	24	1.5 Excellent/Good
West Bristol	K-8	2012	--	122,000	29	1 Excellent
Greene-Hills	PK-8	2012	--	122,000	17	1 Excellent
Eastern High School	9-12	1959	1999	235,000	50	3 Fair
Central High School	9-12	1967	1999	221,000	36	2 Good

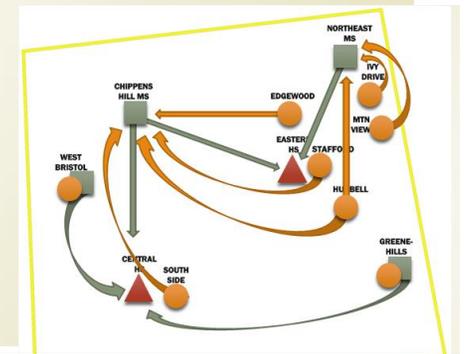
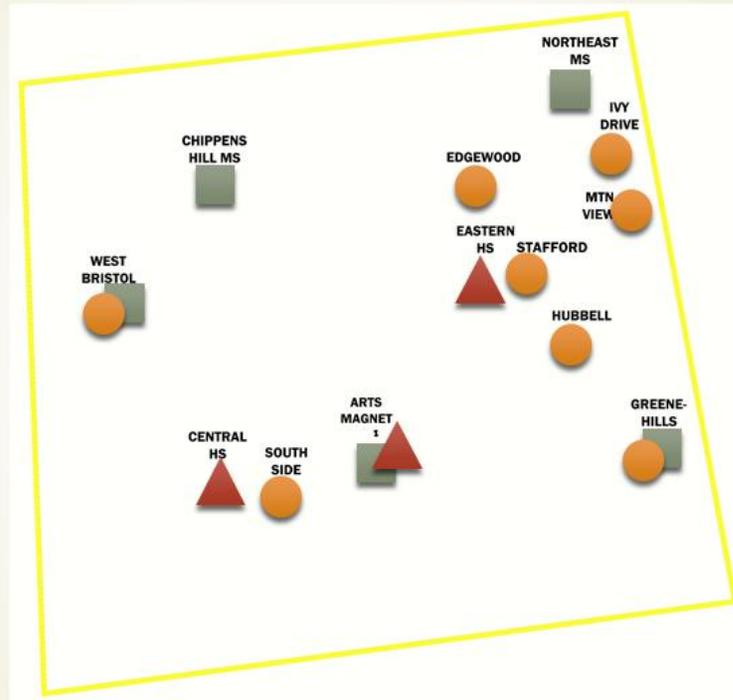
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Schools

EXISTING CONFIGURATION

-  2 High School
-  2 Middle School (6-8)
-  2 K-8 School
-  6 Elementary (PK-5)
- FUTURE**
-  1 Arts Magnet (6-12)



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The existing grade configurations are illustrated in this map.

Existing transitions of 6th grades to middle schools, and of 9th graders to high schools.

BRISTOL PUBLIC SCHOOLS

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Arts Magnet

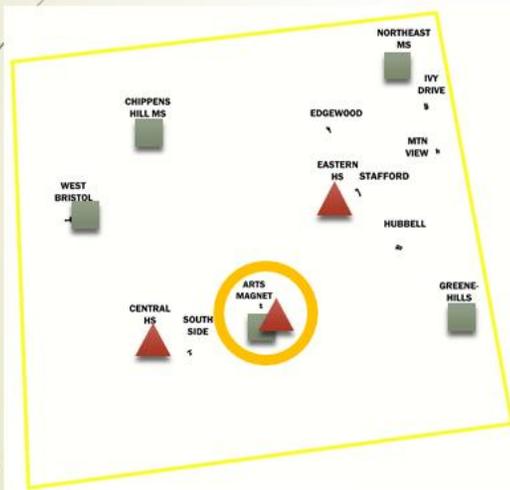


Arts Magnet School, Memorial Boulevard

ENROLLMENT, grades 6-12:
525 students in 7 grades = 75 average/grade

Assuming per capita apportionment by grade at each school, the following enrollment adjustments have been included:

- Chippens Hill, -86 students
- Northeast MS, -63 students
- Greene-Hills, -38 students
- West Bristol, -38 students
- Central HS, -150 students
- Eastern HS, -150 students
- Arts Magnet, +525 students



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The school enrollments have been adjusted as shown in this illustration, to account for the number of students planned for the Arts Magnet school at Memorial Boulevard.

Options Considered in this study are detailed in Chapter 4:

FINAL 11/21/17

Options

OPTIONS AND COMPARISONS

1. **Do Nothing**, continue with the same configuration
2. **All K-8 Schools**, build 1 new and reno/add 2 schools
3. **One Middle School**, Northeast
4. **One Middle School**, Chippens Hill

Other questions:
Analyze Two High Schools: can one HS be closed?
Arts Magnet School: what is the enrollment impact on district?

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D·R·A

Option 4, in which Northeast is converted into a PK-8 school, and Chippens Hill remains a middle school, was the preferred option.

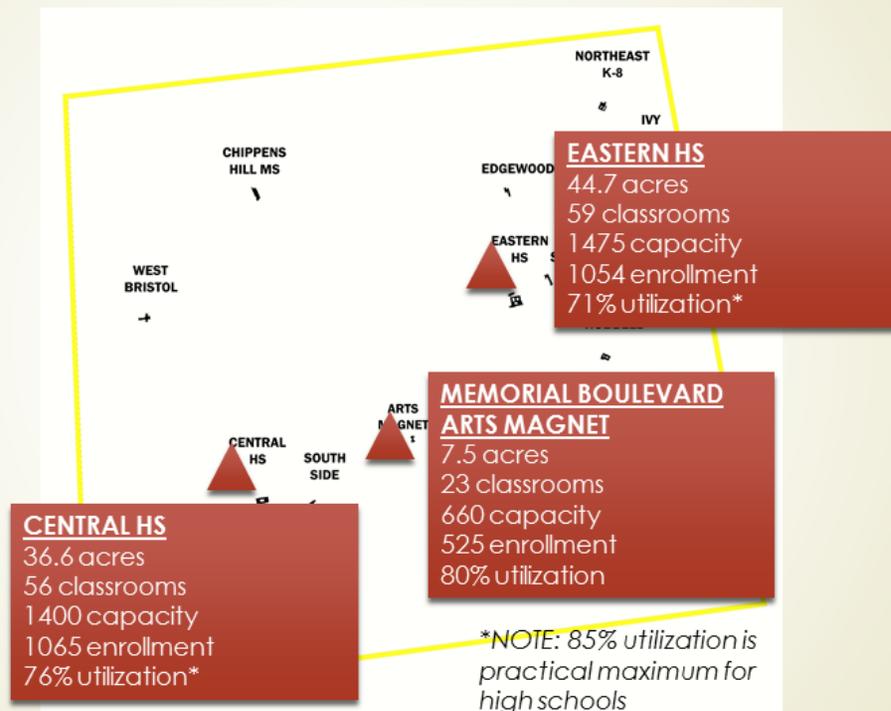
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Option 4

HIGH SCHOOLS

- ▲ 2 High Schools
Grades 9-12, plus
- ▲ 1 Arts Magnet School
Grades 6-12
(Enrollments: **2022-23**)



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Option 4 high schools

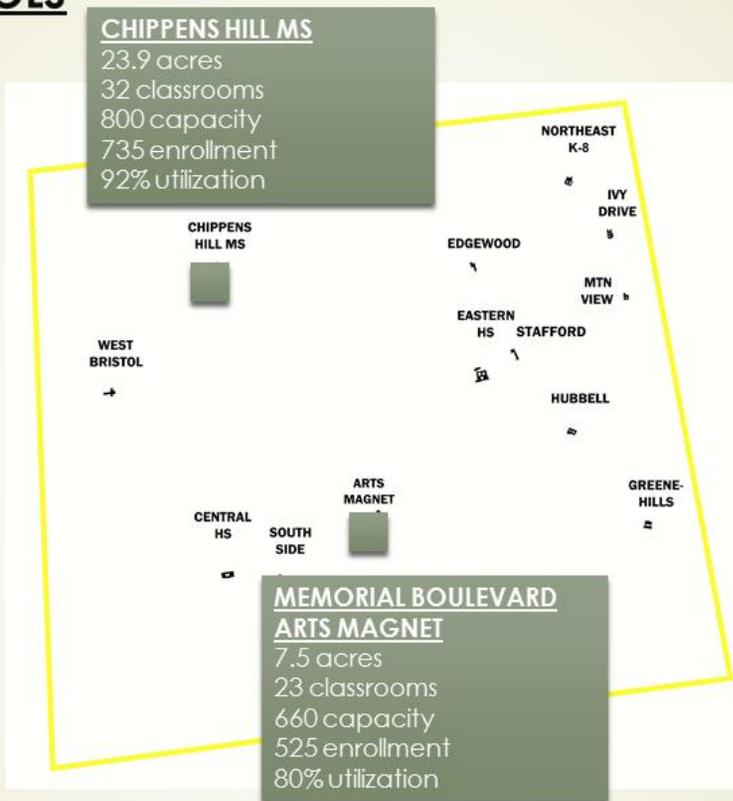
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Option 4

ONE MS ON EXIST. SITE

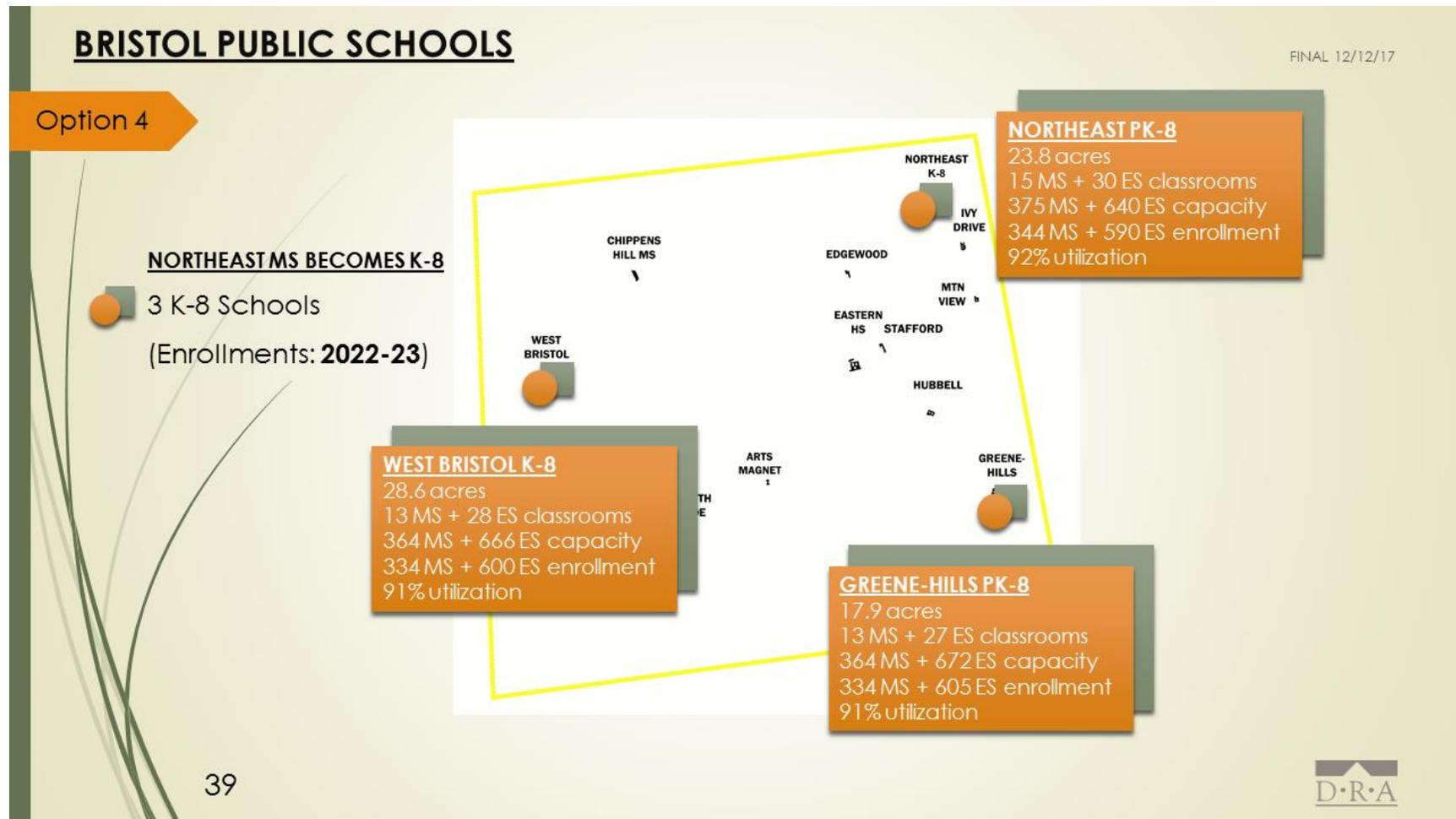
- 1 Middle School
Grades 6-8, plus
- 1 Arts Magnet School
Grades 6-12
(Enrollments: **2022-23**)



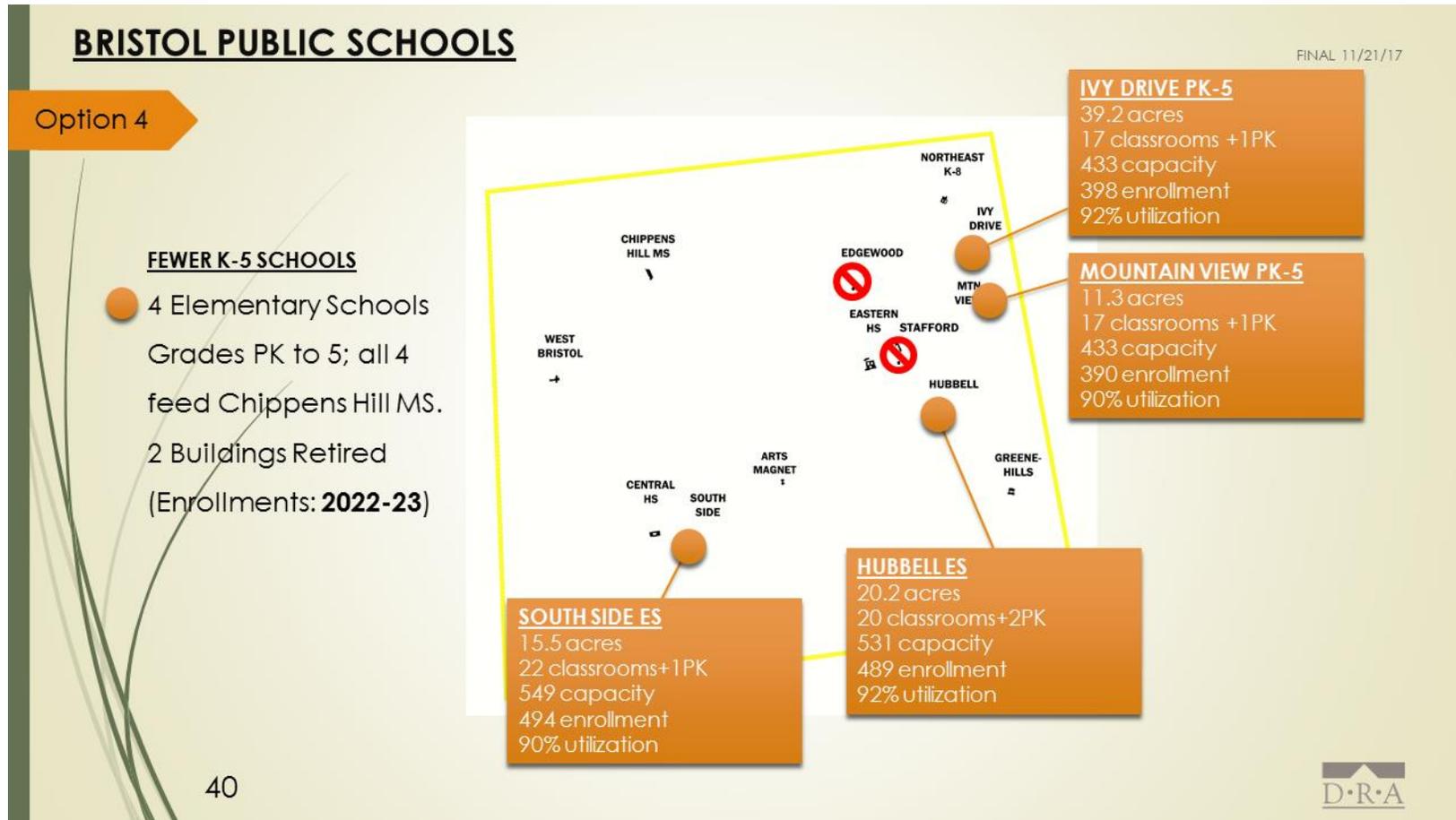
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Option 4 middle schools



Option 4 PK-8 schools, including the converted Northeast



Option 4 elementary schools. Note that 2 schools are retired in this option.

