Facility Capacity Needs Analysis Subcommittee
ACPS & City of Alexandria
October 15, 2014

Joint City Council/ACPS Subcommittee
(4 members)

LREFP Work Group
Explores the major issues that will impact public school facilities over the long term and guides staff in the development of a draft Long-Range Educational Facilities Plan for consideration by the School Board and City Council.

Sub Committees

- Enrollment Forecasts / Demographics
  Establishing sustainable short and long-term enrollment forecast program

- Facility Capacity Needs Analysis
  Understanding current conditions and needs of the existing facilities

- Educational Specifications / School of the Future
  Planning for our future and matching of facilities to our students and our vision.

Joint Long-Range Educational Facilities Plan
To improve facilities planning, accommodate the growing student population, and enhance educational programs and services.
Agenda

- Review Work Program
- Progress by A/E Teams
  - Existing Conditions Exterior Site Inventory
  - Educational Adequacy Assessments (EAs)
- Prioritization Methodology
- Discussion/Next Steps

Goal for this meeting
  - Provide feedback on overall process, tiers and prioritization methodology
Facility Capacity Work Program Goals

- Assess existing conditions
- Review capacity analysis methodology
- Review how existing capacity is allocated to meet demand
- Establish guidelines for adding capacity, supporting education
- Identify potential school site types
Review Work Program

- Work Program Approach
  - Develop a school facility and site inventory
  - Develop a capacity and utilization assessment for each school site
  - Identify space needs by type of use
  - Review findings of Enrollment Subcommittee and Educational Specifications Subcommittee
  - Reallocate existing capacity to meet current demand
  - Develop guidelines for adding capacity
  - Review potential future school sites
Review Work Program

- Next Steps
  - Assess existing conditions of school sites
  - Educational Adequacy Assessment
  - Preparation of future master plans
Status on School Facility Inventory – Exterior Site Inventory

- Scope of Work
  - General site description, including:
    - Describe property ownership and boundaries
    - Usable acreage of open space and recreation features
    - General size and condition of playgrounds
    - Document any natural resources/areas present
    - General site accessibility/traffic issues
    - Adequacy of site utilities to accommodate new construction

- Products
  - Report for each school site
  - Electronic site plans
Status on School Facility Inventory – Exterior Site Inventory

- Schedule
- Pilot School – George Mason
- Group 1
- Group 2
  - Minnie Howard, Cora Kelly, Francis C. Hammond, Lyles-Crouch
- Group 3
  - William Ramsay, James K. Polk, John Adams, Samuel Tucker, T.C. King Street Campus
- Sites Not Included
  - Jefferson–Houston, Patrick Henry
Educational Adequacy Assessments (EAs)

- **Goal of EAs**
  - Assess the ability of existing facilities to support the educational program

- **3 Major Areas**
  - School Site
  - Overall Building Assessment
  - Instructional and Support Spaces

- **Utilization**
Educational Adequacy Assessments (EAs)

- Evaluation Process
  - Compile and review relevant data
    - Floor plans
    - Interior survey information (SF, acoustics, lighting)
    - Other?
  - Field Visit
    - Field verify and collect additional information
    - Survey building users
  - Summarize
  - Utilization Calculation
  - Prepare report
Educational Adequacy Assessments (EAs)

- Evaluation Factors (see handout)
  - School Site
    - Site Circulation
    - Play Areas/Fields
  - Building Assessment
    - Building Organization
    - Technology and Supporting Infrastructure
    - Safety, Security and Accessibility
  - Individual Spaces
    - Size Requirements
    - Internal Organization and Ancillary Spaces
    - Loose Furnishings
    - Fixed Furnishings
    - Lighting Quality
    - Acoustics
    - Air Quality
Evaluation Methodology: Site and Spaces

