

# District-Wide Facilities Study Executive Summary

## Wilson School District

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### Introduction

The goal of the study is to provide the Wilson School District with an overview and evaluation of the district’s educational facilities, demographics and enrollment, as well as a review of each physical plant and educational-related needs.

Costs shown are a representation of the total project costs for each option for all district facilities. These costs are preliminary and used for initial decision making to prioritize projects. ***The Board may elect to revise priorities and recommendations identified in the study, increase or decrease scope to establish the desired budget.***

### Building Capacity / Utilization

Capacity was determined using Pennsylvania Department of Education methodology. PDE capacity is calculated in order to determine reimbursement to school districts for the construction of new schools, additions to existing schools, and/or substantial renovations to existing schools to meet current educational and construction standards.

The capacities for each school in the Wilson School District are shown in the table below and were verified with school district administration.

**Wilson School District Building Capacity**

School	Student Capacity
Cornwall Terrace Elementary School	600
Green Valley Elementary School	600
Shiloh Hills Elementary School	600
Spring Ridge Elementary School	625
Whitfield Elementary School	600
Southern Middle School	1131
West Middle School	1524
Wilson High School	2670
TOTAL	8950

The capacities reflected in the table above assume that every instructional space is scheduled to capacity every instructional period that school is operating. In that scenario, a school would have a utilization rate of 100%. However, that rate is nearly impossible to achieve and maintain as a complex set of variables impact the likelihood of ever doing so.

***A review of Wilson School District enrollment, programming and scheduling places utilization rates in line with best practice: 90% of capacity at the elementary level and 85% of capacity at the secondary level.***

A review of elementary capacity, given a 90% utilization rate and 2019/20 enrollments are detailed in the table below, and yields the following critical information for planning:

School	Capacity	Curent Enrollment	% Capacity	Utilization Capacity	% Utilization Capacity
Cornwall Terrace	600	517	86.17%	540	95.74%
Green Valley	600	559	93.17%	540	103.52%
Shiloh Hills	600	560	93.33%	540	103.70%
Spring Ridge	625	512	81.92%	563	91.02%
Whitfield	600	596	99.33%	540	110.37%
<b>Elementary Total</b>	<b>3025</b>	<b>2744</b>	<b>90.71%</b>	<b>2723</b>	<b>100.79%</b>

- Green Valley & Shiloh Hills Elementary Schools are currently operating above 90% of their capacity and 104% of their capacity when the utilization rate is applied.
- Cornwall Terrace is operating at 86% of its capacity and 96% of its capacity when the utilization rate is applied.
- Spring Ridge is operating at 82% of its capacity and 91% of its capacity when the utilization rate is applied.
- Given elementary enrollment is trending upward across the district, planning to address capacity issues at Green Valley, Shiloh Hills, and Whitfield elementary schools is becoming critical as their capacities exceed 90% and 100% when the utilization rate is applied.
- Given elementary enrollment is trending upward across the district, the need to address capacity issues at Cornwall Terrace and Spring Ridge elementary schools is increasingly important as they are operating above 80% capacity and 90% when the utilization rate is applied.
- **Collectively the elementary schools are operating at 91% of their capacity and 101% of capacity when the utilization rate is applied. The benefits of whole district redistricting of the elementary schools is limited.**

A review of secondary capacity, given an 85% utilization rate and 2019/20 enrollments are detailed in the table below, and yields the following critical information for planning:

School	Capacity	Curent Enrollment	% Capacity	Utilization Capacity	% Utilization Capacity
Southern Middle School	1131	762	67.37%	961	79.26%
West Middle School	1524	729	47.83%	1295	56.28%
<b>Middle School Total</b>	<b>2655</b>	<b>1491</b>	<b>56.16%</b>	<b>2257</b>	<b>66.07%</b>
High School	2670	1992	74.61%	2270	87.77%
<b>High School Total</b>	<b>2670</b>	<b>1992</b>	<b>74.61%</b>	<b>2270</b>	<b>87.77%</b>

- Southern Middle School is currently operating at 67% of its capacity and 79% of its capacity when the utilization rate is applied.
- West Middle School is currently operating at 48% of its capacity and 56% of its capacity when the utilization rate is applied.
- Collectively, the middle schools are operating at 56% of their capacity and 66% of capacity when the utilization rate is applied. That represents an unused capacity of 1164 seats; 766 seats when the secondary utilization rate is applied and 1048 seats when the elementary utilization rate is applied.
- Wilson High School is operating at 75% of its current capacity and 88% of its capacity when the utilization rate is applied.
- Given Wilson High School enrollments are trending upward, planning should begin to address potential capacity issues.