Advantages of Option 4 make this the preferred option.

- The northeast section of Bristol is served with a PK-8 school.
- South Side Elementary School remains in operation.
- Both Ivy Drive and Mountain View continue as elementary schools.
- The oldest elementary schools in the district would be retired.

BRISTOL PUBLIC SCHOOLS

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Cost

BUDGET COMPARISON: OPTION 1 to OPTION 4

DO NOTHING - CIP

No.	Description	Total Cost	*State Reimbursement: Including 5% Reduction for Ineligible Cost	Cost to City
1	Southside HVAC	\$3,597,160	0%	\$3,597,160
2	Stafford Roof & Masonry Repointing	\$2,043,575	0%	\$2,043,575
3	Edgewood Renovate as New with addition	\$25,909,470	64%	\$9,327,409
4	Northeast Renovate as New (updated)	\$34,371,994	64%	\$12,373,918
5	Southside Renovate as New (updated)	\$33,293,344	64%	\$11,985,604
6	Stafford Renovate as New (updated)	\$26,770,918	64%	\$9,637,530
7	Hubbell Renovate as New	\$20,140,646	64%	\$7,250,633
TOTAL COST TO CITY				\$56,215,829

CIP Forecast
\$56.2 million

OPTION 4

No.	Description	Total Cost	* State Reimbursement: Including 5% Reduction for Ineligible Cost	Cost to City
1	Northeast Renovate as New and Addition*	\$72,356,659	64%	\$26,048,397
2	Southside Renovate as New	\$36,793,344	64%	\$13,245,604
3	Hubbell Renovate as New	\$20,140,646	64%	\$7,250,633
TOTAL COST TO CITY				\$46,544,634

Option 4
\$46.5 million

* State Reimbursement 2017 for "Renovation" Status = 68.93%-5% for Ineligibles= 63.98%.
 ** State Reimbursement 2017 for "New Construction" = 58.93%-5% for Ineligibles= 53.98%.

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Budget cost comparison estimated that **Option 4** will cost less than the planned renovations in the Capital Improvement Plan (CIP).

NEXT STEPS

1. Board of Ed and Board of Finance **approval of Option 4**
2. Consider **bonding scenarios and timelines**, include Arts Magnet
3. Adopt a **Masterplan** to complete the 3 projects in Option 4
More phasing details, useful in presentations to both state and to city residents
4. **Submit ED049** to state for phase 1
Masterplan as an attachment
5. Form a **building committee**
6. Gather data, conduct testing, start phase 1 **schematic design**

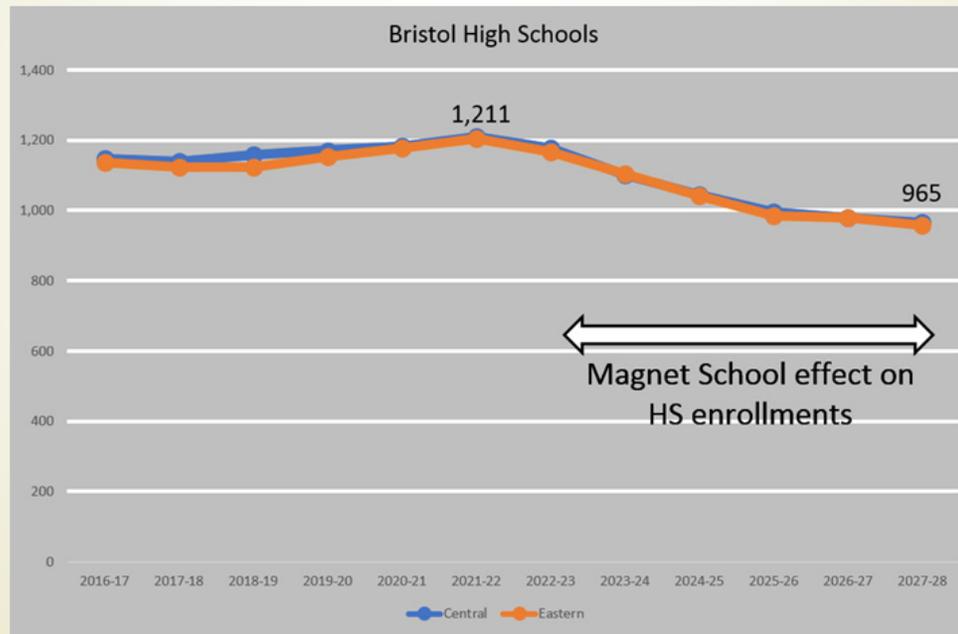
On the question of two high schools, DRA determined the capacity of each one and compared them with the projected enrollments. (Eastern HS capacity is 1,475 and Central HS capacity is 1,400.) Enrollment projections for 2022-23 (5 years from now) are a little over 1060 students for each high school. **Neither high school is large enough to house the projected enrollments for both of them.**

Two H S's

Projected Enrollments, including reductions for Magnet School effects:

Each High School will have approximately 150 students less, as students attend the Arts Magnet School.

Both schools are near their capacity now, but even with the projected drop in enrollments, neither school is large enough to take all of Bristol's high school students.



Two H S's

CENTRAL HIGH SCHOOL

Pros:

- Newer building
- In better shape
- More efficient building layout

Cons:

- Smaller site
- Minimal buffers to neighboring houses
- Building addition more difficult
- Traffic problems

EASTERN HIGH SCHOOL

Pros:

- Larger site
- Building addition more feasible
- Closer to concentration of population

Cons:

- Older building
- More worn building
- Main office doesn't control entrance
- Less efficient building layout
- Traffic problems

Either building would need a sizable addition to become the only high school, and additional parking. This would squeeze the site, eliminating some athletic fields.

Neither school has an overwhelming reason to be chosen as the only high school for Bristol.

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RECOMMENDATION: Maintain two high schools in Bristol.

Bristol Feasibility Study, Board of Education Schools

2 ENROLLMENT PROJECTIONS

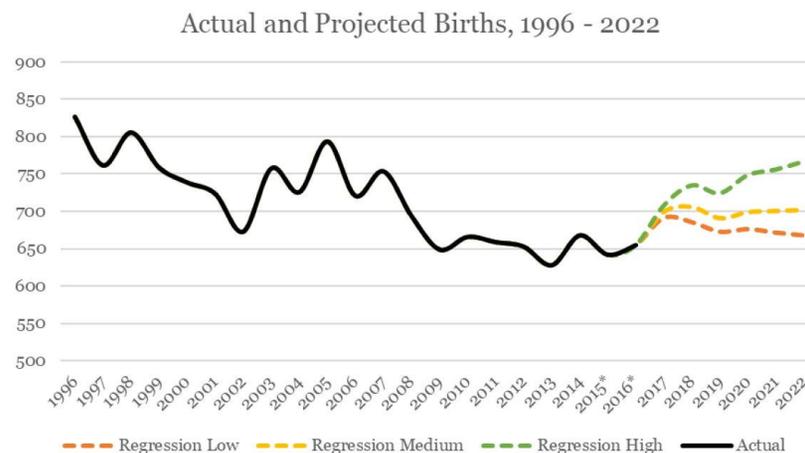
Milone & MacBroom conducted an analysis of Bristol’s past and present school enrollments and projected them forward 10 years. Their complete report, “Bristol Comprehensive School Enrollment Analysis & Projections,” is contained in Appendix A, in Volume 2 of this report.

To summarize, the following trends influence school enrollments:

- Demographics—the population is stable overall, but they have grown older, reducing the number of school age children in Bristol.
- Unemployment—Bristol unemployment rate remains slightly higher than Connecticut’s, although steadily recovering from the unemployment peak in 2010.
- Housing Market Trends—Sales declined steeply during the Great Recession, reaching a low point in 2011, but have recovered steadily since then. Median sales prices have stabilized around \$175,000, but permitting activity for single-family houses has remained quite low.
- Birth Trends—“Bristol’s births have recently experienced a period of substantial decline, with impacts on the town’s population and school enrollment that will be felt for years to come.” The Greene-Hills and West Bristol districts have experienced the greatest number of births historically.

A formula to predict births included factors for housing sales and Bristol unemployment, resulting in three scenarios:

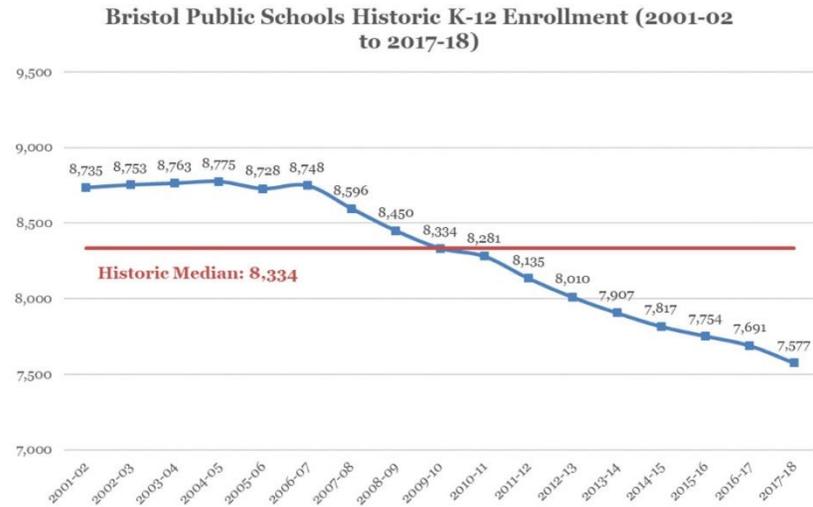
- Low Scenario—Low range of annual home sales, highest trend in Bristol unemployment, and low range of annual births.
- Medium Scenario—Mid-range of annual home sales, Bristol unemployment, and annual births.
- High Scenario—High range of annual home sales, lowest Bristol unemployment, and high range of annual births.



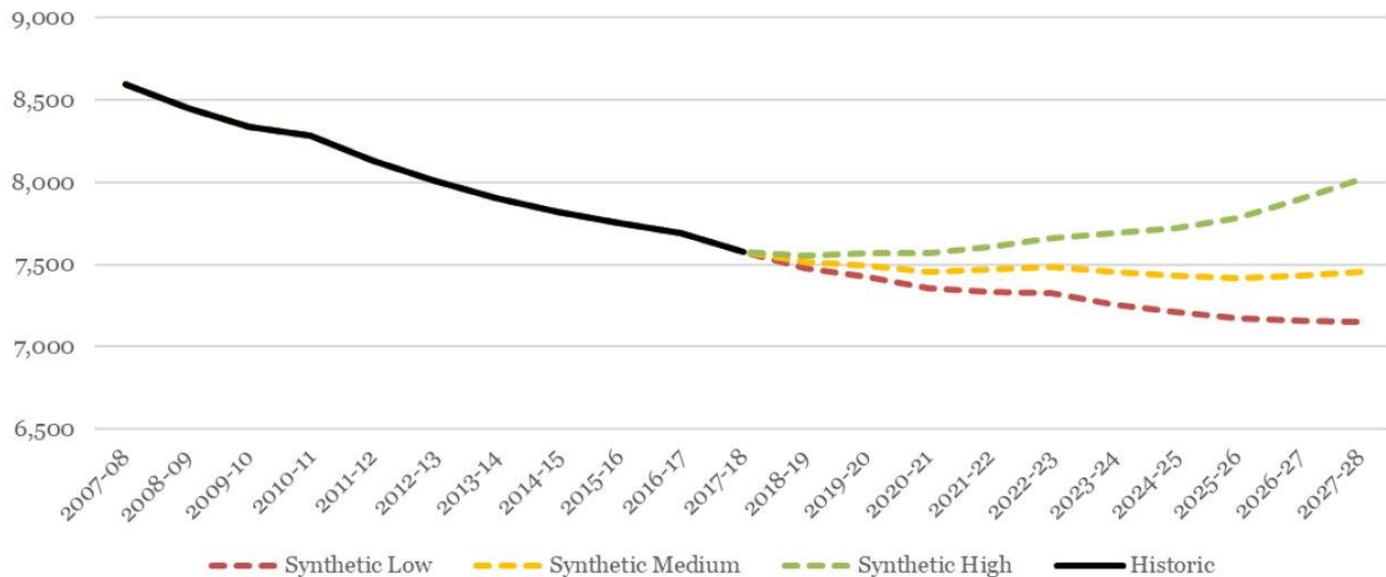
Milone & MacBroom, 2017

Quoting again from the M&M report, “Over the past 13 years, Bristol’s school enrollments experienced two distinct periods: a half-decade of highly stable overall enrollments from 2001-02 through 2006-07 followed by a steady and unbroken declining trend in total enrollments that has reduced the district’s K-12 student body by close to 1,200 students.”

