



Crabtree, Rohrbaugh & Associates

CARLISLE AREA SCHOOL DISTRICT

DISTRICT-WIDE FEASIBILITY STUDY

COMMITTEE MEETING #1

June 2, 2023

AGENDA

1 Introduction

2 Guiding Principles

3 District Overview

4 Facility Analysis

5 Options Overview



INTRODUCTION

Purpose of the Study / Study Requirements

PURPOSE OF THE STUDY

Short and long term planning	Implement future-focused educational vision	Plan for projected enrollment
Capital Improvement Plan to maintain facilities & assets	Guide for decision making	Eligible for PlanCon reimbursement

STUDY REQUIREMENTS

PA DEPARTMENT OF EDUCATION CHECKLIST



Geographical &
Population Overview



Educational Program
Overview



Projected Future
Enrollment (10 Years)



Building Capacity vs
Student Enrollment



Facility Conditions &
Costs to Upgrade



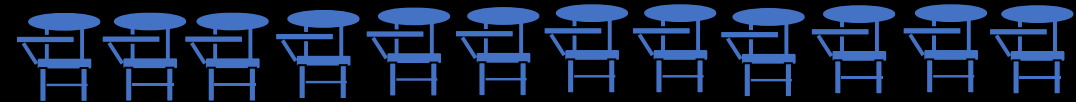
Analysis of Options

BUILDING CAPACITY AND UTILIZATION

Are schools overcrowded or under-utilized?

1. Document current use of spaces to determine building capacity
2. Identify undersized classrooms by PDE standards – 660 SF
3. Determine recommended utilization rate for each building
4. Compare Building Capacity to Projected Enrollment

Capacity



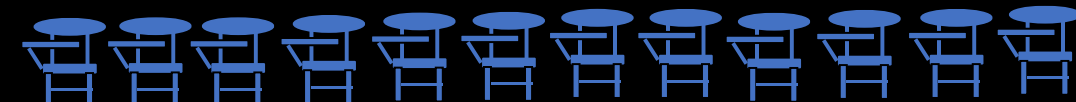
Elementary Educational Capacity
(PDE Guidelines)



90%

Utilization Rate

Capacity



Secondary Educational Capacity
(PDE Guidelines)

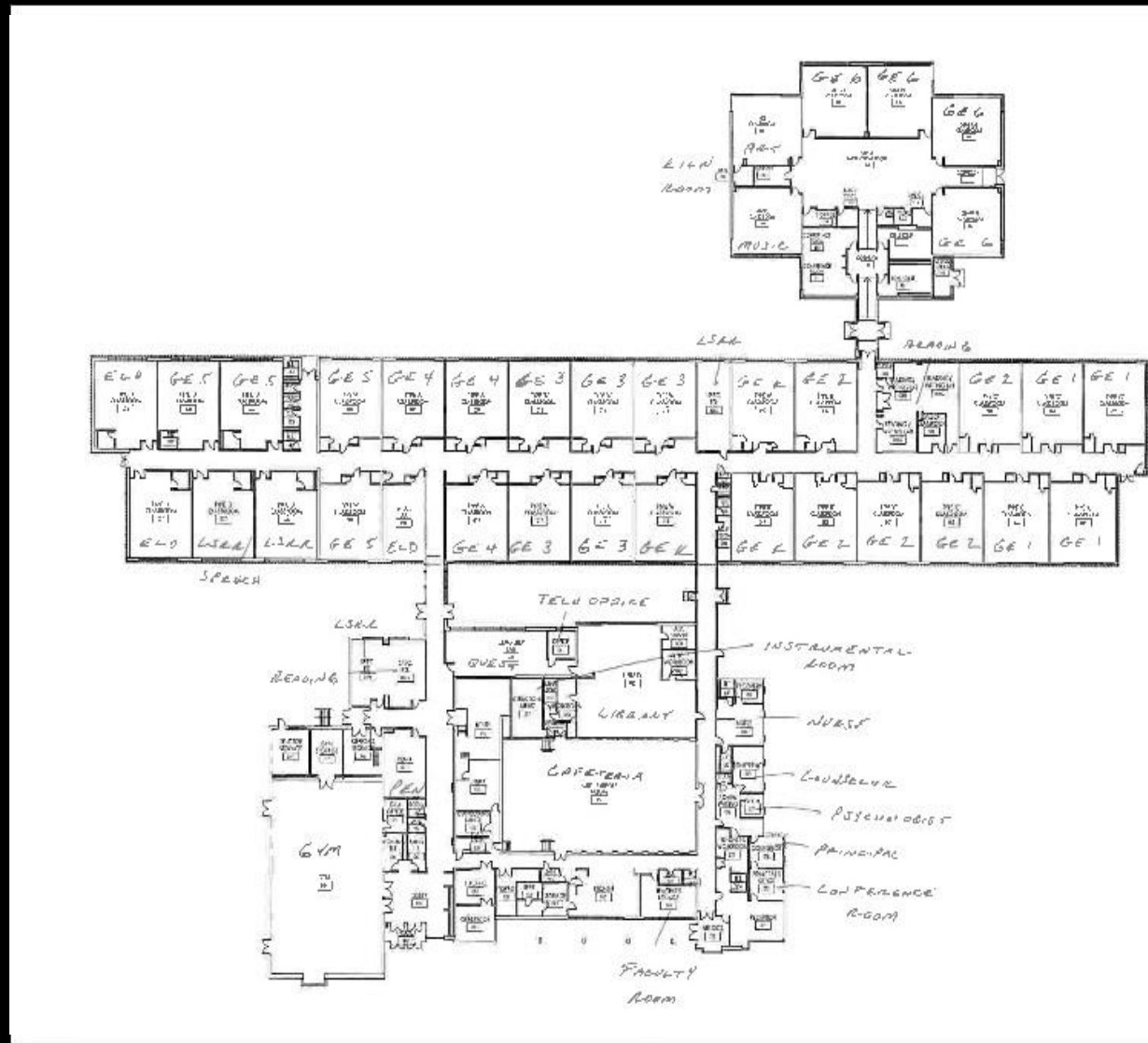


85%

Utilization Rate

Calculating Educational Capacity

FACILITY	CAPACITY
Bellaire Elementary School	425
Crestview Elementary School	550
Hamilton Elementary School	450
Geographic Cluster:	1425
Mooreland Elementary School	350
LeTort Elementary School	300
Geographic Cluster:	650
Mt. Holly Springs Elementary School	225
North Dickinson Elementary School	300
Geographic Cluster:	525
Lamberton Middle School	685
Wilson Middle School	685
Middle Schools:	1370
Carlisle High School	2155
District Total:	6125



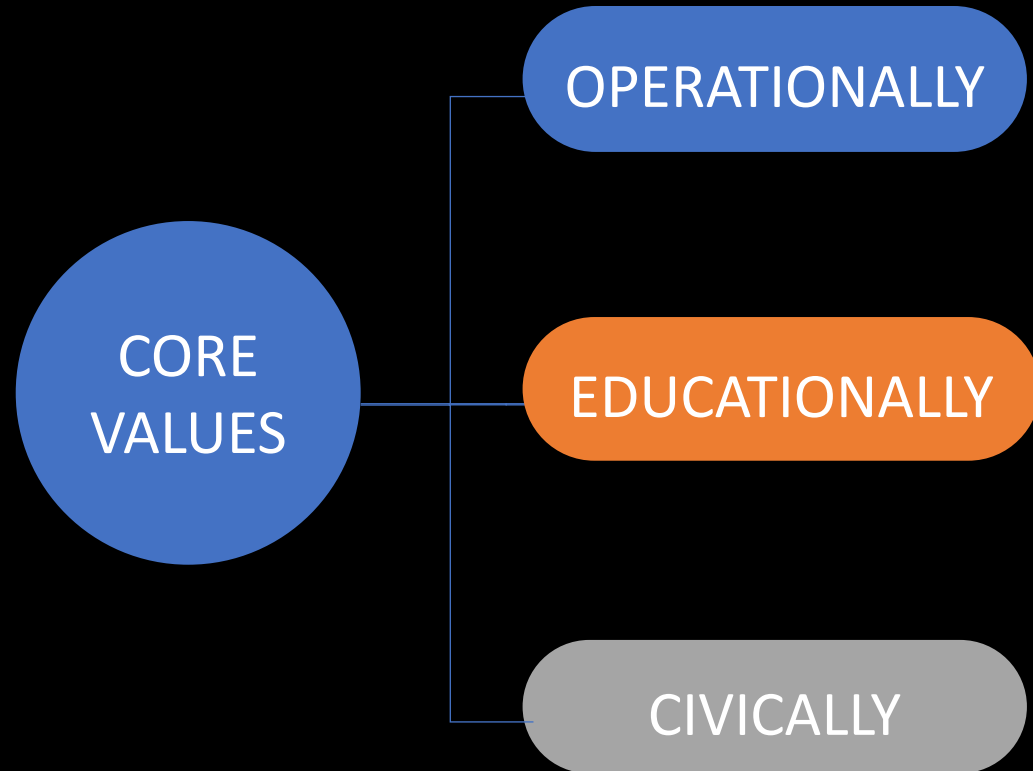
Central Bucks School District		Grade Alignment:	K-6
John Barclay Elementary School		Current Enrollment:	673
Educational Spaces	No. of Rooms	Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Pre-K/Kindergarten Classrooms (Half-Day)	3	40	120
Pre-K/Kindergarten Classrooms (Full-Day)	0	20	0
1st Grade Classrooms +660 Sq. Ft.	4	22	88
2nd Grade Classrooms +660 Sq. Ft.	5	24	120
3rd Grade Classrooms +660 Sq. Ft.	5	26	130
4th Grade Classrooms +660 Sq. Ft.	3	26	78
5th Grade Classrooms +660 Sq. Ft.	4	26	104
6th Grade Classrooms +660 Sq. Ft.	4	26	104
Reading Room/Literature Lab	0	25	0
Unassigned Classrooms (Flex Classroom)	0	25	0
TOTAL	28	288	744
Small Group Classrooms <660 Sq. Ft.			
Storage	0	0	0
Office/Workroom	0	0	0
TOTAL	0	0	0
Full Size Special Education Classrooms >660 Square Feet			
Learning Support Classrooms (LS)	2	15	30
Autistic Support (AS)	0	15	0
Emotional Support (ES)	0	15	0
Life Skills (Life Skills)	0	15	0
Multiple Disabilities Support (MDS)	0	15	0
Occupational and Physical Therapy (OT/PT)	0	15	0
Sensory Room	0	15	0
Isolation Room	0	15	0
Basic Skills (Basic Skills)	0	15	0
Speech (Spch)	0	15	0
TOTAL	2	15	30
Full Size Support Classrooms >660 Square Feet			
English Language Development (ELD)	2	15	30
Math Support	0	15	0
Reading Support	0	15	0
PEN	0	15	0
TOTAL	2	15	30
Small Group Special Education Classrooms <660 Sq. Ft.			
Learning Support Classrooms (LS)	2	15	30
Autistic Support (AS)	0	15	0
Emotional Support (ES)	0	15	0
Life Skills (Life Skills)	0	15	0
Occupational and Physical Therapy (OT/PT)	0	15	0
Sensory Room / Isolation Room	0	15	0
Basic Skills (Basic Skills)	0	15	0
Speech (Spch)	0	15	0
TOTAL	2	15	30
Small Group Support Classrooms <660 Sq. Ft.			
English Language Development (ELD)	1	15	15
Math Support	0	15	0
Reading Support	3	15	45
PEN	1	15	15
TOTAL	5	75	75
Labs (Counted as Full Size Classrooms Unless Academic Room Left Empty When Used)			
Computer Lab (Quest)	1	0	0
Computer Lab (General)	0	0	0
Innovation Lab	0	0	0
TV Studio	0	0	0
TOTAL	1	0	0
Art, Music, PE (Counted as Full Size Classrooms Unless Academic Room Left Empty When Used)			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Band Room	0	0	0
Chorus Room	0	0	0
Orchestra Room	0	0	0
Gymnasium	1	0	0
Multipurpose Room with Stage and/or Cafeteria	0	0	0
TOTAL	3	0	0
Support Spaces			
Large Group Instruction	0	0	0
Library	1	0	0
Cafeteria	1	0	0
Multipurpose Room Separate from Gym and/or Cafeteria	0	0	0
Auditorium	0	0	0
TOTAL	2	0	0
Total Full Size Classrooms Regardless of Use	36		
Total Small Group Classrooms Regardless of Use	7		
		Total Educational Capacity	909
		Utilization Rate	90%
		Functional Building Capacity	818
		Current Enrollment	673



GUIDING PRINCIPLES

Guidelines for Educational Program and Facility Needs

GUIDING PRINCIPLES



Schools, buildings and grounds will have the capacity to meet current and future enrollment needs. Facilities will be flexible, well-lit and ventilated, easily accessible by all stakeholders, and are individually and collectively cost efficient to operate.

Students will be provided appropriate instructional spaces that facilitate whole group, small group and 1 on 1 instruction. Spaces will be nurturing and engaging environments, infused with technology.

District building and grounds will serve as the hub of our community where all stakeholders have safe physical and digital spaces to gather, play, celebrate, learn, exchange ideas and interact as a community. The community will share and see the value of the taxpayer investment.