## Existing Educational Suitability Assessment

The Educational Suitability Assessment (ESA) measures the degree to which facilities support teaching and learning, considering the exterior and site, academic spaces, support spaces, library and media center, security, technology, storage, fixtures, furniture and equipment, environmental quality and controlability of lighting and HVAC systems.

The intent of this assessment is to analyze each building from an educational and teaching perspective, though it does not reflect actual academic performance. Each category shifts slightly based on the overall use of that specific facility.

Assessment ratings are as follows:

20% - 35%: unsatisfactory

36% - 50%: below average

51% - 65%: average (Cornwall Terrace E.S., Whitfield E.S., Southern M.S. & High School)

66% - 80%: good (Green Valley E.S., Shiloh Hills E.S., Spring Ridge E.S. & West M.S.)

81% - 100%: excellent

## Existing Facility Condition Index

In completing the facilities assessment and evaluation, Crabtree, Rohrbaugh & Associates, working with School District staff, developed and utilized several tools to assist in the process:

Building surveys and documentation

Meetings with staff

Use of an Evaluation Criteria as a benchmarking tool

Lifespan of Building Components

The criteria utilized is based on life cycle costs, life span expectations, maintenance needs, energy efficiency, current applicable accessibility, life safety and building code considerations, and is organized into the following categories:

Site (including accessibility)

Exterior building envelope

Interior Elements (including accessibility)

Safety & security

Systems (HVAC, plumbing/fire protection, and electrical)

Code issues identified in the report are those that would be required to meet current codes.

Assessment ratings are as follows:

0% - 15%: critical

16% - 30%: poor

31% - 60%: fair

61% - 90%: good (all buildings)

91% - 100%: new

## District Projected Enrollment

The Wilson School District contracted with DecisionInsite to provide enrollment analytics. DecisionInsite provides enrollment studies for a wide variety of school districts ranging from districts with just over 800 students to the large, suburban school districts with student populations over 200,000 students. They currently serve more than 170 clients in 12 states.

The results of the DecisionInsite study were shared by Wilson School District administration with Crabtree, Rohrbaugh and Associates (CRA), and although they are a separate and independent analysis from the Department of Education's projected enrollment, are critical for developing options.

### High School:

Wilson High School has a capacity for 2,670 students. This school year there are 1,992 students enrolled, which is 75% of capacity. If you consider an 85% utilization rate, educationally the school is functioning at 88% of capacity when delivering the educational program. An average of the moderate and conservative enrollment projections indicates the student body will reach 2,149 by 2024/25. That is an increase of 479 students beyond current enrollment. Given that enrollment projection, the district should be planning a capacity necessary to serve 2471 high school students. While that is 93% of the capacity of the facility, when considering an 85% utilization rate, educationally the school will be functioning at 109% of capacity. Given how the district schedules and utilizes the facility, conservatively the district should plan for nine additional classrooms to allow the efficient and effective delivery of the educational program. While this is a discussion of capacity, given the current program, it should be noted that there are deficiencies in safety and a lack of efficiency in both operation and the delivery of educational programming given the open separation between the upper and lower houses, the lack of spaces that reflect where students will work and learn after graduation, and the disjointed arrangement of some educational spaces in relationship to others.

### Middle Schools:

Combined, the two middle schools have a capacity for 2,655 students. Currently they have 1,491 students, and are operating at 56% of capacity. Even when you apply a utilization rate of 85%, only 66% of capacity is being utilized to deliver the educational program. That represents an unused capacity of 1,164 seats; 766 seats when the secondary utilization rate is applied and 1,048 seats when the elementary utilization rate is applied. An average of the moderate and conservative enrollment projections indicate the middle school student body will reach 1,539 by 2024/25, requiring that the middle schools have a planned capacity for 1,770 students. That is 885 seats less than capacity, and 487 seats when applying the utilization rate.

### Elementary Schools:

Combined, the five elementary schools have a capacity for 3,025. Currently they have 2,744 students enrolled, which is 91% of that capacity. If you consider a 90% utilization rate, educationally they are functioning at 101% capacity. The average of the moderate and conservative DecisionInsite enrollment projections indicate the elementary student body will reach 3,233 by 2024/25. That will result in the elementary schools reaching 118% of their collective capacity. Given a 90% utilization rate it will be very difficult for the elementary schools to function effectively in the delivery of the educational program.

Given the enrollment projections, the district should be planning to increase capacity to address the needs of 3,556 elementary students in order to maintain enrollment at approximately 90% of capacity, and allow them to function educationally at 100% of capacity given a 90% utilization rate. The increased capacity is the equivalent of twenty to thirty additional elementary classrooms, depending how the students are distributed

through the five attendance units, as well as additional prorated capacity in the elementary cafeterias, libraries, art, music, physical education instructional areas, support spaces, traffic flow and parking district-wide.