Of the three birth projection scenarios, M&M recommends **“the medium-growth scenario presents the most appropriate model for long-term projections over the 10-year planning horizon of this study.”**

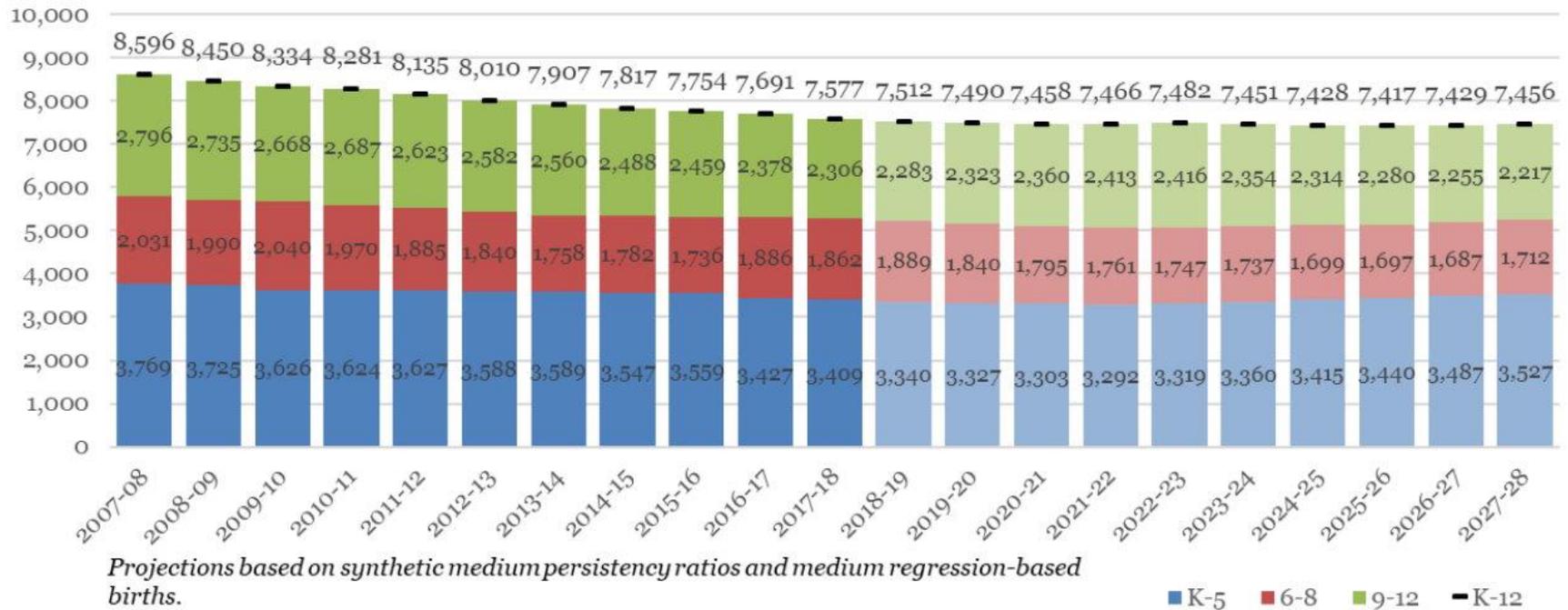


Historic and Projected K-12 Enrollments, 2007-08 to 2027-08



The resulting enrollment projection depicts declines in enrollment until 2025, with slight increases projected in the final 2 years. The final graph includes numbers, broken down into high school, middle school, and elementary school grades.

Historic and Projected K-12 Enrollment (Medium Scenario) 2007-08 to 2027-28



These numbers (also available by school) were used to quantify the different options which were explored during the visioning process in this study. See Chapters 4 and 5 for these options.

Bristol Feasibility Study, Board of Education Schools

3 EXISTING CONDITIONS SUMMARY

The oldest of the district’s 12 school buildings in operation is **Stafford Elementary**, constructed in 1950. Stafford received exterior envelope upgrades in the which are now at end of life. The exterior wall composition is lacking in its ability to provide an energy efficient envelope. Inside the school, the original gypsum product ceilings remain and are a maintenance hardship. Renovations are needed to replace most exterior and interior systems in the building. Stafford is approximately 61,000 square feet in size. Within the building, the main office should be relocated for greater visibility and control. On the site, the bus loop and parking areas should be re-configured to allow for better traffic circulation.

Edgewood Elementary is the district’s second oldest building and also, it’s smallest. At 44,000 square feet, this building received exterior envelope upgrades in the 1980’s that are now at end of life. Along with needing major exterior and interior systems replacement, Edgewood suffers from lack of group space, with it’s multipurpose room being used as a gym, a cafeteria, and an auditorium. While other elementary schools have been added onto to relieve this condition, Edgewood is still managing this daily conflict.

Ellen Hubbell Elementary was originally built in 1961, and received substantial renovations and additions in 1992. Many building systems from the renovation are still in good condition, but the building needs mechanical and electrical systems upgrades, as well

as toilet room renovations. Lighting flooring, and the concealed spline ceilings need replacement throughout. Hubbell is approximately 63,000 square feet.

Ivy Drive and Mountain View Elementary Schools were both built in 1967 and both fully renovated in 2007. The buildings are in excellent shape, and both site layouts work well for traffic circulation. No work at this time is recommended. Ivy Drive is approximately 59,000 square feet and Mountain View is approximately 53,000 square feet.

South Side, the most recently constructed of the elementary schools, was built in 1973. At 61,000 square feet, the building has the most generous floor to floor height and corridor sizes of the elementary schools in the city, with an expansive gym. The mechanical systems and distribution are in need of replacement due to age and condition. Likewise, the exterior glazing and entrance systems and interior finishes are in need of replacement. Within the building, the main office should be relocated for better visibility and control.

Northeast Middle is the oldest operating middle school in the district, built in 1961. A two-story addition was added onto the building, but is not ADA compliant. While a new roof was installed this past summer, most of the MEP systems, interior finishes, and envelope components are at end of life. Northeast is approximately 74,000 square feet with a generous site. The administration area is

undersized, and the building layout not optimal. On the site, alterations to the entrance drives would enhance site safety and circulation.

Chippens Hill Middle School, constructed in 1993, contains 166,000 square feet on three levels, with classrooms organized in teams, aligning with the district’s middle school teaching model. While the building is mostly in excellent shape, the building will be due for upgrades to its mechanical system, ceilings and lighting in the next 5-10 years.

The West Bristol and Greene-Hills Schools serve elementary through middle school grades and were both constructed in 2012. There is no work needed at this time to these schools. Because of the young age of these two buildings, full evaluations were not part of the scope of this study project.

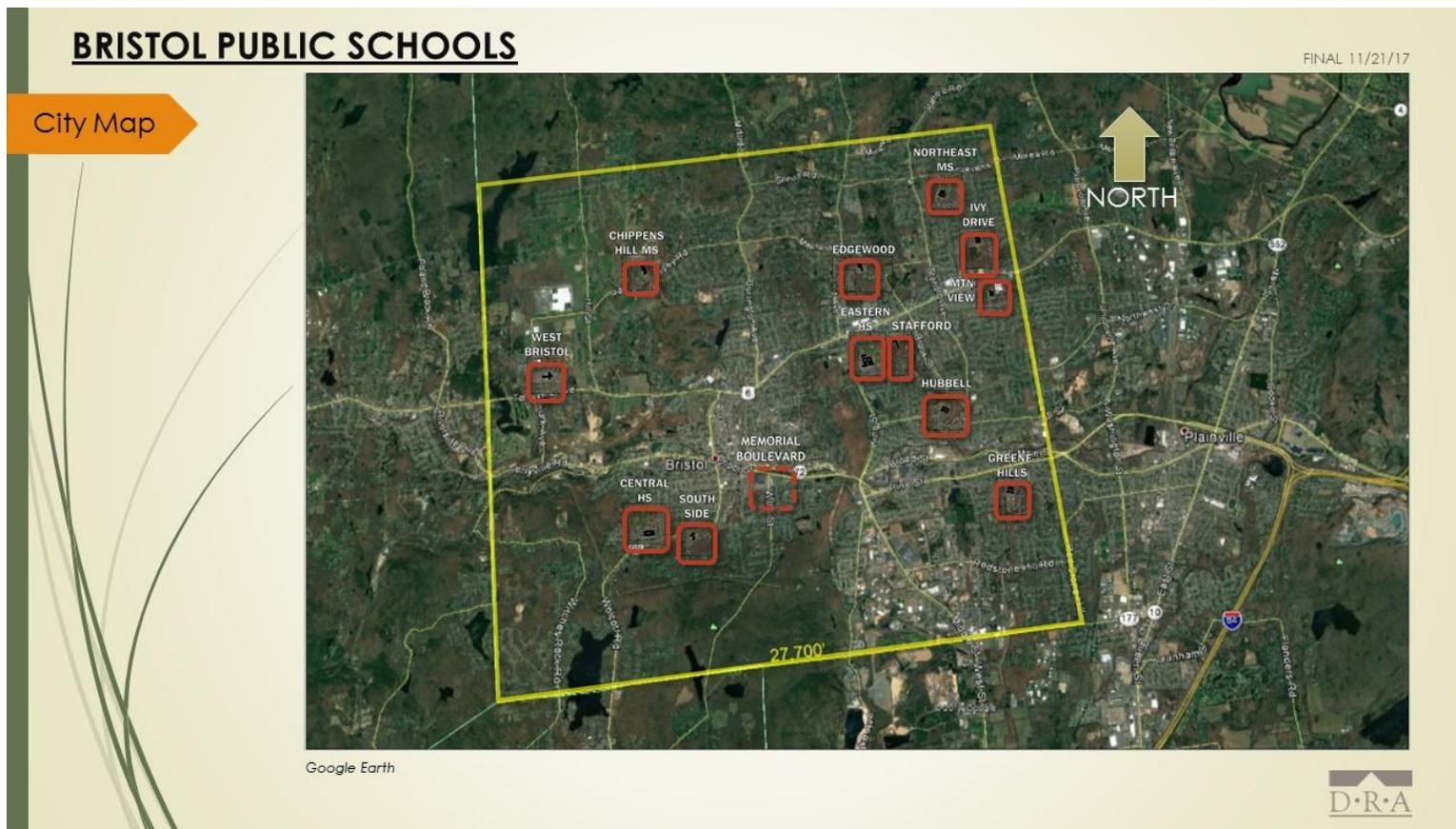
Bristol Eastern is the older of the two high schools in the city, built in 1959, and is 235,000 square feet. While there were some

upgrades to the building in the 1999 high school renovations, some systems and areas remain original and in need of replacement. For example, flooring and stair treads, and some entrance systems. Eastern is also in need of air conditioning and fan equipment replacement, and the main office should be moved for better control and visibility. Eastern’s renovations should happen some time in the next 10 years.

Bristol Central was built in 1967 and received significant renovations in 1999. Some minor mechanical and finish systems replacement is recommended for the next 5-10 years. Central is efficient in layout, 3 stories tall, and is 221,000 square feet.

For a detailed report on each school, please refer to **Appendix B**.

The existing schools are highlighted on this Bristol city aerial photo.



The Arts Magnet school is dashed in at the location of the Memorial Boulevard building. Although it is a future development, its enrollment impact has been incorporated for this study.

From this point forward, the schools will be represented by the icons shown here:

BRISTOL PUBLIC SCHOOLS

Schools

FINAL 12/12/17

EXISTING CONFIGURATION

- 2 High School
- 2 Middle School (6-8)
- 2 K-8 School
- 6 Elementary (PK-5)

FUTURE

- 1 Arts Magnet (6-12)

The map displays the following school locations and their configurations:

- WEST BRISTOL:** 2 K-8 School (orange circle and grey square)
- CHIPPENS HILL MS:** 2 Middle School (6-8) (grey squares)
- EDGEWOOD:** 6 Elementary (PK-5) (orange circles)
- EASTERN HS:** 2 High School (red triangles)
- STAFFORD:** 6 Elementary (PK-5) (orange circles)
- HUBBELL:** 6 Elementary (PK-5) (orange circles)
- NORTHEAST MS:** 2 Middle School (6-8) (grey squares)
- IVY DRIVE:** 6 Elementary (PK-5) (orange circles)
- MTN VIEW:** 6 Elementary (PK-5) (orange circles)
- CENTRAL HS:** 2 High School (red triangles)
- SOUTH SIDE:** 6 Elementary (PK-5) (orange circles)
- ARTS MAGNET 1:** 1 Arts Magnet (6-12) (red triangle and grey square)
- GREENE HILLS:** 2 K-8 School (orange circle and grey square)

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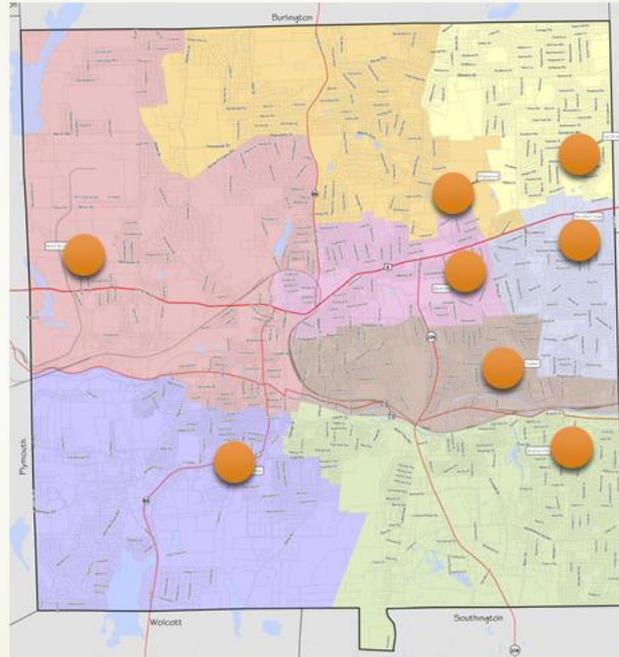
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Attendance Areas

EXISTING CONFIGURATION

- ▲ 2 High School
- 4 Middle School (6-8)
- 8 Elementary (PK-5)



Milone & MacBroom, 2012

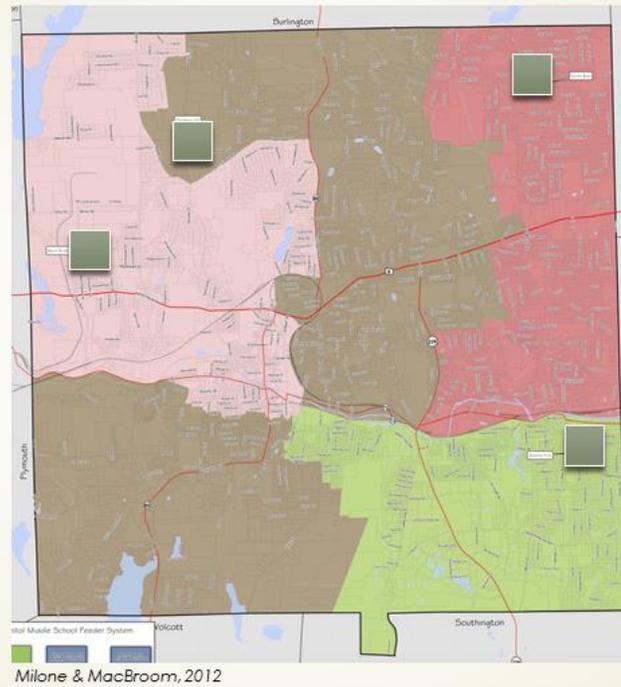
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Attendance Areas

EXISTING CONFIGURATION

- ▲ 2 High School
- 4 Middle School (6-8)
- 8 Elementary (PK-5)