EDUCATIONAL PROGRAM OVERVIEW



Understanding of current program vs future vision



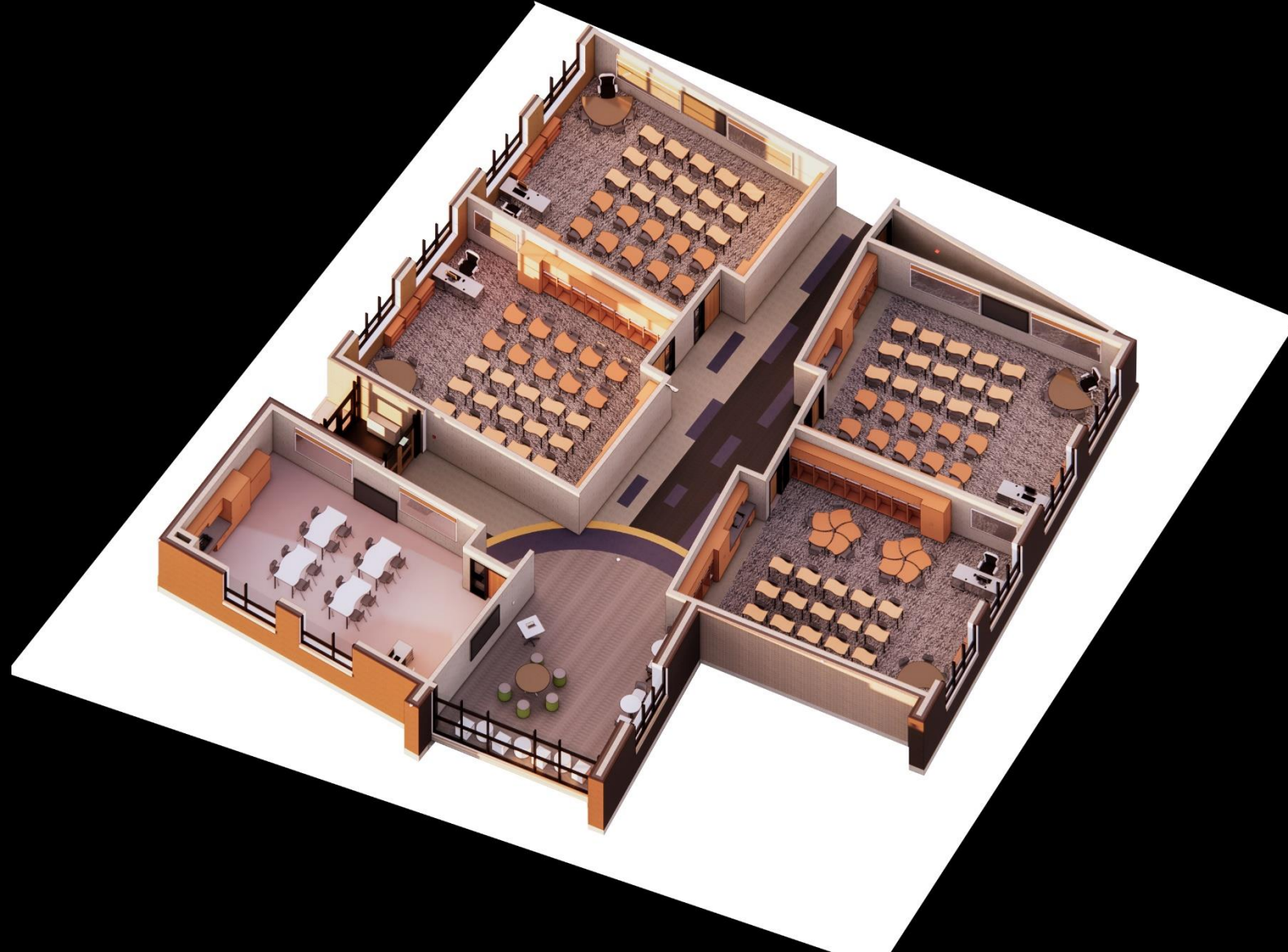
Planned curriculum by grade structure (Primary, Intermediate and Secondary)



Identify Educational Program Deficiencies



Plan for future focused environments & collaboration spaces



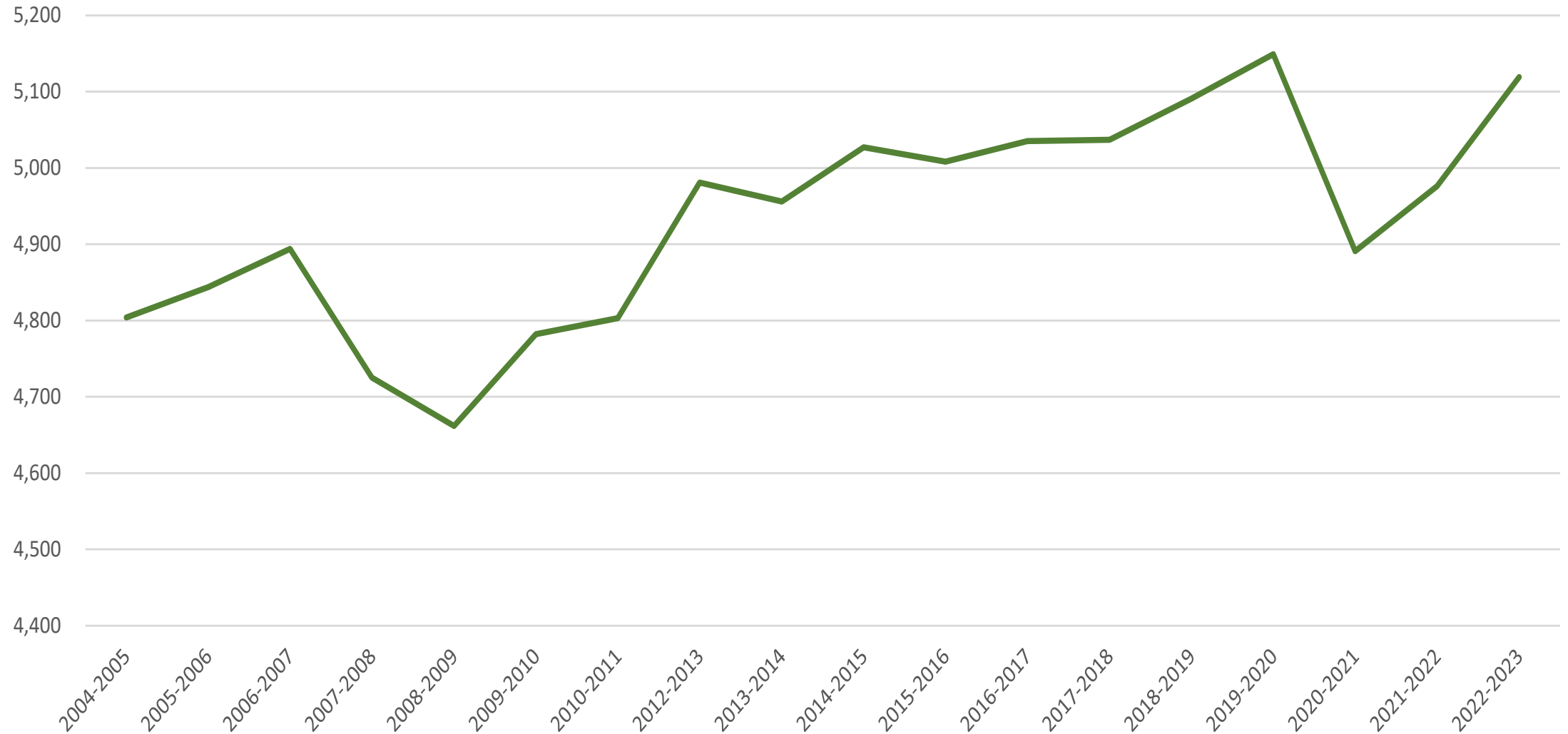


DISTRICT OVERVIEW

Geographical & Population Information

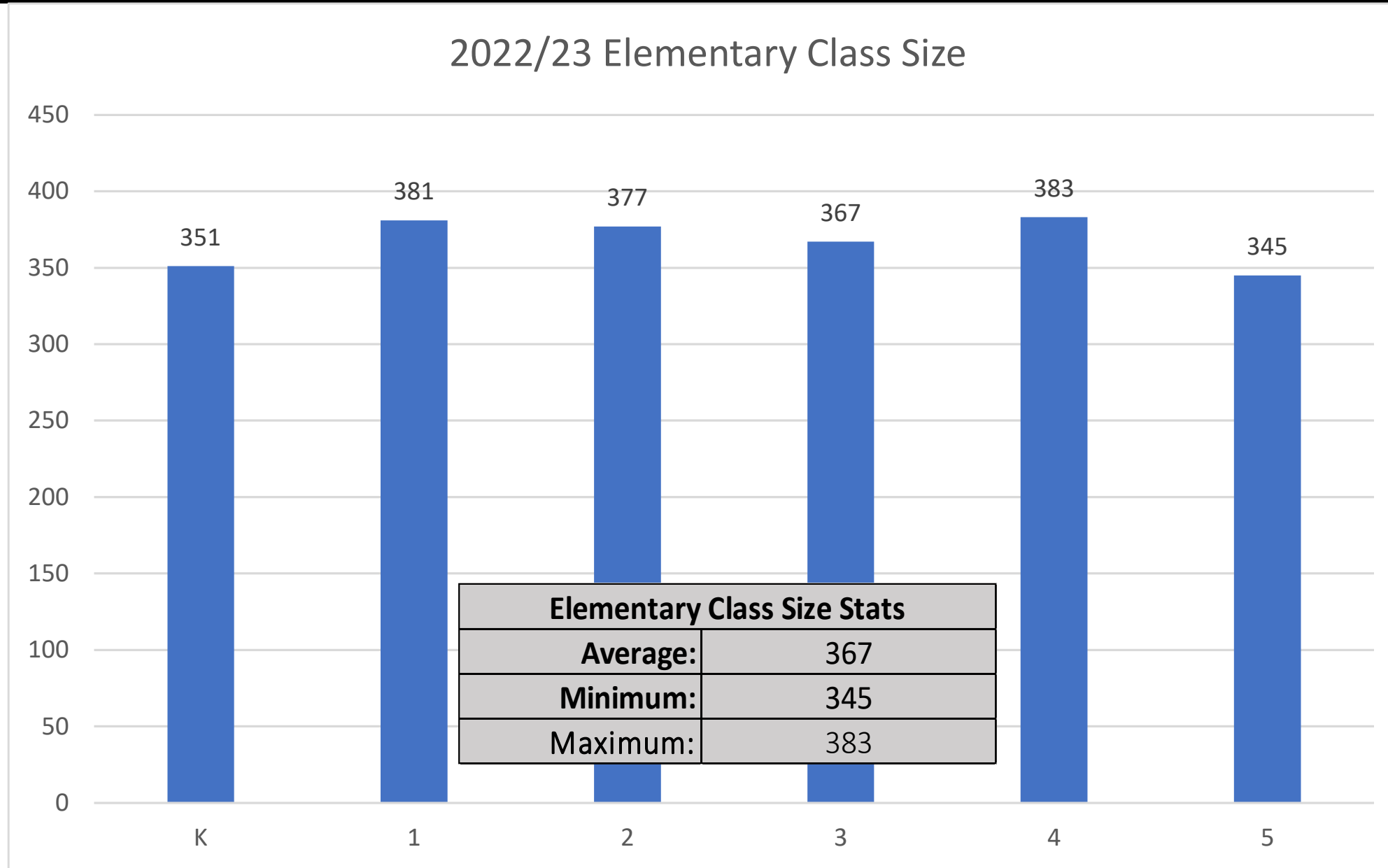
HISTORIC ENROLLMENTS 2003/05 – 2022/23

Carlisle Area School District Enrollment History
2004/05 to 2022/23

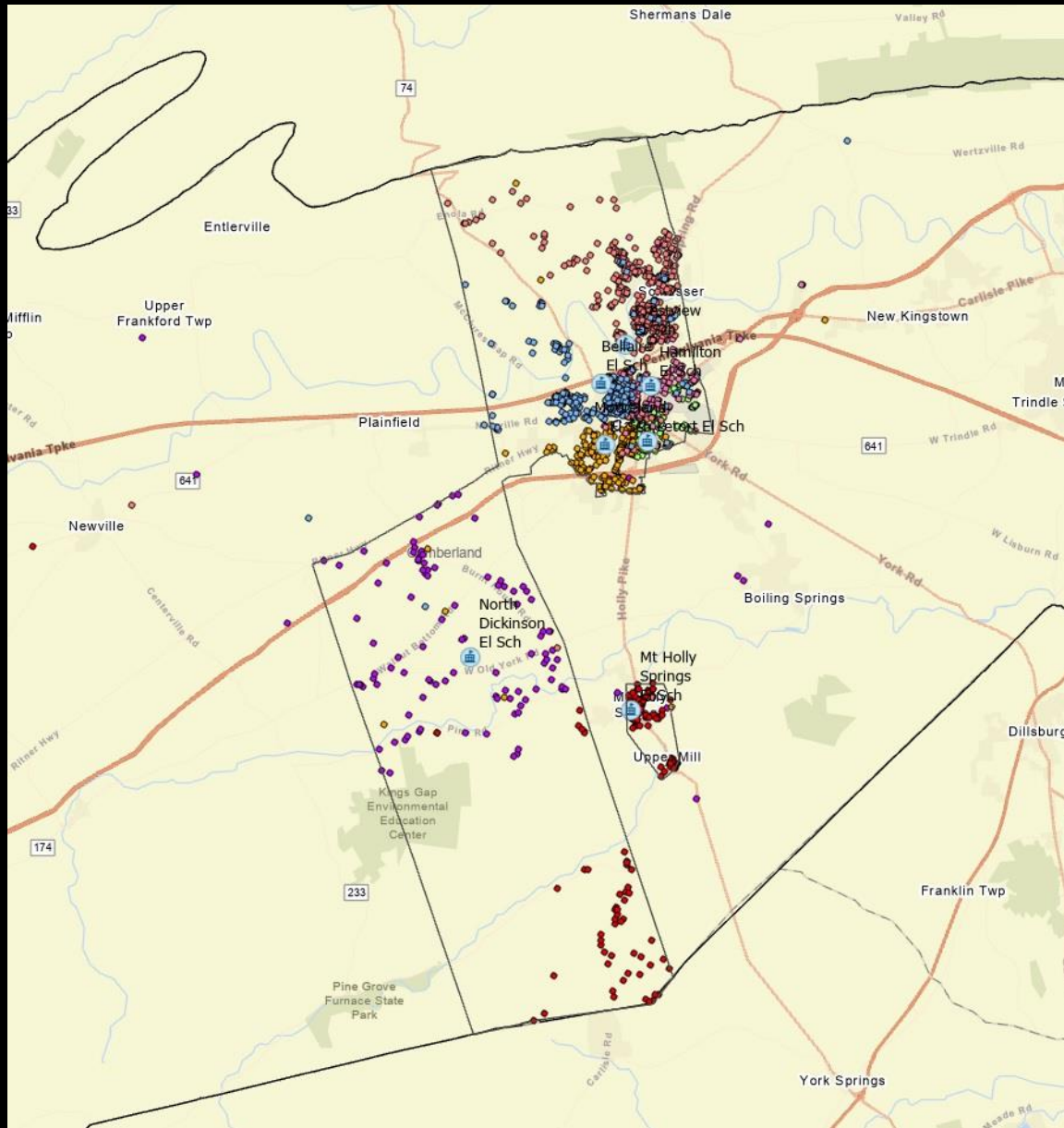


CLASS SIZES BY GRADE LEVEL

Overall elementary class sizes are relatively uniform. From the largest to the smallest elementary class the delta is 38 students or the equivalent of 1.52 classrooms.