Given these projections, this is a conservative estimate of the need for additional space. However, given the relatively small difference between the conservative and moderate projections provided by DecisionInsite, four of the five elementary schools have room for expansion, the fact that the district already holds land on which they can build an additional elementary school, and the fact that the current space utilized for the district office can be quickly converted as swing instructional space if enrollments greatly outpace projections, the district has the ability to exercise a conservative approach that other districts often do not have that potential. In other words, the benefit of developing options that provide the ability to add instructional space beyond five years outweigh the risk of over-building today for a decade from now.

Finally, it should be noted that there is a very high probability that the district will need to alter attendance boundaries in order to better distribute elementary students among the five elementary schools, which are nearly identical in size. Currently, enrollment ranges from 82% of capacity at one of the elementary schools to 99% at another.

### Proposed Construction Options

Preliminary facility options for the School District's buildings have been developed to assist the Wilson School District Board of Directors and administration in the decision-making process regarding the future utilization of their educational buildings.

As such, these options should be viewed as a starting point, or benchmark; providing a framework from which decisions regarding prioritized facility upgrades can be made. The information has been developed to:

- Address the present and foreseeable projected student enrollment
- Identify and address existing facility needs at all district-owned buildings in order to renovate and modernize the facility, and to extend the useful life of the physical plant and operational systems a minimum of 20 years.
- Provide preliminary construction and projecting cost information as a means of budgeting for any major project, designed to address the school district's facility needs in a prioritized and structured approach.

In providing an analysis for potential options, the following understandings were established with the administration:

- CRA utilized the average of the conservative and moderate when planning.
- Planning for instructional space should be completed utilizing the five-year enrollment, not ten-year.
- Planning for additional instructional space should include 100% of the anticipated 2024/25 enrollment, given a utilization rate of 90% at the elementary schools and 85% at the secondary schools.
- The benefit of developing options that provide the ability to add instructional space beyond five years outweigh the risk of over-building for a decade from now.
- Educationally, elementary schools best support children, their families and the community when they are anchored to neighborhoods they serve, and do not exceed a student body of 650 children.
- Changing elementary attendance boundaries should be weighed within the options.
- Utilizing the available instructional space at the middle schools by re-aligning grade levels should be weighed within the options.
- Wilson High School, where 100% of the growing student body eventually attend, must be a critical component of any master plan.

- To allow the district to properly maintain existing facilities while providing needed instructional space for schools reaching capacity. Maintenance, particularly items deferred as a result of the recession, must be considered as part of an ongoing multi-year master plan.
- Ensure equity in each school’s operational, educational and community functions regardless of its size, age or location in the district by following a set of guiding principles.

### Wilson School District Guiding Principles

The Wilson School District’s Guiding Principles collectively describe the district’s vision for its buildings and grounds. They are broad statements of purpose and function that explain how schools and campuses should support students, faculty, staff, families and the community. Further, they describe what the district requires and aspires their schools, libraries, classrooms, play areas, athletic fields, gymnasiums, creative and digital/vocational spaces, performing areas, technology and campuses to do, how they should “feel”, and what is needed of them to support **all** stakeholders, most importantly students. In support of this, a visioning exercise occurred with the school district and administration to assist in establishing these principles.

Operationally, the district strives to assure that our **buildings and grounds:**

- Are as safe as they can be.
- Are maintained as part of an ongoing, multi-year master plan that considers immediate, short and long-term goals appropriate for ensuring the health, safety and welfare of students, faculty, staff and the community.
- Are maintained as part of an ongoing, multi-year master plan that considers immediate, short and long-term goals appropriate for ensuring the board-adopted curriculum, co-curricular and extra-curricular programs can be delivered effectively and efficiently.
- Are individually and collectively cost efficient to operate and staff.
- Have the capacity to meet current and projected enrollments.
- Allow equal access and opportunities for all students, faculty, staff and community.
- Reflect the values of our community and the on-going investments made by taxpayers.