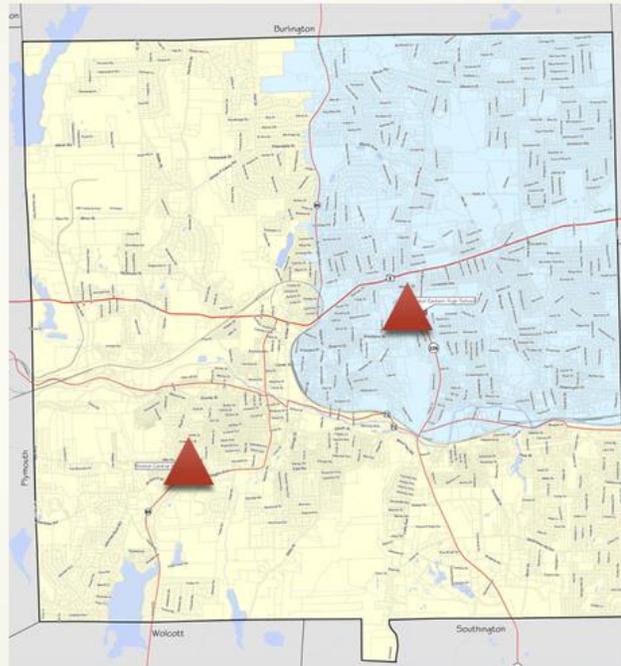
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Attendance Areas

EXISTING CONFIGURATION

- ▲ 2 High School
- 4 Middle School (6-8)
- 8 Elementary (PK-5)



Milne & MacBroom, 2012

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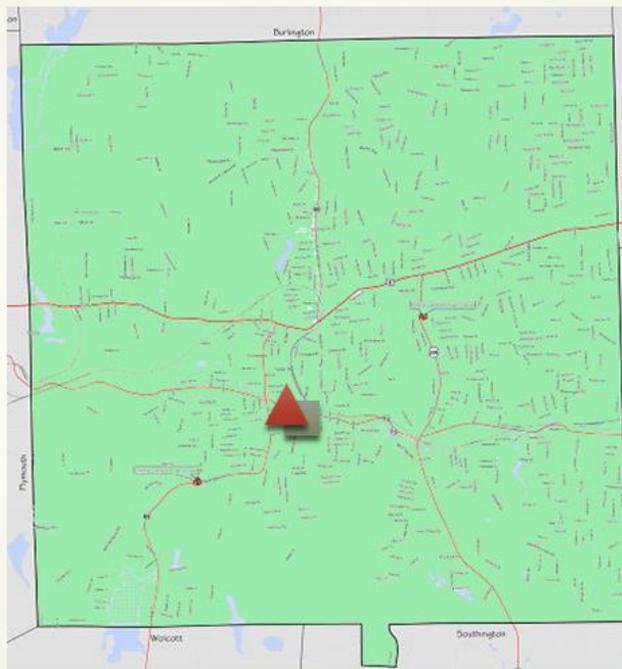
Attendance Areas

EXISTING CONFIGURATION

- ▲ 2 High School
- 4 Middle School (6-8)
- 8 Elementary (PK-5)

NEAR FUTURE

- ▲ 1 Arts Magnet (6-12)



The Arts Magnet school draws students from all parts of Bristol.

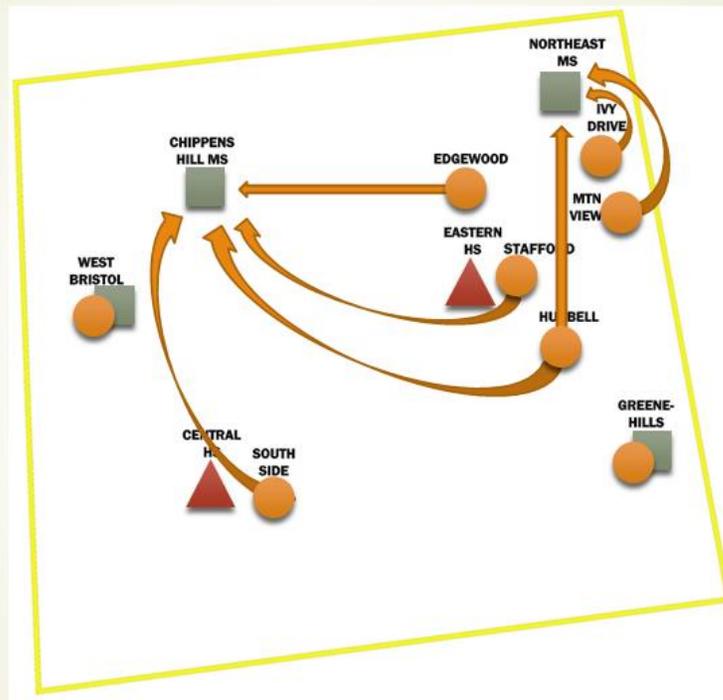
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Feeders

ELEMS FEEDING MS

-  2 High Schools
-  2 Middle Schools (6-8)
-  2 K-8 Schools
-  6 Elementary (PK-5)



The orange arrows represent the incoming 6th graders transitioning from elementary schools to middle schools.

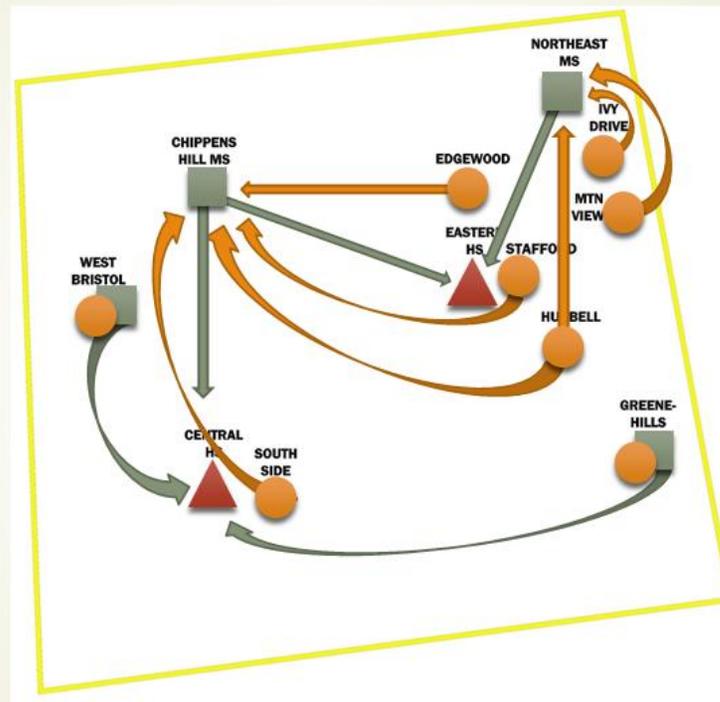
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Feeders

K-8 & MS FEEDING HS

- ▲ 2 High Schools
- 2 Middle Schools (6-8)
- 2 K-8 Schools
- 6 Elementary (PK-5)



The added green arrows represent the incoming 9th graders transitioning from middle schools to high schools.

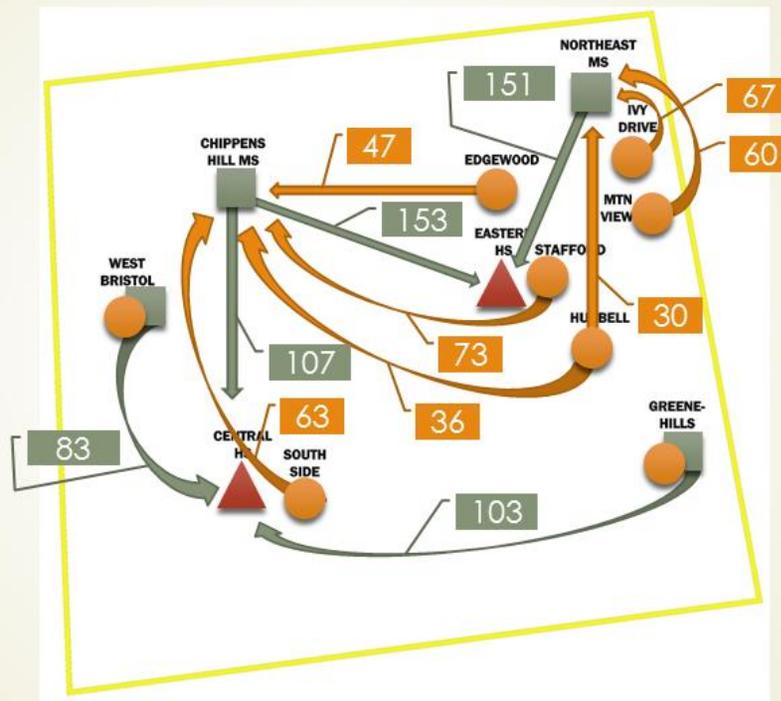
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Feeders

STUDENT FLOWS - 2017-18

- ▲ 2 High Schools
- 2 Middle Schools (6-8)
- 2 K-8 Schools
- 6 Elementary (PK-5)



The numbers represent the students transitioning from one school to another in a given year.

When the Arts Magnet school is operating (estimated to be school year 2022-23), the following adjustments will take effect:

BRISTOL PUBLIC SCHOOLS

FINAL 12/12/17

Arts Magnet

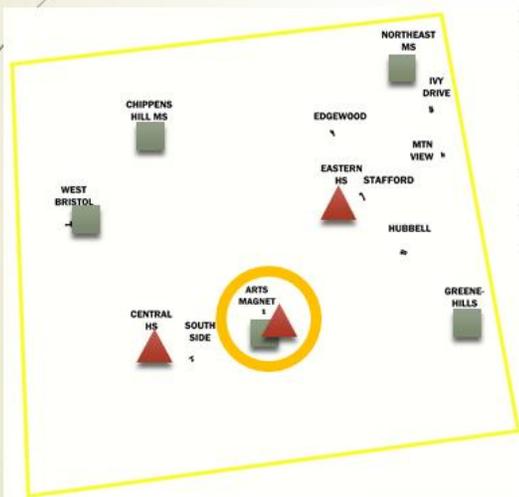


Arts Magnet School, Memorial Boulevard

ENROLLMENT, grades 6-12:
525 students in 7 grades = 75 average/grade

Assuming per capita apportionment by grade at each school, the following enrollment adjustments have been included:

- Chippens Hill, -86 students
- Northeast MS, -63 students
- Greene-Hills, -38 students
- West Bristol, -38 students
- Central HS, -150 students
- Eastern HS, -150 students
- Arts Magnet, +525 students



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The proposed Arts Magnet school will draw students from all of Bristol’s middle and high schools.

BRISTOL PUBLIC SCHOOLS

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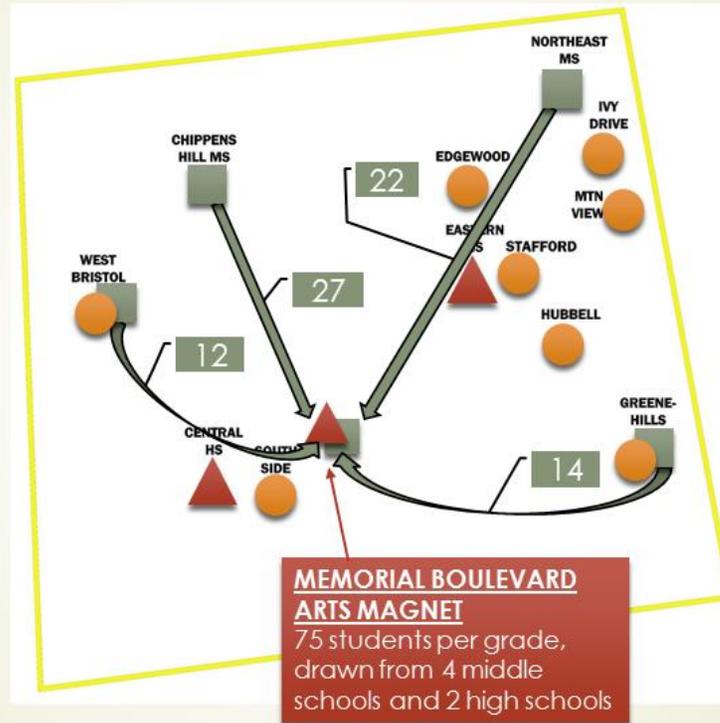
Feeders

STUDENT FLOWS

-  2 High Schools
-  2 Middle Schools (6-8)
-  2 K-8 Schools
-  6 Elementary (PK-5)

FUTURE

-  1 Arts Magnet (6-12)
- The number of students in each grade is 75



Numbers are students from each grade that would go to the Arts Magnet school instead of the middle school. Each high school will contribute 37 to 38 students per grade to the Arts Magnet school.

Bristol Feasibility Study, Board of Education Schools

4 OPTIONS CONSIDERED

This study began exploring options by identifying a wide range of possibilities, including the possibility of continuing without any change to the district's configuration. The Options considered are:

1. Do Nothing Option
2. All K-8 Schools, build 1 new and renovate/add at 2 existing schools
3. Keep One Middle School, Northeast; Chippens Hill converts to PK-8
4. Keep One Middle School, Chippens Hill; Northeast converts to PK-8

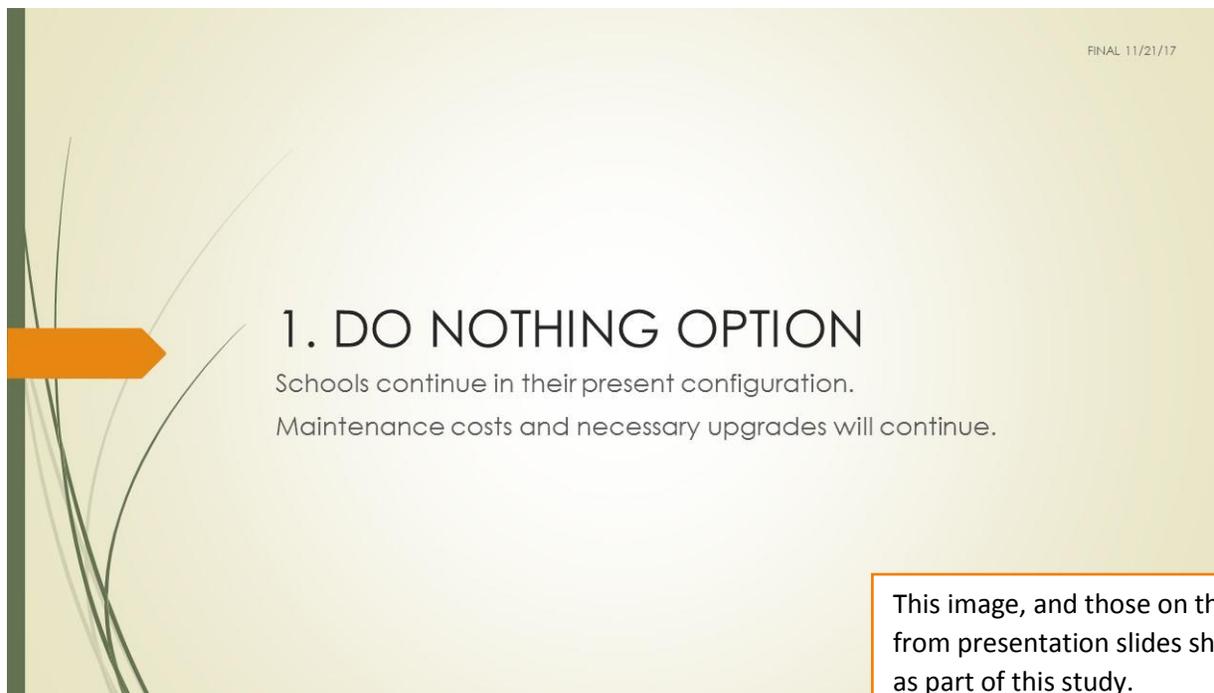
These 4 options are detailed on the following pages.

