

## **Prototype Elementary School Capacity Analysis**

Initial planning of prototype elementary schools in SPLOST IV conceived these schools to have a capacity of 900 students, which would be 58 Instructional Units (IUs) using Ga DOE capacity calculations. During the design of the prototype elementary school, the number of IUs was increased from 58 to 59, making the Ga DOE capacity around 913 FTE (Full Time Equivalent students). See Table 1 below.

Table 1 – # of IU's and GA DOE Capacity

| Instructional Units (IU) | State<br>Capacity |
|--------------------------|-------------------|
| 58                       | 900               |
| 59                       | 913               |
| 60                       | 925               |
| 61                       | 950               |

While the school was designed to have only 59 IUs, the design by CGLS Architects also includes seven "flex" spaces that are smaller than a classroom, but still large enough to have some instructional use. Two of these spaces are large enough to exceed the Ga DOE's size requirements for a classroom (requires 600 sf., spaces are 630 sf. or more) see *Table 2* below. Moreover, both the room uses identified on the architect's design ("Study") and a survey DCSD schools that have already opened with this design show these spaces as being used for instruction. Because of this, the Ga DOE recognizes these spaces as IUs for a total of 61 IUs, and therefore the overall FTE capacity of the school as 950 (61 IUs).

Below is a table of the prototype design by level showing the number of Classrooms (CRs), Core IUs (gym & media center), the rooms designed as "flex" spaces but large enough to be counted as IUs (Large Flex), the total number of IUs, and the number of "flex" spaces that are too small to be counted as an IU (Small Flex). A floorplan of the elementary school prototype is attached that details each space in the design.

Table 2 – Prototype Room Summary

|              | CRs | Core IUs | Large Flex | IUs | Small Flex |
|--------------|-----|----------|------------|-----|------------|
| Main Floor   | 25  | 2        | 0          | 27  | 3          |
| Lower Floor  | 19  | 0        | 2          | 21  | 0          |
| Second Floor | 13  | 0        | 0          | 13  | 2          |
| Total        | 57  | 2        | 2          | 61  | 5          |

Unlike the Ga DOE's capacity calculation, which only takes into account the total number of classrooms, the District uses a "Instructional Use Model" to calculate a schools capacity. In this model, the use of each instructional space affects the overall capacity of the school, and capacity can change as the use of instructional space within the school changes. Using this

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model and the room uses identified on the architect's prototype design, the attached <u>New Prototype Elementary School Capacity Report as Designed</u> shows the DCSD capacity of the elementary prototype as designed. However, the room uses on the architect's design are not indicative of how principals of schools with the prototype design actually use these spaces. The observed room use and capacity of schools once they have opened is often different than what is shown on the architect's design.

As of 2019, five elementary schools (Rockbrige ES, Fernbank ES, John Lewis ES, Barack Obama ES, and Peachcrest ES) have opened with the current prototype design. When reviewing the capacity of these schools, Planning Department staff work with principals to determine how each classrooms and instructional space is used, which in turn affects the available capacity of the school. Attached are the reports of each of the schools listed above as well as the <a href="New Prototype Elementary School Capacity Report as Used">New Prototype Elementary School Capacity Report as Used</a>. The instructional capacity of the prototype design as shown in the report is supported by the average instructional capacity of the five open prototype elementary schools listed above. See Table 3 below.

| School               | DSCD Capacity |
|----------------------|---------------|
| Rockbridge ES        | 1084          |
| Barack H. Obama EMST | 1086          |
| Fernbank ES          | 950           |
| Peachcrest ES        | 1086          |
| John Lewis ES        | 989           |
| Average              | 1039          |

Despite the available capacity observed in the prototype design, when opening a new prototype elementary school the District uses 950 as the school's capacity to be conservative and ensure that a new school is not inadvertently overcrowded if the school opens with more students than forecasted.

Below is a breakdown of how the room counts were applied to the <u>New Prototype</u> <u>Elementary School Capacity Report as Used</u>. This breakdown of the report is calculated by examining the 5 prototype schools room size and usage.