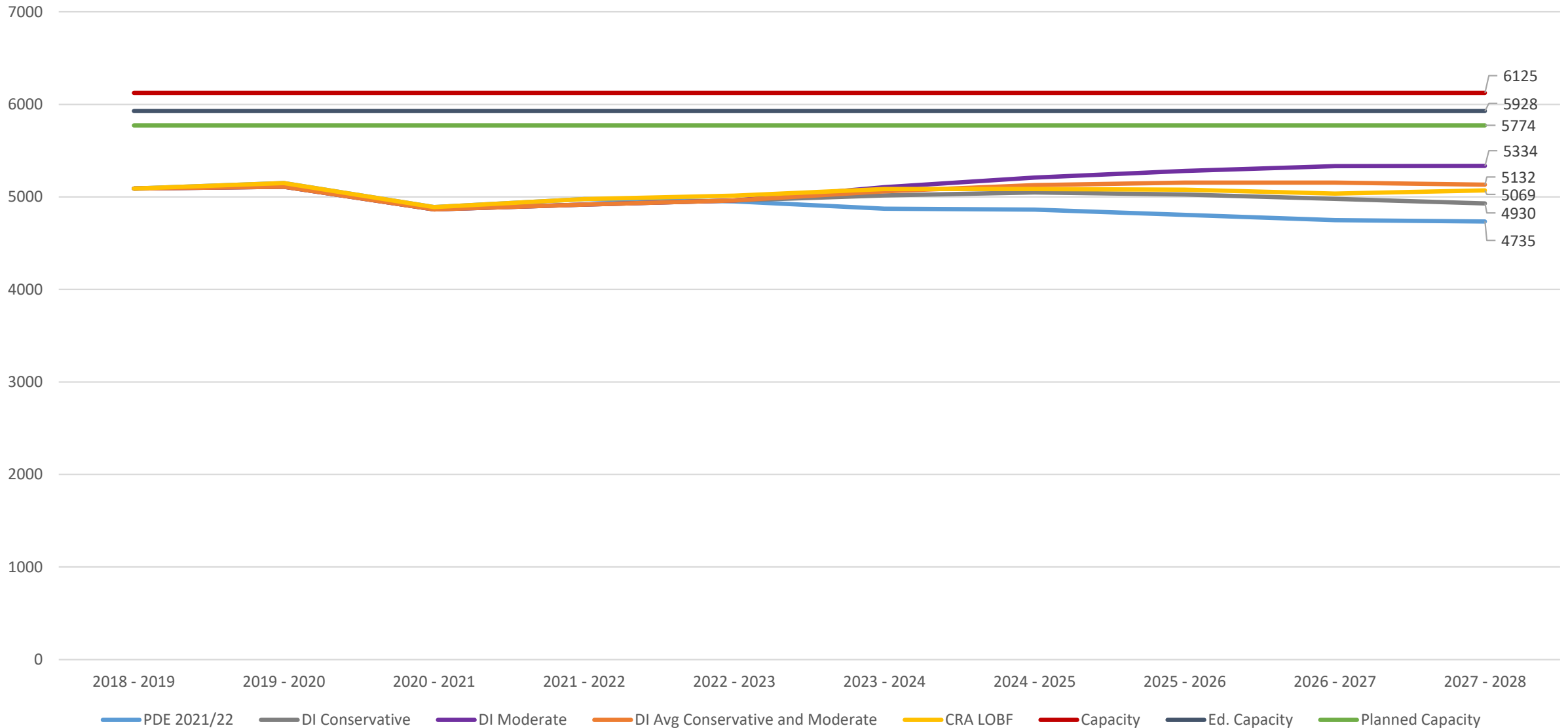
GEOGRAPHICAL & POPULATION OVERVIEW

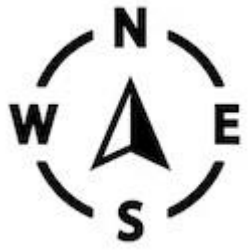


- Carlisle Area School District faces unique challenges due to the District's geographical shape and population distribution.
- Growth areas are not evenly distributed, creating inequities in class sizes amongst the Elementary buildings.
- When studying enrollment and capacity at the Elementary level, CRA considered three distinct geographical clusters:
 - Bellaire / Crestview / Hamilton (North)
 - LeTort / Mooreland (Middle)
 - Mount Holly / North Dickinson (South)

PROJECTED ENROLLMENT

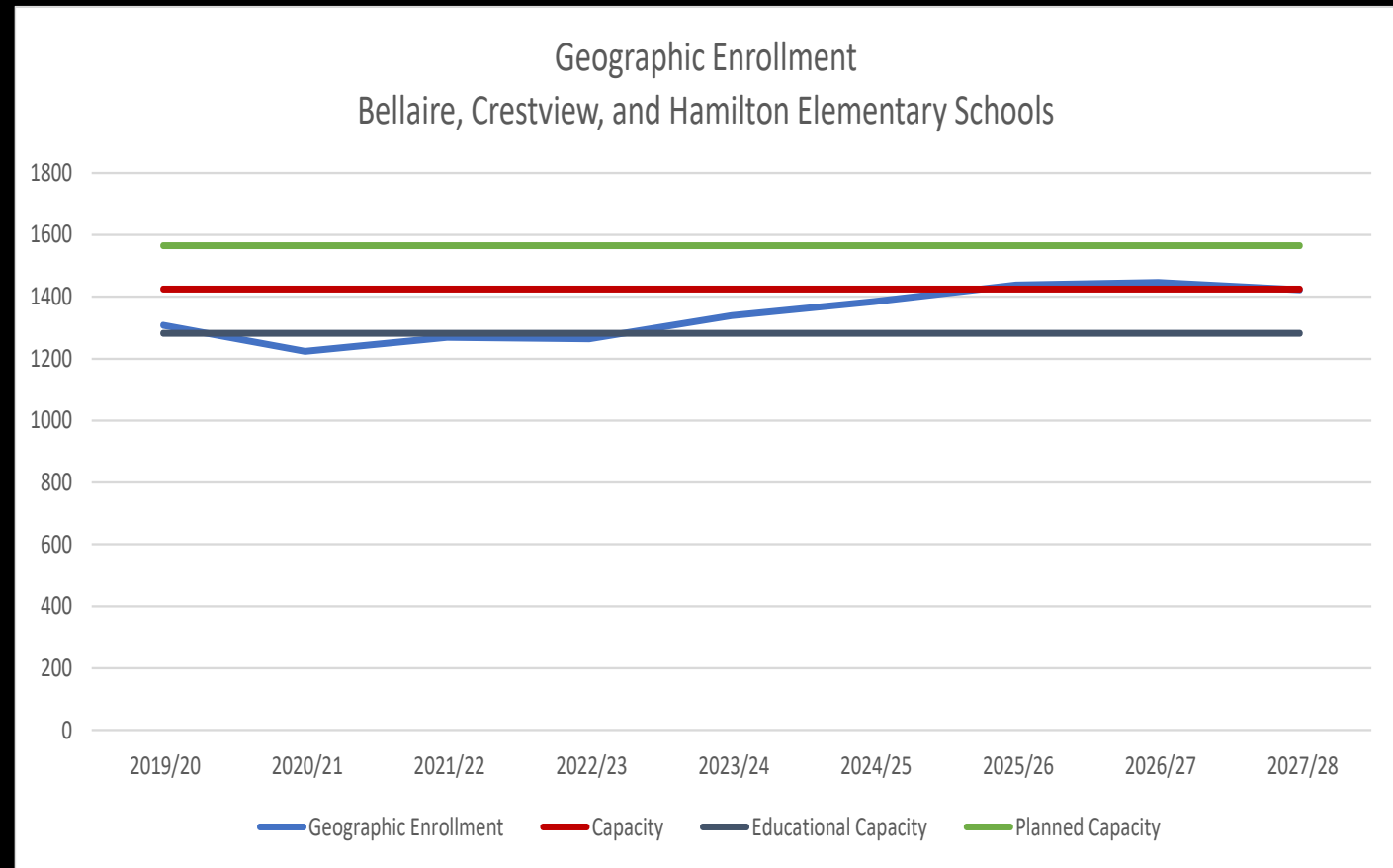
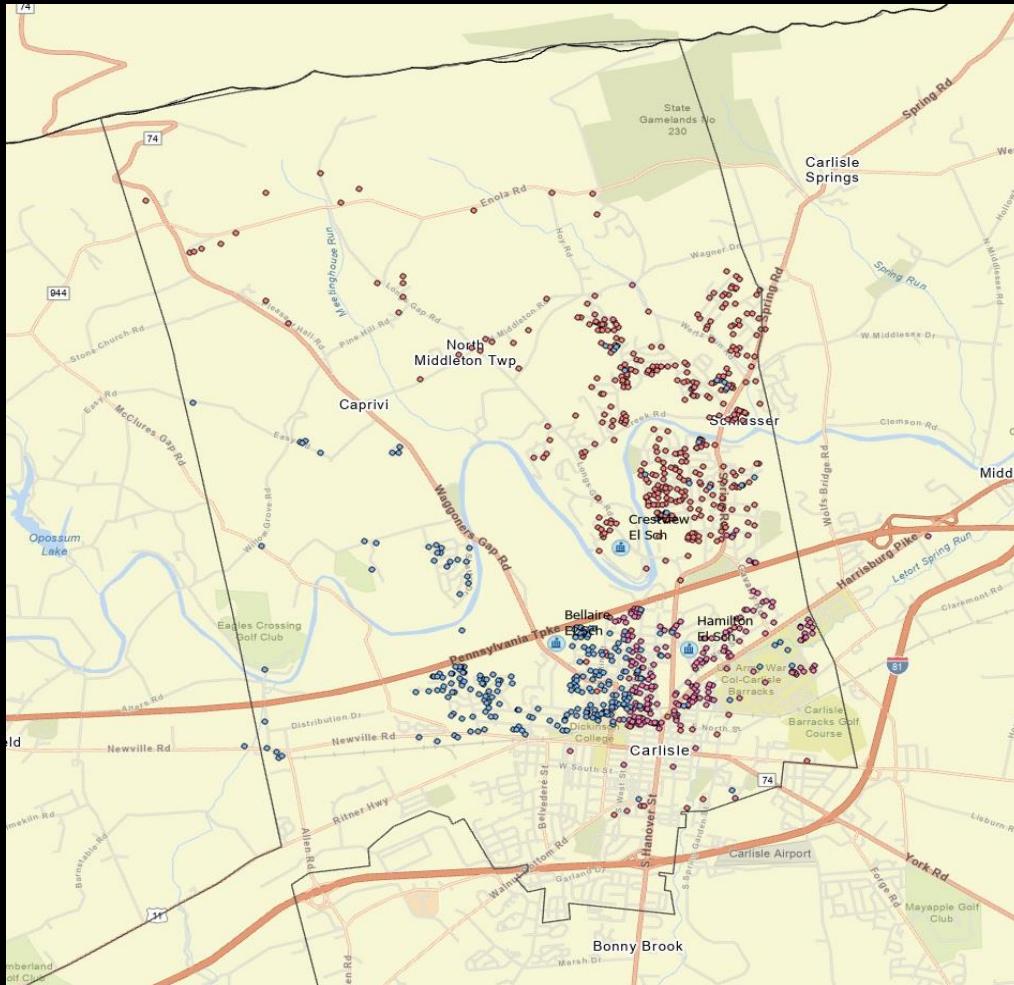
CRA K-12 Enrollment Projections with Development
 Compared to Decsion Insite Projections with Development





Bellaire, Crestview, and Hamilton Elementary Schools

The average of Decision Insite's Conservative and Moderate Projections indicate that combined, Bellaire, Crestview, and Hamilton Elementary Schools will be operating at 100% of capacity by 2027/28.