4.1 OPTION 1 - Do NOTHING

The first option to consider answers the question, “What if we do nothing, just continue as we are?” The “Do Nothing” Option is detailed on the following pages.

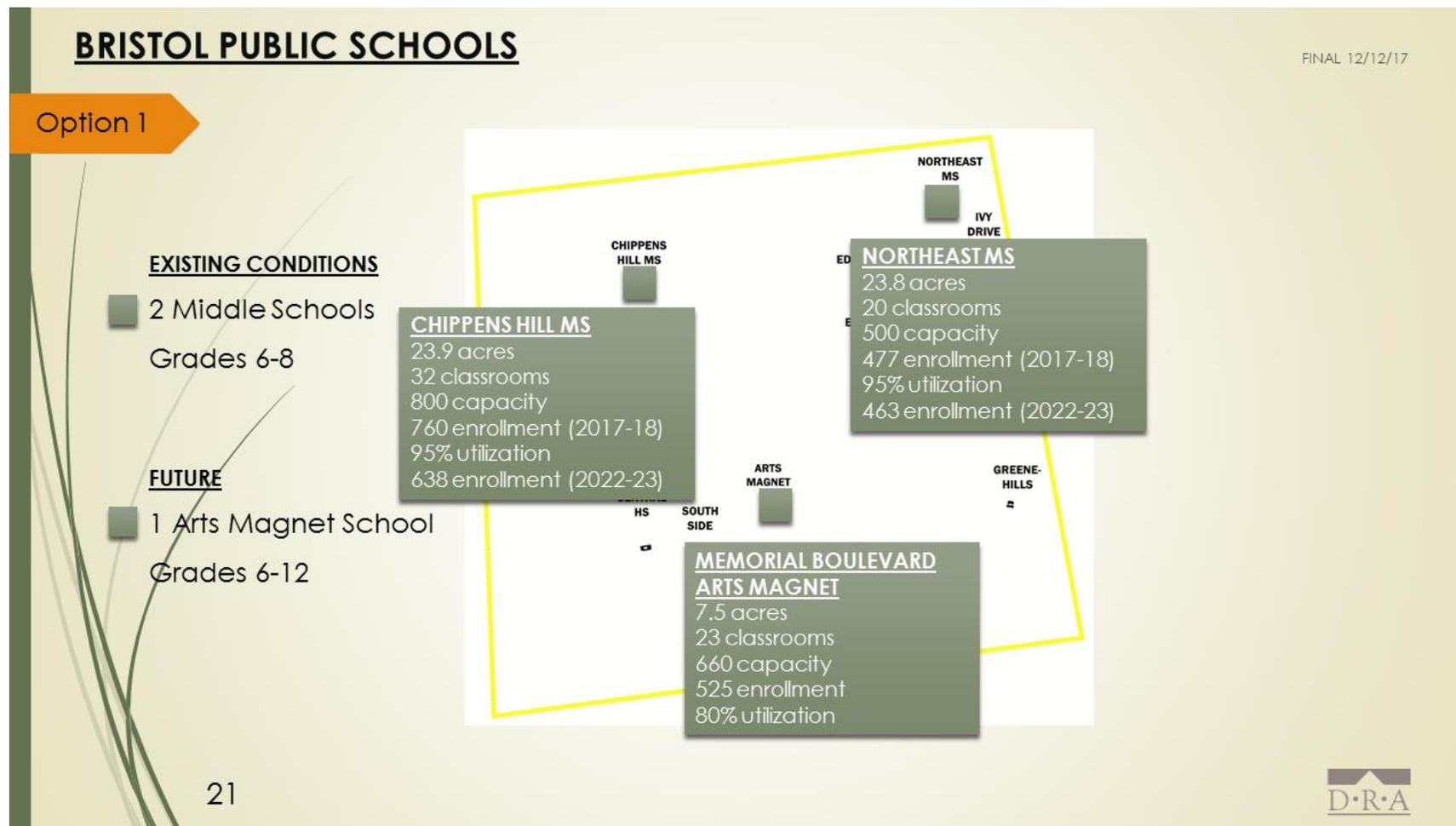
The enrollment numbers are based on enrollment projections for the school year 2017-18, except that an equal share of the Arts

Magnet school enrollment has been deducted from each grade of the other schools serving the same grades (a total of 75 students per grade, grades 6-12, as described in the education specifications, Appendix C).

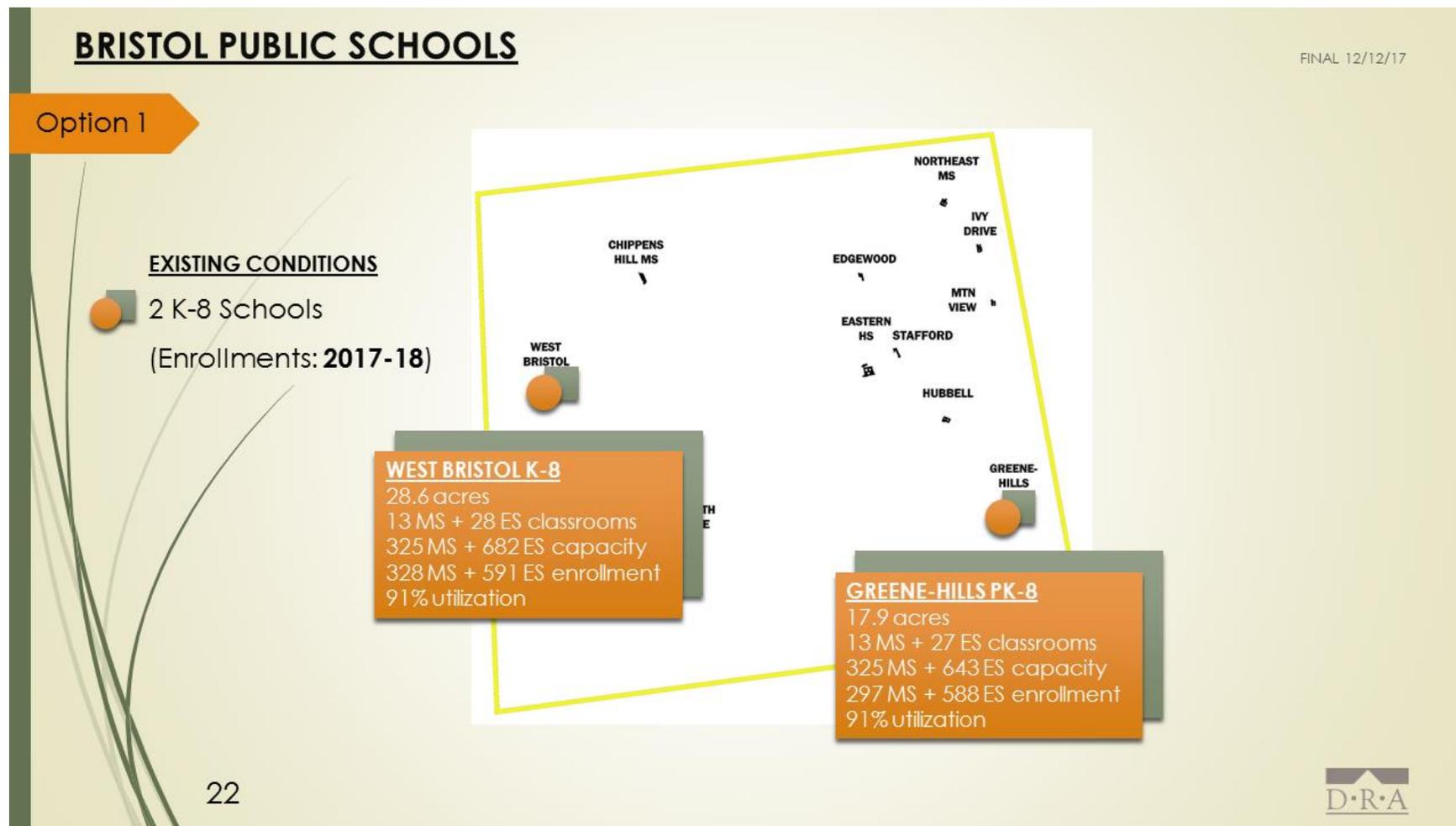


This image, and those on the following pages, come from presentation slides shown at public meetings as part of this study.

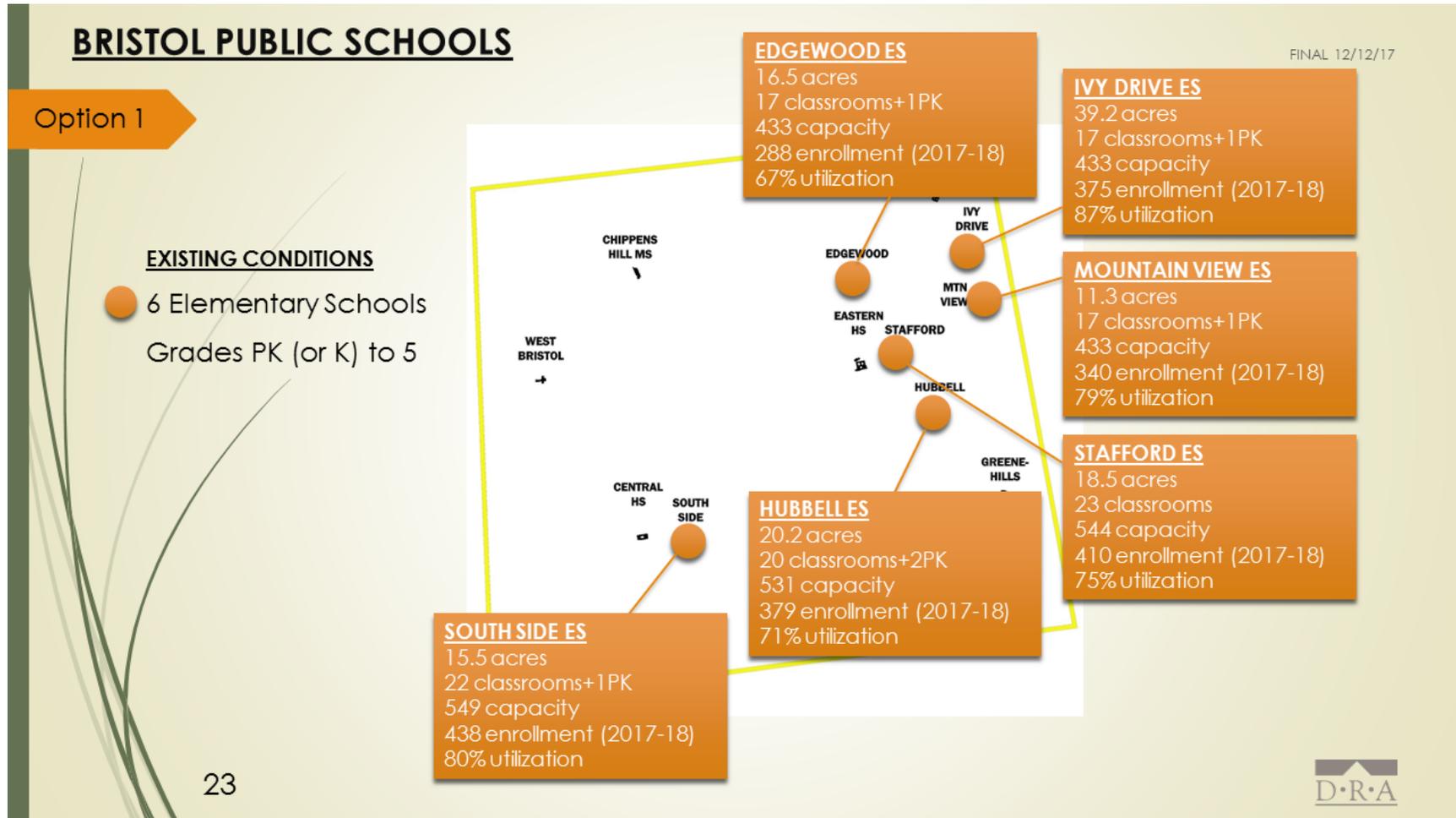
The two existing middle schools and the future Arts Magnet are shown below:



The two existing K-8 schools are shown below:



The six elementary schools are shown below. Some, but not all, contain Pre-Kindergarten classrooms, listed as PK.



Comments on the “Do Nothing” Option

School capacity in an elementary school is based on the number of classrooms available for grade level classes, not shared (art, music, computer lab, etc.), nor rooms for special education programs. Thus, older elementary schools are seen as “losing capacity” over time because some of the classrooms have changed use, becoming the type of rooms that are still serving essential programs, although they no longer contribute to the student capacity.

Utilization rate is the ratio of enrollment projections divided by the maximum capacity of each school, and varies from year to year.

Often elementary school classrooms have the highest utilization rates in a district, and the utilization rate is lower for schools serving the higher grades. This is especially true for high schools, in which students have the opportunity to take electives, and smaller classes offer valuable learning even though not filling every seat. High schools, as a rule of thumb, with higher than 85% utilization have difficulty scheduling classrooms.

