AGENDA
Facility Capacity Needs Analysis Subcommittee Meeting of the Long-Range Educational Facilities Plan Work Group
City Hall, Chet & Sabra Avery Conference Room 2000
Friday, May 23, 2014, 8:00am

1. Welcome and Introductions  
   Staff and Committee Members

2. Review Work Program  
   Staff

3. Progress by Hughes Group Architects  
   Staff
   b) Review Scope of Work for Exterior Site Inventory

4. Review Capacity Methodology  
   Staff and Committee Members

5. Group Discussion/Next Steps
Why is this important?

Important both for the design of the facility and appropriate enrollment suited to each building.

Variables
- Building size
- Number/types of teaching stations
- Support facilities
- Staffing
- Specialty program offerings
- Class sizes
- Schedules

Program Capacity
Program capacity defines the capacity of a school based upon the specific educational programs that are provided at a particular school site. Several models for calculating:
#1- uses teaching stations and actual student/teacher ratio
#2- uses teaching stations and class-size caps
#3- uses teaching stations and design capacity
#4- uses teaching stations and actual square feet

Pros: Capacity is consistent with utilization
Cons: Programs are constantly changing so capacity is a moving target

Core Facilities
Core spaces typically include cafeteria, serving area, kitchen, gymnasium, multipurpose room, library/media center. Calculated based on a square foot allowance per student.

Utilization Factor
Education specification specialists recommend the use of a utilization factor in determining school capacity. The utilization factor is a percentage applied to the optimum capacity to account for the uneven distribution of students across grade levels and cohort groups. The recommended rate for elementary schools is 90-100%. The recommended rate for middle school is 70-85% and high school is 80-85%.

Level of Service
Goal for acceptable level of service provided by a facility based on the operational characteristics of the facility.

Hybrid/Combination
Uses a combination of factors including core capacity and building or program capacity. Provides a more realistic capacity calculation than others. Can use a variety of methods to reflect existing conditions.

**Capacity numbers are not fixed.**
**Capacity Example:**

24 Full Size Classrooms-  
22 Home Rooms  
1 Art  
1 TAG  
**music in resource room**

Core Spaces-  
1 media center 2,718 SF  
1 gymnasium 4,742 SF  
1 cafeteria 4,511 SF

**Program Capacity Calculations**

Program #1 Teaching Stations and Student/Teacher Ratio  
24 General Teaching Stations x Student/Teacher Ratio 24 = 576  
576 * .95 utilization = 548 students

Program #2 Teaching Stations and Class-Size Caps  
*specialty classrooms (music and art) are not available to permanently house additional full-time students*

<table>
<thead>
<tr>
<th>Classroom</th>
<th>Type</th>
<th>ACPS Class Size Cap</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>K</td>
<td>22</td>
<td>110</td>
</tr>
<tr>
<td>8</td>
<td>1st &amp; 2nd</td>
<td>24</td>
<td>192</td>
</tr>
<tr>
<td>9</td>
<td>3rd-5th</td>
<td>26</td>
<td>234</td>
</tr>
<tr>
<td>1</td>
<td>Art</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>TAG</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td><strong>24</strong></td>
<td></td>
<td><strong>536</strong></td>
<td></td>
</tr>
</tbody>
</table>

95% Utilization 510 students

Program #3 Basic Program Analysis  
24 General Teaching Stations x Capacity 26 students = 624  
624 * .95 utilization = 593 students

*assumes all rooms can accommodate 26 students*
Program #4 Program Square Footage
* considers actual square footage of classrooms
* general education goal is 35 SF/student

<table>
<thead>
<tr>
<th>Actual SF</th>
<th>Students per Classroom</th>
<th>Total Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 room</td>
<td>~600</td>
<td>8</td>
</tr>
<tr>
<td>11 rooms</td>
<td>~650</td>
<td>19</td>
</tr>
<tr>
<td>4 rooms</td>
<td>~700</td>
<td>21</td>
</tr>
<tr>
<td>8 rooms</td>
<td>~850</td>
<td>26</td>
</tr>
<tr>
<td>24 rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95% Utilization</td>
<td></td>
<td></td>
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<tr>
<td>24 rooms</td>
<td>748 SF Avg.</td>
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</table>

Total Full-Size Classroom SF 17,954

**Core Space Capacity Calculations**

**Media Center**
Existing- 2,718 SF
Standard- 4-6 SF per student
Result- 453-680 students

**Gymnasium**
Existing- 4,742 SF
Standard- 100 SF per student
Result- Average class size of 23.7 552 students

**Dining and Food Services**
Existing- Dining and food services 4,511SF
Standard- 15 SF per student
Result- 167 students per lunch
        501 students with 3 lunch periods

Dining area ~2,511 SF
2 teachers at one time
3 lunch periods

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