Educationally, the district strives to ensure that schools, classrooms, libraries, play areas, athletic fields, gymnasiums, creative/digital/vocational spaces, performance spaces, technology and campuses provide our **students, faculty and staff:**

- Equitable opportunity to develop, deliver and participate in the board-adopted curriculum, co-curricular and extra-curricular programs.
- A nurturing environment, infused with technology, that supports purposeful efforts to help all students develop a life-long love of learning, a sense of identity and community, and to be good citizens.
- The ability to grow as critical problem solvers, creative thinkers, collaborators, and to communicate their ideas and solutions through a variety of traditional means and digital media.
- Opportunities to teach and study in developmentally-appropriate spaces that reflect where students will work and learn after graduation.
- The tools to utilize traditional, blended and fully online instructional strategies to deliver the educational program, help our students develop appropriate social skills, become college and career ready, and understand the world in which they live.
- The ability to advance through the curriculum based on readiness and not access to physical spaces, the location of resources, or traditional school day/calendar.
- To ensure equity and developmental opportunities to explore the visual and performing arts, languages and cultures other than their own, technology, and family and consumer science.

- Developmentally appropriate opportunities to learn about and maintain their health and wellness

Civically, the district strives to assure that our schools, libraries, classrooms, play areas, athletic fields, gymnasiums, creative/digital/vocational spaces, performance areas, technology, and campuses serve as the hub of our community where **all stakeholders**:

- Can access physical spaces and digital tools to help their students grow, learn and develop safe, healthy relationships.
- Have physical and digital spaces to gather, play, celebrate, create, learn, exchange ideas and interact as a community.
- See the value of the investment taxpayers have made, and are making, for our children and community.
- Convey the pride that we have in our children, their futures, our community and what makes Wilson School District unique.

These principles were a guiding factor in the following construction options:

#### MAINTENANCE PLAN | Maintain Grade Alignment, All Facilities & Current Operation

The maintenance plan option serves as a baseline for the School District, where the existing configuration and educational components of the District as they currently stand would be maintained. The costs associated with this option are solely from the purpose of maintaining each facility as they currently operate and replacing building/system components as needed to bring up to current construction standards. Grade alignment, capacities and percentage of utilization shall all be maintained in this option.

#### Pros

- Continued operation of each facility.
- Current operations to be maintained in the exact same function and grade organization.

#### Cons

- Does not address any deficiencies identified in the ESA.
- Utilizing the enrollment target numbers, all of the elementary schools' utilization percentages are higher than the 90% recommended maximum capacity. Some are in excess of 100%. In addition, the high school's utilization percentage is higher than the 85% recommended maximum capacity.
- Does not address district's desire to have equity between the two middle school buildings.

## Option 1 | Grade Reconfiguration/Re-district

The first construction option for the School District utilizes the modifications in grade alignment to create equity amongst the district, as indicated below.

With the exception of Cornwall Terrace E.S., all the other elementary school buildings are to receive renovations and become **K-4 facilities**. Cornwall Terrace E.S. is to be incorporated as part of Southern M.S. as a **5<sup>th</sup>-6<sup>th</sup> grade facility** and receive a comprehensive renovation. West M.S., as a **7<sup>th</sup>-8<sup>th</sup> grade facility** is to receive maintenance renovations. Portions of the existing high school are to be demolished, with existing remaining components renovated along with the construction of new additions. The district administration offices have the option of being relocated within the Southern/Cornwall Terrace building or remain at the high school. In addition, a **new elementary school** is to be constructed on district-owned property.

\*Note: Proposed scope of work for the high school is the same for all options.