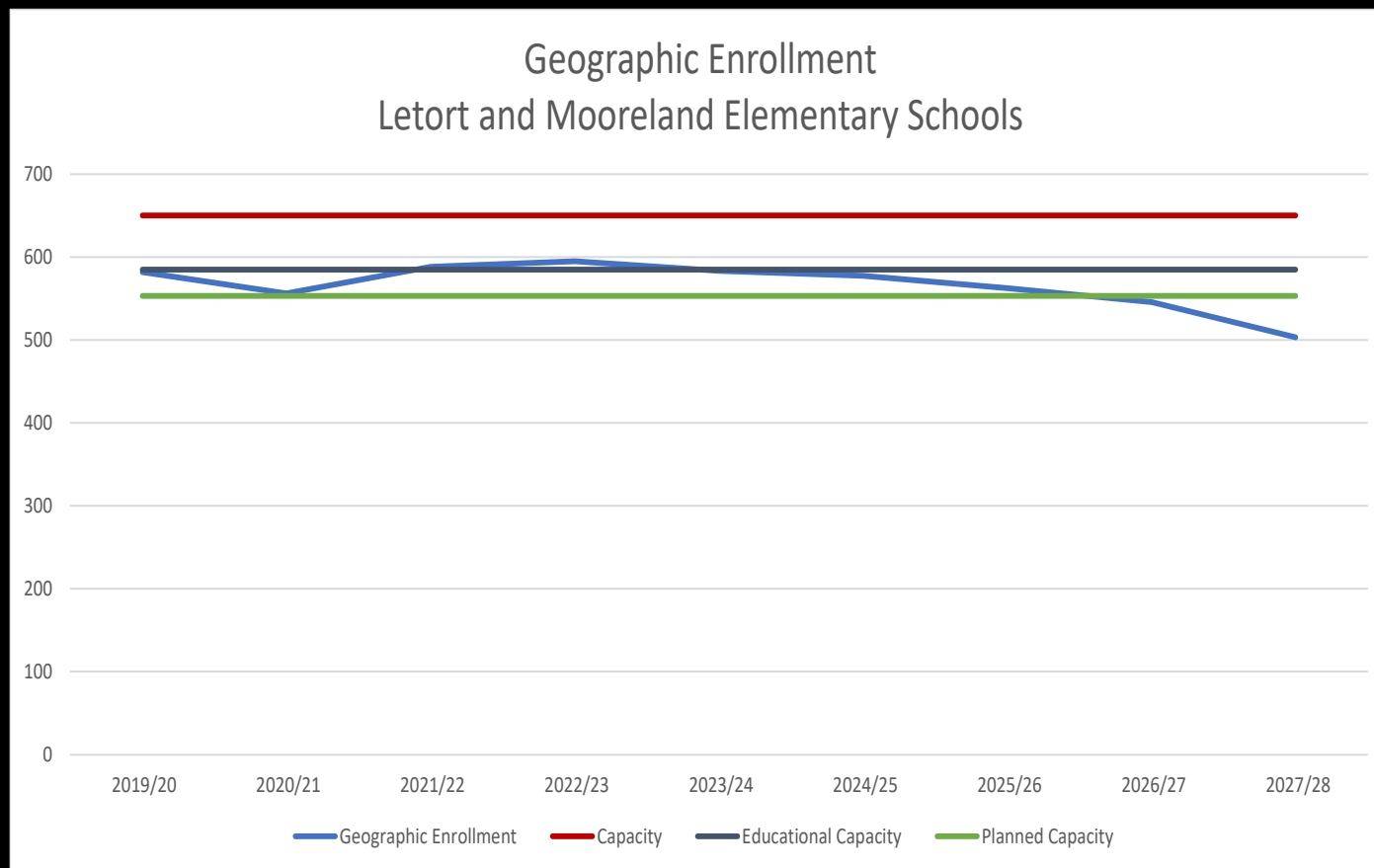
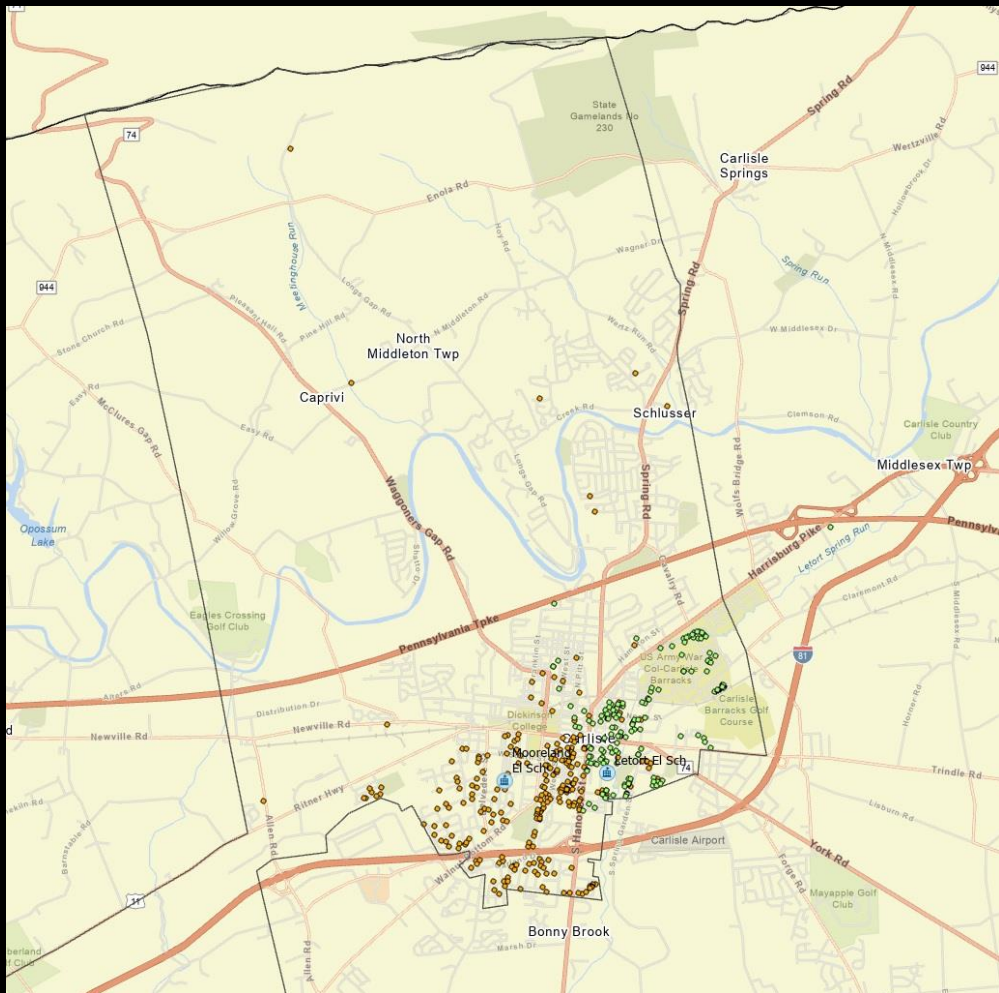


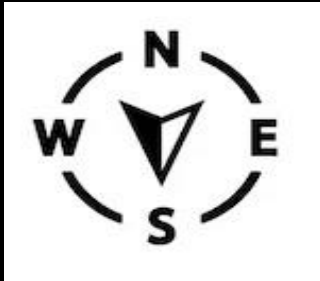


LeTort and Mooreland Elementary Schools



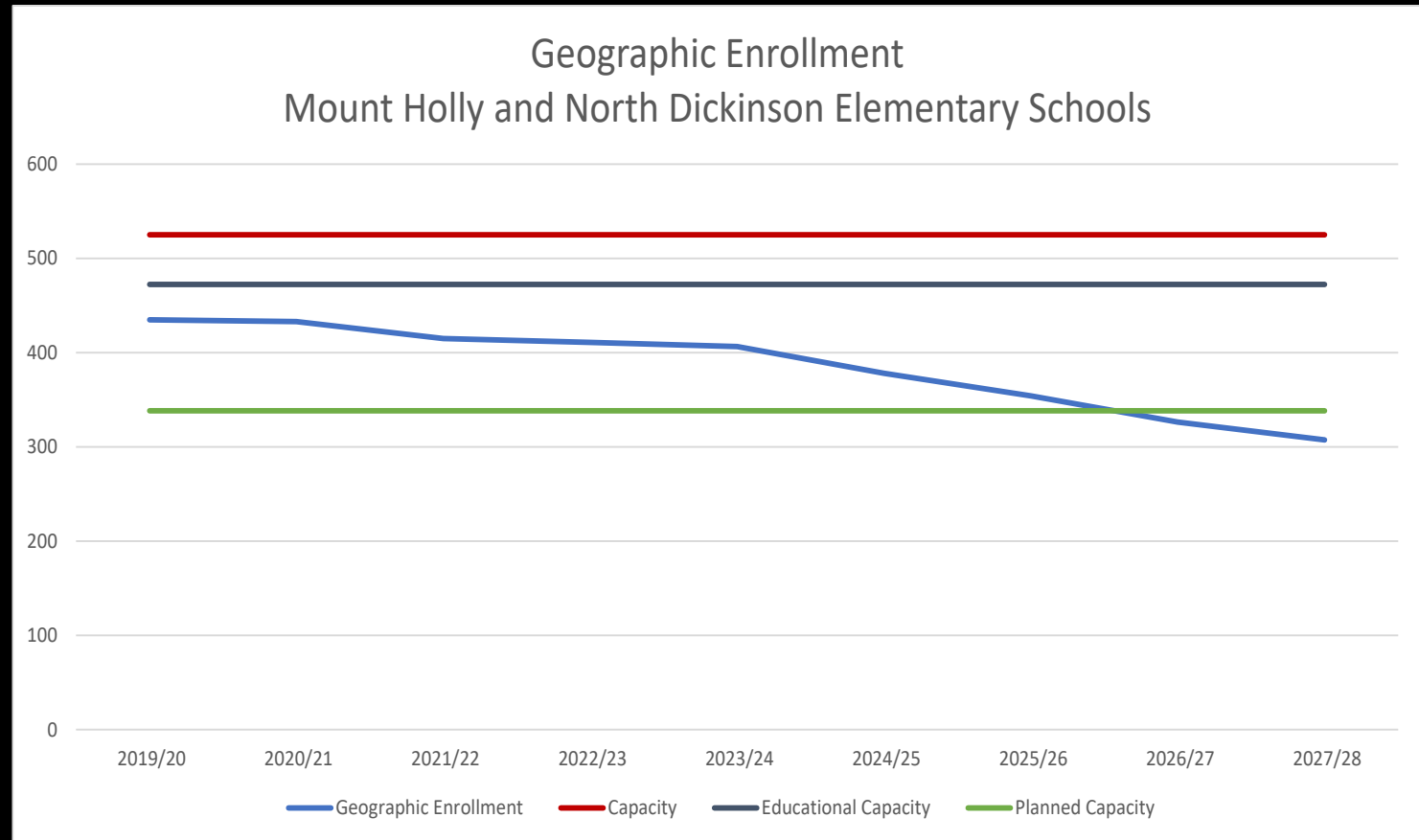
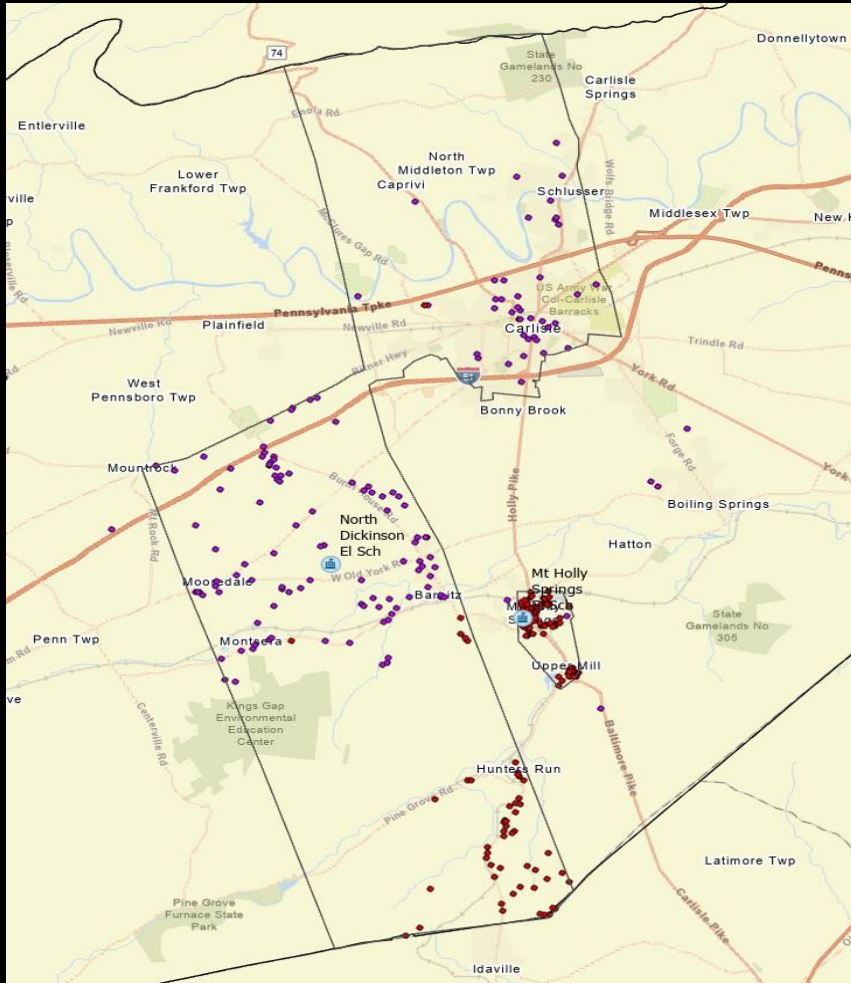
The average of Decision Insite's Conservative and Moderate Projections indicate that combined, Letort and Mooreland Elementary Schools will be operating at 59% of capacity by 2027/28.