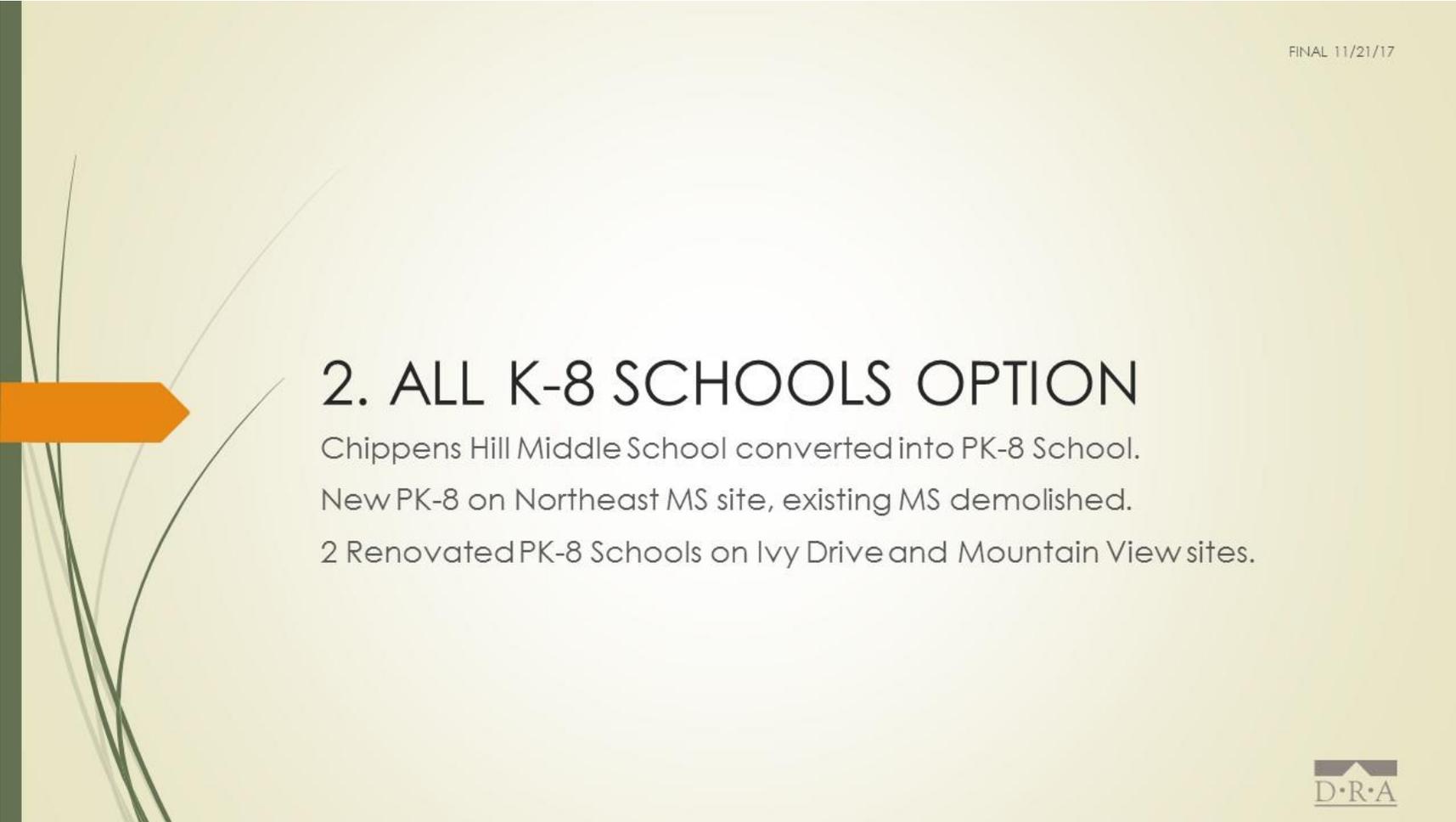
As shown on the previous pages, the elementary schools are not fully utilized in this option (utilization rates range from 70-84%). The schools in the rest of the district are fully utilized, ranging from 79% to 97%, although these rates will be coming down somewhat based on two events: continuing declining enrollments, and opening the future Arts Magnet school.

The next 3 options will each illustrate a different future vision for Bristol schools, to compare with this “Do Nothing” option. The enrollment numbers will be advanced 5 years (school year 2022-23), to allow time for the first construction/renovation phase to be completed.

4.2 OPTION 2 – ALL K-8 SCHOOLS

This option considers replacing all the elementary and middle schools with K-8 schools, which would reduce the number of transitions for the students.

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2. ALL K-8 SCHOOLS OPTION

Chippens Hill Middle School converted into PK-8 School.

New PK-8 on Northeast MS site, existing MS demolished.

2 Renovated PK-8 Schools on Ivy Drive and Mountain View sites.



BRISTOL PUBLIC SCHOOLS

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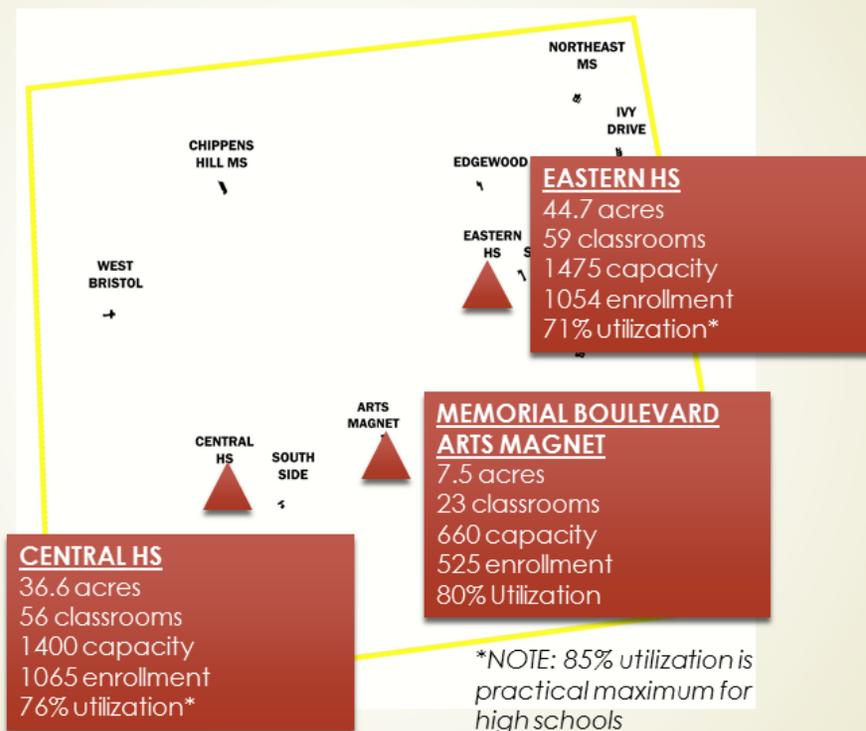
Option 2

HIGH SCHOOLS CONTINUE

- ▲ 2 High Schools
Grades 9-12
(Enrollments: **2022-23**)

FUTURE

- ▲ 1 Arts Magnet School
Grades 6-12



BRISTOL PUBLIC SCHOOLS

Option 2

NO K-5 SCHOOLS, ALL K-8

- 6 K-8 Schools, retire four K-5 & PK-5 schools
 (Enrollments: 2022-23)

CHIPPENS HILL RENO PK-8
 23.9 acres
 14 MS + 31 ES classrooms
 350 MS + 744 ES capacity
 256 MS + 517 ES enrollment
 71% utilization

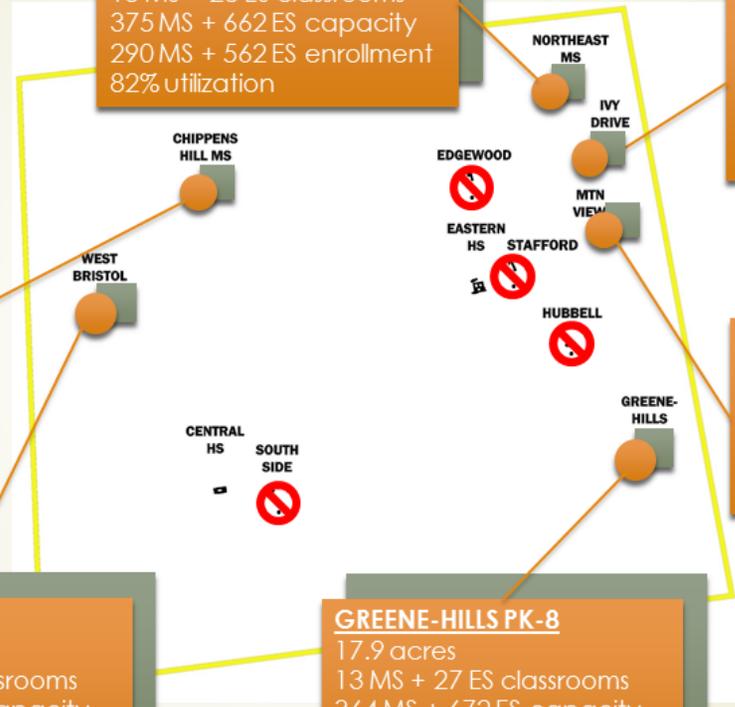
WEST BRISTOL K-8
 28.6 acres
 13 MS + 28 ES classrooms
 325 MS + 682 ES capacity
 264 MS + 579 ES enrollment
 84% utilization

NORTHEAST NEW PK-8
 23.8 acres
 15 MS + 28 ES classrooms
 375 MS + 662 ES capacity
 290 MS + 562 ES enrollment
 82% utilization

GREENE-HILLS PK-8
 17.9 acres
 13 MS + 27 ES classrooms
 364 MS + 672 ES capacity
 256 MS + 582 ES enrollment
 81% utilization

IVY DRIVE RENO: PK-8
 39.2 acres
 15 MS + 26 ES classrooms
 375 MS + 618 ES capacity
 227 MS + 541 ES enrollment
 77% utilization

MTN VIEW RENO: PK-8
 11.3 acres
 15 MS + 26 ES classrooms
 375 MS + 618 ES capacity
 227 MS + 541 ES enrollment
 77% utilization



Option 2

TEST FIT PLANS – Ivy Drive

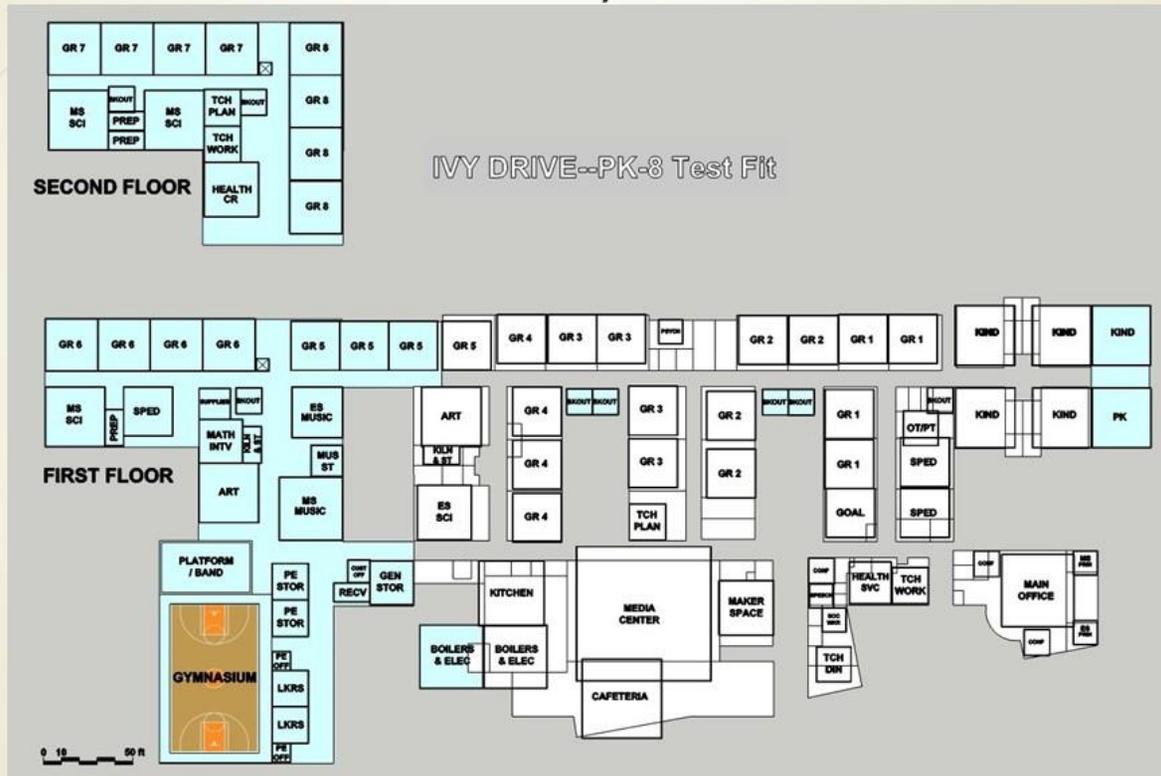


Selecting sites to locate PK-8 schools is difficult in Bristol. They should be larger than elementary school sites to allow more parking and athletic fields for the middle school component.

In this example at Ivy Drive, the flat portion of the site has enough area to expand the parking and the building, but not the play fields.

Option 2

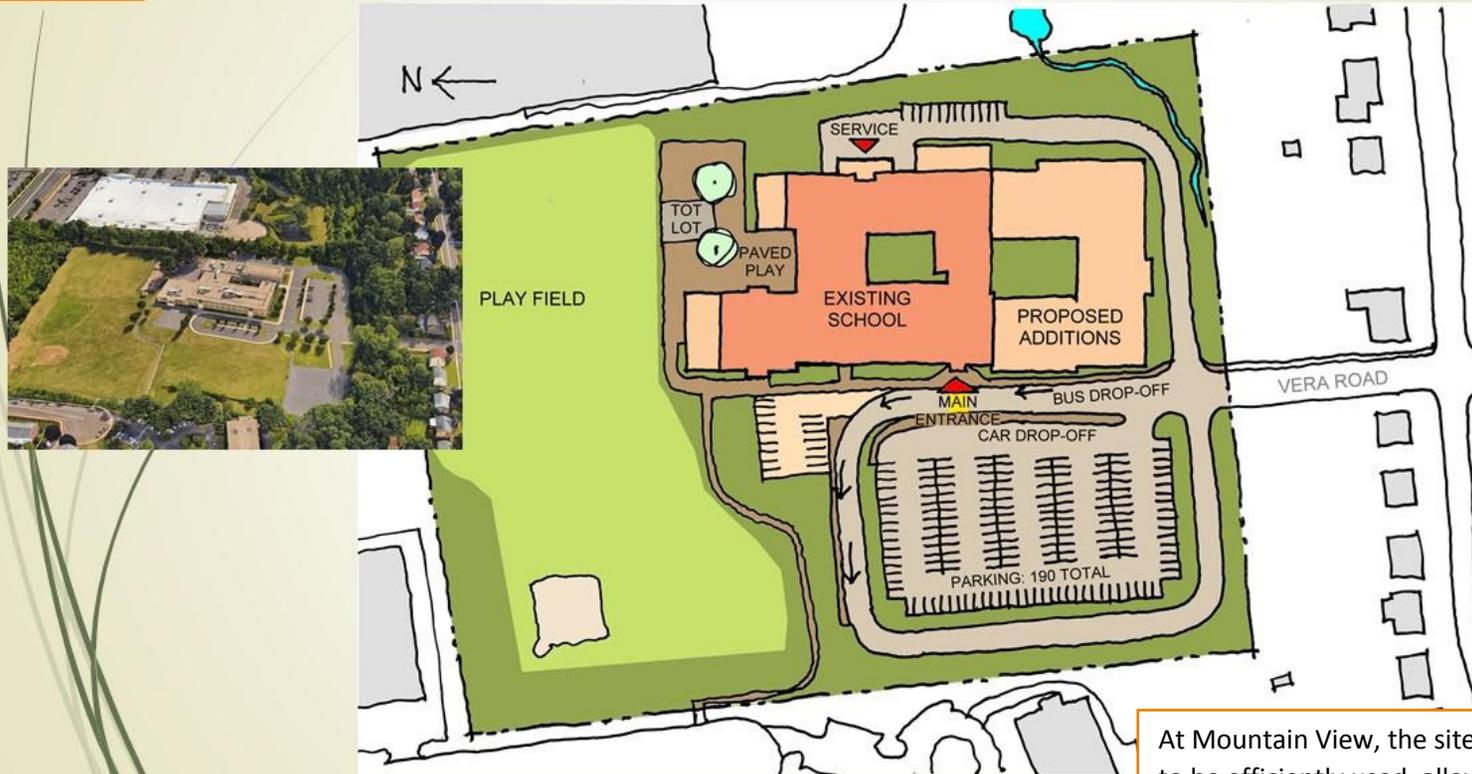
TEST FIT PLANS – Ivy Drive



A test fit plan is generated from an ideal PK-8 program with spaces equivalent to the Greene-Hills and West Bristol schools. At Ivy Drive, the addition is 2 stories, and the existing school would be fully renovated.