### Pros

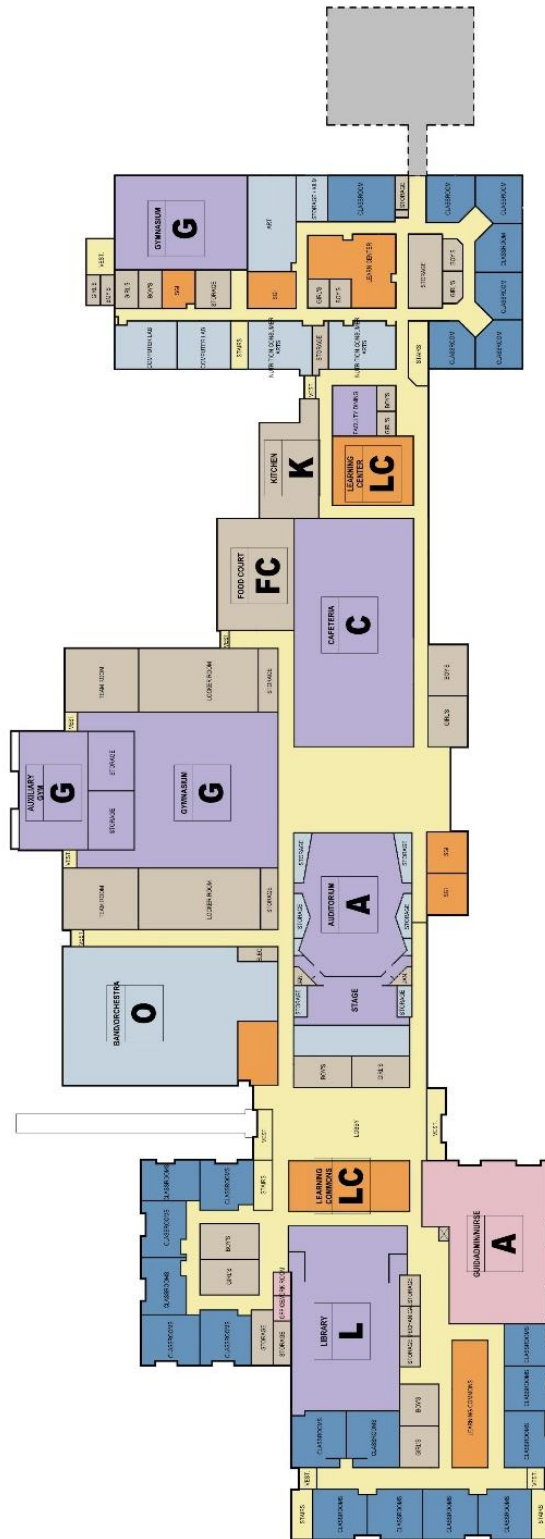
- District Leadership Team's recommended option.
- All deficiencies identified in the FCI and ESA are addressed, including having two separate schools (Cornwall Terrace E.S. & Southern M.S.) located on the same site.
- Provides sufficient capacity (90% minimum for elementary, 85% for middle/secondary) at all buildings.
- Continued operation of each facility.
- The organization and adjacencies of the educational spaces at the Southern/Cornwall Terrace building are improved, and provides space for the potential relocation of DAO if desired/needed.
- No additions are required at any of the elementary schools.
- Creates the least amount of disturbance district-wide.

### Cons

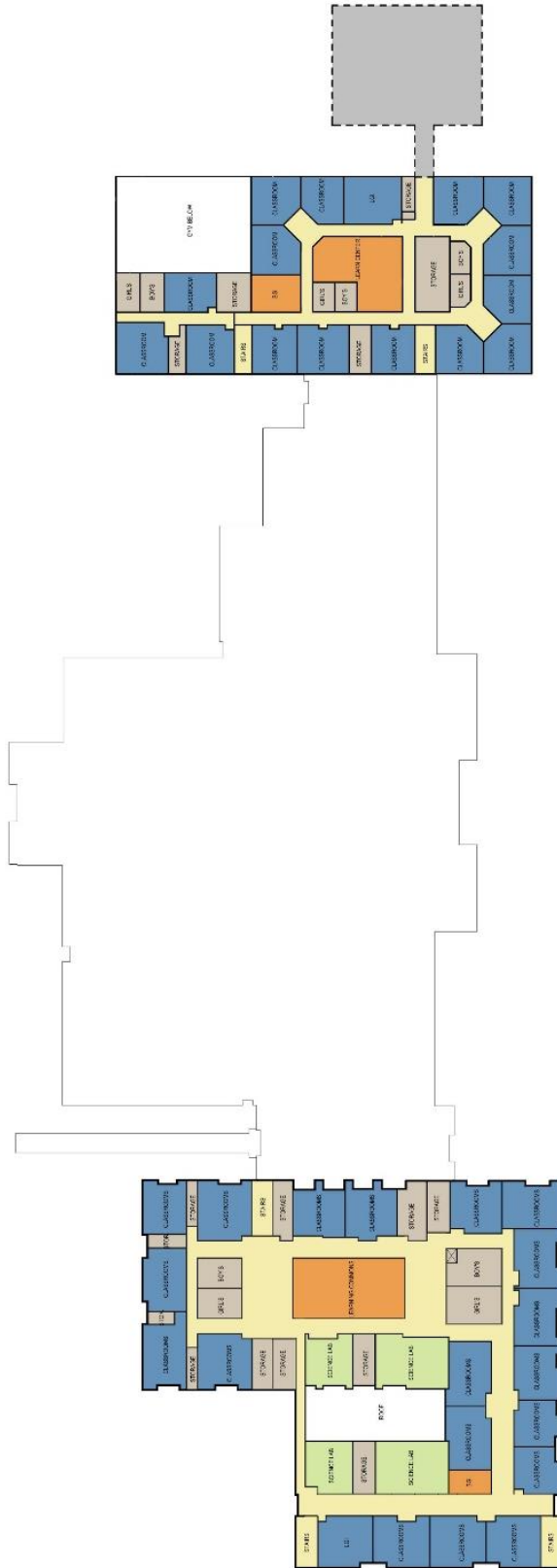
- Requires maintenance/operation costs for an additional building.