Mount Holly and North Dickinson Elementary Schools

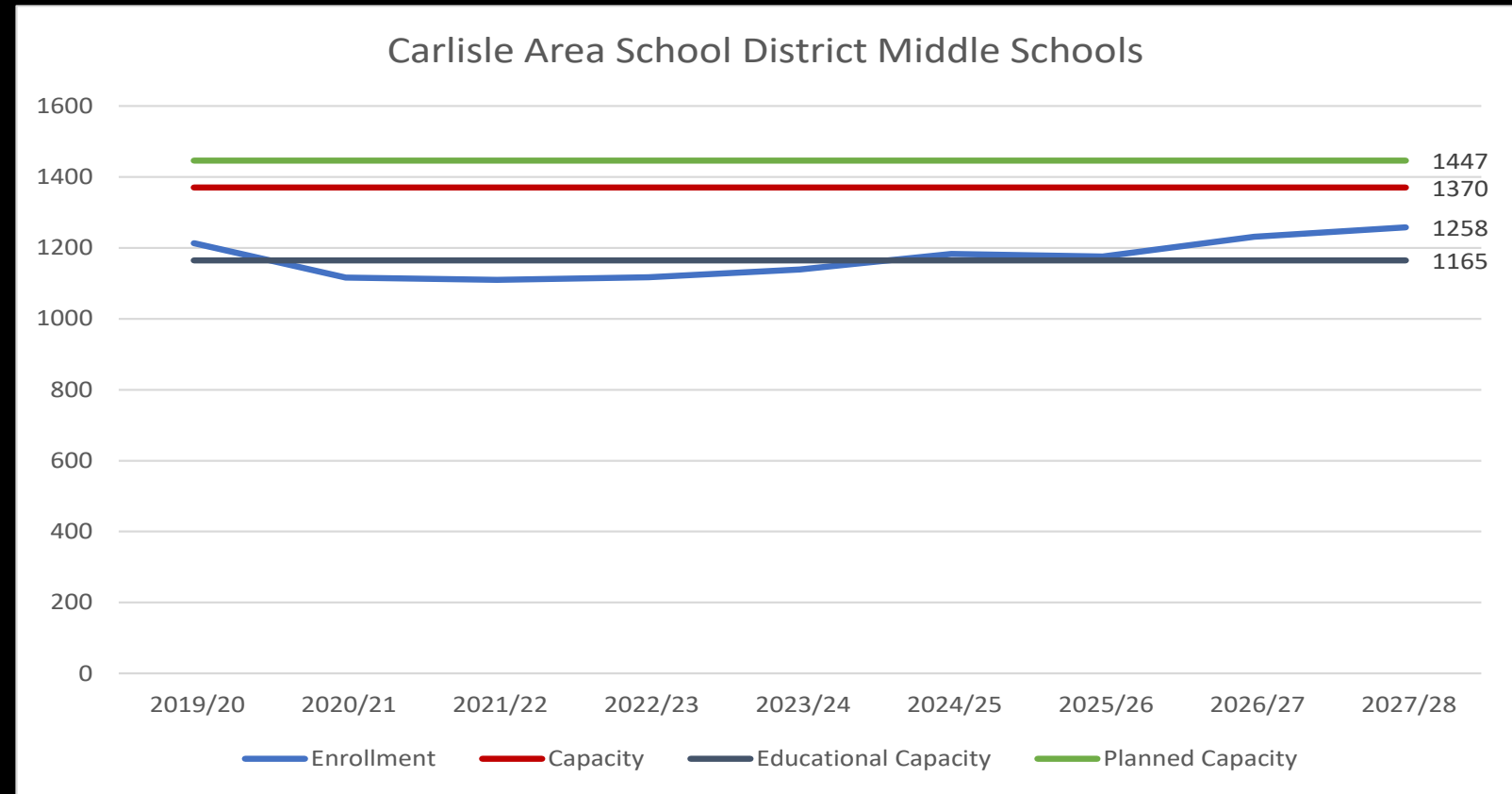
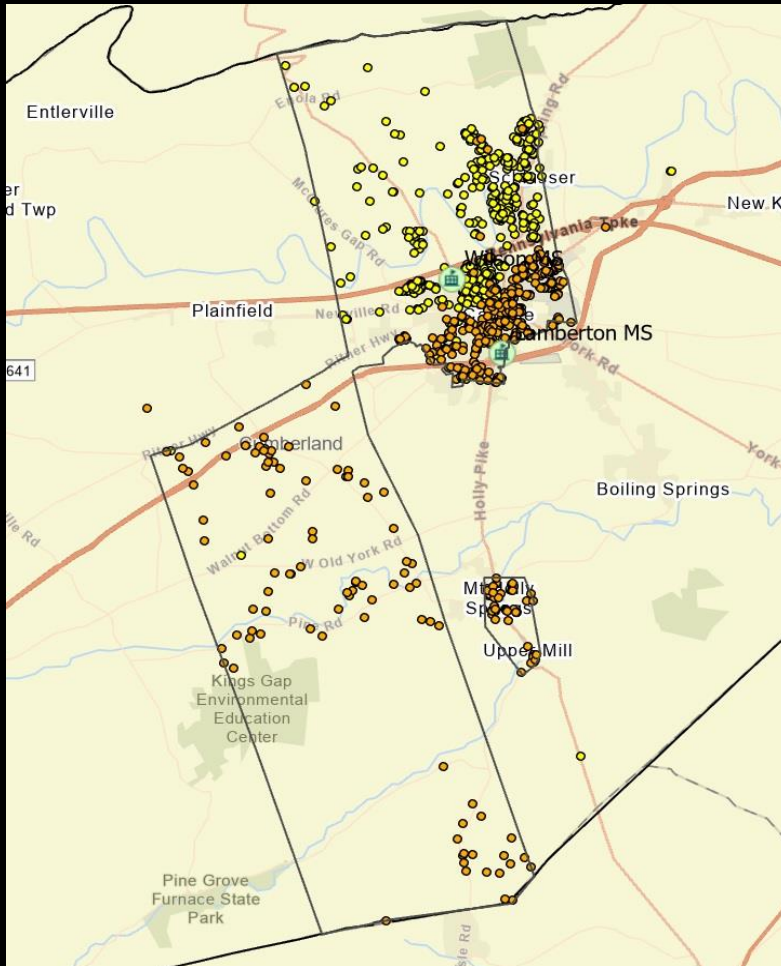
The average of Decision Insite's Conservative and Moderate Projections indicate that combined Mount Holly and North Dickinson Elementary Schools will be operating at 59% of capacity by 2027/28.





Carlisle Area S.D. Middle Schools

The average of Decision Insite's Conservative and Moderate Projections indicate that the Middle Schools will be operating at 93% of capacity by 2027/28.

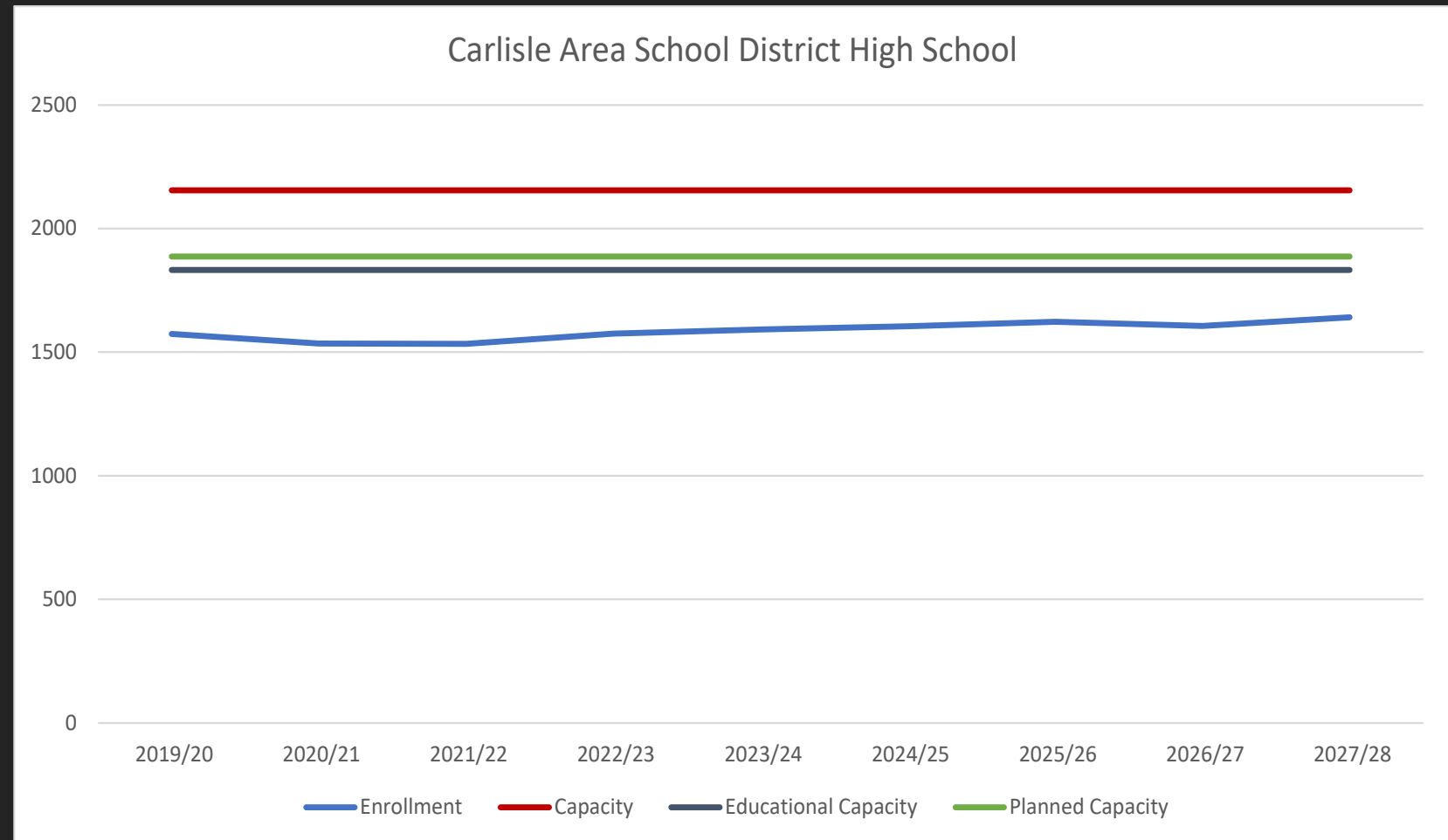
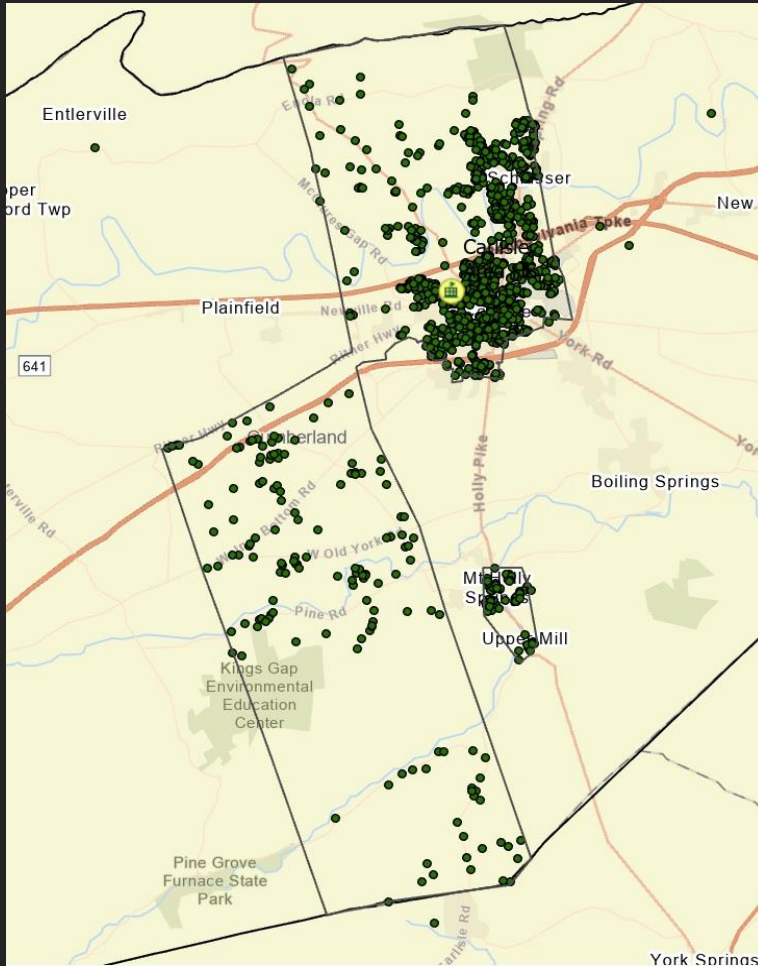


Additional Analysis is required to better establish capacity based on the schedule. Capacity may be higher.



Carlisle Area S.D. High School

The average of Decision Insite's Conservative and Moderate Projections indicate that the High School buildings will be operating at 76% of capacity by 2027/28.





FACILITY ANALYSIS

Building Capacity & Existing Conditions Assessment

EXISTING FACILITY CONDITIONS ASSESSMENT

Costs to Upgrade

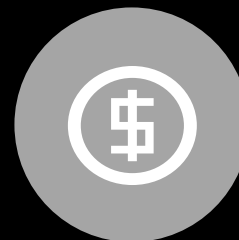
1. Estimates are based on CRA / Barton bid results
2. Costs to “upgrade” do not include space required to address educational program
3. Order of magnitude for decision making, prioritizing projects and preliminary budgeting



Evaluation: Document existing facility conditions and note building system deficiencies



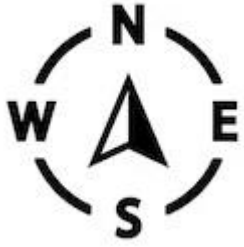
Recommendations: Identify existing facility needs to extend useful life of operational systems a minimum of 20 years



Cost Estimates to Upgrade: Estimates are based on recommendations to maintain existing facilities.