- R01 Preschool: 2 rooms are the standard count across the five schools
- o R02 Kindergarten: 10 rooms are an average number for kindergarten classrooms
- R03 General classrooms (G 1-3): 15 rooms assigns each grade an equal amount of 5 classrooms

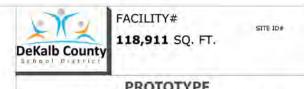
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- R04 General classrooms (G 4-5): 8 rooms assigns both grades an equal amount of 4 classrooms
- R05 K-5 Gifted: 6 rooms based on the current usage of R05 rooms across the protype schools thus far
- o R06 **K-5 Early Intervention EIP**: 6 rooms based on the current usage of R06 rooms across the protype schools thus far
- R07 K-5 SpED: 2 rooms based on the current usage of R07 rooms across the protype schools thus far
- R08 PK-5 SpED: 2 rooms based on the current usage of R08 rooms across the protype schools thus far
- R09 K-3 ESOL: 0 Rooms based on the current usage of R09 rooms across the protype schools thus far
- R10 4-5 ESOL: 0 Rooms based on the current usage of R10 rooms across the protype schools thus far
- o R11 **K-5 Resource/Pull out**: 7 Rooms based on the current usage of R011 rooms across the protype schools thus far
- R12 K-5 Science/STEM: Remains consistent with previous DSCD instructional capacity reports
- R13 Computer Lab (ESOL computer lab): Remains consistent with previous DSCD instructional capacity reports
- o R14 **K-5 Music/Band/Strings**: Remains consistent with previous DSCD instructional capacity reports
- R15 K-5 Art: Remains consistent with previous DSCD instructional capacity reports
- R16 K-5 Physical Education: Remains consistent with previous DSCD instructional capacity reports
- R17 K-5 Media Center: Remains consistent with previous DSCD instructional capacity reports
- R17.1 K-5 Non-Instructional Use: Remains consistent with previous DSCD instructional capacity reports

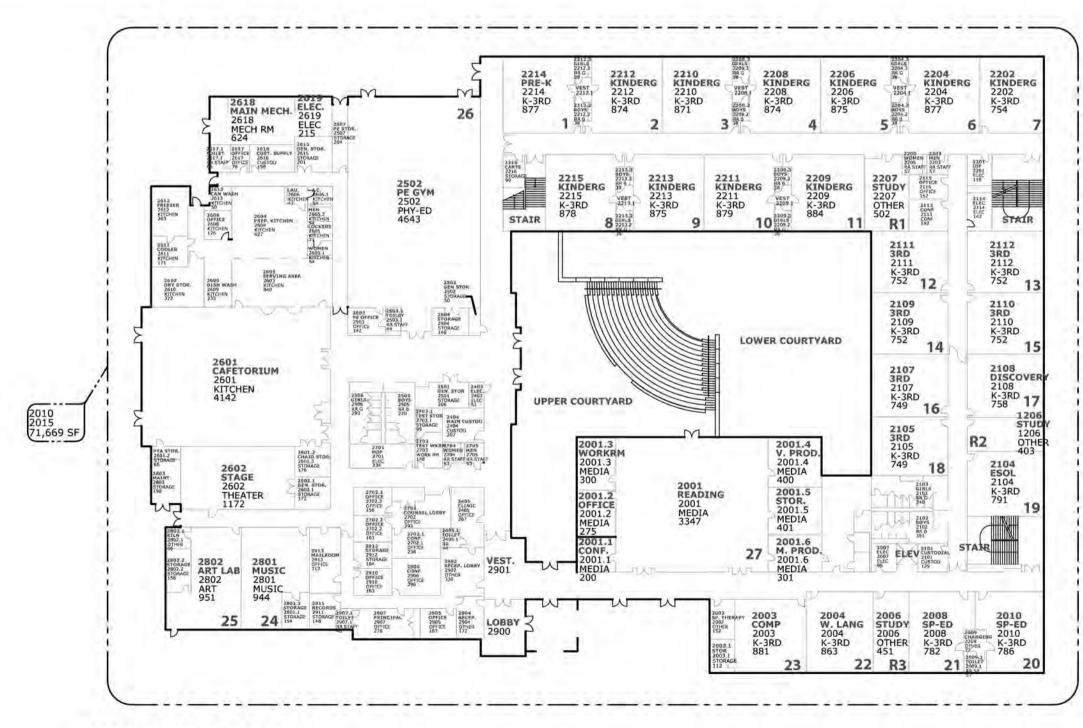
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| BUILI              | DING INFORMA      | TION    |    |
|--------------------|-------------------|---------|----|
| BUILDING #         | CONSTRUCTION DATE | SQ.FT.  | IU |
| 2010 - MAIN        | 2015              | 71,669  | 27 |
| 2010 - LOWER LEVEL | 2015              | 29,775  | 21 |
| 2010 - SECOND      | 2015              | 17,467  | 13 |
| TOTAL              |                   | 118,911 | 61 |