Option 1 – Southern/Cornwall Terrace 5-6 Conceptual First Floor Plan:

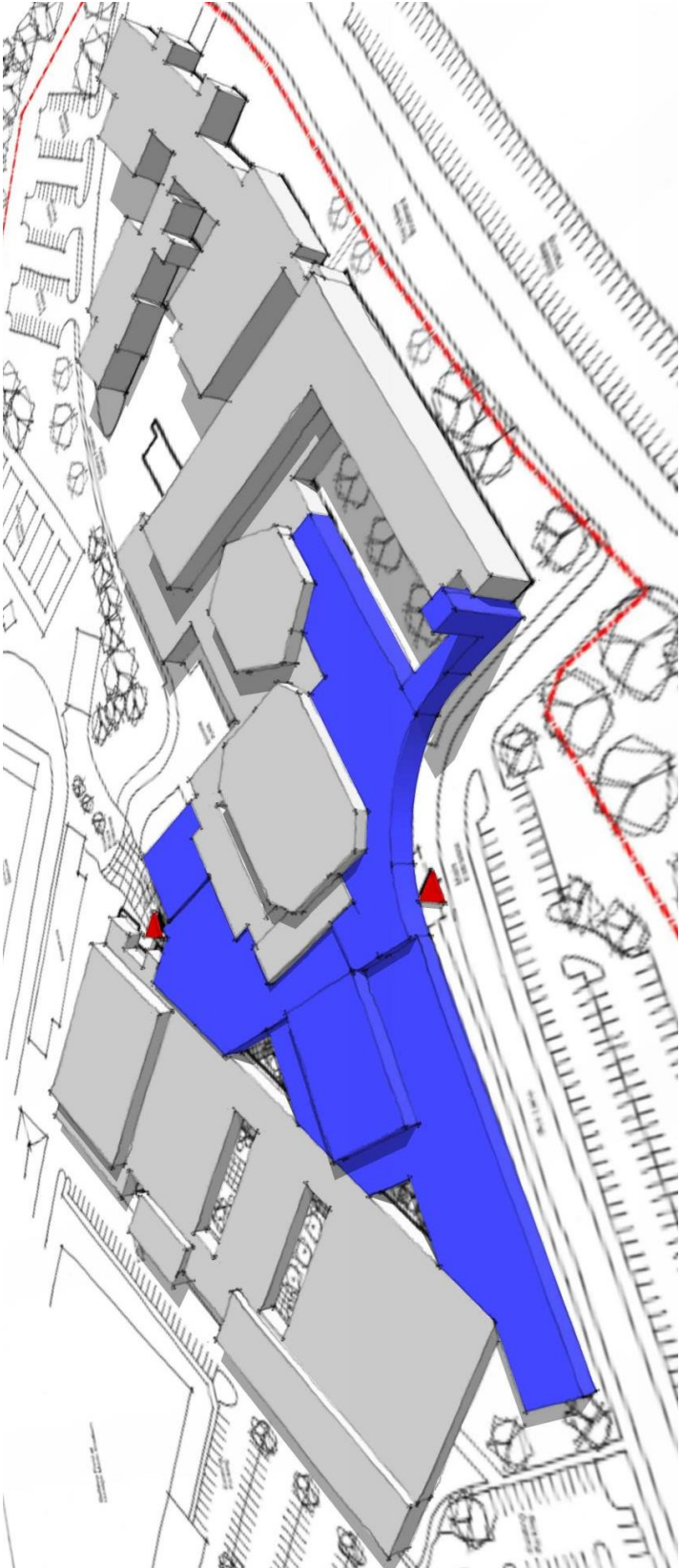


Option 1 – Southern/Cornwall Terrace 5-6 Conceptual Second Floor Plan:





Option 1 – High School Schematic massing plan:



Option 1 – New K-4 Elementary School schematic overall floor plan:



## Option 2 | Grade Reconfiguration/Re-district

The second construction option for the School District utilizes the modifications in grade alignment to create equity amongst the district, as indicated below.

All five of the elementary schools in the district are to receive renovations and **become K-4 buildings**. Southern Middle School is to receive a comprehensive renovation, with additions constructed to allow the building to **become a 5<sup>th</sup>-6<sup>th</sup> grade facility**. West Middle School is converted to a **7<sup>th</sup>-8<sup>th</sup> grade building** and receives maintenance renovations. Portions of the existing high school are to be demolished, with existing remaining components renovated along with the construction of new additions. This district administration offices are to remain at the high school.