Option 2

TEST FIT PLANS – Mountain View



At Mountain View, the site is flat enough to be efficiently used, allowing expansion of the building and parking, but losing a play field.

Comment on Option 2

One disadvantage of this option is the retirement of South Side Elementary, since it is the only elementary school in the southwest part of Bristol. Unfortunately, the site is very constrained at South Side (17 acres), and cannot be recommended as a PK-8 school site.



South Side Elementary School, aerial photo of site



3. ONE MIDDLE SCHOOL OPTION

Chippens Hill Middle School converted into PK-8 School(s).

Northeast is replaced with a new Middle School.

BRISTOL PUBLIC SCHOOLS

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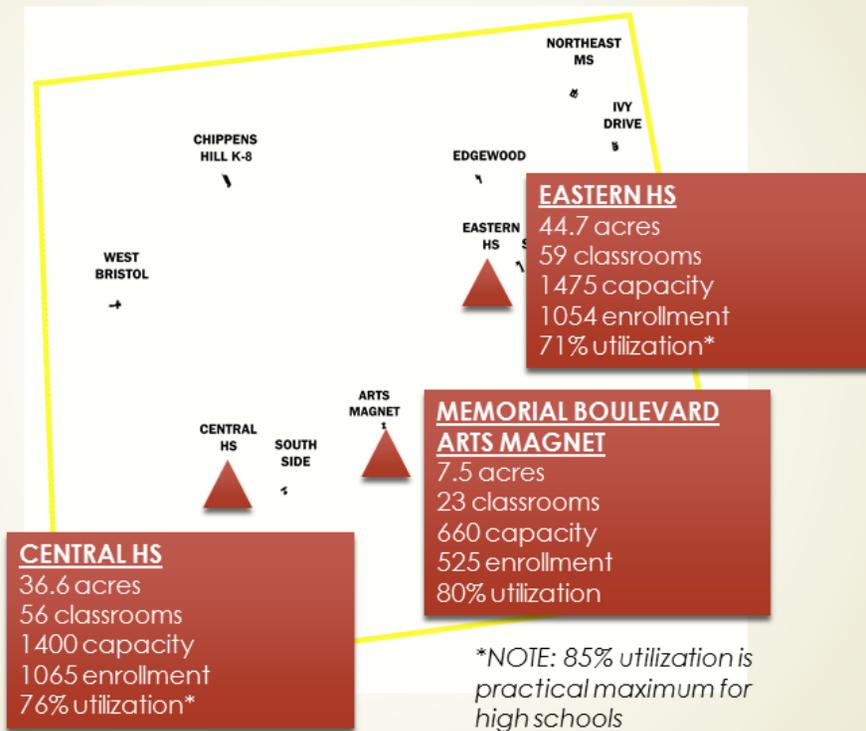
Option 3

HIGH SCHOOLS CONTINUE

- ▲ 2 High Schools
Grades 9-12
(Enrollments: **2022-23**)

FUTURE

- ▲ 1 Arts Magnet School
Grades 6-12



BRISTOL PUBLIC SCHOOLS

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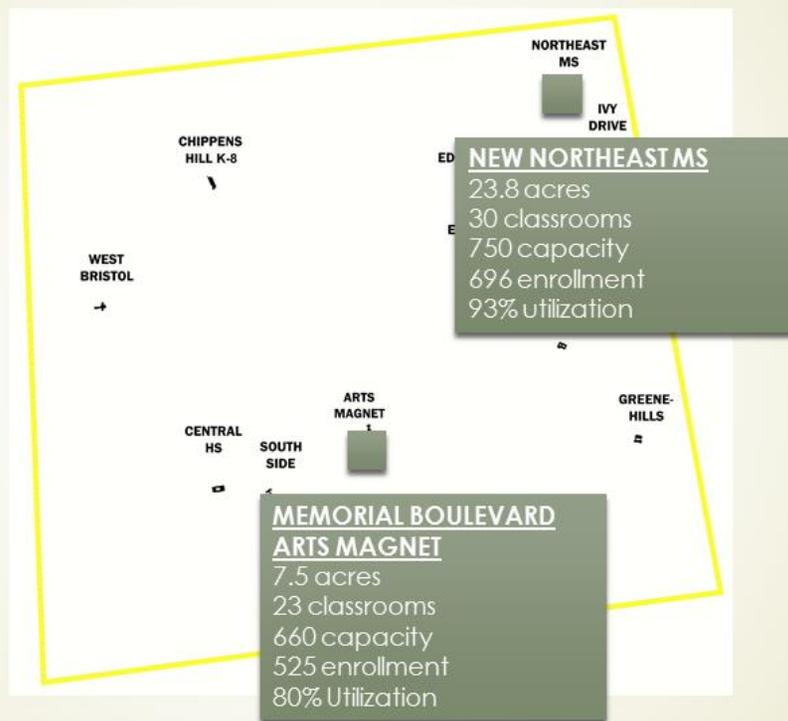
Option 3

ONE NEW MS ON EXIST. SITE

- 1 Middle School
Grades 6-8
(Enrollments: **2022-23**)

FUTURE

- 1 Arts Magnet School
Grades 6-12



BRISTOL PUBLIC SCHOOLS

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Option 3

LARGEST MS BECOMES K-8

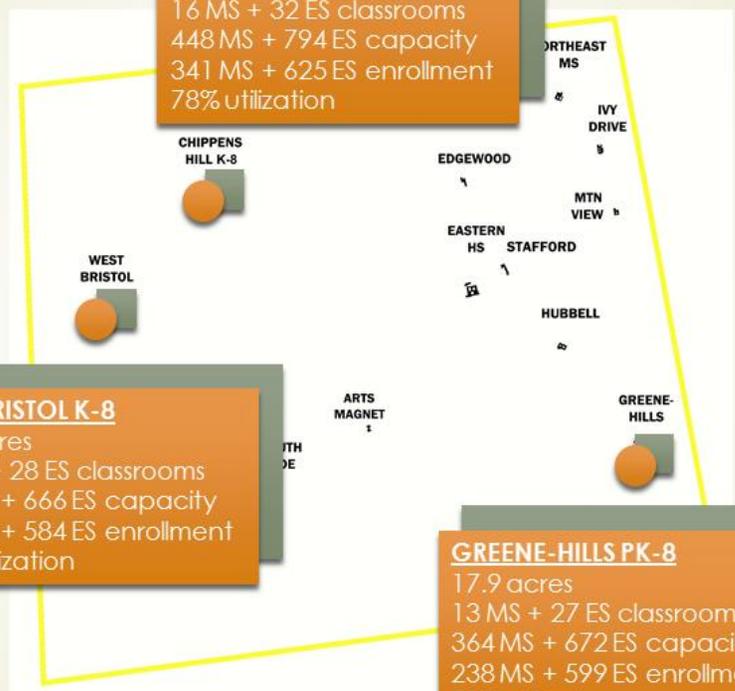
3 K-8 Schools

(Enrollments: 2022-23)

WEST BRISTOL K-8
28.6 acres
13 MS + 28 ES classrooms
364 MS + 666 ES capacity
247 MS + 584 ES enrollment
81% utilization

CHIPPENS HILL PK-8
23.9 acres
16 MS + 32 ES classrooms
448 MS + 794 ES capacity
341 MS + 625 ES enrollment
78% utilization

GREENE-HILLS PK-8
17.9 acres
13 MS + 27 ES classrooms
364 MS + 672 ES capacity
238 MS + 599 ES enrollment
81% utilization



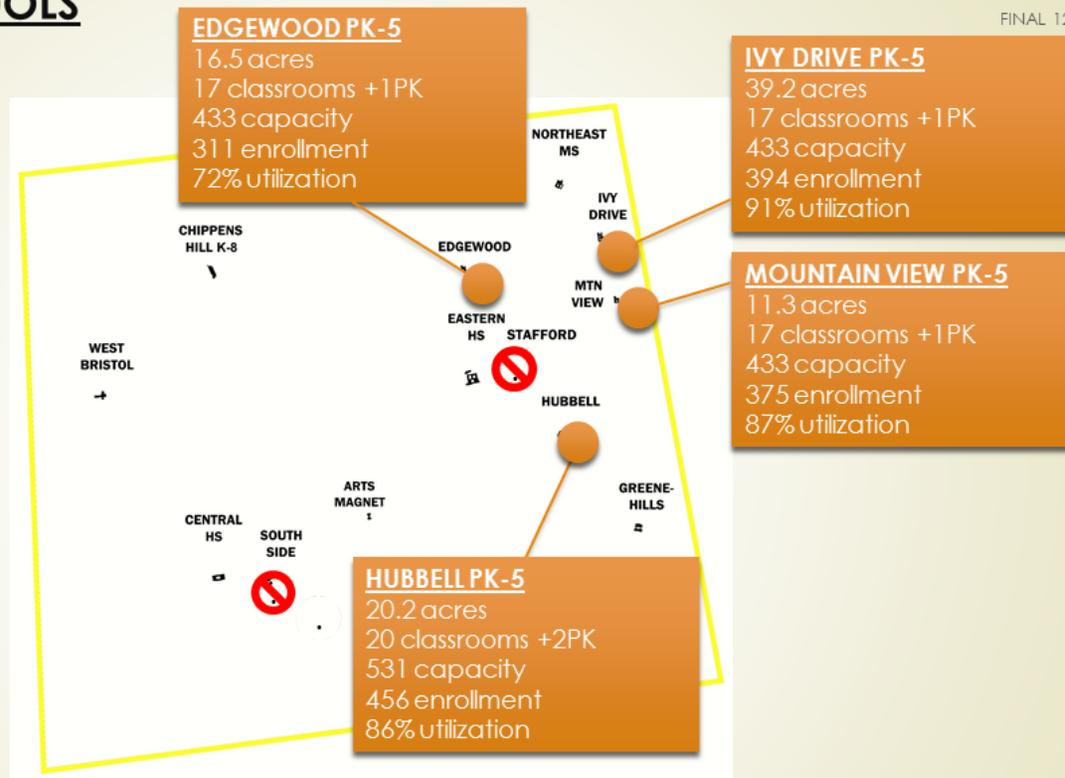
BRISTOL PUBLIC SCHOOLS

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Option 3

FEWER K-5 SCHOOLS

- 4 Elementary Schools
- Grades PK (or K) to 5.
- 2 Buildings Retired
- (Enrollments: **2022-23**)



This option converts Northeast into a K-8 school, and retires 2 elementary schools. It keeps South Side an active school, serving the southwest sector of Bristol, and continues to operate the two most recently renovated elementary schools, Ivy Drive and Mountain View.

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4. ONE MIDDLE SCHOOL OPTION

Northeast Middle School converted into PK-8 School.

Chippens Hill remains as a Middle School.

Memorial becomes 6-12 Arts Magnet School



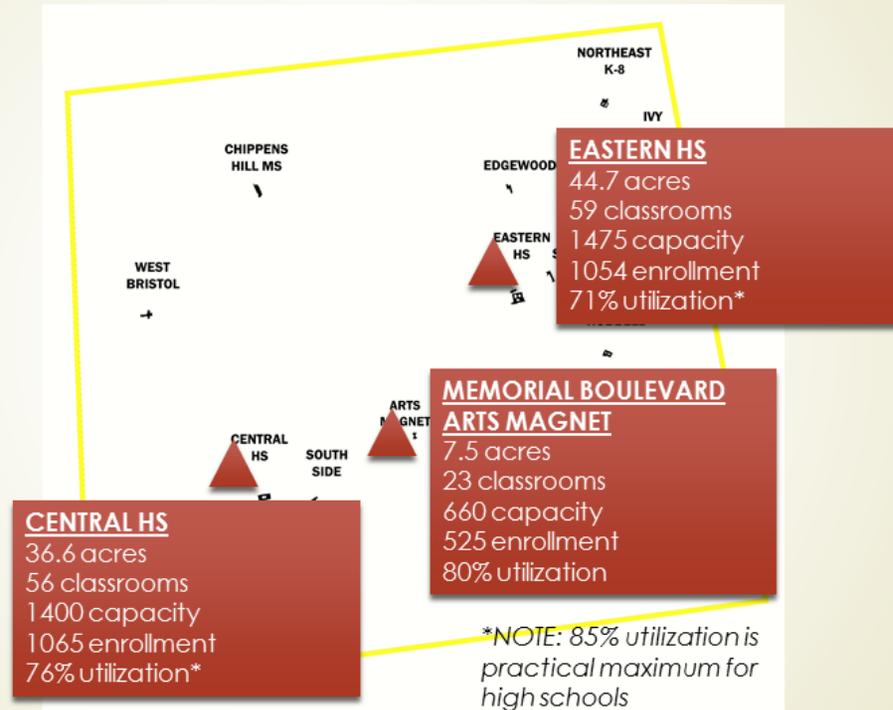
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Option 4

HIGH SCHOOLS

- ▲ 2 High Schools
Grades 9-12, plus
- ▲ 1 Arts Magnet School
Grades 6-12
(Enrollments: **2022-23**)



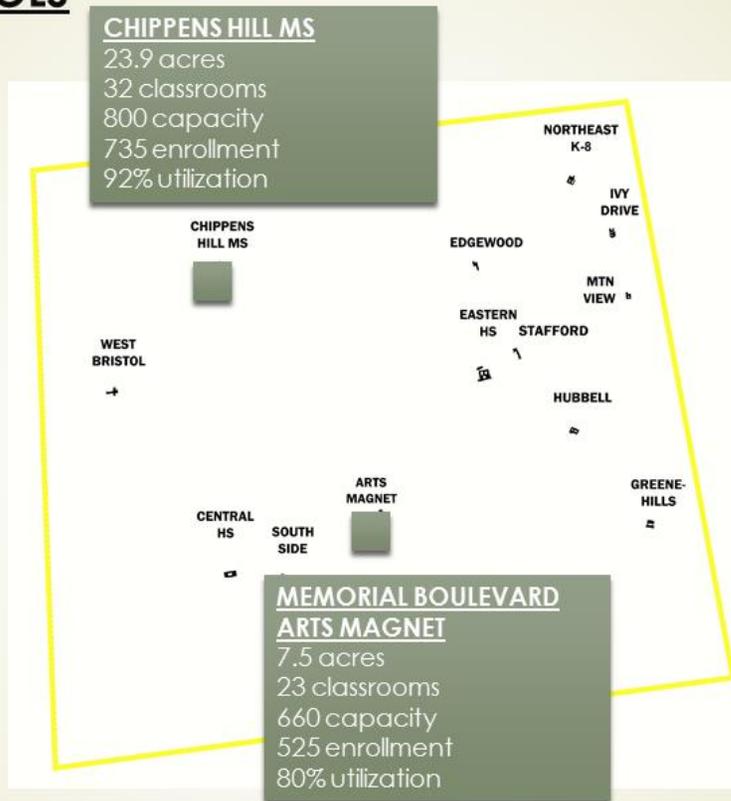
BRISTOL PUBLIC SCHOOLS

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Option 4

ONE MS ON EXIST. SITE

- 1 Middle School
Grades 6-8, plus
- 1 Arts Magnet School
Grades 6-12
(Enrollments: **2022-23**)