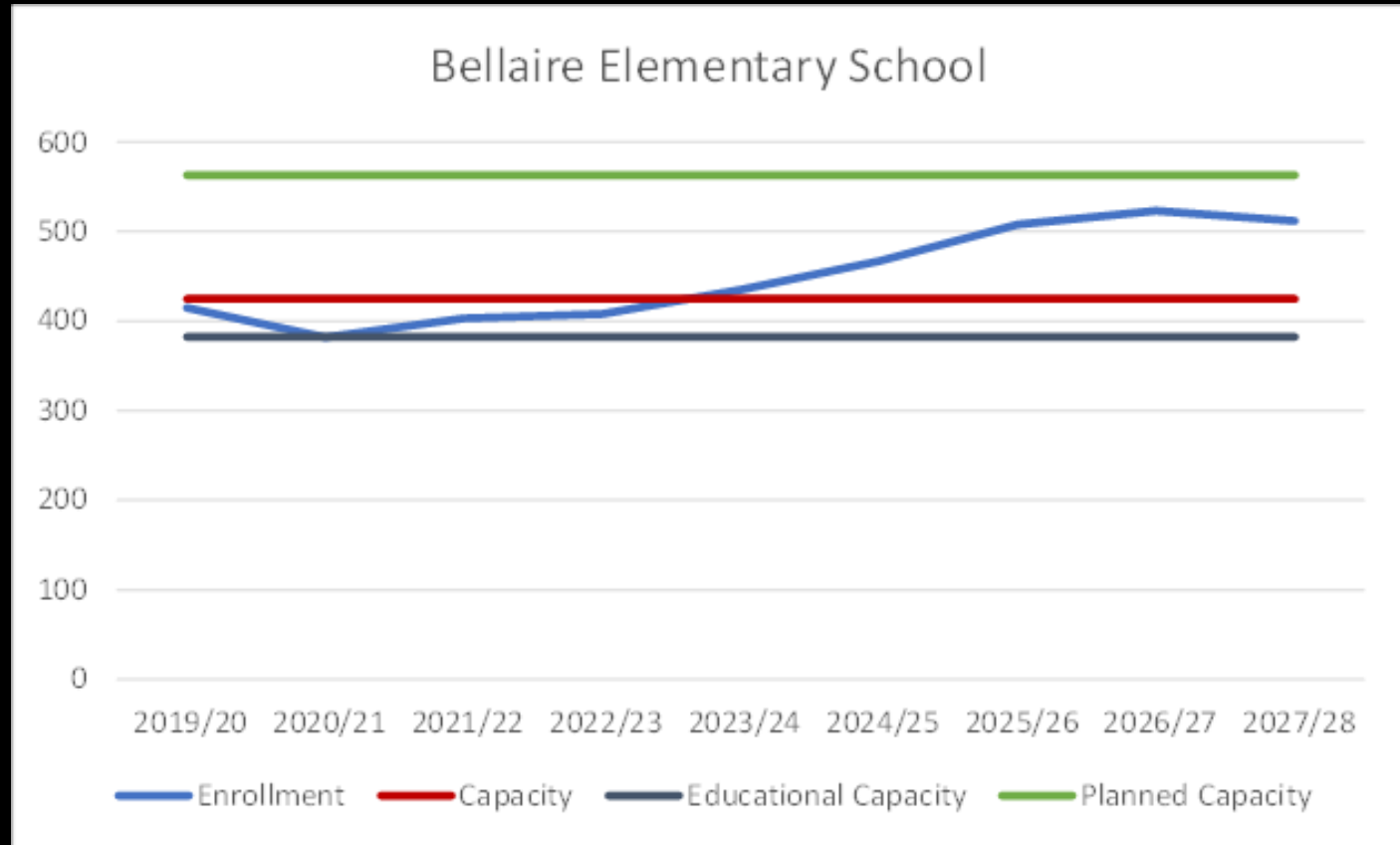
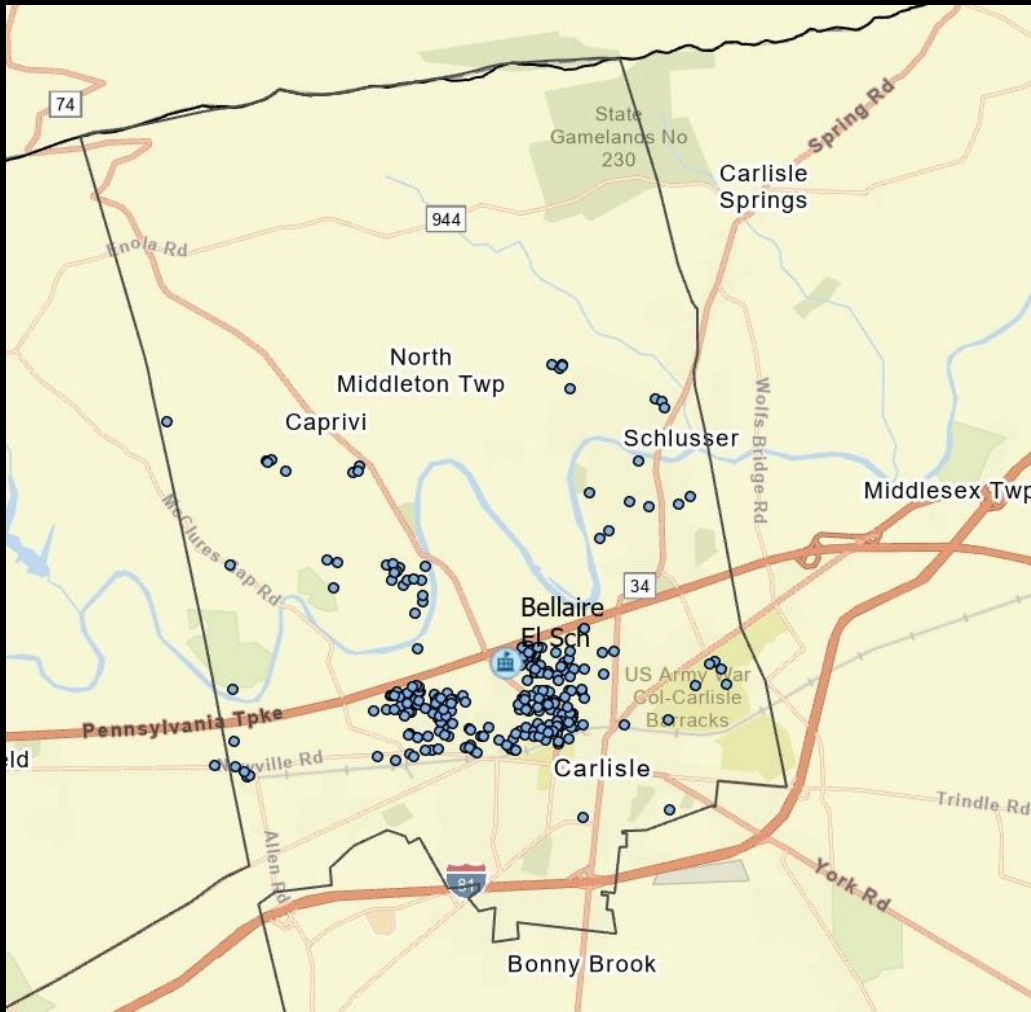
SITE CONSIDERATIONS

- Is there adequate space on the site for any potential additions?
- Vehicular circulation and access
- Separate bus and parent drop-off areas
- Floodplains
- Property lines, easements, etc.



Bellaire Elementary School

The average of Decision Insite's Conservative and Moderate Projections indicate that Bellaire Elementary School will be operating above 120% of capacity by 2027/28.





BELLAIRE ELEMENTARY SCHOOL

- Separate bus and parent drop-off areas, and adequate site circulation
- Good candidate for a small building addition based on available space on-site.
- A large addition would deplete outdoor play areas.

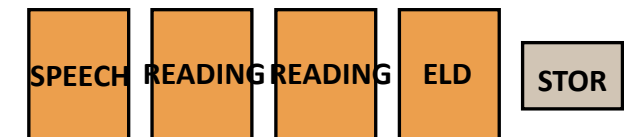
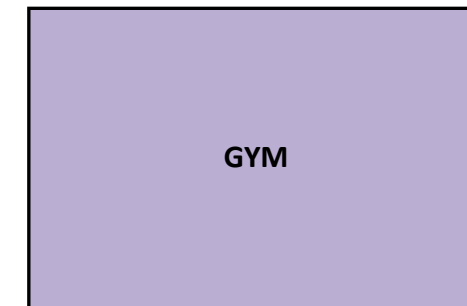
BELLAIRE ELEMENTARY SCHOOL

FORMERLY
MUSIC STORAGE



- AREA: 55,000 SF
- ADJUSTED CAPACITY: 425
- CURRENT ENROLLMENT: 405
- CURRENT UTILIZATION: 95%
- CONFERENCE ROOMS AND STORAGE ROOMS ARE BEING USED FOR SUPPORT. THEREFORE, CAPACITY HAS BEEN ADJUSTED ACCORDINGLY (-50) TO BETTER REFLECT THE ACTUAL CAPACITY OF THE SCHOOL.
- INADEQUATE STORAGE SPACE
- NO SEPARATE GYM/CAFETERIA

PROGRAM DEFICIENCIES:



FACILITY DEFICIENCIES SUMMARY



- Five of the seven elementary schools do not have separate gym/cafeteria facilities, including Bellaire, Mooreland, Mt. Holly Springs, North Dickinson, and LeTort.
- Three of the elementary schools have modular classrooms, including Mooreland, Mt. Holly Springs, and LeTort.
- At some elementary schools, storage rooms and conference rooms are being used as support classrooms.
- Costs to upgrade LeTort, Mt. Holly & Old Bellaire, will be significantly higher due to the age and condition of these buildings.





OPTIONS OVERVIEW

Preliminary Options Development

OPTION DEVELOPMENT

Guiding Principles



Recommendations will align with District Mission, Beliefs and Educational Program

Projected Enrollment



Address the present and foreseeable projected student enrollment

Facility Needs



Identify and address existing facility needs to extend useful life of the physical plant and operational systems a minimum of 20 years

Cost Estimates



Provide preliminary construction cost information as a means of budgeting for any major projects

GOALS

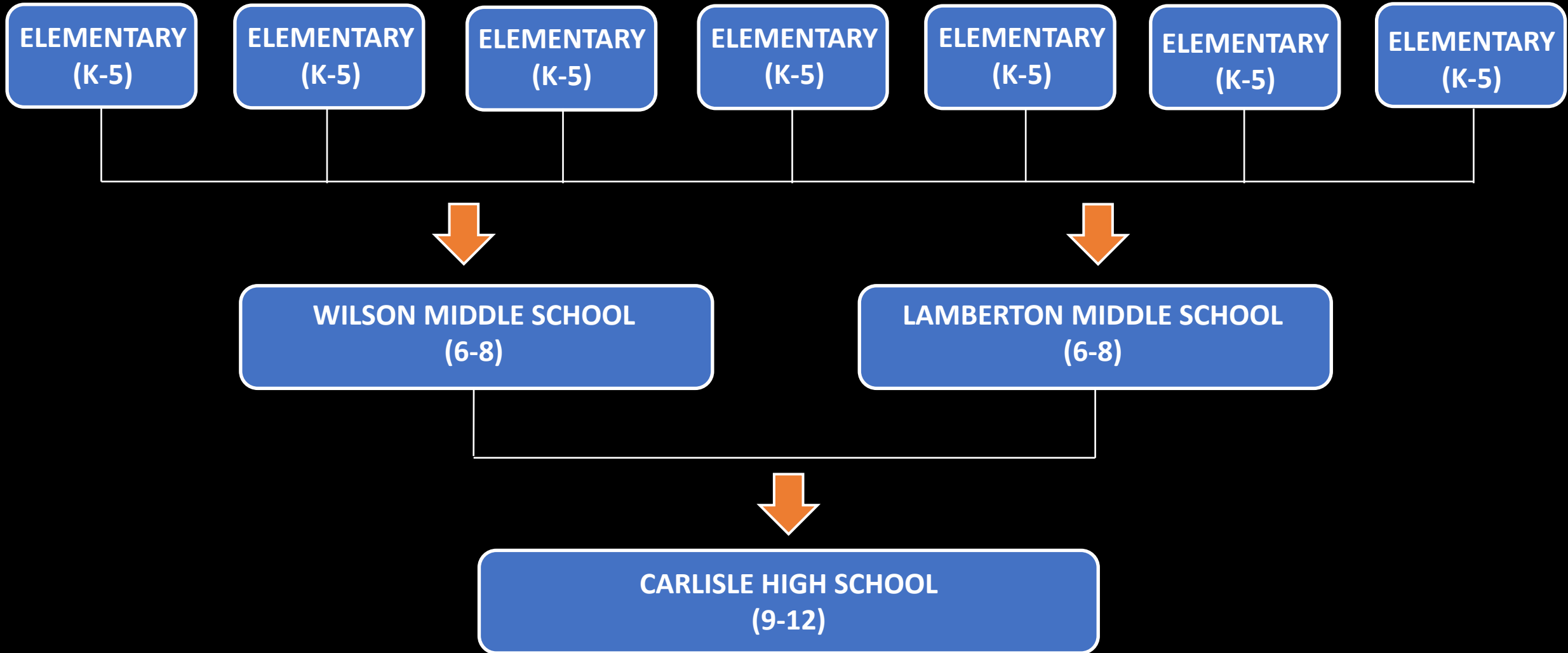
OPTIONS SHOULD ADDRESS THE FOLLOWING:

- Housing boom and subsequent increase in enrollment within identified geographical areas.
- Need for more efficient programming.
- Class size - equity across all elementary schools.
- Critical condition of the District's three oldest buildings (LeTort, Mt. Holly, and Old Bellaire).

CRITERIA FOR EVALUATION

- Generally, options that consolidate new construction will be more cost effective and will take less time to execute than options that involve many, smaller additions at multiple sites.
- Occupied, phased renovations have an extended duration, will require modular classrooms, and cause significant (although temporary) inconvenience.
- Due to the uneven growth distribution across the District, moving of elementary attendance boundaries will be necessary with ANY option being considered.
- Efficient use of facilities (targeting 90% utilization for elementary schools per PDE recommendations).

MAINTAIN STATUS QUO



MAINTAIN STATUS QUO

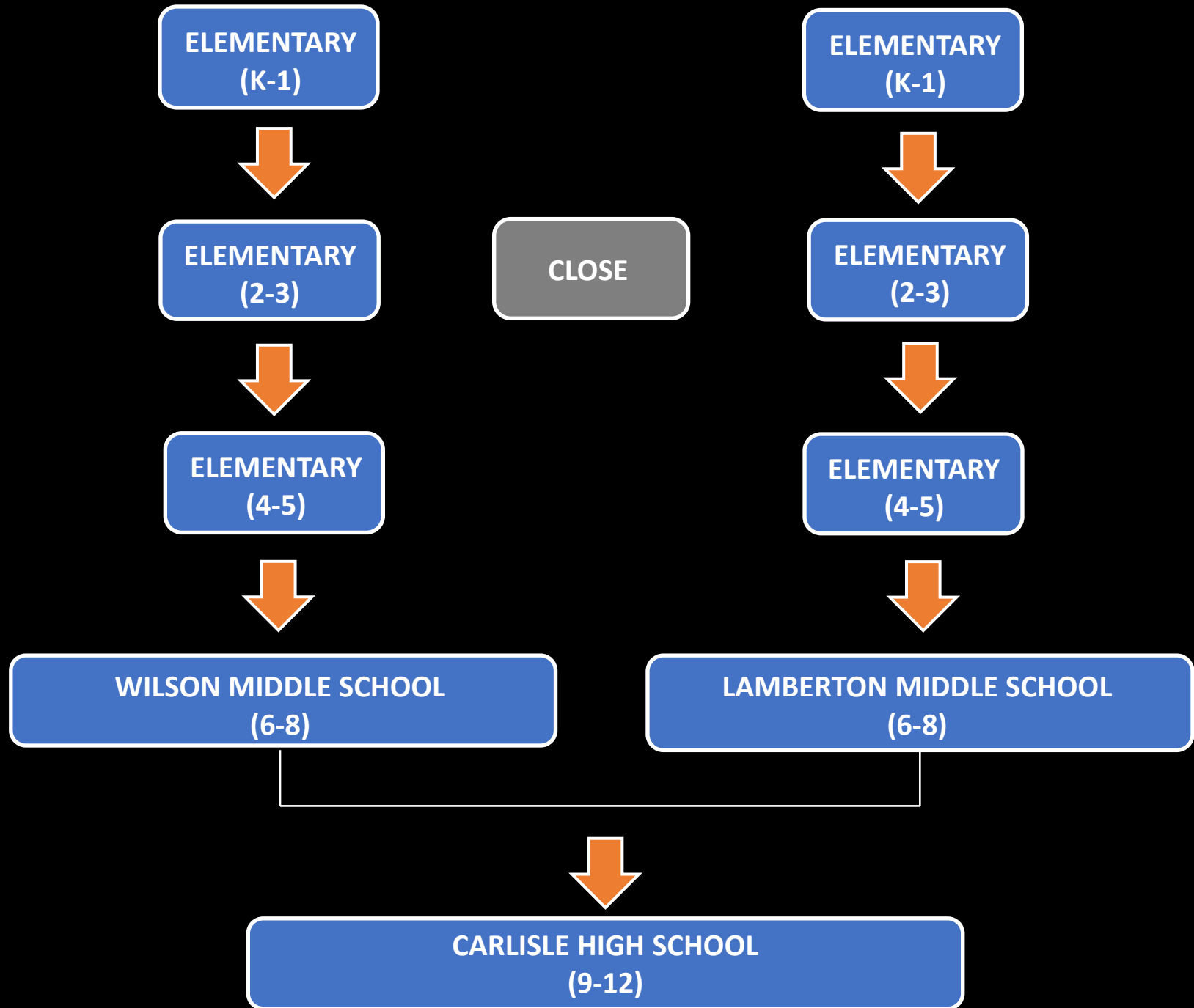
BASELINE ANALYSIS	Status Quo - Maintain Grade Alignment, Maintain Attendance Boundaries, and all Existing Facilities						
SCHOOL	PROPOSED GRADE ALIGNMENT	PDE CAPACITY	Five Year DI PROJECTED ENROLLMENT (2027/28)	2027/28 UTILIZATION RATE	PLANNED CAPACITY (General Classrooms Only)	DELTA CAPACITY AND PLANNED CAPACITY	DELTA CLASSROOM EQUIVALENT
Bellaire Elementary School	K-5	425	512	120.47%	563	-138	-5.53
Crestview Elementary School	K-5	550	583	106.00%	641	-91	-3.65
Hamilton Elementary School	K-5	450	328	72.89%	361	89	3.57
Geographic Cluster:		1425	1423	99.86%	1565	-140	-5.61
Mooreland Elementary School	K-5	350	322	92.00%	354	-4	-0.17
LeTort Elementary School	K-5	300	182	60.67%	200	100	3.99
Geographic Cluster:		650	504	77.54%	554	96	3.82
Mt. Holly Springs Elementary School	K-5	225	175	77.78%	193	33	1.30
North Dickinson Elementary School	K-5	300	133	44.33%	146	154	6.15
Geographic Cluster:		525	308	58.67%	339	186	7.45
Lamberton Middle School	6-8	685	688	100.44%	791	-106	-4.25
Wilson Middle School	6-8	685	571	83.36%	657	28	1.13
Middle Schools:		1370	1259	91.90%	1448	-78	-3.11
Carlisle High School	9-12	2155	1641	76.15%	1887	268	10.71