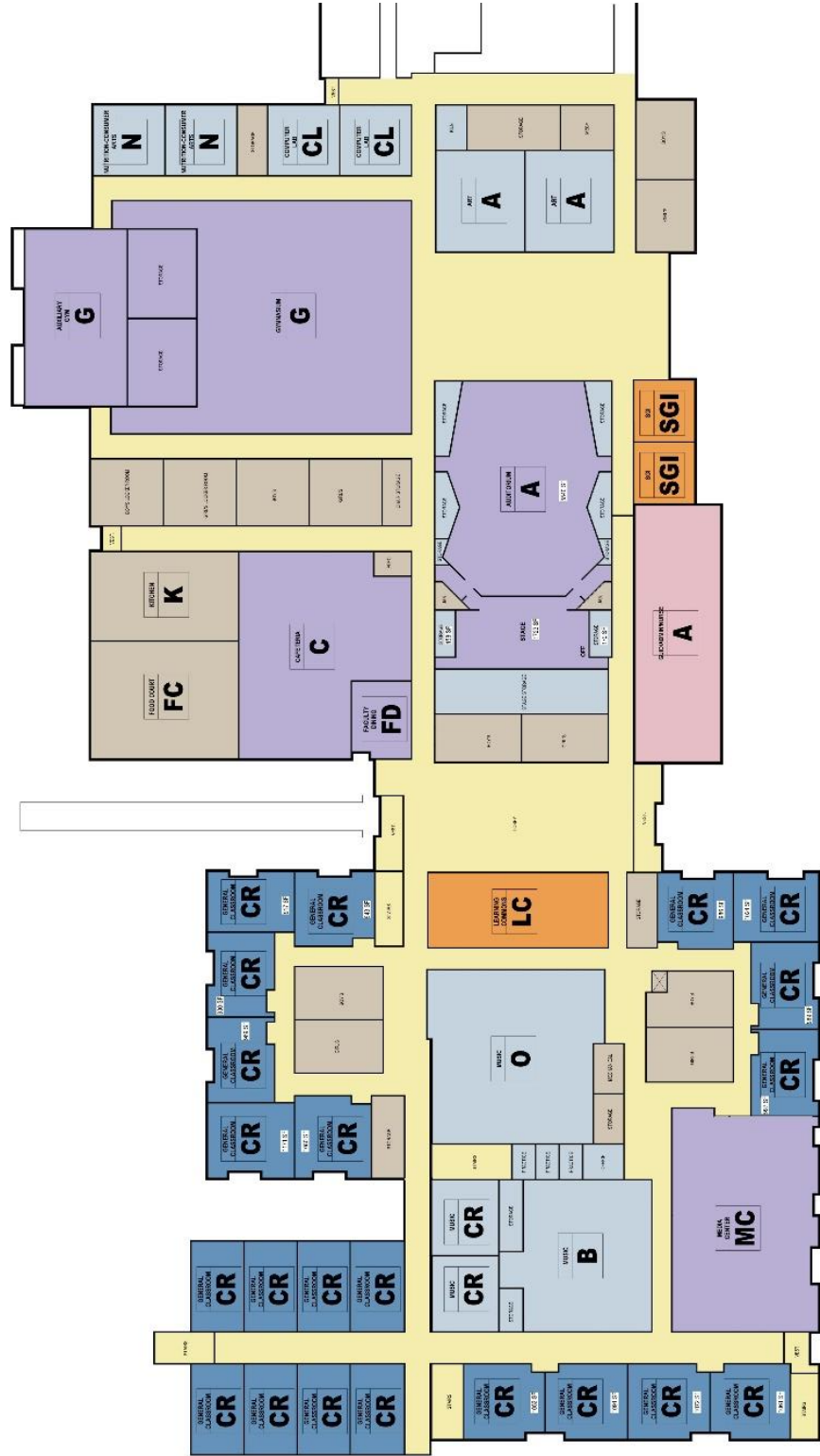
### Pros

- Except for Cornwall Terrace E.S. and Southern M.S. still located on the same site, the deficiencies identified in the FCI and ESA are addressed.
- Provides sufficient capacity (90% minimum for elementary, 85% for middle/secondary) at all buildings.
- Do not have to construct any additions at the elementary schools.
- Continued operation of each facility.
- The organization and adjacencies of the educational spaces at Southern Middle School are improved.

### Cons

- Additions at Southern Middle School make an already tight site even tighter.
- Does not address site deficiencies of Cornwall Terrace E.S. and Southern M.S. located on same site.

Option 2 - Southern Middle School 5-6 Conceptual First Floor Plan:



Option 2 – Southern Middle School 5-6 Conceptual Second Floor Plan:





### Option 3 | Maintain Grade Alignment

The third construction option for the School District would be to maintain existing grade alignment, and address educational, facility and capacity components as indicated below.