Rating Categories–

- **Excellent**: The individual space, or aggregate subcategory, meets at least 90 percent of the requirements outlined in the Ed. Specs.
- **Satisfactory**: The individual space, or aggregate subcategory, meets between 70 and 89 percent of these requirements.
- **Borderline**: The individual space, or aggregate subcategory, meets between 50 and 69 percent of these requirements.
- **Inadequate**: The individual space, or aggregate subcategory, meets between 30 and 49 percent of these requirements.
- **Very inadequate**: The space(s) do not provide at least 29 percent of the requirements.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Rang A</th>
<th>Rang B</th>
</tr>
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<tbody>
<tr>
<td>Excellent</td>
<td>89.5</td>
<td>100</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>69.5</td>
<td>89.4</td>
</tr>
<tr>
<td>Borderline</td>
<td>49.5</td>
<td>69.4</td>
</tr>
<tr>
<td>Inadequate</td>
<td>29.5</td>
<td>49.4</td>
</tr>
<tr>
<td>Very Inadequate</td>
<td>0</td>
<td>29.4</td>
</tr>
<tr>
<td>Non-existent</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
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</table>
### Summary Matrix

<table>
<thead>
<tr>
<th>Wireless bandwidth is adequate to enable a one-to-one student-to-device ratio</th>
<th>Electricity is provided in multiple locations along all walls throughout building</th>
<th>Clocks and PA systems are integrated, digital, and functioning</th>
<th>Universal wireless access is provided in all spaces of the facility</th>
<th>Total Score</th>
<th>Percent Compliant</th>
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<tbody>
<tr>
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<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>13.5</td>
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<td>Some</td>
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<td>No</td>
<td>1</td>
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<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>

Room 1: Yes --or-- 5 Some --or--2.5 Yes --or-- 5 No --or--1 13.5 68%
Room 2: No --or--1 Some --or--2.5 No --or--1 Some --or--2.5 7 35%
Room 3: No --or--1 Yes --or-- 5 Yes --or-- 5 Yes --or-- 5 16 80%
Room 4: No --or--1 Some --or--2.5 No --or--1 No --or--1 5.5 28%
Room 5: Yes --or-- 5 Yes --or-- 5 Yes --or-- 5 Yes --or-- 5 20 100%

62 62%

- Handout provided.
Evaluation Methodology: Utilization

- **Rating Categories**
  - **Excellent:** The school meets the capacity outlined in the educational specifications using the approved planning numbers.
  - **Satisfactory:** The school is 10 percent over or under the capacity outlined in the educational specifications using the approved planning numbers.
  - **Borderline:** The school is up to 20 percent under capacity or up to 15 percent over capacity based on the approved planning numbers in the educational specifications.
  - **Inadequate:** The school is up to 30 percent under capacity or up to 20 percent over capacity based on the approved planning numbers in the educational specifications.
  - **Very inadequate:** The school does not fall in any of the other ranges.

<table>
<thead>
<tr>
<th>Utilization</th>
<th>Range A</th>
<th>Range B</th>
<th>Range C</th>
<th>Range D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Excellent</td>
<td>100</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2 Satisfactory</td>
<td>90</td>
<td>99.9</td>
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<td>110</td>
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<tr>
<td>3 Borderline</td>
<td>80</td>
<td>89.9</td>
<td>110.1</td>
<td>115</td>
</tr>
<tr>
<td>4 Inadequate</td>
<td>70</td>
<td>79.9</td>
<td>115.1</td>
<td>120</td>
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<tr>
<td>5 Very Inadequate</td>
<td>0</td>
<td>69.9</td>
<td>120.1</td>
<td>300</td>
</tr>
</tbody>
</table>
Evaluation Methodology: Utilization

Rating By Size–

- **Excellent:** Enrollment of 570 is met.
- **Satisfactory:** Enrollment is up to 57 students over or under capacity.
- **Borderline:** Enrollment is up to 114 students under capacity or 58 students over capacity.
- **Inadequate:** Enrollment is up to 171 students under capacity or up to 86 students over capacity.
- **Very inadequate:** Enrollment is more than 171 students under capacity or more than 86 students over capacity.