MAINTAIN STATUS QUO

SIGNIFICANT CHALLENGES:

- The Elementary schools in the Bellaire/Crestview/Hamilton geographic cluster would be operating at 100% utilization by 2027/28, even if attendance boundaries are shifted within this cluster.
- Adding classrooms to these schools would be difficult to accomplish, particularly at Crestview and Hamilton due to site constraints and building layout.
- These 3 schools are currently the largest. Adding to their capacity would further deepen the inequities in size amongst the elementary buildings.
- The Mooreland/LeTort and Mt. Holly/N. Dickinson geographic clusters would be operating well below 90% utilization (inefficient use of facilities).
- Programs are duplicated seven times among elementary schools.

SISTER SCHOOLS

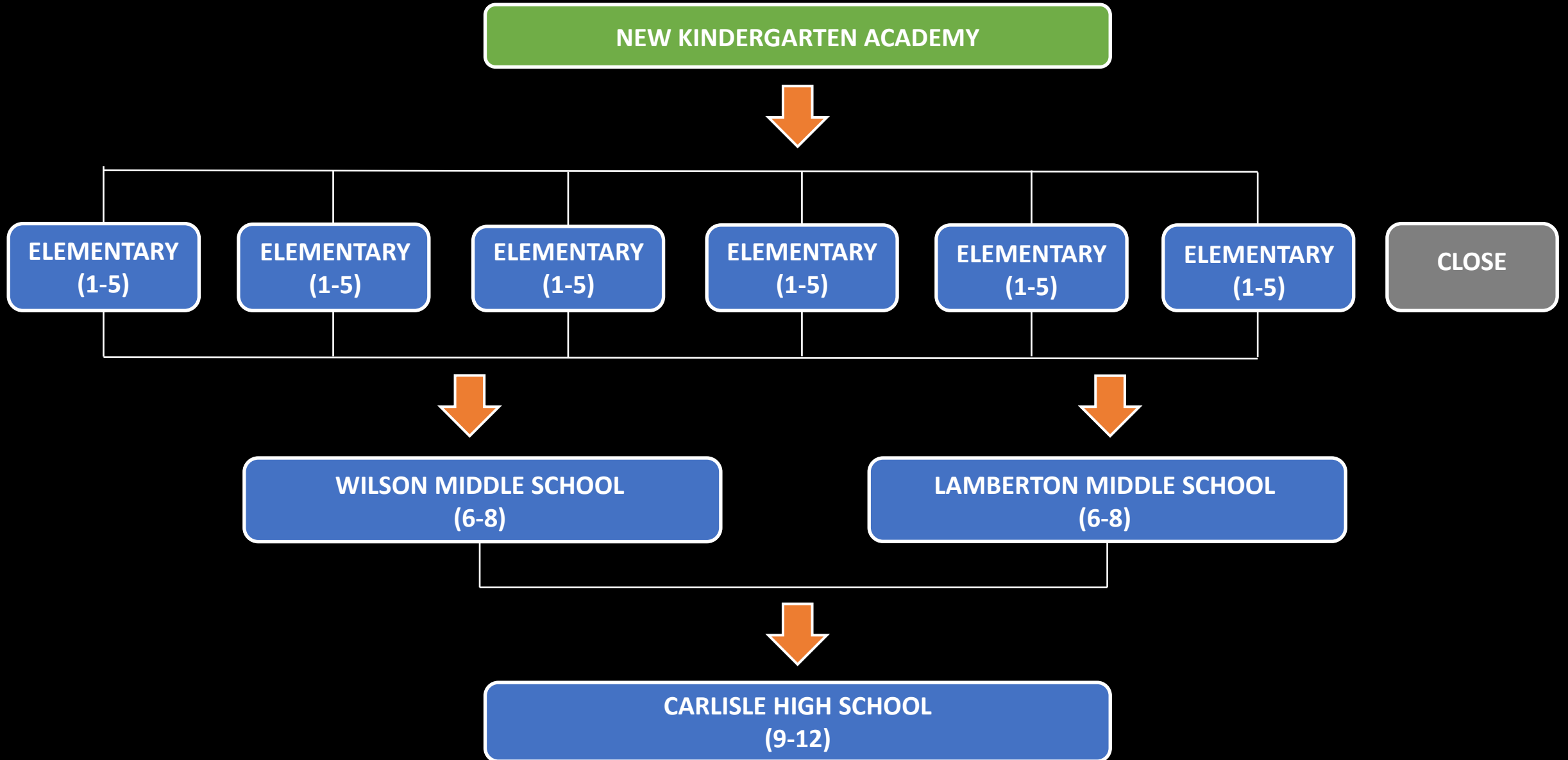


SISTER SCHOOLS

SIGNIFICANT CHALLENGES:

- There are large variations in size (capacity) amongst the seven, existing elementary schools.
- The proposed grade alignment requires six buildings that are roughly the same size (capacity).
- This would necessitate additions to the smaller elementary schools, and it would result in underutilization of the larger elementary schools. For these reasons, this Option is NOT likely to be cost effective, or an efficient use of existing resources.

KINDERGARTEN ACADEMY - (6) 1-5 BUILDINGS

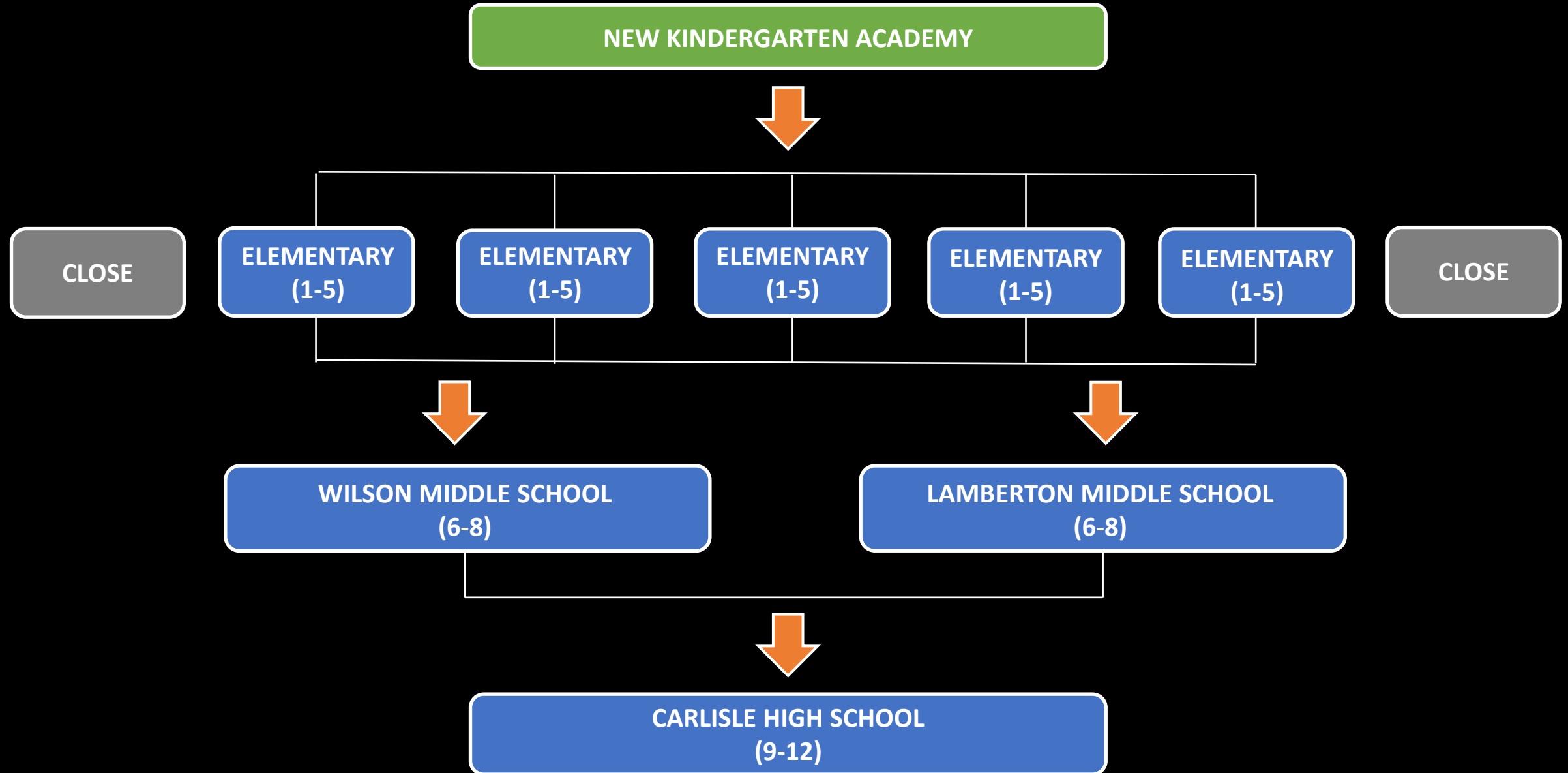


KINDERGARTEN ACADEMY - (6) 1-5 BUILDINGS

SIGNIFICANT CHALLENGES:

- A Kindergarten Academy would be very challenging from a transportation standpoint, given the geographical size of the District.
 - Long bus rides
 - Additional bus runs (\$)
- A Kindergarten Academy would NOT result in more efficient programming, and would require additional staff.
- Programs would still be duplicated seven times across buildings.
- Additions would still be required to elementary school(s) within the Bellaire/Crestview/Hamilton geographic cluster.

KINDERGARTEN ACADEMY - (5) 1-5 BUILDINGS

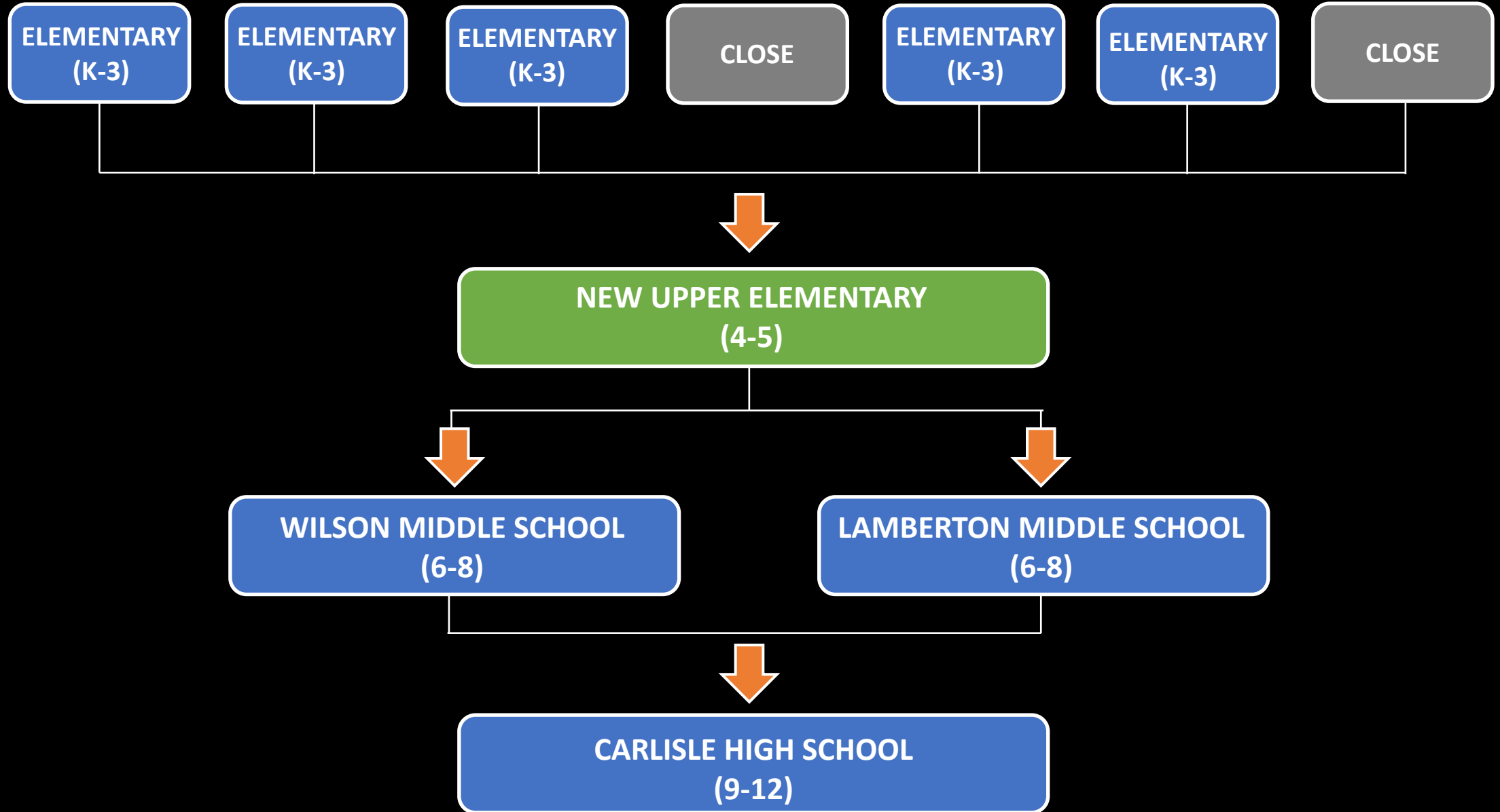


KINDERGARTEN ACADEMY - (5) 1-5 BUILDINGS

SIGNIFICANT CHALLENGES:

- A Kindergarten Academy would be very challenging from a transportation standpoint, given the geographical size of the District.
 - Long bus rides
 - Additional bus runs (\$)
- A Kindergarten Academy would NOT result in more efficient programming, and would require additional staff.
- Additions would still be required to elementary school(s) within the Bellaire/Crestview/Hamilton geographic cluster.