Plus 3 Flex Spaces 0 Flex Spaces Plus 2 Flex Spaces Plus 5 Flex Spaces



PROTOTYPE ELEMENTARY FACILITY



ROOM LABELS
POSTED ROOM NUMBER
ROOM / SPACE NAME
DOE SPACE NUMBER
DOE SPACE TYPE

SQUARE FOOTAGE

XXXX

XX,XXX SF

LEGEND

BUILDING OUTLINE

ROOM OUTLINE

**BUILDING LABEL** 

BUILDING SQ. FT.

YEAR BUILT

BUILDING NUMBER

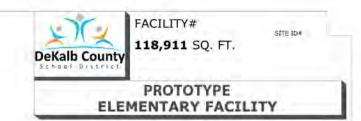
MAIN LEVEL FLOOR PLAN

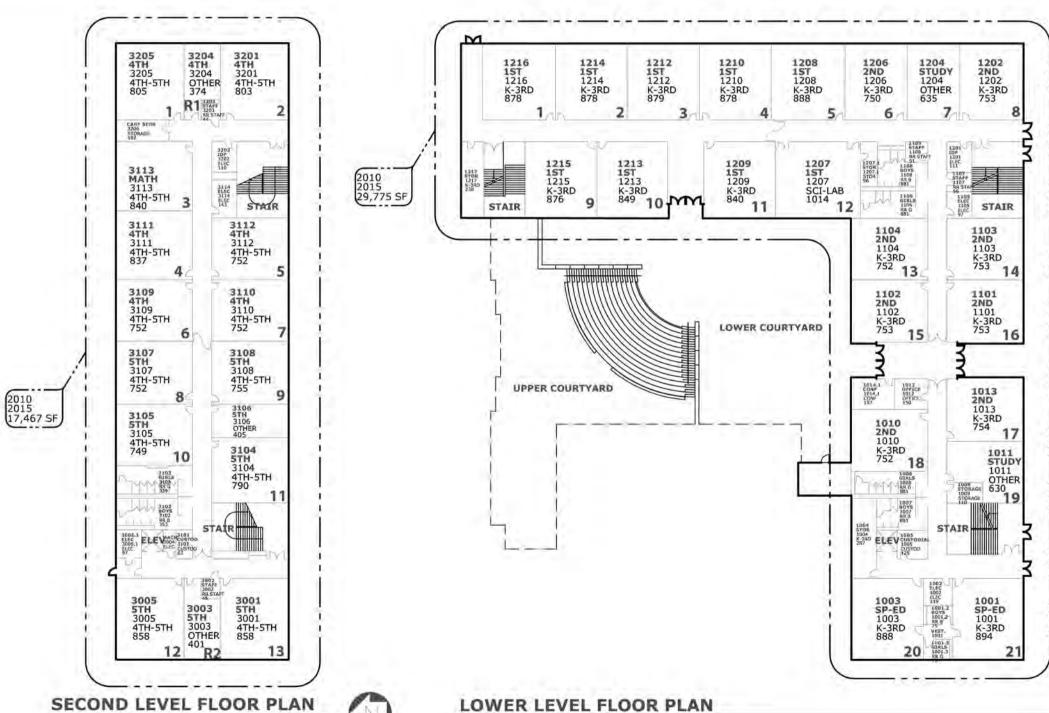
NOT TO SCALE

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Plus 3 Flex Spaces O Flex Spaces Plus 2 Flex Spaces Plus 5 Flex Spaces

NOT TO SCALE





LEGEND BUILDING OUTLINE ROOM OUTLINE BUILDING LABEL XXXX BUILDING NUMBER YEAR BUILT XX,XXX SF BUILDING SQ. FT. ROOM LABELS POSTED ROOM NUMBER ROOM / SPACE NAME DOE SPACE NUMBER DOE SPACE TYPE SQUARE FOOTAGE

## **DCSD Capacity**



|       | New Protoype Elementa   | ry School Ca         | pacity Re     | eport as D          | esigned                |               |                          |
|-------|---|----------------------|---------------|---------------------|------------------------|---------------|--------------------------|
| R-#   | Room Type   | Students<br>Per Room | Fac           | ility               | Portable<br>Classrooms |               | <b>tal</b><br>Portables) |
|       | Elementary Schools  |                      | Room<br>Count | Student<br>Capacity | Portable<br>Count      | Room<br>Count | Student<br>Capacity      |
| R01   | Pre-school  | 22                   | 1             | 22                  | 0                      | 1             | 2                        |
| R02   | Kindergarten  | 24                   | 10            | 240                 | 0                      | 10            | 24                       |
| R03   | General classroom grades 1-3  | 27                   | 22            | 594                 | 0                      | 22            | 59                       |
| R04   | General classroom grades 4-5  | 31                   | 12            | 372                 | 0                      | 12            | 37                       |
| R05   | K-5 Gifted - self-contained   | 25                   | 0             | 0                   | 0                      | 0             |                          |
| R06   | K-5 Early Intervention (EIP) self-contained –<br>Level 1  | 22                   | 0             | 0                   | 0                      | 0             |                          |
| R07   | K-5 Special Education self-contained - severe and profound  | 8                    | 0             | 0                   | 0                      | 0             |                          |
| R08   | PK-5 Special Education self-contained - other   | 10                   | 2             | 20                  | 0                      | 2             | 2                        |