<table>
<thead>
<tr>
<th>Utilization - Measured in students</th>
<th>Number of Students</th>
<th>570</th>
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</thead>
<tbody>
<tr>
<td><strong>Range</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
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<tr>
<td>1 Excellent</td>
<td>570</td>
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<tr>
<td>2 Satisfactory</td>
<td>513</td>
<td>569</td>
</tr>
<tr>
<td>3 Borderline</td>
<td>456</td>
<td>512</td>
</tr>
<tr>
<td>4 Inadequate</td>
<td>399</td>
<td>455</td>
</tr>
<tr>
<td>5 Very Inadequate</td>
<td>Below ---&gt;</td>
<td>398.43</td>
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</tbody>
</table>
Evaluation Methodology: Utilization

- **Rating by Number of Students—**
  - **Excellent:** The classroom holds all 22 students based on the sqft/student planning size.
  - **Satisfactory:** The classroom is under or over capacity by 2 students.
  - **Borderline:** The classroom is under capacity by 4 students or over capacity by 3 students.
  - **Inadequate:** The classroom is under capacity by 7 students or over capacity by 4 students.
  - **Very inadequate:** The classroom is under capacity by more than 7 students or over capacity by more than 4 students.

<table>
<thead>
<tr>
<th>Utilization</th>
<th>Students</th>
<th>22</th>
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<tbody>
<tr>
<td><strong>Rating</strong></td>
<td><strong>Range A</strong></td>
<td><strong>Range B</strong></td>
</tr>
<tr>
<td>1 Excellent</td>
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<td></td>
</tr>
<tr>
<td>2 Satisfactory</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>3 Borderline</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>4 Inadequate</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>5 Very Inadequate</td>
<td>Below ---&gt;</td>
<td>15</td>
</tr>
</tbody>
</table>

**ACPS**
Alexandria City Public Schools
Prioritization Methodology

- **Tiers**
  1. Safety and Security
  2. Capacity
  3. Support of Educational Program
  4. Enhancement to Learning Environment
  5. Other
## Prioritization Methodology

<table>
<thead>
<tr>
<th>Rating</th>
<th>Tier</th>
<th>Priority</th>
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<tbody>
<tr>
<td>Very Inadequate</td>
<td>1- Safety &amp; Security</td>
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<td>2- Capacity</td>
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<td>3- Support of Educational Program</td>
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<td>4- Enhancement to Learning Environment</td>
<td>4</td>
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<tr>
<td></td>
<td>5- Other</td>
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<tr>
<td>Inadequate</td>
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<tr>
<td></td>
<td>2- Capacity</td>
<td>7</td>
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<tr>
<td></td>
<td>3- Support of Educational Program</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4- Enhancement to Learning Environment</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>5- Other</td>
<td>10</td>
</tr>
<tr>
<td>Borderline</td>
<td>1- Safety &amp; Security</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>2- Capacity</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3- Support of Educational Program</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>4- Enhancement to Learning Environment</td>
<td>14</td>
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<tr>
<td></td>
<td>5- Other</td>
<td>15</td>
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<tr>
<td>Satisfactory</td>
<td>1- Safety &amp; Security</td>
<td>16</td>
</tr>
<tr>
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<td>2- Capacity</td>
<td>17</td>
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<tr>
<td></td>
<td>3- Support of Educational Program</td>
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<td>4- Enhancement to Learning Environment</td>
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<td>5- Other</td>
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<tr>
<td>Excellent</td>
<td>1- Safety &amp; Security</td>
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<tr>
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<td>3- Support of Educational Program</td>
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<tr>
<td></td>
<td>4- Enhancement to Learning Environment</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>5- Other</td>
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</table>
Status on Educational Adequacy Assessments (EAs)

- Schedule
- Pilot School
- Group 1
  - Mt. Vernon, Matthew Maury, George Mason, George Washington
- Group 2
  - Douglas MacArthur, Charles Barrett, Cora Kelly, Francis C. Hammond
- Group 3
  - Lyles–Crouch, William Ramsay, James K. Polk, John Adams, Samuel Tucker
- Sites Not Included
  - Jefferson–Houston, Patrick Henry, Minnie Howard, T.C. King Street
Group 1

- Mt. Vernon, Matthew Maury, George Mason, George Washington
  - Compile and review relevant data
  - Field Visit
  - Summarize
  - Utilization Calculation
Discussion/Next Steps