SINGLE UPPER ELEMENTARY (4-5) BUILDING



SINGLE UPPER ELEMENTARY (4-5) BUILDING

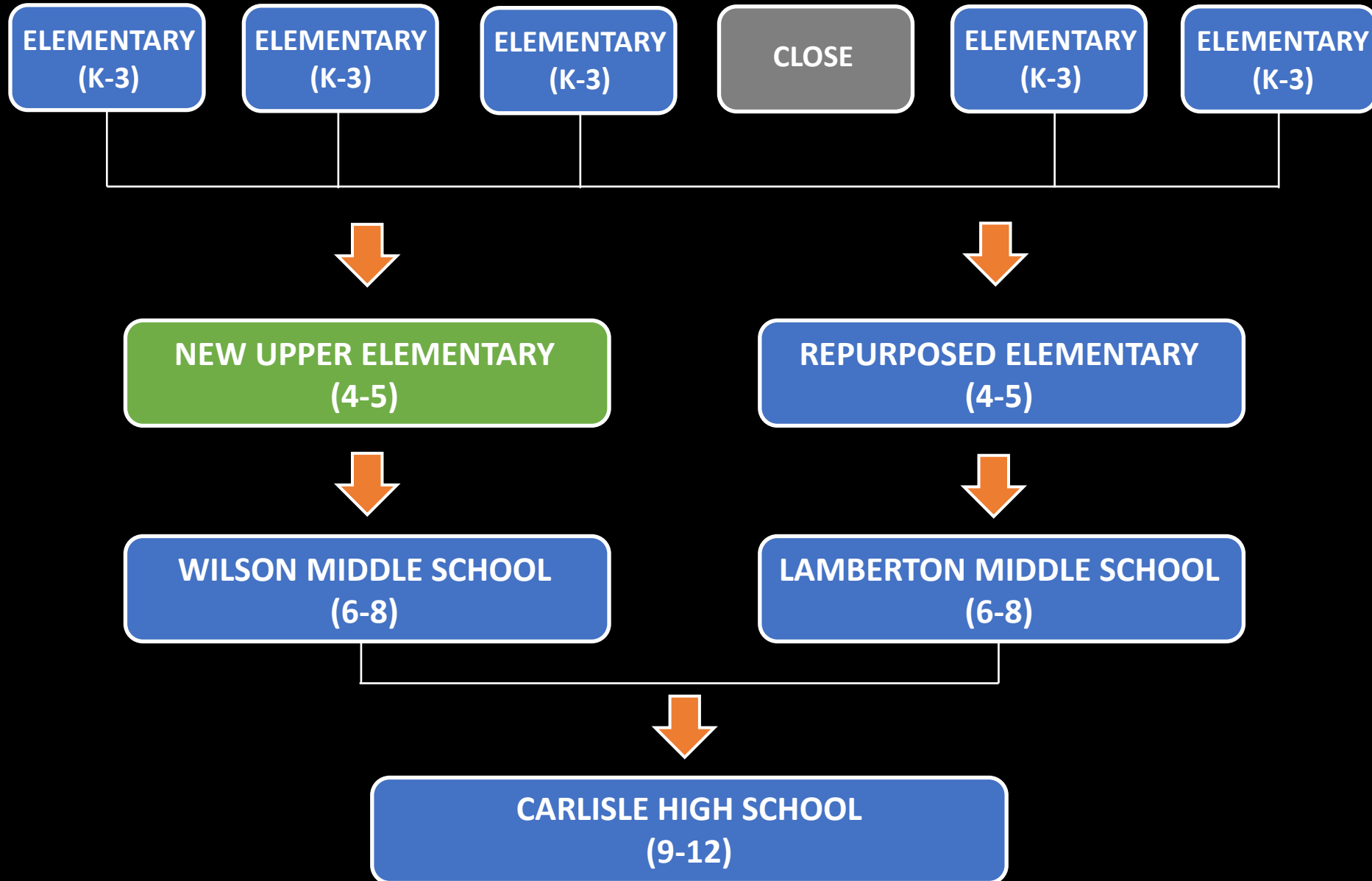
CHALLENGES:

- 4th and 5th grade come together under one roof and are split apart again in 6th grade when they move to the two Middle Schools.

BENEFITS:

- Keeps construction of new classrooms at one site (efficiency - cost & schedule).
- K/3 – 4/5 elementary grade configuration allows for more efficient programming.

TWO UPPER ELEMENTARY (4-5) BUILDINGS

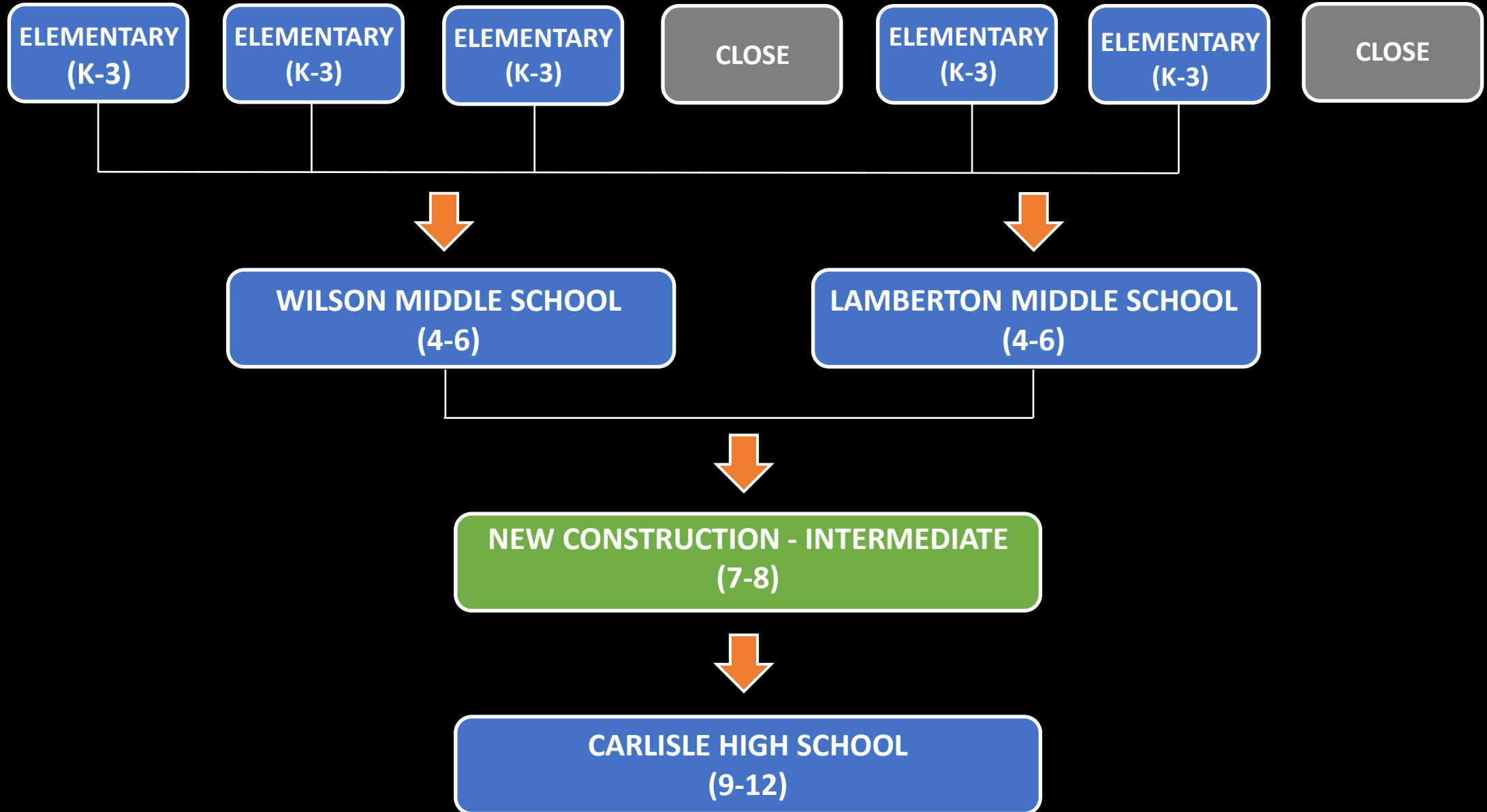


TWO UPPER ELEMENTARY (4-5) BUILDINGS

BENEFITS:

- Keeps construction of new classrooms at one or two sites (efficiency - cost & schedule).
- K/3 – 4/5 elementary grade configuration allows for more efficient programming.
- Students come together earlier.

NEW 7-8 INTERMEDIATE SCHOOL



NEW 7-8 INTERMEDIATE SCHOOL

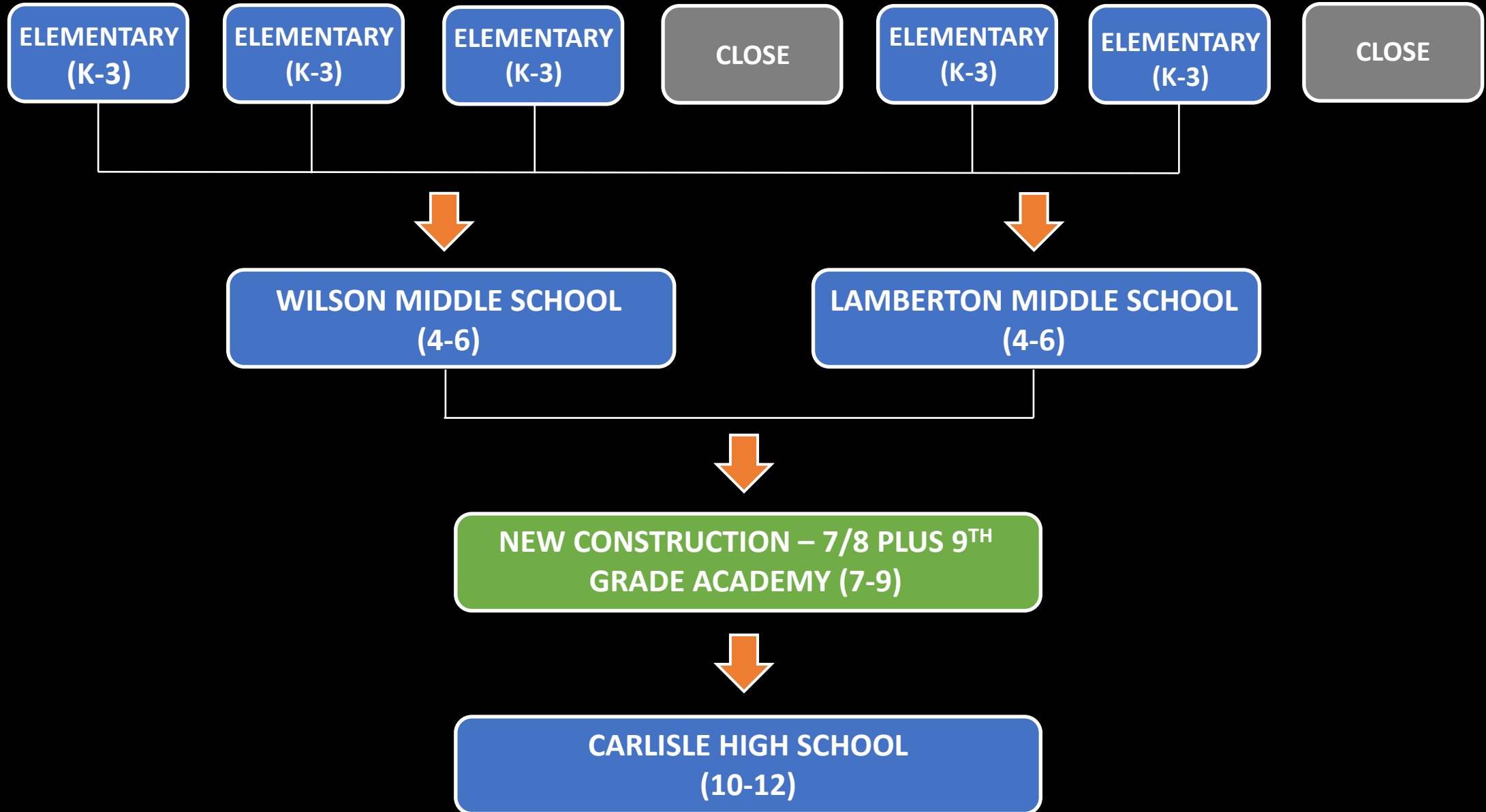
CHALLENGES:

- Further study of the 4/5/6 educational program will be necessary to determine if this is a good fit in the existing Middle School buildings, which were fully renovated a decade ago.
- Would require duplication of Tech Ed and other spaces at the new 7/8 building.

BENEFITS:

- Keeps construction of new classrooms at one site (efficiency - cost & schedule).
- Potential educational opportunities with 7th and 8th grade on the High School campus (Old Bellaire site).

NEW 7-8 INTERMEDIATE + 9TH GRADE ACADEMY



NEW 7-8 INTERMEDIATE + 9TH GRADE ACADEMY

CHALLENGES:

- Further study of the 4/5/6 educational program will be necessary to determine if this is a good fit in the existing Middle School buildings, which were fully renovated a decade ago.
- Would require duplication of Tech Ed and other spaces at the new 7/8 building.
- Would result in underutilization of the High School building, and duplication of programs shared between 9th grade and the High School.

BENEFITS:

- Keeps construction of new classrooms at one site (efficiency - cost & schedule).
- Potential educational opportunities with 7th and 8th grade on the High School campus (Old Bellaire site).

Questions?



Crabtree, Rohrbaugh & Associates
www.cra-architects.com