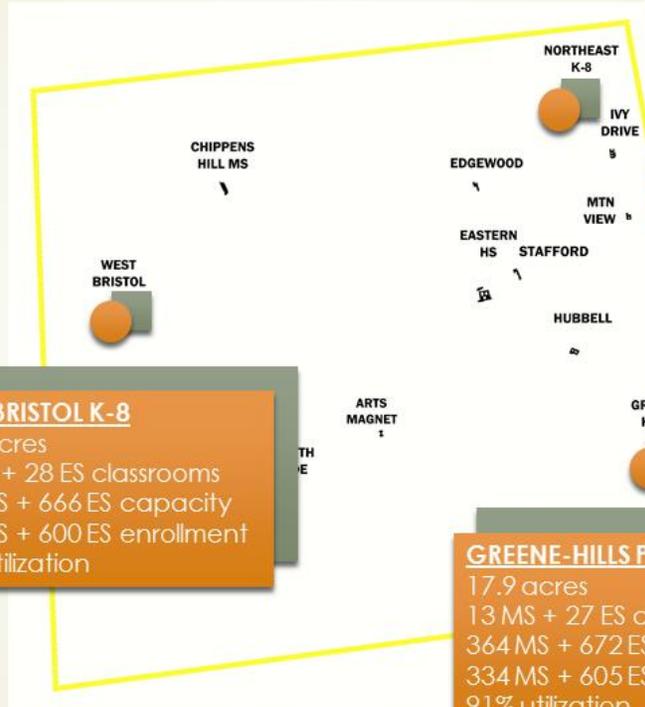
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FINAL 12/12/17

Option 4

NORTHEAST MS BECOMES K-8

3 K-8 Schools
(Enrollments: **2022-23**)



NORTHEAST PK-8
23.8 acres
15 MS + 30 ES classrooms
375 MS + 640 ES capacity
344 MS + 590 ES enrollment
92% utilization

WEST BRISTOL K-8
28.6 acres
13 MS + 28 ES classrooms
364 MS + 666 ES capacity
334 MS + 600 ES enrollment
91% utilization

GREENE-HILLS PK-8
17.9 acres
13 MS + 27 ES classrooms
364 MS + 672 ES capacity
334 MS + 605 ES enrollment
91% utilization



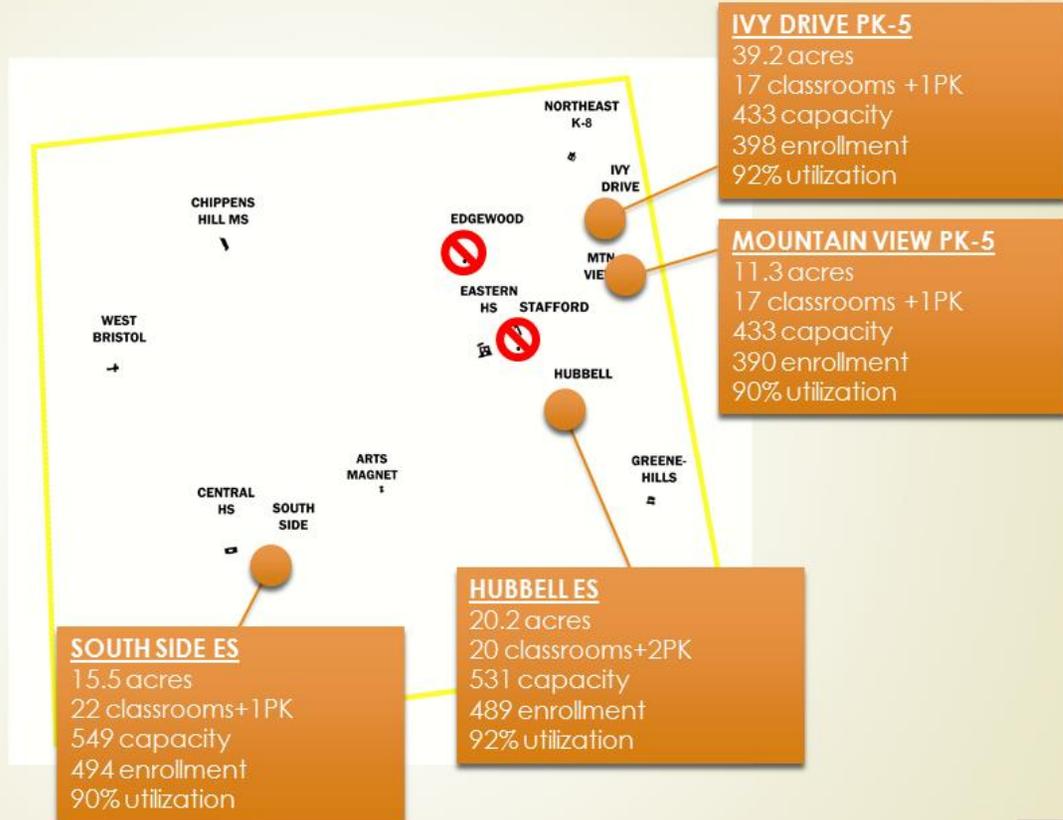
BRISTOL PUBLIC SCHOOLS

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Option 4

FEWER K-5 SCHOOLS

- 4 Elementary Schools
 Grades PK to 5; all 4
 feed Chippens Hill MS.
 2 Buildings Retired
 (Enrollments: **2022-23**)



Comments on Option 4

Advantages of Option 4 make this the preferred option.

- The northeast section of Bristol is served with a PK-8 school.
- South Side Elementary School remains in operation.
- Both Ivy Drive and Mountain View continue as elementary schools.
- The oldest elementary schools in the district would be retired.

For more details, and a cost comparison between Option 4 and the “Do Nothing” option, see [Chapter 5 Recommendations](#).

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Options

OPTIONS AND COMPARISONS

1. **Do Nothing**, continue with the same configuration
2. **All K-8 Schools**, build 1 new and reno/add 2 schools
3. **One Middle School**, Northeast
4. **One Middle School**, Chippens Hill **PREFERRED OPTION**

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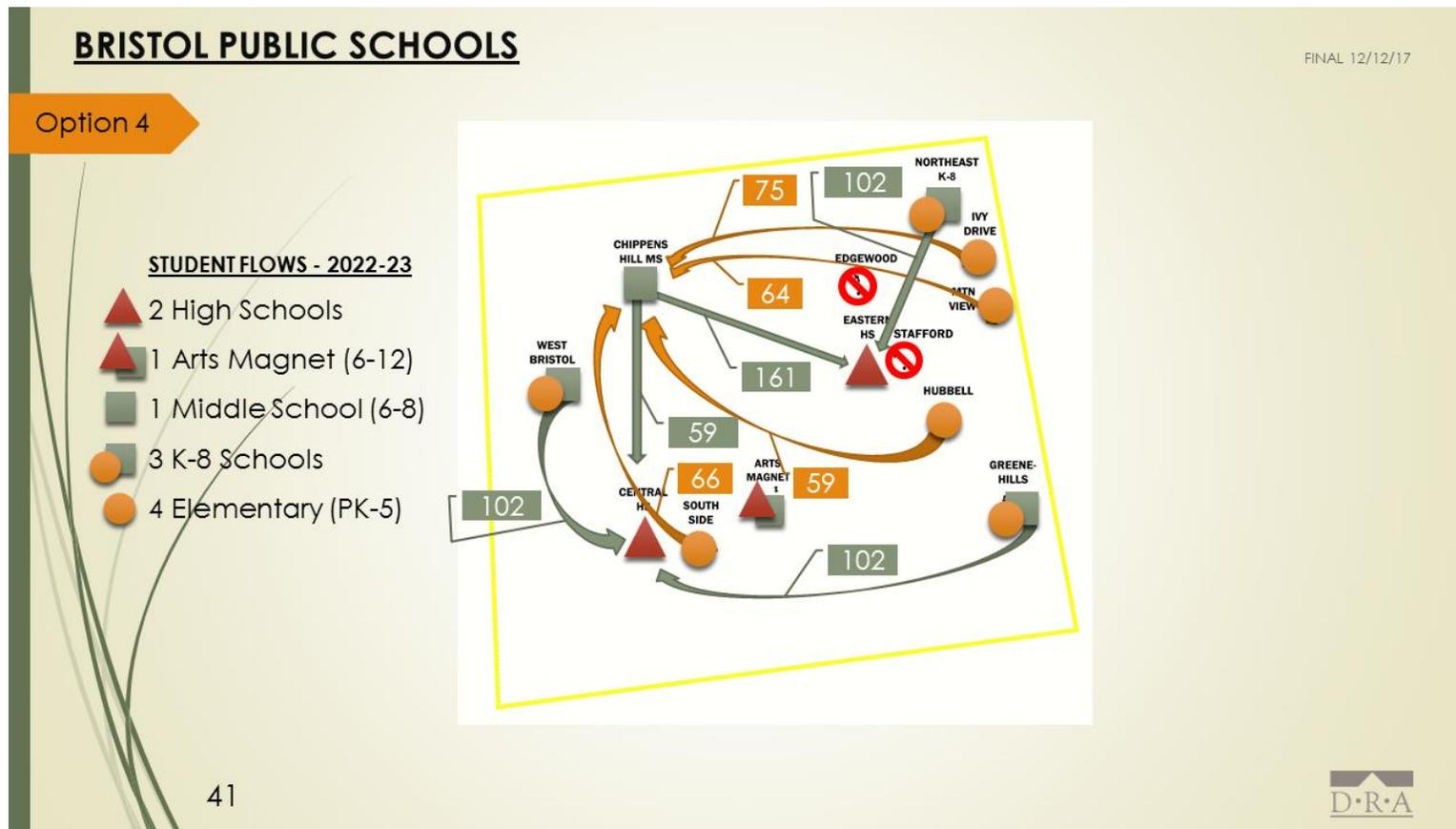
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Bristol Feasibility Study, Board of Education Schools

5 RECOMMENDATIONS

OPTION 4

The preferred option will change the flow of transitioning students, as illustrated here, for the school year 2022-23.



BRISTOL PUBLIC SCHOOLS

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Cost

BUDGET COMPARISON: OPTION 1 to OPTION 4

DO NOTHING - CIP

No.	Description	Total Cost	*State Reimbursement: Including 5% Reduction for Ineligible Cost	Cost to City
1	Southside HVAC	\$3,597,160	0%	\$3,597,160
2	Stafford Roof & Masonry Repointing	\$2,043,575	0%	\$2,043,575
3	Edgewood Renovate as New with addition	\$25,909,470	64%	\$9,327,409
4	Northeast Renovate as New (updated)	\$34,371,994	64%	\$12,373,918
5	Southside Renovate as New (updated)	\$33,293,344	64%	\$11,985,604
6	Stafford Renovate as New (updated)	\$26,770,918	64%	\$9,637,530
7	Hubbell Renovate as New	\$20,140,646	64%	\$7,250,633
TOTAL COST TO CITY				\$56,215,829

CIP Forecast
\$56.2 million

OPTION 4

No.	Description	Total Cost	* State Reimbursement: Including 5% Reduction for Ineligible Cost	Cost to City
1	Northeast Renovate as New and Addition*	\$72,356,659	64%	\$26,048,397
2	Southside Renovate as New	\$36,793,344	64%	\$13,245,604
3	Hubbell Renovate as New	\$20,140,646	64%	\$7,250,633
TOTAL COST TO CITY				\$46,544,634

Option 4
\$46.5 million

* State Reimbursement 2017 for
 "Renovation" Status = 68.93%-5% for
 Ineligibles= 63.98%.
 ** State Reimbursement 2017 for "New
 Construction" = 58.93%-5% for Ineligibles=
 53.98%.

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Next Steps

NEXT STEPS

1. Board of Ed and Board of Finance **approval of Option 4**
2. Consider **bonding scenarios and timelines**, include Arts Magnet
3. Adopt a **Masterplan** to complete the 3 projects in Option 4
More phasing details, useful in presentations to both state and to city residents
4. **Submit ED049** to state for phase 1
Masterplan as an attachment
5. Form a **building committee**
6. Gather data, conduct testing, start phase 1 **schematic design**

Two H S's

TWO HIGH SCHOOLS

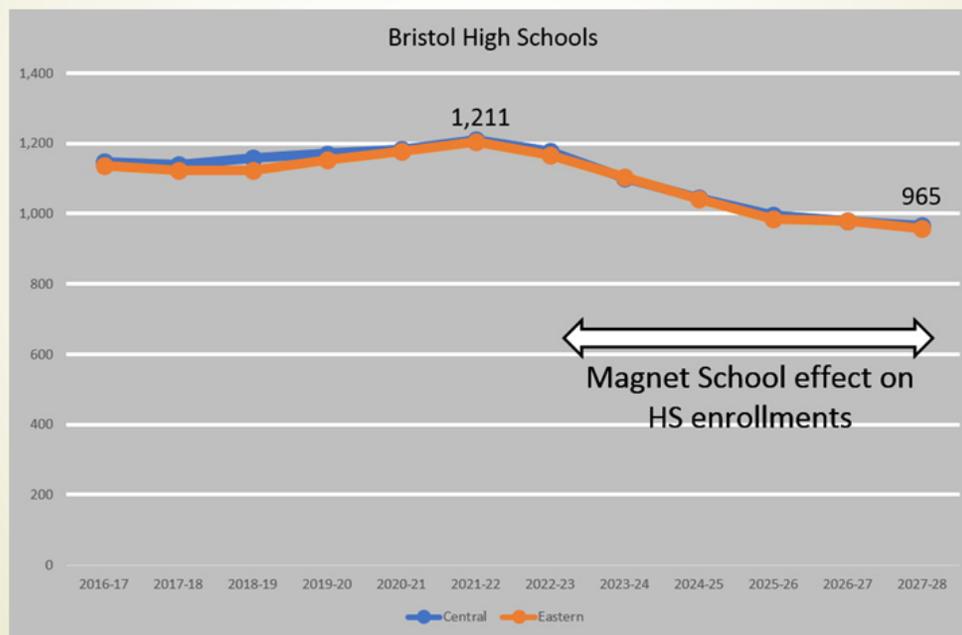
Since the two high schools are experiencing declining enrollments, is there an opportunity to close one of them?

Two H S's

Projected Enrollments, including reductions for Magnet School effects:

Each High School will have approximately 150 students less, as students attend the Arts Magnet School.

Both schools are near their capacity now, but even with the projected drop in enrollments, neither school is large enough to take all of Bristol's high school students.



Two H S's

CENTRAL HIGH SCHOOL

Pros:

- Newer building
- In better shape
- More efficient building layout

Cons:

- Smaller site
- Minimal buffers to neighboring houses
- Building addition more difficult
- Traffic problems

EASTERN HIGH SCHOOL

Pros:

- Larger site
- Building addition more feasible
- Closer to concentration of population

Cons:

- Older building
- More worn building
- Main office doesn't control entrance
- Less efficient building layout
- Traffic problems

Either building would need a sizable addition to become the only high school, and additional parking. This would squeeze the site, eliminating some athletic fields.

Neither school has an overwhelming reason to be chosen as the only high school for Bristol.

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The high school enrollments will be reduced by those going to the Arts Magnet school, but not enough to consolidated into a single high school without a major addition.