All five of the elementary schools are to receive additions and renovations. Southern Middle School is to be renovated. West Middle School is to receive maintenance renovations. Portions of the existing high school are to be demolished, with existing remaining components renovated along with the construction of new additions. The district administration offices are to remain at the high school.

#### Pros

- Except for Cornwall Terrace E.S. and Southern M.S. still located on the same site, the deficiencies identified in the FCI and ESA for these buildings are addressed.
- Provides sufficient capacity (90% minimum for elementary, 85% for middle/secondary) at all buildings.
- Continued operation of each facility.

#### Cons

- Requires additions at all elementary schools, including Whitfield – a building whose site is very restrictive.
- Though it does address the district's desire to have equity between the two middle school buildings, the organization and adjacencies of the educational spaces at Southern Middle School building is not improved.
- Proposed elementary school capacities range from 625 to 825.
- Does not address site deficiencies of Cornwall Terrace E.S. and Southern M.S. located on same site.

#### Option 4 | Grade Reconfiguration/Re-district

The fourth construction option for the School District utilizes the modifications in grade alignment to create equity amongst the district, as indicated below.

Green Valley, Shiloh Hills and Spring Ridge Elementary Schools are to receive additions and renovations. Whitfield Elementary School is to receive renovations only, and Cornwall Terrace E.S. is to be incorporated as part of Southern M.S. as a **5<sup>th</sup>-6<sup>th</sup> grade facility**. The remaining elementary schools are to become **K-4 buildings**. The Southern/Cornwall Terrace building is to receive a comprehensive renovation, and West M.S., as a **7<sup>th</sup>-8<sup>th</sup> grade facility** is to receive maintenance renovations. Portions of the existing high school are to be demolished, with existing remaining components renovated along with the construction of new additions. The district administration offices have the option of being relocated within the Southern/Cornwall Terrace building or remain at the high school.

#### Pros

- All deficiencies identified in the FCI and ESA are addressed, including having two separate schools (Cornwall Terrace E.S. & Southern M.S.) located on the same site.
- Provides sufficient capacity (90% minimum for elementary, 85% for middle/secondary) at all buildings.
- Continued operation of each facility.
- The organization and adjacencies of the educational spaces at the Southern/Cornwall Terrace building are improved.

#### Cons

- As a result of the additions at the select elementary schools as noted, the planned capacity at these buildings is at least 800.

## Athletic Facilities

In addition to the district-owned buildings, the study also encompasses potential options for the board to consider regarding the existing athletic fields and associated structures. Reviews of these facilities were conducted in the same manner as the buildings' components, taking into consideration accessibility, usage, durability, flexibility and maintenance, and developed into the following options.

\*Note: Option 2 is the District Leadership Team's recommended option.

### Option 1

- Upgrade existing northwest softball fields to new natural grass competition baseball and practice softball fields.
- Irrigation systems
- New scoreboards
- New 200 seat bleachers / baseball pressbox
- New dugouts
- New batting cages and bullpens (two each for softball and baseball)
- Field lighting
- Limited stormwater management



## Option 2

- Upgrade existing northwest softball fields to new synthetic turf competition baseball and practice softball fields
- New scoreboards
- New 200 seat bleachers / baseball pressbox
- New dugouts
- New batting cages and bullpens (two each for softball and baseball)
- Field lighting
- More significant stormwater management at ES baseball field



### Option 3

- Upgrade existing northwest softball fields to new synthetic turf competition baseball and practice softball fields
- New scoreboards
- New 200 seat bleachers / baseball pressbox
- New dugouts
- New batting cages and bullpens (two each for softball and baseball)
- Field lighting
- New restrooms / concessions building (2,100 SF)
- New locker room building (2,100 SF)
- New parking lot and additional drop off space
- More significant stormwater management at ES baseball field



#### Option 4

- Upgrade existing northwest softball fields to new synthetic turf competition baseball and practice softball fields
- Upgrade existing competition softball field and multi-purpose field to new synthetic turf fields.
- New scoreboards
- New 200 seat bleachers / baseball pressbox
- New dugouts
- New batting cages and bullpens (two each for softball and baseball)
- Field lighting for all synthetic turf fields
- New restrooms / concessions building (2,100 SF)
- New locker room building (2,100 SF)
- New parking lot and additional drop off space
- Stormwater management at ES baseball field



#### Additional Option for Consideration:

- As identified in the feasibility study, it was noted by faculty, staff an administration that drainage at the West Middle School stadium is very poor and needs to be addressed. Further discussion and review to occur to determine best course of action. Potential options include natural grass/sub-base replacement, or new synthetic turf and sub-drainage system.