| R09   | K-3 ESOL - self-contained   | 15                   | 0             | 0                   | 0                      | 0             |                          |
| R10   | 4-5 ESOL - self-contained   | 18                   | 0             | 0                   | 0                      | 0             |                          |
| R11   | K-5 Resource - Pull out (EIP, Gifted, SPED,<br>ESOL) & Other  | 0                    | 8             | 0                   | 0                      | 8             |                          |
| R12   | K-5 Science/STEM  | 0                    | 1             | 0                   | 0                      | 1             |                          |
| R13   | K-5 Computer Lab (ESOL computer lab)  | 0                    | 1             | 0                   | 0                      | 1             | 9                        |
| R14   | K-5 Music/Band/Strings  | 0                    | 1             | 0                   | 0                      | 1             |                          |
| R15   | K-5 Art   | 0                    | 1             | 0                   | 0                      | 1             |                          |
| R16   | K-5 Physical Education  | 0                    | 1             | 0                   | 0                      | 1             |                          |
| R17   | K-5 Media Center  | 0                    | 1             | 0                   | 0                      | 1             |                          |
| R17.1 | K-5 Non-Instructional Use   | 26                   | 0             | 0                   | 0                      | 0             | 2                        |
|       | Total   |                      | 61            | 1248                | 0                      | 61            | 124                      |
|       | Scheduling Factor (Reduction of total to account for the number of periods the room is not used and allow for rounding of teacher allotments) |                      |               | 0.85                |                        |               | 0.8                      |
|       | Capacity (Total x Scheduling Factor)  |                      |               | 1061                |                        |               | 106                      |
|       | Facility Room Count / Total (ratio of facility rooms to total rooms)  |                      |               |                     |                        | ×             |                          |
|       | DCSD Capacity   |                      |               |                     |                        |               | 106                      |

FTE Mid-Range Capacity
(Based on GaDOE tables)

950

Principal Signature:
Prepared by: David Yoke, Planning & GIS Analyst

## **DSCD Capacity**



| R-#   | Room Type   | Students<br>Per Room | Fac           | ility               | Portable<br>Classrooms |               | otal<br>Portables)   |
|-------|---|----------------------|---------------|---------------------|------------------------|---------------|----------------------|
|       | Elementary Schools  |                      | Room<br>Count | Student<br>Capacity | Portable<br>Count      | Room<br>Count | Students<br>Capacity |
| R01   | Pre-school  | 22                   | 2             | 44                  | 0                      | 2             | 44                   |
| RO2   | Kindergarten  | 24                   | 7             | 168                 | 0                      | 7             | 168                  |
| RO3   | General classroom grades 1-3  | 27                   | 15            | 405                 | 0                      | 15            | 405                  |
| R04   | General classroom grades 4-5  | 31                   | 8             | 248                 | 0                      | 8             | 248                  |
| R05   | K-5 Gifted - self-contained   | 25                   | 6             | 150                 | 0                      | 6             | 150                  |
| R06   | K-5 Early Intervention (EIP) self-contained -<br>Level 1  | 22                   | 6             | 132                 | 0                      | 6             | 132                  |
| R07   | K-5 Special Education self-contained - severe and profound  | 8                    | 2             | 16                  | 0                      | 2             | 16                   |
| R08   | PK-5 Special Education self-contained - other   | 10                   | 2             | 20                  | 0                      | 2             | 20                   |
| R09   | K-3 ESOL - self-contained   | 15                   | 0             | 0                   | 0                      | 0             | (                    |
| R10   | 4-5 ESOL - self-contained   | 18                   | 0             | 0                   | 0                      | 0             | (                    |
| R11   | K-5 Resource - Pull out (EIP, Gifted, SPED, ESOL)<br>& Other  | 0                    | 7             | 0                   | 0                      | 7             |                      |
| R12   | K-5 Science/STEM  | 0                    | 1             | 0                   | 0                      | 1             | (                    |
| R13   | K-5 Computer Lab (ESOL computer lab)  | 0                    | 1             | 0                   | 0                      | 1             |                      |
| R14   | K-5 Music/Band/Strings  | 0                    | 1             | 0                   | 0                      | 1             | (                    |
| R15   | K-5 Art   | 0                    | 1             | 0                   | 0                      | 1             |                      |
| R16   | K-5 Physical Education  | 0                    | 1             | 0                   | 0                      | 1             | - (                  |
| R17   | K-5 Media Center  | 0                    | 1             | 0                   | 0                      | 1             | (                    |
| R17.1 | K-5 Non-Instructional Use   | 26                   | 0             | 0                   | 0                      | 0             |                      |
|       | Total   |                      | 61            | 1183                | 0                      | 61            | 1183                 |
|       | Scheduling Factor (Reduction of total to account for the number of periods the room is not used and allow for rounding of teacher allotments) |                      |               | 0.85                |                        |               | 0.8                  |
|       | Capacity (Total x Scheduling Factor)  |                      |               | 1006                |                        |               | 100                  |
|       | Facility Room Count / Total (ratio of facility rooms to total rooms)  |                      |               |                     |                        | х             |                      |

FTE Mid-Range Capacity
(Based on GaDOE tables)

950

| Principal Signature: | ALTO LE TOURSE, EL CO             |
|----------------------|-----------------------------------|
| Prepared by:         | avid Yoke, Planning & GIS Analyst |